# DEPARTMENT OF THE NAVY
# FISCAL YEAR (FY) 2007
# BUDGET ESTIMATES SUBMISSION


## JUSTIFICATION OF ESTIMATES
## FEBRUARY 2006

# AIRCRAFT PROCUREMENT, NAVY
# Volume II:
# BUDGET ACTIVITY 5

DEPARTMENT OF THE NAVY
FY 2007 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1506N AIRCRAFT PROCUREMENT, NAVY DATE: 09 FEB 2006

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 2005 QUANTITY | FY 2005 COST | FY 2006 QUANTITY | FY 2006 COST | FY 2007 QUANTITY | FY 2007 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| BUDGET ACTIVITY 05: MODIFICATION OF AIRCRAFT | | | | | | | | | |
| | MODIFICATION OF AIRCRAFT | | | | | | | | |
| 25 | EA-6 SERIES | A | | 126.7 | | 120.6 | | 49.0 | U |
| 26 | AV-8 SERIES | A | | 33.9 | | 34.4 | | 20.5 | U |
| 27 | ADVERSARY | A | | 5.1 | | 5.0 | | 2.6 | U |
| 28 | F-18 SERIES | A | | 461.8 | | 428.2 | | 411.5 | U |
| 29 | H-46 SERIES | A | | 70.2 | | 54.7 | | 47.4 | U |
| 30 | AH-1W SERIES | A | | 7.3 | | 15.0 | | 19.8 | U |
| 31 | H-53 SERIES | A | | 65.0 | | 20.5 | | 28.3 | U |
| 32 | SH-60 SERIES | A | | 30.6 | | 12.2 | | 33.1 | U |
| 33 | H-1 SERIES | A | | 10.0 | | 7.8 | | 7.4 | U |
| 34 | EP-3 SERIES | A | | 46.4 | | 43.4 | | 56.8 | U |
| 35 | P-3 SERIES | A | | 167.5 | | 171.0 | | 204.6 | U |
| 36 | S-3 SERIES | A | | 1.8 | | .7 | | .8 | U |
| 37 | E-2 SERIES | A | | 15.5 | | 13.5 | | 9.1 | U |
| 38 | TRAINER A/C SERIES | A | | 15.9 | | 13.8 | | 17.1 | U |
| 39 | C-2A | A | | 29.4 | | 29.2 | | 37.2 | U |
| 40 | C-130 SERIES | A | | 30.9 | | 32.2 | | 3.5 | U |
| 41 | FEWSG | A | | 2.7 | | .6 | | .6 | U |
| 42 | CARGO/TRANSPORT A/C SERIES | A | | 8.2 | | 19.7 | | 30.3 | U |
| 43 | E-6 SERIES | A | | 19.5 | | 11.1 | | 99.2 | U |
| 44 | EXECUTIVE HELICOPTERS SERIES | A | | 25.7 | | 16.5 | | 40.2 | U |

DEPARTMENT OF THE NAVY
FY 2007 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1506N AIRCRAFT PROCUREMENT, NAVY DATE: 09 FEB 2006

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 2005 QUANTITY | FY 2005 COST | FY 2006 QUANTITY | FY 2006 COST | FY 2007 QUANTITY | FY 2007 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 45 | SPECIAL PROJECT AIRCRAFT | A | | 16.5 | | 26.3 | | 14.3 | U |
| 46 | T-45 SERIES | A | | 43.3 | | 45.2 | | 34.9 | U |
| 47 | POWER PLANT CHANGES | A | | 26.0 | | 26.0 | | 24.6 | U |
| 48 | JPATS SERIES | A | | 1.2 | | .7 | | 1.7 | U |
| 49 | AVIATION LIFE SUPPORT MODS | A | | .5 | | .3 | | 14.3 | U |
| 50 | COMMON ECM EQUIPMENT | A | | 77.1 | | 54.1 | | 35.9 | U |
| 51 | COMMON AVIONICS CHANGES | A | | 160.9 | | 178.7 | | 177.5 | U |
| 52 | COMMON DEFENSIVE WEAPON SYSTEM | A | | 7.7 | | 13.6 | | 13.7 | U |
| 53 | ID SYSTEMS | A | | 1.6 | | 7.6 | | 11.1 | U |
| 54 | V-22 (TILT/ROTOR ACFT) OSPREY | B | | 3.7 | | 80.0 | | 85.8 | U |
| TOTAL MODIFICATION OF AIRCRAFT | | | | 1,512.7 | | 1,482.7 | | 1,532.7 | |
| TOTAL AIRCRAFT PROCUREMENT, NAVY | | | | 1,512.7 | | 1,482.7 | | 1,532.7 | |

**Fiscal Year 2007 Budget Estimates**
**Budget Appendix Extract Language**

## AIRCRAFT PROCUREMENT, NAVY

For construction, procurement, production, modification, and modernization of aircraft, equipment, including ordnance, spare parts, and accessories therefore; specialized equipment; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, $10,868,771,000, to remain available for obligation until September 30, 2009, of which $154,800,000 shall be available for the Navy Reserve and the Marine Corps Reserve. (10 U.S.C. 5013, 5063, 7201, 7341; Department of Defense Appropriation Act, 2006.)

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **EA-6 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 2465.4 | A | 126.7 | 120.6 | 49.0 | 22.7 | 18.1 | 18.3 | 18.7 | 367.0 | 3206.6 | |

DESCRIPTION: This line item funds modifications to the EA-6B aircraft. The EA-6B Prowler is a four-seat derivative of the A-6 Intruder medium attack aircraft. Among its features are a computer controlled electronic surveillance and control system and high power jamming transmitters in various frequency bands that are contained in pods mounted externally on the five aircraft pylons. The overall goal of the modifications budgeted in FY 2007 is the procurement of Outer Wing Pane (OWP), Low Band Transmitters, Block 89A upgrades, ASN-130A Replacement, J52 Reliability Improvements, Multifunctional Information Distribution System (LIN 16), ICAP III upgrades, and Productive Ratio initiatives.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 019-79 ALQ-99 PODS | 787.0 | 27.4 | 12.6 | 14.5 | 14.1 | 17.9 | 18.3 | 18.7 | 212.2 | 1,122.8 |
| 032-85 EA-6B STRUCTURAL IMPROVEMEN | 926.4 | 59.9 | 43.3 | 23.2 | 8.6 | 0.1 | | | | 1,061.5 |
| DERF Non-add | 4.3 | | | | | | | | | |
| 111-87 J-52 ENGINES | 43.2 | 4.3 | 0.3 | 0.3 | | | | | 0.1 | 48.2 |
| DERF Non-add | 6.5 | | | | | | | | | |
| 042-93 BLOCK 89A AVIONICS I | 531.5 | 10.7 | 5.4 | 1.6 | | | | | | 549.1 |
| 001-01 ICAP III | 165.7 | 15.8 | 51.6 | 8.3 | | | | | 143.7 | 385.0 |
| 005-03 MIDS/LINK 16 | 11.5 | 8.7 | 7.5 | 1.2 | | | | | 11.0 | 39.9 |
| TOTAL | 2,465.4 | 126.7 | 120.6 | 49.0 | 22.7 | 18.1 | 18.3 | 18.7 | 367.0 | 3,206.6 |

**Note:**

1. Totals may not add due to rounding.
2. FY2002 Defense Emergency Response Funding received augments in OSIPs 032-85 and 111-87.

Exhibit P-3a

MODIFICATION TITLE: ALQ-99 PODS( OSIP 019-79 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Reliability/Mission Capability

DESCRIPTION / JUSTIFICATION:
The Universal Exciter Upgrade (UEU) provides a 30% improvement in reliability over that of the current Universal Exciter (UE / MTBF = 100 hrs), increased maintainability, elimination of multiple configurations and performance improvements.
ORD #474-88-97 defines the UEU requirements. The UEU entered Engineering and Manufacturing Development in 1991 and achieved Milestone III approval for full rate production in Apr 96. A contract for 119 UEUs was awarded in Sep 96. Follow-on procurements are in-process/planned for fiscal years 98-01, which will bring total UEU procurements up to 480. Pursuant to that inventory objective, an FY99 Congressional (Kosovo Supplemental) add of $39M was received in Sep 99. The modification of UEs to UEUs is accomplished via "turn key" sole source contract. Initial UEU deliveries occurred in Jul 98, which allowed for an Initial Operational Capability in Apr 99. ALQ-99 Exciters are Weapons Replaceable Assemblies that are readily removed and installed in the ALQ-99 Pod, thus no installation effort/funding is associated with this program. This capability will be available for all EA-6B/EA-18G aircraft, which includes four Naval Air Reserve aircraft.
LOW BAND TRANSMITTER:
The Low Band Transmitter (LBT) will provide the EA-6B with an expanded jamming capability against the Early Warning/Acquisition Radars and Communication Links of modern Integrated Air Defense Systems. Reliability and maintainability will also be greatly improved over that of current ALQ-99 Transmitters. Following a competitive acquisition and Milestone II approval, Engineering and Manufacturing Development was initiated in Sep 96. Critical Design Review was conditionally approved in Dec 97; however, a follow-up review to close out action items was completed in Nov 98. Testing to date has consisted of prototype testing conducted at government and contractor facilities. This testing has successfully demonstrated the key performance parameters identified in OPNAV/N88 ltr Ser No. N880C3/6S663399 of 26 JUL 96 can be attained by the present design. Fabrication of Engineering Development Models (EDMs began in FY00. EDMs are being used for contractor and Navy testing required to support LRIP and Milestone III approval. The LBT inventory objective is 195. ALQ-99 Transmitters are Weapons Replaceable Assemblies that are readily removed and installed in the ALQ-99 Pod, thus no installation effort/funding is associated with this program. Aircraft Operational Flight Program changes are required to support aircraft integration of this transmitter. This capability will be available for all EA-6B/EA-18G aircraft, which includes four Naval Air Reserve aircraft.
SUPPORT EQUIPMENT:
Introduction of new/modified ALQ-99 pod equipment requires new/modified organizational, intermediate and depot level support equipment, such as modifications to the pod test set to support Low Band Transmitter and Band 7/8 Transmitter, modifications to High Power Device Test Set (HPDTS) to extend freque coverage to test Band 9/10 transmitters, new Test Program Sets to test Low Band Transmitter and Band 9/10 Transmitters and modified Intermediate/depot level support equipment to test Band 7/8 Transmitters.
ENGINEERING CHANGES:
This ALQ-99 PODS Operational and Safety Improvement Program covers ALQ-99 Pod modifications required to improve reliability/maintainability/availability, enhance mission capability, resolve obsolescence issues, and correct deficiencies found in testing or in the field.
BAND 9/10 TRANSMITTER:
The Band 9/10 Transmitter (Band 9/10) provides the EA-6B an expanded jamming capability against target tracking/fire control radars of modern Integrated Air Defense Systems. Reliability and maintainability are also greatly improved over that of current ALQ-99 Transmitters. Following a competitive acquisition, Engineering and Manufacturing Development of the Band 9/10 was initiated in Jan 92. Production began in FY98, with Initial Operational Capability being accomplished in Nov 99. A total of 231 Band 9/10 Transmitters were procured between FY98 and FY03 with the last transmitter delivered in May 05. ALQ-99 Transmitters are Weapons Replaceable Assemblies that are readily removed and installed in the ALQ-99 Pod, thus no installation effort/funding is associated with this program. This capability will be available for all the EA-6B/EA-18G aircraft, which includes four Naval Air Reserve aircraft.
EXTENDED HIGH BAND RADOME:
A modified ALQ-99 Extended High Band Radome is required for compatibility with the Band 9/10 Transmitter (Band 9/10). This Radome incorporates unique sections of the radome composite structure to prevent damage by impinging energy radiation from the Band 9/10. Between FY98 and FY01, 250 ALQ-99 radomes were modified to this configuration. Future requirements for these radomes will be met by new production, vice modification, as there are no more existing assets to modify. ALQ-99 Radomes are Weapons Replaceable Assemblies that are readily removed and installed in the ALQ-99 Pod, thus no installation effort/funding is associated with this program. This capability will be available for all EA-6B/EA-18G aircraft, which includes four Naval Air Reserve aircraft.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: LBT program is proceeding through remainder of E&MD. An LRIP decision was awarded in 2nd quarter of FY2005

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | 2,575 | 199.9 | | | | | | | | | | | | | | | | | | |
| ALQ 99 BAND TWT IM | | 2.0 | | | | | 1 | * | | | | | | | | | | | | |
| BAND 9/10 GFE | | 0.3 | | | | | | | | | | | | | | | | | | |
| BAND 9/10 RADOME | 260 | 4.9 | | | | | | | | | | | | | | | | | | |
| BAND 9/10 TRANSMITTER | 235 | 132.8 | | | | | | | | | | | | | | | | | | |
| LOWBAND TRANSMITTER | 5 | 7.5 | 14 | 18.9 | 4 | 6.7 | 3 | 10.2 | | | | | | | | | | | | |
| PAO TRANSMITTER MOD | 1,296 | 5.8 | | | | | | | | | | | | | | | | | | |
| REPAIR OF GFE(UEU) | | 6.2 | | | | | | | | | | | | | | | | | | |
| UNIVERSAL EXCITER UPGRADE | 480 | 223.3 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 18.4 | | 1.6 | | 1.2 | | 0.1 | | | | | | | | | | | | |
| ECO | | 1.3 | | 0.0 | | | | | | | | | | | | | | | | |
| DATA | | 9.7 | | * | | 0.3 | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | 1.6 | | 0.0 | | | | 0.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | 6 | 99.3 | | 1.8 | | 0.8 | | 0.7 | | | | | | | | | | | | |
| ILS | | 4.3 | | 0.0 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 50.9 | | 5.0 | | 3.7 | | 3.4 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1,207 | 18.9 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 6,064 | 787.0 | 14 | 27.4 | 4 | 12.6 | 4 | 14.5 | | | | | | | | | | | | |

Notes:
1. UEU Repair of GFE costs are included in the UEU Installed Equipment line.
2. Install schedules not provided for GFE that fits into the POD without structural modification, or for equipment not requiring APN-5 funding for installation into the POD/aircraft (e.g.: LBT, UEU).
3. Funding for Repair of GFE was reported in Installation Cost for PB01 and has been redirected to the Install Equipment line under UEU Install Equipment.
4. Total Band 9/10 Transmitters include 5 EDM's.
5. $1.5M FY05 Supplemental was added for ALQ-99 TJS Band 4 Sustainment.
6. * indicates amount less than $50K.
7. Totals may not add due to rounding.
8. $11M added to FY2005 from OSIP 01-01 (ICAP III kit) and OSIP 32-85 (Structures).
9. Funding realigned from ICAP III to purchase additional quantity of 7 for Early Operational Capability (EOC) in support of GWOT

Exhibit P-3a

MODIFICATION TITLE: EA-6B STRUCTURAL IMPROVEMENTS( OSIP 032-85 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Safety of Flight

DESCRIPTION/JUSTIFICATION: This Omnibus Operational and Safety Improvement Program covers EA-6B Structural modifications (includes ejection seat, canopies, etc.) and EA-6B peculiar avionics modifications arising from test/deficiencies and those reliability and safety of flight related improvements. Included are Structural Improvement modifications which includes fixes for areas found to be deficient during aircraft fatigue test; Wing Center Sections (WCS) which replace wings that have either cracked due to stress corrosion or have reached their wing fatigue life limit; Structural Data Recording System (SDRS) which will provide a more accurate measurement of Fatigue Life Expenditure (FLE); Outer Wing Panels (OWP) will replace OWPs that have reached their fatigue life limit; Aircraft wiring Upgrades, Hydraulic Systems Upgrades, and Flight Control Surface Upgrades. This OSIP also includes the Connectiv and USQ-113 programs. In FY02 received supplemental funds in the amount of $35M for 10 additional WCS and $29.4M to reopen the OWP production line. In FY03, total program increased as a result of Congressional Plus-ups in the amount of $9M for 3 additional WCS, USQ113 Jammers $10.5M, On-Boarc Oxygen Generating System (OBOGS) $1M, and Ready Room Mission Rehearsal System $3.1M, and an additional $60M for OWP. In FY04, total program increased as a result of Congressional Plus-ups in the amount of $15M for WCS acceleration and $70M for OWPs in the FY2004 Emergency Supplement Appropriations Act, $2M Plus-up for Ready Rm Mission/ Mission Reprogramming Unit, $4M Plus-up for USQ113, and $35M for OWPs via Congressional add. Funds have been budgeted in FY07 and FY08 for the WCS and OWP production/installation line shutdown.
ASN-130A Replacement: Funding for this upgrade was provided via a Cost Reduction Effectiveness Improvement Council (CREIC) initiative during the POM-02 process. The aging ASN-130A will be replaced with the ASN-172, with a combined inertial navigation/GPS system 2nd EGI. Reliability and maintainabil will be improved.
Outer Wing Panel (OWP) replacement program includes ongoing fatigue life expenditure (FLE) analysis. The solution may range from an airframe change to improve FLE to replace the OWP to ensure the EA-6B availability through FY-2015. In FY02 received supplemental in the amount of $25M to procure up to additional Outer Wing Panels. Also received $4.25M DERF funds for OWP production line start up and tooling lin FY02. Received $60M FY03 Supplemental for OWP in 2003 and $70M FY04 Supplemental for OWP and $15M for WCS acceleration (of which $29.3M of OWP and $3.5M of WCS acclleration was recinded; a total of $32.8M). 47 total OWP sets are on contract.
Mission Reprogramming Unit (MRU): This update to DSMU resulted from an Affordable Readiness Initiative (ARI) that provides an upgrade to the existing memory input/output capability of the mission computer. Tape driven devices which are no longer being produced are being replaced with PCMCIA cards that more reliable and maintainable. Funding for this upgrade resided in OSIP 1-01 during the PB01 process.
EA-6B Power PC initiative: This initiative proposes to add a COTS PowerPC processor to the AYK-14, XN-11/CP-2357. This special EA-6B AYK-14 chassis has already been upgraded to support COTS SRAs on its VME backplane. Funding is required for COTS hardware (Processor SRA) and integration kit (Memory Bridge SRA), addition of a few laboratory support tools, development testing, and modification to technical publication source data and maintenance plans.
EA-6B (MK-GRU-EA7) Ejection seat initiative: The GRUAE7 ejection seat, used in the EA-6B aircraft uses standard British hardware to build the GRUAE7 ejection seat. This hardware is replaced 100% during depot rework and 224 day "O" level maintenance. Aircrews are reporting increased fatigue resulting from extended time in the cockpit due physical positioning of personnel. Materials used during seat over haul could be of an improved quality. The ejection seat sequencing system is an electro- mechanical design which will be improved by changing to a digital time delay system. These two action will improve the aircrew endurance and survivability.
EA-6B Digital Flight Control System (DFCS): The DFCS program comprises the adaption of existing Digital Flight Control Computer (DFCC) and Digital Control Panel (DCP) to replace the existing Air Navigational Computer (ANC) and control panel presently fitted to the EA-6B aircraft. This replacement DFCS w configured to ensure only the minimum number of aircraft changes are required. Intended to eliminate the problem of spurious inputs to Flight Control Systems.
Structural Data Recording System (SDRS) and G-Meter Replacement: The SDRS provides a more accurate recording of the g-force hits on the aircraft. The air crew is reporting disparities between cockpit G-meter and SDRS up to 0.7g difference between the read outs. The cockpit G-meter and the g forces recorded by the SDRS. The current cockpit G-meter is an analogy design meter and the replacement G-meter is a digital design. Data provided to the cockpit G-meter will be taken from the motion pick-up transducers as does the SDRS. As a secondary mode, the replacement G-meter has the capability function independently of the motion pick-up transducer input. Installs are scheduled as part of ICAP II Block 3 installations.
EA-6B Flight Control Surface Upgrades: Upgrade of current EA-6B primary flight control surfaces, which include Inboard Slats, Rudders, Outboard Flaps and Horizontal Stabilizers, due to material condition. Utilizing Phosphoric Acid Anodized (PAA) Honeycomb Core technology will improve operational availabil flight control surfaces by 60%. Bond durability between the face and core sheets and corrosion resistance is significantly improved and reduces total ownership costs by 30%. Additionally, some structural surfaces will be upgraded to improve operational availability per engineering analyses.
EA-6B Hydraulic System Upgrades: Hydraulic System Improvements, based on current technology, are available to improve legacy components on the EA-6B. Upgrades to the hydraulic actuators to include new technology seals to prevent leakage, new barrels and endcaps to improve operational reliability an reduce FLE on components. FLE can be improved by as much as 65% with this technology. Hydraulic reservoir upgrade to include, replacement of endcap to reduce safety impact, and improve operational availability. Hydraulic pumps will be replaced with a similar design used on the F-16 and planned for the 52, which offers six times greater reliability and improved maintainability.
EA-6B Aircraft Wiring Upgrade: The wiring originally installed during OEM production of the EA-6B aircraft and Weapons Replaceable Assemblies (WRAs) has continued to degrade over time. Much of the wiring originally installed conformed to specifications that have since been superceded. Post production engineering analyses have also been conducted that indicate some of the wiring originally installed has potential for severe degradation, which results in increased possibility of electrical arcing and fire hazard. Additionally, EA-6B avionics systems will be upgraded to improve operational availability, per engineer analyses. Additionally, EA-6B avionics systems will be upgraded to improve operational availability, per engineering analyses.
EA-6B USQ-113: Proposed upgrade to USQ-113 communications jamming system includes a jam toggle mode switch package, high power amplifier, and transmitter antenna that will enable the USQ-113 to maintain pace with evolving target sets. USQ-113 received a total of $9.5M in FY05 Supplemental fund

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Major milestones include the completion of SDRS and 9th Squadron Support Equipment.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | 3,101 | 36.3 | | | | | | | | | | | | | | | | | | |
| 2ND EGI/ ASN-130A REPLACEMENT | 113 | 1.1 | | | | | | | | | | | | | | | | | | |
| AIRCRAFT WIRING UPGRADE | | | | | 44 | 1.5 | 44 | 1.5 | | | | | | | | | | | | |
| AN/USQ-113 KITS | 168 | 17.1 | | | | | | | | | | | | | | | | | | |
| DFCS | 2 | 0.4 | 24 | 0.6 | 49 | 1.2 | 43 | 1.1 | | | | | | | | | | | | |
| FLIGHT CONTROL* | | | | | 74 | 4.0 | 28 | 1.5 | | | | | | | | | | | | |
| HYDRAULIC SYSTEMS UPGRADE* | | | | | 88 | 10.6 | 17 | 2.1 | | | | | | | | | | | | |
| OUTER WING PANEL (Supp) | 47 | 130.1 | | | | | | | | | | | | | | | | | | |
| OUTER WING PANEL | 1 | 25.0 | | | | | | | | | | | | | | | | | | |
| SDRS Kit | 122 | 1.7 | | | | | | | | | | | | | | | | | | |
| USQ-113 FREQ EXT A KITS (Supp) * | | | | 3.9 | | | | | | | | | | | | | | | | |
| WING CENTER SECTION | 114 | 335.9 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | 4 | 33.1 | | 15.5 | | 1.3 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | 1,949 | 89.3 | | | | | | | | | | | | | | | | | | |
| ASN-130A REPLACEMENT/2ND EGI | | 4.0 | | 0.2 | | | | | | | | | | | | | | | | |
| DFCS | | | 24 | 3.4 | 49 | 6.9 | 43 | 6.0 | | | | | | | | | | | | |
| EJECTION SEAT | | 0.2 | | | | 0.1 | | | | | | | | | | | | | | |
| MISSION REPROGRAMMING | | 11.2 | | | | | | | | | | | | | | | | | | |
| POWER PC INTEGRATION | | 2.5 | | 0.5 | | 0.5 | | 0.5 | | | | | | | | | | | | |
| USQ-113 FREQ EXT B KITS | | | | 1.6 | | | | | | | | | | | | | | | | |
| USQ-113 TOGGLE B KITS | | | | 2.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 29.6 | | 8.9 | | 1.1 | | 0.5 | | | | | | | | | | | | |
| ECO | | 2.1 | | | | 0.6 | | | | | | | | | | | | | | |
| DATA | | 12.3 | | 0.2 | | 0.6 | | 0.6 | | | | | | | | | | | | |
| TRAINING EQUIP | 15 | 3.2 | | 0.4 | | 0.1 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 15.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 2.6 | | 0.2 | | 0.5 | | 0.4 | | | | | | | | | | | | |
| OTHER SUPPORT | | 66.5 | | 7.7 | | 1.9 | | 3.8 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1,048 | 107.3 | 27 | 14.5 | 245 | 12.5 | 140 | 5.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 6,684 | 926.4 | 75 | 59.9 | 549 | 43.3 | 315 | 23.2 | | | | | | | | | | | | |

Notes:
1. Other Support in FY 2007 includes Wing Center Section Production shutdown costs.
2. Other support in FY 2008 includes Outer Wing Panel Production shutdown costs.
3. $3.0M FY05 Supplemental funding received for USQ-113 Upgrade.
4. $6.5M FY05 Supplemental funding received for USQ-113 Frequency Improvement Upgrade.
5. Breakout of USQ-113 (Supplemental) totaling $9.5M [$3.870M Install Kits, $800K Install Kits NR, $3.780M Install Equipment,$7K Training Equipment, $818K Install Costs, $225K Other Support].
6. * indicates amount less than $50K.
7. Totals may not add due to rounding.
8. Productive Ratios under Aircraft Wiring Upgrade, Flight Control, and Hydraulic Systems Upgrade is comprised of a variety of different kit combinations per aircraft. Quantity shown is projected kit combinations per aircraft.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modifications** MODIFICATION TITLE: Wing Center Section (OSIP 32-85)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Turn-Key for FY97 Procurement. Commercial & Organic Installs FY98 and out.**

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 86 | 72.3 | 16 | 13.3 | 10 | 11.0 | 2 | 3.3 | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **86** | **72.3** | **16** | **13.3** | **10** | **11.0** | **2** | **3.3** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | | |

1. Totals may not add due to rounding.
2. As result of the WCS acceleration efforts production leadtime was reduced from 28 months to 24 months.
3. Total of 114 aircraft includes 1 stricken aircraft.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 86 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | | |
| Out | 63 | 4 | 6 | 6 | 5 | 4 | 4 | 2 | 2 | 4 | 3 | 4 | 3 | 2 | 2 | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modifications** MODIFICATION TITLE: SDRS KITS (OSIP 32-85)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Mod Team/Organic**

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005: N/A FY 2006: N/A FY 2007: N/A

DELIVERY DATE: FY 2005: N/A FY 2006: N/A FY 2007: N/A

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 122 | 2.0 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **122** | **2.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 122 | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | 122 | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modification** MODIFICATION TITLE: ASN-130A Replacements (2nd EGI) (OSIP 32-85)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic Installations**

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 97 | 1.1 | 11 | 0.4 | 5 | 0.3 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **97** | **1.1** | **11** | **0.4** | **5** | **0.3** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 97 | 1 | 3 | 4 | 3 | 1 | 2 | 2 | | | | | | | | | | | | | | | | | |
| Out | 92 | 5 | | 1 | 3 | 3 | 3 | 2 | 2 | 2 | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modification** MODIFICATION TITLE: DFCS (OSIP 32-85)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic Installations**

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: Jun-05 FY 2006: Jan-06 FY 2007: Jan-07

DELIVERY DATE: FY 2005: Mar-06 FY 2006: Oct-06 FY 2007: Oct-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 2 | 1.2 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | 24 | 0.9 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 49 | 2.0 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **2** | **1.2** | **0** | **0.0** | **24** | **0.9** | **49** | **2.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | | |

1. Prior Year Quantity accounts for 1 Test and 1 Val/Ver Aircraft (bought as install equipment N/R).
2. Total to include 8 installs for Trainer Aircraft.
3. The (DFCS) Program quantity and schedule adjustments were the result of budget constraints. The original program called for 119 aircraft to have the current AFCS replaced with DFCS. However the independent cost estimate completed after the PB process determined that this plan exceeded the funding available. The DFCS program has since been de-scoped.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 2 | | | | | | 4 | 10 | 10 | 10 | 13 | 13 | 13 | | | | | | | | | | | | |
| Out | 1 | 1 | | | | | 2 | 10 | 10 | 12 | 10 | 13 | 13 | 13 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modification** MODIFICATION TITLE: Flight Control Surfaces Upgrade

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic Installations**

ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: FY 2006: Oct-05 FY 2007: Oct-07

DELIVERY DATE: FY 2005: FY 2006: Apr-06 FY 2007: Apr-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 74 | * | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 28 | * | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **0** | **0.0** | **0** | **0.0** | **74** | ***** | **28** | ***** | | | | | | | | | | | | |

1. * indicates amount less than $100K.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 40 | 34 | | | 14 | 14 | | | | | | | | | | | | |
| Out | | | | | | | | 30 | 30 | 14 | | 14 | 14 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modification** MODIFICATION TITLE: Hydraulic Systems Upgrade

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic Installations**

ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: FY 2006: Oct-05 FY 2007: Oct-06

DELIVERY DATE: FY 2005: FY 2006: Apr-06 FY 2007: Apr-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 88 | 0.2 | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 17 | * | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **0** | **0.0** | **0** | **0.0** | **88** | **0.2** | **17** | ***** | **0** | ***** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0** | | |

1. * indicates amount less than $100K.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 44 | 44 | | | 17 | | | | | | | | | | | | | |
| Out | | | | | | | | 30 | 30 | 28 | | 17 | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modification** MODIFICATION TITLE: Aircraft Wiring Upgrade

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic Installations**

ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: FY 2006: Oct-05 FY 2007: Oct-06

DELIVERY DATE: FY 2005: FY 2006: Apr-06 FY 2007: Apr-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 44 | * | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 44 | * | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **0** | **0.0** | **0** | **0.0** | **44** | * | **44** | * | **0** | * | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0** | | |

1. * indicates amount less than $100K.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 22 | 22 | | | 22 | 22 | | | | | | | | | | | | |
| Out | | | | | | | | 20 | 20 | 4 | | 20 | 20 | 4 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: J-52 ENGINES( OSIP 111-87 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Reliability Upgrade

DESCRIPTION / JUSTIFICATION: J52 Engine Improvements: The J52 engine is a legacy gas turbine engine, which powers the EA-6B and has been in service since the 1960's. This initiative will capitalize on R&D efforts funded through the Engine Component Improvement Program (CIP) and OMN funded analy of engine failure modes. Specific reliability discrepancy trends have been identified and appropriate Engineering Change Proposals (ECP) and Power Plant Changes (PPC) have been developed to address the risk of uncontained turbine blade failures and improve engine reliability and time on wing. The results include an improved Turbine Exhaust Case (TEC) that provides low pressure turbine (LPT) containment and other durability and reliability improvements designed to increase engine time on wing. 20 TEC kits were purchased in June 2004. These kits will be delivered not later than 1Q FY06. Funding will also be used for the Power Trim Indicator system and engineering and logistics labor required to complete development of maintenance planning products across all 10 ILS elements. Efforts include the analysis of J52 data, maintenance plan, Level of repair analysis, reliability centered maintenance to establish preventiv maintenance schedules, development of technical manuals, provisioning technical documentation, and logistics support tail for associated support equipment. Also includes the development of source data, and limits to revise engine build standards in order to meet J52 reliability goal of 760 hours time on wing.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Development of the Improved Turbine Exhaust Case (TEC) began in FY95 using engine CIP and contractor funds. Testing and ECP approval was completed in the first quarter of FY98 (OCT 97), followed by a production contract award. All EC are approved and Technical Directives (TD) are completed or in process. Incorporation of initial PPC 306 TEC kits is in process. Initial PPC 304 kits are on order and NAVICP is currently procuring attrition parts.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS | 218 | 25.5 | | | 32 | 0.1 | 38 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.3 | | | | * | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.1 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.2 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 4.6 | | 0.7 | | * | | * | | | | | | | | | | | | |
| ILS | | 1.3 | | 0.1 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 10.3 | | 3.5 | | 0.1 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 218 | 43.2 | | 4.3 | 32 | 0.3 | 38 | 0.3 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding.
2. Funding provided within the FYDP reflects an approved Reduction in Total Ownership Cost (RTOC) initiative.
3. Installations will be performed concurrently with Standard Depot Level Maintenance (SDLM), Engine Overhauls and other O&M,N funded efforts.
4. * Totals less than 50K.

Exhibit P-3a

MODIFICATION TITLE: BLOCK 89A AVIONICS I( OSIP 042-93 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Safety of Flight/Reliability

DESCRIPTION / JUSTIFICATION: This omnibus Operational and Safety Improvement Program covers EA-6B ICAP II Block 89A Avionics systems modifications to install required communications, navigation, and miniaturized technology improvements. The avionics common systems upgrade includes incorporat of: (1) AN/ARC-210 VHF/UHF radios having SINCGARS and HAVEQUICK modes for inter-operability with Air Force, ground, and NATO forces. (2) The Embedded GPS Inertial Navigation System (EGI) provides a closely coupled GPS-INS solution and replaces the ASN-50 AHRS which has very poor reliability. Full integration of the Electronic Flight Instrumentation System (EFIS), Control Display Navigation Unit (CDNU), and Digital Signal Data Converter (DSDC), which were installed as part of AFC778-779. This OSIP provides for upgrade of the DSDC for use in Block 89A. The DSDC functions as an interface unit for EFIS and is connected to the 1553 Navigation data bus to provide additional navigation data to the aircrew. (4) The AYK-14 computer will be upgraded with Very High Speed Integrated Circuit Technology (VHSIC) improving processing, memory, and throughput. The upgraded computer (CP-2357) will retain the outer form factor of the current computer and incorporate a new backplane that supports the new VHSIC processor Module and provides VME-bus expansion slots. Discrete and Serial Modules (DSM) replace the Serial Interface Module-A (SIM-A) cards. (5) Mission Planning System: The AN/TSQ-142 Mission Planner provides operational flight program loading, maps, EW libraries, jammer techniques, HARM data, and performs data reduction. Modifications to the AN/TSQ-142 are required to support the Block-89A upgrade, and to support transition of EA-6B MPS. (6) Misc. Avionics: Additional Engineering Change Proposals (ECP) and procurement of avionics, such as ARC-199 Radios, CIU/E, HARM, Dual EGI, and Night Vision capability in all aircraft.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The ARC-210 UHF/VHF radio is a common avionics system to be installed in all Navy aircraft, and has undergone OPEVAL on the F-18, UH-1, and other platforms. The EA-6B has been approved for installation. The EFIS system completed successful OPEVAL and was approved for full rate production and will require minimal upgrade FOT&E for the required interface and incorporation of EGI data. The EGI is common avionics with the F-18 EGI and has been extensively flight tested in that platform. The AYK-14 (XN-*) computer utilizes modules th are common avionics to Navy inventory, and a chassis similar to the current XN-4. The similarity and commonality of the upgraded AYK-14 required little additional qualification testing. DT began on the Block -89A system in FY-98, with an intensive integrated Test and Evaluation period. Testing of software, upgraded avionics, including some regression testing of existing functionality, and testing of the mission planning system are currently being conducted.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| BLOCK 82 TO 89A CABLES OWP | 44 | 43.6 | | | | | | | | | | | | | | | | | | |
| BLOCK 82 TO 89A KIT | 20 | 59.5 | | | | | | | | | | | | | | | | | | |
| BLOCK 89 TO 89A KIT | 46 | 15.4 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | 8 | 61.4 | | | | | | | | | | | | | | | | | | |
| AN/AYK-14 | 45 | 8.3 | | | | | | | | | | | | | | | | | | |
| ARC210 EQUIP | 50 | 5.6 | | | | | | | | | | | | | | | | | | |
| ARC210, USQ-113 | 60 | 3.0 | | | | | | | | | | | | | | | | | | |
| BLOCK 82 TO 89A EQUIP | 26 | 16.4 | | | | | | | | | | | | | | | | | | |
| BLOCK 89 TO 89A | 30 | 2.0 | | | | | | | | | | | | | | | | | | |
| CIU/ENCODER/CDNU | 66 | 18.6 | | | | | | | | | | | | | | | | | | |
| EGI | 21 | 1.2 | | | | | | | | | | | | | | | | | | |
| NVD EQUIP | 122 | 12.6 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | 2 | 8.2 | | | | | | | | | | | | | | | | | | |
| ENGINEERING CHANGE ORDERS | | 0.5 | | | | | | | | | | | | | | | | | | |
| DATA | | 12.4 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 13.4 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 44.2 | | | | | | | | | | | | | | | | | | |
| ILS | | 9.2 | | 0.3 | | 0.2 | | 0.3 | | | | | | | | | | | | |
| OTHER SUPPORT | | 89.9 | | 7.4 | | 0.9 | | 1.3 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 216 | 106.0 | 14 | 3.0 | 5 | 4.3 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 756 | 531.5 | 14 | 10.7 | 5 | 5.4 | | 1.6 | | | | | | | | | | | | |

Notes:
1. * Totals less than $50K.
2. Totals may not add due to rounding.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modifications** MODIFICATION TITLE: BLOCK 89A AVIONICS I( OSIP 042-93 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Commercial and Organic Installations**

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: N/A FY 2006: N/A FY 2007: N/A

DELIVERY DATE: FY 2005: N/A FY 2006: N/A FY 2007: N/A

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 99 | 86.0 | 9 | 2.7 | 5 | 4.3 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 99 | 86.0 | 9 | 2.7 | 5 | 4.3 | 0 | 0.0 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 99 | | 3 | 3 | 3 | 1 | 2 | | 2 | | | | | | | | | | | | | | | | |
| Out | 86 | 1 | 4 | 5 | 3 | 2 | 4 | 4 | | 1 | 3 | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

1. Three (3) Kits Procured by Navy Reserve in FY03. Aircraft Transferred to Active Navy.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **EA-6B Series Modifications** MODIFICATION TITLE: Night Vision Devices (OSIP 42-93)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Organic**

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: N/A FY 2006: N/A FY 2007: N/A

DELIVERY DATE: FY 2005: N/A FY 2006: N/A FY 2007: N/A

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 117 | 2.1 | 5 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **117** | **2.1** | **5** | **0.2** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | **0** | **0.0** | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 117 | 5 | | | | | | | | | | | | | | | | | | | | | | | |
| Out | 117 | | | | 5 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

1. NVD installation costs are not budgeted on an annualized basis as the cost to procure and install kits were provided as part of an FY00 Congressional plus-up.

Exhibit P-3a

MODIFICATION TITLE: ICAP III( OSIP 001-01 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Safety of Flight/Reliability

DESCRIPTION / JUSTIFICATION: This Operational and Safety Improvement Program covers the EA-6B Improved Capabilities III (ICAP III) systems modifications to install required radar and communications receiver, displays, and connectivity improvements. Additionally, this modification removes over 70 aging and unreliable Weapons Replaceable Assemblies (WRAs). Specifically, the modification program replaces the ALQ-99 receiver System with the LR-700/ ALQ-218 receiver system, replaces the TDY-43 display system with a new COTS based display system for the Pilot and three Electronic Countermeasures Officers (ECMOs), replaces the Recorder Reproducer Set (RRS) with a new Digital Recorder, incorporates the Multi-Mission Advanced Tactical Terminal (MATT) which provides reception of datalinks such as TIBS, incorporates the USQ-113 Communication Receiver/Jammer with the Onboard System, updates mission planning for ICAP III, and provides provisions for Link-16. The course of maturing ICAP III to full potential will consist of 4 Block upgrades to deliver approximately 15 months apart.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Following a Full and Open Competition, Milestone II approval was received, and an EMD RDT&E development contract was awarded to the Northrop Grumman Corporation in March 1998. Following a DT/OT test period, completion of an OA a an LRIP decision, an LRIP contract was awarded in FY03. Following completion of OPEVAL and a Milestone III decision, a full rate production contract will be awarded in FY06.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ICAP III | 10 | 69.9 | | | 4 | 23.8 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.1 | | | | 8.9 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.5 | | | | 1.7 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.3 | | 0.1 | | 2.5 | | | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 66.6 | | 5.7 | | 1.8 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 9.4 | | 6.1 | | 8.7 | | | | | | | | | | | | | | |
| ILS | | 0.4 | | 0.4 | | 3.6 | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.7 | | 3.5 | | 0.7 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 10 | 10.8 | | | | | 4 | 8.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 22 | 165.7 | | 15.8 | 4 | 51.6 | 4 | 8.3 | | | | | | | | | | | | |

Notes:
1. Installation costs include Repair Incident to Modification (RIM) efforts in FY06 and out.
2. Total quantity of 35 ICAP III kits does not include 2 kits procured/installed via the E&MD program.
3. FY05 includes Congressional add for $6.3M for ICAP III Weapons Systems Trainer.
4. Totals may not add due to rounding.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **EA-6B Series ICAP III Upgrade** MODIFICATION TITLE: ICAP III System Improvement (OSIP 01-01)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Commercial**

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: FY 2006: Jan-05 FY 2007: Oct-05

DELIVERY DATE: FY 2005: FY 2006: Jan-06 FY 2007: Oct-06

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 10 | 10.8 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (4 ) kits | | | | | | | 4 | 8.3 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **10** | **10.8** | **0** | **0.0** | **0** | **0.0** | **4** | **8.3** | | | | | | | | | | | | |

1. Aircraft are inducted concurrent with other Depot work to maximize Primary Aircraft Inventory (PAI) levels and is not impacted despite delay in initial ICAP III kit deliveries.
2. ICAP III Kit is delivered in three parts. Part 1 of the kit delivery is delivered 12 months after ARO. Also production rate for ICAP III kit was increased to maintain IOC schedule requirements.
3. MIDS and ICAP III are interconnected programs, but have their own OSIPs. However, procurement kit quantities and kit install quantities will match because the goal is to have both MIDS and ICAP III work as part of a system. As a result, the installs will be done at the same time to ensure that the two are placed on a common aircraft.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 10 | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| Out | 0 | 1 | 3 | 3 | 3 | | | | | | 1 | 1 | 1 | 1 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

1.Two (2) aircraft kits were developed and installed in EA-6B EMD RDT&E program. Total Inventory of 37 (35 or which is in production).

Exhibit P-3a

MODIFICATION TITLE: MIDS/LINK 16( OSIP 005-03 )

MODELS OF SYSTEMS AFFECTED: EA-6 SERIES TYPE MODIFICATION: Safety of Flight/Reliability

DESCRIPTION / JUSTIFICATION: This Operational and Safety Improvement Program covers integration of required flight systems and Link-16 into the EA-6B. These programs cover procurement and installation of (a) Government Off the Shelf (GOTS) Inter-cockpit Communications System (ICS), CXP (IFF), TACAN Modification, and modification of the of Pre-Planned Product Improvement (P3I) Ethernet processor into the already installed AN/AYK-14 XN-11 and (b) previously developed and approved for production MIDS Low Volume Terminal. These modifications will allow the EA-6B aircraft to fly with new FAA mandated requirements and to participate in the Link-16 network. Items within (a) above are required prerequisites for (b) installs. Training Systems, Publications, and Support Equipment will be procured.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The MIDS LVT is a common DoD system. The Navy will procure an existing ICS system based on requirements and via a competitive contract. The AYK-14 XN-11 Ethernet modification is currently in development.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | 30.5 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| MIDS A Kits | 10 | 0.4 | | | 4 | 0.1 | | | | | | | | | | | | | | |
| MIDS B Kits | 10 | 3.8 | | | 4 | 2.0 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION EQUIPMENT | 25 | 3.1 | 1 | 2.0 | 3 | 1.0 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | 0.1 | | 0.4 | | | | | | | | | | | | | | |
| TRAINING EQUIP | | * | | 1.3 | | 0.3 | | 0.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.1 | | 0.1 | | 0.1 | | | | | | | | | | | | |
| ILS | | 0.1 | | 0.4 | | 0.2 | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.7 | | 4.8 | | 3.4 | | 0.9 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 10 | 1.3 | | | | | 4 | 0.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 55 | 11.5 | 1 | 8.7 | 11 | 7.5 | 4 | 1.2 | | | | | | | | | | | | |

1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. Total of 35 Kits include 4 which are used for labs and test aircraft and will not be operational aircraft.
4. A Kits = provisions including cables, brackets, and interface devices. B Kits = LINK 16 black box.
5. MIDS Installation Equipment (i.e. companion equip: CXP, AYK, ICS) is required for ICAP II 89A Block III Aircraft whether it is upgraded to ICAP III or not.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **EA-6B Series** MODIFICATION TITLE: **MIDS (Provisions and Link 16) (OSIP 05-03)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **FIELD** **DEPOT INSTALL**

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: FY 2006: Dec-05 FY 2007:

DELIVERY DATE: FY 2005: FY 2006: Dec-06 FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 10 | 1.3 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (4 ) kits | | | | | | | 4 | 0.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **10** | **1.3** | **0** | **0.0** | **0** | **0.0** | **4** | **0.2** | | | | | | | | | | | | |

1. Aircraft are inducted one month before kit deliver
2. MIDS and ICAP III are interconnected programs, but have their own OSIPs. However, procurement kit quantities and kit install quantities will match because the goal is to have both MIDS and ICAP III work as part of a system. As a result, the installs will be done at the same time to ensure that the two are placed on a common aircraft.
3. MIDS Installation Equipment (i.e. companion equip: CXP, AYK, ICS) is required for ICAP II 89A Block III Aircraft whether it is upgraded to ICAP III or not.
4. MIDS A & B Kits are installed at the same time. Above quantity reflects a combined installation of A & B kits.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 10 | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| Out | | 1 | 3 | 3 | 3 | | | | | | 1 | 1 | 1 | 1 | | | | | | | | | | | |

| | FY 2011 | | | | To | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | |
| In | 0 | 0 | 0 | 0 | | |
| Out | 0 | 0 | 0 | 0 | | |

1. Total of 35 Kits include 4 which are used for labs and test aircraft and will not be operational aircraft.

| BUDGET ITEM JUSTIFICATION SHEET<br>P-40 | | | | | | | | | | | DATE:<br>February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE<br>**AV-8 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 477.1 | A | 33.9 | 35.7 | 20.5 | 18.0 | 25.2 | 15.9 | 15.8 | 86.8 | 728.8 | |

This line item funds modifications to AV-8B aircraft. The AV-8B is a single engine, single crewmember aircraft capable of vertical/short take-off and landing (V/STOL) operations. The AV-8B meets the Marine Corps requirements for a light attack aircraft to provide responsive offensive air power that can operate at austere forward bases in direct support of ground forces. The overall goal of the modifications budgeted in FY 2007 is to continue incorporation of Operational and Safety Improvements to the aircraft; completion of power cable MIL-W-81381 wire with MIL-W-22759 wire; continued update of TAV-8B trainer aircraft to better align with operational aircraft; continued incorporation of OSCAR; completion of the aircraft arming unit with ZRF; and incorporation of AV-8B F402-RR-408 Engine safety and operational changes.

The AV-8B active inventory (21 June 2005) consists of 4 major configurations:
17 two-seat TAV-8B aircraft,
5 DAY Attack aircraft,
40 NIGHT Attack Aircraft, and
92 Night Attack/RADAR aircraft.
Retrofit quantities of each ECP depend on the aircraft configuration type if & when the change was introduced into production.

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 001-91 OMNIBUS O&S IMPROVEMENTS | 92.1 | 1.4 | 0.7 | 0.4 | 0.1 | | | | | 94.5 |
| 003-96 KAPTON WIRE REPLACEMENT | 35.4 | 1.1 | | | | | | | | 36.4 |
| 025-99 TAV-8B PERFORMANCE UPGRADE | 105.8 | 1.4 | 0.7 | 0.4 | * | | | | | 108.4 |
| 023-00 AV-8B LITENING POD | 186.2 | 5.8 | | | | | | | | 192.0 |
| 012-02 OPEN SYSTEMS CORE AVIONICS RQMT & PRECISION STRK | 44.7 | 18.1 | 28.3 | 8.5 | 8.5 | 8.0 | 3.5 | | | 119.6 |
| 002-04 ENGINE LIFE MANAGEMENT PROGRAM | 4.0 | 6.2 | 3.1 | 3.7 | 2.7 | 3.8 | 3.9 | 2.9 | 15.6 | 45.9 |
| 006-06 READINESS MANAGEMENT PLAN | | | 2.9 | 7.6 | 6.7 | 13.3 | 8.6 | 12.9 | 71.2 | 123.1 |
| TOTAL | 468.1 | 33.9 | 35.7 | 20.5 | 18.0 | 25.2 | 15.9 | 15.8 | 86.8 | 719.8 |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODIFICATION TITLE: OMNIBUS O&S IMPROVEMENTS( OSIP 001-91 )

MODELS OF SYSTEMS AFFECTED: AV-8B Night, AV8B Night/Radar, TAV8B, AV8B Day Attack TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION:

Each ECP description includes the AV-8B configuration affected by the change, and if applicable, when it was introduced into production.

ECP-217, Emergency Battery Backup, provides electrical power to the landing gear in the event of a major power failure - TAV-8B, Day. ECP-246, Canopy Restraint, incorporates an improved pyrotechnic device to provide separation to the pilot on ejection - TAV-8B. ECP-248, Power Lever Angle Unit (PLAU), provides critical in-flight engine control, is being relocated from the engine bay to the cockpit to reduce the failure rate - TAV-8B, Day, Night, and FY99 & prior Radar. ECP-251, Nose Wheel Steering (NWS), a Safety change, provides improved pilot control over nose wheel steering responsiveness for critical landing conditions - TA 8B, Night, FY96 & prior Radar. ECP-254, Inlet Guide Vane Controller (IGVC), a Safety change, provides improved -408 engine (via RR-ECP-3759) responsiveness during critical maneuvers - TAV-8B, Night, FY96 & prior Radar. ECP-255R1, Digital Flap Controller (DFC), a Safety change, provides improved flap control range and failure response during critical operations - TAV-8B, Day, Night, FY97 & prior Radar. ECP-256, Jet Pipe Temperature (JPT), a Safety change, eliminates the erroneous engine temperature returns - TAV-8B, Night, and FY96 & prior Radar. ECP-257, Digital Electronic Controller Unit (DECU), a Safety change, provides an improved power supply that corrects power interruptions during critical maneuvers - TAV-8B, Night, and FY96 & prior Radar. ECP-269R1, Frame 12, incorporates high vibration structural modifications to absorb increased vibrations which cause fatigue cracks - TAV-8B, Night, & Radar. ECP-271, an improved mounting bracket for the 100% LERX structure reduces maintenance problems and improves readiness - Night, FY96 & prior Radar. ECP-278, installs more durable cables for the Radar Warning Radar System - Night, Radar. ECP-300, Landing Gear Control, replaces the striker pad inside the landing gear control handle

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

NWS flight test completed Feb 98. NWS & IGVC V&V completed third quarter FY98. DFC and JPT V&V completed second quarter FY98. DECU V&V completed first quarter FY98 and incorporation initiated. Initial design/ V&V of ECP-217 was completed in 2nd quarter FY90 and a replacement battery was identified in 3rd quarter FY97 to allow final installations. ECP-271 design/V&V was completed 3rd quarter FY99. Installation reinitiated to complete modification program. ECP-278 design completed in 2nd quarter FY99. L660 GTS/APU design was completed 2nd quarter FY97 and rework initiated in 3rd quarte FY97. L580 GTS/APU modification rework was completed in 4th quarter FY97. GEC-11 modification was completed in 4th quarter FY97.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| C1.0 DSM MODULES | 154 | 1.2 | | | | | | | | | | | | | | | | | | |
| ECP 254 IGVC | 88 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP-217 BU BATTERY | 67 | 1.2 | | | | | | | | | | | | | | | | | | |
| ECP-246 CANOPY RESTRAINT | 34 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP-248 PLAU | 54 | 2.8 | | | | | | | | | | | | | | | | | | |
| ECP-251 NWS | 94 | 3.2 | | | | | | | | | | | | | | | | | | |
| ECP-255R1 DFC | 141 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP-256 JPT | 192 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP-257 DECU | 99 | * | | | | | | | | | | | | | | | | | | |
| ECP-269R1 FRAME 12 | 60 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP-271 LERX | 52 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP-278 RWR | 136 | 0.8 | | | | | | | | | | | | | | | | | | |
| ECP-300 LANDING GEAR CTRL | 184 | 0.8 | | | | | | | | | | | | | | | | | | |
| PRIOR YEARS | 1106 | 12.4 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 7.8 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP 254 IGVC | 125 | 17.1 | | | | | | | | | | | | | | | | | | |
| ECP-248 PLAU GFE | 54 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP-255R1 DFC CFE | 161 | 5.4 | | | | | | | | | | | | | | | | | | |
| ECP-296 ALR67 ANTENNA | 178 | 0.8 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 2.0 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 7.8 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 2.3 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.3 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 11.4 | | 0.2 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1369 | 12.3 | 36 | 1.1 | 9 | 0.4 | 3 | 0.1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 92.1 | | 1.4 | | 0.7 | | 0.4 | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: TAV-8B, AV-8B Day, AV-8B Night, AV-8B Night/Radar MODIFICATION TITLE: OMNIBUS O&S IMPROVEMENTS( OSIP 001-91 )

INSTALLATION INFORMATION: This reflects multiple ECP installation begun in FY-94. Quantities will not match kit procurement line due to "O" level installs, Contractor warranty kits (ECP-271 & ECP-269R1) & piece part attrition upgrades.

METHOD OF IMPLEMENTATION: Installation will be accomplished by Naval Aviation Depot drive-in modification

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: It varies with each ECP

CONTRACT DATES: FY 2005 Multiple FY 2006 Multiple FY 2007 Multiple

DELIVERY DATE: FY 2005 Multiple FY 2006 Multiple FY 2007 Multiple

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (1,417) kits | 1,369 | 12.3 | 36 | 1.1 | 9 | 0.4 | 3 | 0.1 | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 1,369 | 12.3 | 36 | 1.1 | 9 | 0.4 | 3 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1367 | 9 | 9 | 9 | 9 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | | | | | | | | | | | | | |
| Out | 1367 | 9 | 9 | 9 | 9 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: KAPTON WIRE REPLACEMENT ( OSIP 003-96 )

MODELS OF SYSTEMS AFFECTED: TAV-8B TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: The Kapton Wiring Replacement (ECP-277) S,R & M modification is required to replace the MIL-W-22759 (TEFZEL) wiring in TAV-8B aircraft delivered prior to September 1999. TAV-8Bs with KAPTON (MIL-W-81381) insulated wire suffer from high failure rate due to frequent incidents of chafing resulting in wire fires. The KAPTON (MIL-W-81381) wired airplanes also require frequent and costly maintenance actions to continue flying. Replacement of this wiring is expected to improve aircraft readiness. This modification was introduced in production FY1989 TAV-8B aircraft cum 16 & subsequent which deleted the KAPTON (MIL-W-81341) insulated wiring and replaced it with irradiated TEFZEL wiring which is much more resistant to chaffing and fire. This modification has been retrofitted in 9 of 11 of the 13 TAV-8B aircraft (cum 15 & below) currently in the inventory. Wiring kits for all affected aircraft have been procured, however, aircraft availability and higher than anticipated installation labor hours (cost growth) and configuration differences have resulted in the removal of two aircraft from the current installation schedule. Issue sheets to restore these aircraft have been submitted and the program intends to complete installations when funding is identified.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
This modification was designed and incorporated in all production baseline aircraft delivered after September 1989. AFP not applicable. An installation validation commenced July 2000 and commenced Aug 2001.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-277 KAPTON WIRING | 12 | 16.3 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 2.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.8 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.0 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | * | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.8 | | * | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 9 | 12.3 | 1 | 1.0 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 35.4 | | 1.1 | | | | | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: TAV-8B MODIFICATION TITLE: KAPTON WIRE REPLACEMENT ( OSIP 003-96 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AFC installation will be accomplished by Naval Aviation Depot Drive

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (10) kits | 9 | 12.3 | 1 | 1.0 | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 9 | 12.3 | 1 | 1.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Only 10 of the 12 kits bought will be installed. Aircraft cum numbers T-2 and T-6 cannot accept kits at this time due to configuration differences and are not included in the schedule

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 9 | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| Out | 9 | | | | | | | | 1 | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: TAV-8B PERFORMANCE UPGRADE( OSIP 025-99 )

MODELS OF SYSTEMS AFFECTED: TAV-8B TYPE MODIFICATION: Upgrade

DESCRIPTION / JUSTIFICATION:
Update all AV-8B Trainer aircraft to better align with operational aircraft by incorporating Night Vision Goggle (NVG) lighting and the -408 engine. ECP-276 (NVG lighting) incorporation allows for training of fleet pilots in NVG tactical flight operations during initial AV-8B flight training under the supervision of an instructor pilot. Currently, all NVG training is performed in the operational squadrons in single piloted aircraft after completion of initial pilot training. Earlier introduction of pilot NVG training/proficiency enhances the training environment. Improves configuration standardization with current Night/Radar NVG compatible components. ECP-276 is being installed on 17 aircraft currently in the inventory. The -408 engine is not thrust limited to the extent of the current -406A/B engines. ECP-275 (-408 Engine) provisions incorporation will allow expansion of VSTOL training time and increase the vertical landing performance safety margin by 2,000 pounds of thrust. Additionally, initial pilot training will be at the same performance levels experienced in the operational squadrons. Configuration consistency between Trainer and fleet Night/Radar aircraft will also be enhanced. Trainer aircraft cum T16 and above have -408 provisions incorporated and require engines only. Trainer aircraft cum T1 through T15 require both -408 engine provision kits and -408 engines. ECP-275 will be installed on 12 of the 13 T15 & below aircraft currently in the inventory. ECP-288 will field a modified Operational Flight Program to support the full -408A engine capabilities. ECP-291 installs the Night Attack Display computer. ECP-305 installs the Throttle Grip and Stick. Due to the upgraded engine, Frame 12 stiffeners will be installed on all TAV-8B aircraft concurrently with ECP-275

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Initial design of the NVG and -408A aircraft kits began in November 1998. Engine provisioning software development (ECP-288) was initiated in November 1998.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC-273 GFE AFT FOR ECP-276 | 18 | * | | | | | | | | | | | | | | | | | | |
| AFC-273 GFE FWD FOR ECP-276 | 2 | * | | | | | | | | | | | | | | | | | | |
| AFC-398 FR12 FOR ECP-275 | 12 | .3 | | | | | | | | | | | | | | | | | | |
| ECP-275 408 ENGINE | 12 | 4.2 | | | | | | | | | | | | | | | | | | |
| ECP-276 NVG--ANNUNCIATOR KIT | 17 | 4.3 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 2.6 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-275 ENGINES (T1-15) | 12 | 41.7 | | | | | | | | | | | | | | | | | | |
| ECP-275 ENGINES (T16-24) | 6 | 20.4 | | | | | | | | | | | | | | | | | | |
| ECP-276 ACNIP MOD KIT | 18 | .2 | | | | | | | | | | | | | | | | | | |
| ECP-276 AIRSPEED INDICATOR MOD | 52 | .1 | | | | | | | | | | | | | | | | | | |
| ECP-276 CDC/CDM MOD KIT | 51 | 1.0 | | | | | | | | | | | | | | | | | | |
| ECP-276 EPI MOD KIT | 42 | .3 | | | | | | | | | | | | | | | | | | |
| ECP-276 FUEL QTY MOD KIT | 26 | .1 | | | | | | | | | | | | | | | | | | |
| ECP-276 STANDBY ALTIMETERS | 36 | .5 | | | | | | | | | | | | | | | | | | |
| ECP-288 MISSION SYSTEM | 17 | 2.0 | | | | | | | | | | | | | | | | | | |
| ECP-288 WARFARE MISSION | 17 | 3.7 | | | | | | | | | | | | | | | | | | |
| ECP-291 CFE NA DISPLAY | 17 | 1.7 | | | | | | | | | | | | | | | | | | |
| ECP-275 GFE EMU | 20 | 1.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | .2 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 2.3 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | .2 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | .2 | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 11.1 | | .7 | | .2 | | .2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 45 | 7.6 | 4 | .8 | 2 | .5 | 3 | .1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 105.8 | | 1.4 | | .7 | | .4 | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: TAV-8B MODIFICATION TITLE: TAV-8B PERFORMANCE UPGRADE( OSIP 025-99 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AFC installation will be accomplished by Naval Aviation Depot Drive-in Mod. ECP-275 will be installed concurrent with ECP-276 on aircraft cum T-15 & below

ADMINISTRATIVE LEADTIME: Varies for each ECP PRODUCTION LEADTIME: Varies for each ECP

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (61) kits | 45 | 7.6 | 4 | 0.8 | 2 | 0.5 | 3 | 0.1 | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 45 | 7.6 | 4 | 0.8 | 2 | 0.5 | 3 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Only 54 of the 61 kits bought will be installed. Aircraft cum numbers T-2 and T-6 cannot accept kits at this time due to configuration differences and are not included in the schedule.

Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 45 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | | | | | | | | | | | | |
| Out | 45 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: AV-8B LITENING POD( OSIP 023-00 )

MODELS OF SYSTEMS AFFECTED: Night Attack & Radar/Night Attack TYPE MODIFICATION: Upgrade

DESCRIPTION / JUSTIFICATION:
The system will integrate and procure an external targeting pod that includes an infared (IR) and low-light TV targeting device capable of detecting, classifying, auto-tracking, and designating air-to-surface targets. The system will support first-pass autonomous delivery of conventional, precision guided, and accur munitions to include Laser Maverick, GBU-12 and GBU-16 and JDAM (Joint Direct Attack Munition). The system will provide targeting capabilites for the AV-8B fleet of Night Attack and Radar/Night Attack aircraft through the end of its service life. The addition of the LITENING II Targeting Pod gives the AV-8B (Night and Radar) the capability to perform precision targeting. Congressional adds of FY01 $80M, FY02 $24.7M, FY03 $28.0M and FY04 $37.0M to procure additional Litening II Precision Targeting Pods and integrate Litening into the AV-8B.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The Targeting Pod is a non developmental item and has been in full production for several years. It was a winner of a targeting FLIR competition for the Air Force Reserve and Air National Guard and put in service on their F-16s 2nd Qtr FY00. The design, integration, and testing of the Targeting Pod for the AV-8B was done on the Radar and/or Night Attack during 3rd Qtr FY00. The integration will utilize: existing aircraft software, a weapons station adapter, and Targeting Pod interface software. PEO(A) had approved the acquisition strategy to acquire the pods through an existing USAF contract and provided a targeting pod capability to the Fleet in 1st Qtr FY02. Additional full Litening integration to utilize targeting information from the Litening Pod in OC1.2 to create aircraft targeting solutions will be developed and tested under this OSIP and introduced unde the H20 OFP program. The ability to carry the Litening Pod on alternate wing stations and multi-target cueing is included in the H4.0/H6.0 Program.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Litening PD/ROVER | | | 2 | 5.0 | | | | | | | | | | | | | | | | |
| Night | 44 | 0.1 | | | | | | | | | | | | | | | | | | |
| POD RETROFIT KITS | 47 | 4.0 | | | | | | | | | | | | | | | | | | |
| Radar | 47 | 0.1 | | | | | | | | | | | | | | | | | | |
| Reman | 47 | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 7.9 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| CFE PODS | 96 | 124.8 | | | | | | | | | | | | | | | | | | |
| STATION 2, 5, 6 | 129 | 2.0 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | 0.1 | | | | | | | | | | | | | | | | | | |
| DATA | | 0.8 | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 5.8 | | 0.5 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | 35 | 1.7 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.1 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 38.7 | | 0.2 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 186.2 | | 5.8 | | | | | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODIFICATION TITLE: OPEN SYSTEMS CORE AVIONICS REQUIREMENT & PRECISION STRIKE( OSIP 012-02 )

MODELS OF SYSTEMS AFFECTED: AV-8B Night, AV-8B Night/Radar TYPE MODIFICATION: Upgrade

DESCRIPTION / JUSTIFICATION:
The current AV-8B avionics do not have sufficient processor throughput and memory to support planned system upgrade. The OSCAR program will update the existing obsolete avionics using Commercial Off the Shelf (COTS) open system architecture hardware that has object-oriented design (OOD) and higher order language (HOL) software. This OSIP supports the procurement and retrofit installation of the Mission System Computer (MSC), and Warfare Management Computer (AMC) and Warfare Management Computer (WMC) being developed under the OSCAR program. This OSIP also supports the procurement and retrofit installation of MIL-STD-1760 wiring. The installation of the MIL-STD-1760 wiring to support JDAM and other new weapons will require the addition of wiring to the wing, pylons, fuselage, additional circuit breakers, and a new relay panel. Subsequent system upgrades based on the OSCAR system will a continuing effort to integrate precision weapons suitable for delivery from the Harrier platform. ECP-289 ECCM Mod Kits are being installed concurrent with OSCAR to provide the full integration of the Havequick/SINCGARS capability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
This system upgrade (ECP-270R2, ECP-285) is the production incorporation of the MSC, WMC and software developed under the OSCAR program. The OSCAR program developed, integrated and operationally tested the new MSC, WMC, and Operational Flight Program software that will use the MK-83 Joint Direct Attack Munitions on the AV-8B as well as full integration of Havequick/SINCGARS. LRIPI decision was approved Feb 02. DT completed 4th quarter FY02. LRIP II decision was approved Apr 03. OPEVAL completed Mar 04 and the final report was received Jul 04. Initial operational capability attained Jun 05. OSCAR was approved MSIII / Full Rate Production 16 Aug 04.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-270R1 NIGHT | | | 6 | 1.8 | 11 | 2.9 | 12 | 3.2 | | | | | | | | | | | | |
| ECP-270R1 RADAR | 12 | 2.5 | 12 | 3.0 | | | | | | | | | | | | | | | | |
| ECP-270R1 REMAN | 6 | 1.3 | 20 | 4.5 | 14 | 3.9 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-270R2 MSC | 78 | 10.8 | 16 | 1.8 | 43 | 4.9 | | | | | | | | | | | | | | |
| ECP-270R2 WMC | 68 | 13.7 | 18 | 3.2 | 43 | 8.3 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 3.1 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.3 | | 0.2 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 6.2 | | 0.5 | | 1.7 | | 0.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.6 | | 0.4 | | 0.2 | | | | | | | | | | | | | | |
| ILS | | | | | | 0.2 | | 0.4 | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.1 | | 0.8 | | 1.1 | | 0.6 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 30 | 2.0 | 51 | 5.2 | 44 | 4.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 44.7 | | 18.1 | | 28.3 | | 8.5 | | | | | | | | | | | | |

Notes: ECP-289 ECCM Mod kits will be installed concurrent with OSCAR and installation costs will be incurred under OSIP 1202 Open Systems Core Avionics Requirement & Precision Strike
An additional MIL-STD-1760 kit is being procured in FY04 for installation in the AV-8B Maintenance Trainer
The cost of the FY04 OSCAR computers is $400K lower due to an additional 18 units being purchased by Spain and Italy on the same contract
Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: AV-8B Night, AV-8B Night/Radar

MODIFICATION TITLE: OPEN SYSTEMS CORE AVIONICS REQUIREMENT & PRECISION STRIKE( OSIP 012-02 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AFC installation will be accomplished by Naval Aviation Depot or Commercial Drive-in Mod

ADMINISTRATIVE LEADTIME: 9 Months

PRODUCTION LEADTIME: 16 Months

CONTRACT DATES: FY 2005 Jan 05 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 May 06 FY 2006 May 07 FY 2007 May 08

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (148) kits | 0 | 0.0 | 30 | 2.0 | 34 | 2.1 | 24 | 0.5 | | | | | | | | | | | | |
| FY 2005 (38) kits | | | | | 17 | 3.1 | 20 | 3.8 | | | | | | | | | | | | |
| FY 2006 (25) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (12) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 0 | 0.0 | 30 | 2.0 | 51 | 5.2 | 44 | 4.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Note: FY02 buys of ECP-289 ECCM mod kits were procured under OSIP 023-92, installation will be concurrent with OSCAR.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | 7 | 8 | 8 | 7 | 13 | 13 | 13 | 12 | 11 | 11 | 11 | 11 | | | | | | | | | | | | |
| Out | | 7 | 8 | 7 | 7 | 13 | 13 | 13 | 12 | 11 | 11 | 11 | 11 | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: ENGINE LIFE MANAGEMENT PROGRAM( OSIP 002-04 )

MODELS OF SYSTEMS AFFECTED: F402-RR-408 TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION:
The AV-8B is a single engine aircraft with unique capabilities. The VSTOL enviornment is very unforgiving and allows no tolerance for engine problems. In the past, the Pegasus F402 has suffered from a less than optimal safety and reliability record demonstrating a 12.11 mishap (Class A) per 100,000 flight hou compared to a historical average rate of less than 2.0 over the rest of the Navy and Marine Corps in recent years. The Engine Life Management Program is a comprehensive program to increase safety of flight and operational readiness of the AV-8B F402-RR-408 Engine. Funding provided is to incorporate Engineering Change Proposals to increase safety of flight and operational readiness of the F-402-RR-408 Engine.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
The Engine Life Management Program was developed in October 2000. OSIP 02-04 supports the Harrier AV-8B Engine Life Management Program (ELMP) through APN funding. Power Plant changes are required throughout the aircraft service life as the aircraft ages and operationally revealed deficiencies are discovered, researched and solutions engineered. The Component Improvement Program (CIP), which is RDT&E funded, provides for the developing and demonstrating of the engineered solutions to these deficiencies and through the Engineering Change Proposal (ECP) process the Power Plant changes are initiated. The power plant program procures the necessary kits, installation, non-recurring engineering, and technical data. The kits provided are for engine and propulsion related hardware to support the AV-8B F402 engine such as nozzle guide vanes (NGV), Pilot Lever Angle Units (PLAU), Fuel Control Units, Generator Turbine Starters (GTS) and accessory components, rotors and vanes for compressor sections, power turbines, combustion sections, exhaust ducts, engine monitor systems, and blade and vane coatings and foils to improve Foreign Object Damage (FOD) tolerance. The purpose of the program is to increase safety of flight and operational readiness of the AV-8B F402-RR-408 Engine. The ELMP is comprised of several Engineering Project Description investigations and a series of bi-annual Accelerated Simulated Mission Endurance Tests (ASMET). The Engineering Project Description (EPD) investigations and ASMET tests provide data points for existing Fleet problems and predict future engineering issues with the F402-RR-408. The EPD investigations are conducted annually and an ASMET test began 4Q/04. Engineering Change Proposals resulting from Engineering Investigations and ASMET teardown results will be researched and their development formalized under the development program and incorporated into the F402-RR-408 via OSIP 02-04.

ECP-3868 Improved Gearbox Lubrication - Replaces existing short transfer bobins, rework of gear carrier and improved gear lubrication to reduce gear wear and extend the life of the component.
ECP-3705R1 Bottom Heat Shield - Allows easier removal and access to the water injection system without removing the NO. 4 oil drain pipe.
ECP-3877 EVICS HMU Introduction of Restrictor - Introduces a repair for dithering (fluctuation) enhancing the reliability.
ECP-3690 Improved clipping of GTS leads - Revised to alleviate design deficiency.
ECP-3813 Oil Piping #3 Vane
ECP-3881 FMU Shut Off Valve
ECP-3886 PDR Assembly
ECP-3532 Bulkhead Cracking
ECP-3717R1 Accessory Gearbox Starter Shaft Bearing - introduces a revised clearance to minimize occurrences of rub btwn the cage and bearing housing
ECP-3843 Sand Tolerant NGV - Revised NGV's to improve durability and increase component life
ECP-3745 Combustion Chamber Improvements - introduces multiple changes to minimize or prevent the current problems
ECP-589 GTS Chip Detector - New chip detector for early detection of potential damaging particles within the GTS
IPPC 227 FDS
IPPC XXX IGVCU Gasket revision
IAYC XXX HPT Vane Borescope
GTS Break Seal
ECP-3647 Improved Alignment of Bulkhead Sealing Rings
ECP-3852 LPC Stage 2 Vanes Hard Coating
ECP-3892 LPC Rotor 2 Blade with Revised Stagger Angle
ECP-3889 Encapsulated Revision
ECP-3883 Introduction of IBI
ECP-3893 LPS 1, 2, & 3 Van Serialization
ECP-3843 Sand Tolerant NGV
ECP-3855 LPCI Vane
ECP-3705 Two Piece Bottom Heat Shield
ECP-3705R1 Two Piece Bottom Heat Shield
ECP-3837R1 CuNiIn
ECP-3887 IGV Position Transmitter with Rev. Drive Shaft
ECP-TBD GTS PWR Turbine/Compressor RGV/Compressor Turbine - Revision due to obsolescence, introduces a new part number.
The following TBD ECP's are revisions to improve durability and increase component life and or introduce new parts due to obsolescence
ECP-TBD CCOC Thermocouples
ECP-TBD HPC Vane Modification
ECP-TBD LPT1 Liner
ECP-TBD Introduction of new HPT2 Blade
ECP-TBD Fine Oil Filter
ECP-TBD Control System Obsolescence
ECP-TBD EVICS IDEC POR Correction
ECP-TBD EVICS IDEC Diagnostic Improvements
ECP-TBD EVICS Obsolescence
ECP-TBD EVICS HMU Pilot Valve Improvements
ECP-TBD DECU Obsolescence
ECP-TBD Final Drive End-Similar to RAF design
ECP-TBD Hot nozzle redesign - cracking problem
ECP-TBD Exhaust Diffuser Redesign
ECP-TBD Thrust Push Improvements
ECP-TBD GTS Improvements
ECP-TBD DECU/FMU WOW/FDS Improvements
ECP-TBD LPC 1 Blade FOD Tolerance (LPB)
ECP-TBD LPC 1 Blade Dovetail Coatings (LPB)
ECP-TBD #2 Bearing Redesign
ECP-TBD PLAU Shut Off Valve
ECP-TBD Obsolescence, starter contactor
ECP-TBD Obsolescence, protection unit
ECP-TBD Obsolescence, starter motor
ECP-TBD New break-in box with expanded capability
ECP-TBD Power turbine rotor blade failure fix
ECP-TBD Nozzle and spigot ring assy material change for improved realiabilty
ECP-TBD New Start Counter - improved reliability
ECP-TBD FMU Obsolescence ECP
ECP-TBD LPC2 Blade (root cracking) Mod
ECP-TBD 2 Transducer modification
ECP-TBD DCU Redesign

ECP-TBD Introduction of new HPT2 Blade
ECP-TBD Fine Oil Filter
ECP-TBD Control System Obsolescence
ECP-TBD EVICS IDEC POR Correction
ECP-TBD EVICS IDEC Diagnostic Improvements
ECP-TBD EVICS Obsolescence
ECP-TBD EVICS HMU Pilot Valve Improvements
ECP-TBD DECU Obsolescence
ECP-TBD Final Drive End-Similar to RAF design
ECP-TBD Hot nozzle redesign - cracking problem
ECP-TBD Exhaust Diffuser Redesign
ECP-TBD Thrust Push Improvements
ECP-TBD GTS Improvements
ECP-TBD DECU/FMU WOW/FDS Improvements
ECP-TBD LPC 1 Blade FOD Tolerance (LPB)
ECP-TBD LPC 1 Blade Dovetail Coatings (LPB)
ECP-TBD #2 Bearing Redesign
ECP-TBD PLAU Shut Off Valve
ECP-TBD Obsolescence, starter contactor
ECP-TBD Obsolescence, protection unit
ECP-TBD Obsolescence, starter motor
ECP-TBD New break-in box with expanded capability
ECP-TBD Power turbine rotor blade failure fix
ECP-TBD Nozzle and spigot ring assy material change for improved realiabilty
ECP-TBD New Start Counter - improved reliability
ECP-TBD FMU Obsolescence ECP
ECP-TBD LPC2 Blade (root cracking) Mod
ECP-TBD 2 Transducer modification
ECP-TBD DCU Redesign

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-3717 ACC GEARBOX STARTER | | | | | | | | | | | | | | | | | | | | |
| ECP-3745 COMBUSTION CHAMBER | | | | | | | | | | | | | | | | | | | | |
| ECP-3843 SAND TOLERANT | 11 | 1.2 | 22 | 1.6 | 26 | 2.3 | 31 | 2.9 | | | | | | | | | | | | |
| ECP-3868 IMPROVED GEARBOX | | | | | | | | | | | | | | | | | | | | |
| ECP-589 MAGNETIC CHIP | 211 | 1.1 | 98 | 0.3 | | | | | | | | | | | | | | | | |
| TBD IMPROVE TO LP AND HP PULSE | | | | | | | | | | | | | | | | | | | | |
| TBD COMPRESSOR BLADE LEADING | | | | | | | | | | | | | | | | | | | | |
| TBD COMPRESSER MODULE | | | | | | | | | | | | | | | | | | | | |
| TBD FUEL CONTROL | | | | | | | | | | | | | | | | | | | | |
| TBD COMBUSTION MODULE | | | | | | | | | | | | | | | | | | | | |
| TBD EXHAUST MODULE IMPROV | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 0.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.2 | | 0.2 | | 0.2 | | 0.2 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.8 | | 2.1 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| ILS | | 0.2 | | 1.5 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.5 | | 0.3 | | 0.1 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 4.0 | | 6.2 | | 3.1 | | 3.7 | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODIFICATION TITLE: OBSOLESCENCE REPLACEMENT( OSIP 006-06 )

MODELS OF SYSTEMS AFFECTED: TAV-8B, AV-8B Night, AV-8B Night/Radar TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION:
This OSIP provides for maintaining the reliability of the AV-8B weapons system until its projected end of service, which is now expected to extend to 2020 or until replaced by STOVL JSF. This requires the airframe to exceed planned service life and will require both structural and obsolescence solutions. Funds be utilized to incorporate ECPs and implement changes for AV-8B weapons system safety, structural integrity deficiency, and component (avionics/systems) obsolescence conditions as they arise. Based on funding controls, the program intends to proceed with ECP-282P1 --Fuel Coupling-- will install new clan couplings with safety straps; ECP-282P2-- modify the wing to fuselage fuel interconnect with threaded couplings; ECP CHPT-34-- Tactical Aircrew Combat Training System (TACTS) Antenna-- replaces antenna attachment bolts; ECP-283-- Water Tank Pre-Filter-- incorporates a filter to prevent contamination of th poppet drain valve; ECP-305-- Throttle and Stick Grip, TAV-8B-- replaces obsolete throttle and stick grips with current fleet configuration; ECP-309-- Fuel Bellows Conduit Leak-- incorporates a safer double bellows design with increased gage material-- incorporation by attrition; ECP-TBD Center Tank Improvemen Replaces failing structural frames 19, 20, 21 with a strengthened design, incorporation by both attrition and scheduled depot installations; ECP-TBD Aft Structural Modification Improvement-- will install structural sensors/recorders in all aircraft-- to allow early detection and enable design resolution of Frame 43 bulkhead cracking-- in the area of the vertical tail and horizontal stabilizer to prevent catastrophic failure; ECP-TBD EAAS; ECP-TBD Bullet Fairing-- modify to prevent corrosion deterioration of fairing internal structure; ECP-TBD Wedge Frame-- will develop and implement a solution for acoustic resonance fatigue cracking of webs and panels-- near the auxiliary air doors; ECP-TBD-- Main Landing Gear (MLG) Hand Operating Strut-- redesign to forestall premature strut wear resulting in premature failure of MLG door mechanism; ECP-TBD Frame 16-- provide solution of fatigue cracking in the engine nozzle ring raceway an bulkhead buttresses; ECP-TBD Air Loc Replacement-- modify and replace fasteners for improved retention to reduce FOD; ECP-TBD Frame 30, 31 and 32-- implement solution for structural fatigue cracking; ECP-TBD Blast Shields-- implement solution for acoustic fatigue failures; ECP-TBD-- Forward ECS Air Ducts-- modify failing staying ties which are causing FOD in the ECS system; ECP-TBD Display Computers-- modify to address processor obsolescence.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
ECP-CHPT-42 Center Tank Modification Improvements (Frame 19, 20, 21) FY06 to begin NRE and kit buys in FY06 and installations in FY07. Engineering Change Order and Publication/Data work to begin in FY06 for future ECP procurements and installations. Support equipment procurements will begin to support future installations to manage aircraft obsolescence.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP TBD Bullet Fairing | | | | | | | | | | | | | | | | | | | | |
| ECP-282 (P-1) Fuel Coupling | | | | | | | 31 | 0.1 | | | | | | | | | | | | |
| ECP-282 (P-2) Fuel Coupling | | | | | | | 31 | 0.1 | | | | | | | | | | | | |
| ECP-283 Water Tank Pre-Filter | | | | | | | | | | | | | | | | | | | | |
| ECP-305 Throttle Stick and Grip | | | | | | | | | | | | | | | | | | | | |
| ECP-TBD Aft Structural Mod | | | | | | | 12 | 0.1 | | | | | | | | | | | | |
| ECP-TBD Air Loc Fasteners | | | | | | | 30 | * | | | | | | | | | | | | |
| ECP-CHPT-42 Center Tank Improve | | | | | 12 | 0.4 | 12 | 0.4 | | | | | | | | | | | | |
| ECP-CHPT-42 Center Tank | | | | | 12 | * | 12 | 0.1 | | | | | | | | | | | | |
| ECP-TBD ECS Air Ducts | | | | | | | | | | | | | | | | | | | | |
| ECP-TBD Frame 16 | | | | | | | | | | | | | | | | | | | | |
| ECP-CHPT-43 Frame 30,31,32 | | | | | | | 1 | 0.1 | | | | | | | | | | | | |
| ECP-TBD Hand Operating Strut | | | | | | | 15 | 0.1 | | | | | | | | | | | | |
| ECP-TBD Wedge Frame | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | 0.1 | | 0.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP-TBD Display Computer Kits | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | 0.3 | | 0.5 | | | | | | | | | | | | |
| DATA | | | | | | 0.3 | | 0.7 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | 1.7 | | 1.2 | | | | | | | | | | | | |
| ILS | | | | | | 0.1 | | 0.8 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 0.1 | | 1.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 25 | 2.1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | 2.9 | | 7.6 | | | | | | | | | | | | |

Note: Totals may not add due to rounding
Asterisk indicates amount less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: TAV-8B, AV-8B Night, AV-8B Night/Radar

MODIFICATION TITLE: OBSOLESCENCE REPLACEMENT( OSIP 006-06 )

INSTALLATION INFORMATION: Quantities will not match kit procurement line due to "O" level installs

METHOD OF IMPLEMENTATION: Installation will be accomplished by Naval Aviation Depot drive-in Mod

ADMINISTRATIVE LEADTIME: It varies with each ECP

PRODUCTION LEADTIME: It varies with each ECP

CONTRACT DATES: FY 2005 Multiple FY 2006 Multiple FY 2007 Multiple

DELIVERY DATE: FY 2005 Multiple FY 2006 Multiple FY 2007 Multiple

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (24) kits | | | | | | | 24 | 2.1 | | | | | | | | | | | | |
| FY 2007 (37) kits | | | | | | | 1 | 0.0 | | | | | | | | | | | | |
| FY 2008 (117) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (157) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (131) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (158) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (377) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 2.1 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | 6 | 6 | 7 | 6 | | | | | | | | | | | | |
| Out | | | | | | | | | | 6 | 6 | 7 | 6 | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

| BUDGET ITEM JUSTIFICATION SHEET<br>**P-40** | | | | | | | | | | DATE:<br>**February 2006** | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE<br>**Adversary Series** | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
| QUANTITY | | | | | | | | | | | |
| COST (In Millions) | 32.8 | A | 5.1 | 5.0 | 2.6 | | | | | | 45.4 |

DESCRIPTION: This line item funds modifications to convert a total of 32 F-5E Aircraft, procured from the Government of Switzerland, into a Navy approved configuration. It allows the U.S. Navy to maintain as close a standardized configuration with the Air Force as possible based on need. It also allows the Navy to initiate unique structural or avionics modifications. The overall goal of the modifications budgeted in 2007 is to incorporate airframe modifications and selected Air Force approved Time-Compliance Technical Orders (TCTO's) to improve safety and reliability. This specific modifications budgeted and programmed are for the F-5 Structural Repair Program.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 029-81 STRUCTURAL FATIGUE/U | 32.8 | 5.1 | 5.0 | 2.6 | | | | | | 45.4 |
| TOTAL | 32.8 | 5.1 | 5.0 | 2.6 | | | | | | 45.4 |

Exhibit P-3a

MODIFICATION TITLE: STRUCTURAL FATIGUE/U( OSIP 029-81 )

MODELS OF SYSTEMS AFFECTED: F-5 Adversary Series

TYPE MODIFICATION: SAFETY/RELIABILITY
VERTICAL STABILIZER
COCKPIT LONGERON
SWISS US CONVERSION

DESCRIPTION / JUSTIFICATION: The Navy F-5E/F Adversary aircraft inventory, and all applicable funds, are for 32 aircraft. USAF has updated their durability, damage, and tolerance analysis. Their structural inspection, full scale fatique testing and accelerometer data has identified structural fatique in wings and fuselage areas. The US Navy plans to utilize these aircraft in the Adversary mission through FY2015, and beyond. However, aircraft will be grounded prior to 2015, when maximum fatique life is reached on major structural components, unless further analysis and replacements are procured and installed. The Navy plans to replace the current high time fuselage with low time Swiss F-5E Fuselages. Also, wings, horizontal stabilizers, vertical stabilizers, upper/lower cockpit songerons, and dorsal longerons require replacement as they reach their fatique life limit. Installation of a Structural Data Recorder is planned to ensure accurate recording of flight profile data which can provide up to a 25% increase in usage of these high cost critical components. Also, repair of other critical safety-of-flight systems such as, Flight Controls and Canopy Latching mechanisms will be accomplished under this program.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: All components and systems required for this program are already qualified, and/or approved for Navy use. No Operational Testing is envisioned under this program.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CANOPY LATCH MOD/REFURB KITS | 36 | 0.2 | | | | | | | | | | | | | | | | | | |
| DORSAL LONGERONS | 21 | 1.6 | | | | | | | | | | | | | | | | | | |
| HORIZONTAL STABILIZERS | 13 | 1.5 | | | | | | | | | | | | | | | | | | |
| SDR KITS | 10 | 0.9 | | | | | | | | | | | | | | | | | | |
| SWISS/US CONVERSION KIT | 9 | 0.4 | 9 | 1.7 | 9 | 0.4 | 5 | 0.2 | | | | | | | | | | | | |
| UPPER COCKPIT LONGERON | 18 | 1.2 | 9 | 0.2 | 9 | 0.6 | 5 | 0.4 | | | | | | | | | | | | |
| VARIOUS KITS | 291 | 1.2 | | | | | | | | | | | | | | | | | | |
| VERTICAL STABILIZER | 21 | 3.6 | | | | | | | | | | | | | | | | | | |
| VERTICAL STABILIZER INSTALL KIT | 10 | 0.2 | | | | | | | | | | | | | | | | | | |
| WINGS | 4 | 3.9 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 6.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.2 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 2.5 | | 0.1 | | 0.7 | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.1 | | | | 0.4 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 349 | 6.2 | 22 | 3.1 | 20 | 2.8 | 14 | 1.9 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 782 | 32.8 | 40 | 5.1 | 38 | 5.0 | 24 | 2.6 | | | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: F-5 Adversary Series

MODIFICATION TITLE: SAFETY/RELIABILITY
VERTICAL STABILIZER
COCKPIT LONGERON
SWISS US CONVERSION

INSTALLATION INFORMATION: DEPOT LEVEL

METHOD OF IMPLEMENTATION: CONCURRENT WITH PHASE DEPOT MAINTENANCE

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005 Nov 04 FY 2006 Nov-05 FY 2007 Nov-06 FY 2008

DELIVERY DATE: FY 2005 Jul 05 FY 2006 Jul 06 FY 2007 Jul 07 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (46) kits | 36 | 6.2 | 8 | 0.8 | 1 | 0.1 | 1 | 0.1 | | | | | | | | | | | | |
| FY 2005 (18) kits | | | 14 | 2.3 | 4 | 0.4 | | | | | | | | | | | | | | |
| FY 2006 (18) kits | | | | | 15 | 2.3 | 3 | 0.3 | | | | | | | | | | | | |
| FY 2007(10) kits | | | | | | | 10 | 1.5 | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 36 | 6.2 | 22 | 3.1 | 20 | 2.8 | 14 | 1.9 | | | | | | | | | | | | |

**Note: 313 kits from prior year procurements have been installed and are not shown on this schedule.**

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 36 | | 8 | 7 | 7 | | 8 | 6 | 6 | | 3 | 6 | 5 | | | | | | | | | | | | |
| Out | 36 | 1 | 3 | 6 | 5 | 1 | 7 | 5 | 7 | 5 | 5 | 2 | 3 | 5 | 4 | 1 | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-40, BUDGET ITEM JUSTIFICATION** | DATE: **February 2006**

APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy/APN-5 Aircraft Modifications**

P-1 ITEM NOMENCLATURE: **F-18 Series Modification**

Program Element for Code B Items:

Other Related Program Elements

| | Prior Years | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | To Complete | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 2,236.518 | | 461.840 | 451.217 | 411.524 | 444.830 | 487.698 | 535.646 | 525.437 | 1,102.625 | | 6,657.335 |

This line item funds modifications to F/A-18 aircraft. The F/A-18 Naval Strike Fighter is a twin-engine, mid-wing, multi-mission tactical aircraft. The F/A-18 is employed in both Navy and Marine Corps squadrons. Commencing with the FY 1988 procurement, both the single seat and two-seat F/A-18's include a night attack capability. F/A-18 can be missionized through selected use of external equipment to accomplish specific fighter or attack missions. This commonality provides the Operational Commander more flexibility in employing his tactical aircraft in a dynamic scenario. The primary design mission for the F/A-18 is a strike fighter which includes the traditional fighter applications, such as fighter escort and fleet air defense, combined with the attack applications, such as interdiction and close air support. Since the same fighter and self defense capability is retained, the overall goal of the modifications budgeted in FY 2007 is to implement commonality/capability and structural safety and reliability improvements. The specific modifications budgeted and programmed are:

(TOA, $ in Millions)

| OSIP No. | Description | Prior Years | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 011-84 | Correction of Discrep. | 484.4 | 31.0 | 34.0 | 45.3 | 46.8 | 44.3 | 88.5 | 60.7 | 174.7 | 1,009.7 |
| 039-92 | AN/ARC-210 | 17.5 | 0.6 | | | | | | | | 18.2 |
| 019-94 | Common Configuration | 178.4 | 1.1 | | | | | | | | 179.5 |
| 036-94 | GPS | 80.4 | 1.7 | 1.1 | | | | | | 17.5 | 100.7 |
| 038-94 | AN/APG-73 RUG | 144.0 | | | | | | | | | 144.0 |
| 012-96 | PIDS | 53.9 | 3.8 | | | | | | | 191.0 | 248.6 |
| 003-97 | ATARS | 244.7 | 12.0 | | | | | | | | 256.7 |
| 010-99 | DCS | 13.9 | 4.7 | 3.3 | 2.5 | 1.8 | 1.4 | 1.4 | 1.4 | | 30.6 |
| 011-99 | SLMP | 124.4 | 98.4 | 86.3 | 112.1 | 114.0 | 115.4 | 123.3 | 124.8 | 390.5 | 1,289.1 |
| 012-99 | MIDS[1] | 228.2 | 46.5 | 36.9 | 40.3 | 41.9 | 101.6 | 53.1 | 21.4 | | 569.8 |
| 020-99 | NACES P3I | 20.2 | | | | | | | | | 20.2 |
| 021-00 | USMC F/A-18 UPGRADE (ECP583) | 217.3 | 14.2 | 34.4 | 10.4 | 8.4 | 6.7 | 33.0 | 40.4 | | 364.7 |
| 024-00 | JHMCS | 30.6 | 26.0 | 36.4 | 38.9 | 36.8 | 38.8 | 39.6 | 40.3 | 137.0 | 424.3 |
| 012-01 | ATFLIR | 240.7 | 106.2 | 137.0 | 119.1 | 79.3 | 58.4 | 24.2 | 24.6 | | 789.6 |
| 019-01 | E/F 2000 hr Correction of Discrep. | 26.5 | 7.8 | 3.8 | 1.9 | 0.6 | 0.2 | | | | 40.7 |
| 005-02 | Digital Wing Tip for AIM 9X | 3.0 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 0.3 | 0.5 | | 5.2 |
| 006-02 | C/D Training System | 33.6 | 20.6 | 7.6 | 6.7 | 6.9 | 6.8 | 6.9 | 13.1 | | 102.2 |
| 015-02 | Fast Tactical Imagery II | 3.5 | | | | | | | | | 3.5 |
| 012-03 | E/F 4000 hr Correction of Discrep. | 11.1 | 2.4 | 2.0 | 1.8 | 0.5 | | | | | 17.7 |
| 013-03 | E/F 6000 hr Correction of Discrep. | 1.6 | 2.2 | 2.1 | 1.3 | * | * | | | | 7.3 |
| 014-03 | E/F Correction of Operational Discrep. | 50.4 | 28.2 | 14.9 | 16.8 | 20.2 | 20.9 | 11.0 | 11.2 | 16.4 | 190.0 |
| 015-03 | Mark XIIA Mode 5 IFF[2] | 2.1 | | | | | | | | | 2.1 |
| 008-05 | Reserve Squadron ECP560 | | 7.8 | 7.7 | 0.4 | 0.4 | 0.3 | | | | 16.6 |
| 023-04 | Core Avionics Improvements/Upgrades | 22.8 | 3.8 | 3.5 | 3.8 | 2.8 | 2.8 | 6.1 | 6.3 | | 51.8 |
| 024-04 | Litening At Targeting Pod | 3.2 | 42.5 | 14.8 | | | | | | | 60.5 |
| 009-06 | Link 4A Replacement | | | 4.5 | 4.7 | 9.6 | 10.2 | 11.0 | 7.4 | 4.3 | 51.7 |
| 017-06 | Engines Modules | | | 20.7 | | | | | | | 20.7 |
| 002-07 | AESA | | | | 5.4 | 74.6 | 79.5 | 116.1 | 123.3 | 96.1 | 495.0 |
| 002-01 | Network Centric Ops/Interoperability Upgrade | | | | | | | 21.4 | 50.1 | 75.1 | 146.6 |
| | * Asterisk indicates amounts less than $51K. | | | | | | | | | | |
| TOTAL | | 2,236.5 | 461.8 | 451.2 | 411.5 | 444.8 | 487.7 | 535.6 | 525.4 | 1,102.6 | 6,657.3 |
| | RESERVE INCLUDED IN TOTAL | 11.705 | 11.780 | 7.901 | 7.885 | 0.368 | 0.351 | 0.335 | | | |

NOTE: FY2006 does not match the P-1 due to technical error.
FY2006 shown above includes $25M of Title IX funding.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **CORRECTION OF DISCREPANCIES IDENTIFIED DURING PRELIMINARY EVALUATION, SUBSEQUENT FLIGHT TEST PROGRAMS AND FLEET OPERATIONS (OSIP 011-84)**

MODELS OF SYSTEM AFFECTED: **F/A-18 A/B/C/D** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

*Corrections to discrepancies found during testing and evaluation can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However, when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the fleet, which will create maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required:

| | |
|---|---|
| External Stores EMI Protection (ECP 087S1) | Provide for the application of external stores EMI Protection. This ECP includes Installation Costs ONLY. |
| Auto AC Bus Isolation (ECP 121R1) | Modifies the 50A Battery Charging Converter installation to automatically isolate the busses and reset the generators following a dual power outage. |
| Battery Control Relay Unit (ECP 165R1) | Safety modification to the utility/emergency battery control circuits and adds a battery relay control unit. Prevents inadvertent battery discharge. |
| FY86 Block Upgrade (ECP 178R1C1) | Increases the power handling capabilities of the four port antenna and the RF switchable filter in order to accommodate the RF power output requirements of the ASPJ System. |
| Center Fuselage Structural Mods (ECP 241R1) | Improves fatigue for the Dorsal Deck, Duct Skin rivets at Y442, ECS Inlet Casting, and Y419 Nacelle Former at Ramp Truss Attachment. |
| Dorsal Longeron (ECP 251) | Life extension modification to the Dorsal Longeron. |
| Dorsal Longeron (ECP 251R1) | Life extension modification to the Dorsal Longeron. |
| 470.5 Bulkhead (ECP 262)* | Improves the fatigue life of the Y470.5 Bulkhead Outer Cap. |
| Righthand AMAD Bay (ECP 267R1)* | Reliability and maintainability improvement to the interference between the motive flow tube and the hot fuel recirculation tube. |
| Y508 Former (ECP 276) | Structural improvement of the Y508 Former by increasing the flange thickness and reinforcing the former with integral ribs. |
| AFT Engine Mount (ECP 305R1)* | Safety modification improves the aft engine mount support to prevent cracking in the aft engine mount support fitting. |
| Y657.35 Engine Bay Door Former (ECP 306) | Modifies the existing door former to prevent cracking. |
| Main Landing Gear (MLG) Planing Link (ECP 311)* | Safety modification to the existing planing link assembly. Belleville washers spring is replaced with nested external compression springs to provide additional overcenter locking force and stroke capability. |
| MLG Trunnion Upgrade (ECP 319)* | Safety modification reconfigures and strengthens the MLG trunnion assembly to prevent catastrophic failure upon landing or takeoff. |
| Y488 Bulkhead (ECP 320) | Modifies the Y488 bulkhead to reduce structural stress and improve fatigue life. |
| Wing Fatigue Repair (ECP 353) | Modifies the fastener holes in the Wing Panel Forward Spar and the #4 Intermediate Wing Spar to increase fatigue life. |
| MLG Shoulder Belt (ECP 355) | Safety modification provides new shoulder bolts to correct a deficiency concerning elongation of the AFT bolt hole in the MLG Door Actuator Support Fitting. |
| ASPJ System Improvement (ECP 364) | Improves reliability and maintainability by improving the cooling system and correcting transmit switchable filter qual test problems. |
| Y470 Bulkhead Improvement (ECP 365) | Modifies the Y470 bulkhead to reduce structural stress and improve fatigue life. |
| #1 Fuel Cell Floor (ECP 367) | Safety modification to improve the fuel cell floor strength to prevent cracking during catapult. |
| MLG Retract Actuator (ECP 375) | Redesigns the MLG Retract Actuator Support Fitting and the Flange of Y470.5 Bulkhead where the fitting attaches and revises hydraulic timing to lengthen the Fatigue Life of the structures. |
| Fretting on Formers & Spindles (ECP 391) | Safety modification to correct fretting observed on outboard formers of horizontal stabilizer. |
| Fuselage Skin, Y518 to Y534 (ECP 402)* | Modifies exterior fittings and adds and internal bathtub to strengthen the area, reduce structural stress, and improve fatigue life. |
| Fuselage Skin, Y518 to Y534 (ECP 402R1)* | Modifies exterior fittings and adds and internal bathtub to strengthen the area, reduce structural stress, and improve fatigue life. |
| Inlet Duct Skin at Y453 (ECP 417) | Addresses the retrofit design which will provide 12,000 SFH of life without cracks for the Inlet Duct Skin. |
| Y470.5 Bulkhead MLG Trunnion (ECP 428) | Corrects the deficiency in the MLG Trunnion support at Y470.5 bulkhead. |
| Speed Brake Trough (ECP 440) | Modifies the existing speed brake trough area to strengthen it and improve fatigue life. |
| SUU-63 Wing Pylon Door Panel (ECP 488) | Safety modification to the existing door panel to preclude loss of the door during flight |
| Y470.5 Bulkhead Fatigue Change (ECP 492) | Modifies the thickness of the existing bulkhead web to increase strength and improve fatigue life. |
| Fuselage Skin at Y453 (ECP 498) | Safety modification to strengthen existing fasteners attaching the P/N 74A324350 former to Y453 bulkhead. |
| Nacelle Skin Fatigue Improvements (ECP 501) | Retrofits the Inlet Nacelle Skin to correct acoustic vibration related fatigue failures. |
| LAU-115 Sparrow Mod (ECP 506)* | Modifies the lower rail of the LAU-115 to strengthen the area of the AIM-7 Sparrow missile forward hanger interface and improve fatigue life. |
| ST-16 Failures (ECP 536)* | Modifies aircraft between Lot VI and Lot XVI ro realize Full Life Airframe (6000 Fatigue Hours) |
| Improvement of Inner Wing SPAR (ECP 544) | Strengthens the existing inner wing spar to improve fatigue life. |
| Fuel Barrier Web (ECP 548) | Safety improvement to the existing fuel barrier web to prevent fuel leaks. |
| Wing Drag Longeron (ECP 550)* | Structural improvement to the Wing Drag Longeron due to tabs attached to the closeout webs were cracking during installation. |
| Y326.5 Plate Nut (ECP 561) | Modifies the existing fasteners at the Y326.5 Bulkhead to improve fatigue life. |
| Lower Center Keel Fire Hazard (ECP 562) | Safety improvement to the secondary pressure regulator bay to eliminate fire hazards. |
| Aileron/Trailing Edge Flap (ECP 574) | Provides a full-life improvement for aircraft degradation caused by cracked trailing edge flap and aileron hinges. |
| Serocylinder Test Station (ECP-598) | Provides for the upgrade of aging Peculiar Support Equipment. Improvements in reliability and maintainability of Peculiar Support Equipment and modification to existing Support Equipment. |
| Flight Control Computer (ECP 595) | Improves safety-of-flight for the recovery from, and resistance to, out-of-control flight (OOCF) while also eliminating anomalies cited in FCC OFP 91C*004. **(NON-RECURRING COSTS ONLY)** |
| Hydraulic Temp Gauges (ECP NI 879) | Improves the reliability of the hydraulic temperature gauges. |
| Environment Control System Wiring (NI 742) | Modifies wiring to the number 3 Relay Panel Assembly to connect the Left MainGear (LMG) Weight on Wheels (WOW) Relay ABD the Dump/RAM Dump Relay. |
| Wing Fuel Dams (NI 796) | Safety improvement modifies the inner wing inboard closure rib to prevent fuel leaks. |
| MLG Trunnion Assembly (NI 824) | Safety improvement to the MLG trunnion assembly to improve fatigue life and prevent failed landing gear mishaps. |
| Heat Exchanger (NI 827) | Provides for the removal of the nickel core and replaces with a more reliable stainless steel and nickel core. |
| Night Vision Display System (NVDS) (NI 830) | Adds capability to the lighting system to make the NVDS compatible. |
| Trailing Edge Flap (NI 839) | Safety modification to the trailing edge flap to correct flap departures while in flight. |
| Birdstrike Res Windshield (NI 843) | Safety modification to the windshield to protect against birdstrikes during flight. |
| Aileron Hinge Mod (NI 844) | Provide a full-life improvement for aircraft degradation caused by cracked trailing edge flap and aileron hinges. |
| ANTI G VALVE (ECP XXX) | Improves pilot G-Load tolerance as part of the Navy Combat Edge (NCE) Anti-G Protection System. |
| Fuel Cell Floor Crack (ECP 973) | Safety modification to correct cracks at Y431, Y442, and Y453 in the fuel cavity floor deck centerline under tank two and three. |
| Side Fuselage Crack (ECP592) | Safety improvement to the fatigue life of the forward skin section of the chem-milled panels. |
| Wing SPAR Crack (ECP XXX5) | Strengthens the existing front inner wing SPAR to improve fatigue life. |
| Forward Lower Keel Modification (ECP NI 931) | Improves fatigue life of the Nose Landing Gear (NLG) Drag Brace. |
| Main Landing Gear (MLG) Axle (ECP 952) | Incorporation of Full Life redesigned Main Landing Gear Axle Polygon, extending Axle's service life from current 8300 total landings to 13000. |
| MLG Y488 Bulkhead (ECP XXX8) | Restores Full Life to Y488 Bulkhead due to cracks around MLG Uplock hardware holes |
| LOX OBGS Conversion (ECP XXX9) | Retrofit LOX equipped aircraft with OBOGs solutions that are integrated with supplemental oxygen systems |
| Crease Longeron (ECP 608) | Restores the load path lost when the Crease Longeron cracks at FS 453. |
| Heat Deterrent (ECP N1-1013-05) | Modifies the aircraft to correct structural fatigue problems caused by degraded ECS Peri-Seals. |
| Nose Landing Gear/MLG/Control Value Restrict | Improve hydraulic fluid rate and reduce hydraulic line failures. |
| Bay 3 Shelf Redesign (ECP XXX13) | Modify avionic shelves to withstand catapult fatigue loads. |
| Bay 4 Shelf Redesign (ECP XXX14) | Modify avionic shelves to withstand catapult fatigue loads. |
| Cockpit Pressurization Warning System (ECP XXX-15) | Notify pilot when pressurization is lost in cockpit. |
| Vertical Tail (ECP XXX-16) | Modify vertical tail former and spars to prevent gatigue cracking. |
| Canopy/Windscreen (ECP XXX-17) | Modify canopy/windscreen frames and address delamination. |
| NLG/MLG Fatigue Improvements (ECP-XXX18) | Fatigue Improvements to include arresting gear bolts, planning link redesign, MLG planning bolts and MLG Bell Crank. |
| Inner Wing Conversions (ECP XXX19) | Converting Lot 5-9 Wings to Lot 12 and above configuration due to supply issues. |
| NFDS Mods, C&D Conversion (ECP-JAX-F18-001) | Removing the weapon systems from the aircraft, install Smoke Generation System and install Auxiliary Fuel Pumps for extended inverted flight. |
| Repeatable Release Holdback Bar (ECP XXX-20) | Modifies the RRHB to correct problems caused by degraded primary locking segments. |

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Each change has been or will be tested prior to installation in the F/A-18.
ECP 536 moved from OSIP 11-99 to OSIP 11-84 in FY02. No installs currently planned; possible in future.
Unit cost variances due to: - Many ECP Kits were/are provided to the Navy at no additional costs (warranty kits).*
- Some ECPs have numerous Technical Directives with different unit costs.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **CORRECTION OF DISREPANCIES IDENTIFIED DURING PRELIMNARY EVALUATION, SUBSEQUENT FLIGHT TEST PROGRAMS AND FLEET OPERATIONS (OSIP 011-84)**

MODELS OF SYSTEM AFFECTED: **F/A-18 A/B/C/D** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 087S1/External Stores EMI Protection | | | | | | | | | | | | | | | | | | | | |
| ECP 121R1/Auto AC Bus Isolation | 356 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP 165R1/Battery Control Relay Unit | 251 | 0.5 | | | | | | | | | | | | | | | | | | |
| ECP 178/FY86 Block Upgrade | 82 | 4.7 | | | | | | | | | | | | | | | | | | |
| ECP 241R1/Center Fuselage Structural Mods | 1,719 | 0.6 | | | | | | | | | | | | | | | | | | |
| ECP 251/Dorsal Longeron | 1,926 | 0.8 | | | | | | | | | | | | | | | | | | |
| ECP 251R1/Dorsal Longeron | 443 | 8.6 | | | | | | | | | | | | | | | | | | |
| ECP 262/470.5 Bulkhead | 494 | * | | | | | | | | | | | | | | | | | | |
| ECP 267R1/Righthand AMAD Bay | 287 | * | | | | | | | | | | | | | | | | | | |
| ECP 276/Y508 Former | 836 | 1.0 | | | | | | | | | | | | | | | | | | |
| ECP 305/AFT Engine Mount | 619 | * | | | | | | | | | | | | | | | | | | |
| ECP 306/Y657.35 Engine Bay Door Former | 688 | 0.9 | | | | | | | | | | | | | | | | | | |
| ECP 311/Main Landing Gear (MLG) Planing Link | 10 | * | | | | | | | | | | | | | | | | | | |
| ECP 319/MLG Trunnion Upgrade | 1,405 | * | | | | | | | | | | | | | | | | | | |
| ECP 320/Y488 Bulkhead | 473 | 1.2 | | | | | | | | | | | | | | | | | | |
| ECP 353/Wing Fatigue Repair | 98 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP 355/MLG Shoulder Belt | 350 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 364/ASPJ System Improvement | 225 | * | | | | | | | | | | | | | | | | | | |
| ECP 365/Y470 Bulkhead Improvement | 982 | 1.0 | | | | | | | | | | | | | | | | | | |
| ECP 367/#1 Fuel Cell Floor | 557 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 375/MLG Retract Actuator | 1,323 | 5.7 | | | | | | | | | | | | | | | | | | |
| ECP 391/Fretting on Former's & Spindles | 582 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 402/Fuselage Skin, Y518 to Y533 | 638 | * | | | | | | | | | | | | | | | | | | |
| ECP 402R1/Fuselage Skin, Y518 to Y534 | 720 | 2.1 | | | | | | | | | | | | | | | | | | |
| ECP 417/Inlet Duct Skin at Y453 | 575 | 2.0 | | | | | | | | | | | | | | | | | | |
| ECP 428/Y470.5 Bulkhead MLG Trunnion | 2 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 440/Speed Brake Trough | 591 | 1.0 | | | | | | | | | | | | | | | | | | |
| ECP 488/SUU-63 Wing Pylon Door Panel | 1,351 | 0.8 | | | | | | | | | | | | | | | | | | |
| ECP 492/Y470.5 Bulkhead Fatigue Change | 688 | 1.4 | | | | | | | | | | | | | | | | | | |
| ECP 498/Fuselage Skin at Y453 | 696 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP 501/Nacelle Skin Fatigue Improvements | 663 | 3.7 | | | | | | | | | | | | | | | | | | |
| ECP 506/LAU-115 Sparrow Mod | 935 | * | | | | | | | | | | | | | | | | | | |
| ECP 536/ST-16 Failures | | | 28 | 4.3 | | | 4 | 0.6 | | | | | | | | | | | | |
| ECP 544/Improvement of Inner Wing SPAR | 29 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 548/Fuel Barrier Web | 750 | 1.4 | | | | | | | | | | | | | | | | | | |
| ECP 550/Wing Drag Longeron | 119 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 561/Y326.5 Plate Nut | 532 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 562/Lower Center Keel Fire Hazard | 798 | 0.4 | | | | | | | | | | | | | | | | | | |
| ECP 574/Trailing Edge Flaps | 1,026 | 26.8 | | | | | | | | | | | | | | | | | | |
| ECP 574/Aileron | 707 | 18.2 | | | | | | | | | | | | | | | | | | |
| ECP 598 Servocylinder Test Station | | | | | | | 9 | 1.2 | | | | | | | | | | | | |
| NI879/Hydraulic Temp Guages | 150 | 0.2 | | | 100 | 0.3 | 100 | 0.3 | | | | | | | | | | | | |
| NI 742/Environment Control System Wiring | 150 | 0.2 | | | | | | | | | | | | | | | | | | |
| NI 796/Wing Fuel Dams | 515 | 0.8 | | | | | | | | | | | | | | | | | | |
| NI 824/MLG Trunnion Assembly | 425 | 13.4 | | | | | | | | | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **CORRECTION OF DISREPANCIES IDENTIFIED DURING PRELIMNARY EVALUATION, SUBSEQUENT FLIGHT TEST PROGRAMS AND FLEET OPERATIONS (OSIP 011-84)**

MODELS OF SYSTEM AFFECTED: **F/A-18 A/B/C/D** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| NI 827/Heat Exchanger | 37 | 0.4 | | | | | | | | | | | | | | | | | | |
| NI 830/Night Vision Display System (NVDS) | 14 | 0.3 | | | | | | | | | | | | | | | | | | |
| NI 839/Trailing Edge Flap | 1,150 | 9.4 | | | | | | | | | | | | | | | | | | |
| ECP XXX - ANTI G VALVE | 800 | 1.0 | | | | | | | | | | | | | | | | | | |
| ECP 973 -Fuel Cell Floor Crack | | | | | 40 | 0.8 | 40 | 0.9 | | | | | | | | | | | | |
| ECP 973 -Fuel Cell Floor Crack | | | | | | | | | | | | | | | | | | | | |
| ECP XXX5 - Front SPAR Crack | | | | | 40 | 0.8 | 40 | 0.9 | | | | | | | | | | | | |
| ECP NI 931 - Forward Lower Keel Modification | | | | | 20 | 0.3 | 40 | 0.6 | | | | | | | | | | | | |
| ECP 952 - MLG Axle | 688 | 17.1 | | | | | | | | | | | | | | | | | | |
| ECP XXX8 - MLG Y488 Bulkhead | | | | | 80 | 0.3 | 80 | 0.3 | | | | | | | | | | | | |
| ECP XXX9 - LOX OBGS Conversion | | | | | | | 20 | 0.5 | | | | | | | | | | | | |
| ECP XX10 - Crease Longeron | | | | | | | | | | | | | | | | | | | | |
| ECP XX11 Heat Derrent | | | | | 315 | 6.4 | 315 | 6.6 | | | | | | | | | | | | |
| (ECP XX112) Nose Landing Gear/MLG/Control Value Restriction | | | | | | | | | | | | | | | | | | | | |
| (ECP XXX13) Bay 3 Shelf Redesign | | | | | 80 | 0.4 | 80 | 0.4 | | | | | | | | | | | | |
| (ECP XXX14) Bay 4 Shelf Redesign | | | | | 80 | 0.4 | 80 | 0.4 | | | | | | | | | | | | |
| (ECP 6217) Cockpit Warning System | 10 | 0.1 | | | 150 | 0.6 | 150 | 0.6 | | | | | | | | | | | | |
| (ECP XXX-16) Vertical Tail | | | | | 10 | 0.3 | 10 | 0.3 | | | | | | | | | | | | |
| (ECP XXX-17) Canopy/Windscreen | | | | | | | 150 | 0.4 | | | | | | | | | | | | |
| (ECP XXX18) NLG/MLG Fatigue Improvements | | | | | | | 80 | 0.1 | | | | | | | | | | | | |
| (ECP XXX19) Inner Wing Conversions/ Modification | | | | | | | 40 | 0.2 | | | | | | | | | | | | |
| (ECP JAX F-18-001) NFDS MODS, C&D Conversion | | | | | | | 10 | 6.0 | | | | | | | | | | | | |
| (ECP XXX20) Repeatable Release Holdback Bar | | | | | | | 80 | 0.1 | | | | | | | | | | | | |
| Installation Kits N/R | | 13.5 | | 3.2 | | 0.5 | | 1.2 | | | | | | | | | | | | |
| Installation Equipment | | 0.2 | | | | 0.3 | | 0.6 | | | | | | | | | | | | |
| Installation Equipment N/R | | 0.1 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 2.0 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 1.5 | | | | | | | | | | | | | | | | | | |
| ILS | | 121.3 | | 11.4 | | 18.4 | | 16.9 | | | | | | | | | | | | |
| Other Support | | | | 5.5 | | 1.3 | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 17,596 | 216.6 | 828 | 6.6 | 397 | 2.8 | 912 | 6.2 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 484.4 | | 31.0 | | 34.0 | | 45.3 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. ECP 087S1 (External Stores EMI Protection) and ECP XX10 (Crease Longeron) includes "Installation Costs" only.
4. ECP 595 (Flight Control Computer) includes Non-Recurring Costs only.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **AN/ARC-210 ELECTRONIC PROTECTION (EP) COMBINATION RADIO (OSIP 039-92)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

The AN/ARC-210 (ORD# 486-88-93) is a combination UHF/VHF, AM/FM jam-resistant radio that was developed to allow for EP interoperability with the Air Force, Army and NATO. The radio provides dual UHF capability for carrier based TACAIR; VHF FM for close air support and maritime channels; VHF AM for air traffic control; and EP capabilities using the Air Force developed waveforms (UHF-AM HAVEQUICK I and II), and the Army developed waveform (VHF-FM SINCGARS). The AN/ARC-210 can be controlled by either a remote control unit or via a MIL-STD-1553 multiplex data bus. The EP parameters and single channel preset information can be loaded via a CYZ-10 Data Transfer Device (DTD). The fill information can consist of word-of-day for HAVEQUICK; the KGV-10 transec variable, hopsets and frequency lock-out tables for SINCGARS. F/A-18 ARC-210 requirements will be satisfied by retrofitting Lot X through Lot XVI and forward fitting Lot XVII through Lot XXI.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

F/A-18 was the lead aircraft for the AN/ARC-210 development program; therefore, retrofit procurement began in FY92. AN/ARC-210 Milestone III was approved in April 1994. First article test completed in January 1994. The additional requirements shown in this budget for FY2001 - 2004 reflect the fleet's desire for a common communications capability for Lots X and above F/A-18C/D. ARC-210 radios removed from other aircraft during DCS upgrade will be installed in F/A-18C/D Lots X and XI.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Lot XII through XXI Kit | 79 | 1.3 | | | | | | | | | | | | | | | | | | |
| Lot X through XI Kit | 141 | 4.0 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 0.8 | | | | | | | | | | | | | | | | | | |
| Installation Equipment ** | | | | | | | | | | | | | | | | | | | | |
| Lot XII through XXI Kit | 114 | 5.6 | | | | | | | | | | | | | | | | | | |
| Lot X through XI Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.3 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.3 | | 0.6 | | | | | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 218 | 5.3 | 2 | * | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 17.5 | | 0.6 | | | | | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. ** Quantities refer to number of radios (2/aircraft). The equipment and common logistics requirements for this OSIP have been funded in the AN/ARC-210 Common OSIP (4-94) starting in FY94.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D** MODIFICATION TITLE: **AN/ARC-210 ELECTRONIC PROTECTION (EP) COMBINATION RADIO (OSIP 039-92)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **PUBLIC/PRIVATE COMPETITION AND AT NAVAL AVIATION DEPOTS.**

ADMINISTRATIVE LEADTIME: **Months** PRODUCTION LEADTIME: **Months**

CONTRACT DATES: FY 2005: Feb-04 FY 2006: FY 2007: FY 2008:

DELIVERY DATE: FY 2005: Feb-05 FY 2006: FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (220) kits | 218 | 5.3 | 2 | * | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 218 | 5.3 | 2 | * | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 218 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Out | 218 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **COMMON CONFIGURATION (OSIP 019-94)**

MODELS OF SYSTEM AFFECTED: **F/A-18A/B/C/D** TYPE MODIFICATION: **CAPABILITY IMPROVEMENTS / SAFETY**

DESCRIPTION/JUSTIFICATION:

Prior to FY 2002, this OSIP was used for various relatively small capability imrpovement ECPs. Included in this OSIP were: Cockpit Video Recording System (CVRS); AYK-14 Very High Speed Integrated Circuit (VHSIC) Processor Module; and the Advnaced Targeting FLIR (subsequently moved to its own OSIP). The F/A-18 CVRS upgrade improved operational debriefing, increased resolution and recording time, and improved fleet training. The AN/AYK-14(V) Very High Speed Integrated Circuit (VHSIC) Processor Module has three important features: a new computer chassis, VHSIC processor cards and 1M/W memory on the processor cards that allowed necessary growth through the 1990's and beyond. With the F/A-18 C/D out of production since 1997, this OSIP is also used to procure modified Peculiar Support Equipment . The Mission Planning System provides capabilities and displays required by the aircrew to plan and execute a mission from a cockpit perspective by providing a set of aircraft planning functions, reports and graphic display options.

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DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

CVRS utilizes moderately militarized HI-8MM video recorders that are currently available (no development required) with CVRS installed. The AN/AYK-14 is fully developed. It was production incorporated into Lot XV and subsequent F/A-18C/Ds and has had retrofit funding since 1994.

.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS | | | | | | | | | | | | | | | | | | | | |
| NI818/CVRS | 314 | 2.9 | | | | | | | | | | | | | | | | | | |
| CDII-045/VPM("O"Level") | 559 | 57.0 | | | | | | | | | | | | | | | | | | |
| CDII-051/VPM("O"Level") | 217 | 20.6 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 25.4 | | | | | | | | | | | | | | | | | | |
| INSTALLATION EQUIP. | | | | | | | | | | | | | | | | | | | | |
| NI818/CVRS | | | | | | | | | | | | | | | | | | | | |
| CDII-045/VPM("O"Level") | | | | | | | | | | | | | | | | | | | | |
| CDII-051/VPM("O"Level") | 291 | 7.6 | | | | | | | | | | | | | | | | | | |
| INSTALLATION EQUIP. N/R | | | | | | | | | | | | | | | | | | | | |
| ENGINEERING CHANGE ORDERS | | | | | | | | | | | | | | | | | | | | |
| DATA | | 4.0 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIPMENT | | 0.3 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIPMENT(SE NR, PSE,SE ILS) | | 49.2 | | | | | | | | | | | | | | | | | | |
| ILS | | 4.9 | | 0.6 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.8 | | 0.5 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACT SUPPORT | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 729 | 5.9 | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 178.4 | | 1.1 | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Funding previously budgeted in this OSIP for the Mission Planning System has been moved to to OSIP 23-05.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18 GLOBAL POSITIONING SYSTEM (GPS) (OSIP 036-94)**

MODELS OF SYSTEM AFFECTED: **F/A-18A/B/C/D** TYPE MODIFICATION: **SAFETY / CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

GPS (ORD# 401-88-95) is a space-based worldwide radio navigation aid that provides precise position, velocity, and time data under all-weather conditions twenty-four hours a day, and is proposed to replace land-based TACAN. Incorporation of the GPS in the F/A-18 aircraft provides the following: accurate navigation position and velocity, precision close air support, onboard sensor positioning, command and control guidance, search and rescue guidance, accurate all-weather air drops and accurate time standard. The F/A-18A (Lot VI through IX) GPS requirements will be satisfied by retrofitting the Embedded Global Positioning Inertial Navigation System. F/A-18C/D requirements will be satisfied by retrofitting the Miniature Airborne GPS Receiver (MAGR) in Lot X through Lot XVI and forward fitting Lot XVII through Lot XXI. This OSIP will also be used to perform non-recurring efforts to address parts obsolescence and to examine potential GPS-related capability upgrades associated with Network Centric Operations and interoperability requirements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The Embedded Global Positioning System (GPS) and Inertial Navigation System (INS) (EGI) program is a joint multi-user NDI acquisition which achieved Milestone III in FY94. Contract award was 4 March 1994, with Engineering Design Review completed in July 1994.

The Embedded GPS/INS (EGI) system was supposed to be an NDI system, however, it has required a significant amount of development, which has resulted in schedule slips. As a result, F/A-18 has been adversely impacted in the following areas:

1. F/A-18A/B/C/D can no longer meet the Congressional mandate to have GPS installed in all A/C by the year 2005.
2. F/A-18 Mission Computer S/W testing to incorporate EGI functionality has experienced continual slips due to EGI hardware immaturity.
3. The immaturity of the EGI has resulted in a delay of the Validation and Verification ( Val/Ver ) of the EGI A-Kits in all versions of the F/A-18.
4. As a result of the above impacts, a decision was made to install the Miniature Airborne GPS Receiver (MAGR) in F/A-18C/D Lot X through Lot XVII A/C. MAGR is a lower risk option and has been installed as a forward fit in Lot XVII and above A/C. Since EGI performance has not completed testing, MAGR is the only option that ensures the most rapid, low risk retrofit. This plan results in the least impact to further F/A-18C/D modifications. Furthermore, a decision was also made to continue with the development of the EGI in order to meet GPS requirements for the F/A-18A/B (Lot IX and below) . F/A-18 A/B's cannot be retrofitted with a MAGR integration due to space restrictions and airframe differences. In summary, F/A-18 has had to develop new integration plans for GPS that now include the integration of both MAGR and EGI. EGI A-Kits were put on order using FY96/97/98 funding based on an NDI assumption, however due to above mentioned reasons, the EGI A-Kits now need to be converted to MAGR A-Kits with no pricing impact. The procurement of MAGR B-Kits to catch up with converted MAGR A-Kits has resulted in F/A-18 not meeting the full funding requirement while protecting the risk and schedule of this high visibility program. PMA-209 (OSIP 71-88) is funding the procurement of a portion of the installation equipment reflected in the total column below which explains the difference between the installation kits and equipment. Increase in NRE funding in FY01 thru 03 due to requirements for increased testing and integration for "B" kits (installation equipment).

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Lot VI through IX Kit (Note 3) | 67 | 5.1 | | | | | | | | | | | | | | | | | | |
| Lot X through XVI Kit | 444 | 7.7 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 34.6 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Lot VI through IX Kit | | | | | | | | | | | | | | | | | | | | |
| Lot X through XVI Kit | 374 | 12.3 | 16 | 0.8 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | 0.5 | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | 4.1 | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | 2.0 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 1.8 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.4 | | 0.3 | | | | | | | | | | | | | | | | |
| Other Support | | 0.1 | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 385 | 11.3 | 6 | 0.1 | 57 | 1.1 | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 80.4 | | 1.7 | | 1.1 | | | | | | | | | | | | | | |

Notes:

1. Funds in house will be realign in FY06 to support installation of equipment.
2. Asterisk indicates amount less than $50K
3. 15 "A" kits procured in FY91 to 98 were not installed due to technical issue addressed above.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A/B/C/D** MODIFICATION TITLE: **F/A-18 GLOBAL POSITIONING SYSTEM (GPS) (OSIP 036-94)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Navy Depot Field Mod Team at Five (5) Locations**

ADMINISTRATIVE LEADTIME: **5 Months** PRODUCTION LEADTIME: **18 Months**

CONTRACT DATES: FY 2005: FY 2006: Mar-04 FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: Sep-05 FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( 448) kits | 385 | 11.3 | 6 | 0.1 | 57 | 1.1 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 385 | 11.3 | 6 | 0.1 | 57 | 1.1 | | | | | | | | | | | | | | |

15 "A" kits procured in FY91 to 98 were installed due to technical issue addressed above.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 385 | 0 | 2 | 2 | 2 | 13 | 14 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Out | 385 | 0 | 2 | 2 | 2 | 13 | 14 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **AN/APG-73 RADAR UPGRADE (RUG) PHASE I & RUG PHASE II (OSIP 038-94)** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D**

DESCRIPTION/JUSTIFICATION:

The F/A-18 radar (AN/APG-65), requires an upgrade to improve electronic counter-countermeasure (ECCM) performance against improved threat electronic countermeasures (ECM). This threat ECM improvement has partially resulted from compromises in the F/A-18 radar performance against various threat electronic warfare systems. The AN/APG-73 radar follows and capitalizes on AN/APG-70 and AN/APG-71 developmental and value engineering programs to maximize shop replaceable assembly (SRA) commonality. ORD # 199-05-88 (Radar Upgrade Phase I) and ORD # 022-05-83 (Radar Upgrade Phase II).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Forward fit of the AN/APG-73 was incorporated into Lot 16 (Block 43) and subsequent aircraft. Rug Phase I was approved for full rate production of retrofit units in September 1996. This OSIP reflects retrofit of Lot 13 through Lot 16 (Block 42) aircraft. A Pre-planned Product Improvement (P3I) Phase II to the RUG program developed improved hardware and software for an all-weather Reconnaissance (RECCE) strip map mode. Additional modes can be incorporated with software changes as required in the future. Development of RUG Phase II completed in FY 1998 and retrofit procurements began in FY 1999.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E (0204136N/E2065) | | 297.1 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 508 / RUG - Phase I Kit | 58 | 103.0 | | | | | | | | | | | | | | | | | | |
| ECP 569 / RUG - Phase II Kit | 34 | 13.1 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 5.6 | | | | | | | | | | | | | | | | | | |
| ECP 508 / RUG - Phase I Kit | | | | | | | | | | | | | | | | | | | | |
| ECP 569 / RUG - Phase II Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| ECP 508 / RUG - Phase I Equip | | | | | | | | | | | | | | | | | | | | |
| ECP 569 / RUG - Phase II Equip | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 2.2 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 4.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 15.0 | | | | | | | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 58 | 1.1 | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 144.0 | | | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D** MODIFICATION TITLE: **AN/APG-73 RADAR UPGRADE (RUG) PHASE I & RUG PHASE II (OSIP 038-94)**

METHOD OF IMPLEMENTATION: **Phase I kits are Depot Level; Phase II kits are Organization level. Schedule below reflect RUG Phase I installs only.**

ADMINISTRATIVE LEADTIME: **4 Months** PRODUCTION LEADTIME: **18 Months**

CONTRACT DATES: FY 2005: FY 2006: FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (58) kits | 58 | 1.1 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 58 | 1.1 | | | | | | | | | | | | | | | | | | |

($ in Millions)

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Out | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **POSITIVE IDENTIFICATION SYSTEM / CNS/ATM (OSIP 012-96)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D/E/F** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

The Positive Identification System (PIDS) will allow the F/A-18 to positively identify another aircraft. The requirement for positive identification of enemy and friendly aircraft arose from Desert Storm lessons learned and is a CNO high priority issue. Although Lot applicability is back to Lot X, FYDP funding represents an affordable plan. ORD # 446-88-96. The Communication, Navigation and Surveillance/Air Traffic Management (CNS/ATM) is a satellite-based technology designed to effectively and efficiently control and manage air traffic. CNS/ATM requires the PIDS AN/APX-111 to be upgraded to the -20 Configuration. Military aircraft must conform with CNS/ATM to prevent violation of civil air traffice clearances and ensure safe separation of military and civil air traffic. One kit is required per aircraft / AN/APX-111.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Forward fit of the PIDS (CIT) for the F/A-18 began in FY 1995 with the last block of Lot 19 aircraft. Retrofit kit procurement started in FY1996. Val/Ver kits were installed in FY98. Kit installation began in FY99. PIDS (CIT) had a successful OPEVAL with Software Configuration Set (SCS) 13C.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 89.7 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Lot X through XIX Kit | 90 | 27.9 | | | | | | | | | | | | | | | | | | |
| Lot XX through XXI Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 7.0 | | | | | | | | | | | | | | | | | | |
| Installation Equipment (Note 1) | | | | | | | | | | | | | | | | | | | | |
| Lot X through XIX Kit | | | | | | | | | | | | | | | | | | | | |
| Lot XX through XXI Kit | | | | | | | | | | | | | | | | | | | | |
| Lot XXV through XXVI Kit | | | 12 | 1.9 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | 0.4 | | | | | | | | | | | | | | | | |
| Data | | 1.2 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | 2.7 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 5.4 | | 0.5 | | | | | | | | | | | | | | | | |
| ILS | | 2.4 | | | | | | | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 82 | 7.4 | 8 | 1.0 | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 53.9 | | 3.8 | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Lots XXV-XXVI Kits will be installed at "O" Level

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D/E/F** MODIFICATION TITLE: **POSITIVE IDENTIFICATION SYSTEM / CNS/ATM (OSIP 012-96)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **DEPOT LEVEL**

ADMINISTRATIVE LEADTIME: **6 Months** PRODUCTION LEADTIME: **18 Months**

CONTRACT DATES: FY 2005: FY 2006: FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( 90 ) kits | 82 | 7.4 | 8 | 1.0 | | | | | | | | | | | | | | | | |
| FY 2005 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 436 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 82 | 7.4 | 8 | 1.0 | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 82 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Out | 82 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18 ADVANCED TACTICAL AIRBORNE RECONNAISSANCE SYSTEM (ATARS) (OSIP 03-97)**

MODELS OF SYSTEM AFFECTED: **F/A-18D(RC)** TYPE MODIFICATION: **OPERATIONAL UPGRADE**

DESCRIPTION/JUSTIFICATION:

The need for a modern reconnaissance capability for the Navy and Marine Corps was clearly demonstrated during Operation Desert Shield/Desert Storm. Specific deficiencies noted were: poor connectivity with coalition forces, no wide-area standoff or all weather reconnaissance, and insufficient quantities of reconnaissance platforms. Lessons learned emphasized the value of timely imagery intelligence to support the tactical commander's concept of operations. In order to provide low to medium altitude, day/night, penetrating under-the weather overflight imagery to meet the Operational Requirement for the Navy and Marine Corps, the Navy is capitalizing on the work accomplished in the former ATARS Program and is leveraging the Air Force investment in ATARS to develop an ATARS-based Tactical Reconnaissance System for the F/A-18. Since system delivery, a need has arisen to upgrade the current recording system to a Digital Solid State Recorder. A Congressional add in FY 2004 and 2005 provided funding for procurement of 12 recorders.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

An engineering change to the F/A-18 which would allow internal carriage of reconnaissance sensors was incorporated in production via ECP-206 in the F/A-18D starting with FY 1992 procured aircraft. All subsequently procured F/A-18Ds contained the reconnaissance modifications in their baseline configuration. Development of the Advanced Tactical Airborne Reconnaissance System (ATARS) began in 1988 with the Air Force as the lead service. ATARS was developed as a common reconnaissance system for use by the Air Force, Navy, and Marine Corps in both manned and unmanned platforms. The Air Force and the ATARS prime contractor mutually agreed to a cessation of effort on the ATARS contract in June 1993, and the Navy/Marine Corps assumed program leadership in August 1993. A go-ahead decision to procure four(4) LRIP-1 ATARS systems in February 1997 and six (6) LRIP-2 units and four Datalink pods in March 1998. An Early Operational Capability (EOC) was approved in May 1999 leading to a deployment of the system to Kosovo. Formal OPEVAL began in September 1999 leading to a Milestone III decision in July 2000 for Full Rate Production. NAVAIR ECP-549, allowed for the procurement & Installation of the AN/ASD-10(V) ATARS Sensor System Pallet and the AN/ARQ-56 Data Link Pod, and resulted in AFC-244 (an "O" Level Change), and AVC-4744 (an "O" Level Change). These changes have been approved and implemented. NAVAIR North Island submitted ECP-960, a depot level modification to the F/A-18 SUU-62 Centerline Pylon to enable carriage of the AN/ARQ-56 ATARS Data Link Pod. This ECP resulted in a need for additional funding in FY 2002 through FY 2004. Since system delivery, a need has arisen to upgrade the current recording system to a Digital Solid State Recorder. Congress added $11.9M in FY 2003 to integrate this capability into the F/A-18D ATARS capable aircraft. This development is scheduled to be completed in FY 2004. Procurement of mod kits was in FY05. Installs were complete in FY05.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 234.9 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Suites, DL, Ground Stations | 39 | 159.5 | | | | | | | | | | | | | | | | | | |
| Solid State Recorders (EASD) | | | 6 | 1.7 | | | | | | | | | | | | | | | | |
| Solid State Recorders | 6 | 2.2 | 6 | 2.2 | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 33.8 | | 2.8 | | | | | | | | | | | | | | | | |
| Installation Equipment | | 1.0 | | 0.9 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | 2.0 | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | 0.2 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 8.5 | | 0.3 | | | | | | | | | | | | | | | | |
| ILS | | 14.2 | | 0.3 | | | | | | | | | | | | | | | | |
| Other Support | | 22.4 | | 3.6 | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | 1.0 | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 12 | 0.2 | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 244.7 | | 12.0 | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**INSTALL KIT COMPONENTS BREAKOUT:**

| | FY97 | FY98 | FY99 | FY00 | FY01 |
|---|---|---|---|---|---|
| ATARS SUITES | **4** | **6** | **4** | **5** | **0** |
| DATA LINK PODS | **0** | **4** | **0** | **0** | **9** |
| SQUADRON GROUND STATIONS | **1** | **2** | **4** | **0** | **0** |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **DIGITAL COMMUNICATIONS SYSTEM (DCS) (OSIP 010-99)**

MODELS OF SYSTEM AFFECTED: **F/A-18 C/D (Lots 10-21)** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

The Digital Communications System (DCS) consists of an upgraded AN/ARC-210 Receiver Transmitter (RT) [with embedded digital message transfer capability and embedded Communications Security (COMSEC)] installed in the F/A-18 and integrated with the F/A-18 weapons system [mission computer, controls & displays, and communication subsystem]. The DCS utilizes preformatted messages to communicate with standard USMC, USA, and USAF digital communications devices to facilitate Close Air Support (CAS), Deep Air Strike (DAS), and Tactical Air Control (TAC) missions. DCS reduces voice communications requirements which tend to be slow, inaccurate, and susceptible to Meaconing, Interference, Jamming, and Intrusion (MIJI). DCS will enhance mission effectiveness by decreasing pilot workload which allows the pilot more time to counter increased threat capabilities. ORD# 486-88-98. This OSIP will also be used to address parts obsolescence issues and to perform non-recurring work associated with Network Centric operations and Interoperability requirements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The AN/ARC-210 RT is being upgraded to a DCS RT. The Initial Engineering Developmental Model (EDM) was delivered (using RDT&E,N resources) in FY1998 as scheduled. The F/A-18C/D requirements will be satisfied by retrofitting DCS into Lot X through Lot XXI. Functionality was provided in the Operational Flight Program (OFP) 15C fleet release in FY2000. Initial procurement of installation kits was awarded May 1999. F/A-18C/D Lots X and XI require an ACI and DCS radio. DCS radios are purchased through OSIP 04-94 (PMA-209). "B" Kits (Radios) purchased in FY02 and FY03 through this OSIP are to balance total inventory of radios to installation kits. OSIP 04-94 is purchasing 20 Install A kits in FY05 and 40 Install A kits in FY06. Additional ACI requirements for increased install provisions are currently funded under OSIP 12-99.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 35.3 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Lot XII through XXI Kit | 264 | 0.8 | 72 | 0.3 | 24 | 0.1 | | | | | | | | | | | | | | |
| Lot X through XI Kit | 72 | 0.5 | 31 | 0.1 | 20 | 0.1 | | | | | | | | | | | | | | |
| Installation Kits N/R | | 0.6 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Lot XII through XXI Kit ("B" Kit) | 40 | 1.9 | | | | | | | | | | | | | | | | | | |
| Lot X through XI Kit (ACI) | 72 | 5.5 | 36 | 2.0 | 20 | 1.3 | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | 0.5 | | | | | | | | | | | | | | | | |
| Data | | * | | | | | | | | | | | | | | | | | | |
| Training Equipment | | 0.6 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.8 | | 0.4 | | | | | | | | | | | | | | | | |
| ILS | | 1.2 | | 0.5 | | 0.1 | | 0.8 | | | | | | | | | | | | |
| Other Support | | | | 0.1 | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 183 | 2.0 | 66 | 0.8 | 81 | 1.7 | 84 | 1.7 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 13.9 | | 4.7 | | 3.3 | | 2.5 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. "Installations" are 60 greater than "Installation Kit Procurement" due to 60 kits being procured on OSIP 04-94.
4. Installation cost varies depending on aircraft configuration and Lot being retrofit.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18 C/D (Lots 10-21)** MODIFICATION TITLE: **DIGITAL COMMUNICATIONS SYSTEM (DCS) (OSIP 010-99)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Navy Depot Field Mod Team**

ADMINISTRATIVE LEADTIME: **3 Months** PRODUCTION LEADTIME: **24 Months**

CONTRACT DATES: FY 2005: Jan-05 FY 2006: Jan-06 FY 2007: Jan-06 FY 2008:

DELIVERY DATE: FY 2005: Jan-07 FY 2006: Jan-08 FY 2007: Jan-08 FY 2008:

264

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( 336) kits | 183 | 2.0 | 66 | 0.8 | 81 | 1.7 | 66 | 0.5 | | | | | | | | | | | | |
| FY 2005 (103) kits | | | | | | | 18 | 1.3 | | | | | | | | | | | | |
| FY 2006 ( 44) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 | | | | | | | | | | | | | | | | | | | | |
| FY 2008 | | | | | | | | | | | | | | | | | | | | |
| FY 2009 | | | | | | | | | | | | | | | | | | | | |
| FY 2010 | | | | | | | | | | | | | | | | | | | | |
| FY 2011 | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 183 | 2.0 | 66 | 0.8 | 81 | 1.7 | 84 | 1.8 | | | | | | | | | | | | |

**NOTE: "Installations" are 60 greater than "Installation Kit Procurement" due to 20 kits in FY05 and 40 kits in FY06 being procured on OSIP 04-94.**

Installation Schedule

| | FY 2004 & Prior | FY 2005 | FY 2005 | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 183 | 0 | 22 | 22 | 22 | 0 | 27 | 27 | 27 | 27 | 19 | 19 | 19 | | | | |
| Out | 183 | 0 | 22 | 22 | 22 | 0 | 27 | 27 | 27 | 27 | 19 | 19 | 19 | | | | |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18 AIRCRAFT STRUCTURAL LIFE MANAGEMENT PLAN (SLMP) (OSIP 011-99) CBR+**

MODELS OF SYSTEM AFFECTED: **F/A-18A/B/C/D** TYPE MODIFICATION: **SAFETY / LIFE EXTENSION**

DESCRIPTION/JUSTIFICATION:

Incorporation of structural enhancements and changes is required to attain F/A-18 service life and maintain sufficient aircraft inventory to meet fleet operational requirements through FY2023. Structural enhancements and changes include resolution of discrepancies identified as a result of Structural Test (ST-16) and in-service experience. These enhancements and changes include: modifications to allow the entire airframe to achieve 12,000 spectrum flight hours; modifications to ensure structures currently limited to 78% of design life can achieve 100% life; modifications to ensure landing gear, catapult and attachment components and associated structure achieve at least 2700 cats/traps; modifications to ensure landing gear and attachment structure achieve a total of at least 14,500 landings for F/A-18 /C's and 17,000 landings for F/A-18 B/D's; to ensure flight control surfaces and associated / attaching components achieve 12,000 spectrum flight hours; to ensure a 30-year service life for primary and secondary structural components of metallic and nonmetallic (composite, polymer, etc) construction. The unacceptable alternative to retrofitting would be the failure to reach full fatigue life for these aircraft and to not correct the structural defects discovered on fatigue test articles. In many cases, the mission capability of the aircraft would be adversely affected in addition to its reduced service life. As a result, aircraft may be prematurely removed from useful service. Center Barrel Replacement Plus (CBR+) is applicable to F/A-18A/Bs as well as to F/A-18C/Ds. Currently F/A-18A/Bs are not in the plan. However, the F/A-18As being retrofitted with upgraded avionics changes may require a service life extension in the future.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Currently all Lot VI through XVII aircraft have 78% life limits without the SLMP modifications to bring them to 100% airframe life. MDA and NGC developed ECP536 retrofit repair to modify these aircraft so they could restore the airframe to full life. ECP 536 was approved and Validation was completed May 2001. NADEP North Island developed ECP904NI (CBR+) which was approved on 27 April 2000. Validation started October 2000 and was completed in August 2001. Verification started August 2001 and was completed June 2002. ECP 536 moved from this OSIP to OSIP 11-84 in FY02.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 19.6 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| In Warranty | | | | | | | | | | | | | | | | | | | | |
| ECP 904 Part 1 | 75 | 57.5 | 65 | 49.7 | 37 | 32.1 | 28 | 24.8 | | | | | | | | | | | | |
| ECP 904 Part 2 | 17 | 13.5 | 19 | 0.7 | 32 | 0.5 | 32 | 0.5 | | | | | | | | | | | | |
| ECP 904 Part 3 | 5 | 0.0 | 9 | 1.4 | 2 | 0.3 | 76 | 12.3 | | | | | | | | | | | | |
| ECP 904 Part 4 | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | 5 | 20.0 | 2 | 2.5 | | | | | | | | | | | | | | | | |
| Installation Equipment | 13 | 1.1 | 24 | 1.6 | 36 | 1.6 | 40 | 2.3 | | | | | | | | | | | | |
| Installation Equipment N/R | 6 | 0.2 | 6 | 0.5 | | | | 0.7 | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 4.8 | | 0.1 | | | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 11.1 | | 9.9 | | 6.7 | | 12.9 | | | | | | | | | | | | |
| Other Support | | 0.8 | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 15 | 15.4 | 24 | 32.0 | 36 | 45.1 | 40 | 58.4 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 124.4 | | 98.4 | | 86.3 | | 112.1 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
   - *** ECP536 VAL/VER Kit provided under warranty.**
   - **** Prior Year VAL/VER Kits: (1) provided under warranty by Boeing and (1) provided by NAVICP on hand assets.**
   - ***** Installations slipped one year due to FY01 funding reductions.**
2. "Installation Kit" Pricing is Quantity Sensitive. FMS procurements in some years affects unit price.
3. ECP 904 Part 2 is required to correct a Wing Root FLE problem and is not required for all aircraft.
4. ECP 904 Part 3 is to required to fix CAT & TRAP deficiences. It is not required for all aircraft.
5. FY06 ECP 904 Part 2 procured (4) Nacelle Fastners only to complete "C" aircraft installs.
6. FY06 ECP 904 Part 2 unit cost reflects remanufactured kits vice procuring new.
7. FY06 ECP 904 Part 3 is an "O'" Level Install, does not have to be installed concurrently with Part I and II.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A/B/C/D** MODIFICATION TITLE: **F/A-18 SERVICE LIFE MANAGEMENT PROGRAM (SLMP) (OSIP 11-99) CBR+**

INSTALLATION INFORMATION: **CONTRACTOR PROVIDING 1 WARRANTY KIT**

METHOD OF IMPLEMENTATION: **ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS BY DEPOT**

ADMINISTRATIVE LEADTIME: **3 Months** PRODUCTION LEADTIME: **24 Months**

CONTRACT DATES: FY 2005: Jan-05 FY 2006: Jan-06 FY 2007: Jan-07 FY 2008: Jan-08

DELIVERY DATE: FY 2005: Jan-07 FY 2005: Jan-08 FY 2007: Jan-09 FY 2008: Jan-10

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & Prior ( 75 ) kits | 15 | 15.4 | 24 | 32.0 | 36 | 45.1 | | | | | | | | | | | | | | |
| FY 2005 ( 65 ) kits | | | | | | | 40 | 58.4 | | | | | | | | | | | | |
| FY 2006 ( 37 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( 28 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 40 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 40 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 40 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 40 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 56 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 15 | 15.4 | 24 | 32.0 | 36 | 45.1 | 40 | 58.4 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 15 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | | | | | | | | |
| Out | 9 | 1 | 2 | 2 | 2 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 2 | 10 | 10 | 10 | 10 | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **MULTI-FUNCTIONAL INFORMATION DISTRIBUTION SYSTEM (MIDS) (012-99)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D/E/F** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

The system is Tactical Data Link Communications to provide a secure communications and navigation system. MIDS is a Pre-planned Product Improvement (P3I) to the Joint Tactical Information System (JTIDS) and will be installed in USN/USMC F/A-18 aircraft as the primary U.S. platform, since the aircraft can not accommodate the larger JTIDS Class 2 Terminals due to size and weight constraints. MIDS LVT is an International Cooperative Program (ICP) development with France, Germany, Italy, and Spain. A PMOU and Supplement 1 is in effect. The system will be interoperable with JTIDS Class 2 Terminals utilized by NATO allies as well as the other Services. F/A-18 will be interoperable with all Link 16 equipped platforms in U.S. and Allied Nations. This OSIP will also be used to perform efforts to address parts obsolescence and to examine potential MIDS-related capability upgrades associated with Network Centric Operations and interoperability requirements. ORD # 337-06-93. MIDS interoperability for nine (9) squadrons of MIDS ready C/D/E/F/G aircraft provides terminal upgrades to improve MIDS interoperability across all Link 16 terminal types. interop

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

This OSIP is planned for incorporation of MIDS into F/A-18C/D (Lots 12-21) and F/A-18E/F (Lots 22-26). A MIDS installation kit Critical Design Review (CDR) was held at Boeing in September 1996. MIDS Terminal initial Engineering and Manufacturing Development (E&MD) delivery for F/A-18 occurred in February 1998. Installation into the first three (3) EMD aircraft began in March 1998 and ended in September 1998. In May 1999, Boeing was awarded the ECP contracts required to provision the F/A-18E/F for the MIDS LVT while still in production. These provisions include: an Interference Blanking Unit (IBU); an Amplifier Control Intercommunication Unit (ACI); a MIDS Compatible CIT upgrade; and a MIDS Compatible Transponder upgrade. This list of equipment was also required to be retrofit into F/A-18C/D and is included as the "Avionics Upgrade" in the table below. These provisions are required by other F/A-18 programs and can be installed independently of MIDS LVT. OPEVAL was completed in June 2003, with a recommendation of operationally effective and operationally not suitable. A Verification Correction of Deficiencies (VCD) was completed on 15 August 2003. The VCD report delivered on 4 September 2003 recommended full fleet release. Full Rate Production approval was granted on 25 September 2003.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 29.9 | | 0.9 | | 1.5 | | 1.7 | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Lot 12 through 21 Kits | 232 | 37.9 | 48 | 7.7 | 48 | 7.5 | 48 | 7.5 | | | | | | | | | | | | |
| Lot 10 through 11 Kits | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Avionics Upgrade | 232 | 40.9 | 48 | 8.4 | 48 | 8.3 | 48 | 8.3 | | | | | | | | | | | | |
| MIDS LVT | 237 | 73.3 | 72 | 21.2 | 54 | 13.7 | 52 | 15.2 | | | | | | | | | | | | |
| MIDS INTEROPERABILITY | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 37.2 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | 0.5 | | | | 0.5 | | | | | | | | | | | | |
| Data | | 1.4 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 3.6 | | 0.9 | | 0.3 | | 0.6 | | | | | | | | | | | | |
| ILS | | 5.7 | | 0.7 | | 0.0 | | 0.7 | | | | | | | | | | | | |
| Other Support | | 13.5 | | 2.3 | | 2.2 | | 2.7 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 136 | 14.7 | 48 | 4.8 | 48 | 4.8 | 48 | 4.8 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 228.2 | | 46.5 | | 36.9 | | 40.3 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. "A" Kits and Avionics Upgrade continue to be procured and MIDS installations continue on the C/D's to maintain schedule.
4. 12 Installations kits and Avionics Upgrades, plus 23 MIDs LVT procured through DERF($11.5M), in FY02. Installation will be accomplished through budgeted FY04 installation cost.
5. 173 MIDS LVTs planned for Lot 22 - 26 E/F (provisioned in production) and 40 planned for DT & OT.
6. Production Engineering (w/ SPAWAR) scheduled to pay share of FSE support and associated Fleet Standup and deployment Issues (Other Support).

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D/E/F** MODIFICATION TITLE: **MULTI-FUNCTIONAL INFORMATION DISTRIBUTION SYSTEM (MIDS) (012-99)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **DEPOT LEVEL**

ADMINISTRATIVE LEADTIME: **5 Months** PRODUCTION LEADTIME: **18 Months**

CONTRACT DATES: FY 2005: Mar-05 FY 2006: Mar-06 FY 2007: Mar-07 FY 2008: Mar-07

DELIVERY DATE: FY 2005: Sep-06 FY 2006: Sep-07 FY 2007: Sep-08 FY 2008: Sep-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & Prior ( 232 ) kits | 136 | 14.7 | 48 | 4.8 | 48 | 4.8 | | | | | | | | | | | | | | |
| FY 2005 ( 48 ) kits | | | | | | | 48 | 4.8 | | | | | | | | | | | | |
| FY 2006 ( 48 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( 48 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 48 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 136 | 14.7 | 48 | 4.8 | 48 | 4.8 | 48 | 4.8 | | | | | | | | | | | | |

*Note: DERF funded "A" kit procurement.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 136 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | |
| Out | 136 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

**Exhibit P-3a**

**INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18C/D/E/F NACES P3I (Navy Aircrew Common Ejection Seat Pre-Planned Product Improvement) (OSIP 020-99)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D/E/F NACES EJECTION SEATS** TYPE MODIFICATION: **SAFETY**

DESCRIPTION/JUSTIFICATION:

An average of 15 Naval Aircrew fatalities occur each year from in-flight mishaps. Nearly half result from the seat ejecting aircrew into the ground or water at low altitude and adverse attitude. Congressional direction to increase U.S. Navy aircrew anthropometric range to more closely match the general aircrew population. This change will increase anthropometric range from the current 135lbs through 213lbs to 100lbs through 245lbs. The NACES P3I program is divided into three phases of development and upon completion of each phase, existing aircraft seats will be modified with retrofit kits to provide the increased capability to the NACES seat: Phase I - Current technology improvements to increase cockpit accommodation and reduce injury risk for all aircrew. Phase II - Propulsion stability control to reduce the risk of major injury to less than 5% up to 600 knots. Phase III - Stability control and surface avoidance capability for low altitudes, adverse altitudes, and out-of-control ejections.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

ECP MB6004 was approved 19 May 1999.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | 544 | 15.5 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | 36 | 1.5 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.2 | | | | | | | | | | | | | | | | | | |
| Training Equipment | 12 | 0.3 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.2 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.8 | | | | | | | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 544 | 0.7 | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 20.2 | | | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **USMC F/A-18 UPGRADE ECP-583 (OSIP 021-00)/ Litening**

MODELS OF SYSTEM AFFECTED: **F/A-18A/B/C** TYPE MODIFICATION: **AVIONICS UPGRADE**

DESCRIPTION/JUSTIFICATION:

This OSIP upgrades USMC F/A-18A/B/Cs (Lots 7-11) to a capability level comparable to a Lot 17 F/A-18C, including both hardware and software capabilities. This requirement is critical to meet the Marine Corps requirements for the Tactical Air Integration Plan. The Avionics Upgrade includes new avionics subsystems already incorporated or in the process of being incorporated into USMC and/or FMS F/A-18 aircraft. This ECP incorporates the following subsystems in ECP 583R1: AN/ARC-210(V) with HAVEQUICK II and SINCGARS; Digital Communication Systems (DCS) Receiver/Transmitter (RT-1824(C)); Combined Interrogator/Transponder AN/APX-111 (V); Night Vision Display System (NVDS); Mission Computer CP-2360 (XN-8); Radar (AN/APG-73); Stores Management Set (SMS) (AN/AYQ-9); AMRAAM Capability (radar mod, launchers,weapons pylons and control stick); Digital Display Indicator (DDI) Upgrade; Mission Data Loader (AN/ASQ-215); Targeting FLIR provisions (AAS-38B). ECP583R1 adds a digital wingtip modification, allowing use of the AIM-9X air-to-air missile. ECP 583R2 will add the following capabilities will add: MIDS(LVT); Color Displays; JHMCS; ALE-47; TAMMAC; and AMU.

This OSIP also provides for limited integration of the Litening Enhanced Range FLIR on 24 USMC F/A-18Ds. This will allow the Marine Corps to utilize existing Litening pods, currently in the AV-8B inventory, on USMC F/A-18Ds to provide the Air Ground Task Force capability and flexibility in the execution of operations in the combat spectrum.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

While the number of aircraft to be retrofit in the program of record has not changed, the Marine Corps will now retrofit some early lot F/A-18C/Ds vice only F/A-18As due to greater remaining life on those aircraft. ECP 583 was approved 25 March 1999. ECP 583R1 was approved in August 2001. All the equipment being incorporated in this ECP has completed development. This OSIP includes a $24.5M Congressional Add in FY 2004

A New Start notification was sent to the Congress in FY 2003 to initiate the Litening integration and procurement of the FY 2004 Installation Kits. Due to lower than expected pricing, 24 aircraft are able to be modified with the originally identified funding.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 583 | 27 | 7.5 | 4 | 1.0 | 11 | 2.8 | | | | | | | | | | | | | | |
| ECP 583R1 | 82 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 583R2 | 4 | 0.5 | 3 | 0.3 | 15 | 1.8 | | | | | | | | | | | | | | |
| Litening | 24 | 1.1 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 5.3 | | 2.1 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| Installation Equipment | 1023 | 160.9 | 29 | 8.0 | 105 | 20.9 | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.4 | | 0.2 | | | | | | | | | | | | | | | | |
| Training | | 0.7 | | | | 0.2 | | | | | | | | | | | | | | |
| Other Support (Testing) | | 2.0 | | | | 1.1 | | 2.0 | | | | | | | | | | | | |
| Support Equipment | | 1.4 | | 0.1 | | 1.8 | | 0.7 | | | | | | | | | | | | |
| ILS | | 15.9 | | 2.4 | | 2.9 | | 2.1 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 76 | 21.2 | 3 | | 16 | 2.6 | 18 | 5.3 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 217.3 | | 14.2 | | 34.4 | | 10.4 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. 34 "Installation Kits" were purchased with NGRE Funds to include: 4 Val/Vers - FY98; 20 "A" Kits - FY99; and 10 "A" Kits - FY00. The cost of these kits are not displayed in this OSIP.
4. The "Installation" unit costs for FY 2002 through FY 2005 are scewed by Congressional adds. The 6 installs in FY2004 are funded with FY 2002 Congressional add funding and the 3 installs in FY 2005 are funded with FY 2003 Congressional add funding.
5. The Installation Kit procurement of ECP583R2 is for Validation/Verification.
6. In FY 2008 the "Installation Cost" includes 11 ECP 583 and 6 ECP 583R2 kits. Beginning in FY 2008 "Installation Costs" are only for installation of ECP 583R2.
7. The additional ECP583R1 kits are being procured to retrofit Navy Reserve aircraft already modified to an ECP 583 configuration under an OSIP that is no longer active.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A/B/C** MODIFICATION TITLE: **USMC F/A-18 UPGRADE ECP-583 (OSIP 021-00)/ Litening (ECP583 and ECP 583R2)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **(ECP 583) ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS FIELD TEAMS**

ADMINISTRATIVE LEAD-TIME: **4 Months** PRODUCTION LEAD-TIME: **24 Months**

CONTRACT DATES: FY 2004: Jan-04 FY 2005: Jan-05 FY 2006: Jan-06 FY 2007: Jan-07

DELIVERY DATE: FY 2004: Jan-06 FY 2005: Jan-07 FY 2006: Jan-08 FY 2007: Jan-09

METHOD OF IMPLEMENTATION: **(LITENING) ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS FIELD TEAMS**

ADMINISTRATIVE LEAD-TIME: **2 Months** PRODUCTION LEAD-TIME: **4 Months**

CONTRACT DATES: FY 2005: Feb-05 FY 2006: Feb-06 FY 2007: Feb-07 FY 2008:

DELIVERY DATE: FY 2005: Jun-05 FY 2006: Jun-06 FY 2007: Jun-07 FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004& PY (86 ) kits [1,2,3] | 76 | 21.2 | 3 | | 7 | 1.3 | | | | | | | | | | | | | | |
| FY 2005 ( 7 ) kits | | | | | 7 | 1.3 | | | | | | | | | | | | | | |
| FY 2006 ( 26 ) kits[5] | | | | | 2 | | 18 | 5.3 | | | | | | | | | | | | |
| FY 2007 (0 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 9 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 0 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 76 | 21.2 | 3 | | 16 | 2.6 | 18 | 5.3 | | | | | | | | | | | | |

**Notes:**

1. 34 "Installation Kits" were purchased with NGRE funds, not included in this OSIP.
2. ECP 583 FY04 Installations are funded with FY02 Congressional add funding.
3. FY05 installations are funded with FY03 Congressional add funding.
4. FY04 installations are for Litening. FY06 installations are for 6 ECP 583 kits and 1 Val/Ver kit for ECP 583R2. Since the Val/Ver installation is contracted with the kit procurement in FY04, the funding associated with this install is budgeted in FY04.

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 76 | 0 | 0 | 2 | 1 | 0 | 4 | 6 | 6 | 0 | 6 | 6 | 6 | | | | | | | | |
| Out | 76 | 0 | 0 | 2 | 1 | 0 | 4 | 6 | 6 | 0 | 6 | 6 | 6 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18 JOINT HELMET-MOUNTED CUEING SYSTEM (JHMCS) (OSIP 024-00)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D/E/F** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

The Joint Helmet-Mounted Cueing System (JHMCS) is a multi-service system that provides United States Air Force (USAF), United States Navy (USN), and United States Marine Corps (USMC) aircraft the capability to cue and verify on-board weapons and weapons sensors to a specific azimuth/elevation determined by the pilot's head position and to confirm sensor line-of-sight. The intent is to reduce tasks required of aircrews, verify seeker/sensor position, and enhance weapons employment opportunities. In the air-to-air role, the aircrew will be able to cue and verify cueing of off-boresight weapon sensors and weapons (current and future short-range air-to-air missiles) to exploit the full weapons envelopes in the dynamic Within Visual Range (WVR) arena. In the air-to-ground role, this system will enhance lethality and survivability by reducing cockpit “heads down” and target acquisition time. For the strike, strike escort, and force application missions, the JHMCS possesses potential to enhance the flexibility of cueing weapons and sensors in the stressful air-to-ground tactical environment. The JHMCS incorporates an ejection-compatible helmet-mounted display system, with capability to cue and verify cueing of high off-axis sensors and weapons, on USAF and USN single seat and two seat fighter aircraft. The JHMCS includes a flight helmet with display optics, image source, display processor/video hardware and software to drive the display, uplook reticle, magnetic helmet tracker hardware and software, interfaces to the aircraft computers, weapons and sensor hardware, with software to integrate the JHMCS functions with other onboard systems. The JHMCS communicates with airborne sensors (FLIR, Radar) through the aircraft avionics MUX Bus. It communicates with weapons through the armament MUX Bus via the Stores Management System.

"Installation Equipment" quantities have been planned by the Joint Program Office to maximize the quantity fielded across all service platforms as expeditiously as possible, while balancing contractor production capacity. In order to meet this objective, in some cases the "Installation Equpment" is procured a year prior to the "Installation Kit" procurement. However, due to a year difference in production leadtimes both the "Installation Kits" and "Installation Equipment" will be delivered at essentially the same time. This allows for the quickest introduction to the fleet of this critical warfighting capability and balances the needs of all services with production capacity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

F/A-18E/F JHMCS completed Developmental Testing in August 2001. Operational Test (OPEVAL) was completed in April 2002. F/A-18E/F retrofit kit procurement began in FY 2004 and installed in FY 2005 starting with Lot 23 aircraft. JHMCS procurement for F/A-18C/D was approved at a milestone decision in January 2004. The first F/A-18C/D JHMCS retrofit kits were procured in FY 2005 and installed in FY 2006.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 54.5 | | 24.6 | | 12.7 | | | | | | | | | | | | | | 91.7 |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| C/D | | | 42 | 4.4 | 66 | 8.4 | 42 | 6.3 | 42 | 6.5 | 64 | 9.6 | 60 | 8.1 | 58 | 5.8 | 35 | 8.9 | 409 | 58.0 |
| E/F | 14 | 0.4 | 3 | 0.4 | | | 10 | 1.2 | 8 | 1.0 | 8 | 1.0 | 12 | 1.6 | 12 | 1.6 | 113 | 14.2 | 180 | 21.4 |
| Canopy A Kits (AYC-1321) | | | | | 66 | 1.3 | 52 | 1.0 | 50 | 1.0 | 72 | 1.3 | 72 | 1.4 | 70 | 1.4 | | | 382 | 7.4 |
| Ejection Seat A Kits (ACC-695) | | | 52 | 0.4 | 86 | 0.6 | 58 | 0.4 | 58 | 0.4 | 76 | 0.6 | 72 | 0.6 | 70 | 0.6 | | | 472 | 3.6 |
| Installation Kits N/R | | 10.1 | | 3.5 | | | | 1.1 | | 1.1 | | 1.0 | | 0.8 | | 0.5 | | 1.8 | | 19.9 |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| C/D | 44 | 13.0 | 48 | 7.7 | 46 | 11.3 | 40 | 10.6 | 48 | 11.3 | 70 | 11.3 | 60 | 8.2 | 29 | 4.7 | 24 | 4.7 | 409 | 82.7 |
| E/F | 14 | 2.9 | 3 | 0.3 | | | 10 | 2.6 | 8 | 2.5 | 8 | 2.5 | 12 | 1.5 | 12 | 1.5 | 113 | 17.7 | 180 | 31.5 |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.6 | | 2.3 | | 0.6 | | | | | | | | | | | | | | 3.5 |
| Training | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.8 | 40 | 2.3 | 34 | 2.1 | 24 | 0.9 | 28 | 1.2 | 34 | 3.0 | 28 | 1.5 | 33 | 4.6 | 31 | 0.6 | | 17.0 |
| ILS | | 2.6 | | 4.0 | | 5.3 | | 5.9 | | 4.1 | | 1.1 | | 6.1 | | 6.8 | | 11.0 | | 47.0 |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support - Testing | | | | | | 2.4 | | 1.6 | | 1.3 | | 1.3 | | 2.4 | | 5.2 | | 48.9 | | 63.1 |
| Installation Cost | | 0.2 | 18 | 0.7 | 43 | 4.4 | 66 | 7.1 | 52 | 6.3 | 52 | 6.2 | 72 | 7.5 | 72 | 7.6 | 218 | 29.1 | 593 | 69.2 |
| **TOTAL PROCUREMENT** | | 30.6 | | 26.0 | | 36.4 | | 38.9 | | 36.8 | | 38.8 | | 39.6 | | 40.3 | | 137.0 | | 424.3 |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. "Installation Equipment" is procured one year prior to "Installation Kits" due to a year greater production leadtime.
4. "Installation Kit" and "Installation Cost" unit costs begin to increase in FY 2006 and FY 2007 respectively due to introduction of Aft Seat JHMCS capability.
5. FY2004 "Installation Cost" includes funds contracted with the first Lot of Installation Kits. These 14 Kits will be physically installed in FY2005.
6. In FY 2005, the "Installation Cost" represents two (2) Validation Installs and two (2) Verification Installs for F/A-18C/D. These kits were procured as part of the "Installation Kit" Non-recurring cost in FY 2004.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D/E/F**

MODIFICATION TITLE: **F/A-18 JOINT HELMET-MOUNTED CUEING SYSTEM (JHMCS) (OSIP 024-00)**

INSTALLATION INFORMATION: **APPROX 5 KITS INSTALLED EVERY 4 WEEKS**

METHOD OF IMPLEMENTATION: **FIELD MOD TEAMS**

ADMINISTRATIVE LEAD-TIME: **2 Months**

PRODUCTION LEAD-TIME: **12 Months**

CONTRACT DATES: FY 2005: Dec-04 FY 2006: Dec-05 FY 2007: Dec-06 FY 2008:

DELIVERY DATE: FY 2005: Dec-05 FY 2006: Dec-06 FY 2007: Dec-07 FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( 18 ) kits | | | 18 | 0.7 | | | | | | | | | | | | | | | | |
| FY 2005 ( 45 ) kits | | | | | 43 | 4.4 | 2 | | | | | | | | | | | | | |
| FY 2006 ( 66) kits | | | | | | | 64 | 7.1 | | | | | | | | | | | | |
| FY 2007 ( 52 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 50 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 72 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 72 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( 70 ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 148 ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 18 | 0.7 | 43 | 4.4 | 66 | 7.1 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | 0 | 2 | 2 | 14 | 9 | 9 | 9 | 16 | 8 | 18 | 20 | 20 | | | | | | | | |
| Out | 0 | 0 | 2 | 2 | 14 | 9 | 9 | 9 | 16 | 8 | 18 | 20 | 20 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **ADVANCED TARGETING FORWARD LOOKING INFRARED (ATFLIR) (OSIP 012-01)**

MODELS OF SYSTEM AFFECTED: **F/A-18A+/C/D** TYPE MODIFICATION: **CAPABILITY IMPROVEMENTS**

DESCRIPTION/JUSTIFICATION:

The Advanced Targeting FLIR (ORD# 437-88-96) will provide the F/A-18A+/E/F with a significantly enhanced capability to detect, track, and attack air and ground targets. New laser guided and GPS standoff weapon systems, and higher altitude attack profiles, require improved performance over the current AAS-38/46 Targeting FLIR. The ATFLIR is designed to provide a quantum leap in operational effectiveness to fully support the standoff precision strike mission. Improved reliability and maintainability technology will increase operational availability while reducing life cycle costs. This OSIP will also be used to perform efforts to address parts obsolescence and to examine potential ATFLIR-related capability upgrades associated with Network Centric Operations and interoperability requirements. A 3rd Generation Targeting Pod will provide the F/A-18A+/C/D with a significantly enhanced capability to detect, track and attack air and round targets. New laser

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

ATFLIR development began in FY1997. The E&MD contract was awarded in March, 1998. Preliminary Design Review, Critical Design Review, and TECHEVAL have been completed. OPEVAL testing was completed June 2003 and the OPEVAL report was issued 4 September 2003 to support Full Rate Production decision in October 2003. NAVFLIR capability was removed from the system in December 2003.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 275.6 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment(C/D) | 56 | 158.3 | 37 | 82.7 | 54 | 112.9 | 46 | 87.4 | | | | | | | | | | | | |
| Installation Equipment(E/F) | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 30.0 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | 3.3 | | 4.5 | | 9.4 | | | | | | | | | | | | |
| Data | | 3.0 | | 0.5 | | 2.0 | | 3.2 | | | | | | | | | | | | |
| Training | | 4.3 | | 0.2 | | 0.4 | | 0.4 | | | | | | | | | | | | |
| Support Equipment | | 18.0 | | 13.3 | | 4.3 | | 7.2 | | | | | | | | | | | | |
| ILS | | 27.0 | | 6.2 | | 13.0 | | 11.5 | | | | | | | | | | | | |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support | | 0.2 | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 240.7 | | 106.2 | | 137.0 | | 119.1 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 2000 HR CORRECTION OF DISCREPANCIES (OSIP 019-01)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY / RELIABILITY /IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

Corrections to discrepancies up to 2000 Flight Hours identified during testing and development can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However, when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the fleet, which will create maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required to meet the F/A-18 E/F transition plan and achieve planned life limits of LRIP 1-3 and FRP 1 and 2 aircraft:

| | |
|---|---|
| TEF, AIL, & AIL Shroud Hinges, (ECP-6035 PT1) | Replace hinges on trailing edge flap, aileron and aileron shroud with redesigned hinges to prevent potential departure of flight control surfaces in flight. |
| Drag Angle, (ECP-6136) | Install redesigned wing drag angle to correct acoustic vibration related fatigue failures. |
| Idle Hinge, NLG R/H Forward Door (ECP-6032) | Retrofit redesigned hinge to restore component to its original specification. |
| Strut Door Attach Former @ Y520, (ECP-6057) | Replace with redesigned hinge and clevis, and install bushing into Y520 former to restore component to its original specification. |
| Drive Hinge, NLG R/H Forward Door, (ECP-6137) | Incorparate redesigned drive hinge to prevent potential departure of component in flight. |
| Y541 Fitting Repair Crack, (ECP-6111) | Splice redesigned lower appendage area into Y541 former to restore component to original specification. |
| ECS Primary Heat Exchanger, (ECP-6078) | Replace noncompliant heat exchanger with redesigned full life component and new ECS duct. |
| LEX Diverter Apex Fitting @ Y383, (ECP-6041) | Retrofit with redesigned apex fitting to restore component to its original specification. |
| MLG Sidebrace Pin, (ECP-6099) | Fit MLG with redesigned pin to prevent possible collapse of MLG during arrestments. |
| Heat Exchanger Cover (Door 55) Hole Wear, (ECP-6086) | Retrofit fasteners with steel bushings to prevent distribution of stress into fuselage components. |
| Outer Wing Substructure, Hinge kit & Wing Torque Box kit, (ECP-6035 PT2) | Remove noncompliant TEF and aileron hinges on wing torque box and replace with full life hinges. |
| Ecology Tank Flange Changes, (ECP-6100) | Incorporate redesigned ecology tank and modify mount on the door to prevent tank separation. |
| Center Keel Intercoaster @ Y627, (ECP-6092) | Replace component to restore aircraft to original structural integrity. |
| Fuel Floor Support Angle @ Y470, (ECP-6128) | Add titanium bathtub fittings and replace fuel floor to increase fuel floor land area. |
| Inlet Duct Stiffener, (ECP-6094) | Remove & replace with new design Inlet Duct Stiffener to correct design deficiency. |
| Keel Access Cover @ Y631-Y645, (ECP-6118) | Replace Keel Web with redesigned component to conform to original aircraft specification. |
| Upper Keel Web Stringer @ Y659, (ECP-6067) | Install doublers to restore component to its original service life. |
| Keel Web Fittings Aft of Y472, (ECP-6127) | Install doublers to restore component to its original service life. |
| Visual Identifcation System (ECP-6052) | Provide Pattern Strobe Light System and Circuit Logic Change cues to distinguish E/F from C/D at night. |
| AOA/PITOT Probe Circuitry Change & Boarding Ladder/Canopy Switch, (ECP-6165) | Retrofit redesigned AOA Probe Circuitry to prevent potential safety hazard and relocation of boarding ladder switch to preclude inadvertent actuation of the canopy switch, resulting in the possible closing of aircraft canopy on personnel. |
| Keel Web, (ECP-XXX7) | Replace Keel Web with redesigned component to conform to original aircraft specification. |

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Each change has been or will be tested prior to installation in the F/A-18.
Some ECPs are "O" Level Installs.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 2000 HR CORRECTION OF DISCREPANCIES (OSIP 019-01)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 6035PT1/ TEF, AIL, & AIL Shroud Hinges | 12 | 3.4 | | | | | | | | | | | | | | | | | | |
| ECP 6136 / Drag Angle | 12 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 6032 / Idle Hinge, NLG R/H Forward Door | 12 | * | | | | | | | | | | | | | | | | | | |
| ECP 6057 / Strut Door Attach Former @Y520 | 12 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 6137 / Drive Hinge, NLG R/H Forward Door | 110 | 0.3 | 25 | 0.1 | | | | | | | | | | | | | | | | |
| ECP 6111 / Y541 Fitting Repair Crack | 79 | 3.2 | | | | | | | | | | | | | | | | | | |
| ECP 6078 / ECS Primary Heat Exchanger | | | 36 | 0.2 | 36 | 0.2 | 36 | 0.2 | | | | | | | | | | | | |
| ECP 6041 / LEX Diverter Apex Fitting @Y383 | 12 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 6099 / MLG Sidebrace Pin | 12 | * | | | | | | | | | | | | | | | | | | |
| ECP 6086 / Heat Exchanger Cover (Door 55) Hole Wear | 12 | * | | | | | | | | | | | | | | | | | | |
| ECP 6035PT2 / Outer Wing Substructure, Hinge kit & Wing Torque Box kit | 100 | 2.5 | | | | | | | | | | | | | | | | | | |
| ECP 6100 / Ecology Tank Flange Changes | 27 | 0.4 | | | | | | | | | | | | | | | | | | |
| ECP 6092 / Center Keel Intercoaster @Y627 | 12 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 6128 / Fuel Floor Support Angle@Y470 | 91 | 0.8 | | | | | | | | | | | | | | | | | | |
| ECP 6094 / Inlet Duct Stiffener | 9 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 6118 / Keel Access Cover @Y631-Y645 | 112 | 1.0 | 14 | * | | | | | | | | | | | | | | | | |
| ECP 6067 / Upper Keel Web Stringer @Y659 | 46 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECP 6127 / Keel Web Fitting Aft @Y472 | 72 | 0.8 | | | | | | | | | | | | | | | | | | |
| ECP 6052 / Visual Identifcation System | 32 | 2.1 | | | | | | | | | | | | | | | | | | |
| ECP 6165 /AOA PITOT Probe Circuitry Change & Boarding Ladder/Canopy Switch | 108 | 0.1 | 27 | 0.1 | | | | | | | | | | | | | | | | |
| ECP XXX7 / Keel Web | | | | | 36 | 0.3 | 36 | 0.3 | | | | | | | | | | | | |
| Installation Kits N/R | | 6.2 | | | | 0.3 | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.8 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 1.3 | | 0.7 | | 0.2 | | 0.2 | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 218 | 2.3 | 465 | 6.7 | 198 | 2.9 | 127 | 1.3 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 26.5 | | 7.8 | | 3.8 | | 1.9 | | | | | | | | | | | | |

Notes:
1. Total may not add due to rounding.
2. Asterisk indicates amount less than $50K
3. Procurement unit cost for ECP 6035PT2 is dependent of Lot of aircraft being retrofit due to multiple Technical Directives.
4. Update required based on FY02 magr procurement $2,548K from OSIP 19-01.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **F/A-18C/D DIGITAL WINGTIP MOD FOR AIM-9X COMPATIBILITY (OSIP 005-02)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D** TYPE MODIFICATION: **CAPABILITY UPGRADE**

DESCRIPTION/JUSTIFICATION:

The AIM-9X Joint Operation Document (JORD), ORD# USN-CAF (USAF 001-93)-IIA, requires a highly expanded off-boresight targeting capability that presently cannot be achieved with the current AIM-9M analog interface signal set. The JORD also requires the missile to communicate with the aircraft through a digital interface. The F/A-18 currently has a tailored MIL-STD-1760 interface on stations 2 through 8. Modifications to the outer wing panel and LAU-7 launcher can provide full digital capability to the wingtip and can support full AIM-9X capability. The current launcher support equipment (AWM-100) must also be modified to support/test this digital wingtip capability. AWM-100 are “O” level installations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The AIM-9X missile is on contract for LRIP 1, 2 and 3 deliveries, with the LRIP 1 delivery complete. Operational test shots have been completed and an end of test message was issued in August 2003. The AIM-9X program Milestone III (FRP) was completed 15 May 2004.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| F/A-18 Digital Wingtip Kits | 210 | 0.3 | 15 | * | 9 | * | 20 | * | 48 | 0.1 | 21 | * | 65 | 0.1 | | | | | 388 | 0.6 |
| Installation Kits N/R | 2 | 0.3 | | | | | | | | | | | | | | | | | 2 | 0.3 |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.3 | | | | | | | | | | | | | | | | | | 0.3 |
| Training | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | 24 | 0.7 | | | | | | | | | | | | | | | | | 24 | 0.7 |
| ILS | | 0.1 | | * | | * | | 0.1 | | * | | 0.2 | | | | | | | | 0.5 |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support - Testing | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 181 | 1.2 | 48 | 0.3 | 23 | 0.2 | 9 | 0.1 | 20 | 0.1 | 48 | 0.3 | 21 | 0.1 | 65 | 0.5 | | | 415 | 2.7 |
| **TOTAL PROCUREMENT** | | 3.0 | | 0.3 | | 0.2 | | 0.2 | | 0.2 | | 0.5 | | 0.3 | | 0.5 | | | | 5.1 |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. 2 Validation/Verification Kits are included in Installation Kit N/R..
4. 27 Kits were provided as contractual consideration from the manufacturer.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18C/D**

MODIFICATION TITLE: **F/A-18C/D DIGITAL WINGTIP MOD FOR AIM-9X COMPATIBILITY (OSIP 005-02)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **D-Level Install for Digital Wingtip Mod with Field Mod Teams, O-Level Install for AWM-100**

ADMINISTRATIVE LEAD-TIME: **2 Months**

PRODUCTION LEAD-TIME: **12 Months**

CONTRACT DATES: FY 2005: Dec-04 FY 2006: Dec-05 FY 2007: Dec-06 FY 2008:

DELIVERY DATE: FY 2005: Dec-05 FY 2006: Dec-06 FY 2005: Dec-07 FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( 210) kits | 181 | 1.2 | 48 | 0.3 | 8 | * | | | | | | | | | | | | | | |
| FY 2005 ( 15) kits | | | | | 15 | 0.2 | | | | | | | | | | | | | | |
| FY 2006 ( 9) kits | | | | | | | 9 | 0.1 | | | | | | | | | | | | |
| FY 2007 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( 48) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( 21) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( 65 ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 181 | 1.2 | 48 | 0.3 | 23 | 0.2 | 9 | 0.1 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY2007 | | | | FY2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 181 | 12 | 12 | 12 | 12 | 5 | 6 | 6 | 6 | 3 | 3 | 3 | 0 | | | | |
| Out | 181 | 12 | 12 | 12 | 12 | 5 | 6 | 6 | 6 | 3 | 3 | 3 | 0 | | | | |

| | FY2009 | | | | FY2010 | | | | FY2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **C/D TRAINING SYSTEM (OSIP 006-02)**

MODELS OF SYSTEM AFFECTED: **F/A-18C/D** TYPE MODIFICATION: **TRAINERS UPGRADE**

DESCRIPTION/JUSTIFICATION:

F/A-18C/D training funds will be used to meet current Fleet Readiness Squadron (FRS) requirements by purchasing new components and software to prevent obsolescence of the various trainers as F/A-18C/D aircraft are modified for capability enhancement and service life extension. Funding will also be used to update courseware and computer based training (CBT) as new capabilities are introduced to the fleet, and will enable the fleet to institute an aggressive post-FRS training environment to bring F/A-18C/D trainers into High Level Architecture (HLA) compliance.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training | | 33.6 | | 20.6 | | 7.6 | | 6.7 | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support - Testing | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 33.6 | | 20.6 | | 7.6 | | 6.7 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **Fast Tactical Imagery II (OSIP 015-02) FTI** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

MODELS OF SYSTEM AFFECTED: **F/A-18C/DE/F**

DESCRIPTION/JUSTIFICATION:

FTI provides the aircrew the capability to link video imagery and targeting coordinates from aircraft to aircraft at limited cost. This capability is currently being used by the F-14 to transmit critical targeting imagery and coordinates from aircraft to aircraft. This Congressionally added funding would be used to fully qualify the FTI capability on the F/A-18, and to provide this critical warfighting capability to the Fleet as F-14s are being retired from carriers. The Fleet completed a successful demonstration of the FTI capability on the F/A-18C aircraft last year, and thus, this effort is considered low risk.

Tactical imagery continues to be critical to ongoing conflicts. FTI provides the capability to transmit this imagery from aircraft to aircraft, or to a ground receiving station. This allows quick and easy dissemination of imagery to aircraft or ground stations after it is collected. This also provides the fleet the capability to target mobile targets. Without FTI on F/A-18 aircraft, the Battle Group Commander lost this critical capability in FY03 when F-14s left the Fleet. As such, his ability to transmit and disseminate imagery, and to target mobile targets were severely diminished. A fiscal year 2004 Congressional Add for $1.0M provides for procurement and installation for one (1) F/A-18 squadron.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

| | |
|---|---|
| Deliver Preproduction Units(3) | Sep 30 2002 |
| Complete Carrier Qual Testing | Dec 30 2002 |

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E (0204136N/E2065) | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | 15 | 2.5 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | 0.1 | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.1 | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Other Support | | 0.6 | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 12 | 0.2 | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 3.5 | | | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. FY04 installs are funded with FY 2004 Congressional Add funding.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 4000 HR CORRECTION OF DISCREPANCIES (OSIP 012-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

Corrections to discrepancies up to 4000 Flight Hours identified during testing and development can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However, when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the fleet, which will create maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required to meet transition plan and achieve planned life limits of LRIP II / III and FRP I/II aircraft.

| | |
|---|---|
| LEX Cracks Redesign, (ECP-6126) | Replace 50% of intermediate Spar; add bathtub fittings 4 locations; replace rib to restore aircraft to design life |
| Bootstrap at Several Locations (After Interim Fix), (ECP-6029) | Replace bootstrap and Y645 Outboard Former with redesigned components to meet specification life |
| Dorsal Cover (Door 40) Hole Elongation, (ECP-6085) | Incorporate redesigned door to prevent potential departure of component in flight |
| Door 317 Hole Elongation, (ECP-6120) | Incorporate redesigned door to prevent potential departure of component in flight |
| Side Longeron Web @ Y510 (ECP-6129) | Remove and replace Longeron Web with thicker web to restore component to its original specification. |
| Aft Fuselage Inboard Former Crack @Y618, (ECP-6135) | Replace stringer, upper / lower keel webs and stiffener to restore aircraft to original structural integrity |
| LEX Doors – Upper Center & Aft, (ECP-6009) | Install door with thicker lands and thicker hat stiffeners end to correct acoustic vibration related fatigue |
| Lower Outboard Longeron @ Y555, (ECP-6141) | Cold work nutplate holes and add clip to correct design deficiency |
| Inlet Duct Stiffener @Y568, (ECP-6143) | Installation of a structural clip to the shroud in order to prevent buckling |
| Y472.5 Blkd Fatigue Crks @ MLG Trunion, (ECP-6157) | Blend bulkhead to prevent distribution of stress into components. (Installation costs only) |
| Missile Launcher Bay Clost Out Web, (ECP-6142) | Install doublers to restore component to its original service life |
| Lower Outboard Longeron Cracks, (ECP-6138) | Brings sturcture back to original specification by adding a doubler to the structure |

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Each change has been or will be tested prior to installation in the F/A-18.
Some ECPs are "O" Level Installs

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 4000 HR CORRECTION OF DISCREPANCIES (OSIP 012-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 6126 / LEX Cracks Redesign | 62 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 6029 / Bootstrap at Several Locations (After Interim Fix) | | | | | | | | | | | | | | | | | | | | |
| ECP 6085 / Dorsal Cover (Door 40) Hole Elongation | 53 | 1.8 | | | | | | | | | | | | | | | | | | |
| ECP 6120 / Door 317 Hole Elongation | 79 | 1.2 | | | | | | | | | | | | | | | | | | |
| ECP 6129 /Side Longeron Web @ Y510 | 87 | * | | | | | | | | | | | | | | | | | | |
| ECP 6135 / Aft Fuselage Inboard Former Crack @ Y618 | 98 | 0.4 | 37 | 0.2 | | | | | | | | | | | | | | | | |
| ECP 6009 / LEX Doors Upper Center & Aft | 32 | * | | | | | | | | | | | | | | | | | | |
| ECP 6141 / Lower Outboard Longeron @ Y555 | | | | | | | | | | | | | | | | | | | | |
| ECP 6143 / Inlet Duct Stiffener @Y568 | 89 | 0.5 | | | | | | | | | | | | | | | | | | |
| ECP 6142 / Missile Launcher Bay Close Out Web | 36 | 0.1 | 36 | 0.1 | 36 | 0.1 | 26 | 0.1 | | | | | | | | | | | | |
| ECP 6138 / Lower Outboard Longeron Cracks | 62 | * | | | | | | | | | | | | | | | | | | |
| ECP 6163/ Dissimilar Metals, Main Landing Gear Wheel Well | | | | | 10 | * | | | | | | | | | | | | | | |
| ECP 6173/ DOOR 630 Goose Neck Hinge | | | | | 36 | * | | | | | | | | | | | | | | |
| Installation Kits N/R | | 1.9 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.1 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.4 | | 0.3 | | 0.2 | | | | | | | | | | | | | | |
| Other Support | | 4.3 | | | | | | 0.7 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 394 | 1.8 | 170 | 1.7 | 95 | 1.0 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 11.1 | | 2.4 | | 2.0 | | 1.8 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. Total quantity of installations exceeds the "Installation Kit" procurement quantity by 82 due to ECP 6157, which does not require an "installation kit" to complete the modification.
4. ECP 6126 includes multiple airframe changes with different pricing dependent on aircraft Lot.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 6000 HR CORRECTION OF DISCREPANCIES (OSIP 013-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

Corrections to discrepancies up to 6000 FHs identified during testing and development can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However, when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the fleet, which will create maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required to meet transition plan and achieve planned life limits of LRIP II / III and FRP I / II aircraft:

| | |
|---|---|
| Y577 Frame FInge @ Door 55, **(ECP-6154)** | Add bathtub fitting to restore aircraft to original structural integrity |
| 12K SFH Y461 Clip Crack, **(ECP-6144)** | Replace fatigued clip with a redesigned clip to meet design life |
| Y591 Bulkhead Stiffner Fillet Crack, **(ECP-6160)** | Add nested fitting to restore aircraft to original structural integrity |
| Keel Longerons @ Y555 Former, **(ECP-6117)** | Add structural backup to former fo meet specification life |
| Outboard Longeron Splice Fasteners @ Y591, **(ECP-6119)** | Remove and replace splice fitting and fasteners to restore aircraft to original structural integrity |
| Upper Outboard Longeron @ Y631, **(ECP-6124)** | Remove and replace hi-lok fastener to restore aircraft to original structural integrity |
| Nacelle Skin Failed Fastener @ Y694, **(ECP-6107)** | Replace fastener with oversize fastener to correct design deficiency |
| Y679 Former Fasteners, **(ECP-6123)** | Replace with new material fastener to restore aircraft to original structural integrity |
| Y604 UOB Long, **(ECP-6134)** | Blend away material from downstanding leg to prevent distribution of stress |
| Missile Beam Web, Aft of Y541, **(ECP-6132)** | Add doubler to restore component to its original service life |
| AMAD Door 53R (Install work only), **(ECP 6169)** | Correction of possible interference condition existing between the right hand generator and a hat stiffner on the AMAD bay door 53R |

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Each change has been or will be tested prior to installation in the F/A-18.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F 6000 HR CORRECTION OF DISCREPANCIES (OSIP 013-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 6154 / Y577 Frame Finge @ Door 55 | 98 | * | 19 | * | | | | | | | | | | | | | | | | |
| ECP 6144 / 12K SFH Y461 Clip Crack | 117 | 0.2 | 19 | * | | | | | | | | | | | | | | | | |
| ECP 6160 / Y591 Bulkhead Stiffner Fillet Crack | 98 | 0.4 | 37 | 0.2 | | | | | | | | | | | | | | | | |
| ECP 6117 / Keel Longerons @Y555 Former | | | | | | | | | | | | | | | | | | | | |
| ECP 6119 / Outboard Longeron Splice Fasteners @ Y591 | | | | | | | | | | | | | | | | | | | | |
| ECP 6124 / Upper Outboard Longeron @Y631 | | | | | | | | | | | | | | | | | | | | |
| ECP 6107 / Nacelle Skin Failed Fastener @Y694 | 47 | * | | | | | | | | | | | | | | | | | | |
| ECP 6123 / Y679 Former Fasteners | 63 | * | | | | | | | | | | | | | | | | | | |
| ECP 6134 / Y604 UOB Long | | | | | | | | | | | | | | | | | | | | |
| ECP 6132 / Missile Beam Web, Aft @Y541 | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 0.7 | | | | * | | * | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.1 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.3 | | 0.3 | | 0.2 | | * | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 286 | 1.7 | 108 | 1.9 | 127 | 1.2 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 1.6 | | 2.2 | | 2.1 | | 1.3 | | | | | | | | | | | | |

Notes:
1. Total may not add due to rounding.
2. Asterisk indicates amount less than $50K
3. "Installation Kit" procurement quantity exceeds "Installation" quantity due to 20 Validation/Verification kits.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F CORRECTION OF OPERATIONAL DISCREPANCIES (OSIP 014-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

Corrections to operational discrepancies identified can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However, when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the fleet, which will create maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required to meet transition plan and achieve planned life limits of LRIP II / III and FRP I / II aircraft:

| | |
|---|---|
| ECS Exhaust Overtemp Final Fix/Bard Stacks, **(ECP-6106R1)** | Modifies current exhaust ducts in order to reduce skin and structural temperatures caused by the ECS exhaust plume |
| Aft ECS Cooling Fan, **(ECP-6114)** | Strengthens ECS cooling fan to prevent and contain fan failures |
| FCC Processor Upgrade, **(ECP-6002)** | Replace existing FCC processor with upgraded higher order processors |
| MLG Door Bushing Migration, **(ECP-6104)** | Improved bushing retention for MLG Door hinge attach points |
| AFT Fuselage Outbd Former Fwd Flange @ Y645, **(ECP-6088)** | Repair former by adding a doubler to bring it back to original specification |
| MLG Trunnion Bearing Loose Retention Nut, **(ECP-6194)** | Replacing bearing retention nut with an improved retention nut |
| Long Stick Position, **(ECP-XXX2)** | Incorporation of improved retention mechanism in position sensor |
| SKIN 12 Stiffener Back-up Structure, **(ECP-6171)** | Strengthen the Centerline Structure to meet 2000 catapult requirement |
| AFT Fan Shutoff Valve, **(ECP-XXX5)** | Modify the Aft Fan with an Improved Shut-Off Valve |
| Radar Altimeter Antenna Radome Delineation, **(ECP-XXX8)** | Drill hole in door to allow escape of moisture accumulation in order to prevent corrosion of the antenna |
| Leading Edge Extension (LEX) Lower Surface/Structure Cracks Redesign, **(ECP-6193)** | Modifies LEX structure to prevent cracks induced from aerodynamic loads |
| MLG Outboard Tire Door Clevis, **(ECP-6145)** | Redesign clevis to eliminate cracking imparted during gear cycling |
| FT50 Y436 Inlet Former, **(ECP-6188)** | Introduces strengthened design to prevent cracking |
| FT50 teardown Keel Failure, **(ECP-XX11)** | Modifies Keel To Prevent Future Cracking |
| FT50 Teardown Bulkhead Cracking, **(ECP-XX12)** | Modifies bulkhead to prevent cracking discovered during FT50 testing |
| FT-50 Failure of Upper Wing Skin Splice Plate, **(ECP-6183)** | Redesigned Upper Wing Skin Splice Plate to address failures observed during fatigue testing |
| DOOR 49 Replacement, **(ECP-6098)** | Replace Door 49 for holes found elongated beyond spec. |
| Horizontal Actuator Cover-Door 71, **(ECP-6068)** | Improved fasteners to prevent deformation introduced by flight loads |
| MLG R/H Upper Planing Link Attach Fitting Failure, **(ECP-6196)** | Redesign existing planing link attach fittings |
| LEX Vent Mechanism Support Assembly Rod End Clevis Failure, **(ECP-XXX3)** | Redesign and strengthen door actuator |
| LDS Fuel Wash Filter, **(ECP-XX16)** | Redesign wash filter to prevent passages from becoming clogged and causing loss of cooling efficiency; impacting LCS, Hydraulic, and AMAD life- due to higher operating temps. |
| ECS Ejector Cracks, **(ECP-XX17)** | Modify ECS ejector to prevent cracks from being induced |
| MLG Door Uplock, **(ECP-XX18)** | Improves Uplock ability to overcome increased loads due to MLG Door icing |
| Cockpit Pressure Warning System (CPWS), **(ECP-XX19)** | Provides a warning system to identify a possible insidious cabin pressure loss that could result in crew hypoxia and possible A/C loss |
| DOORS 315 & 316 Elongation, **(ECP-XX20)** | Reduces the potential for hole elongation on doors 315 & 316. |
| HOL Follow-On Upgrades Lot 25 & Up, **(ECP-XX21)** | Mission Computer BIT performance upgrades & enhancements for aircraft with Higher Order Language (HOL) |
| 18E Follow-On Upgrades Lot 24 & Below, **(ECP-XX22)** | Mission Computer BIT performance upgrades & enhancements for aircraft without Higher Order Language (HOL) |
| MLG Proximity Switches & Sidebrace Down lock Mechanism, **(ECP-6076)** | Modify down lock actuator assembly, jury link; replace lock plate & proximity switches |
| Fuel System Ground Pressurization Tube Water Entrapment, **(ECP-6190)** | Change manual drain valve to automatic drain valve to ensure that no water is trapped in the fuel system. |
| Wing Modification for Transonic Flying Qualities Improvement, **(ECP-6191)** | Modify the wing and flight control surfaces to improve the flying qualities of the aircraft when flying above the speed of sound. |
| Radar Bay Vent Valve Fail - MSP 862, **(ECP-6198)** | To eliminate the Radar Bay Vent Valve failures (MSP 862 code). The condition was traced to an excessive voltage drop to the valve, a result of the Radar Bay Vent Valve circuit change which incorporated Forward Avionics Fan Delay Logic. |
| Y679 Former Boot Strap Interface Fillet Seal Missing, **(ECP-6206)** | Retrofit will consist of applying Fillet seal/brush coating to entire edge of lower leg of Support that interfaces with "Y679" Former |
| ECS Cooling Duct Grounding Strap, **(ECP-6209)** | Add a grounding strap to prevent accidental static discharge to an aircraft maintainer |
| ARS Lighting, **(ECP-XXX23)** | Add lighting to the ARS pod to improve the visibility of the tanking aircraft during night time refueling operations |
| NVG Friendly NAV Lighting, **(ECP-XXX24)** | Modify cockpit lighting to be more friendly with night vision goggles (NVG) |
| Fatigue Testing - Bulkhead, **(ECP-XXX25)** | Correct cracks in bulkheads found during fatigue testing |
| Fatigue Testing - Keel Web **(ECP-XXX26)** | Correct cracks in keel webs found during fatigue testing |
| Fatigue Testing - Teardown, **(ECP-XXX27)** | Correct cracks in various other structural components found during teardown of various fatigue test articles |
| Fatigue Testing - Doors, **(ECP-XXX28)** | Correct hole elongations in doors found as a result of fatigue testing |
| HS1 Reservoir Chafe, **(ECP-XXX29)** | Correct chafing condition between the hydraulic reservoir and structural components of the aircraft |
| TEF Clip Fatigue Prevention, **(ECP-6213)** | The trailing edge flap experienced a fatigue failure during ground testing. This change incorporates improvements to the trailing edge flap to assure fatigue life requirements are met |
| Boarding Ladder Sensors Improvement, **(ECP-XXX30)** | Improve boarding ladder sensors to prevent incorrect stowage indications |
| Brake Piston Assy Redesign , **(ECP-XXX31)** | Redesign the brake piston assembly to improve reliability |
| Inlet Ice Detector Hardware Redesign , **(ECP-XXX32)** | Redesign the ice detector system to reduce the number of false positives |
| Inadequate Clearance Between APU SCV and Structure, **(ECP-6211)** | Correct chafing condition between aircraft structural material and the APU SCV to prevent damage to the aircraft structure |
| Wing - Fuel Probe Corrosion Protection, **(ECP-6219)** | Add a layer of corrosion preventative between the fuel probe and its mounting to prevent galvanic corrosion between dissimilar metals |
| Common Preamps **(ECP-6034)** | Procures Common Preamps not funded in Lot 24 (Installation Equipment Only) |

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Each change has been or will be tested prior to installation in the F/A-18.
Some ECPs are "O" Level Installs

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **E/F CORRECTION OF OPERATIONAL DISCREPANCIES (OSIP 014-03)**

MODELS OF SYSTEM AFFECTED: **F/A-18E/F** TYPE MODIFICATION: **SAFETY /RELIABILITY/IMPROVEME!SAFETY /RELIABILITY/IMPROVEMENT**

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 6106R1 / Exhaust Overtemp Final Fix/Bard Stacks | 170 | 11.9 | 36 | 1.9 | | | 17 | 0.9 | | | | | | | | | | | | |
| ECP 6114 / Aft ECS Cooling Fan | 12 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 6002 / FCC Processor Upgrade | 28 | 1.3 | | | | | | | | | | | | | | | | | | |
| ECP 6104 / MLG Door Bushing Migration | 32 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 6088 / Aft Fuselage Outboard Former Fwd Flange @Y645 | | | | | | | | | | | | | | | | | | | | |
| ECP 6194 / MLG Trunnion Bearing Loose Retention Nut | 36 | 0.1 | 44 | 0.2 | | | | | | | | | | | | | | | | |
| ECP XXX2 / Long Stick Position Tx | | | | | | | | | | | | | | | | | | | | |
| ECP 6171 / Skin 12 Stiffener Back-up Structure | 54 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP-XXX5 / Aft Fan Shutoff Valve | | | 80 | 0.1 | | | | | | | | | | | | | | | | |
| ECP XXX8 / Radar Altimeter Antenna Radome Delamination | | | | | 36 | 0.7 | 26 | 0.5 | | | | | | | | | | | | |
| ECP 6193 Leading Edge Ext (LEX ) Lower Surface/Structure Cracks Redesign | 32 | 23.2 | 19 | 4.4 | | | | | | | | | | | | | | | | |
| ECP 6145 / MLG Outboard Tire Door Clevis | | | 23 | * | | | | | | | | | | | | | | | | |
| ECP 6188 / Y436 Inlet Former | 36 | 0.4 | | | 36 | 0.4 | 36 | 0.4 | | | | | | | | | | | | |
| ECP XX11 / FT50 Teardown Keel Failure | | | 38 | 0.1 | | | | | | | | | | | | | | | | |
| ECP XX12 / FT50 Teardown Bulkhead Cracking | | | | | | | 36 | 0.4 | | | | | | | | | | | | |
| ECP 6183 / FT50 Failure of Upper Wing Skin Splice Plate | | | | 0.2 | 36 | 0.2 | 36 | 0.2 | | | | | | | | | | | | |
| ECP 6098 / DOOR 49 Replacement | | | 12 | 0.2 | | | | | | | | | | | | | | | | |
| ECP 6068 / Horizontal Actuator Vocer Door 71 | 62 | 0.5 | | | | | | | | | | | | | | | | | | |
| ECP 6196 / MLG R/H Upper Planing Link Attach Fitting Failure | | | 36 | * | 36 | * | 12 | * | | | | | | | | | | | | |
| ECP XXX3 / LEX Vent Mechanism Support Assembly Rod end Clevis Failure | | | | | 198 | 0.9 | | | | | | | | | | | | | | |
| ECP 6216 / LDS Fuel Wash Filter | | | 36 | 0.2 | 36 | 0.2 | 36 | 0.2 | | | | | | | | | | | | |
| ECP XX17 / ECS Ejector Cracks | | | | | | 0.3 | 36 | 0.3 | | | | | | | | | | | | |
| ECP XX18 / MLG Door Uplock | | | | | 36 | 0.1 | 36 | 0.1 | | | | | | | | | | | | |
| ECP XX19 / Cockpit Pressure Warning System (CPWS) | | | 8 | 0.1 | 30 | 0.3 | 30 | 0.3 | | | | | | | | | | | | |
| ECP XX20 / DOORS 315 & 316 Elongation | | | 36 | 0.1 | 38 | 0.1 | 30 | 0.1 | | | | | | | | | | | | |
| ECP XX21 / HOL Follow-on Upgrades Lot 25 & Up | | | | | | | 30 | * | | | | | | | | | | | | |
| ECP XX22 / 18E Follow-on upgrades Lot 24 & Below | | | | | | | 30 | * | | | | | | | | | | | | |
| ECP 6076 / MLG Proximity Switches & Sidebrace Downlock Mechanism | 2 | * | 10 | 0.1 | | | | | | | | | | | | | | | | |
| ECP-6190 / Fuel System Ground Pressurization Tube Water Entrapment **ECP-6190** | | | | | 36 | * | 36 | * | | | | | | | | | | | | |
| ECP-6191 / Wing Modification for Transonic Flying Qualities Improvement | | | | | | | | | | | | | | | | | | | | |
| ECP-6198 / Radar Bay Vent Valve Fail - MSP 862 | | | | | 36 | * | 36 | * | | | | | | | | | | | | |
| ECP-6206 / Y679 Former Boot Strap Interface Fillet Seal Missing | | | | | 36 | 0.1 | 36 | 0.1 | | | | | | | | | | | | |
| ECP-6209 / ECS Cooling Duct Grounding Strap | | | | | 39 | 0.1 | | | | | | | | | | | | | | |
| ECP-XXX23 / ARS Lighting | | | | | 36 | 0.1 | 36 | 0.1 | | | | | | | | | | | | |
| ECP-XXX24 / NVG Friendly NAV Lighting | | | | | | | 36 | * | | | | | | | | | | | | |
| ECP-XXX25 / Fatigue Testing - Bulkhead | | | | | 36 | 0.1 | 36 | 0.1 | | | | | | | | | | | | |
| ECP-XXX26 / Fatigue Testing - Keel Web | | | | | | | 36 | 0.2 | | | | | | | | | | | | |
| ECP-XXX27 / Fatigue Testing - Teardown | | | | | | | 36 | 0.3 | | | | | | | | | | | | |
| ECP-XXX28 / Fatigue Testing - Doors | | | | | 36 | 0.2 | 36 | 0.2 | | | | | | | | | | | | |
| ECP-XXX29 / HS1 Reservoir Chafe | | | | | 36 | * | 26 | * | | | | | | | | | | | | |
| ECP-6213 / TEF Clip Fatigue Prevention | | | | | 36 | 0.4 | 36 | 0.4 | | | | | | | | | | | | |
| ECP-XXX30 / Boarding Ladder Sensors Improvement | | | | | | | 36 | 0.2 | | | | | | | | | | | | |
| ECP-XXX31 / Brake Piston Assy Redesign | | | | | 2 | * | 36 | 0.1 | | | | | | | | | | | | |
| ECP-XXX32 / Inlet Ice Detector Hardware Redesign | | | | | 36 | * | 36 | * | | | | | | | | | | | | |
| ECP-6211 / Inadequate Clearance Between APU SCV and Structure | | | | | 36 | * | 36 | * | | | | | | | | | | | | |
| ECP-6219 / Wing - Fuel Probe Corrosion Protection | | | | | 36 | * | 36 | * | | | | | | | | | | | | |
| ECP-6258/FT76 Forward Windshield Bolt Life Limit | | | | | | | 36 | * | | | | | | | | | | | | |
| ECP-XXX33/ Hydraulics Components Improvement | | | | | | | 36 | * | | | | | | | | | | | | |
| ECP-XXX34/ 480 Gallon External Fuel Tank Valve Replacement | | | | | | | 36 | 0.3 | | | | | | | | | | | | |
| ECP- XXX35/ MLG Door Departure and Flight Redesign ( Final Fix) | | | | | | | 36 | 1.1 | | | | | | | | | | | | |
| ECP-XXX36/ Fire Bottle Bay Over-Temperature | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 3.5 | | 4.0 | | 1.9 | | 1.8 | | | | | | | | | | | | |
| Installation Equipment | | | | 5.4 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.2 | | 0.6 | | 0.5 | | 0.2 | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.6 | | 0.1 | | | | | | | | | | | | | | | | |
| ILS | | 7.6 | | 3.8 | | 3.2 | | 4.0 | | | | | | | | | | | | |
| Other Support | | | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 53 | 0.9 | 124 | 6.9 | 219 | 5.0 | 443 | 4.4 | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 50.4 | | 28.2 | | 14.9 | | 16.8 | | | | | | | | | | | | |

Notes:
1. Total may not add due to rounding.
2. Asterisk indicates amount less than $50K
3. ECP 6194 was listed in previous budgets as ECP XXX1 / MLG Control Valve of Emerg Port Restrictor.
4. ECP 6171 was listed in previous budgets as ECP XXX4 / SUU 78 Back-Up Structure.
5. ECP 6193 was listed in previous budgets as ECP XXX9 / LEX Cracks.
6. ECP 6188 was listed in previous budgets as ECP XXX10 / FT50 Teardown Longeron Repair.
7. "Installation Kit" procurement quantity exceeds "Installation" quantity due to some kits being installed at the Organizational Level.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **MARK XIIA MODE 5 IFF (OSIP 015-03)**

MODELS OF SYSTEM AFFECTED: **VARIOUS (49 Separate T/M/S)** TYPE MODIFICATION: **CAPABILITY IMPROVEMENT**

DESCRIPTION/JUSTIFICATION:

MK XII A Mode 5 provides improved secure cooperative combat identification through IFF. MODE 5 is a product improvement which is designed to be installed through engineering changes to digital MK XII interrogators and transponders including the APX-117, APX-118, UPX-37, APX-111, and RT-1832. MODE 5 is designed to be installed in all Navy T/M/S aircraft which are currently MODE 4 IFF capable (49 T/M/S aircraft). MODE 5 is developed in cooperation with NATO. MODE 5 was designated a "JROC special interest" program in March 2001 and is interoperable across all services. ORD # 577-06-01

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MODE 5 completed a brassboard development in December 1997. Modeling and Simulation to demonstrate interoperability was completed in February of 1998 to support NATO STANAG development. Proof of concept flight testing completed in December 1999. A Preliminary Design Review (PDR) for the proposed ECP to incorporate MODE 5 in the APX-118 was completed in July 2001. Contracts to develop a prototype Cryptographic Module and ECP kit are presently being executed.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | 10.4 | | 11.0 | | 10.9 | | 5.9 | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Platform Installation A-Kits | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment (Note 1) | | | | | | | | | | | | | | | | | | | | |
| MODE 5 IFF HARDWARE B-KIT | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 0.5 | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Other Support | | 1.6 | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 2.1 | | | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. FY04 funding for this OSIP resides in BLI 058200: ID Systems.

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **RESERVE SQUADRON ECP 560 OSIP 008-05**

MODELS OF SYSTEM AFFECTED: **F/A-18A** TYPE MODIFICATION: **AVIONICS UPGRADE**

DESCRIPTION/JUSTIFICATION:

Upgrade Avionics for F/A-18A Hornets (Lots 8 and 9) for the U.S. Naval Reserve Force. The Avionics Upgrade includes new avionics subsystems already incorporated or in process of being incorporated into USN/USMC and/or FMS F/A-18 aircraft. This ECP incorporates the following systems: AN/ARC-210(V) with HAVEQUICK II and SINCGARS; Digital Communications System (DCS) Receiver Transmitter (RT-1824(C)); Mission Computer CP 2360 (XN-8); Stores Management Set (SMS) (AN/AYQ-9); AMRAAM Capability (radar mod, launchers, weapons pylons and control stick); Digital Display Indicator (DDI) Upgrade: Mission Data Loader (AN/ASQ-215): Targeting FLIR provisions (AAS-38B). (Starting in FY2005 the following capabilities will add: MIDS LVT, Color Displays, JHMCS, ALE-47, TAMMAC and AMU).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

ECP 560 was approved in March 1998. All the equipment being incorporated in this ECP has completed development.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| ECP 560 | | | 4 | 1.0 | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | 5.2 | | | | | | | | | | | | | | |
| Installation Equipment | | | 70 | 4.2 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | | | | | | |
| Other Support (Testing) | | | | 0.5 | | 0.8 | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | 1.1 | | 0.3 | | 0.4 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 3 | 1.0 | 4 | 1.4 | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | | | 7.8 | | 7.7 | | 0.4 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. In FY05 3 units were procured with National Guard Reserve Equipment (NGRE) funds and will be installed with APN-5 funds.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A**

MODIFICATION TITLE: **RESERVE SQUADRON ECP 560 OSIP 008-05**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS FIELD TEAMS**

ADMINISTRATIVE LEAD-TIME: **2 Months**

PRODUCTION LEAD-TIME: **2 Months**

CONTRACT DATES: FY 2005: FY 2006: Dec-05 FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: Feb-05 FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits * | | | | | | | | | | | | | | | | |
| FY 2005 ( 4) kits | | | 3 | 1.0 | 1 | 1.0 | | | | | | | | | | |
| FY 2006 ( 3 ) kits | | | | | 3 | .4 | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | |
| TOTAL | | | 3 | 1.0 | 4 | 1.4 | | | | | | | | | | |

* USMC Reserve funded 34 "A" Kits

Quantities Reflect ECP 583 and ECP 583R2

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3.00 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | 0 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | | | | |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **CORE AVIONICS IMPROVEMENTS / UPGRADES (OSIP 023-04)**

MODELS OF SYSTEM AFFECTED: **F/A-18A-F** TYPE MODIFICATION: **Capability and Reliability Improvements**

DESCRIPTION/JUSTIFICATION:

This OSIP is required to upgrade retrofits and improvements to various pieces of avionics equipment that have been or are being incorporated into production aircraft and to provide Mission Planning updates. Specifically for Mission Planning, the F/A-18 Unique Planning Component for JMPS, requires yearly updates to software to maintain production currency with other aircraft systems and the core mission planning equipment and software procured elsewhere within the Navy budget. This OSIP currently includes a requirement to retrofit a Solid State Recorder (SSR) into 24 F/A-18E/F Lot 27 aircraft and 24 F/A-18 E/F Lot 28 aircraft. This retrofit leverages non-recurring integration for production incorporation, replacing the current Cockpit Video Recording System (CVRS) recorder.

This OSIP also includes a requirement to retrofit Fiber Channel Network and the Deployable Flight Incident recorder System (DIFRS) to address the issue of the current COSPAT SARSAT satellite becoming obsolete. This old satellite frequency will be replaced and the DFIRS box will be modified to work with a new satellite Beacon frequency.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

A Mission Planning system supporting F/A-18A-F is currently fielded. A Joint Mission Planning System (JMPS) is currently in development and expected to be fielded for F/A-18A-F in the first quarter fiscal year 2005 with 19C and H2E+. The Solid State Recorder retrofit was approved as a Congressional new start in August 2004. Validation/Verification for the SSR was completed in the second and third quarter fiscal year March 2005, with retrofit on two squadrons completed in the fourth quarter of fiscal year 2005.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS | | | | | | | | | | | | | | | | | | | | |
| "A" Kits E/F Solid State Recorder | 24 | 0.5 | 24 | 0.8 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| Solid State Recorder | | 1.4 | | | | | | | | | | | | | | | | | | |
| DIFRS | | | | 1.1 | | | | | | | | | | | | | | | | |
| INSTALLATION EQUIP. | | | | | | | | | | | | | | | | | | | | |
| MP/UPC | | 19.8 | | | | 3.3 | | 3.8 | | | | | | | | | | | | |
| "B" Kits E/F Solid State Recorder | 24 | 0.5 | 24 | 0.8 | | | | | | | | | | | | | | | | |
| INSTALLATION EQUIP. N/R | | | | | | | | | | | | | | | | | | | | |
| ENGINEERING CHANGE ORDERS | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.2 | | 0.5 | | | | | | | | | | | | | | | | |
| TRAINING EQUIPMENT | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIPMENT(SE NR, PSE,SE ILS) | | 0.4 | | 0.4 | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACT SUPPORT | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 24 | 0.2 | 24 | 0.2 | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 22.8 | | 3.8 | | 3.5 | | 3.8 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Funding for MP/UPC previously budgeted in OSIP 19-94, Common Configuration

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A-F** MODIFICATION TITLE: **CORE AVIONICS IMPROVEMENTS / UPGRADES (OSIP 23-04)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **PUBLIC/PRIVATE COMPETITION AND AT NAVAL AVIATION DEPOTS.**

ADMINISTRATIVE LEADTIME: **3 Months** PRODUCTION LEADTIME: **8 Months**

CONTRACT DATES: FY 2005: _____ FY 2006: _____ FY 2007: _____ FY 2008: _____ _____

DELIVERY DATE: FY 2005: _____ FY 2006: _____ FY 2007: _____ FY 2008: _____ _____

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (24) kits | | | 24 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2005 (24 ) kits | | | | | 24 | 0.2 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 24 | 0.2 | 24 | 0.2 | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | 0 | 0 | 12 | 12 | 0 | 0 | 12 | 12 | 0 | 0 | 0 | 0 | | | | | | | | |
| Out | 0 | 0 | 0 | 12 | 12 | 0 | 0 | 12 | 12 | 0 | 0 | 0 | 0 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **Litening AT Targeting Pod (OSIP 024-04)**

MODELS OF SYSTEM AFFECTED: **F/A-18A+/D** TYPE MODIFICATION: **CAPABILITY IMPROVEMENTS**

DESCRIPTION/JUSTIFICATION:

The Litening AT Pod (AN-AAQ-28) possesses qualities essential to the Marine Corps' F/A-18A+/D's in the execution of operations within the combat spectrum providing the Marine Air Ground Task Force with crucial capabilities in the expeditionary land based environment. Litening AT Pod capabilities include: Laser /Infrared (IR) marker functionality, image data link functionality, cooperative Laser guided illumination, Laser Spot Tracker (LST), and limited weapons damage assessment capability. Northrop Grumman's Litening pod has demonstrated improved reliability and maintainability during combat operation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Congressional New Start Notification letters dated 24 July 2003 identified the need for limited integration of the Litening Enhanced Range Forward Looking Infra Red on the F/A-18D. This interim enhanced capability provided USMC Air Ground Task Forces greater precision close-in-air support capability and overall mission flexibility in the execution of theater operations in the combat environment. For F/A-18A+, another set of Congressional New Start Notification letters dated 29 October 200r for integration of the Litening Forward Looking Infrared pods on land-based F/A-18A-Cs to increase their effectiveness in the Global War on Terrorism. FY05 Congressional Add of $3.0M was added in FY05 directs the Marine Corps to fully fund the acquisition, integration, and install for the remainder of the Litening pod AT requirement, stated to be a total of 60 pods for 72 F.A-18Ds, in the fiscal year 2006 and future budgets.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| A-Kit (D's) | 24 | 0.9 | 50 | 0.7 | | | | | | | | | | | | | | | | |
| A-Kit (A+'s) | 14 | 0.8 | | | | | | | | | | | | | | | | | | |
| Avionics | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 0.9 | | | | | | | | | | | | | | | | | | |
| Installation Equipment(C/D) | | | 24 | 40.0 | 7 | 10.7 | | | | | | | | | | | | | | |
| Installation Equipment(E/F) | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | 8 | 0.2 | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | 1.5 | | | | | | | | | | | | | | |
| Data | | 0.2 | | 0.2 | | | | | | | | | | | | | | | | |
| Training | | | | 0.2 | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | 0.2 | | | | | | | | | | | | | | |
| ILS | | 0.4 | | 0.2 | | 0.2 | | | | | | | | | | | | | | |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support - Testing | | | | 0.9 | | 2.0 | | | | | | | | | | | | | | |
| Installation Cost | | | 24 | 0.2 | 39 | * | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | 3.2 | | 42.5 | | 14.8 | | | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Procurement contract of A-Kits includes the associated installation cost.
4. FY03 and FY04 funds was realigned from ECP-583; OSIP 21-00.
5. 24 Installs in FY06 funded with FY05 funds.
6. 15 Installs in FY06 funded with FY06 Congressional Add

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **Link 4A Replacement (OSIP 009-06)**

MODELS OF SYSTEM AFFECTED: **F/A-18A E/F/G** TYPE MODIFICATION: **AVIONICS UPGRADE**

DESCRIPTION/JUSTIFICATION:

The RT-1379A Link-4A system provides Aircraft Carrier Landing (ACL), Vectoring, and Shipboard INS (SINS) alignment capability. The basis for the RT-1379A is the RT-1250A/ARC-182 Radio which is re-furnished GFE from Rockwell Collins (RC) for a re-use program. RC re-uses 4 cards from the ARC-182 (A2, A4, A5, and A6) and builds 3 new cards (A1, A3, and A7). Boeing then purchases the re-manufactured RT-1379A from RC for the cost of the new cards, refurbishment, and unit testing, before providing it to the Navy as CFE. The RT-1379A is located in the starboard right-hand LEX position. Rockwell-Collins plans to discontinue support of the ARC-182 product line including the RT-1379A starting on 30 September 2007. The reasons for discontinuance include: an inability to procure electrical components to accomplish receiver-transmitter maintenance repairs and remanufacture; low product volume; aging test equipment; and diminishing technical expertise (late 1970s design technology). Cross Decking of existing RT-1379A radios, upgrading and remanufacturing high failure rate SRAs, and replacing the depot repair capability for the RT-1379A is also required to support fleet requirements through FY22.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FIN. The F/A-18 RT-1379A Replacement Program was initiated by a formal PMA-265 Diminishing Manufacturing Sources Review Board (DMSRB) decision on 12 December 2003, which approved the selection of the RT-1824(C) Digital Communications System (DCS) Radio as the replacement candidate for this effort. The replacement program is scheduled to be introduced with Lot 31 E/F/G aircraft, and is dependent on the H4E and H5E System Configuration Set (SCS) Block Operational Flight Program schedule, and is anticipated to have a Fall 2007 Fleet release. A 4-5 year retrofit program will commence one year later

| | Prior Years | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | |
| APN 202 | | | | | | | | | | | | | | | | | | |
| RT-1379A | | | | | | | | | | | | | | | | | | |
| RT-1379A "A" Kits | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | 4.5 | | 4.7 | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | | | | |
| Other Support (Testing) | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | | | 4.5 | | 4.7 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A E/F/G** MODIFICATION TITLE: **Link 4A Replacement (OSIP 009-06)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS FIELD TEAMS**

ADMINISTRATIVE LEAD-TIME: **3 Months** PRODUCTION LEAD-TIME: **12 Months**

CONTRACT DATES: FY 2005: FY 2006: FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits * | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (50) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (36) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (80 kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (12) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 30) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2004 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3.00 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | |

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **Engine Module (OSIP 017-06)**

MODELS OF SYSTEM AFFECTED: **F/A-18 E/F/G** TYPE MODIFICATION: **CAPABILITY IMPROVEMENTS**

DESCRIPTION/JUSTIFICATION:

This OSIP will procure 26 F414 Engine Modules. There are no other element being procured; hardware only. Modules will be delivered directly to the Fleet to improve overall F414 readiness.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Option funding will be put on the MYP contract along with the FY06 procurement option by 31 March 2006.

FINANCIAL PLAN (TOA, $ in Millions):

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Engine Modules | | | | | 26 | 20.7 | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Spares | | | | | | | | | | | | | | | | | | | | |
| Other Support - Testing | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | | | | 26 | 20.7 | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a** **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **AESA (OSIP 002-07)**

MODELS OF SYSTEM AFFECTED: **F/A-18A E/F** TYPE MODIFICATION: **AVIONICS UPGRADE**

DESCRIPTION/JUSTIFICATION:

The F/A-18 E/F program has developed and integrated the AN/APG-79 Active Electronically Scanned Array (AESA) RADAR system for installation in Lot 26 and subsequent Block II, Super Hornet aircraft. The integration of the AN/APG-79 AESA RADAR system into the F/A-18 E/F greatly improves the weapon system's threat detection range, high resolution Synthetic Aperture RADAR (SAR) ground mapping capability, survivability and reliability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Forward fit of the AN/APG-79 AESA RADAR system began with limited quantities in Lot 27 through Lot 29 F/A-18 E/F aircraft. All Lot 30 and subsequent F/A-18 E/F and EA-18G aircraft will be forward fit with the AN/APG-79 AESA RADAR. This OSIP reflects the retrofit of Lot 26 through Lot 29 F/A-18 E/F aircraft.

FIN/ The procurement of retrofit kits will begin in FY08 with retrofit kit installation beginning in FY2010. Installation of kits will be accomplished by a Fleet Support Team traveling to two locations (NAS Oceana and NAS Lemoore) and executing the retrofit on aircraft by squadron.

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| A KIT 1 - Radar Set | | | | | | | | | | | | | | | | | | | | |
| A KIT 2 - Radome | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| B Kit -1 | | | | | | | | | | | | | | | | | | | | |
| Main Electrical Panel | | | | | | | | | | | | | | | | | | | | |
| Electrical Connections | | | | | | | | | | | | | | | | | | | | |
| Liquid Cooling system Quick Disconnects | | | | | | | | | | | | | | | | | | | | |
| ECS Fixed Duct | | | | | | | | | | | | | | | | | | | | |
| Fiber Channel Network Switches (FCNS) | | | | | | | | | | | | | | | | | | | | |
| B Kit -2 | | | | | | | | | | | | | | | | | | | | |
| Main Electrical Panel | | | | | | | | | | | | | | | | | | | | |
| Electrical Connections | | | | | | | | | | | | | | | | | | | | |
| Liquid Cooling system Quick Disconnects | | | | | | | | | | | | | | | | | | | | |
| ECS Fixed Duct | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Other Support | | | | | | | | 5.4 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **TOTAL PROCUREMENT** | | | | | | | | 5.4 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **F/A-18A E/F** MODIFICATION TITLE: **AESA (OSIP 002-07)**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **ONE KIT INSTALLED BY CONTRACTOR FOR VAL/VER, OTHER INSTALLS FIELD TEAMS**

ADMINISTRATIVE LEAD-TIME: **3 Months** PRODUCTION LEAD-TIME: **24 Months**

CONTRACT DATES: FY 2005: FY 2006: FY 2007: FY 2008:

DELIVERY DATE: FY 2005: FY 2006: FY 2007: FY 2008:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits * | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (38) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (44) | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (68) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (70) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( 50) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |

| | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **H-46 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 654.6 | A | 70.2 | 54.7 | 47.4 | 6.3 | | | | 8.8 | 842.0 | |

DESCRIPTION: This line item funds modifications to the H-46 aircraft. The H-46 is a twin-turbine powered dual-piloted tandem-rotor helicopter. The cabin contains provisions for accommodating 25 troops and crew members. The cabin also contains an integral cargo and rescue system. The overall goal of the modification budget in FY2007 is to keep the H-46 a viable platform until a replacement aircraft can be fielded. H-46 helicopters are used by the Marine Corps for troop transport and Search and Rescue missions. USMC inventory: (220) CH-46E + (3) HH-46D. (24) of the (220) CH-46E's are reserve aircraft. Original Design Service Life was 10,000 hours. It was subsequently extended to 12,500 hours 18 Dec 1992 and 15,000 hours 16 Feb 1996. Aircraft will continue to be flown past 15,000 flight hours on an Age Exploration program.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 025-91 Dynamic Component Upgrade | 407.2 | 1.4 | | | | | | | | 408.6 |
| 025-97 Safety Improvement Program | 35.4 | 1.8 | 3.2 | 1.4 | 0.4 | | | | | 42.2 |
| 028-99 Engine Control System | 44.7 | 3.5 | 0.1 | | | | | | | 48.4 |
| 029-99 Electrical Systems Upgrade | 7.0 | 0.5 | 0.3 | 0.4 | | | | | | 8.2 |
| 015-01 Engine Reliability Improvement Program | 145.0 | 53.5 | 40.0 | 39.5 | 4.1 | | | | 4.0 | 286.1 |
| 010-03 Aircraft Integrated Maintenance System | 7.7 | 7.7 | 7.9 | 3.3 | | | | | | 26.7 |
| 011-05 Lightweight Replacement Armored Seats Program | | 1.8 | 3.2 | 2.8 | 1.7 | | | | 4.8 | 14.3 |
| TOTAL | 647.1 | 70.2 | 54.7 | 47.4 | 6.3 | 0.0 | 0.0 | 0.0 | 8.8 | 834.5 |
| | | | | | | | | | | |
| H-46 Series Reserves (included above) | | 0.2 | 0.2 | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: DYNAMIC COMPONENT UPGRADE ( OSIP 025-91 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: The H-46 helicopter is nearing the end of its originally planned service life. Several dynamic components failed between 1988 and 1990 due to fatigue. Engineering Change Proposal (ECP)-556 incorporates design improvements to the critical safety items, which have been ident by in-service failure and flight strain survey. The changes increase thickness of critical sections and make other specific changes to increase resistance to fatigue damage. The major components include the forward and aft rotor heads, the forward and aft transmissions, the mixbox, aft vertical rotor shaft, the swashplates, synchronizing shafts, and accessory gear box. ECP-558 changes configuration of the Aircraft Flight Control System (AFCS), which reduces flight, loads on critical components. The H-46 previously used the MD-1 and AHRS gyroscopes for pitch and roll rate input to the AFCS. These gyroscopes originally designed for indication systems only and do not provide adequate input for pitch and roll rate to the AFCS. DCU was directed by Chief of Naval Operations (CNO) letter 13100 serial 504E/OU603293 dated 30 Aug 90 and approved by ASN (RDA) by Program Management Proposal (PMP) 90-7 on 18 Jan

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: This modification program is complete.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC-433 (PT 12) KITS (SOFSA) | 315 | * | | | | | | | | | | | | | | | | | 315 | * |
| AFCS A-KITS (Contractor) | 630 | 12.6 | | | | | | | | | | | | | | | | | 630 | 12.6 |
| DCU ROTORHEAD (Contractor) | 310 | 108.6 | | | | | | | | | | | | | | | | | 310 | 108.6 |
| DCUP ACFT (Contractor) | 310 | 97.7 | | | | | | | | | | | | | | | | | 310 | 97.7 |
| ROTOR HUBS (Contractor) | 121 | 2.3 | | | | | | | | | | | | | | | | | 121 | 2.3 |
| TIEBARS | 315 | 4.9 | | | | | | | | | | | | | | | | | 315 | 4.9 |
| INSTALLATION KITS N/R | 4 | 84.9 | | | | | | | | | | | | | | | | | 4 | 84.9 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GFE | 1 | 0.5 | | | | | | | | | | | | | | | | | 1 | 0.5 |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ACCESSORY GEAR BOX | | 1.2 | | | | | | | | | | | | | | | | | | 1.2 |
| FUZZ BURN-OFF | | 0.2 | | | | | | | | | | | | | | | | | | 0.2 |
| HORIZONTAL HINGE PIN BEARING | | 0.2 | | | | | | | | | | | | | | | | | | 0.2 |
| MOISTURE DEBRIS COVERS | | * | | | | | | | | | | | | | | | | | | * |
| PITCH LINK ASSY | | 0.9 | | | | | | | | | | | | | | | | | | 0.9 |
| WEAR PLATE BLADE ATTACH | | 0.2 | | | | | | | | | | | | | | | | | | 0.2 |
| DATA | | 2.0 | | | | | | | | | | | | | | | | | | 2.0 |
| TRAINING EQUIP | | 1.8 | | | | | | | | | | | | | | | | | | 1.8 |
| SUPPORT EQUIP | | 9.3 | | | | | | | | | | | | | | | | | | 9.3 |
| ILS | | 1.2 | | 0.2 | | | | | | | | | | | | | | | | 1.5 |
| OTHER SUPPORT | | 24.1 | | 0.5 | | | | | | | | | | | | | | | | 24.6 |
| INTERIM CONTRACTOR SUPPORT | | 2.7 | | | | | | | | | | | | | | | | | | 2.7 |
| INSTALLATION COST | 1,125 | 52.0 | 49 | 0.6 | | | | | | | | | | | | | | | 1,174 | 52.6 |
| TOTAL PROCUREMENT | 3,131 | 407.2 | 49 | 1.4 | | | | | | | | | | | | | | | 3,180 | 408.6 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: DYNAMIC COMPONENT UPGRADE ( OSIP 025-91 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 FY 2008

DELIVERY DATE: FY 2005 FY 2006 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (1174) kits | 1,125 | 52.0 | 49 | 0.6 | | | | | | | | | | | | | | | | | 1,174 | 52.6 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 1,125 | 52.0 | 49 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,174 | 52.6 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1125 | 17 | 16 | 16 | | | | | | | | | | | | | | | | | | | | | |
| Out | 1108 | 17 | 17 | 16 | 16 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 1,174 |
| Out | | | | | | | | | | 1174 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: SAFETY IMPROVEMENT( OSIP 025-97 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: The Safety Improvement Program was directed by Chief of Naval Operations (CNO) letter 7100 serial N880F/7U660758 dated 10 Jan 97, and approved as an Abbreviated Acquisition Program (AAP) by the Program Executive Officer (PEO) on 24 Oct 97. This program contains the following Engineering Change Proposals (ECP):
1. HYDRAULIC SYSTEM UPGRADE and UTILITY HYDRAULIC SYSTEM REDESIGN: This ECP was completed in FY2000, but the fleet has experienced ongoing problems with the hydraulic system following installation of the modification. The Utility Hydraulic System Redesign will assess the overall configuration of the hydraulic system and correct deficiencies to improve system performance. This modification will be installed in 177 CH-46E aircraft (153 active + 24 reserve).
2. LOWER DUAL BOOST ACTUATOR (LDBA): The housing for the actuator is highly susceptible to stress corrosion cracking. The material wear and housing cracks have resulted in LDBA malfunction. The pilot cannot control the drive direction of the helicopter, a potentially life threatening situation. This program will procure a redesigned actuator housing that eliminates the failure mode in the LDBA. This modification will be installed concurrent with Fleet Exchange (FE) repairs. This modification will be installed in 177 CH-46E aircraft (153 active + 24 reserve).
3. NIGHT VISION GOGGLE (NVG) COMPATIBLE COCKPIT and NVG COMPATIBLE COCKPIT DOME LIGHT: This ECP is complete.
4. RUNNING ENGINE WASH: This ECP is complete.
5. SLIDING RESCUE HATCH (HELL HOLE DOOR): This ECP is complete.
6. ALQ-157 INFRARED COUNTERMEASURES (IRCM): This ECP is an Aircraft Survivability Equipment (ASE) modification to improve aircraft operation/maintainability/survivability in combat operations. Operation Iraqi Freedom (OIF) after action reports indicated the reliability and maintainability (R&M) of the IRCM system was not sufficient to support sustained combat operations. The Original Equipment Manufacturer (OEM) designed a R&M improvement for Foreign Military Service (FMS) users that is being installed on CH-46E helicopters. This improvement will be installed in 196 CH-46E aircraft in support of OIF II.
7. AN/ALE-47 COUNTERMEASURES DISPENSING SYSTEM (CMDS): This ECP is an Aircraft Survivability Equipment (ASE) modification to improve aircraft operation/maintainability/survivability in combat operations. This safety improvement upgrades the AN/ALE-39 (CMDS). It improves the reliability, reduces fleet operational cost and enhances the ASE capabilities of the CH-46E aircraft operating in hostile environments by addressing the problems of "Things Falling Off Aircraft" (TFOA) and uncommanded dispensing of countermeasures. This improvement will be installed in 214 CH-46E aircraft in support o OIF II.
8. AN/AAR-47(V)2 MISSILE WARNING SET INSTALLATION: This ECP is an Aircraft Survivability Equipment (ASE) modification to improve aircraft operation/maintainability/survivability in combat operations. The current system has a high false alarm rate resulting in premature flare launch. The modification wi improve reliability in missile protection by reducing the false alarm rate, which in turn will conserve flares. This improvement will be installed in 214 CH-46E aircraft in support of OIF II.
9. HH-46E SEARCH AND RESCUE (SAR) CONVERSION: All Navy H-46Ds have been retired leaving the Marine Corp as the sole operator of the H-46D Type-Model-Series (TMS). The high flight hours on the HH-46Ds airframes, poor engine reliability and obsolescence issues make this aircraft difficult and expensive to operate and maintain. This ECP will convert 3 CH-46E helicopters to the HH-46E configuration to perform the SAR mission, and will permit retirement of the H-46D TMS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
1. UTILITY HYDRAULIC SYSTEM REDESIGN: The nonrecurring engineering is complete. Validation & testing are complete. Production installations are in process.
2. LOWER DUAL BOOST ACTUATOR: The LDBA manifold has been redesigned & qualified, and procurement of improved manifolds is ongoing. Delivery and installation is planned to start in June 2005.
3. NVG COMPATIBLE COCKPIT DOME LIGHT: This upgrade is complete.
4. T58-16/402 RUNNING ENGINE WASH: This upgrade is complete.
5. SLIDING RESCUE HATCH (HELL HOLE DOOR): This upgrade is complete.
6. ALQ-157 INFRARED COUNTERMEASURES (IRCM): This upgrade is complete.
7. AN/ALE-47 COUNTERMEASURES DISPENSING SYSTEM (CMDS): This ECP was approved 26 Feb 2004. Kits are delivering and Depot installs are ongoing.
8. AN/AAR-47(V)2 MISSILE WARNING SET INSTALLATION: This ECP was approved 26 Feb 2004. Kits are delivering and installs are ongoing.
9. HH-46E SEARCH AND RESCUE (SAR) CONVERSION: The NRE for SAR conversion is in work. The first aircraft for SAR conversion is scheduled to induct in 3rd quarter FY06 with planned delivery 1st quarter FY07.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AAR-47 (V)2 KITS | 214 | 0.2 | | | | | | | | | | | | | | | | | 214 | 0.2 |
| AAR-47 LOOSE WIRE GRP CABLES | 220 | * | | | | | | | | | | | | | | | | | 220 | * |
| ALE-47 CABLES (NADEP) | 36 | * | | | | | | | | | | | | | | | | | 36 | * |
| ALE-47 KITS | 214 | 0.9 | | | | | | | | | | | | | | | | | 214 | 0.9 |
| ALQ-157 KITS | 196 | 9.3 | | | | | | | | | | | | | | | | | 196 | 9.3 |
| HH-46E SEARCH AND RESCURE | | | | | 3 | 0.2 | | | | | | | | | | | | | 3 | 0.2 |
| HYDRAULIC SYSTEM UPGRADE (D- | 81 | 1.1 | | | | | | | | | | | | | | | | | 81 | 1.1 |
| HYDRAULIC SYSTEM UPGRADE (E- | 229 | 3.3 | | | | | | | | | | | | | | | | | 229 | 3.3 |
| LOWER DUAL BOOST ACTUATOR (E- | 37 | 0.3 | 60 | 0.4 | 80 | 0.6 | | | | | | | | | | | | | 177 | 1.2 |
| NVG COMPATIBLE COCKPIT (D- | 81 | 3.0 | | | | | | | | | | | | | | | | | 81 | 3.0 |
| REW D-AIRFRAME (T58-402) AFC-477 | 65 | 0.1 | | | | | | | | | | | | | | | | | 65 | 0.1 |
| REW D-ENGINE (T58-402) PPC-165 | 81 | 0.1 | | | | | | | | | | | | | | | | | 81 | 0.1 |
| REW E-AIRFRAME (T58-16) AFC-492 | 200 | 0.5 | | | | | | | | | | | | | | | | | 200 | 0.5 |
| REW E-ENGINE (T58-16) PPC-165 | 687 | 0.8 | | | | | | | | | | | | | | | | | 687 | 0.8 |
| SLIDING RESCUE HATCH (D/E- | 66 | 0.8 | | | | | | | | | | | | | | | | | 66 | 0.8 |
| UTIL. HYDR SYST. AFC-522 | 37 | 0.1 | 60 | 0.2 | 80 | 0.1 | | | | | | | | | | | | | 177 | 0.4 |
| UTIL. HYDR SYST. RED AFC-521 (E) | 37 | 0.2 | 60 | 0.3 | 80 | 0.5 | | | | | | | | | | | | | 177 | 1.1 |
| INSTALLATION KITS N/R | | 1.8 | | | | 0.6 | | | | | | | | | | | | | | 2.5 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| MOD/ALQ-157 | 196 | 0.6 | | | | | | | | | | | | | | | | | 196 | 0.6 |
| NRE/NAVICP/ALQ-157 | | 1.0 | | | | | | | | | | | | | | | | | | 1.0 |
| DATA | | 0.4 | | * | | 0.2 | | | | | | | | | | | | | | 0.5 |
| TRAINING EQUIP | 8 | 0.1 | 1 | * | 1 | * | | | | | | | | | | | | | 10 | 0.1 |
| SUPPORT EQUIP | | * | | | | | | | | | | | | | | | | | | * |
| ILS | | 0.8 | | 0.2 | | 0.1 | | | | | | | | | | | | | | 1.1 |
| OTHER SUPPORT | | 3.4 | | 0.3 | | 0.1 | | 0.4 | | 0.4 | | | | | | | | | | 4.7 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 904 | 6.6 | 38 | 0.3 | 158 | 0.8 | 130 | 1.0 | 33 | 0.1 | | | | | | | | | 1,263 | 8.8 |
| TOTAL PROCUREMENT | 3,589 | 35.4 | 219 | 1.8 | 402 | 3.2 | 130 | 1.4 | 33 | 0.4 | | | | | | | | | 4,373 | 42.2 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: Safety Improvement Program (Utility Hydraulic System)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot level FMT and concurrent w/ SDLM/IMP

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 2005 Feb 05 FY 2006 Dec-05 FY 2007 FY 2008

DELIVERY DATE: FY 2005 Jun 05 FY 2006 Apr 06 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (74) kits | | | 38 | 0.3 | 36 | 0.1 | | | | | | | | | | | | | | | 74 | 0.5 |
| FY 2005 (121) kits | | | | | 121 | 0.5 | | | | | | | | | | | | | | | 121 | 0.5 |
| FY 2006 (161) kits | | | | | | | 128 | 0.7 | 33 | 0.1 | | | | | | | | | | | 161 | 0.7 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 0 | 0.0 | 38 | 0.3 | 157 | 0.6 | 128 | 0.7 | 33 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 356 | 1.7 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | 38 | 39 | 39 | 39 | 40 | 32 | 32 | 32 | 32 | 33 | | | | | | | | | | | |
| Out | | | | | | 38 | 39 | 39 | 39 | 40 | 32 | 32 | 32 | 32 | 33 | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 356 |
| Out | | | | | | | | | | 356 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: Safety Improvement Program (SAR Conversion)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Concurrent w/ SDLM/IMP

ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 Jun-06 FY 2007 FY 2008

DELIVERY DATE: FY 2005 FY 2006 Jul 06 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2006 (3) kits | | | | | 1 | 0.1 | 2 | 0.3 | | | | | | | | | | | | | 3 | 0.4 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 2 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.4 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | 1 | | 1 | | 1 | | | | | | | | | | | | |
| Out | | | | | | | | | | 1 | | 1 | | 1 | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 3 |
| Out | | | | | | | | | | 3 |

Exhibit P-3a

MODIFICATION TITLE: ENGINE CONTROL SYSTEM ( OSIP 028-99 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: The current H-46 Engine Condition Control System (ECCS) has several failure modes, which cause engines to shut down in flight; this presents a significant safety hazard to the fleet. Three bulletins have been issued by NAVAIR to inspect for system deficiencies. A formal sys safety analysis utilizing historical failure data defines this as a Category One hazard and predicts six to seven failures per year. In the three and a half years before this upgrade was initiated there were 35 hazard reports (HAZREPs) issued documenting this failure mode, and it is estimated that 20 more occurred were not reported through the HAZREP system. The aircraft has a limited single engine-operating envelope and is vulnerable to engine failure while flying and hovering over water. There have been five aircraft lost at sea in which pilots reported engine failure as the cause of the mishap. The aircraft were not recov and therefore, the specific engine failure mode could not be determined, but it is likely that ECCS caused some of the engine failures and ultimately led to the loss of aircraft. The proposed solution to this safety problem is to convert to an alternative Engine Control System (ECS) utilized by the commercial varia H-46. The proposed ECS will eliminate the safety failure modes, has a proven track record, needs only slight modification for military use, increases reliability, and will increase aircraft capability through increased engine responsiveness. Implementation will require configuration changes to the airframe and the e This is an urgent safety issue that must be resolved to eliminate future loss of crew and aircraft. This modification was installed on 65 H-46D aircraft (all active); and is being installed on 226 CH-46E aircraft (202 active + 24 reserve).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The contract for Proof of Concept, validation and verification (val/ver) kits for this Non-Development Item (NDI) was awarded May 1999, and the Engineering Change Proposal (ECP) was approved Jun 2000. Validation installation for D-model wa completed 2nd quarter FY2001, followed immediately by Electromagnetic Interface (EMI) testing and Verification installation in 3rd quarter FY2001. Production installations in Navy D-models are complete. The CH-46E validation/verification installation and Electromagnetic Compatibility (EMC) testing are comple final production E-model installations are in process.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A KIT D-AIRCRAFT | 63 | 0.4 | | | | | | | | | | | | | | | | | 63 | .413 |
| A KIT E-AIRCRAFT | 225 | 3.2 | | | | | | | | | | | | | | | | | 225 | 3.232 |
| B-KITS FOR D&E-ACFT | 240 | 14.2 | | | | | | | | | | | | | | | | | 240 | 14.154 |
| B-KITS FOR RILOP | 16 | * | 26 | * | | | | | | | | | | | | | | | 42 | .061 |
| FUEL LINE ASSY KIT (D-AIRCRAFT) | 63 | 0.1 | | | | | | | | | | | | | | | | | 63 | .132 |
| FUEL PRIMING SYS H/W (D-ACFT) | 1 | 0.1 | | | | | | | | | | | | | | | | | 1 | .077 |
| OVERSPEED KITS (D&E AIRCRAFT) | 434 | 1.7 | | | | | | | | | | | | | | | | | 434 | 1.688 |
| QEC-3 KIT (D-AIRCRAFT) | 130 | 0.5 | | | | | | | | | | | | | | | | | 130 | .467 |
| QEC-4 KIT (E-AIRCRAFT) | 452 | 0.9 | | | | | | | | | | | | | | | | | 452 | .909 |
| INSTALLATION KITS N/R | 3 | 4.8 | | | | | | | | | | | | | | | | | 3 | 4.750 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| CONTROL BOXES | 79 | 0.3 | | | | | | | | | | | | | | | | | 79 | .316 |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ENGINE CONDITION ACTUATOR | | 0.2 | | | | | | | | | | | | | | | | | | .231 |
| IGNITER CIRCUIT | | 0.4 | | | | | | | | | | | | | | | | | | .447 |
| DATA | | 1.1 | | * | | | | | | | | | | | | | | | | 1.074 |
| TRAINING EQUIP | 8 | 0.5 | | | | | | | | | | | | | | | | | 8 | .487 |
| SUPPORT EQUIP | | 0.5 | | | | | | | | | | | | | | | | | | .539 |
| ILS | | 1.4 | | | | | | | | | | | | | | | | | | 1.420 |
| OTHER SUPPORT | | 5.3 | | 0.2 | | 0.1 | | | | | | | | | | | | | | 5.626 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1,559 | 9.1 | 263 | 3.3 | | | | | | | | | | | | | | | 1,822 | 12.378 |
| TOTAL PROCUREMENT | 3,273 | 44.7 | 289 | 3.5 | | 0.1 | | | | | | | | | | | | | 3,562 | 48.401 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: ENGINE CONTROL SYSTEM ( OSIP 028-99 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Level FMT

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 FY 2008

DELIVERY DATE: FY 2005 FY 2006 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (1822) kits | 1,559 | 9.1 | 263 | 3.3 | | | | | | | | | | | | | | | | | 1,822 | 12.4 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 1,559 | 9.1 | 263 | 3.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,822 | 12.4 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1559 | 66 | 66 | 66 | 65 | | | | | | | | | | | | | | | | | | | | |
| Out | 1494 | 65 | 66 | 66 | 66 | 65 | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 1,822 |
| Out | | | | | | | | | | 1822 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: ELECTRICAL SYSTEMS UPGRADE ( OSIP 029-99 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: This program contains the following Engineering Change Proposals:
1. GENERATOR CONTROL UNIT: The power generation system was the cause of ten hazard reports (HAZREP) in the three years before this upgrade was initiated. The causal factor has been traced back to the generators and the voltage control system. Two incidents resulted in dual generator failure, and sev incidents resulted in aircraft smoking/fires. (One of those fires was caused by flammable fluid ingestion into the generator that turned a hydraulic leak into a massive fire that consumed the entire aircraft in a Class A mishap.) A formal system safety analysis utilizing historical failure data defines this hazard as a Category One hazard and predicts two to three failures per year. This is an urgent safety problem that must be alleviated to eliminate loss of life and aircraft. The proposed solution is to modify the power generation system to eliminate the safety problem, provide cleaner power to sensitive avionics components, improve performance of the generator to meet the power demand for future electrical installation in the aircraft. This modification will be installed in 226 CH-46E aircraft (202 active + 24 reserve).

2. PERMANENT MAGNETIC GENERATOR (PMG) WIRING: RCM analysis of generator failure modes, and risk hazard analysis indicates that risk can be mitigated with a combination of replacing PMG and main generator power wiring, and inspecting to ensure proper clearances between hydraulic lines and ele power wire. This mod will be installed on 188 aircraft (164 active + 24 reserve).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
1. GENERATOR CONTROL UNIT: This upgrade is complete.

2. PERMANENT MAGNETIC GENERATOR (PMG) WIRING: Val/Ver installations are complete, and installation of wiring is ongoing.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| PMG WIRING KIT | | | 58 | 0.1 | 60 | 0.1 | 70 | 0.1 | | | | | | | | | | | 188 | 0.3 |
| INSTALLATION KITS N/R | | 0.7 | | | | | | | | | | | | | | | | | | 0.7 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| APU GCU (O-LEVEL) | 226 | 1.0 | | | | | | | | | | | | | | | | | 226 | 1.0 |
| MAIN GCU (O-LEVEL) | 452 | 0.9 | | | | | | | | | | | | | | | | | 452 | 0.9 |
| INSTALL EQUIPMENT N/R | 6 | 0.8 | | | | | | | | | | | | | | | | | 6 | 0.8 |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 6 | 0.6 | | | | | | | | | | | | | | | | | 6 | 0.6 |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.8 | | 0.1 | | | | | | | | | | | | | | | | 0.9 |
| OTHER SUPPORT | | 2.2 | | 0.2 | | 0.1 | | 0.1 | | | | | | | | | | | | 2.5 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 47 | 0.1 | 71 | 0.2 | 70 | 0.2 | | | | | | | | | | | 188 | 0.4 |
| TOTAL PROCUREMENT | 690 | 7.0 | 105 | 0.5 | 131 | 0.3 | 140 | 0.4 | | | | | | | | | | | 1,066 | 8.2 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: ELECTRICAL SYSTEMS UPGRADE ( OSIP 029-99 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 Jun 06 FY 2006 Jan-06 FY 2007 Oct-06 FY 2008

DELIVERY DATE: FY 2005 Jul 06 FY 2006 Feb 06 FY 2007 Nov 06 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2005 (58) kits | | | 47 | 0.1 | 11 | * | | | | | | | | | | | | | | | 58 | 0 |
| FY 2006 (60) kits | | | | | 60 | 0.2 | | | | | | | | | | | | | | | 60 | 0 |
| FY 2007 (70) kits | | | | | | | 70 | 0.2 | | | | | | | | | | | | | 70 | 0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| TO COMPLETE | 0 | 0.0 | 47 | 0.1 | 71 | 0.2 | 70 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 188 | 0.4 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | 47 | 18 | 18 | 18 | 17 | 18 | 18 | 17 | 17 | | | | | | | | | | | | |
| Out | | | | | | 47 | 18 | 18 | 18 | 17 | 18 | 18 | 17 | 17 | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 188 |
| Out | | | | | | | | | | 188 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: Engine Reliability Improvement Program ERIP( OSIP 015-01 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: T58-GE-16 reliability and performance trends were unacceptable prior to 2001 and were severely impacting Fleet safety, readiness and war fighting capability. Without corrective action, the T58-GE-16 Mean Time Between Repairs (MTBR) was projected to fall below 320 hours b FY2002 and would require 309 major repairs per year. The NAVAIR System Safety Team determined that the Hazard Risk Index (HRI) for the T58-GE-16 was "IIC" (critical, occasional) and trending towards "IIB" (critical, probable). The CH-46E Helicopter must be logistically supported until at least 2015; howeve T58-GE-16 support costs were being driven to unaffordable levels. This program will drastically improve Fleet operating safety and readiness, while providing tremendous reductions in maintenance man-hours and Operations & Support (O&S) costs. Funds support production and procurement of a T58-GE-16 engine core or "Gas Path," depot overhaul of key engine accessories, incorporation of all approved engine Component Improvement Program (CIP) changes, and depot final assembly of manufacturer delivered "Gas Path" with accessory components. This program is projected to restore a 900-hour (MTBR), improve performance to the original power specification, and reduce the major engine repairs per year to 165 in FY2006. This modification will be installed in 223 aircraft (199 active + 24 reserve).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Congress approved $3M plus-up in FY2001 for risk mitigation, prototypes, and non-recurring engineering; the contract for these efforts awarded in Jan 2001. The prototype engine gas path modules were delivered in Apr 2002, and the engine prototypes were completed in Jul 2002. A Low Rate Initial Production (LRIP) contract was awarded in Aug 2002, and gas path module deliveries started in Oct 2003 with the first ERIP configuration units fielded to the fleet in Mar 2003. Approval for Full Rate Production (FRP) was granted and the first production was ordered Mar 2003. Initial Operational Capability (IOC) was reached in Dec 2003 and installations are ongoing.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ACCESSORY KITS (GE) | 280 | 2.3 | 49 | 0.6 | 60 | 0.7 | 60 | 0.7 | | | | | | | | | | | 449 | 4.3 |
| GAS PATH MODULE KITS (GE) | 235 | 113.2 | 91 | 41.1 | 60 | 26.8 | 60 | 27.4 | | | | | | | | | | | 446 | 208.4 |
| T-5 HARNESS KITS (GOCO) | 20 | * | | | | | | | | | | | | | | | | | 20 | * |
| INSTALLATION KITS N/R | 3 | 7.4 | | | | | | | | | | | | | | | | | 3 | 7.4 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| EROSION BLADE COATING GE | | 0.4 | | 0.4 | | | | | | | | | | | | | | | | 0.7 |
| EROSION BLADE COATING | | | 42 | 1.3 | 60 | 1.9 | 60 | 1.9 | | | | | | | | | | | 162 | 5.1 |
| EROSION BLADE COATING | | | 57 | 3.9 | 82 | 5.7 | 79 | 5.6 | 13 | 0.9 | | | | | | | 56 | 4.0 | 287 | 20.1 |
| DATA | | 0.9 | | 0.1 | | 0.1 | | 0.2 | | | | | | | | | | | | 1.3 |
| TRAINING EQUIP | | 1.5 | | | | 0.4 | | | | | | | | | | | | | | 1.9 |
| SUPPORT EQUIP | | 7.3 | | 1.2 | | 0.1 | | | | | | | | | | | | | | 8.6 |
| ILS | | 0.2 | | 0.1 | | 0.2 | | 0.2 | | 0.2 | | | | | | | | | | 0.9 |
| OTHER SUPPORT | | 7.3 | | 3.8 | | 3.8 | | 3.4 | | 3.0 | | | | | | | | | | 21.2 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 55 | 4.5 | 12 | 1.2 | 1 | 0.4 | | | | | | | | | | | | | 68 | 6.1 |
| TOTAL PROCUREMENT | 593 | 145.0 | 251 | 53.5 | 263 | 40.0 | 259 | 39.5 | 13 | 4.1 | | | | | | | 56 | 4.0 | 1,435 | 286.1 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: Engine Reliability Improvement Program ERIP( OSIP 015-01 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Modify engine & accessories concurrent w/ repairs at Depot

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 FY 2008

DELIVERY DATE: FY 2005 FY 2006 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (46) kits | 38 | 3.8 | 8 | 0.2 | | | | | | | | | | | | | | | | | 46 | 4.0 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 38 | 3.8 | 8 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 4.0 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 38 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| Out | 36 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 46 |
| Out | | | | | | | | | | 46 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: T58 Test Cell Kit Installs

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 Dec 05 FY 2006 FY 2007 FY 2008

DELIVERY DATE: FY 2005 Jan 06 FY 2006 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (7) kits | 3 | 0.7 | 4 | 1.0 | | | | | | | | | | | | | | | | | 7 | 1.7 |
| FY 2005 (1) kits | | | | | 1 | 0.4 | | | | | | | | | | | | | | | 1 | 0.4 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 3 | 0.7 | 4 | 1.0 | 1 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 2.1 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 3 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | |
| Out | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 8 |
| Out | | | | | | | | | | 8 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: AIRCRAFT INTEGRATED MAINTENANCE SYSTEM( OSIP 010-03 )

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Reliability & Maintainability (HONA Category B)

DESCRIPTION / JUSTIFICATION: Aircraft Integrated Maintenance System (AIMS) is a Commercial Off The Shelf (COTS) vibration monitoring system to be permanently installed in the aircraft. AIMS is a comprehensive set of aircraft monitoring hardware and support software. It interfaces with the cockpit crew v Control Data Navigation Unit (CDNU), which has extensive software upgrades. The purpose of the system is to build support equipment functions into the aircraft as a permanent installation. Thus, AIMS will eliminate most H-46 peculiar support equipment requirements. This equipment will provide aircrews imm feedback on aircraft condition and engine performance, which enhances the ability to predict catastrophic failures and reduces maintenance costs. In 1997, PMA226 fielded new vibration equipment to a small sample of H-46 aircraft and implemented a 100-hour vibration monitoring check. Since implementation, vibration monitoring has been instrumental in predicting (and preventing) impending component failures. For example, vibration data was received from an aircraft that had undergone three aft transmission removals for input pinion seal leakage. Analysis of the vibration monitoring data revealed a major problem w #2 engine. Further investigation of the engine revealed impending failure of the right angle drive bearings. Failure of the engine may have resulted in damage or loss of the aircraft. Another example is an aircraft that, while performing a 100-hour vibration check, experienced aft transmission vertical vibration levels exceeded acceptable limits. Further investigation revealed impending failure of the electrical generator. Without vibration monitoring, the problem with the generator would have gone undetected until catastrophic failure. Failure of the generator may have resulted in an electrical fire and/or collateral damage to the aircraft. This modification will be installed in 154 aircraft (130 active + 24 reserve).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Contracts to integrate the COTS into the H-46 aircraft, design an installation kit, modify Control Data Navigation Unit (CDNU) software, and prepare technical data were awarded in Jun 2003. Prototype kits delivered in Feb 2004, the hardware Design Review (CDR) was held in July 2004, and the software CDR was completed in August 2004. Validation/verification completed in May 2005 and Electromagnetic Interference (EMI) testing in July 2004. The first production lot delivered in January 2005 and production installations are ongoing.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| RELAYS FOR INSTALL KITS (DEPOT) | | | | | 67 | * | | | | | | | | | | | | | 67 | * |
| PRODUCTION KITS (HONEYWELL) | 15 | 0.8 | 68 | 3.5 | 67 | 3.6 | | | | | | | | | | | | | 150 | 7.9 |
| SOFSA AIMS BASIC KITS | 15 | 0.3 | 68 | 0.8 | 67 | 0.8 | | | | | | | | | | | | | 150 | 1.9 |
| INSTALLATION KITS N/R | 4 | 3.9 | | | | | | | | | | | | | | | | | 4 | 3.9 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.4 | | 0.7 | | 0.1 | | | | | | | | | | | | | | 1.3 |
| TRAINING EQUIP | 2 | 0.1 | | | | | | | | | | | | | | | | | 2 | 0.1 |
| SUPPORT EQUIP | 42 | 0.3 | | | | | | | | | | | | | | | | | 42 | 0.3 |
| ILS | | | | 0.1 | | 0.2 | | | | | | | | | | | | | | 0.3 |
| OTHER SUPPORT | | 2.0 | | 0.9 | | 0.5 | | 0.6 | | | | | | | | | | | | 4.0 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 47 | 1.7 | 56 | 2.6 | 53 | 2.6 | | | | | | | | | | | 156 | 7.0 |
| TOTAL PROCUREMENT | 78 | 7.7 | 183 | 7.7 | 257 | 7.9 | 53 | 3.3 | | | | | | | | | | | 571 | 26.7 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: AIRCRAFT INTEGRATED MAINTENANCE SYSTEM( OSIP 010-03

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Aug 06 FY 2006 Dec-06 FY 2007 FY 2008

DELIVERY DATE: FY 2005 Feb 07 FY 2006 Jun 07 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (21) kits | | | 21 | 0.8 | | | | | | | | | | | | | | | | | 21 | 0.8 |
| FY 2005 (68) kits | | | 26 | 1.0 | 42 | 2.0 | | | | | | | | | | | | | | | 68 | 2.9 |
| FY 2006 (67) kits | | | | | 14 | 0.7 | 53 | 2.6 | | | | | | | | | | | | | 67 | 3.3 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| TO COMPLETE | 0 | 0.0 | 47 | 1.7 | 56 | 2.6 | 53 | 2.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 156 | 7.0 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 5 | 21 | 21 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | | | | | | | | | | | | |
| Out | | | | 5 | 21 | 21 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 156 |
| Out | | | | | | | | | | 156 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: Lightweight Replacement Armored Seats Program (OSIP 011-05)

MODELS OF SYSTEMS AFFECTED: H-46 SERIES TYPE MODIFICATION: Safety (HONA Category A)

DESCRIPTION / JUSTIFICATION: The efficiency of the CH-46E to perform the medium lift assault support mission largely depends on aircraft payload. The empty weight of the aircraft has increased significantly over the aircraft's more than 40 years of service, limiting payload and range, and degrading mission performance. The replacement of pilot, crew chief, and aerial observer seats with a non-developmental military qualified/certified, armored, in-production seat is low risk, and will eliminate the need for lengthy nonrecurring engineering and testing. Modern seats would recover up to 250 pounds of payload and provide the latest in survivability technology. Reducing the empty weight of the aircraft is an extremely viable means of restoring mission effectiveness. The seats will be installed on 164 (140 active and 24 reserve) CH-46E aircraft.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Nonrecurring engineering is complete. Critical Design Review (CDR) was conducted in Dec 2005. A firm fixed price contract for pilot/co-pilot armored seats was awarded in Jan 2006, and delivery is scheduled to begin in June 2006. Additional National Guard and Reserve Equipment Account, NGREA, funding will be used to buy seats for reserve aircraft.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AERIAL OBSERVER SEAT KIT (A) | | | | | | | | | | | | | | | | | 164 | 0.2 | 164 | 0.2 |
| CREW CHIEF SEAT KIT (A) | | | | | | | | | | | | | | | | | 164 | 0.2 | 164 | 0.2 |
| PROVISION KIT (Contractor) | | | 6 | * | 48 | * | 42 | * | 25 | * | | | | | | | 19 | * | 140 | 0.1 |
| INSTALLATION KITS N/R | | | | 1.0 | | | | | | | | | | | | | | 0.8 | | 1.8 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AERIAL OBSERVER SEAT EQUIP (B | | | | | | | | | | | | | | | | | 164 | 0.7 | 164 | 0.7 |
| CREW CHIEF EQUIP SEATS (B KIT) | | | | | | | | | | | | | | | | | 164 | 0.7 | 164 | 0.7 |
| SEATS EQUIP | | | 6 | 0.4 | 48 | 2.9 | 42 | 2.6 | 25 | 1.6 | | | | | | | 19 | 1.2 | 140 | 8.8 |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | * | | | | | | | | | | | | | | 0.4 | | 0.4 |
| TRAINING EQUIP | | | 2 | 0.1 | | | | | | | | | | | | | 2 | * | 4 | 0.1 |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | 0.3 | | 0.3 |
| OTHER SUPPORT | | | | 0.3 | | 0.2 | | 0.2 | | 0.1 | | | | | | | | 0.3 | | 1.0 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 14 | 1.8 | 96 | 3.2 | 84 | 2.8 | 50 | 1.7 | | | | | | | 696 | 4.8 | 940 | 14.3 |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: H-46 SERIES MODIFICATION TITLE: Lightweight Replacement Armored Seats Program (OSIP 011-05)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 FY 2008

DELIVERY DATE: FY 2005 FY 2006 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| TO COMPLETE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | 0 |
| Out | | | | | | | | | | 0 |

Totals may not add due to rounding
DD Form 2454, Jun 86

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **AH-1W SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 393.7 | A | 7.3 | 37.5 | 19.8 | 18.8 | 2.0 | 1.7 | 1.7 | 21.8 | 504.3 | |

This line item funds modifications to the AH-1W aircraft. Modifications prior to FY 1997 were funded in the H-1 Series P-1 line item. There are 176 AH-1W's. The AH-1W is a tandem seat, two place (pilot and gunner/co-pilot) attack helicopter designed and built to provide the high speed and maneuverability required by the attack mission. The armament of the AH-1W includes the SIDEWINDER, TOW, and the HELLFIRE missile systems, a chin-mounted 20mm turret gun, and wide variety of forward firing and gravity released external stores. Operational Requirements Document (ORD) AAS-35 covers all OSIPs listed below. The overall goal of the modifications budgeted in FY2007 is to continue to fulfill the operational requirement to detect, identify and destroy tactical sized armored targets with precision guided munitions during the day, at night, and during adverse weather, as well as providing enhanced conventional weapons delivery by utilizing the systems laser ranging and designating system. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 008-90 AH-1 NIGHT TARGETING | 328.1 | 3.4 | 3.9 | | | | | | | 335.4 |
| 016-98 AH-1 APR-39 A(V)2 | 38.2 | 1.7 | 22.4 | 18.2 | 17.2 | 0.4 | | | | 98.0 |
| 012-00 H-1 MISSION PLANNING | 4.3 | 1.0 | | | | | | | | 5.3 |
| 013-00 AH-1W A/C & T700 ENG | 18.0 | 1.2 | 4.8 | | | | | | | 23.9 |
| 002-03 AH-1 20MM LINKLESS FEED | 4.9 | | 6.4 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 21.8 | 41.4 |
| TOTAL | 393.5 | 7.3 | 37.5 | 19.8 | 18.8 | 2.0 | 1.7 | 1.7 | 21.8 | 504.1 |

RESERVE FUNDING INCLUDED IN THE TOTALS: 0.5

Notes: FY05 OSIP 16-98 includes $1.7M of Title IX supplemental funding.
FY06 does not match the P-1 due to technical error.
FY06 OSIP 16-98 includes $15.9M of Title IX supplemental funding for Turned Exhaust and $6.6M for Increased Survivability.

Exhibit P-3a

MODIFICATION TITLE: AH-1 NIGHT TARGETING SYSTEM ( OSIP 008-90 )

MODELS OF SYSTEMS AFFECTED: AH-1W TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: The U.S. Marine Corps (USMC) has an operational requirement to detect, identify and destroy tactical sized armored targets with precision guided munitions during day, night and adverse weather conditions. The Night Targeting System (NTS) provides a night/adverse weather and designator TOW and autonomous HELLFIRE capability. In addition, NTS will provide enhanced conventional weapons delivery by utlizing the systems laser ranging system. This modification has two key parts: (1) the modification of the cockpit and the canopy places a radar altimeter in the front cockpit fo first time: and (2) the NTS itself. The Night Vision Goggle Helmet mounted Display and Improved Crew Restraint System completes the NTS modification. NTS will accomplish the USMC requirement for night operations by incorporating a high resolution stabilized forward looking infra-red sensor, charged couple device camera system, automatic target tracking, and laser range finder/designator into the current M65 telescopic sight unit. Due to changes in the TOW missile control by addition of the NTS, a Buffer Box is being incorporated to ensure proper operation of the TOW missile with the NTS. Additional NTS WRA modifications to improve reliability, maintainability, and systems stabilization will also be incorporated.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The AH-1W Fleet has been fully outfitted with the Night Targeting System. There is a requirement to upgrade the Night Targeting System on the AH-1W flying until 2015. Upgrades will include but not limited to replacement of the first generation FLIR with a third generation FLIR, replacing the black and white TV with a color TV, improve boresight, and continue to look at reliability maintainability and stablization issues.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A/F Kits | 128 | 37.5 | | | | | | | | | | | | | | | | | | |
| Accelerated Kits | 5 | 2.0 | | | | | | | | | | | | | | | | | | |
| NTS Kits | 132 | 129.4 | | | | | | | | | | | | | | | | | | |
| NTSU Kits | 7 | 4.0 | 3 | 2.3 | 3 | 2.9 | | | | | | | | | | | | | | |
| Tow Buffer Kits | 202 | 1.8 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 23.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ICRS GFE | 41 | 1.8 | | | | | | | | | | | | | | | | | | |
| Misc. GFE (Repair/Replace) | | 5.5 | | | | | | | | | | | | | | | | | | |
| NTS GFE | 79 | 1.5 | | | | | | | | | | | | | | | | | | |
| VCRS | 137 | 3.6 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 2.2 | | | | | | | | | | | | | | | | | | |
| ECO | | 7.5 | | | | | | | | | | | | | | | | | | |
| DATA | | 1.5 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 4 | 4.5 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 15.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 15.0 | | * | | * | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 26.4 | | 1.1 | | 1.0 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 132 | 45.1 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 867 | 328.1 | 3 | 3.4 | 3 | 3.9 | | | | | | | | | | | | | | |

Notes:

1. Aterisk indicates amount less than $50K.
2. FY06 includes a $3.9M Congressional Add for NTSU.

Exhibit P-3a

MODIFICATION TITLE: AH-1 APR-39 A(V)2, TURNED EXHAUST ( OSIP 016-98 )

MODELS OF SYSTEMS AFFECTED: AH-1W/AH-1Z TYPE MODIFICATION: SURVIVABILITY

DESCRIPTION / JUSTIFICATION: Existing AH-1W aircraft self-protection/survivability systems are inadequate to cope with present-day threats. These engineering changes incorporate a survivaility system that reduces aircrew workload, centralizes control functions and increases the helicopter's survivability during operations in or near hostile territory by providing additional threat detection capabilities; and enhanced missile and laser detection systems. The Integrated EW System consists of installation of the AN/AAR-47 (V)2 Missile Warning Set, modification to the existing wiring for installation of the APR-39 (V) RWR, removal of the AN/APR-44 (3) Radar Warning System (MWS), required interfaces, and AN/ALE-47. Additional survivability efforts covered by this OSIP include: IR Signature Reduction (IR Suppressors, Turned Exhaust), upgrades to all existing EW Suite equipment which includes AN/AAR-47(V)2, APR-39 (V)2, ALE-47, ALQ-144 and A/C/Aircrew survivability through implementation of improved armor technologies including, but not limited to, transparent armor, armored panels and crew weapons mounts. Portions of the AH-1W Turned Exhaust will forward fit to the AH-1Z.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: This program utilizes operationally approved hardware to increase aircraft self protection and survivability. This modification will cover a quantity of 180 AH-1W aircraft and 2 AH-1W trainers. Additional Aircraft Survivability issues to be addressed as part of this OSIP include A/C IR signature suppression/reduction efforts (IR Suppressors and Turned Exhaust Systems).

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC-230 Rev A (EW Suite) | 142 | 3.2 | | | | | | | | | | | | | | | | | | |
| IR Suppressors | 55 | 3.4 | | | | | | | | | | | | | | | | | | |
| KIT AFC 369 (ALE-47) | 65 | 0.6 | | | | | | | | | | | | | | | | | | |
| Turned Exhaust | 60 | 13.4 | | | 58 | 14.9 | 63 | 15.8 | | | | | | | | | | | | |
| Armor Panels | | | | | 180 | 3.6 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 3.7 | | | | 1.6 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AAR-47 P Kits | | | 34 | 1.5 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.1 | | | | 0.1 | | | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 0.4 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.4 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.4 | | | | 0.2 | | 0.6 | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.8 | | 0.2 | | 0.9 | | 0.8 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 269 | 4.9 | | | 58 | 1.0 | 63 | 1.0 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 593 | 38.2 | 34 | 1.7 | 296 | 22.4 | 126 | 18.2 | | | | | | | | | | | | |

Notes:

1. Aterisk indicates amounts less than $50K.
2. FY05 OSIP 16-98 includes $1.7M of Title IX supplemental funding.
3. FY06 OSIP 16-98 includes $15.9M for Turned Exhaust and $6.6M for Increased Survivability of Title IX supplemental funding.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: AH-1W

MODIFICATION TITLE: AH-1W A{R-39 A(V)2, TURNED EXHAUST (OSIP 16-98)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: CONTRACTOR FIELD MOD TEAM

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 N/A | FY 2006 Jun 06 | FY 2007 Dec 06 | FY 2008 Dec 07

DELIVERY DATE: FY 2005 N/A | FY 2006 Dec 06 | FY 2007 Mar 07 | FY 2008 Mar 08

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (269) kits | 269 | 4.9 | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (58) kits | | | | | 58 | 1.0 | | | | | | | | | | | | | | | | |
| FY 2007 (63) kits | | | | | | | 63 | 1.1 | | | | | | | | | | | | | | |
| FY 2008 (53) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 269 | 4.9 | 0 | 0.0 | 58 | 1.0 | 63 | 1.1 | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 269 | | | | | | | | 20 | 20 | 18 | 14 | 14 | | | | | | | | | | | | |
| Out | 209 | 10 | 25 | 25 | | | | | | 20 | 35 | 33 | 14 | 14 | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: H-1 MISSION PLANNING( OSIP 012-00 )

MODELS OF SYSTEMS AFFECTED: AH-1W TYPE MODIFICATION: UPGRADE

DESCRIPTION / JUSTIFICATION: The H-1 MPM is a unique software module application designed to operate in and interface with the Joint Mission Planning System (JMPS) Core Software architecture. The MPM links the JMPS core to the aircraft operational flight program (OFP) software. This OSIP will also provide for periodic OFP software upgrades. It is tailored to meet the mission planning requirements of the H-1 weapon system platform and makes extensive use of generic Core processing with adjustments for unique H-1 requirements. The MPM will provide the capability for the H-1 operator to effectively and efficiently plan a mission in and automated environment, thereby reducing aircrew workload. The MPM will allow for the development and refinement of specific mission data to be produced in the JMPS and then transferred to the aircraft via a Mission Data Loader/Advanced Memory Unit device. This data will include target and waypoint, threats, GPS, ARC-210, EW System, weapons, and aircraft performance information. The MPM will also allow for helicopter performance calculations, taking into consideration terrain and threat information, which will enhance survivability. As a result, the H-1 MPM and OFP softwa upgrades will enable the operators to more effectively plan the assigned H-1 missions and coordinate with other Service and other Marine assets.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Modification of the existing MPM is necessary to reflect the new Windows NT architecture design. FY98 and FY99 H-1 prior year Mission Planning developments were funded under OSIP 03-93. JMPS 7.0 Core and MPM releases are scheduled as follows: Release #1: FY01; Release #2: FY02; Release #3: FY03; Release 4: FY05.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 3.0 | | 0.8 | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | * | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.1 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.1 | | 0.2 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 4.3 | | 1.0 | | | | | | | | | | | | | | | | |

Notes:

1. Aterisk indicates amount less than $50K.

Exhibit P-3a

MODIFICATION TITLE: AH-1W A/C & T700 ENG( OSIP 013-00 )

MODELS OF SYSTEMS AFFECTED: AH-1W TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: This program is designed to address safety issues, such as mishap casual factors associated with maintaining an older type model series aircraft. The AH-1W helicopter is powered by two General Electric T700-GE-401 turboshaft engines which are controlled throughout the normal operating range by the Electrical Engine Control Unit (EECU) and the Hydro-Mechanical Unit (HMU). Since 1994, 86 total power loss incidents have occurred with the T700-GE-401; 58 ground flameouts, 7 ground rollbacks, 10 inflight shut-downs, and 11 inflight rollbacks. These inadvertent power loss incidents severely jeopardize aircrew safety. Incorporation of a Digital Electronic Control Unit (DECU) with auto-ignition system will reduce the risk of an uncommanded engine flameout and complete power loss. This change will replace the EECU with a DECU which will be carried forward into the AH-1Z. Additional safety programs that will be implemented by this OSIP include, but are not limited to: Dynamic Component Change (DCC) to incorporate new chip detectors on the 42 and 90 degress gear boxes are required to provide improved warning of impending failure, and new filler caps to prevent internal corrosion caused by water intrusion. Equipment introduced by this change will be carried forward into the AH-1Z. Incorporation of Crash Attenuating Seat Cushions, to reduce the likelyhood of back injuries to pilots during hard landings or crashes, will be investigated for modification. Additional A/C fatigue life issues, including, but not limited to rotor blades, stub wings and tailboom technology, will be investigated to improve performance and mitigate tailboom fatigue. Tailboom Strake technology will be investigated to improve performance and reduce tailboom fatiue. Reduction of cockit vertigo inducing problems whic include Common Cockpit Processor (CCP), Heads-up display (HUD) Uprades, Tactile Situation Awareness System (TSAS), Upgrade Transponder (CXP) will also be implemented via this OSIP. Additional improvements to increase reliability and reduce maintenance efforts (such as scratch covers, damaged tole windscreens and tear-a-way covers, etc.) and mid-air collision avoidance systems will also be accomplished.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The DECU is a General Electric proprietary, non-developmental item used on the SH-60B and aircraft equipped with T700-GE-401C. Contract awarded 1st quarter of FY00. Installation of prototpes was accomplished in 2nd quarter of FY01 tc complete verification. This modification will carry forward to the AH-1Z.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC XXX DECU Install Kits | 175 | 0.2 | | | | | | | | | | | | | | | | | | |
| DCC XXX 42 & 90 Degree Gearbox | 50 | 0.9 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.4 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | 0.3 | | | | | | | | | | | | | | |
| PPC XXX Kits | 392 | 5.8 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.2 | | | | 1.8 | | | | | | | | | | | | | | |
| ECO | | 0.2 | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.9 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.9 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.4 | | 0.3 | | 0.2 | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.5 | | 0.9 | | 2.6 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 617 | 18.0 | | 1.2 | | 4.8 | | | | | | | | | | | | | | |

Notes:

1. Aterisk indicates amount less than $50K.
2. Kits will be installed at the orgainizational level.
3. FY06 increase is due to a Congressional Add for ANVIS HUD.

Exhibit P-3a

MODIFICATION TITLE: AH-1 20MM LINKLESS FEED ( OSIP 002-03 )

MODELS OF SYSTEMS AFFECTED: AH-1W/AH-1Z TYPE MODIFICATION: SURVIVABILITY

DESCRIPTION / JUSTIFICATION: The U.S. Marine Corps (USMC) has an operational requirement for conventional weapons delivery. This initiative will replace the current feeder assembly with one that utlizes linkless, bulk 20MM ammunition common to all other DoN 20MM systems (F/A-18, F-14, CWIS). The ammo can/feeder assembly is the highest reliability degrader in the gun system. In addition this OSIP provides for additional modifications, enhanced lubrication system/methodology, laser pointers, improved turret test console and improved barrel supports that will significantly increase the accuracy and reliability of this critical weapons system and enhance the survivabilty of the flight crew. The implementation of this modification will enhance the warfighter's capability to place more rounds on traget by eliminationg gun jamming significantly increasing reliability. This modification will be carried forward and must be forward compatible to the AH-1Z.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: This initiative will be implemented by issuance of a new contract based on open competition between several manufacturers of linkless feed technology. Contract Award is scheduled for the 2nd quarter of FY06. Production Installations are forecasted to commence in the 2nd quarter of FY07.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Linkless Feed Assembly | 3 | 1.3 | | | 30 | 3.9 | 5 | 0.7 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.6 | | | | 1.0 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | 0.1 | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 0.1 | | | | 0.2 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.3 | | | | 0.9 | | | | | | | | | | | | | | |
| ILS | | 1.1 | | | | 0.3 | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.1 | | | | 0.1 | | 0.7 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 5 | 0.2 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 10 | 4.9 | | | 30 | 6.4 | 5 | 1.6 | | | | | | | | | | | | |

Notes:

1. Aterisk indicates amount less than $50K.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | P-1 ITEM NOMENCLATURE: **H-53 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
| QUANTITY | | | | | | | | | | | |
| COST (In Millions) | 387.6 | A | 65.0 | 30.5 | 28.3 | 38.7 | 27.8 | 28.5 | 30.4 | 297.4 | 934.2 |

DESCRIPTION: This line item funds modifications to the CH-53D/CH-53E/MH-53E aircraft. As of 1 June 2005, there are 34 MH-53E Helicopters; 147 CH-5 Helicopters; and 32 CH-53D Helicopters. The CH-53E is a seven blade main rotor and a four-blade canted tail rotor helicopter powered by three T64-GE-41 turbo shaft engines on the CH-53E while the CH-53D has six main rotor blades and two T64-GE-413 engines. The CH-53D/E aircraft are capable of both la and ship based transport of heavy equipment, supplies, and personnel. The MH-53E is similar to the CH-53E with additional capabilities for Airborne Mine Countermeasures (AMCM), Vertical On-Board Delivery (VOD), and Special Missions which require longer range and more precise navigation than that of th 53E. The overall goal of the modifications budgeted in FY07 was increased communication and navigation, night vision capability, and fleet operation and s performance in the H-53 community.

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 011-92 AN/ARC-210 RADIO | 23.1 | 0.4 | | | | | | | | 23.5 |
| 012-92 HNVS | 146.3 | 32.3 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.0 | 33.3 | 216.3 |
| 020-97 ATTEN. TRP SEATS FOR | 36.4 | 2.7 | 3.4 | | | | | | | 42.5 |
| 007-98 INTEGRATED MECH DIAG | 51.3 | 8.4 | 1.3 | 1.3 | 2.3 | 1.3 | 1.3 | 3.4 | 58.4 | 129.0 |
| 009-01 NACELLES | 6.9 | 2.6 | 3.0 | 2.2 | 4.1 | | | | | 18.8 |
| 021-03 H-53 INTERIOR BALLISTIC ARMOR | 7.4 | 3.5 | 0.9 | | | | | | | 11.7 |
| 010-05 H-53 ERIP | 40.0 | 0.5 | 7.6 | 9.1 | 13.1 | 10.7 | 12.1 | 11.6 | 121.6 | 226.3 |
| 012-05 H-53 AMARC | | 4.0 | | | | | | | | 4.0 |
| 015-05 H-53 SURVIVABILITY | | 10.5 | | | | | | | | 10.5 |
| 008-06 H-53 A/C SUSTAINMENT | | | 13.7 | 15.0 | 18.6 | 15.1 | 14.3 | 14.5 | 84.1 | 175.2 |
| TOTAL | 311.2 | 65.0 | 30.5 | 28.3 | 38.7 | 27.8 | 28.5 | 30.4 | 297.4 | 857.9 |
| RESERVE FUNDING INCLUDED IN TOTAL | | 6.7 | 6.9 | 7.1 | 7.3 | 7.4 | 7.6 | 7.7 | | |

NOTE: FY06 does not match the P-1 due to technical error.

*008-06 H-53 A/C Sustainment FY 2006 includes $10.0M Title IX Supplemental funding.

Exhibit P-3a

MODIFICATION TITLE: AN/ARC-210 RADIO( OSIP 011-92 )

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 216 Total

TYPE MODIFICATION: MISSION/PERFORMANCE ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

The AN/ARC-210 is a combination UHF/VHF, AM/FM jam-resistant radio that was developed for ECCM interoperability with the Air Force, Army, and NATO. The radio provides dual UHF capability for CV based TACAIR; VHF FM for close air support and maritime channels; VHF AM for air traffic control; and ECCM capabilities using the Air Force developed waveforms (UHF-AM HAVE QUICK I and II), and the Army developed waveform (VHF-FM SINCGARS). The AN/ARC-210 can be controlled by either a remote control unit or via a MIL-STD-1553 multiplex data bus. The ECCM parameters and single channel preset information can be loaded via a CYZ-10 Data Transfer Device (DTD). The fill information can consist of word-of-day for HAVE QUICK and the KGV-10 transec variable, hopsets and frequency lock-out tables for SINCGARS. Applicable ECPs: CH-53E: PNCLA-4, CH-53D: PNCLA-61, MH-53E: CHPT-006

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Procurement of the validation/verification kits occurred in August 1992. CH validation/verification efforts were procured in FY 1995. Procurement of validation/verification for the MH-53E took place in FY97. Due to the deactivation of RH-53D's, the incorporation of modifications in RH-53D aircraft was canceled.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53D A-Kits | 46 | 0.8 | | | | | | | | | | | | | | | | | | |
| CH-53D APX-72 A-Kit | 40 | 0.2 | | | | | | | | | | | | | | | | | | |
| CH-53D ATABS A Kit (Note 5) | 43 | 0.2 | | | | | | | | | | | | | | | | | | |
| CH-53D ATABS Val/Ver Kit | 1 | * | | | | | | | | | | | | | | | | | | |
| CH-53D Rev B Bundles Kit (Note 3) | 45 | 0.4 | | | | | | | | | | | | | | | | | | |
| CH-53E A-Kit (Note | 158 | 1.7 | | | | | | | | | | | | | | | | | | |
| MH-53E A-Kit (Note | 41 | 0.8 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 1.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GFE Items - CHE (Note 2) | 4 | 0.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.3 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.9 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 7 | 0.7 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.4 | 53 | 0.2 | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 4.9 | | 0.2 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 324 | 8.7 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 709 | 23.1 | 53 | 0.4 | | | | | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. 4 radios (GFE) procured by PMA-261 for Val/Ver. Balance procured by PMA-209
3. Includes 44 CHD Rev B installs
4. Only 150 Installations
5. 43 CH-53D ATABS A Kits are O level (no cost) installs
6. Seven remaining radios to be installed were previously funded but were not installed due to aircraft availabiility during the Global War on Terrorism.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 216 Total MODIFICATION TITLE: AN/ARC-210 RADIO( OSIP 011-92 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Concurrent with Naval Aviation Depot (NADEP) standard depot level maintenance (SDLM), augmented by NADEP and interservice field modification teams (FMTs).

ADMINISTRATIVE LEADTIME: 2 PRODUCTION LEADTIME: 13 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS (284) kits | 277 | 8.4 | | | 7 | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 277 | 8.4 | 0 | 0.0 | 7 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | | | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 281 | | | | | | | 7 | | | | | | | | | | | | | | | |
| Out | 281 | | | | | | | 7 | | | | | | | | | | | | | | | |

| | FY 2010 | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | |
| Out | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53D APX-72 MODIFICATION TITLE: AN/ARC-210 RADIO( OSIP 011-92 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Concurrent with (NADEP) (SDLM), augmented by NADEP and interservice field modification teams (FMTs).

ADMINISTRATIVE LEADTIME: 1 PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS (40) kits | 40 | 0.4 | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 40 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | | | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 40 | | | | | | | | | | | | | | | | | | | | | | |
| Out | 40 | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | |
| Out | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: HNVS( OSIP 012-92 )

MODELS OF SYSTEMS AFFECTED: CH-53E (147) TYPE MODIFICATION: MISSION/PERFORMANCE ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

The Helicopter Night Vision System (HNVS) will provide an infrared night vision system for the CH-53E transport helicopters. The HNVS provides an improved night/all weather mission capability. This OSIP includes integration of the off the shelf APN-217(V)6 Doppler Navigation System and AAQ-16B/29/29A FLIR. Future configuration for CH-53E transport helicopter will be the AAQ-29A FLIR due to obsolescence issues for OEM with AAQ-29. Program is structured to replace AAQ-16 and AAQ-29 with AAQ-29A to establish a single configuration.
Applicable ECP: 0231-E001

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The AAQ-16B/29 FLIR is a non-developmental Item (NDI) currently installed on a number of U.S. Army, Air Force, and Navy helicopters. DT-IIIA on the CH-53E/HNVS was completed in the third quarter FY 94. Extension of application for CH-53E was granted first quarter FY 95.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A-Kits | 156 | 11.6 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 3.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53E Installation Equipment | 195 | 18.7 | | | | | | | | | | | | | | | | | | |
| CH-53E TFU/SDC AAQ-16B/29 | 223 | 72.3 | | | | | | | | | | | | | | | | | | |
| AAQ-29A TFU/SEU | 14 | 8.3 | 11 | 5.9 | 1 | 0.5 | 1 | 0.5 | | | | | | | | | | | | |
| AAQ-29A TFU/SEU Supplemental | | | 55 | 25.7 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.7 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 3 | 8.4 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 1.0 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 12.9 | | 0.5 | | 0.1 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 153 | 9.3 | 5 | 0.2 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 744 | 146.3 | 71 | 32.3 | 1 | 0.6 | 1 | 0.6 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. Though the program was truncated (from 166 kits to 138) by N880 and HQMC in FY'97, 19 additional Kits were approved and funded per N78 and HQMC in October 2001.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53E (147) MODIFICATION TITLE: HNVS( OSIP 012-92 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: 14 A-Kits installed in FY04 and 5 A-Kits installed in FY05 by Field Mod Teams. B-Kits (TFUs) installed at O-Level.

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS (158) kits | 153 | 9.3 | 5 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 153 | 9.3 | 5 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 153 | 5 | | | | | | | | | | | | | | | | | | | |
| Out | 153 | 5 | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: ATTEN. TRP SEATS ( OSIP 020-97 )

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34) TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION:

Utility and Troop transport mission increasing in importance. Current troop/passenger seats are 1950 generation. Design does not provide impact protection of current rotorcraft seat designs. The impulsive type loading experienced during survivable mishaps produces amplified seat/floor anchor loads and potentially injurious occupant decelerations. Due to this operational deficiency, NDI crashworthy troop seat program established. NDI are lightweight off-the-shelf seats that provide protection by limiting an occupants inertial loading to survivable levels by attenuating impact forces to below survivable ranges and enables the occupant to rapidly egress a downed aircraft are being sought.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

NDI procedures utilized for the Procurement, Installation and Support of the seats for all 46 CH-53D Helicopters. Funding for the 46 seats and associated requirements were appropriated in 1997. Program consists of a one-time procurement with a turn-key installation approach. FY-98 through FY04 provided for procurement, installation, and support of the CH-53E and MH-53E helicopters.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53D Kits | 46 | 4.6 | | | | | | | | | | | | | | | | | | |
| CH-53E Kits (Note 2) | 154 | 11.9 | 73 | 2.0 | | | | | | | | | | | | | | | | |
| MH-53E Cruise Box Kits | 26 | 0.2 | | | | | | | | | | | | | | | | | | |
| MH-53E Extension Brackets | 20 | 0.1 | | | | | | | | | | | | | | | | | | |
| MH-53E Kits | 22 | 1.9 | | | | | | | | | | | | | | | | | | |
| Crew Chief Seats (A Kits) | | | | | 100 | 0.1 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 1.3 | | 0.1 | | 0.4 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Crew Chief Seats (B kits) | | | | | 100 | 0.5 | | | | | | | | | | | | | | |
| Seat Testing Kits | 1 | 0.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 1.7 | | | | | | | | | | | | | | |
| ECO | | 0.5 | | | | | | | | | | | | | | | | | | |
| DATA | | 1.0 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | * | | 0.2 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.3 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 8.7 | | 0.4 | | 0.3 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST (Note 4) | 115 | 5.2 | 86 | | 100 | 0.5 | 21 | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 384 | 36.4 | 159 | 2.7 | 300 | 3.4 | 21 | | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. 73 CH-53E Kits in 2005 are installed at O-level (no cost)
3. Total quantities include Cruise Box Kits and Extension Brackets.
4. 107 troop seats procured in prior years will not be installed until FY2005 and out due to availability of aircraft during the Global War on Terrorism. Installs are funded with prior year funds.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34) MODIFICATION TITLE: ATTEN. TRP SEATS , CRUISE BOX KITS AND EXTENSION BRACKETS ( OSIP 020-97

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Modification Teams and SDLMs

ADMINISTRATIVE LEADTIME: 10 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 FY 2006 Jul-06 FY 2007

DELIVERY DATE: FY 2005 FY 2006 Dec 06 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS (222) kits | 115 | 5.2 | 86 | | | | 21 | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (100) kits | | | | | | 0.5 | 40 | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| TOTAL | 115 | 5.2 | 86 | 0.0 | 0 | 0.5 | 61 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 115 | 24 | 24 | 24 | 14 | | | | | 21 | 10 | 15 | 15 | | | | | | | | |
| Out | 115 | 24 | 24 | 24 | 14 | | | | | 21 | 10 | 15 | 15 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Notes:
1. FY05, FY07 and FY08 installations funded with prior year funds.
2. 100 Kits procured in FY06 installed in FY07 and FY08 using Congressional Add funds.

Exhibit P-3a

MODIFICATION TITLE: INTEGRATED MECH DIAG( OSIP 007-98 )

MODELS OF SYSTEMS AFFECTED: CH-53E (147), MH-53E (34), (CH-53E - (22) LRIP Quantity) TYPE MODIFICATION: SAFETY, READINESS AND MAINTAINABILITY

DESCRIPTION / JUSTIFICATION:

IMD is a helicopter monitoring and diagnostics system that provides continuous on board monitoring and diagnostics of engine health, gearbox and drive train vibrations, oil debris, rotor track and balance, and crash protected Cockpit Voice and Flight Data recorder (CVFDR). CVFDR, an integral part of the IMD system, will perform the required function of a Flight Incident Recorder (FIR). An Early Operational Assessment (EOA) of a Commercial Off-the-Shelf system on two CH-53E's occurred FY96-98. Lessons learned from this effort were incorporated into the solicitation for the fleet wide IMD effort of which the H-53E is the lead platform.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The CH-53E IMDS successfully completed operational evaluation (OPEVAL) in October 2005. The Milestone Decision Authority approved full-rate production for CH-53E IMDS in December 2004. FY04-05 quantities are on contract and previously delivered kits are being installed as aircraft become available.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53E A-Kits | 34 | 10.1 | 16 | 4.7 | 2 | .7 | 2 | .7 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 3.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | 0.3 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.3 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.2 | | 0.3 | | 0.1 | | | | | | | | | | | | | | |
| ILS | | 2.2 | | 0.6 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 32.1 | | 0.9 | | 0.5 | | 0.5 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 34 | 2.7 | | 1.6 | 3 | | 15 | 0.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 68 | 51.3 | 16 | 8.4 | 5 | 1.3 | 17 | 1.3 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53E (147), MH-53E (34), (CH-53E - (22) LRIP Quantity) MODIFICATION TITLE: INTEGRATED MECH DIAG( OSIP 007-98 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: CONTRACTOR INSTALLED

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Jan-05 FY 2006 Mar-06 FY 2007 Mar-07

DELIVERY DATE: FY 2005 Jul 05 FY 2006 Sep 06 FY 2007 Sep 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS (34) kits | 34 | 2.7 | | | | | | | | | | | | | | | | | | |
| FY 2005 (16) kits | | | | 1.6 | 3 | | 13 | | | | | | | | | | | | | |
| FY 2006 (2) kits | | | | | | | 2 | 0.2 | | | | | | | | | | | | |
| FY 2007 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (7) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (79) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 34 | 2.7 | 0 | 1.6 | 3 | 0.0 | 15 | 0.2 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 9 | 1 | 1 | 1 | 1 | 3 | 7 | 7 | 7 | 4 | 4 | 4 | 3 | | | | | | | | |
| Out | 9 | 1 | 1 | 1 | 1 | 3 | 7 | 7 | 7 | 4 | 4 | 4 | 3 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: NACELLES( OSIP 009-01 )

MODELS OF SYSTEMS AFFECTED: CH-53E (147), MH-53E (34) TYPE MODIFICATION: MISSION/MISSION ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

This modification provides improvements to the engine nacelles which are intended to decrease the maintenance man-hours expended on nacelles repair and replacement. This modification will incorporate the forward and aft engine nacelles for the CH-53E and MH-53E.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Contract awarded 2nd Qtr. FY 02. O-Level Validation/Verification was completed May 03. All installations are O-Level. Material quality defects were discovered in the first production lot. Technical data package was studied by the OEM. Contract award is planned in July 06 for Risk Reduction, Tooling and Prototypes.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH/MH-53E KITS | 48 | 3.3 | 12 | 0.8 | 41 | 2.9 | 28 | 2.0 | | | | | | | | | | | | |
| CH/MH-53E Kits - Val/Ver | 2 | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.9 | | 0.3 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.5 | | 1.5 | | 0.2 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 50 | 6.9 | 12 | 2.6 | 41 | 3.0 | 28 | 2.2 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. All installations are O-Level.

Exhibit P-3a

MODIFICATION TITLE: H-53 INTERIOR BALLISTIC ARMOR( OSIP 021-03 )

MODELS OF SYSTEMS AFFECTED: CH-53E (147) TYPE MODIFICATION: MISSION/PERFORMANCE ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

Ballistic Protection System (BPS) provides increase protection and survivability for H-53 aircrew and passengers against small arms and anti-aircraft fragmentation type threats. BPS is a mission kit of protective armor panels secured to the cockpit and cargo compartment floor and to the sidewall area around the gunners' doors. Standardization Kits are First Article production kits used to verify subsequent Ballistic Armor Production Runs.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The BPS is in production for the CH-53D and will be expedited to the CH-53D aircraft that are scheduled to deploy. Every CH-53D will receive installation provisions (A-Kit), and an armor panel set (D-Kit) will go to approximately half of the aircraft. The BPS for the MH-53E is in the developmental stage and will be expedited to the MH-53E aircraft that are currently being configured to go in theater. Every MH-53E will receive installation provisions (A-Kit), and an armor panel set (D-Kit) will go to approximately half of the aircraft. The BPS can be quickly moved from aircraft to aircraft according to mission needs once the A-Kit has been installed.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53D A-KITS (PMC) | | | 35 | 0.5 | | | | | | | | | | | | | | | | |
| CH-53D Standardization A-KITS (PMC) | | | 1 | * | | | | | | | | | | | | | | | | |
| CH-53E A-KITS (PMC) | 149 | 2.0 | | | | | | | | | | | | | | | | | | |
| CH-53E Standardization A-KITS (PMC) | 1 | * | | | | | | | | | | | | | | | | | | |
| MH-53E A-KITS (PMC) | | | 32 | 0.5 | | | | | | | | | | | | | | | | |
| MH-53E Standardization A-KITS (PMC) | | | 1 | * | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | * | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| P-Kits CH-53D | | | 14 | 1.2 | | | | | | | | | | | | | | | | |
| P-Kits CH-53E | 61 | 5.2 | | | 8 | 0.8 | | | | | | | | | | | | | | |
| P-Kits MH-53E | | | 14 | 1.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | * | | 0.1 | | | | | | | | | | | | | | | | |
| ILS | | 0.1 | | | | * | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.1 | | | | * | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 211 | 7.4 | 97 | 3.5 | 8 | 0.9 | | | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. All installations are O-Level.
3. Standardization Kits are First Article production kits used to verify subsequent Ballistic Armor Production Runs.

Exhibit P-3a

MODIFICATION TITLE: H-53 ERIP( OSIP 010-05 )

MODELS OF SYSTEMS AFFECTED: CH-53E T64 416 Turbo-shaft engines (488) TYPE MODIFICATION: SAFETY, READINESS AND MAINTAINABILITY

DESCRIPTION / JUSTIFICATION:

The T64 Engine reliability Improvement Program upgrades top age related engine degraders, fatigue limiters, and performance degradation on the T64 engine. A concentrated effort is to upgrade the T64-416 engines to the T64-416A configuration by replacing components of the engine with improved hardware designs to increase reliability and reduce logistical requirements by conforming to one configuration. Other efforts are to improve age related components such as torques measuring gages and thermocouples that have become obsolescent.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

488 engines remain to be upgraded from -416 to -416A. The -416A upgrade kit development was previously completed. Only procurement of the -416A upgrade kits is required under this OSIP. Kits procured with FY04 Title IX Supplemental funding began installs in FY05

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| REL IMPROVEMENT KITS (BSR) | 38 | 3.2 | | | | | | | | | | | | | | | | | | |
| T64-416A UPGRADE (GE) | 84 | 12.4 | | | | | | | | | | | | | | | | | | |
| TIN SETS (GE) | 48 | 13.2 | | | | | | | | | | | | | | | | | | |
| COMPRESSOR KITS | 960 | 1.0 | | | | | | | | | | | | | | | | | | |
| 416A CONVERSION KITS | 17 | 2.3 | | | | | | | | | | | | | | | | | | |
| AIR STARTER KITS | 8 | 0.2 | | | | | | | | | | | | | | | | | | |
| T64 COMP CASES FOR SUPPORT TIN | 10 | 0.3 | | | | | | | | | | | | | | | | | | |
| T64 ERIP Kits | | | | | 20 | 6.2 | 23 | 7.5 | | | | | | | | | | | | |
| T2 HOUSING KICKSTAND (GE) | 980 | 0.2 | | | | | | | | | | | | | | | | | | |
| VG AFT SPHERICAL BEARING REPL | 1,100 | * | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 2.9 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 1.5 | | 0.5 | | | | | | | | | | | | | | | | |
| ILS | | 0.1 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.3 | | | | 1.4 | | 1.6 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 134 | 0.2 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 3,379 | 40.0 | | 0.5 | 20 | 7.6 | 23 | 9.1 | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2, Title IX Supplemental funding is identified as FY04 funding but is being executed in FY05

Exhibit P-3a

MODIFICATION TITLE: H-53 AMARC( OSIP 012-05 )

MODELS OF SYSTEMS AFFECTED: CH-53E (147) TYPE MODIFICATION: SAFETY, READINESS AND MAINTAINABILITY

DESCRIPTION / JUSTIFICATION:

The Aerospace Maintenance & Regeneration Center (AMARC) will support the restoration of five CH-53E helicopters from long-term preservation and storage into the active inventory. The Weapon System Planning Document (WSPD) reflects a requirement for 153 CH-53E Primary Aircraft Authorized (PAA). Due to combat related losses and mishaps during the GWOT, there are currently 148 PAA aircraft. To get back to the WSPD requirement, the USMC must remove five aircraft from war reserve storage at AMARC and return them to active status. This OSIP includes (1) preparation for the aircraft to come out of AMARC, (2) bringing aircraft to a fleet representative condition with all currently installed modifications, (3) replacement of obsolete items (swashplate, tail rotor head, etc.), (4) replacement of all parts that have deteriorated beyond use during storage (tires, fuel lines, etc.), (5) transportation to NADEP Cherry Point, and (6) putting the aircraft through SDLM. Supplemental funding was sufficient for three kits only. An issue was submitted for FY06 supplemental for two additional kits.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

BUNO 161532 was inducted into SDLM in Aug 2005 and scheduled to be delivered to the fleet in Jan 2007. BUNOs 161539 and 161542 were inducted into SDLM in Sep 2005 and are scheduled to be delivered to the fleet in Feb 2007.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AIRCRAFT (BUNO 161532) | | | 1 | 0.3 | | | | | | | | | | | | | | | | |
| AIRCRAFT (BUNO 161539) | | | 1 | 0.2 | | | | | | | | | | | | | | | | |
| AIRCRAFT (BUNO 161542) | | | 1 | 0.3 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 1.7 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | Note 2 | 1.6 | | | 3 | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 3 | 4.0 | | | 3 | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. FY07 installations funded with FY05 supplemental funds

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53E (147) MODIFICATION TITLE: H-53 AMARC( OSIP 012-05 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Various (Field Maintenance Teams, Concurrent with SDLM, Depot)

ADMINISTRATIVE LEADTIME: N/A Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2005 Sep 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Feb 07 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | 2005 | | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (3) kits | | | Note 1 | 1.6 | | | 3 | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 0 | 0.0 | 0 | 1.6 | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | 3 | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | 3 | | | | | | | | | | |

| | 2010 | | | | 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Notes:
1. FY07 installations funded with FY05 supplemental funds

Exhibit P-3a

MODIFICATION TITLE: H-53 SURVIVABILITY ( OSIP 015-05 )

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 216 Total TYPE MODIFICATION: SAFETY, READINESS AND MAINTAINABILITY

DESCRIPTION / JUSTIFICATION:

This funding effort is established for procurement and integration of survivability systems that will improve H53 aircrew and passengers against hostile threats through more effective self-defense methods. The H53 survivability strategy is to upgrade threat detection ability, increase countermeasure capability, reduce vulnerability, enhance situational awareness by communicating aircraft position to deconflict with friendly forces in the AO, and improve vulnerability to battle damage by better developing protect for both the aircrew and critical components. This increased survivability will protect the H-53 during all aspects of its various missions; assault support, shipboard delivery of cargo, anti-mine warfare, casualty transport/MEDEVACs, and heavy cargo transport.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Phase I effort (8 aircraft) complete in November 2005. Blue Force Tracker effort will be complete in July 2006. Fully equipped aircraft deployment scheduled for July 2006.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Blue Force Tracker | | | 2 | * | | | | | | | | | | | | | | | | |
| MH AAR-47 | | | 10 | 0.4 | | | | | | | | | | | | | | | | |
| MH ALE-47 | | | 10 | 0.1 | | | | | | | | | | | | | | | | |
| MH NVD Cockpit | | | 10 | 0.7 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 3.0 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Blue Force Tracker | | | 2 | 0.1 | | | | | | | | | | | | | | | | |
| MH AAR-47 (P-Kit) | | | 15 | 1.0 | | | | | | | | | | | | | | | | |
| MH ALE-47 (P-Kit) | | | 15 | 0.6 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 1.2 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | 0.8 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.3 | | | | | | | | | | | | | | | | |
| ILS | | | | 0.1 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 1.3 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | * | 1.1 | 32 | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 64 | 10.5 | 32 | | | | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. $0.5M of FY05 Supplemental is for procurement of spares. This funding is included in the Install Equipment (B Kits) line
3. FY06 installations funded with FY05 supplemental funds

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 2 MODIFICATION TITLE: H-53 SURVIVABILITY ( OSIP 015-05 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Field Modification Teams

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Jul 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Jan 06 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | 2005 | | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (32) kits | | | Note 1 | 1.1 | 32 | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| TOTAL | 0 | 0.0 | 0 | 1.1 | 32 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | 12 | 10 | 10 | | | | | | | | | | | | |
| Out | | | | | | | 12 | 10 | 10 | | | | | | | | | | | | |

| | 2010 | | | | 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Notes:

1. FY06 installation quantity funded with FY05 supplemental funds

Exhibit P-3a

MODIFICATION TITLE: H-53 A/C SUSTAINMENT( OSIP 008-06 )

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 216 Total

TYPE MODIFICATION: MISSION/PERFORMANCE ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

The H-53 Aircraft are included in the Naval Aviation Plan to support Sea Power 21 through CY 2020. The H-53 Aircraft Sustainment Strategy targets initiatives to remedy the top age-related maintenance degraders, fatigue life limiters, and safety issues that impede the aircraft's ability to operate into the future. This program implements a concentrated effort to utilize improvements to the H-53 component obsolescence (e.g. Engine Air Particle Separator (EAPS) redesign), structural limitations (e.g. transition bulkhead and station 820 structural improvement), aircrew safety systems and program sustainment support. This effort will sustain the H-53 legacy fleet in an affordable manner until the H-53 follow-on aircraft becomes available.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The H-53 Sustainment Strategy program is anticipated to reach milestone C the 1st quarter of FY06. Because of limited funds in FY06, high priority requirements will be the concentration and the bulk of procurement will begin in FY07.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AIRCRAFT RESTORAL KITS | | | | | | | 1 | 1.5 | | | | | | | | | | | | |
| COMPONENT OBSOLESCENCE | | | | | 30 | 2.2 | 27 | 1.5 | | | | | | | | | | | | |
| CREW RESTRAINT SYSTEM (CH-D, CH-E) | | | | | | | 12 | 0.3 | | | | | | | | | | | | |
| CREW RESTRAINT SYS VAL/VER (Note 2) | | | | | | | 2 | * | | | | | | | | | | | | |
| EAPS REDESIGN | | | | | 16 | 4.1 | | | | | | | | | | | | | | |
| EAPS REDESIGN A KIT VAL/VER (Note 2) | | | | | 2 | 0.5 | | | | | | | | | | | | | | |
| IMP RAMP CONTROL VALVE (ALL) | | | | | | | 75 | 1.6 | | | | | | | | | | | | |
| RATE GYRO REPLACEMENT (CH-D) | | | | | | | 18 | 0.4 | | | | | | | | | | | | |
| SLIDING DOGHOUSE COVER (CH-D) | | | | | | | 15 | 0.4 | | | | | | | | | | | | |
| STATION 820 BULKHEAD (CH-E) (Note 2) | | | | | 75 | 0.4 | 50 | 0.3 | | | | | | | | | | | | |
| TRANSITION BULKHEAD (CH-E) (Note 2,3) | | | | | 16 | 1.2 | 15 | 1.2 | | | | | | | | | | | | |
| TRANSITION BULKHEAD (MH-E) (Note 2,3) | | | | | | | 5 | 0.4 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | 2.8 | | 0.7 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| EAPS REDESIGN B KIT | | | | | | | 1 | 1.3 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | 1.1 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.6 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 1.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 1.8 | | 1.9 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 77 | 0.7 | 52 | 0.7 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | 216 | 13.7 | 273 | 15.0 | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. Installation costs are for these items only, all other items are O-level installs.
3. Transition Bulkhead installs funded with FY of procurement, but have 18 month production leadtime
4. FY06 does not match the P-1 due to technical error.
5. FY 2006 includes $10.0M Title IX Supplemental funding.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CH-53D (35), CH-53E (147), MH-53E (34), 216 Total

MODIFICATION TITLE: H-53 A/C SUSTAINMENT( OSIP 008-06 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Numerous different types of kits will be procured in this program. Each has it own unique production lead time and installation method.

ADMINISTRATIVE LEADTIME: 1-6 Months PRODUCTION LEADTIME: 9-18 Months

CONTRACT DATES: FY 2005 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 Sep 06 FY 2007 Sep 07

($ in Millions)

Cost:

| | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FY 2004 & PRIOR YEARS () kits | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (93) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (72) kits | | | | | 77 | 0.7 | | | | | | | | | | | | | | |
| FY 2008 (40) kits | | | | | | | 52 | 0.7 | | | | | | | | | | | | |
| FY 2009 (12) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (22) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (17) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (76) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | | | | | | | | | | | | | |
| | 0 | 0.0 | 0 | 0.0 | 77 | 0.7 | 52 | 0.7 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | 77 | | | | 52 | | | | | | | | |
| Out | | | | | | | | | 77 | | | | 52 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Notes:
1. FY2007 install qty of 52 includes 50 Station 820 and 2 Crew Restraint System Val/Ver
2. FY2008 install qty of 24 includes 22 Station 820 Bulkhead and 2 EAPS Redesign Val/Ver
3. All remaining install quantities are for Transition Bulkheads

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **H-60 MODIFICATIONS** | | | | | |
| Program Element for Code B Items: **0204243N** | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 194.6 | A | 30.6 | 12.2 | 33.1 | 23.3 | 24.1 | 23.5 | 17.0 | 100.2 | 458.6 | |

This line item funds modifications to H-60 series aircraft. The H-60 series current inventory is comprised of: 38 HH-60H, 147 SH-60B, 72 SH-60F, 81 MH-60S, 7 MH-60R. The design service life of these systems is 10,000 hours. The SH-60B is the vehicle component of the LAMPS MK III Weapon System on surface combatants. The primary missions of the SH-60B are Anti-Submarine (ASW) and Surface Warfare (SUW). The SH-60F is an ASW, dipping sonar helicopter assigned to carrier airwings based aboard aircraft carriers (CV). The SH-60F primary mission is protection of the CV inner zone. The HH-60H is a Combat Search and Rescue (CSAR) and Special Warfare Support (SWS) helicopter assigned to carrier airwings aboard CVs and also in two reserve squadrons. The MH-60S is the Fleet Combat Support (HC) Helicopter. The primary missions of the MH-60S are Vertical Replenishment (VERTREP), Search and Rescue (SAR), Organic AMCM (OAMCM), Surface Warfare (SUW), Maritime Interdiction Operations (MIO), and Navy Organic Combat Search and Rescue (CSAR). The MH-60R is the Multi-Mission Helicopter. The primary missions of the MH-60R are Under Sea Warfare (USW) and Surface Warfare (SUW). SH-60B requirements are driven by the number of LAMPS MK III ships to be supported. The overall goal of the modifications budgeted is for the Integrated Mechanical Diagnostic System (IMDS), ADHEELS 2000/fl, Safety Related Systems Upgrade, AMCM/ Armed Helo (Correction of Deficiencies) for the MH-60S, Air Ambulance, Armed Block I Upgrade for the MH-60R, H-60 Helicopter Visit, Board, Search, and Seizure (HVBSS), and MH-60S Warfighting Capability. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 017-00 HEL0 INTEGRATED DIAGNOSTIC SYSTEM | 22.7 | 2.1 | 1.4 | 0.2 | | | | | | 26.4 |
| 017-02 ADVANCED HELO EMER EGRESS LIGHT SYS | 3.4 | 0.8 | | | | | | | | 4.2 |
| 009-03 SAFETY RELATED SYSTEM UPGRADE | 20.4 | 6.1 | 3.3 | 4.4 | 3.8 | 3.8 | 5.5 | 5.6 | | 52.9 |
| 016-04 MH-60S AMCM/ARMED HELO | | 12.6 | 3.2 | 3.8 | | | | | 17.3 | 36.8 |
| 026-04 AIR AMBULANCE | 9.5 | 9.0 | | | | | | | | 18.5 |
| 001-06 MH-60R ARMED BLOCK I UPGRADE | | | 4.4 | 4.9 | 3.3 | 3.9 | 3.0 | 3.0 | 16.6 | 39.2 |
| 008-07 H-60 HVBSS | | | | 4.0 | | | | | | 4.0 |
| 009-07 MH-60S WARFIGHTING CAPABILITY | | | | 15.8 | 16.2 | 16.4 | 15.0 | 8.4 | 66.3 | 138.0 |
| TOTAL | 56.0 | 30.6 | 12.2 | 33.1 | 23.3 | 24.1 | 23.5 | 17.0 | 100.2 | 320.0 |

Exhibit P-3a

MODIFICATION TITLE: HELO INTEGRATED DIAGNOSTIC SYSTEM (OSIP 1700)

MODELS OF SYSTEMS AFFECTED: SH-60B, SH-60F, HH-60H, MH-60R, MH-60S TYPE MODIFICATION: OPERATIONAL ENHANCEMENT/SAFETY

DESCRIPTION / JUSTIFICATION: Integrated Mechanical Diagnostic System (IMD) is a helicopter monitoring and diagnostic systems that provides continous onboard monitoring and diagnostic of engine health, gearbox and drive train vibrations, oil debris, and rotor track and balance. The IMD system also includes a Cockpit Voice Recorder and Flight Data Recorder (CVRFDR) capability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Revised Acquisition Strategy from lease concept to procurement; approved by PEO (A) December 1999. IMD Development Testing (DT) started on the SH-60B at Rotary Wing January 2000. Limited LRIP decision April 2001, for hardware based on DT-IIA. Software DT-IIB completed November 2002. DT-IIC completed December 2003. Inventory included 1 HH-60H that was rebuilt at Troy, AL, 2 SH-60B were designated NSH-60B, and 1 additional SH-60F aircraft designated YSH-60F.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| LEGACY AIRCRAFT INSTALL KIT | 3 | 1.2 | | | | | | | | | | | | | | | | | | |
| MH-60R | | | 1 | 0.2 | 1 | 0.2 | | | | | | | | | | | | | | |
| MH-60S | | | 5 | 0.8 | 5 | 0.8 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 9.9 | | 0.7 | | 0.2 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.8 | | 0.2 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.3 | | | | 0.1 | | | | | | | | | | | | | | |
| ILS | | 1.1 | | 0.1 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 8.8 | | 0.2 | | 0.1 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 3 | 0.5 | | | | | 6 | 0.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 6 | 22.7 | 6 | 2.1 | 6 | 1.4 | 6 | 0.2 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Funds in the amount of $3.7M transferred from OSIP 09-03 for FY05-FY07
4. Starting in FY07, OSIPS 01-06 and 09-07 will begin procuring IMD Systems.
5. FY05 IMD Systems are VAL/VER Kits.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: SH-60B, HH-60H, SH-60F, MH-60S, MH-60R MODIFICATION TITLE: Helicopter Integrated Mechanical Diagnostics System (OSIP 17-00)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005 FY 2006 Nov-05 FY 2007

DELIVERY DATE: FY 2005 FY 2006 Oct 06 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (3) kits | 3 | 0.5 | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (6) kits | | | | | | | 6 | 0.2 | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 3 | 0.5 | | | | | 6 | 0.2 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 3 | | | | | | | | | | 2 | 2 | 2 | | | | | | | | | | | | |
| Out | 3 | | | | | | | | | | 2 | 2 | 2 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: Advance Helicopter Emergency Egress Lighting System (OSIP 1702)

MODELS OF SYSTEMS AFFECTED: SH-60B, SH-60F, HH-60H TYPE MODIFICATION: Operational Enhancement/Safety

DESCRIPTION / JUSTIFICATION: The ADHEELS 2000/fl is a self-contained, automatically activated, emergency exit/escape light system. System characteristics include both automatic and manual activation, automatically activated by water immersion, G-sensitive switch, pitch/roll>110 degrees activation, system weight is <10lb per aircraft vs. 27lb for AFC-46 heels, five (5) year maintenance cycle (battery package replacement). Current retrofit plan reflects: (147) SH-60B, (72) SH-60F, and (38) HH-60H.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: AFC-203 signed and installations are occurring without schedule delay.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A Kits) | 275 | 2.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.2 | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.3 | | 0.2 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 147 | 0.7 | 115 | 0.5 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 422 | 3.4 | 115 | 0.8 | | | | | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. FY02 Congressional Add funding provided for kit procurements and installation

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: SH-60B, SH-60F, HH-60H MODIFICATION TITLE: Advance Helicopter Emergency Egress Lighting System (OSIP 170

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (262) kits | 147 | 0.7 | 115 | 0.5 | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 147 | 0.7 | 115 | 0.5 | | | | | | | | | | | | | | | | |

**FY02 Congressional Add Funding provided for kit procurements and installation.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 147 | 31 | 32 | 32 | 20 | | | | | | | | | | | | | | | | | | | | |
| Out | 147 | 31 | 32 | 32 | 20 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: SAFETY RELATED SYSTEM UPGRADE( OSIP 009-03 )

MODELS OF SYSTEMS AFFECTED: SH-60B, SH-60F, HH-60H, MH-60R, MH-60S TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION (SH-60B, SH-60F, HH-60H): - Gunners Belts are H-60 Series Systems Safety Working Group (SSWG) number 1 item of concern. Procured 1 per aircraft for 147 SH-60B, and 3 per 72 SH-60Fs, 38 HH-60Hs, and 39 MH-60Ss. Gunner's Belt (Web Retractors) are used by crewmen when they are out of seats, i.e., as during unprepared landing in a Landing Zone (LZ) during VERTREP operations. T700 Engine Safety Improvements (New White Harness) funds ECPs to provide encapuslated (waterproof) engine wire harness. In addition troubleshoot T700 Engine problems unique to H-60 community and find fixes. Support proposed Joint ECP to provide an Engine High Speed Shaft Flex Coupling Replacement, a proven Lead The Fleet (LTF) concept that would remove the potential for catastrophic engine failures, by increasing margin of safety and readiness while reducing inspection and maintenance tasks. Stabilator Control System Redesign solves problem of uncommanded runaway without caution alerts. H-60 Lighted RAST Probe provides a luminescent messenger cable. Fast Tactical Imaging (FTI) Terminals and Imaging and Communications Environment (ICE) software allow H-60 H/B aircraft to link imagery and target data with Carrier Strike Group and Joint Special Operations forces, increasing battlefield situational awareness, improving safety-of-forces, and enhancing precision strike capability in close-air-support of Special Warfare forces.

DESCRIPTION / JUSTIFICATION (MH-60S/MH60R): - The Ground Proximity Warning System (GPWS) will be a software-based system that takes existing aircraft data and calculates a recovery profile to the above ground attitude of the aircraft. If the recovery profile (plus a suitable buffer) intercepts this ground height, GPWS will generate a warning to the pilot. Other means of generating a warning may also be used to ensure maixmum detection with minimum nuisance cues. The retrofit plan for systems to be modified as follows: MH-60S 74. T700 Engine Safety Improvements (New White Harness) funds ECPs to provide encapsulated (waterproof) engine wire harness.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Off the shelf items (minor mod required, off the shelf components for a I-level fixed contract lead time is 6 months and production is 3 months to deliver all parts required. Joint Engineering Change Proposal with Army testing completed May 20, 2001. FTI systems are off-the-shelf procurements with 30-day lead time. FTI Mission kit installation procedure by O-level documented by Navy message / IFC. The MH-60S aircraft completed OPEVAL in Mar 2002; MS III was completed 12 Aug 2002.

METHOD OF IMPLEMENTATION: The Gunner Belts, White Harness, High Speed Shaft, Lighted Rast Probe, Fast Tactical Imaging are "O" Level Installs.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| H-60 HIGH SPEED SHAFT (ALL TMS) | 513 | 6.9 | 172 | 2.1 | | | | | | | | | | | | | | | | |
| SH-60B/SH-60F/HH-60H LIGHTED RAST PROBE | 202 | 0.1 | | | | | | | | | | | | | | | | | | |
| HH-60H GUNNER BELTS | 120 | 0.2 | | | | | | | | | | | | | | | | | | |
| MH-60S GUNNER BELTS | 116 | 0.2 | | | | | | | | | | | | | | | | | | |
| NEW WHITE HARNESS (ALL TMS) | | | | | 110 | 1.7 | 125 | 1.9 | | | | | | | | | | | | |
| SH-60B GUNNER BELTS | 160 | 0.3 | | | | | | | | | | | | | | | | | | |
| SH-60F GUNNER BELTS | 222 | 0.4 | | | | | | | | | | | | | | | | | | |
| WHITE HARNESS (ALL TMS) | 548 | 0.2 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 2.5 | | 0.5 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| HH-60H/SH-60B FAST TACTICAL IMAGING | | | 54 | 0.5 | | | | | | | | | | | | | | | | |
| MH-60S GPWS CARDS | 74 | 0.4 | 54 | 0.3 | | | | | | | | | | | | | | | | |
| MH-60S/MH-60R GUNNER BELTS | 104 | 0.3 | | | | | | | | | | | | | | | | | | |
| SH-60B/SH-60F/HH-60H GUNNER BELTS | 78 | 0.2 | | | | | | | | | | | | | | | | | | |
| SH-60B/SH-60F/HH-60H LIGHTED RAST PROBE | 1 | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 2.4 | | 0.8 | | | | | | | | | | | | | | | | |
| ECO | | | | * | | | | | | | | | | | | | | | | |
| DATA | | 1.2 | | 0.3 | | 0.3 | | 0.5 | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.1 | | 0.3 | | 0.1 | | 0.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.2 | | 0.4 | | 0.3 | | 0.5 | | | | | | | | | | | | |
| OTHER SUPPORT | | 4.7 | | 0.9 | | 0.4 | | 1.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 128 | 0.5 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 2,138 | 20.4 | 280 | 6.1 | 238 | 3.3 | 125 | 4.4 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Starting in FY05 through FY09 funds in the amount of $6.4m transferred to OSIPs 17-00 ($3.7m) 09-07 ($1.7m), and 01-06 ($1.0m).
4. Gunner Belts, White Harness, New White Harness, High Speed Shaft, Lighted RAST Probe, Fast Tactical Imaging are 0 Level Installs.
5. H-60 Lighted RAST Probe procured for 160 SH-60Bs, 21 SH-60Fs and 21 HH-60Hs.
6. New White Harness will be procured for 138 SH-60Bs, 70 SH-60Fs, 39 HH-60Hs, 81 MH-60S and 7 MH-60R @ 2 per.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: GPWS Cards

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Apr 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Oct 06 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (74) kits | | | | | 74 | 0.3 | | | | | | | | | | | | | | |
| FY 2005 (54) kits | | | | | 54 | 0.2 | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 128 | 0.5 | | | | | | | | | | | | | | |

**2 GPWS Cards per Aircraft

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | 32 | 32 | 32 | 32 | | | | | | | | | | | | | | | | |
| Out | | | | | | 32 | 32 | 32 | 32 | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: MH-60S AMCM/ARMED HELO( OSIP 016-04 )

MODELS OF SYSTEMS AFFECTED: MH-60S TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION: Based on Developmental and Operational testing, Fleet aircraft require modifications to correct identified deficiencies incorporated in production aircraft. These modifications include corrections to Common Cockpit Avionics, Auxiliary Fuel System, High Maintenance Battery, Search and Rescue Equipment, Rotor System and Airframe and Night Vision Device Exterior Lighting. Current retrofit plan is as follows: The Aux Tank A kit will be retrofit on 50 aircraft. Aux Tank B kits (two tanks per kit) are not procured on a one for one basis with the A kit modifications. The Bifilar B Kit and Ultra Low Maintenance Battery will be retrofit as an "O" Level install on 50 aircraft. Night Vision Device Capable Aircraft Lighting will be retrofit on 110 Aircraft.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The MH-60S aircraft completed OPEVAL in Mar 2002; MS III was completed 12 Aug 2002. The validation of the Aux Tank capability was completed in the second quarter of FY 2005.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Bifilar | | | 26 | 1.4 | | | 24 | 1.3 | | | | | | | | | | | | |
| ECP 4000 Retrofit | | | 14 | 3.5 | 8 | 2.0 | 2 | 0.5 | | | | | | | | | | | | |
| NVD KITS | | | | | | | 6 | 0.3 | | | | | | | | | | | | |
| ULMB | | | 20 | 0.4 | 25 | 0.5 | 5 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 4.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AUX TANKS | | | 20 | 2.8 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 0.3 | | 0.1 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 7 | 0.6 | 23 | 1.6 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 80 | 12.6 | 40 | 3.2 | 60 | 3.8 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: ECP 4000 kits

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005 Sep 05 FY 2006 Jan-06 FY 2007 Dec-06

DELIVERY DATE: FY 2005 May 06 FY 2006 Aug 06 FY 2007 Jul 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (14) kits | | | | | 7 | 0.6 | 7 | 0.6 | | | | | | | | | | | | |
| FY 2006 (8) kits | | | | | | | 8 | 0.7 | | | | | | | | | | | | |
| FY 2007 (2) kits | | | | | | | 2 | 0.2 | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (26) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 7 | 0.6 | 17 | 1.4 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 3 | 4 | 4 | 5 | 4 | 4 | | | | | | | | | | | | |
| Out | | | | | | | | 3 | 4 | 4 | 5 | 4 | 4 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: NVD Lighting

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Dec-06

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Jun 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (6) kits | | | | | | | 6 | 0.2 | | | | | | | | | | | | |
| FY 2008 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (104) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 6 | 0.2 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 3 | 3 | | | | | | | | | | | | |
| Out | | | | | | | | | | | | 3 | 3 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: AIR AMBULANCE( OSIP 026-04 )

MODELS OF SYSTEMS AFFECTED: HH-60H, MH-60S TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION: OSD directed the Department of the Navy deploy 6 Air Ambulance helicopters to operate jointly with US Army units in support of OIF commencing November 2005. The OSIP also requires additional modified aircraft (1) of each series for training of follow-on deploying personnel and to account for attrition. This modification configures MH-60S and HH-60H helicopters with improved communication and navigation capabilities (COMM/NAV), aircraft survivability equipment (ASE), and enhancements for improved aircraft supportability in the desert environment (Desert Kit). This modification also adds medical capabilities required for Aeromedical patient movement while maintaining critical levels-of-care (MEDEVAC). The COMM/NAV initiatives include the following: MH-60S Aircraft Operating Program (AOP) software upgrade to provide Military Grid Reference System (MGRS) formats, MH-60S GPS anti-jam system (GAS-1), HH-60H ARC-210 non-recurring engineering support for program schedule advancement , and Blue Force Tracker (BFT) and Advanced Wireless Intercom System (AWICS) for both HH-60H and MH-60S aircraft. The ASE initiatives for MH-60S provide a stand-alone self-defense suite (SDS) including ALQ-144AV, ALE-47, AAR-47V2 and a ballistic protection system (BPS). The ASE initiative also upgrades the current HH-60H SDS to the AAR47V2 version. Further ASE improvements include development of upturned exhaust provision to reduce aircraft vulnerability. The Desert Kit enhancements for both HH-60H and MH-60S include: Engine Inlet Barrier Filtration (EIBF), Auxiliary Power Unit (APU) Inlet Barrier filtration (AIBF), ALQ-144 filtration kits, Infra-Red (IR) anti-collision lights, rotor-blade sand-erosion mitigation engineering, and dynamic component supportability improvements. The MEDEVAC mission enhancements for both aircraft include platform unique Litter Management Systems (LMS) to support up to six littered patients, Medical Equipment Sets (MES) and MES storage systems (MSS) to provide enroute patient care, and Fast Tactical Imaging (FTI) systems to provide advanced patient condition and vital data and for MH-60S aircraft uniquely, an Extended Range Fuel System (ERFS).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Air ambulance modifications are encompassed within nine separate Engineering Change Proposals. Interim technical directives have been issued and as of 29 June 2005, 3 of 8 aircraft have completed modification, while 2 additional aircraft are currently in modification status. System integration, installation, and aircraft modification scheduled to be completed 31 July 2006.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ASE (MH-60S) | 4 | 1.2 | | | | | | | | | | | | | | | | | | |
| DESERT KIT (MH-60S, HH-60H) | 8 | 0.3 | | | | | | | | | | | | | | | | | | |
| MEDEVAC KIT (MH-60S, HH-60H) | | | 8 | 0.4 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 4.0 | | 2.8 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ASE (MH-60S, HH-60H) | 8 | 1.5 | | | | | | | | | | | | | | | | | | |
| COMM/NAV (MH-60S, HH-60H) | 4 | 0.1 | 8 | 0.3 | | | | | | | | | | | | | | | | |
| DESERT (MH-60S, HH-60H) | 8 | 0.9 | 8 | 0.1 | | | | | | | | | | | | | | | | |
| MEDEVAC (MH-60S, HH-60H) | | | 8 | 1.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | 0.2 | | 0.4 | | | | | | | | | | | | | | | | |
| DATA | | 0.3 | | 0.5 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | * | | 0.1 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.1 | | 2.9 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 44 | 0.4 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 32 | 9.5 | 76 | 9.0 | | | | | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: HH-60H MODIFICATION TITLE: Air Ambulance (OSIP 26-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 Feb 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Jun 05 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (12) kits | | | 12 | 0.1 | | | | | | | | | | | | | | | | |
| FY 2005 (4) kits | | | 4 | * | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 16 | 0.2 | | | | | | | | | | | | | | | | |

Install Kits/Equipment installing by Contractor Field modification include (by category):
ASE: AAR47V2 B-kits (4)
DESERT: EIBF/AIBF A/B kits (8)
MEDEVAC: LMS A-kits (4)

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | 5 | 11 | | | | | | | | | | | | | | | | | | | | |
| Out | | | | 5 | 11 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: Air Ambulance (OSIP 26-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 Feb 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Jun 05 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (20) kits | | | 20 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2005 (8) kits | | | 8 | 0.1 | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 28 | 0.3 | | | | | | | | | | | | | | | | |

Install Kits/Equipment installing by Contractor Field modification include (by category):
COMM/NAV: Gas-1 B-kits (4)
ASE: A and B kits (8)
DESERT: EIBF/AIBF A/B kits (8)
MEDEVAC: LMS A-kits, ERFS B-kits (8)

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | 14 | 14 | | | | | | | | | | | | | | | | | | | | |
| Out | | | | 14 | 14 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: MH-60R ARMED BLOCK I UPGRADE( OSIP 001-06 )

MODELS OF SYSTEMS AFFECTED: MH-60R TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION: Global Positioning System (GPS) Selective Availability Anti-Spoofing Module (SAASM) is a set of functional security requirements used to design and build a secure GPS receiver. Use of GPS SAASM security architecture significantly enhances the pilot's ability to use the GPS Precise Positioning, velocity, time, and other GPS sensor information in all environments. Current retrofit plan reflects: (5) LRIP I, (4) LRIP II, and (3) LRIP III MH-60R aircraft. Link 16 supports the exchange of C4I data that is required to operate in a Joint and NATO Battlespace. Link 16 is designed to support the exchange of formatted data messages rather than the "raw" data exchange that the existing C-Band Hawklink and Tactical Common Data Link (TCDL), now KUBAND, will support. KUBAND is an update to the current C-Band Hawklink that allows for an increase in bandwidth with the ability to transfer additional data. It is compliant with the Assistant Secretary of Defense C3I Letter dated 18 October 2004 directing commonality and interoperability between all DOD airborne sensor platforms and meets the mandate for a common standard for transmission of unprocessed sensor information. The Integrated Mechanical Diagnostic System (IMDS) will improves aircraft performance and vibration parameters in flight. GPS SAASM, Link 16, KUBAND and IMDS are a part of the MH-60R Block Upgrades as specified in the evolutionary acquisition strategy for the program.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: SAASM Joint Common System (JCS) Instruction CDCSI 6140.01, issued 15 November 1998, mandates that all Precise Position Systems (i.e. Global Positioning System (GPS) used on the MH-60R) users field SAASM-based user equipment and use black keys after 01 October 2002.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| GPS SAASM KITS | | | | | 2 | 0.2 | 2 | 0.2 | | | | | | | | | | | | |
| IMDS KITS | | | | | | | 2 | 0.3 | | | | | | | | | | | | |
| KUBAND KITS | | | | | | | 1 | 1.0 | | | | | | | | | | | | |
| LINK-16 KITS | | | | | 4 | 3.0 | 2 | 1.5 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 2 | 1.2 | 6 | 1.8 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | 8 | 4.4 | 13 | 4.9 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
2. Funds in the amount of $1.0M transferred from OSIP 09-03 for FY07-FY09.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60R MODIFICATION TITLE: Armed Block I Upgrade - GPS SAASM, Link 16, KUBAND, and IMDS Kits

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY 2005 FY 2006 Dec-05 FY 2007 Dec-06

DELIVERY DATE: FY 2005 FY 2006 Sep 06 FY 2007 Sep 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (6) kits | | | | | 2 | 1.2 | 4 | 1.2 | | | | | | | | | | | | |
| FY 2007 (7) kits | | | | | | | 2 | 0.6 | | | | | | | | | | | | |
| FY 2008 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (2) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (11) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 2 | 1.2 | 6 | 1.8 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | 2 | 2 | 2 | | 2 | | | | | | | | | | | | |
| Out | | | | | | | | | 2 | 2 | 2 | | 2 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: H-60 HVBSS( OSIP 008-07 )

MODELS OF SYSTEMS AFFECTED: SH-60B, HH-60H TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION: Maritime Interdiction by Helicopter Visit, Board, Search, and Seizure (HVBSS) tactics require Naval Helicopters be compatible with rapid insertion of Special Warfare forces. This OSIP adds hardpoints to the overhead cabin structure for improved special warfare seating and cabin configurations for (72) SH-60B aircraft by Depot level modification. Modification by O-level to access existing aircraft hardpoints for mounting of Fastrope Rapid Insertion Extraction System (FRIES) hardware will also be conducted for all (145) SH-60B aircraft. Fast Tactical imaging systems kits (25) will be procured for improved battlefield situational awareness for Command and Direct Action elements. Close Air Support improvements for accompanying assault SH-60B and HH-60H helicopters include (20) M240 7.62mm machine gun kits, replacing aging M-60D gun systems. Additional area suppression close air support improvements include (22) GAU-17 weapon kits and 22 corresponding depot level airframe modifications to integrate the GAU-17 into the remaining HH-60H aircraft. Precise weapon aiming required to employ crew-served weapons in close quarters require the coincident procurement of (42) aiming laser systems to kit with each weapon.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: GAU-17/A , M-240D, Fast Tactical Imaging (FTI) SYSTEMS, IZLID-200 aiming laser, FRIES are systems integrated on other H-60 helicopter platforms and are off-the-shelf procurements. Lead time for all systems 30-90 days. TD for HH-60H modifications (AAC 993) signed 30 June 1994. AFC for O-level and D-level mods for SH-60B require 3 month development including prototyping.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| GAU-17 CABIN MOD (HH-60H) | | | | | | | 22 | 0.7 | | | | | | | | | | | | |
| CONFIG CABIN MOD (SH-60B) | | | | | | | 72 | 0.7 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 0.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AIMING LASER (IZLID-200) (SH-60B,HH-60H) | | | | | | | 42 | * | | | | | | | | | | | | |
| FRIES (SH-60B) | | | | | | | 145 | * | | | | | | | | | | | | |
| GAU-17 (HH-60H) | | | | | | | 22 | 0.6 | | | | | | | | | | | | |
| M240 (SH-60B) | | | | | | | 20 | 0.3 | | | | | | | | | | | | |
| FAST TACTICAL IMAGING (SH-60B, HH-60H) | | | | | | | 20 | 0.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | 0.1 | | | | | | | | | | | | |
| DATA | | | | | | | | 0.2 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 0.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 94 | 0.7 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | 437 | 4.0 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: SH-60B, HH-60H

MODIFICATION TITLE: CONFIGURATION CABIN MOD AND GAU-17 CABIN MOD OSIP 08-07

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 ____ FY 2006 ____ FY 2007 Nov-06

DELIVERY DATE: FY 2005 ____ FY 2006 ____ FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (94) kits | | | | | | | 94 | 0.7 | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 94 | 0.7 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 31 | 31 | 32 | | | | | | | | | | | | |
| Out | | | | | | | | | | | 31 | 31 | 32 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: MH-60S WARFIGHTING CAPABILITY( OSIP 009-07 )

MODELS OF SYSTEMS AFFECTED: MH-60S TYPE MODIFICATION: OPERATIONAL ENHANCEMENT

DESCRIPTION / JUSTIFICATION: Provides for the retrofit of AMCM Block 2B (AMNS & OASIS Only) & 3B Link-16 airframe provisions into 60 Block 2A aircraft and Armed Helo Block 3A weapons airframe provision into 31 Block 2A aircraft. OSIP also provides retrofit of Active Vibration Control (AVC) in 127 MH-60S aircraft and Integrated Mechanical Diagnostics (IMDS) in 110 MH-60S aircraft to achieve a common configuration for vibration and IMD. IMD provides cockpit voice recorder and flight data recorder (CVRFDR) capability as well as the building block for Military Flight Operations Quality Assurance (MFOQA) capability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The MH-60S Aircraft completed MS III in August 2002.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AVC | | | | | | | 5 | 1.0 | | | | | | | | | | | | |
| Block 2B | | | | | | | 5 | 0.8 | | | | | | | | | | | | |
| Block 3A | | | | | | | 5 | 1.9 | | | | | | | | | | | | |
| Block 3B | | | | | | | 5 | 0.4 | | | | | | | | | | | | |
| IMDS | | | | | | | 5 | 0.8 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 9.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 1.0 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 0.5 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | 25 | 15.8 | | | | | | | | | | | | |

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Funds in the amount of $1.7M transferred from OSIP 09-03 starting FY07-FY09.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: Block 3A A-Kit

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Dec-06

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Oct-07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (7) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: Block 2B and 3B A-Kits

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Dec-06

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Oct-07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (36) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: IMDS A-Kits

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Dec-06

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Oct-07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (17) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (11) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (14) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (3) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (50) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: MH-60S MODIFICATION TITLE: AVC A-Kits

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Nov-07

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Feb-07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (17) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (11) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (14) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (3) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (77) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET<br>P-40 | DATE:<br>February 2006 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | P-1 ITEM NOMENCLATURE<br>**H-1 SERIES** |
| Program Element for Code B Items: | Other Related Program Elements |

| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 126.0 | A | 10.0 | 7.8 | 7.4 | 6.0 | 7.6 | 7.8 | 8.0 | 83.8 | 264.4 | |

There are 84 H-1N's in the UH configuration and 11 H-1N's in the HH configuration for a total of 95. The UH-1N provides command and control and combat assault support under day/night and adverse weather conditions. Additional UH-1N missions include special operations support, controls/coordination/guidance o supporting fire and aeromedical evacuation. The overall goal of the modifications budgeted in FY2007 is to eliminate safety hazards, remedy obsolescence and maintain significant mission capability until the planned retirement date. The HH configured aircraft provide local civilian and military search and rescue support, as well as augmenting Department of Homeland Security resources. Additionally, the UH-1Y will upgrade the current Navigational Thermal Imaging System (NTIS starting in FY09.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 031-92 UH-1 NTIS | 91.7 | 8.2 | 7.6 | 7.2 | 5.8 | 7.4 | 7.5 | 7.7 | 83.8 | 227.4 |
| 018-98 H-1N SAFETY UPGRADES | 28.0 | 1.8 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | | 31.1 |
| TOTAL | 119.7 | 10.0 | 7.8 | 7.4 | 6.0 | 7.6 | 7.8 | 7.9 | 83.8 | 258.5 |

Notes: Asterisk indicates amounts less than $50K

FY05 OSIP 018-98 includes $1.6M of Title IX supplemental funding.

FY06 OSIP 031-92 includes a Congressional Add for the BRITE Star.

Exhibit P-3a

MODIFICATION TITLE: UH-1 NTIS( OSIP 031-92 )

MODELS OF SYSTEMS AFFECTED: UH-1N/UH-1Y, ASSOCIATED TRAINERS AND LABS TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: Operational Requirements Document (ORD) AAS-51 states that the UH-1N requires a Navigational Thermal Imaging System (NTIS) to provide the U.S. Marine Corps with a night/day warfighting capability in the NOE/smoke/dust/haze environment. This capability reduces th safety risk by allowing the aircrew to see and avoid flight obstructions and locate targets that might not be visible with the naked eye or night vision goggles. The AN/AAQ-22 is a low cost, stabilized system which provides the required capability in the form of high quality real time imagery displayed into the U aircraft cockpit. The NTIS System is comprised of 5 components; Turret FLIR Unit (TFU), Central Electronics Unit (CEU), Hand Control Unit (HCU), Thermal Image Recorder (TIR), and the Video Display Unit (VDU). The NTIS is installed only in the UH-1N aircraft by AFC 278. The system also includes a Las Range Finder (LRF) to determine the range to landmarks, targets, and tactical points of interest. Beginning FY97, the NTIS was upgraded from 1st generation to 3rd generation Forward Looking Infrared (FLIR) technology. The COTS Star SAFIRE modification consisted of a 3-5 micron focal plane array detec an eye safe LRF and new optics. Additionally, the NTIS will be upgraded with a new Thermal Imaging Recorder (TIR) with mount and a Flat Panel Display replacement for the VDU due to a fire hazard. Additional modifications to the NTIS are being incorporated in order to add a COTS Laser Designator/Laser Pointer capability (BRITE Star I/II). Laser designator capability is a threshold ORD requirement. The Laser Pointer capability is an ORD objective requirement. BRITE Star I/II "P" Kits are "O" level installed mission kits. Additional reliability and maintenance upgrades to the NTIS components and VDU will a investigated. BRITE Star Block II integration into the UH-1Y will start in FY09.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The NTIS is a commercial off-the-shelf (COTS) item. MIL-STD-810C testing is complete. DT-III testing was completed in the fourth quarter 1994 and FOT&E was completed in the second quarter of FY1996. Additional testing occurred durir fourth quarter 1998 for the NTIS upgrade. The completion of COTS post Milestone III testing of Laser Designator (BRITE Star) completed in FY03, intial fielding of BRITE Star I FY04 and continues in FY05. BRITE Star II development completes FY06, Test FY06, fielding scheduled FY07.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC-278 A KIT (CONTRACTOR) | 105 | 2.6 | | | | | | | | | | | | | | | | | | |
| AFC-334 TIR | 105 | 0.1 | | | | | | | | | | | | | | | | | | |
| AFC-364 (Brite Star) | 100 | 0.4 | 5 | * | | | | | | | | | | | | | | | | |
| BRITE Star II/UH-1Y | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 3.4 | | | | | | 0.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| BRITE STAR I | 20 | 12.2 | 12 | 6.9 | 6 | 5.0 | | | | | | | | | | | | | | |
| BRITE STAR II | | | | | | | 6 | 5.6 | | | | | | | | | | | | |
| FLAT PANEL DISPLAY | 90 | 0.8 | | | | | | | | | | | | | | | | | | |
| NTIS SYSTEM (GFE) | 84 | 29.7 | | | | | | | | | | | | | | | | | | |
| NTIS UPGRADE | 90 | 29.3 | | | | | | | | | | | | | | | | | | |
| TIR (GFE) | 107 | 1.0 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.6 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | | | | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 0.6 | | 0.1 | 1 | 0.8 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 1.1 | 2 | * | 1 | 0.1 | 4 | 0.1 | | | | | | | | | | | | |
| ILS | | 0.4 | | 0.1 | | | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.6 | | 1.1 | | 1.7 | | 1.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 205 | 3.5 | 5 | * | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 908 | 91.7 | 24 | 8.2 | 8 | 7.6 | 10 | 7.2 | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K.
2. FY04 NTIS Upgrade Procurement realigned to BRITE Star to continue FY03 BRITE Star Congressional Add.
3. FY06 NTIS includes a Congressional Add for the BRITE Star.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: UH-1 SERIES MODIFICATION TITLE: UH-1 NTIS( OSIP 031-92 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: INSTALLED AT INTER-SERVICE SDLM AND BY CONTRACTOR

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005 Dec 04 FY 2006 N/A FY 2007 N/A

DELIVERY DATE: FY 2005 Dec 04 FY 2006 N/A FY 2007 N/A

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (205) kits | 205 | 3.5 | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (5) kits | | | 5 | * | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (42) kits | | | | | | | | | | | | | | | | | 42 | 2.3 | | | | |
| TO COMPLETE | 205 | 3.5 | 5 | * | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 |
| In | 205 | | | 2 | 3 | | | | | | | | | | | | | | | | | | | |
| Out | 176 | 29 | | 2 | 3 | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

System (NTIS) to provide the U.S. Marine Corps with a night/day warfighting capability in the NOE/smoke/dust/haze environment. This capability reduces th
gles. The AN/AAQ-22 is a low cost, stabilized system which provides the required capability in the form of high quality real time imagery displayed into the U
ermal Image Recorder (TIR), and the Video Display Unit (VDU). The NTIS is installed only in the UH-1N aircraft by AFC 278. The system also includes a Las
eration to 3rd generation Forward Looking Infrared (FLIR) technology. The COTS Star SAFIRE modification consisted of a 3-5 micron focal plane array detec
ay replacement for the VDU due to a fire hazard. Additional modifications to the NTIS are being incorporated in order to add a COTS Laser Designator/Laser
irement. BRITE Star I/II "P" Kits are "O" level installed mission kits. Additional reliability and maintenance upgrades to the NTIS components and VDU will a

mplete. DT-III testing was completed in the fourth quarter 1994 and FOT&E was completed in the second quarter of FY1996. Additional testing occurred durir
fielding of BRITE Star I FY04 and continues in FY05. BRITE Star II development completes FY06, Test FY06, fielding scheduled FY07.


4

Exhibit P-3a

MODIFICATION TITLE: H-1N SAFETY UPGRADES( OSIP 018-98 )

MODELS OF SYSTEMS AFFECTED: HH-1N/UH-1N TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: Operational Requirements Document (ORD) AAS-51 requires that the following safety shortfalls be corrected. The HH/UH-1N helicopter fleet was designed in the 1960s, introducted in the 1970s and are projected to remain in the Department of the Navy inventory until FY2020. This program is designed to address safety issues, such as mishap casual factors associated with maintaining an older type model series aircraft. This safety upgrade program replaced the Tail Drive System (TDS). A COTS/NDI Improved Torque Indicator System will be added to provide a digital torque display to the aircrew to improve low power margin situational awareness. Tailboom Strake technology will be investigated to improve performance and reduce tailboom fatigue. Additionally, the overspeed Aural Alert Unit (AAU) will be modified. A modification to the CH-8500 Vibration Analysis Support Equipment (VASE) will also be needed. A COTS replacement Rotor Brake Quill (RBQ) assembly, component failure due to an obsolete design pose a significant risk to all aircrew, and Low Maintenance Battery (LMB) will be incorporated into all HH/UH-1N aircraft. Included in this OSIP is the requirement to correct the safety deficiencies of the Defensive Armament System (DAS): machine guns, carriages, mounts, and associated equipment. Improvements and enhancements to airframe Night Vision Goggle (NVG) compatability along with communications equipment for external agency interaction during the Global War on Terrorism. A/C fatigue life issues and mitigating technology will be investigated to improve performance and mitigate aircraft fatigue. Incorporation of Crash Attenuating Seat Cushions, to reduce the likelyhood of back injuries to pilots during hard landings or crashes, will be also investigated for modification. Cockpit ergonomic/safety issues including movement of critcal controls, Heads Up Display (HUD's), CDNU and GPS Upgrades (CCP) (radio select, etc.). Implementation of improved armor technologies including, but not limited to, transparent armor and armored panels, damage tolerant windscreen tech's, reduce maintenance efforts (such as scratch covers, damaged tolerant windscreens and tear-a-way covers, etc.) and mid-air collision avoidance systems wi also be accomplished and crew weapons mounts.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: These upgrades are proprietary, non-development items used in other BHTI produced military and FAA certified commercial helicopters.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A-1 Kits (TDS) | 131 | 6.3 | | | | | | | | | | | | | | | | | | |
| Aural Alert Unit (AAU) Kits | 103 | Note #2 | | | | | | | | | | | | | | | | | | |
| GAU-17 Gun Control Unit | 79 | 0.3 | | 1.0 | | | | | | | | | | | | | | | | |
| IDAS Mounts | 110 | 0.7 | | | | | | | | | | | | | | | | | | |
| M240 Refielding (mount & ejection tube) | 210 | 0.1 | | | | | | | | | | | | | | | | | | |
| Rotor Brake Quill | 136 | 1.6 | | | | | | | | | | | | | | | | | | |
| Smart Torque Indicator | 268 | 3.3 | | | | | | | | | | | | | | | | | | |
| Tailboom Strakes | 119 | 4.0 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 1.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Aural Alert Unit (AAU) Equipment | 103 | 0.6 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.2 | | | | | | | | | | | | | | | | | | |
| ECO | | * | | | | | | | | | | | | | | | | | | |
| DATA | | 0.7 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 4 | 1.3 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | 100 | 0.4 | | 0.6 | | | | | | | | | | | | | | | | |
| ILS | | 1.0 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.6 | | 0.2 | | 0.2 | | 0.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 229 | 0.8 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 1,592 | 28.0 | | 1.8 | | 0.2 | | 0.2 | | | | | | | | | | | | |

Notes:

1. Asterisk indicates amount less than $50K
2. Aural Alert Unit Installation Kit Cost included in Aural Alert Unit Installation Equipment cost.

sed in other BHTI produced military and FAA certified commercial helicopters.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **EP-3 SERIES** | | | | | |
| Program Element for Code A Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 539.7 | A | 46.4 | 43.4 | 56.8 | 46.8 | 58.7 | 94.8 | 104.9 | 250.1 | 841.6 | |

DESCRIPTION: This line item funds modifications to the EP-3E aircraft. The EP-3E is a land based, long range aircraft, with electronic intercept devices for detection and tracking of enemy RADARs and radios. The overall goal of the modifications budgeted in FY2007 is to procure the remaining Force Net (Spiral 1) kits. The Spiral 1 kit improves operational capability and aircrew productivity by expanding the ESM frequency coverage, applying state-of-the-art signal exploitation/processing/display techniques, expanding direction finding (DF) frequency coverage, off-board classified communication, and expanding special signal processing capability. Spiral 2 kits provide for improved information fusion/decision-making capabilities. Spiral 3 procurement begins in FY10 with Low Band Communication System Upgrades, Environmental Control System (ECS) Upgrades and the replacement of aging and obsolescence aircraft antenna arrays. FY2007-FY2011 includes ECO funding to replace subsystem obsolescence to ensure EP-3E viability until aircraft recapitalization. FY2009-FY2011 continues funding of the Quick Response Capabilities (QRCs) ability to respond to emerging threats.

Research and Development is funded with National Security Agency (NSA) Defense Cryptologic Program (DCP) funds and ASDC41 Defense Airborne Reconnaissance Program (DARP). This OSIP provides the procurement tail for RDT&E funds from the Navy's Advanced Signal Recognition line (PE 0305206N). The NSA RDT&E line for the Navy Airborne Sensor System Improvements funds sensor improvements with application for the EP-3E. DARP RDT&E funds are responsible for the development and acquisition of EP-3E sensors, data links, data relays and ground stations to achieve and maintain interoperability with Defense-wide airborne reconnaissance assets. Active PAA inventory is 12 with a BAA inventory of 4 for a total of 16 aircraft with the completion of OSIP 29-00. Funds budgeted in FY2007 are to continue Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD). The EP-3E has an average service life of 29.5 years. The EP-3E service life will be managed through Special Structural Inspection - Kits (SSI-Ks) program and QRC/ECO/Obsolescence ECP funding in this OSIP beyond the JMOD Common Configuration (JCC) baseline Full Operational Capability (FOC) in FY2013.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 011-01 JSAF MODIFICATION (JMOD) | 152.5 | 33.4 | 43.4 | 56.8 | 46.8 | 58.7 | 94.8 | 104.9 | 250.1 | 841.6 |
| 014-05 EP-3E INFO OPERATIONS | | 13.0 | | | | | | | | 13.0 |
| TOTAL | 152.5 | 46.4 | 43.4 | 56.8 | 46.8 | 58.7 | 94.8 | 104.9 | 250.1 | 854.6 |

FY-05 Emergency Supplemental Appropriation for Defense (ESAD) in the amount of $13.0 initiated OSIP 14-05.

NOTE: FY2006 does not match the P-1 due to technical error.
FY2006 shown above includes $22.5M of Title IX funding.

Exhibit P-3a

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01)

MODELS OF SYSTEMS AFFECTED: EP-3E TYPE MODIFICATION: Operational Improvement / Modernization

DESCRIPTION / JUSTIFICATION: The EP-3E JASA Modification (JMOD) Program began as an upgrade to the capabilities of the Sensor System Improvement Program (SSIP) configuration of the EP-3E. This OSIP responds to Operational Requirement Document (ORD) #571-78-01 and the CAPSTONE ORD (CAF-002-88). JMOD was designed as an evolutionary acquisition program consisting of three block mods. MOD 1 updated the EP-3E infrastructure, improved auto-ESM with the Story Finder system, incorporated Joint Signal Processor (JSP), incorporated SSIP corrections, and incorporated Quick Response Capabilities (QRC) (including the SINCGAR upgrade and IR Strobes modifications) into JMOD. MOD 2 was planned to incorporate a low band capability which improves special collection capability and add the Common Data Link (CDL) allowing the EP-3E to serve as a network-centric airborne SIGINT collection element capable of sharing data with ground, air, and ship-based operators. MOD 3 would have incorporated precision targeting. The Baseline Update to MOD 1 was required to ensure the JMOD TKI aircraft had the same baseline configuration and capabilities as SSIP and QRC fleet assets. The twelve EP-3E aircraft (PAA) will be managed through Special Structural Inspections (SSI-Ks) beyond JMOD Baseline Full Operational Capability (FOC).

Beginning in FY03 and continuing through FY07, the EP-3E platform received funding for COMINT/ELINT upgrades. The FY05-FY07 COMINT/ELINT upgrades funding has been incorporated into the JMOD Baseline.

In FY05, the JMOD Baseline was restructured from the original JMOD program that brings all EP-3E platforms into a single configuration (JMOD Common Configuration (JCC)) on an accelerated timetable. JCC Baseline incorporates 60% of JMOD 1 components into the existing EP-3E backbone and accelerates critical elements of JMOD 2 and 3 via spirals. JMOD Baseline also includes various Quick Reaction Capabilities and OEF/OIF installs and addresses mission avionics obsolescence. This OSIP was restructured to fund the acceleration of JMOD 2 and JMOD 3 capabilities by three years by incorporating their capabilities into the ForceNet and Sea Strike spirals. ForceNet capabilities were procured via Spiral 1 in FY05 and FY06. Sea Strike capabilities were procured via Spiral 2 in FY06 and continuing in FY07. The final Spiral 2 kit will be procured in FY10. FY04 funding procured existing backbone required to bring the five conversion aircraft to the configuration necessary to receive JMOD Baseline. This OSIP addresses a PAA of 12 EP-3E aircraft. The QRC funds in FY09 through FY11 address mission avionics system obsolescence and emerging requirements from national and theater commanders in response to rapidly evolving Global War On Terrorism (GWOT) threats.

This OSIP included the following Congressional Plus-ups: in FY02 for Hyperwide/Deltawing and VME Tuners; in FY03 for Radio Frequency Distribution (RFD) Upgrades, JMOD 1 Upgrades and SIGINT Tuner; in FY04 for JMOD Upgrades ($10.8M), RFD Upgrades ($2.4M), VME Tuners ($7.7M), and Tactical Communications Systems Upgrades ($3.4M); and in FY05 for JMOD Sustainment/Common Configuration Initiative ($5.4M).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Increment 1 (the JMOD baseline configuration) Milestone III decision occurred 4th Qtr FY04 based on completion of OT, demonstration of Key Performance Parameters (KPP's) and a DT Assist on the Story Finder subsystem. The ForceNet Spiral 1 LRIP decision was approved as planned on 06 June 2005 based on successful completion of its Design Readiness Reviews (DRR) and applicable contractor aircraft flight tests. Spiral 1 is scheduled for OT during the 2nd Qtr of FY06 with the associated Full Rate Production decision and contract award scheduled for the 3rd Qtr of FY06. Spiral 2 Engineering Development efforts are underway with its associated LRIP decision planned for 4th Qtr in FY07 and associated contract award planned for the 1st Qtr in FY08.. Spiral 2 OT is planned for 3rd Qtr of FY08 with its associated Full Rate Production decision in the 4th Qtr of FY08 and associated contract award planned for the 1st Qtr of FY09. Spiral 3 efforts will begin with LRIP procurement in FY2010.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | 11.9 | | 9.5 | | 27.5 | | 35.0 | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| BLOCK MOD 1 | 3 | 4.0 | | | | | | | | | | | | | | | | | | |
| COMINT/ELINT UPGRADES | | 1.9 | | | | | | | | | | | | | | | | | | |
| IR STROBES MOD | 10 | 0.2 | | | | | | | | | | | | | | | | | | |
| JMOD Common | 5 | 4.5 | 4 | 4.4 | | | | | | | | | | | | | | | | |
| JMOD Common SP1 | | | | | 6 | 4.8 | | | | | | | | | | | | | | |
| JMOD Common SP2 | | | | | | | | | | | | | | | | | | | | |
| JMOD Common SP3 | | | | | | | | | | | | | | | | | | | | |
| RFD Upgrades | 4 | 0.4 | | | | | | | | | | | | | | | | | | |
| SINCGARS UPGRADE | 16 | 0.4 | | | | | | | | | | | | | | | | | | |
| VME TUNER | 2 | 1.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 4.7 | | | | 1.1 | | 2.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| BLOCK MOD 1 | 3 | 11.1 | | | | | | | | | | | | | | | | | | |
| COMINT/ELINT UPGRADES | | 7.2 | | | | | | | | | | | | | | | | | | |
| DERF SIGINT | | 14.2 | | | | | | | | | | | | | | | | | | |
| IR STROBES MOD | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| JMOD 1 Upgrades | 5 | 10.8 | | | | | | | | | | | | | | | | | | |
| JMOD Common | 5 | 3.5 | 4 | 12.0 | | | | | | | | | | | | | | | | |
| JMOD Common SP1 | | | | | 6 | 25.0 | | | | | | | | | | | | | | |
| JMOD Common SP2 | | | | | | | | | | | | | | | | | | | | |
| JMOD Common SP3 | | | | | | | | | | | | | | | | | | | | |
| QRC | | | | | | | | | | | | | | | | | | | | |
| RFD Upgrades | 9 | 4.4 | | | | | | | | | | | | | | | | | | |
| SINCGARS UPGRADE | 16 | 0.6 | | | | | | | | | | | | | | | | | | |
| Tactical Comms System Upgrade | 16 | 3.4 | | | | | | | | | | | | | | | | | | |
| VME TUNER | 6 | 10.0 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 24.0 | | 2.9 | | | | 3.1 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| JCC Obsolescence | | | | | | | | 14.8 | | | | | | | | | | | | |
| DATA | | 3.8 | | | | 0.2 | | 1.4 | | | | | | | | | | | | |
| TRAINING EQUIP | | 4.2 | | 0.6 | | | | 1.4 | | | | | | | | | | | | |
| SUPPORT EQUIP | | 1.8 | | | | | | 0.2 | | | | | | | | | | | | |
| ILS | | 6.8 | | 2.5 | | 2.7 | | 2.3 | | | | | | | | | | | | |
| OTHER SUPPORT | | 24.9 | | 9.1 | | 6.9 | | 5.8 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 5 | 4.6 | 2 | 1.9 | 2 | 2.7 | 6 | 25.8 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 115 | 152.5 | 4 | 33.4 | 6 | 43.4 | | 56.8 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than 51K
2. Two JMOD 1 kits were funded under the Conversion OSIP (29-00) and one JMOD 1 kit was funded as a R&D TKI.
3. FY09 through FY11 QRC quantities vary due to obsolescence and emergent threat requirements.
4. FY07-11 Install costs include various ECO/QRC that are not parts of JCC Spiral install costs.
5. FY05 JMOD Common quantity of 4 shown are JCC Spiral 1 LRIP assets procured under JMOD Common line.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E Mission Avionics Systems

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01) JMOD Installations/JMOD Common Spiral 1

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Commercial Contractor Installation

ADMINISTRATIVE LEADTIME: 9 Months

JCC PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005: 4/05 FY 2006: 6/06 FY 2007:

DELIVERY DATE: FY 2005: 9/05 FY 2006: 11/06 - *** FY 2007:

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (9) kits * / ** | 6 | 2.7 | | | | | | | | | | | | | | | | | | |
| FY 2005 (4) kits | | | 2 | 1.9 | 2 | 2.7 | | | | | | | | | | | | | | |
| FY 2006 (6) kits | | | | | | | 6 | 19.7 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 6 | 2.7 | 2 | 1.9 | 2 | 2.7 | 6 | 19.7 | | | | | | | | | | | | |

* 1 JMOD 1 kit was funded as a R&D TKI.

** Three (3) JMOD kits installed into Conversion aircraft (OSIP 29-00). Installation efforts for FY04 Congressional Plus Ups will be concurrent with the JMOD Baseline installations or Special Structural Inspections (SSIs).

*** Installation induction and duration varies dependent on concurrent PDM/SSI sustainment modification efforts.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 6 | | | | 2 | | | 2 | | | 2 | 2 | 2 | | | | | | | | | | | | |
| Out | 6 | | | | | | | | 2 | | 2 | | 2 | 2 | 2 | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E Mission Avionics Systems

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01) JMOD Installations/JMOD Common Spiral 2

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Commercial Contractor Installation

ADMINISTRATIVE LEADTIME: 3 Months

JCC PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005: ____ FY 2006: ____ FY 2007: ____

DELIVERY DATE: FY 2005: ____ FY 2006: ____ FY 2007: ____

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E Mission Avionics Systems

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01)
JMOD Installations/JMOD Common Spiral 3

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Commercial Contractor Installation

ADMINISTRATIVE LEADTIME: 3 Months

JCC PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: ____ FY 2006: ____ FY 2007: ____

DELIVERY DATE: FY 2005: ____ FY 2006: ____ FY 2007: ____

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (6) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (7) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E Mission Avionics Systems

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01) Quick Response Capabilities (QRC) and Obsolescence Installations

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months

JCC PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 2005: ____ FY 2006: ____ FY 2007: ____

DELIVERY DATE: FY 2005: ____ FY 2006: ____ FY 2007: ____

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Note: FY09 through FY11 QRC quantities vary due to obsolescence and emergent threat requirements.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E Mission Avionics Systems

MODIFICATION TITLE: EP-3E Joint Airborne SIGINT Architecture (JASA) Modification Program (JMOD) (OSIP 11-01) ECO (Obsolescence ECPs)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months

JCC PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: 12/06

DELIVERY DATE: FY 2005: FY 2006: FY 2007: 2/76

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | 6.2 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | 6.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: EP-3E INFORMATION OPERATIONS ( OSIP 014-05 )

MODELS OF SYSTEMS AFFECTED: EP-3E TYPE MODIFICATION: Operational Improvement / Modernization

DESCRIPTION / JUSTIFICATION: This program responds to the current, immediate demand for electronic attack capabilities on the EP-3E in the Global War on Terrorism (GWOT) and has been funded via the FY05 Emergency Supplemental Appropriation for Defense (ESAD).

This EP-3E Information Operations program will procure the necessary modifications for ten EP-3E aircraft to selectively conduct offensive intelligence operations. This requirement was originally identified by COMFIFTHFLT (N3//11715332OCT02) for Operation Enduring Freedom (OEF). The requirement was further identified by CMNF- Iraq (021101ZNOV04) and endorsed by USCENTCOM (CCJ3-P//091619ZNOV04), USNAVCENT (111332ZNOV04) and CFFC (122012ZNOV04).

The AN/USQ-146 procurement follows a prototype installation of this capability that was installed to meet an urgent requirement for an airborne Intelligence Operations capability during Operation Iraqi Freedom (OIF). Due to its great success in the operational theater, the Joint Chiefs of Staff (JCS) requested the capability to be installed on all EP-3E aircraft in the USCENTCOM theater. This program procures ten units for aircraft installation.

The AN/USQ-146 will be used to fill the emergent requirement to the electronic attack to expedite the capability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Contract award is scheduled for 4th quarter FY05. Delivery will occur ten months after contract award and installation two weeks thereafter.

DT III testing will occur on the first delivered unit in 3rd quarter FY06. Each unit will require TEMPEST testing after installation.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AN/USQ-146 | | | 10 | 0.7 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 0.5 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AN/USQ-146 | | | 10 | 8.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | 1.3 | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.5 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | 0.2 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.2 | | | | | | | | | | | | | | | | |
| ILS | | | | 0.2 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 0.6 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 4 | 0.7 | 6 | * | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 24 | 13.0 | 6 | | | | | | | | | | | | | | | |

* FY05 Emergency Supplemental Appropriation for Defense (ESAD) funds 6 installs.

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: EP-3E

MODIFICATION TITLE: EP-3E Information Operations (OSIP 14-05)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Government Field Team Modification

ADMINISTRATIVE LEADTIME: 10 Months

PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY 2005: Aug-05 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: Jun-06 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( 10 ) kits | | | 4 | 0.7 | 6 | * | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 4 | 0.7 | 6 | * | | | | | | | | | | | | | | |

* FY05 Emergency Supplemental Appropriation for Defense (ESAD) funds 6 installs.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 2 | 2 | 2 | 2 | 2 | | | | | | | | | |
| Out | | | | | | | | 2 | 2 | 2 | 2 | 2 | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **P-3 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 2413.8 | A | 167.5 | 189.4 | 204.6 | 180.9 | 243.5 | 221.3 | 131.4 | 1928.5 | 5680.9 | |

DESCRIPTION:
This line item funds modifications to P-3 aircraft. The P-3 Orion is a 4 engine, long-range maritime surveillance aircraft which performs Under Sea Warfare (USW), Surface Warfare (SW) and Intelligence, Surveillance and Reconnaissance (ISR) in support of battle group and littoral operations in direct support of Sea Shield and Forcenet pillars of Seapower 21.

As a direct result of the 7 June 2003 Maritime Patrol and Reconnaissance (MPRA) offsite, the P-3 Sustainment Bridge was approved by the CNO. This resulted in P-3C inventory levels being reduced from 227 to 148. The foundational element of this bridge was optimizing the P-3 fleet by investing manpower, AVDLR and Flying Hour Program (FHP) savings into the resulting smaller P-3 force to produce a better productive ratio of aircraft. This investment allows the P-3 force to be smaller, more ready and more capable. A key investment area is P-3 Mod Programs. Funding for these programs support a multitude of obsolescence, structural, sustainment, training/logistics and warfighting capability upgrades that are key in keeping the P-3 platform relevant through Multi-mission Maritime Aircraft (MMA) Initial Operational Capability (IOC) of 2013 and until the MMA Full Operational Capability (FOC) of 2019. P-3 aircraft mods funded under the APN line have heavily supported recent and current Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF) and Global War on Terrorism (GWOT) operations. Without key technology upgrades and aggressive obsolescence management, P-3 aircraft will be unable to meet Fleet Response Plan (FRP) requirements, leaving key Seapower 21 capabilities in support of the Combatant Commanders at risk. This P-3 Sustainment Bridge provides a roadmap for the next 15 years, ensuring sufficient P-3 assets for Fleet and Combatant Commanders to fulfill operational and training/readiness requirements.

The overall goal of the modifications budgeted in FY2007 is to continue: USQ-78 improvements (part of Update III), comm/nav/surveillance weapon system improvements, upgrades/modifications to airframe components/systems, safety improvements and key system obsolescence upgrades. Total P-3C aircraft inventory will be 148 by the end of FY-07. The P-3C has an average service life of 29.5 years. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 080-84 UPDT III BLK UPGRDE | 1071.1 | 30.0 | 38.9 | 54.1 | 27.5 | 17.2 | 17.2 | | 21.7 | 1277.6 |
| 053-85 CRITICAL SYSTEMS IMPROVEMEN | 32.3 | 3.0 | 2.2 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | | 40.0 |
| 029-94 ASUW IMPROV. PROG. | 1124.2 | 79.6 | 28.8 | 8.2 | 5.5 | 48.3 | 49.7 | 60.2 | 1636.0 | 3040.5 |
| 013-01 CNS-ATM | 46.4 | 12.7 | 21.4 | 20.6 | 15.5 | 14.7 | 13.8 | 8.1 | 6.0 | 159.2 |
| 004-04 P-3 READINESS IMPROVEMENT | 14.5 | 24.3 | 34.2 | 43.7 | 42.1 | 46.2 | 39.7 | 35.5 | 264.7 | 544.8 |
| 005-05 SSI-K | | 18.0 | 63.8 | 74.3 | 87.6 | 114.3 | 98.5 | 25.2 | | 481.8 |
| 005-07 PROJECT K-0416 | | | | 2.7 | 2.3 | 2.4 | 2.1 | 2.1 | | 11.6 |
| TOTAL | 2288.5 | 167.5 | 189.4 | 204.6 | 180.9 | 243.5 | 221.3 | 131.4 | 1928.5 | 5555.6 |

Note: FY2006 does not match the P-1 due to technical error.
Note: FY2006 reflects $18.4 of Title IX funding.

Exhibit P-3a

MODIFICATION TITLE: UPDT III BLK UPGRDE( OSIP 080-84 )

MODELS OF SYSTEMS AFFECTED: P-3C TYPE MODIFICATION: Operational Improvement

DESCRIPTION / JUSTIFICATION:
The Update III Block Upgrade program provides an improved P-3 anti-submarine warfare (ASW) capability required to neutralize current and emerging littoral and open ocean submarine threats in support of Sea Shield/Sea Power 21.

The program initially establishes a common configuration of AN/USQ-78(V) acoustic processors, acoustic data recorders, sonobuoy receivers, and other acoustic subsystem components for all P-3C Mission Aircraft. Follow-on program efforts continuously modernize this common acoustic subsystem baseline to address COTS component obsolescence, accomplish periodic COTS technology insertions, and provide functional improvements via an Air Acoustic Rapid COTS Insertion (Air ARCI) process. These common configuration efforts and follow-on technology insertion efforts are accomplished with AN/USQ-78(V) upgrade funding and with follow-on P-3C ASW Maritime Improvement Program (AMIP) funding.

FY06 thru FY10 objectives of the Update III Block Upgrade Program are to provide improved ASW capability through: (1) Processing growth to meet emerging under-sea threats and Fleet ASW requirements for multi-static acoustic sensor processing (e.g., Extended Echo Ranging [EER] family), active acoustic sensor processing (e.g., DICASS) and passive acoustic sensor processing (e.g., ADR, DIFAR); (2) Improved hardware sustainability through replacement of obsolete system components with current generation COTS hardware; (3) Increased digital sonobuoy monitoring capacity and improved acoustic subsystem maintainabilty via integration and incorporation of software defined sonobuoy receiver technology; (4) on-going non-recurring engineering to support continuous technology insertion and COTS obsolescence mitigation on a regular cycle via an ARCI process.

The Update III Common Configuration program is based on Decision Coordinating Paper W-080-AS and the Program Management Plan #0526 serial 902D/6U324405. Up to 100 aircraft and 5 trainers to be modified to a common baseline configuration, then continuously upgraded via an ARCI process.

FY-02 SEI Congressional Plus-up provides associated NRE, 8 units, and installs as initial integration of new capability.
FY-02 Congressional Plus-up provides NRE for Acoustic Data Recorder-Digital (ADR-D) input enhancements, a prototype digital model (EDM) and 31 ADR-D upgrade kits.
FY-03 Congressional Plus-up provides associated NRE for 8 units to upgrade and install (ALR-95).
FY-03 Congressional Plus-up provides 10 additional ADR-D kits with some NRE for obsolescence issues.
FY-03 Congressional Plus-up for USQ-78(V) will be used to upgrade existing USQ78(V) hardware for technical refresh and End of Life (EOL) requirements.
FY-04 Congressional Plus-up upgrades the ADR tape transport to a hard drive configuration for reliability and maintainability.
FY-05 Congressional Plus-up upgrades the ADR tape transport to a hard drive configuration for reliability and maintainability.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
The original Update III variant received approval for limited production in December 1983 and December 1984. Approval for full production was received in January 1986. The basis of the currently planned common configuration is an AN/USQ-78(V) variant that received approval for full production in February 2002.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| Note: FY2006 reflects $18.4 of Title IX | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| BLOCK MOD UPGRADE KITS | 8 | 9.9 | | | | | | | | | | | | | | | | | | |
| MK-50 KITS | 147 | 4.0 | | | | | | | | | | | | | | | | | | |
| PRIOR YEAR KITS | 434 | 72.5 | | | | | | | | | | | | | | | | | | |
| USQ-78A KITS | 55 | 9.3 | 14 | 3.0 | 17 | 4.0 | 14 | 3.3 | | | | | | | | | | | | |
| USQ78 SONO RECEIVER | | | | | | | 30 | 0.4 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 64.5 | | | | | | 2.4 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ADR/DRR | 75 | 19.0 | 6 | 1.5 | | | | | | | | | | | | | | | | |
| AN/ASH-33/RDSS | 221 | 24.3 | | | | | | | | | | | | | | | | | | |
| BLOCK 1C HARPOON | 148 | 5.1 | | | | | | | | | | | | | | | | | | |
| CHRDS | 4 | 0.1 | | | | | | | | | | | | | | | | | | |
| COMMON CONFIG EQUIP | 36 | 65.4 | | | | | | | | | | | | | | | | | | |
| CP-2044/ASQ UPGRADE (CPU) | 121 | 64.1 | | | | | | | | | | | | | | | | | | |
| DASD/DASD DOCKS | 222 | 1.8 | 28 | 0.3 | 34 | 0.4 | 28 | 0.3 | | | | | | | | | | | | |
| ESEI (ALR-95) | | 2.9 | | | | | | | | | | | | | | | | | | |
| LESPA | | 19.0 | | | | | | | | | | | | | | | | | | |
| PEP | 25 | 6.4 | | | | | | | | | | | | | | | | | | |
| PRIOR YEAR EQUIPMENT | 1,181 | 349.7 | | | | | | | | | | | | | | | | | | |
| SEI CARDS | | 2.1 | | | | | | | | | | | | | | | | | | |
| SYSTEM CONTROLLER | | | 28 | 5.0 | 25 | 4.4 | | | | | | | | | | | | | | |
| USQ-78 Tech Insertion | | | | | | | 105 | 2.9 | | | | | | | | | | | | |
| USQ-78A/CHRDS | 55 | 85.6 | 14 | 12.5 | 17 | 18.2 | 14 | 14.6 | | | | | | | | | | | | |
| USQ-78V PROCESSOR UPGRADE | 25 | 1.3 | | | | | | | | | | | | | | | | | | |
| USQ78 SONO RECEIVER UPGRADE | | | | | | | 30 | 12.0 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 70.0 | | 4.3 | | 6.1 | | 14.0 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 16.8 | | | | | | 0.5 | | | | | | | | | | | | |
| TRAINING EQUIP | 43 | 17.6 | | | 5 | 3.0 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 1.6 | | | | | | | | | | | | | | | | | | |
| ILS | | 3.6 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 121.0 | | 2.9 | | 2.0 | | 2.6 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 543 | 33.2 | 5 | 0.5 | 8 | 1.0 | 12 | 1.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 3,343 | 1071.1 | 95 | 30.0 | 106 | 38.9 | 233 | 54.1 | | | | | | | | | | | | |

NOTES:
1. Asterisk indicates amount less than 51K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Update III Block Upgrade (OSIP 80-84) USQ-78V

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished on-site by contractor field team

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 19 Months

CONTRACT DATES: FY 2005: 03/05 FY 2006: 03/06 FY 2007: 03/07

DELIVERY DATE: FY 2005: 10/06 FY 2006: 10/07 FY 2007: 10/08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (55) kits | 42 | 2.4 | 5 | .5 | 8 | 1.0 | | | | | | | | | | | | | | |
| FY 2005 (14) kits | | | | | | | 12 | 1.3 | | | | | | | | | | | | |
| FY 2006 (17) | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (14) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 42 | 2.4 | 5 | .5 | 8 | 1.0 | 12 | 1.3 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 42 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | | | | | | | | |
| Out | 42 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | | | | | | | | |

Note: FY2006 r

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Completions same as inductions; one week effort.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Update III Block Upgrade (OSIP 80-84) SONO RECEIVER

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished on-site by contractor field team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: 11/06

DELIVERY DATE: FY 2005: FY 2006: FY 2007: 12/07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (30) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (10) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

** FY10 funds 20 installs in FY11.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

Note: FY2006 r

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Completions same as inductions; one week effort.

Exhibit P-3a

MODIFICATION TITLE: CRITICAL SYSTEMS IMPROVEMENTS( OSIP 053-85 )

MODELS OF SYSTEMS AFFECTED: P-3C TYPE MODIFICATION: Readiness

The purpose of this program is to provide the requisite funding to implant various minor cost effective changes to critical P-3 weapon systems. These changes are essential to the operation of the aircraft and/or it's mission systems, but are not currently being addressed by an existing aircraft modification program. The changes can be either airframe, avionic, or procedures.

SINGLE ARMAMENT CONTROL PANEL (SACP) ECP JAX P3-649: This ECP replaces the existing 9622068 Wing Jettison/Special Weapon Control Box and the A-393 Pilot's Armament Control Box in 228 P-3C aircraft with the PEU-196/A Pilot's Armament Control Box.

KAPTON WIRING REPLACEMENT MOD ECP JAX P3-610: This ECP replaces the Kapton Wiring in the wing trailing edge of P-3C aircraft. The initial program will modify 97 P-3C aircraft.

STRUCTURAL DATA RECORDING SYSTEM (SDRS) ECP SEI 196-1A: The SDRS (ASH-37) CCB was approved in June of 1994 to install the ASH-37 in all P-3C aircraft. The funding to procure and install the kits was provided by OSIP (5-93). The funding for SDRS ended in FY95. The task covered in this OSIP include SDRS Pubs, SDRS data reduction and installation of last 20 kits.

STANDBY ATTITUDE INDICATOR (PEANUT GYRO) ECP BFGAAS ID-1481A/A-25583-48: This ECP modifies the P-3C Standby Attitude Indicator (Peanut Gyro) to operate with a DC power vice an AC power. This modification is planned for 148 P-3C's and 3 trainers.

E-J RECEIVER MOD AN/ALR-66 B(V)3 ECP LITTON 970: The AN/ALR-66B(V)3 ECP upgrades certain components of the AN/ALR-66A(V)3 ESM to improve system performance, including the E-J Amplifier Receivers, CD Amplifier Receivers, Processor Interface and Computer Converter. The effort under this OSIP supports the modification and certain RIM in support of AN/ALR-66 B(V)3 installs on 145 P-3C aircraft, 6 operational trainers and 10 test bench installations.

APS-115 FEEDBALL MODIFICATION ECP CUBIC 2509-02F3: This ECP are liability and performance improvement to the APS-115 radar feedball. The unmodified feedballs are susceptible to burning out which decreased the APS 115 sensitivity (or caused failure) and made the feedball incompatible with the AN/ALR-66 B(V)3 ESM system, which uses the feedball as the center channel receiver. This modification will be installed in all APS-115 equipped aircraft. This modification affects 90 P-3C aircraft.

P-3 PILOT/COPILOT/ PLANE CAPTAIN SEAT MODIFICATION FOR THE MA-16 INERTIA REEL ECP JAX P3-519: MA-1 and MA-2 Inertia Reels are no longer available in the supply system and further procurement is anticipated. This ECP provides a kit to modify 50 Pilot/Copilot/Plane Captain seats to install the MA-16 Inertia Reel as a substitute for the MA-1/2 to meet outstanding requirements.

Follow-On Kapton Wiring Replacement (Wheel Wells) ECP TBD: The Kapton wiring in the landing gear retraction housing areas (wheel wells) will require replacement due to weather exposure. Initial program will modify 18 P-3C aircraft.

Digital Autopilot : An FY-02 Congressional Plus-Up provided funding to perform NRE, procure, install and test a Digital Autopilot in the P-3C as a replacement for the ASW-31 system, which is highly unreliable and costly to maintain. An FY-03 Congressional Plus-Up provided funding to procure and install four Digital Autopilot systems.

Aircraft Health Monitoring System (AHMS) ECP N/A: An FY-02 Congressional Plus-Up provided NRE funding to develop an AHMS for the P-3C which can monitor critical aircraft systems (engines, structures, electrical, avionics) to identify items that require maintenance or repair. An FY-03 Congressional Plus-up provided funding to test an AHMS in a P-3C. An FY-04 Congressional Plus-up provided funding to modify the prototype AHMS aircraft to test electronic engine instruments. An FY-05 Congressional Plus-Up provided funding for three additional pre-production AHMS kits and installs. FY-06 Congressional Plus-Up provided funding to expand AHMS functionality to include propulsion system monitoring.

N Infra-Red (IR) Strobes ECP JAX P3-776: FY-02 Defense Emergency Response Fund (DERF) funding for 100 IR strobes for P-3 aircraft.

Hub Integrated Power Switching System/Propeller Balancing Monitoring System (PBMS): An FY-04 Congressional Plus-Up provided funding to install and test a new propeller hub mounted system for power generation (HIPSS). An FY-05 Congressional Plus-Up provided funding to install and test a system for in-flight measurement of propeller vibration and balancing (PBMS).

Oxygen System Modification ECP JAX P3-833: Replaces the Aluminum Manifold Check Valve, Filler Check Valve and Pressure Reducing Valve with Monel Parts. O-Level Install. Models of systems affected: P-3C and P-3 Derivatives (EP-3, Special Projects, NP-3, VP-3 and UP-3).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
The changes identified are minor and do not require approval for full production.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AHMS | 1 | 0.1 | 3 | 0.2 | | | | | | | | | | | | | | | | |
| APS-115 FEEDBALL MOD | 90 | 1.6 | | | | | | | | | | | | | | | | | | |
| DIGITAL AUTOPOLIT | 5 | 0.1 | | | | | | | | | | | | | | | | | | |
| EJ RECEIVER MOD | 145 | ** | | | | | | | | | | | | | | | | | | |
| INFRA_RED (IR) STROBES | 100 | 0.5 | | | | | | | | | | | | | | | | | | |
| KAPTON WIRE MOD (WHEEL WELL) | | | | | | | 18 | 0.3 | | | | | | | | | | | | |
| KAPTON WIRE MOD (WINGS) | 97 | 1.0 | | | | | | | | | | | | | | | | | | |
| MA-16 INERTIAL REEL MOD KITS | 50 | 0.1 | | | | | | | | | | | | | | | | | | |
| OXYGEN SYSTEM MOD KIT | 177 | 0.9 | | | | | | | | | | | | | | | | | | |
| PBMS KIT | 20 | 0.1 | | | | | | | | | | | | | | | | | | |
| PRIOR YEAR KITS | 171 | 7.6 | | | | | | | | | | | | | | | | | | |
| SACP | 228 | 0.7 | | | | | | | | | | | | | | | | | | |
| STANDBY (PEANUT) GYRO MOD | 71 | 0.4 | 15 | 0.1 | 27 | 0.2 | 19 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 5.5 | | 0.9 | | 0.9 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AHMS Equipment | 1 | ** | 3 | 0.3 | | 0.2 | | | | | | | | | | | | | | |
| DIGITAL AUTOPILOT | 5 | 1.1 | | | | | | | | | | | | | | | | | | |
| INFRA-RED (IR) STROBES | 100 | 0.5 | | | | | | | | | | | | | | | | | | |
| PBMS KIT | 20 | 0.3 | 1 | * | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| STANDBY GYRO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 2.3 | | 0.3 | | 0.1 | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.3 | | * | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.3 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.2 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 5.2 | | 1.0 | | 0.7 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | 3.8 | | 0.1 | | 0.2 | | 0.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 1,281 | 32.3 | 22 | 3.0 | 27 | 2.2 | 37 | 0.9 | | | | | | | | | | | | |

NOTE:
1. Asterisk indicates amount less than 51K

** AHMS Equipment on Loan from Contractor.
NOTE: Oxygen System installs are "O" level.

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C

MODIFICATION TITLE: Critical Systems Improvement (OSIP 53-85) Kapton Wiring (Wheel Well)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005: ____ FY 2006: ____ FY 2007: 12/06

DELIVERY DATE: FY 2005: ____ FY 2006: ____ FY 2007: 05/07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (1) kit | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (18) kits | | | | | | | 18 | 0.2 | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 18 | 0.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 9 | 9 | | | | | | | | |
| Out | | | | | | | | | | | | 9 | 9 | | | | | | | | |

| Note: FY2006 | FY 2010 | | | | FY 2011 | | | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| In | | | | | | | | | | | | |
| Out | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Critical Systems Improvement (OSIP 53-85) HIPSS/PBMS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005: 12/04 FY 2006: ____ FY 2007: ____

DELIVERY DATE: FY 2005: 04/05 FY 2006: ____ FY 2007: ____

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (20) kits | ** | 0.4 | | | 20 | ** | | | | | | | | | | | | | | |
| FY 2005 (1) kit | | | 1 | * | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | ** | 0.4 | 1 | * | 20 | ** | | | | | | | | | | | | | | |

* Asterisk indicates amount less than 51K

** FY 04 Congressional Add for HIPPS was to fund twenty (20) installs. Current plan is to reprogram funding for PBMS kits and installs.

** FY 05 Congressional Add for PBMS to fund NRE, prototype and testing.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | 1 | | | | 10 | 10 | | | | | | | | | | | | |
| Out | | | | 1 | | | | 10 | 10 | | | | | | | | | | | | |

Note: FY2006

| | FY 2010 | | | | FY 2011 | | | | To | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | | | |
| In | | | | | | | | | | | | |
| Out | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Critical Systems Improvement (OSIP 53-85) AHMS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 2005: 01/05 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: 05/05 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (1) kits * | 1 | .1 | | | | | | | | | | | | | | | | | | |
| FY 2005 (3) kit | | | 2 | .1 | 1 | ** | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 1 | .1 | 2 | .1 | 1 | ** | | | | | | | | | | | | | | |

* FY 03 Congressional Add for AHMS provide funding to install and test an AHMS in a P-3C

** FY 05 Congressional Add for AHMS funds three (3) additional pre-production kits and installs.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1 | | | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| Out | 1 | | | 1 | 1 | 1 | | | | | | | | | | | | | | | |

| Note: FY2006 | FY 2010 | | | | FY 2011 | | | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| In | | | | | | | | | | | | |
| Out | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Critical Systems Improvement (OSIP 53-85) Infra-Red (IR) Strobes

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (100) kits * | 85 | .9 | 3 | * | 6 | .1 | 6 | .1 | | | | | | | | | | | | |
| FY 2005 () kit | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 85 | .9 | 3 | * | 6 | .1 | 6 | .1 | | | | | | | | | | | | |

* FY 02 DERF Funded 100 Kits and 100 Installs for IR Strobes. Only 85 of 100 kits installs were completed with FY-02 DERF funding due to A/C availability. Remaining IR Strobe installs will be completed with current year funding.

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 85 | | | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | | | | | | | | |
| Out | 85 | | | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | | | | | | | | |

| Note: FY2006 | FY 2010 | | | | FY 2011 | | | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| In | | | | | | | | | | | | |
| Out | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Critical Systems Improvement (OSIP 53-85) Structural Data Recorder Set

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits ** | 8 | 0.2 | | | 1 | * | | | | | | | | | | | | | | |
| FY 2005 () kit | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 8 | 0.2 | | | 1 | * | | | | | | | | | | | | | | |

* Asterisk indicates amount less than 51K

** Nine SDRS kits procured under P-3 OSIP 5-93 and equipment procured under Common Avionics OSIP 14-92.

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 8 | | | | | 1 | | | | | | | | | | | | | | | |
| Out | 8 | | | | | 1 | | | | | | | | | | | | | | | |

| Note: FY2006 | FY 2010 | | | | FY 2011 | | | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | |
| In | | | | | | | | | | | | |
| Out | | | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: ASUW IMPROV. PROG.( OSIP 029-94 )

MODELS OF SYSTEMS AFFECTED: P-3C TYPE MODIFICATION: Operational Improvement

DESCRIPTION / JUSTIFICATION:
The Navy's Maritime Patrol and Reconnaissance Force (primarily P-3C Orion aircraft) provides three deliverables to Navy and joint commanders worldwide: Undersea warfare; Intelligence Surveillance, and Reconnaissance; and Maritime Surveillance Targeting. The ASUW Improvement Program meets the Navy's requirement to rapidly provide a significant increase in the current P-3's ability to perform Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASUW), Over-the-Horizon Targeting (OTH-T), and Command, Control, Communications, Computers, and Intelligence (C4I).The target aircraft for this modification are P-3C Update II/II.5 and Update III. This modification focuses on improving the weapon system's capability for standoff targeting and classification. Significant sensor improvements and capabilities are provided by the APS-137D (V) 5 imaging radar, the Advanced Imaging Multi-Spectral Sensor (AIMS) electro optical/infrared system, and ESM upgrades that include Specific Emitter Identification (SEI), SEI Utility Improvement, ALR-95, improved pulse processing, and DF accuracy. C4I is improved with a DAMA Satcom radio suite and Multi-mission Advanced Tactical Terminal (MATT) that can receive the Officer in Tactical Command Information Exchange System (OTCIXS), and other fleet broadcasts. Additional planned Phased Capability Upgrade (PCU) improvements include the Maritime Surveillance Targeting (MST) capability as well as Tactical Common Data Link (TCDL). Survivability enhancements include the ALE-47/AAR-47 missile warning countermeasures, explosive suppressant foam, and small circular area of probability weapon system (Maverick, SLAM, SLAM-ER, and provisions to carry and launch all Mil Std 1760 Digital weapons. Additional funding in FY1995 and FY1996 was utilized to meet an urgent fleet requirement to upgrade 17 Pre-AIP aircraft with Maverick armament control kits. FY2005 Emergency Supplemental Appropriation for Defense (ESAD) funds were provided to procure and install additional TCDL systems. The P3 AIP operational requirement document (ORD) is Ser # 355-88-94.
Future Engineering Change Proposals (ECPs) are anticipated for the existing systems including APS 137 radar; ARPPD;AIMS EO/IR; MATT; Link 16; Global Communication & Control System - Maritime (GCCS-M); Precision Targeting Workstation (PTW); OASIS;Video Distribution Controller (VDC); Tactical Mission Computer; ALR-95 ESM; DAMA Satcom; MST; TCDL; Recorders; ALE47/AAR47; Digital Stores Management System (DSMS); all weapon systems including missiles, torpedoes, mines, as well acoustic system upgrades. The ASW Maritime Improvement Program will provide for Mission System Sustainment, ASW improvements and improved C41 systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
This modification makes maximum use of previously developed subsystems.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFC A-KIT | 70 | 80.4 | 1 | 1.6 | | | | | | | | | | | | | | | | |
| AFC B-KIT | | 280.9 | | 6.7 | | | | | | | | | | | | | | | | |
| PRE-AIP ARMAMENT KIT (LORAL) | 9 | 2.4 | | | | | | | | | | | | | | | | | | |
| PRE-AIP ARMAMENT KIT (PAX RIVER) | 8 | 10.5 | | | | | | | | | | | | | | | | | | |
| TORPEDO DIRECTED SEARCH A KIT | | 0.6 | | 1.9 | | | | | | | | | | | | | | | | |
| Note: FY2006 reflects $18.4 of Title IX | | 0.6 | | 1.9 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 36.5 | | 1.0 | | 5.4 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ADVANCED IRDS | | 4.0 | | | | | | | | | | | | | | | | | | |
| AMIP EQUIPMENT | | | | | | 1.6 | | | | | | | | | | | | | | |
| GFE SENSORS AND AVIONICS | | 266.6 | | 14.8 | | | | | | | | | | | | | | | | |
| HIGH RESOLUTION DIGITAL | | | | | | 1.0 | | | | | | | | | | | | | | |
| PHASED CAPABILITY UPGRADE | | 22.5 | | 5.2 | | 4.8 | | | | | | | | | | | | | | |
| PHASED CAPABILITY | | | | 5.9 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 65.2 | | 11.2 | | 4.3 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| Digital Stores Management System | | 5.3 | | | | 0.3 | | | | | | | | | | | | | | |
| SLAM-ER | | 17.6 | | | | | | | | | | | | | | | | | | |
| DATA | | 16.6 | | 0.4 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 55.1 | | 1.8 | | 4.4 | | 7.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | | 13.1 | | 0.2 | | | | | | | | | | | | | | | | |
| ILS | | 14.4 | | 2.6 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 120.2 | | 8.6 | | 1.2 | | 1.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 68 | 111.7 | 21 | 15.8 | 1 | 5.9 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 155 | 1124.2 | 22 | 79.6 | 1 | 28.8 | | 8.2 | | | | | | | | | | | | |

NOTE:
1. Asterisk indicates amount less than 51K
2. FY05 Congressional Add funds eleven (11) TCDL installs. FY05 ESAD funds eight (8) TCDL installs.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Anti-Surface Warfare (ASUW) Improvement Program (OSIP 29-94)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation through FY98 funded turn-key operation. Installation for FY99 and out years funded in the year they occur.

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 16 Months

CONTRACT DATES: FY 2005: 10/04 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: 02/06 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (70) kits **/***/**** | 68 | 111.7 | 2 | 12.6 | | | | | | | | | | | | | | | | |
| FY 2005 (1) kit | | | | | 1 | 5.9 | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (73) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 68 | 111.7 | 2 | 12.6 | 1 | 5.9 | | | | | | | | | | | | | | |

** FY 02 Congressional Add funds two (2) installs.
*** FY 03 Congressional Add funds one (1) install.
**** FY 04 Congressional Add funds one (1) install.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 68 | | 1 | 1 | | | 1 | | | | | | | | | | | | | | |
| Out | 64 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | | | | | | | |

Note: FY2006 reflects $18.4 of Title IX funding.

| | FY 2010 | | | | FY 2011 | | | | To | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | | |
| In | | | | | | | | | | | |
| Out | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: Anti-Surface Warfare (ASUW) Improvement Program (OSIP 29-94) TCDL Installations

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 19 Months

CONTRACT DATES: FY 2005: 05/05 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: 11/06 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (19) kit ** | | | 19 | 3.2 | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (73) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 19 | 3.2 | | | | | | | | | | | | | | | | |

** FY05 Congressional Add funds eleven (11) TCDL installs. FY05 ESAD Supplemental funds eight (8) TCDL installs.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | 5 | 5 | 5 | 4 | | | | | | | | |
| Out | | | | | | | | | | | 5 | 5 | 5 | 4 | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | |
| In | | | | | | | | | | | |
| Out | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: CNS-ATM( OSIP 013-01 )

MODELS OF SYSTEMS AFFECTED: P-3C/EP-3 TYPE MODIFICATION: Operational Improvement/Safety

DESCRIPTION / JUSTIFICATION:

P-3C aircraft have a requirement for a Communications, Navigation and Surveillance/ Air Traffic Management (CNS/ATM) upgrades to meet expanding CNS/ATM requirements and ensure global access to commercial airspace. The CNS/ATM requirements consist of various avionics systems upgrades/replacements which currently include; VHF radio with 8.33 kHz channel spacing, IFF (Mode S and Mode 5), protected ILS/VOR with FM Immunity, and an upgraded GPS to provide increased navigation accuracy (RNP5, BRNAV, RVSM) with the capability to be upgraded to meet Automatic Dependent Surveillance Broadcast (ADS-B), Next Generation Communications (NEXCOM), Joint Precision Approach and Landing System (JPALS), Precision Area Navigation (PRNAV), Navigation Warfare (NAVWAR) and Joint Tactical Radio System (JTRS) requirements . Successful integration of any or all of these capabilities, and any future Federal Aviation Administration (FAA) or International Civil Aviation Organization (ICAO) mandates, requires an Flight Management System (FMS) which provides for growth and interface flexibility. This OSIP provides non-recurring engineering for the development of the CNS/ATM architecture for the P-3 aircraft which includes a FMS/CDU, digital air data computer (DADC) and an Electronic Flight Display Systems (EFDS). This modification program provides CNS/ATM upgrades for 148 P-3C aircraft and 16 EP-3 aircraft. RNAV/ MODE S Kit (JAX ECP P3-828) includes FMS/CDU 7000, Digital Air Data Computer, APX-118 (IFF/MODE S) and RINU-G. EFDS (JAX ECP P3-491 ), MMR (JAX ECP P3-826 & ARC-210 (8.33KHz) (Jax ECP P3-827) are Stand-Alone ECPs that will be installed separately or in conjunction with RNAV/Mode S ECP.

CPRG FRP approved by CNO directed 148 P-3C aircraft.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Acquisition Strategy approved 21 Nov 03/ACAT IVM. Preliminary Design Review for RNAV Mode S completed 16 Jun04. Begin transition of ARC-210 (8.33kHz) Radio and MLR-2020 (P-ILS) form Roll-On/Roll-Off to permanent installation in FY-05 (PMA-209 funded).

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| 8.33kHz VHF RADIO | 28 | 0.1 | | *** | | *** | | *** | | | | | | | | | | | | |
| ARC-197/210 KIT | 28 | 0.5 | | | | | | | | | | | | | | | | | | |
| EFDS | 79 | 1.5 | 18 | 1.5 | 23 | 1.9 | 22 | 1.9 | | | | | | | | | | | | |
| MLR-2020 (P-ILS) | 75 | 0.3 | | *** | | *** | | *** | | | | | | | | | | | | |
| MLR-2020 (PERMANENT) | 20 | 0.1 | | | | | | | | | | | | | | | | | | |
| RNAV/MODE S | 1 | 0.4 | 18 | 1.5 | 23 | 2.0 | 23 | 2.1 | | | | | | | | | | | | |
| Note: FY2006 reflects $18.4 of Title IX | | 8.1 | | | | 0.4 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| 8.33kHz (ARC-210) | 54 | 1.8 | | *** | | *** | | *** | | | | | | | | | | | | |
| APX-118 (IFF/MODE S) | 5 | 0.1 | | *** | | *** | | *** | | | | | | | | | | | | |
| DIGITAL ADC | 6 | 0.2 | 38 | 0.8 | 60 | 1.3 | 56 | 1.3 | | | | | | | | | | | | |
| EFDS | 82 | 2.4 | 20 | 2.7 | 31 | 4.4 | 25 | 3.6 | | | | | | | | | | | | |
| FMS/CDU 7000 (3 per A/C | 17 | 0.7 | 57 | 2.4 | 96 | 4.2 | 84 | 3.7 | | | | | | | | | | | | |
| MLR-2020 (P-ILS) (2 PER A/C) | 148 | 6.1 | | *** | | *** | | *** | | | | | | | | | | | | |
| MLR-2020A-1 UPGRADES | 40 | 0.2 | | *** | | *** | | *** | | | | | | | | | | | | |
| RINU-G (RNP 4/5) (2 PER A/C) ** | 8 | 0.1 | | *** | | *** | | *** | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 13.1 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.7 | | 0.5 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 3 | *** | 8 | 0.7 | 10 | 1.3 | 8 | 1.0 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 1.1 | | 0.3 | | 0.4 | | 0.6 | | | | | | | | | | | | |
| OTHER SUPPORT | | 7.9 | | 1.5 | | 2.1 | | 2.0 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1 | 1.2 | | 0.8 | 18 | 3.4 | 23 | 4.6 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 595 | 46.4 | 159 | 12.7 | 261 | 21.4 | 241 | 20.6 | | | | | | | | | | | | |

NOTE:
1. Asterisk indicates amount less than 51K

** 60 EFDS funded under GPS OSIP 28-92
*** APX-118 and RINU-G funding in FY04 is for TKIs
**** Beginning in FY-04, PMA-209 will fund NRE, Kits, equipment and installs for ARC-210 VHF radio, APX-118, MLR-2020 and RINU-G

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C/EP-3/Derivatives MODIFICATION TITLE: CNS/ATM (OSIP 13-01) RNAV MODE S

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Team

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 2005: 3/05 FY 2006: 1/06 FY 2007: 01/07

DELIVERY DATE: FY 2005: 12/05 FY 2006: 10/06 FY 2007: 10/07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (1) kits | 1 | .2 | | .2 | | | | | | | | | | | | | | | | |
| FY 2005 (18) kits | | | | | 18 | 1.7 | | | | | | | | | | | | | | |
| FY 2006 (23) kits | | | | | | | 23 | 2.5 | | | | | | | | | | | | |
| FY 2007 (23) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (25) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (30) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (31) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (7) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (6) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 1 | .2 | | .2 | 18 | 1.7 | 23 | 2.5 | | | | | | | | | | | | |

P-3C Prototype NRE, prototype kit and prototype installation funded in FY02 with Congressional Plus-Up.

RNAV MODE S installs begin in FY05 and consist of FMS/CDU 7000, Digital Air Data Computer (DADC/ADDU), CXP and RINU-G. CXP & RINU-G Funded by PMA-209.

** 7 Installs Funded in FY11, Installed In FY12

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & PRIOR | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1 | | | | | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | | | | |
| Out | 1 | | | | | | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | | | |

Note: FY2006 reflects $18.4 of Title IX funding.

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C/EP-3/Derivatives MODIFICATION TITLE: CNS/ATM (OSIP 13-01) MLR-2020-A-1 Multimode Receivers (MMRs)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Team

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (75) kits | 60 **** | ** | 15 | * | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | ** | 15 | * | | | | | | | | | | | | | | | | |

NOTE: Will conduct stand-alone MLR-2020-A-1 (MMR) installations in FY01-05 to meet immediate requirements. The remainder of MLR-2020-A-1 (MMR) will be procured and installed by PMA-209.

* Asterisk indicates amount less than 51K

** O-Level - Roll-On/Roll-Off, No Install Cost

**** FY03 Congressional Plus up funds 21 installs in FY04.

**** Includes the 14 FY04 Congressional Add.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & PRIOR | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 60 | 4 | 4 | 4 | 3 | | | | | | | | | | | | | | | | |
| Out | 60 | 4 | 4 | 4 | 3 | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C/EP-3/Derivatives MODIFICATION TITLE: CNS/ATM (OSIP 13-01) Electronic Flight Display Systems (EFDS)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Team

ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: 6/05 FY 2006: 6/06 FY 2007: 6/07

DELIVERY DATE: FY 2005: 2/06 FY 2006: 2/07 FY 2007: 2/08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (79) kits | 72 ** | .9 | 7 | .5 | | | | | | | | | | | | | | | | |
| FY 2005 (18) kits | | | | | 18 | 1.8 | | | | | | | | | | | | | | |
| FY 2006 (23) kits | | | | | | | 23 | 2.1 | | | | | | | | | | | | |
| FY 2007 (22) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (7) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (6) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (6) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 72 | .9 | 7 | .5 | 18 | 1.8 | 23 | 2.1 | | | | | | | | | | | | |

Note: Will conduct stand-alone EFDS installations in FY01-05 to meet immediate requirements. EFDS will be installed concurrent with CNS/ATM Architecture installs beginning in FY05.

* Prior year EFDS funded under GPS OSIP 29-92

** FY-03 Congressional Add includes one EP-3 EFDS installation.

** 6 Installs Funded in FY11, Installed In FY12

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & PRIOR | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 72 | 1 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | | | | |
| Out | 70 | 2 | 1 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | | | |

Note: FY2006 reflects $18.4 of Title IX funding.

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: P-3 READINESS IMPROVEMENT( OSIP 004-04 )

MODELS OF SYSTEMS AFFECTED: P-3C TYPE MODIFICATION: Readiness Improvement

DESCRIPTION / JUSTIFICATION:
The purpose of this program is to incorporate a number of cost effective changes to the P-3 weapon system, specifically targeting improvements to high cost and maintenance and obsolete readiness degrader items. These improvements are a vital element of the P-3 sustainment bridge, significantly enhancing the strategy of a smaller, more ready, more capable P-3 force during the bridge to Multi-Mission Maritime Aircraft (MMA). The increased readiness and capabilities that will be realized, support the foundational sustainment bridge elements, specifically operational availability and common configuration. Planned improvements under this OSIP cover airframe, propulsion and avionics related subsystems, utilizing Commercial Off-The-Shelf Systems (COTS) technology to the maximum extent practicable to minimize development and procurement costs, and to reduce the time to field the improved systems. The systems identified for replacement include HF Radio, Data Link, InfraRed Detection System Autopilot, Inter Communication System, and Radar. Additionally, systems being evaluated for replacement include IFF Interrogator Set, Magnetic Anomaly Detector, and Magnetic Tape Recorder/Reproducer.

FY04 Congressional Plus-Up of $2.0M for Electro-Optics and Communications Upgrade.
FY05 Congressional Plus-Up of $1.0M for Electro-Optics and Communications Upgrade.
FY05 Congressional Plus-Up of $2.0M for Digital Autopilot Systems.
Commander Patrol Reconnaisance Group (CPRG) Fleet Readiness Plan (FRP) approved by CNO directed 148 P-3C aircraft.
FY06 Congressional Plus-Up of $1.0M for Electro-Optics and Communications Upgrade.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
This Modification makes maximum use of Commercial Off-The-Shelf Systems that have been installed on operational platforms.

The COP NPDM authorizing MS-C / LRIP was approved 26 March 2004.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E (H1152) | | 4.5 | | 3.8 | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AUTO-PILOT KIT | 3 | 0.2 | 6 | 0.3 | 19 | 0.8 | 25 | 1.0 | | | | | | | | | | | | |
| Note: FY2006 reflects $18.4 of Title IX | | | 3 | 0.4 | 9 | 0.6 | 30 | 1.5 | | | | | | | | | | | | |
| INFRARED DETECTION KIT (EO/IR) | 3 | 0.1 | 6 | 0.1 | 19 | 0.3 | 18 | 0.3 | | | | | | | | | | | | |
| INTER COMMUNICATIONS KIT | | | 3 | 0.1 | 9 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| RADAR/INTEROGATOR | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 0.5 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AUTO-PILOT SYSTEM | 3 | 1.5 | 6 | 1.5 | 19 | 4.4 | 25 | 5.9 | | | | | | | | | | | | |
| HF RADIO/DATA LINK SYSTEM | | | 3 | 2.2 | 9 | 3.4 | 30 | 9.4 | | | | | | | | | | | | |
| INFRARED DETECTION SYSTEM | 3 | 1.5 | 6 | 2.2 | 19 | 6.8 | 18 | 6.5 | | | | | | | | | | | | |
| INTER COMMUNICATIONS SYSTEM | | | 3 | 2.4 | 9 | 3.7 | 9 | 3.8 | | | | | | | | | | | | |
| RADAR/INTEROGATOR | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 6.5 | | 8.8 | | 1.0 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.9 | | 1.5 | | 3.2 | | | | | | | | | | | | |
| TRAINING EQUIP | | 3.4 | | 0.8 | | 1.2 | | 2.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.6 | | 1.0 | | 0.1 | | | | | | | | | | | | |
| ILS | | * | | 0.8 | | 2.5 | | 1.7 | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.3 | | 2.4 | | 4.8 | | 4.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 6 | 0.6 | 18 | 2.1 | 56 | 4.0 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 12 | 14.5 | 42 | 24.3 | 130 | 34.2 | 220 | 43.7 | | | | | | | | | | | | |

NOTES:
1. Asterisk indicates amount less than 51K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: P-3 Critical Obsolescence Program (OSIP 04-04) HF Radio / Data Link

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: 03/05 FY 2006: 01/06 FY 2007: 01/07

DELIVERY DATE: FY 2005: 03/06 FY 2006: 01/07 FY 2007: 01/08

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (3) kits* | | | | | 3 | .2 | | | | | | | | | | | | | | |
| FY 2006 (9) kits | | | | | | | 9 | .5 | | | | | | | | | | | | |
| FY 2007 (30) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (26) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (26) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (30) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (24) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 3 | .2 | 9 | .5 | | | | | | | | | | | | |

*FY 06 kits are Trial Kit Installations

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | 3 | | | | 3 | 3 | 3 | | | | | | | | |
| Out | | | | | | | | 3 | | | | 3 | 3 | 3 | | | | | | | |

Note: FY2006 reflec

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C

MODIFICATION TITLE: P-3 Critical Obsolescence Program (OSIP 04-04) Infrared Detection (EO/IR)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: 01/05 FY 2006: 01/06 FY 2007: 01/07

DELIVERY DATE: FY 2005: 01/06 FY 2006: 01/07 FY 2007: 01/08

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (3) kits | | | 3 | .1 | | | | | | | | | | | | | | | | |
| FY 2005 (6) kits | | | | | 6 | .2 | | | | | | | | | | | | | | |
| FY 2006 (19) kits | | | | | | | 19 | .5 | | | | | | | | | | | | |
| FY 2007 (18) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (15) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (14) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 3 | .1 | 6 | .2 | 19 | .5 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | 3 | | | | | 3 | 2 | 1 | | 7 | 6 | 6 | | | | | | | | |
| Out | | | 3 | | | | | 3 | 2 | 1 | | 7 | 6 | 6 | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C

MODIFICATION TITLE: P-3 Critical Obsolescence Program (OSIP 04-04) Auto-Pilot

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: 01/05 FY 2006: 01/06 FY 2007: 01/07

DELIVERY DATE: FY 2005: 01/06 FY 2006: 01/07 FY 2007: 01/08

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (3) kits | | | 3 | .1 | | | | | | | | | | | | | | | | |
| FY 2005 (6) kits | | | * | .4 | 6 | * | | | | | | | | | | | | | | |
| FY 2006 (19) kits | | | | | | | 19 | 1.2 | | | | | | | | | | | | |
| FY 2007 (25) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (26) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (29) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (30) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (10) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 3 | .5 | 6 | * | 19 | 1.2 | | | | | | | | | | | | |

* FY05 Congressional Add funds 6 installs

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | 3 | | 2 | 2 | 2 | | 7 | 6 | 6 | | | | | | | | |
| Out | | | | | | 3 | | 2 | 2 | 2 | | 7 | 6 | 6 | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C

MODIFICATION TITLE: P-3 Critical Obsolescence Program (OSIP 04-04) Inter Communications System

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: 07/05 FY 2006: 01/06 FY 2007: 01/07

DELIVERY DATE: FY 2005: 07/06 FY 2006: 01/07 FY 2007: 01/08

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (3) kits | | | | | 3 | 1.8 | | | | | | | | | | | | | | |
| FY 2006 (9) kits | | | | | | | 9 | 1.8 | | | | | | | | | | | | |
| FY 2007 (9) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (16) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (16) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (16) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (6) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 3 | 1.8 | 9 | 1.8 | | | | | | | | | | | | |

NOTE: FY06 funding is for installation and integration of Trial Kit Installation(s) (TKI).

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | 3 | | 3 | 3 | 3 | | | | | | | | |
| Out | | | | | | | | | | 3 | | 3 | 3 | 3 | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: P-3 Critical Obsolescence Program (OSIP 04-04) Radar System

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: TBD Months PRODUCTION LEADTIME: TBD Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (1) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (74) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: SSI-K( OSIP 005-05 )

MODELS OF SYSTEMS AFFECTED: ALL P-3 T/M/S TYPE MODIFICATION: Sustainment

DESCRIPTION / JUSTIFICATION:
The Special Structural Inspection - Kits Program is an Operational Safety Improvement Program (OSIP) that will capture the P-3/EP-3 aircraft's test demonstrated fatigue life by replacing airframe structural components in fatigue life limiting critical regions the P-3/EP-3 aircraft to enable the airframe to fully reach its designed service life but will not extend the fatigue life of those aircraft.
Unchecked, these problem areas collectively will result in significant loss of aircraft from the operational inventory due to operational and support funding limitations. SSI-K will manufacture and install a structural mod / replacement kit for P-3 outer wing, center box and other components.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CENTER BOX KIT | | | | | 24 | 7.2 | | | | | | | | | | | | | | |
| SSI-K KIT (A-Kits) | | | 8 | 5.1 | 15 | 9.8 | 15 | 10.5 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 6.8 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| CENTER WING FABRICATION | | | | 0.5 | | 0.5 | | 0.1 | | | | | | | | | | | | |
| PHYSICAL CONFIG AUDIT | | | | | | 0.2 | | | | | | | | | | | | | | |
| SSI-K KIT ECP | | | | | | 0.5 | | 0.6 | | | | | | | | | | | | |
| DATA | | | | 2.4 | | 1.1 | | 0.8 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.4 | | 0.4 | | 0.4 | | | | | | | | | | | | |
| ILS | | | | 1.1 | | 1.7 | | 0.8 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 1.8 | | 6.2 | | 7.0 | | | | | | | | | | | | |
| Note: FY2006 reflects $18.4 of Title IX | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 8 | 36.4 | 19 | 54.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 8 | 18.0 | 47 | 63.8 | 34 | 74.3 | | | | | | | | | | | | |

NOTES:
1. Asterisk indicates amount less than 51K
2. FY06 includes $18.4M Title IX Supplemental funds.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: All P-3 T/M/S

MODIFICATION TITLE: P-3/EP-3 Special Structural Inspection - Kits (SSI-K) (OSIP 05-05)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 3/2 Months

PRODUCTION LEADTIME: 10/9 Months

CONTRACT DATES: FY 2005: 6/05 FY 2006: 3/06 FY 2007: 1/07

DELIVERY DATE: FY 2005: 3/06 FY 2006: 1/07 FY 2007: 11/07

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (8) kits | | | | | 8 | 30.4 | | | | | | | | | | | | | | |
| FY 2006 (15) kits | | | | | | | 13 | 54.2 | | | | | | | | | | | | |
| FY 2007 (15) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (19) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 8 | 30.4 | 13 | 54.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | 2 | 3 | 3 | | 4 | 4 | 5 | | | | | | | | |
| Out | | | | | | | | | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 1 | | | | | |

Note: FY2006 reflec

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: All P-3 T/M/S

MODIFICATION TITLE: P-3/EP-3 Special Structural Inspection - Kits (SSI-K) (OSIP 05-05) Center Box

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by contractor mod teams.

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: _____ FY 2006: 2/06 FY 2007: _____

DELIVERY DATE: FY 2005: _____ FY 2006: 2/07 FY 2007: _____

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (24) kits | | | | | | 6.0 | 6 | * | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | 6.0 | 6 | | | | | | | | | | | | | |

* Installs for Center wings procured with FY06 Title IX Supplemental funding will install 12 in FY 07 and FY 08 and remaining installs will occur in FY 09-FY 11 with program funds.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 2 | 2 | 2 | | | | | | | | |
| Out | | | | | | | | | | | | 2 | 2 | 2 | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: PROJECT K-0416( OSIP 005-07 )

MODELS OF SYSTEMS AFFECTED: P-3C TYPE MODIFICATION: Operational Improvement

DESCRIPTION / JUSTIFICATION:
CNO Project K-0416 program provides a rapid response ASW intelligence collection, analysis, and reporting system program focused on OPLAN specific threat submarines, both conventional and nuclear.

CNO K-0416 mission is to place high quality calibrated data on tape for subsequent exploitation and analysis. It is essential for submarine prosecution in deep and littoral water conditions in support of the Sea Shield/Sea Power 21.

The program accomplishes this by introducing advanced collection avionics that operate with special calibrated sensors to provide threat target data for tactical, S&T, and weapon design uses.

CNO K-0416 will modify P-3 Platforms, forward sited laboratories, and select forward deployed sites with these collection avionics to provide tactical and S&T Intelligence.
Prime performer is the Naval Air warfare Center, Patuxent River. NAWC performs system integration, material acquisition, fabrication, and installation of collection systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
The changes identified are minor and do not require approval for full production.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| BT TAPE RECORDERS | | | | | | | 8 | 0.7 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 0.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| BT TAPE RECORDERS | | | | | | | 8 | 1.0 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | 0.1 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| Note: FY2006 reflects $18.4 of Title IX | | | | | | | | 0.3 | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 0.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 8 | 0.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | 24 | 2.7 | | | | | | | | | | | | |

NOTES:
1. Asterisk indicates amount less than 51K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3C MODIFICATION TITLE: CNO Project K-0416

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: 11/06

DELIVERY DATE: FY 2005: FY 2006: FY 2007: 03/07

($ in Millions)

| Cost: | Prior years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (8) kits | | | | | | | 8 | 0.3 | | | | | | | | | | | | |
| FY 2008 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (6) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 8 | 0.3 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 2 | 3 | 3 | | | | | | | | |
| Out | | | | | | | | | | | 2 | 3 | 3 | | | | | | | | |

| Note: FY2006 reflec | FY 2010 | | | | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

| BUDGET ITEM JUSTIFICATION SHEET<br>P-40 | | | | | | | | | | | DATE:<br>February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE<br>**S-3 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 409.8 | A | 1.8 | 0.7 | 0.8 | 0.5 | | | | | 413.6 | |

DESCRIPTION: This line item funds modifications to S-3 aircraft. The S-3B is a carrier based, all weather, high wing, high subsonic,twin engine, multi-mission aircraft capable of Anti-Surface Warfare (ASUW) operations and tanking. The overall goal of the modifications budgeted in FY2007 is to provide funding to implement Engineering Change Proposals (ECPs) and Engineering Change Orders (ECOs) for flight critical S-3B systems that are essential to the continued safe operational employment and support of the S-3B aircraft. Total Active Inventory (TAI) is 14. The S-3B will reach end of service in 2015. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 039-94 UHF/VHF COMM. IMPROV | 109.2 | 1.8 | | | | | | | | 111.0 |
| 004-06 FLIGHT CRITICAL SYSTEM SUSTAINMENT | | | 0.7 | 0.8 | 0.5 | | | | | 2.0 |
| TOTAL | 109.2 | 1.8 | 0.7 | 0.8 | 0.5 | | | | | 113.0 |

Exhibit P-3a

MODIFICATION TITLE: UHF/VHF COMM. IMPROV( OSIP 039-94 )

MODELS OF SYSTEMS AFFECTED: S-3B TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: The S-3B has an operational requirement for reliable UHF and VHF communications. The current UHF radio (AN/ARC-156) suffers from serious reliability and obsolescence problems, and lacks the internal intermodulation protection required for proper operation in today's operational environment. The AN/ARC-187 UHF radio to be installed is a derivative of the AN/ARC-164 which is presently utilized by the Air Force and would correct the above mentioned deficiencies. The installation also permits compatibility with the JCS requirements for UHF Satellite Communications (SATCOM) users. The radio is common with the P-3C aircraft and this commonality will significantly reduce logist support requirements. The S-3B does not currently have a VHF radio, which is required by International Air Traffic Control regulations and represents a potential safety flight problem when operating in international airspace and with foreign air fields. The AN/ARC-182 is the Navy's standard VHF radio for tactical aircraft and provides the VHF capability required. One AN/ARC-182 radio was installed in 79 S-3B aircraft. This modification is validated in ORD 393-88-95, approved 23 Mar 95. S-3B ECP#423 constitutes the CIP integration, and Communication Control Group (CCG) modification.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The AN/ARC-182 had Approval for Full Production (AFP), and was verified in the S-3B with trial kit installation (TKI). The AN/ARC-187 installation was verified in the S-3B with Trial Kit Installation. Milestone III Approval for Full Production for S-3B Communications Improvement Program was granted on 23 June 1995.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CIP - A KIT | 77 | 17.5 | | | | | | | | | | | | | | | | | 77 | 17.5 |
| PROTOTYPE/TKI | 2 | 1.8 | | | | | | | | | | | | | | | | | 2 | 1.8 |
| INSTALLATION KITS N/R | | 11.4 | | | | | | | | | | | | | | | | | | 11.4 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ARC-182 - R/T & MOUNT | 81 | * | | | | | | | | | | | | | | | | | 81 | * |
| ARC-187 - B KIT (2 PER A/C) | 162 | 13.2 | | | | | | | | | | | | | | | | | 162 | 13.2 |
| AS-3557 ANTENNA | 81 | 0.2 | | | | | | | | | | | | | | | | | 81 | .2 |
| CCG MODIFICATION | 92 | 22.7 | | | | | | | | | | | | | | | | | 92 | 22.7 |
| CRYPTO FILL PANELS (2 PER A/C) | 162 | 0.2 | | | | | | | | | | | | | | | | | 162 | .2 |
| DIPLEXER PREAMP | 81 | 0.5 | | | | | | | | | | | | | | | | | 81 | .5 |
| MD - 1324 MODEM | 81 | 2.5 | | | | | | | | | | | | | | | | | 81 | 2.5 |
| INSTALL EQUIPMENT N/R | | 1.5 | | | | | | | | | | | | | | | | | | 1.5 |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 2.6 | | 0.4 | | | | | | | | | | | | | | | | 2.9 |
| TRAINING EQUIP | 8 | 4.4 | | | | | | | | | | | | | | | | | 8 | 4.4 |
| SUPPORT EQUIP | | 1.6 | | | | | | | | | | | | | | | | | | 1.6 |
| ILS | | 2.9 | | 0.1 | | | | | | | | | | | | | | | | 3.0 |
| OTHER SUPPORT | | 16.3 | | 0.9 | | | | | | | | | | | | | | | | 17.2 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 83 | 9.7 | 4 | 0.4 | | | | | | | | | | | | | | | 87 | 10.1 |
| TOTAL PROCUREMENT | 910 | 109.2 | 4 | 1.8 | | | | | | | | | | | | | | | 914 | 111.0 |

NOTE: Asterisk indicates amount less than 51K

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: S-3B MODIFICATION TITLE: UHF/VHF Communications Improvement Program (OSIP 39-94)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Team

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (87) kits | 83 | 9.7 | 4 | .4 | | | | | | | | | | | | | | | 87 | 10.1 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL ** | 83 | 9.7 | 4 | .4 | | | | | | | | | | | | | | | 87 | 10.1 |

** Includes trainer install(s).

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 83 | 3 | 1 | | | | | | | | | | | | | | | | | | |
| Out | 83 | 3 | 1 | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | | | | | 87 |
| Out | | | | | | | | | | 87 |

Exhibit P-3a

MODIFICATION TITLE: FLIGHT CRITICAL SYSTEM SUSTAINMENT( OSIP 004-06 )

MODELS OF SYSTEMS AFFECTED: S-3B TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: The purpose of this program is to provide funding to implement airframe and avionic modifications to flight critical S-3B systems that are essential to the continued safe operational employment and support of the S-3B aircraft. These include but are not limited to airframe changes to inner and outer wing spars discovered during the Full Scale Fatigue test and are required to safely operate the aircraft until FY2009, and replacement of Kapton wiring harnesses to critical avionics equipment.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The modifications identified are minor and do not require approval for full production.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CRITICAL AVIONICS WIRING | | | | | 15 | 0.1 | | | | | | | | | | | | | 15 | .1 |
| INNER/OUTER WING SPARS | | | | | 15 | 0.1 | | | | | | | | | | | | | 15 | .1 |
| INSTALLATION KITS N/R | | | | | | 0.1 | | | | | | | | | | | | | | .1 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | 0.1 | | | | | | | | | | | | | | .1 |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | 0.1 | | | | | | | | | | | | | | .1 |
| OTHER SUPPORT | | | | | | 0.3 | | 0.8 | | 0.5 | | | | | | | | | | 1.5 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | 30 | 0.7 | | 0.8 | | 0.5 | | | | | | | | | 30 | 2.0 |

NOTE: Installation for kits is "O" level.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **E-2 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 1129.1 | A | 15.5 | 13.5 | 9.1 | 9.1 | 8.3 | 8.5 | 8.7 | 54.7 | 1256.4 | |

DESCRIPTION:
This line item funds modifications to the E-2 aircraft. The E-2 is an all weather, carrier based, airborne early warning and command and control aircraft that extends task force defense perimeters by providing early warning of approaching enemy units and by vectoring interceptors into attack position. Additionally, the HAWKEYE provides strike control, radar surveillance, search and rescue assistance, communications relay and automatic tactical data exchange. The E-2 aircraft design service life is 10,000 flight hours with an average service life remaining through FY2020. The E-2 is a critical element of the Navy's Cooperative Engagement Capability (CEC). The Structural Enhancements OSIP (121-87) provides for procurement and installation of the new eight (8) bladed propeller. The Block II Upgrade OSIP (74-88) funds commercial technology, E-2 Warning Detection System, Radar Obsolescence, Vapor Cycle and Engine Turbine Blade reliability improvements and emerging safety of flight items such as parachute survival ensemble (PSE), cockpit lighting, and flight instruments. As the result of technological advancements, the Commercial-Off-The-Shelf (COTS) hardware/software of the Mission Computer (MCU) will change or become obsolete in the very near future. The Technology Insertion OSIP (5-01) supports assembly, validation and configuration management of COTS hardware and software of the MCU. The Outer Wing Panel (OWP) OSIP (87-88), funds OWP enhancements.

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 121-87 STRUCTURAL ENHANCEMENTS | 559.5 | 4.7 | 2.7 | 0.9 | 0.5 | | | | | 568.3 |
| 074-88 BLOCK UPGRADE II | 416.1 | 2.7 | 2.6 | 1.2 | 0.2 | | | | | 422.8 |
| 087-88 OUTER WING PANELS | 117.7 | 1.4 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | | | 123.5 |
| 005-01 TECHNOLOGY INSERTION | 31.9 | 6.5 | 7.1 | 6.0 | 7.5 | 7.6 | 7.8 | 8.7 | 54.7 | 137.8 |
| 022-03 NAVIGATION IMPROVEMENTS | 3.8 | 0.2 | | | | | | | | 4.0 |
| TOTAL | 1129.1 | 15.5 | 13.5 | 9.1 | 9.1 | 8.3 | 8.5 | 8.7 | 54.7 | 1256.4 |

Exhibit P-3a

MODIFICATION TITLE: STRUCTURAL ENHANCEMENTS (OSIP 121-87 )

MODELS OF SYSTEMS AFFECTED: E-2C TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION:
The Navy Inventory Control Point (NAVICP) projected an E-2 propeller shortage in FY 2000. As a result, NAVICP approved a Logistics Engineering Change Proposal (LECP) to procure a new eight-blade propeller for the E-2 program office. The LECP funds the non-recurring and the procurement of 187 propellers only. The E-2 program office is responsible for funding the ground/flight test and overall system integration between Northrop Grumman (airframe), Allison (engine) and Hamilton-Sunstrand (propellers). The ground/flight test and prototype propeller kits were funded with APN-1 funds starting in FY99. Starting in FY00 retrofit propeller kits and installs were funded with APN-5 funds.

Repeatedly, E-2 Hawkeye and C-2A Greyhound elevator trim actuators have failed in flight and on deck, causing the aircraft to go into an immediate nose down flight profile. In some cases, the aircraft has lost half its altitude before control was regained. The community assesses this risk as potentially catastrophic. Failure of the elevator trim actuator occurs when an internal thrust bearing fails, allowing the rod end to separate from the actuator housing, resulting in an abrupt nose down trim. Safety ECP (NI 1004-04 Trim Actuator) provides a hardware correction by opening the elevator trim actuator, changing the bushing and other component parts. This OSIP funds the installation of 114 Trim Actuators, 72 kits in FY-05 and 42 kits in FY-06 funded by NAVICP.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

NP2000 Developmental Component Testing is complete. First successful developmental flight test took place in April 01. Flight test completed 2nd QTR 04. In FY04, the OSIP ramped up the installation of propellers with associated ILS and other support. NP2000 production approved July 03.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| 270 LONGERON | 15 | 0.6 | | | | | | | | | | | | | | | | | | |
| ACTUATORS | 150 | 2.7 | | | | | | | | | | | | | | | | | | |
| ECP 1004-04 Trim Actuator | 50 | * | 70 | * | 30 | * | | | | | | | | | | | | | | |
| ECP 367R1-WCS ENHANCEMENT | 28 | 10.6 | | | | | | | | | | | | | | | | | | |
| ELEVATOR IDLER-ARM | 75 | 0.5 | | | | | | | | | | | | | | | | | | |
| ENGINE JUNCTION BOX | 388 | 2.4 | | | | | | | | | | | | | | | | | | |
| LECP NP2000 PROPELLERS | 75 | 1.2 | | | | | | | | | | | | | | | | | | |
| MLG FITTING | 150 | 0.1 | | | | | | | | | | | | | | | | | | |
| MOD TRUSS | 52 | 5.2 | | | | | | | | | | | | | | | | | | |
| OWP MOD | 30 | 1.2 | | | | | | | | | | | | | | | | | | |
| PRESSURE BULKHEAD | 34 | * | | | | | | | | | | | | | | | | | | |
| UPPER LONGERON | 49 | 1.2 | | | | | | | | | | | | | | | | | | |
| WING CENTER SECTION | 78 | 114.3 | | | | | | | | | | | | | | | | | | |
| WINGFOLD ACTUATORS | 200 | * | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 14.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GENERATORS (DERF II) | 283 | 4.4 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | 0.8 | | | | | | | | | | | | | | | | | | |
| DATA | | 0.9 | | * | | * | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 2.9 | | 0.8 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 2.8 | | | | | | | | | | | | | | | | | | |
| ILS | | 3.4 | | 0.3 | | 0.3 | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | 30.9 | | 0.1 | | 0.1 | | * | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 253 | 359.0 | 165 | 3.4 | 88 | 2.2 | 7 | 0.7 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 559.5 | | 4.7 | | 2.7 | | 0.9 | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: STRUCTURAL ENHANCEMENTS (OSIP 121-87 )

INSTALLATION INFORMATION: NP2000 Propeller LECP

METHOD OF IMPLEMENTATION: Contractor Field Mod Team @ Depot

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 2005 _____ FY 2006 _____ FY 2007 _____

DELIVERY DATE: FY 2005 _____ FY 2006 _____ FY 2007 _____

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (75) kits | 20 | 2.1 | 23 | 2.4 | 16 | 1.7 | 7 | 0.7 | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 20 | 2.1 | 23 | 2.4 | 16 | 1.7 | 7 | 0.7 | | | | | | | | | | | | |

* 5 kits were installed during production line so total should be 70.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 20 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 1 | | | | | | | | | | | | |
| Out | 20 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 1 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: STRUCTURAL ENHANCEMENTS (OSIP 121-87 )

INSTALLATION INFORMATION: Trim Actuators

METHOD OF IMPLEMENTATION: Depot Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 May 05 FY 2006 Oct-05 FY 2007

DELIVERY DATE: FY 2005 Jun 05 FY 2006 Nov 05 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (50) kits | | * 0.3 | 50 | | | | | | | | | | | | | | | | | |
| FY 2005 (142) kits | | | 80 | * 1.0 | * 62 | | | | | | | | | | | | | | | |
| FY 2006 (72) kits | | | | | 72 | 0.5 | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 0 | 0.3 | 130 | 1.0 | 134 | 0.5 | | | | | | | | | | | | | | |

*50 units reflected in FY05 are funded with FY04 funds. 62 units reflected in FY06 are funded with FY05 funds. Quantities are higher than kit purchase due to safety forced retrofit of spares.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 20 | 45 | 65 | 65 | 65 | 4 | | | | | | | | | | | | | | | | | |
| Out | | | | 45 | 65 | 65 | 65 | 24 | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: BLOCK UPGRADE II (OSIP 74-88 )

MODELS OF SYSTEMS AFFECTED: E-2C TYPE MODIFICATION: Mission Performance Enhancement/Safety

DESCRIPTION / JUSTIFICATION:
The Block II Upgrade OSIP (74-88) funds commercial technology, E-2 Warning Detection System, Radar Obsolesence, Vapor Cycle and Engine Turbine Blade reliability improvements and emerging safety of flight items such as parachute survival ensemble (PSE); cockpit lighting, and flight instruments.

E-2C Warning Detection System: Dual Element Fire Warning (Safety ECP 934-01) and Oil Pressure Transmitter (OPT) Warning Detection System (Safety ECP 938-01) - Replaces T56-A-427 Dual Element Fire Warning and Oil Pressure Warning System in the E-2 Aircraft to alleviate false warning indications.

Radar Obsolesence - Funds non-recurring and recurring engineering efforts for Obsolesence/Readiness Improvements to the APS-145 which is the number one weapon system mission degrader.

ECP 939-01 - "Vapor Cycle" - Funds wiring modification, rebussing of under sized wiring between circuit breakers in the vapor cycle system.

Engine Turbine Blade Cost Reduction & Effectiveness Improvement (CREI) - 'T56-A-427 First Stage Turbine Blade-Track Seal Replacement' - A more durable metal blade track seal will replace the current ceramic seal. This design change is consistent with newer technology engines and is expected to increase the reliability of the T56-A-427 engine by reducing low power removals.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Kits are being procured and installed on all applicable aircraft.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| 486 MFCDU | 10 | 1.5 | | | | | | | | | | | | | | | | | | |
| CAINS ASN-139 | 10 | 3.0 | | | | | | | | | | | | | | | | | | |
| COCKPIT PANEL | 10 | 0.5 | | | | | | | | | | | | | | | | | | |
| ECP 410-SATCOM | 4 | 0.3 | | | | | | | | | | | | | | | | | | |
| EHSP | 7 | 4.5 | | | | | | | | | | | | | | | | | | |
| ENG FIRE WALL CONNECTOR | 78 | 0.1 | | | | | | | | | | | | | | | | | | |
| ENG OIL PRESSURE SYS | 13 | 0.4 | | | | | | | | | | | | | | | | | | |
| ENHANCED DISPLAY (EMDU) | 18 | 28.9 | | | | | | | | | | | | | | | | | | |
| GPS | 13 | 0.6 | | | | | | | | | | | | | | | | | | |
| IMPROVED IFF | 13 | 22.6 | | | | | | | | | | | | | | | | | | |
| JTIDS | 13 | 8.8 | | | | | | | | | | | | | | | | | | |
| LOW OIL WARNING | | 0.7 | | | | | | | | | | | | | | | | | | |
| MFCDU BLOWER | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| MFCDU MOD (SINS) | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| MFCDU MOD | 10 | 0.7 | | | | | | | | | | | | | | | | | | |
| OIL PRESSURE TRANSMITTER | 74 | 0.7 | | | | | | | | | | | | | | | | | | |
| RADAR GROUP II | 13 | 28.3 | | | | | | | | | | | | | | | | | | |
| SAFCS | 10 | 3.2 | | | | | | | | | | | | | | | | | | |
| SAFETY ECP 934-01 DUAL ELEMENT | 74 | 1.7 | | | | | | | | | | | | | | | | | | |
| SAFETY ECP 939-01 VAPOR CYCLE | 52 | 0.5 | | | | | | | | | | | | | | | | | | |
| SINS FILTER | 10 | * | | | | | | | | | | | | | | | | | | |
| SINS MOUNT | 10 | * | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 67.4 | | 0.8 | | 0.8 | | 0.7 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP 400 - AIC 400 | 9 | 0.5 | | | | | | | | | | | | | | | | | | |
| ECP 400 - APX-100 | 13 | 0.2 | | | | | | | | | | | | | | | | | | |
| ECP 400 - JTIDS (NOTE 1) | 28 | 28.7 | | | | | | | | | | | | | | | | | | |
| ECP 400 - LAMPS ASSY | 9 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 403 - AM95C60 CHIP | | 0.4 | | | | | | | | | | | | | | | | | | |
| ECP 403 - DUAL CAINS (S/S) | 10 | 2.8 | | | | | | | | | | | | | | | | | | |
| ECP 403 - MDL (DTM) | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 403 - MDL (IRU) | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 403 - RT-1379A | 15 | 0.7 | | | | | | | | | | | | | | | | | | |
| ECP 403 - SDC | 10 | 0.1 | | | | | | | | | | | | | | | | | | |
| ECP 403 - TID | 24 | 1.3 | | | | | | | | | | | | | | | | | | |
| FIELD ACTIVITY SPT- RADAR OBS | | 6.1 | | 0.9 | | 1.0 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.0 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 15.2 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 59.4 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 40.9 | | | | | | | | | | | | | | | | | | |
| ILS | | 15.5 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 22.3 | | 0.2 | | 0.4 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 88 | 46.3 | 25 | 0.8 | 13 | 0.4 | 17 | 0.5 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 416.1 | | 2.7 | | 2.6 | | 1.2 | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: BLOCK UPGRADE II (OSIP 74-88 )

INSTALLATION INFORMATION: Dual Element Warning Safety ECP 934-01

METHOD OF IMPLEMENTATION: Depot Driven-in-Modification (DIM)

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 _____ FY 2006 _____ FY 2007 _____

DELIVERY DATE: FY 2005 _____ FY 2006 _____ FY 2007 _____

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (74) kits | 49 | 1.6 | 13 | 0.5 | 3 | 0.1 | 5 | 0.1 | 4 | 0.1 | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () kits | | | | | | | | | | | | | | | | | | | | |
| Total | 49 | 1.6 | 13 | 0.5 | 3 | 0.1 | 5 | 0.1 | 4 | 0.1 | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 49 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | | 2 | 1 | 1 | 1 | | | | | | | | | | | | |
| Out | 49 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | | 2 | 1 | 1 | 1 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: BLOCK UPGRADE II (OSIP 74-88 )

INSTALLATION INFORMATION: Vapor Cycle Safety ECP 939-01

METHOD OF IMPLEMENTATION: Depot Driven-in-Modification (DIM)

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005 _____ FY 2006 _____ FY 2007 _____

DELIVERY DATE: FY 2005 _____ FY 2006 _____ FY 2007 _____

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (52) kits | 16 | 0.5 | 12 | 0.3 | 10 | 0.3 | 12 | 0.3 | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 16 | 0.5 | 12 | 0.3 | 10 | 0.3 | 12 | 0.3 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 16 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| Out | 14 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: OUTER WING PANELS (OSIP 087-88 )

MODELS OF SYSTEMS AFFECTED: E-2C TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION:

The E-2C fatigue test and inspection of aircraft have identified fatigue stress cracks in Outer Wing Panels (OWP) which could cause loss of aircraft and result in injury or loss of personnel. OWP's installed on T56-A-427 configured aircraft are limited to 7,500 flight hours. Teardowns of fleet OWP's showed that overhaul of the OWP is neither technically practical nor cost effective. This modification develops and incorporates enhancements to the OWP which extends the aircraft service life through FY 2015. Thirty-four (34) aircraft will be enhanced with the AYC-1222 OWP (ECP-91145/C2A/859-97 Rev. (A) increasing the fatigue life limit of E-2C Outer Wing Panels. FY04 funding of $1.5 million was a Congressional plus-up.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ATTACHING HARDWARE | 5 | 1.4 | | | | | | | | | | | | | | | | | | |
| ECP 362R2C2 - OUTER WING PANEL | 82 | 77.7 | | | | | | | | | | | | | | | | | | |
| ECP 378 - REDESIGNED OWP | 10 | 22.0 | | | | | | | | | | | | | | | | | | |
| ECP 383R1C1 - SDRS | 108 | 0.6 | | | | | | | | | | | | | | | | | | |
| ECP 91145/C2A/859-97 Rev A | 8 | 0.5 | 6 | 0.4 | 5 | 0.3 | 5 | 0.3 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 7.6 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECP 3831C1 SDRS | | 3.0 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 1.7 | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.9 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.3 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.4 | | 0.1 | | 0.1 | | * | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 90 | 1.7 | 6 | 0.8 | 5 | 0.7 | 5 | 0.7 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 117.7 | | 1.4 | | 1.1 | | 1.1 | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: OUTER WING PANELS (OSIP 087-88 )

INSTALLATION INFORMATION: ECP 91145/C-2A/859-97 Rev. A

METHOD OF IMPLEMENTATION: Depot Drive-in Modification (DIM)

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Mar 05 FY 2006 Mar-06 FY 2007 Mar-07

DELIVERY DATE: FY 2005 Sep 05 FY 2006 Sep 06 FY 2007 Sep 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (8) kits | 4 | 1.0 | * 4 | | | | | | | | | | | | | | | | | |
| FY 2005 (6) kits | | | 6 | 0.8 | | | | | | | | | | | | | | | | |
| FY 2006 (5) kits | | | | | 5 | 0.7 | | | | | | | | | | | | | | |
| FY 2007 (5) kits | | | | | | | 5 | 0.7 | | | | | | | | | | | | |
| FY 2008 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 4 | 1.0 | 10 | 0.8 | 5 | 0.7 | 5 | 0.7 | | | | | | | | | | | | |

*FY05 quantities installed using FY04 Congressional Add funds.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 4 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | | | | | | | | | | |
| Out | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: TECHNOLOGY INSERTION (OSIP 005-01 )

MODELS OF SYSTEMS AFFECTED: E-2C TYPE MODIFICATION: Missions Performance Enhancement

DESCRIPTION / JUSTIFICATION:
Commercial technology obsolescence drives hardware and software changes in Computing Resources for the E-2 Aircraft. Funding is required to support capability for assembly, validation, and configuration management of Commercial Off-The-Shelf (COTS) hardware/software provided to fleet squadrons and updated on a 4-year technology insertion cycle. Specific examples include video boards, memory boards, CPU cards, compilers, middleware, backplanes, and operating systems that will change or become obsolete.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The E-2 Program Support Activity (PSA) will insure software is upgraded, revised, and integrated so it functions with the versions of the COTS hardware and software delivered. The integration effort must start no less than one year prior to the delivery.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 2.4 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 29.6 | | 6.5 | | 7.1 | | 6.0 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 31.9 | | 6.5 | | 7.1 | | 6.0 | | | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: NAVIGATION IMPROVEMENTS (OSIP 022-03 )

MODELS OF SYSTEMS AFFECTED: E-2C TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION:

These resources will be used to install a Commercial Off-the-Shelf (COTS) Very High Frequency Omnibearing Rand (VOR)/Instrument Landing System (ILS) system, the Garmin GNS-530, for non-precision and precision approach. Installation of a COTS precision approach system will ensure E-2C has the ability to safely land at airfields worldwide in support of ongoing anti-terrorism and anti-drug operations. E-2C currently relies on Precision Approach Radar (PAR) for precision approach and Tactical Air Navigation (TACAN) for non-precision approach. Since these aids to navigation are being retired out of service in the United States and are virtually non-existent worldwide, the E-2C aircraft now requires the ability to utilize ground-based VOR for non-precision approach and ILS for precision approach and landing in poor weather.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Safety ECP 91145/E2C2/994-04 applies. CCB Approval 13 Apr 04. Three (3) E-2C Group II Aircraft have been successfully prototyped. Carrier Suitability and TEMPEST testing complete. T&E was completed by the end of FY04. Fleet installs began 1st quarter FY05. Logistics Elements are funded via PMA 209 CNS/ATM & Reserve Funding.
FY-04 ($262K) and FY-05 ($200K) Special Interest funding for Drug Interdiction and Counter-drug Activities.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| GARMIN | 36 | 1.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GARMIN | | 0.8 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.3 | | 0.2 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 4 | 1.6 | 32 | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 3.8 | | 0.2 | | | | | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-2C

MODIFICATION TITLE: NAVIGATION IMPROVEMENTS (OSIP 022-03 )

INSTALLATION INFORMATION: Safety ECP 91145/E2C/994-04

METHOD OF IMPLEMENTATION: Navy Field Modification Team (FMT)

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 2005 _____ FY 2006 _____ FY 2007 _____

DELIVERY DATE: FY 2005 _____ FY 2006 _____ FY 2007 _____

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (36) kits | 4 | 1.6 | 32 | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| To Complete () Kits | | | | | | | | | | | | | | | | | | | | |
| Total | 4 | 1.6 | 32 | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 4 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | | | |
| Out | 0 | 4 | 8 | 8 | 8 | 8 | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **TRAINER A/C SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 33.4 | A | 15.9 | 13.8 | 17.1 | 18.1 | 7.1 | 11.0 | 10.7 | 70.8 | 197.9 | |

DESCRIPTION: This line item funds modifications to a group of trainer aircraft which includes T-34C, T-39, T-44A/C, TH-57, T-38, TC-12, and T-2C. The trainer aircraft are described as follows: The T-34C is a single engine turbo-prop, multi-seat aircraft produced by Beech Aircraft used to simulate jet aircraft flight; the T-39 is a dual-engine, multi-purpose aircraft used to train undergraduate flight officers; the T-44 is a twin-engine, multi-seat aircraft produced by Beech Aircraft used to simulate operation of twin engine aircraft, specifically the P-3; the TH-57 and TH-6 are a single-engine, multi-seat rotary wing aircraft used for helicopter training. The T-38 is a two seat twin-engine supersonic jet aircraft utilized by the US Navy Test Pilot School to train pilots, test flight officers, and test engines.

The overall goal of the modification is to maintain safe and reliable operation of the trainer aircraft through the timely installation of necessary changes. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 005-04 T-44 AVIONICS OBSOLESCENCE | 8.8 | 7.4 | 7.8 | 7.7 | 5.4 | | | | 17.4 | 54.5 |
| 015-04 T-38 A/C CONVERSION | 2.9 | 6.0 | 6.0 | 6.4 | 5.7 | | | | 16.7 | 43.6 |
| 003-05 T-44 OXYGEN MASK/BRAKE REPLACEMENT | | 1.4 | | | | | | | | 1.4 |
| 006-05 TRAINER LEGACY A/C FAA | | 1.1 | 0.1 | 0.1 | 0.1 | | | | 0.1 | 1.5 |
| 006-07 TH-57 SAFETY UPGRADE | | | | 2.2 | 6.2 | 6.4 | 10.3 | 10.0 | 36.5 | 71.6 |
| 007-07 T44 WING WIRING | | | | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | | 3.6 |
| TOTAL | 11.7 | 15.9 | 13.8 | 17.1 | 18.1 | 7.1 | 11.0 | 10.7 | 70.8 | 176.2 |

Exhibit P-3a

MODIFICATION TITLE: T-44 AVIONICS OBSOLESCENCE( OSIP 005-04 )

MODELS OF SYSTEMS AFFECTED: T-44A TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: DESCRIPTION/JUSTIFICATION: The T-44A Avionics are becoming non-supportable due to non-availability of parts. The following avionics systems require replacement: NCS-31A Area Navigation/Control System, AP-106 Autopilot, Flight Director
and the RDR-130 Weather Radar. Avionics are being returned from the repair vendor Beyond Economical Repair (BER) due to non-availability of parts. Spare units are not available in the commercial market. IMPACT: As avionics become BER due to lack of parts, spares will be depleted.
Lack of avionics will ground aircraft and severely degrade CNATRA's ability to meet Pilot Training Requirements beginning in FY04. Current plans call for T-44 to fly its training mission until 2015.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The T-44 Avionics Obsolescence (OSIP 05-04) non-recurring engineering occurred in FY04. Commercially available Non-Development Item (NDI) kit procurement and installations began in FY05 .

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Install Kits | | | 8 | 5.4 | 8 | 6.0 | 9 | 6.3 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | 3 | 4.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 1 | 4.1 | 1 | 1.4 | 1 | 0.8 | 1 | 0.8 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 3 | * | 2 | 0.6 | 14 | 1.0 | 9 | 0.6 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 7 | 8.8 | 11 | 7.4 | 23 | 7.8 | 19 | 7.7 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-44A

MODIFICATION TITLE: T-44A Avionics Obsolescence (OSIP 05-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **CONTRACTOR FIELD TEAM MODIFICATION**

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005: Nov-04 FY 2006: Nov-05 FY 2007: Nov-06

DELIVERY DATE: FY 2005: Dec-04 FY 2006: Dec-05 FY 2007: Dec-06

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY (3) kits | 3 | * | | | | | | | | | | | | | | | | | | |
| FY 2005 (8) kits | | | 2 | 0.6 | 6 | 0.4 | | | | | | | | | | | | | | |
| FY 2006 (8) kits | | | | | 8 | 0.6 | | | | | | | | | | | | | | |
| FY 2007 (9) kits | | | | | | | 9 | 0.6 | | | | | | | | | | | | |
| FY 2008 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete (20) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **3** | * | **2** | **0.6** | **14** | **1.0** | **9** | **0.6** | | | | | | | | | | | | |

*Asterisk indicates amount less than $51K

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 3 | | | | 2 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | | | | | | | | | | | | |
| Out | | | | | 3 | 2 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: T-38 A/C CONVERSION( OSIP 015-04 )

MODELS OF SYSTEMS AFFECTED: T-38A SUPERSONIC JET TRAINER TYPE MODIFICATION: SAFETY/RELIABILITY

DESCRIPTION / JUSTIFICATION: The T-38A aircraft was introduced into service between 1961 and 1962 and has undergone numerous changes through the years. The Navy has allocated ten aircraft at TPS and relies heavily on the Air Force for engineering and Logistics support. At the close of FY08, the Air Force will have transitioned all of their aircraft to T-38C and the Navy will need to stand up engineering and logistics units for these unique aircraft. Due to the age of the aircraft, Operations & Support costs will increase over the life of the aircraft. The modifications will reduce O&S costs, allow the Navy to continue to utilize engineering and logistics infrastructure of the Air Force, and provide for improved safety of the T-38 aircraft. The Navy plans to utilize the T-38 at USNTPS through 2020 and beyond. Future modifications will include improved wings and ejection seats, currently being developed by the US Air Force.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: All components and systems required for this program are being developed and tested by the US Air Force. No Navy unique operational testing is anticipated under this program.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AUP KITS | 3 | 2.2 | 4 | 4.3 | 3 | 3.4 | | | | | | | | | | | | | | |
| EJECTION SEATS | | | | | | | | | | | | | | | | | | | | |
| PMP KITS | | | | | 2 | 1.3 | 10 | 5.3 | | | | | | | | | | | | |
| WINGS | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | * | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.1 | | 0.4 | | 0.2 | | 0.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 3 | 0.6 | 4 | 1.3 | 5 | 1.1 | 10 | 0.8 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 6 | 2.9 | 8 | 6.0 | 10 | 6.0 | 20 | 6.4 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: T-38A SUPERSONIC JET TRAINER MODIFICATION TITLE: T-38 A/C CONVERSION( OSIP 015-04 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: CONCURRENT WITH PHASED DEPOT MAINTENANCE

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 2005 Nov 04 FY 2006 Nov-05 FY 2007

DELIVERY DATE: FY 2005 Jan 05 FY 2006 Jan 06 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (3) kits | 3 | 0.6 | | | | | | | | | | | | | | | | | | |
| FY 2005 (4) kits | | | 4 | 1.3 | | | | | | | | | | | | | | | | |
| FY 2006 (3) kits | | | | | 3 | 1.0 | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 3 | 0.6 | 4 | 1.3 | 3 | 1.0 | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 3 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | | | | | | | | | | | | | |
| Out | 3 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Total |
| In | | | | | | | | | |
| Out | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: T-38A SUPERSONIC JET TRAINER MODIFICATION TITLE: T-38 A/C CONVERSION

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: CONCURRENT WITH PHASED DEPOT MAINTENANCE

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 N/A FY 2006 Nov-05 FY 2007 Nov-06

DELIVERY DATE: FY 2005 N/A FY 2006 Feb 06 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (2) kits | | | | | 2 | 0.1 | | | | | | | | | | | | | 2 | 0.1 |
| FY 2007 (10) kits | | | | | | | 10 | 0.8 | | | | | | | | | | | 10 | 0.8 |
| FY 2008 (8) kits | | | | | | | | | 8 | 0.7 | | | | | | | | | 8 | 0.7 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | | | | | 2 | 0.1 | 10 | 0.8 | 8 | 0.7 | | | | | | | | | 20 | 1.7 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | 2 | | | | 4 | 4 | 2 | | 4 | 4 | | | | | | | | | |
| Out | | | | | | | | 2 | | | | 4 | 4 | 2 | | 4 | 4 | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Total |
| In | | | | | | | | | 20 |
| Out | | | | | | | | | 20 |

Exhibit P-3a

MODIFICATION TITLE: T-44 OXYGEN MASK/BRAKE REPLACEMENT( OSIP 003-05 )

MODELS OF SYSTEMS AFFECTED: T-44A TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: T-44A Brake Assembly. The T-44A has experienced a large number of catastrophic brake failures (sticking/dragging) due to over temping of the brake housing and stator assembly. The OEM revealed insulator material was changed from asbestos to superimide. Lab results state that Superimide insulators contain a high amount of carbon material, which when combined with high humidity and salt air, will accelerate corrosion in the brake housing bore. There are 55 T-44A Inventory and all 55 will receive this modification. T-44A Oxygen Masks. Aviation Hazrep DTG 301751Z APR 02, T-44A Air Crew (AC) crew lost both left and right subpanel, and cockpit lighting. AC started to feel light headed due to altitude. AC went on oxygen but was unable to get headset on with oxygen mask on and selected speaker The oxygen masks installed in the aircraft are the old style which do not fit properly with the headsets currently in use. (Headsets changed from Telex to David Clark which utilize large ear muffs to reduce engine/aircraft noise and enhance AC communication during normal operation.) C-12/TC-12 platforms are in the process of replacing their oxygen mask with a FAA approved COTS full face type. This mask could be readily used in the T-44A. There are 55 T-44A Inventory and all 55 will receive this modification.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The Oxygen Masks and Brakes to be installed will be a commercially available, Non-Development Item (NDI).

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Brakes | | | 52 | 0.2 | | | | | | | | | | | | | | | | |
| Oxygen Mask | | | 52 | 0.8 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| Brakes | | | 3 | 0.1 | | | | | | | | | | | | | | | | |
| Oxygen Mask | | | 3 | 0.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | * | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 104 | 0.1 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 214 | 1.4 | | | | | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-44A

MODIFICATION TITLE: T-44A OXYGEN MASK/BRAKE REPLACEMENT (OSIP 03-05)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **CONTRACTOR FIELD MOD TEAM**

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005: Nov-04 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: Dec-04 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | 104 | 0.1 | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **104** | **0.1** | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | 26 | 26 | 26 | 26 | | | | | | | | | | | | | | | | | | | | |
| Out | | 26 | 26 | 26 | 26 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: TRAINER LEGACY A/C FAA( OSIP 006-05 )

MODELS OF SYSTEMS AFFECTED: TC-12B, T-34C, T-39G/N, T-2C, TH-57B/C TYPE MODIFICATION: Safety, Reliability, Maintainability

DESCRIPTION / JUSTIFICATION: Federal Aviation Regulations require manufacturers of commercial aircraft and associated systems/subsystems to investigate discrepant conditions, failures, and potential safety problems reported by all operators. The results of these investigations with recommended corrective action are reviewed/approved by the FAA and Navy and provided to all operators as service bulletins. Each service bulletin is a complete technical directive that provides corrective change information or detailed modification instructions. Compliance with many of these FAA bulletins is mandatory to ensure safe, reliable, FAA/Navy certified aircraft and continued flight operations. The Navy must maintain configuration and integrity compatible with FAA certified commercial models by incorporation of applicable service bulletins even when they emerge during the year of execution. The incorporation of certain service bulletins also serves to preclude extensive repairs/repetitive inspections. Crew equipment requirements in accordance with FAA directives and Navy requirements will be incorporated to ensure maximum safety in case of emergency. Specific modifications budgeted in this OSIP include the incorporation of TC-12B, T-34C, T-39G/N, T-44A, T-2C and TH-57B/C FAA Bulletins and Safety of Flight Navy Directives. Specific examples of components that will require modificati to conform to FAA bulletins and directives: oxygen masks, brakes, wing wiring, attenuating seats, exceedence warning, flap actuators, UHF/VHF radios, GPS, Mode S Transponder, Traffic Avoidance System, and Landing Gear.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Applicable FAA data (Supplemental Type Certificates, Service Bulletins and Airworthiness Directives) is reviewed for possible incorporation on an as required basis. All data is previously approved and verified by the FAA.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| T-2C | | | | | 23 | * | 23 | * | | | | | | | | | | | | |
| T-34C | | | | | 309 | * | 309 | * | | | | | | | | | | | | |
| T-39G/N | | | | | 23 | * | 23 | * | | | | | | | | | | | | |
| T-44 Stall Warning | | | 15 | 0.3 | 55 | * | 55 | * | | | | | | | | | | | | |
| TC-12B | | | | | 21 | * | 21 | * | | | | | | | | | | | | |
| TH-57/BC Night Vision Goggles | | | 120 | 0.6 | 120 | * | 120 | * | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 135 | 0.2 | 551 | 0.1 | 551 | 0.1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 270 | 1.1 | 1,102 | 0.1 | 1,102 | 0.1 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-2C/TC-12/T-34C/T-44A/T-39/TH-57 MODIFICATION TITLE: Trainer Legacy Aircraft, Federal Aviation Administration (FAA) Update, and Correction of Deficiencies (OSIP 06-05)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **CONTRACTOR MOD TEAM**

ADMINISTRATIVE LEADTIME: Various Months PRODUCTION LEADTIME: Various Months

CONTRACT DATES: FY 2005: Various FY 2006: Various FY 2007: Various

DELIVERY DATE: FY 2005: Various FY 2006: Various FY 2007: Various

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | 135 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 551 | 0.1 | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 551 | 0.1 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **135** | **0.2** | **551** | **0.1** | **551** | **0.1** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | 34 | 34 | 34 | 33 | 137 | 137 | 137 | 140 | 137 | 137 | 137 | 140 | | | | | | | | | | | | |
| Out | | 34 | 34 | 34 | 33 | 137 | 137 | 137 | 140 | 137 | 137 | 137 | 140 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: TH-57 SAFETY UPGRADE( OSIP 006-07 )

MODELS OF SYSTEMS AFFECTED: TH-57B/C TYPE MODIFICATION: Conversion/Safety

DESCRIPTION / JUSTIFICATION: The TH-57 is the sole platform for primary helicopter flight training for student aviators (USN, USMC, USCG) and foreign military pilots. This moderization effort capitalizes on technology improvements by inceasing aircrew survivability and situational awareness while providing a fleet representative digital cockpit configuration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The components of this block upgrade will be COTS as turnkey items.
ACI by the commercial contractor.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Install Kits | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 0.7 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Equipment | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 1.5 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | | 2.2 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **TH-57 Safety Upgrade** MODIFICATION TITLE: TH-57 Safety Upgrade (06-07)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Concurrent with ACI or Drop-in at CLS Depot Facility**

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: T44 WING WIRING( OSIP 007-07 )

MODELS OF SYSTEMS AFFECTED: T-44A/C TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: The NAVAIR Wiring System Team, AIR-4.4.4.3, completed a Wiring Integrity Study on the T-44A in FY02 and identified that the aircraft wiring, outside the pressure vessel, has deteriorated to an unacceptable condition. It was recommended that the wiring in the wings, from pressure vessel outward (including the engines) be replaced. Current Navy long-term plans are to operate the T-44 aircraft until the year 2025. In order to safely and economically maintain aircraft availability and PTR, it is necessary to replace the wiring.
Note that aircraft designated T-44A are redesignated T-44C upon completion of Avionics Obsolescences (OSIP 005-04) Modifications

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The wings are commercially available, non-developmental items (NDI) and will be installed during ACI by the commercial contractor.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Wing Wiring Kits | | | | | | | 10 | 0.2 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | * | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 10 | 0.4 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | 20 | 0.7 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **T-44A, T-44C Aircraft** MODIFICATION TITLE: T-44A Wing Wire Replacement (OSIP 07-07)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Concurrent with ACI or as a Drop-in Modification at CLS Contractor Depot Facility**

ADMINISTRATIVE LEADTIME: * Months PRODUCTION LEADTIME: * Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: Oct-06

DELIVERY DATE: FY 2005: FY 2006: FY 2007: Oct-06

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 10 | 0.4 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | **10** | **0.4** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | 2 | 2 | 3 | 3 | | | | | | | | | | | | |
| Out | | | | | | | | | | 2 | 2 | 2 | 3 | 3 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE<br>**C2-A(R) Series Modification** | | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 240.8 | A | 29.4 | 29.2 | 37.2 | 32.2 | 23.1 | 19.3 | 6.0 | 24.0 | 441.2 | |

DESCRIPTION:

The C-2A(R) Greyhound is a high wing monoplane, twin engine turbo-prop aircraft capable of operating from both a shore base and all operational USN aircraft carrier classes. The mission of the C-2A(R) is to provide rapid response Carrier Onboard Delivery (COD) of fleet essential supplies, repair parts, and personnel to sustain at sea operations of deployed battle groups. In addition, the C-2A(R) provides airdrop delivery and mobilization support for special operations forces from land bases and carriers. The overall goal of the modifications in FY 2007 is to continue initial procurement efforts for the C-2A(R) Service Life Extension Program (SLEP). The design service life of the C-2A(R) is 10,000 flight hours with 15,000 landings. SLEP modifications increase the service life to 15,000 flight hours and 36,000 landings.

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 024-94 C-2A SLEP | 240.8 | 29.4 | 29.2 | 31.7 | 30.2 | 20.5 | 15.2 | 3.2 | 21.1 | 421.3 |
| 011-07 CRITICAL COMPONENTS | | | | 5.5 | 2.1 | 2.6 | 4.0 | 2.8 | 2.8 | 19.9 |
| TOTAL | 240.8 | 29.4 | 29.2 | 37.2 | 32.2 | 23.1 | 19.3 | 6.0 | 24.0 | 441.2 |

Exhibit P-3a

MODIFICATION TITLE: C-2A(R) Blk Upgrade/Service Life Extension Program (OSIP 024-94)

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft TYPE MODIFICATION: MISSION PERFORMANCE ENHANCEMENTS

DESCRIPTION / JUSTIFICATION:

The C-2A(R) Block Upgrade/Service Life Extension Program (SLEP) extends the Navy's Carrier Onboard Delivery (COD) capability beyond current projected service life. Efforts funded in this OSIP include Structured Enhancements, Aircraft Rewiring, L-Probe Kit, Cains II, ARC-210 Radios, Outer Wing Panel Enhancements, NP-2000 (8 bladed propeller).

Repeatedly, C-2A Greyhound elevator trim actuators have failed in flight and on deck, causing the aircraft to go into an immediate nose down flight profile. In some cases, the aircraft has lost half its altitude before control was regained. The community assesses this risk as potentially catastrophic. Failure of the elevator trim actuator occurs when an internal thrust bearing fails, allowing the rod end to separate from the actuator housing, resulting in an abrupt nose down trim. Safety ECP (NI 1004-04 Trim Actuator) provides a hardware correction by opening the elevator trim actuator, changing the bushing and other component parts. NAVICP, utilizing NWCF funds is buying 36 spare kits (FY-05) and 20 spare kits (FY-06) which are installed with this OSIP.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development and operational testing (DT and OT) have been completed for the avionics systems included in this OSIP. DT and OT of the various modifications for SLEP will complete in FY 2006. Aircraft Rewire effort experienced technical difficulties during initial validation process and program was restructured resulting in a 2 year slip. Procurement of kits commenced in FY06.
FY04 BTR $2.5M for one additional Structures Kit.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ARC-210 KIT | 35 | 3.0 | | | | | | | | | | | | | | | | | | |
| CAINS II (AFC-156) | 36 | 2.3 | | | | | | | | | | | | | | | | | | |
| INTERIM AFC | 5 | 0.3 | | | | | | | | | | | | | | | | | | |
| INTERIM AFC-DERF | 2 | 0.1 | | | | | | | | | | | | | | | | | | |
| L-PROBE (AFC-161) | 36 | 0.3 | | | | | | | | | | | | | | | | | | |
| NP2000 | 7 | 1.1 | 4 | 0.3 | 4 | 0.3 | 10 | 0.7 | | | | | | | | | | | | |
| OWP CONVERSION (AYC-A) | 19 | 2.8 | | | | | | | | | | | | | | | | | | |
| OWP ENHANCEMENT (AFC-Y) | 4 | 10.8 | | | | | | | | | | | | | | | | | | |
| OWP ENHANCEMENT (AFC-Z) | 39 | 9.2 | 6 | 0.5 | 8 | 0.8 | 10 | 1.0 | | | | | | | | | | | | |
| REWIRE (AFC-162) | 8 | 8.2 | | | 3 | 1.9 | 5 | 3.2 | | | | | | | | | | | | |
| REWIRE (AFC-162)-DERF | 2 | 1.7 | | | | | | | | | | | | | | | | | | |
| STRUCTURE (AFC-171)-DERF | 1 | 0.4 | | | | | | | | | | | | | | | | | | |
| STRUCTURE KIT (AFC-171) | 13 | 4.7 | 4 | 1.2 | 5 | 1.6 | 5 | 1.6 | | | | | | | | | | | | |
| TRIM ACTUATOR | 34 | * | 26 | * | 10 | * | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | 1 | 31.1 | 1 | 6.6 | 2 | 4.2 | | 1.4 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| CAINS II B KITS | 50 | 6.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 4.2 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 10.3 | | 3.6 | | 1.4 | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | 6.4 | | * | | | | 1.5 | | | | | | | | | | | | |
| SUPPORT EQUIP | | 2.9 | | 0.1 | | 0.2 | | | | | | | | | | | | | | |
| ILS | | 5.0 | | 0.1 | | 0.2 | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | 99.7 | | 11.2 | | 11.3 | | 8.5 | | | | | | | | | | | | |
| INTERIM CONTRACTOR | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 185 | 30.0 | 78 | 5.7 | 45 | 7.3 | 29 | 13.4 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 240.8 | | 29.4 | | 29.2 | | 31.7 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Enhanced OWP kit and OWP Conversion kit installed by fleet.
3. Asterisk indicates amount less than $50K.
4. QTY 2 of 6 Rewire kits no longer reflect current design and cannot be used.
5. Trim Actuator's is 2 per aircraft.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - ARC-210 Radios

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Modification Team (FMT)

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY2005 FY2006 FY2007

DELIVERY DATE: FY2005 FY2006 FY2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (35) kits | 26 | 1.9 | 9 | 0.7 | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 26 | 1.9 | 9 | 0.7 | | | | | | | | | | | | | | | | |

Installation Schedule

| | QTY | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 26 | 5 | 4 | | | | | | | | | | | | | | | | | | | | | | |
| Out | 26 | | 5 | 4 | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| In | | | | | | | | | |
| Out | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft

MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - Structures

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Current w/SDLM

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 14 Months

CONTRACT DATES: FY2005 Oct-04 FY2006 Oct-05 FY2007 Oct-06

DELIVERY DATE: FY2005 Dec 05 FY2006 Dec-06 FY2007 Dec 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (13) kits | 9 | 12.0 | 4 | 3.7 | | | | | | | | | | | | | | | | |
| FY2002 (1) kit - DERF* | 1 | 2.1 | | | | | | | | | | | | | | | | | | |
| FY2005 (4) kits | | | | | 4 | 3.8 | | | | | | | | | | | | | | |
| FY2006 (5) kits | | | | | | | 5 | 4.9 | | | | | | | | | | | | |
| FY2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2008 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2009 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 10 | 14.2 | 4 | 3.7 | 4 | 3.8 | 5 | 4.9 | | | | | | | | | | | | |

* 1 structure kit procured with DERF in SLEP subhead Y5C2.

Installation Schedule

| | PRIOR YEARS | FY2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | | | | | | | | | | | | |
| Out | 10 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft

MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - Rewire

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Current w/SDLM

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 14 Months

CONTRACT DATES: FY2005 ____ FY2006 Oct-05 FY2007 Oct-06

DELIVERY DATE: FY2005 ____ FY2006 Dec 06 FY2007 Dec 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (6) kits * | | | | | ***2 | 1.0 | 2 | 1.9 | | | | | | | | | | | | |
| FY 2002 (2) kit - DERF** | ***1 | | ***1 | | | | | | | | | | | | | | | | | |
| FY2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY2006 (3) kits | | | | | | | 3 | 2.8 | | | | | | | | | | | | |
| FY2007 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2008 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2009 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (9) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 1 | | 1 | | 2 | 1.0 | 5 | 4.7 | | | | | | | | | | | | |

* 2 of 6 kits no longer reflect current design and cannot be used.
** 2 Rewire kits were procured with DERF
*** Prior Year, FY05 and 1 unit in FY06 are the prototype, validation and verification quantities.

Installation Schedule

| | QTY | FY2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1 | 1 | | | | 1 | | 1 | 1 | 1 | 2 | 1 | 1 | | | | | | | | | | | | |
| Out | 1 | | | | | 1 | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft

MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - Outer Wing Panel Enhancement

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Forced Retrofit Component

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY2005 Oct-04 FY2006 Oct-05 FY2007 Oct-06

DELIVERY DATE: FY2005 Feb 05 FY2006 Feb 06 FY2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (39) kits | 36 | 9.6 | 3 | 0.9 | | | | | | | | | | | | | | | | |
| FY2005 (6) kits | | | | | 6 | 1.9 | | | | | | | | | | | | | | |
| FY2006 (8) kits | | | | | | | 8 | 2.5 | | | | | | | | | | | | |
| FY2007 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY2008 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY2009 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 36 | 9.6 | 3 | 0.9 | 6 | 1.9 | 8 | 2.5 | | | | | | | | | | | | |

Installation Schedule

| | QTY | FY2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 36 | | 2 | 1 | | 2 | 2 | 2 | | 3 | 3 | 2 | | | | | | | | | | | | | |
| Out | 36 | | | 2 | 1 | | 2 | 2 | 2 | | 3 | 3 | 2 | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft

MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - NP-2000

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Current w/SDLM Drive in Mod

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY2005 Oct-04 FY2006 Oct-05 FY2007 Oct-06

DELIVERY DATE: FY2005 Oct 05 FY2006 Oct 06 FY2007 Oct 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (7) kits | | | | | 4 | 0.4 | 3 | 0.3 | | | | | | | | | | | | |
| FY2005 (4) kits | | | | | | | 4 | 0.5 | | | | | | | | | | | | |
| FY2006 (4) kits | | | | | | | 4 | 0.5 | | | | | | | | | | | | |
| FY2007 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY2008 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | 4 | 0.4 | 11 | 1.3 | | | | | | | | | | | | |

Installation Schedule

| | QTY | FY2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | 1 | 1 | 2 | | 4 | 4 | 3 | | | | | | | | | | | | | |
| Out | | | | | | | 1 | 1 | 2 | | 4 | 4 | 3 | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft MODIFICATION TITLE: Block Upgrade/SLEP (OSIP 24-94) - TRIM ACTUATOR

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Field Mod Team

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY2005 Jun-05 FY2006 Oct-05 FY2007

DELIVERY DATE: FY2005 Jul-05 FY2006 Nov-05 FY2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY2005 | | FY2006 | | FY2007 | | FY2008 | | FY2009 | | FY2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (34) kits | | * 0.3 | * 34 | | | | | | | | | | | | | | | | | |
| FY2005 (62) kits | | | 62 | 0.4 | | | | | | | | | | | | | | | | |
| FY2006 (30) kits | | | | | 30 | 0.2 | | | | | | | | | | | | | | |
| FY2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | 0.3 | 96 | 0.4 | 30 | 0.2 | | | | | | | | | | | | | | |

Note: * Quantities reflected in FY05 are funded with FY04 funds. Quantities are higher than kit purchases due to safety forced retrofit of spares.

Installation Schedule

| | QTY | FY2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 24 | 36 | 36 | 30 | | | | | | | | | | | | | | | | | | | |
| Out | | | | 36 | 36 | 36 | 18 | | | | | | | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: C-2A(R) CRITICAL COMPONENTS PROGRAM (OSIP 011-07)

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft TYPE MODIFICATION: MISSION PERFORMANCE ENHANCEMENTS

DESCRIPTION / JUSTIFICATION:

The C-2A(R) Service Life Extension Program (SLEP) extends the Navy's Carrier Onboard Delivery (COD) capability beyond current projected service life. With this longer airframe life, problems with other non-SLEP systems require upgrade/modifications. Commencing in FY2007 and out of this OSIP procures a portion of the Critical Components avionics, hydraulics, structural or power and propulsion subsystems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ALIGHTING & LANDING | | | | | | | 1 | * | | | | | | | | | | | | |
| AVIONICS UPGRADE | | | | | | | 1 | 0.2 | | | | | | | | | | | | |
| ENGINE POWER & | | | | | | | 4 | * | | | | | | | | | | | | |
| HYDRAULIC | | | | | | | 4 | * | | | | | | | | | | | | |
| STRUCTURAL/PRESSURATION | | | | | | | 4 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | 2 | 2.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 1.5 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 1.3 | | | | | | | | | | | | |
| INTERIM CONTRACTOR | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 2 | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | | 5.5 | | | | | | | | | | | | |

Notes:
1. Engine Power and Propulsion, Hydraulic and Structural Pressurization kits installed by the fleet.
2. Asterisk indicates amount less than $50K.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft MODIFICATION TITLE: Critical Components (OSIP 11-07) - Alighting and Landing

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Field Mod Team (FMT)

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005 FY2006 FY2007 Mar-07

DELIVERY DATE: FY2005 fY2006 FY2007 Jun 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (1) kits | | | | | | | 1 | * | | | | | | | | | | | | |
| FY 2008 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (7) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (7) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (6) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 1 | | | | | | | | | | | | | |

Note: * FY07 is a Validation/Verification

Installation Schedule

| | 0 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | 1 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-2A(R) Aircraft MODIFICATION TITLE: Critical Components (OSIP 11-07) - Avionics Upgrades

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Field Mod Team

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY2005 FY2006 FY2007 Mar-07

DELIVERY DATE: FY2005 FY2006 FY2007 Jun 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (1) kits | | | | | | | 1 | * | | | | | | | | | | | | |
| FY 2008 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (7) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (7) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (6) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 1 | | | | | | | | | | | | | |

Note: * FY07 is a Validation/Verification

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY2006 | | | | FY2007 | | | | FY2008 | | | | FY2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | 1 | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**BUDGET ITEM JUSTIFICATION SHEET**
**P-40**

**DATE:** **February 2006**

APPROPRIATION/BUDGET ACTIVITY
**Aircraft Procurement. Navv / APN5 Aircraft Modifications**

P-1 ITEM NOMENCLATURE
**C-130 SERIES**

DESCRIPTION:

| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | |
| COST (In Millions) | 40.5 | A | 30.9 | 50.2 | 3.5 | | 35.6 | 66.1 | 69.6 | 472.4 | 768.6 |

This item funds modifications to C/KC-130 aircraft. The Lockheed C/KC-130 aircraft is a four engine, high-wing, all metal, long range, land based monoplane capable of all weather transport of cargo or personnel and in-flight refueling. There are currently 98 aircraft in the Navy and Marine Corps inventory (50 active and 48 reserve). The expected Service Life is as follows:

| T/M/S | Service Date | Service Life | Expected Life |
|---|---|---|---|
| C-130T | 10/91 - 11/95 | 450 mos. | 2028-2032 |
| KC-130F | 03/60 - 11/62 | 600 mos. | 2010-2012 |
| KC-130R | 09/75 - 06/78 | 480 mos. | 2015-2018 |
| KC-130T | 04/84 - 02/96 | 450 mos. | 2021-2033 |
| KC-130J | 09/00 - 10/13 | 450 mos. | 2037-2048 |

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 002-92 AN/ARC-210 RADIO | 13.8 | 3.5 | 0.6 | | | | | | | 18.0 |
| 009-94 NVL | 11.8 | 1.1 | | | | | | | | 12.9 |
| 020-03 ASE | 13.8 | 20.3 | 18.0 | | | | | | | 52.2 |
| 013-04 AVIONICS MODERNIZATION PROGRAM | 3.8 | | 29.2 | | | 30.6 | 43.9 | 39.7 | 432.0 | 579.2 |
| 021-04 ELEC. PROP CONTROL SYSTEM (EPCS) | 1.0 | 3.2 | | | | | | | 28.5 | 32.6 |
| 016-05 C/KC-130F/R/T LIFE RAFTS | | 2.7 | | | | | | | | 2.7 |
| 010-06 C-130J CNS/ATM | | | 2.4 | 3.5 | | 5.0 | 22.2 | 29.8 | 12.0 | 74.9 |
| TOTAL | 44.3 | 30.9 | 50.2 | 3.5 | | 35.6 | 66.1 | 69.6 | 472.4 | 772.6 |

NOT: FY2006 does not match the P-1 due to a technical error.
FY2006 amount shown above includes $18M in Title IX funding.

Exhibit P-3a

MODIFICATION TITLE: AN/ARC-210 RADIO (OSIP 02-92)

MODELS OF SYSTEMS AFFECTED: C-130T, KC-130F/R/T TYPE MODIFICATION: Performance Enhancement (HONA Category C)

DESCRIPTION / JUSTIFICATION: The AN/ARC-210 is a combination UHF/VHF, AM/FM jam-resistant radio that was developed to allow for Electronic Protection (EP) interoperability with the Air Force, Army and NATO. The radio provides dual UHF capability for CV based TACAIR; VHF FM for close air support and maritime channels; VHF AM for air traffic control; and EP capabilities using the Air Force developed waveforms (UHF-AM HAVEQUICK I and II), and the Army developed waveform (VHF-FM SINCGARS). The AN/ARC-210 can be controlled by either a remote control unit or via a MIL-STD-1553 multiplex data bus. The EP parameters and single channel preset information can be loaded via a CYZ-10 Data Transfer Device (DTD). The fill information can consist of word-of-day for HAVEQUICK; the KGV-10 transec variable, hopsets and frequency lock-out tables for SINCGARS. Baseline for this program is GPS (OSIP 25-92). This modification is covered by a singular ECP (C-130-99) and will be incorporated in 38 C-130 aircraft (12 active and 26 reserve). PMA209 funded the 2 validation/verification kits and installs. PMA209's ARC-210 OSIP covers 21 recurring kits. This OSIP covers the remaining 16 kits and 36 aircraft installs plus the 21 retrofit kits with installs. This modification was approved 20 Apr 93, ORD 333-06-093.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The AN/ARC-210 radio replaces the AN/ARC-159 radios in the C-130 aircraft. Validation/verification was performed during FY 1994-FY 1996. FOT&E was performed in FY97 for the KC-130F and KC-130R configurations. Recurring production installations started in April 1997. The previous program plan called for 91 total aircraft (77 to be equipped with 1556 radios and 14 aircraft to be equipped with 1794C radios that were SATCOM capable). Reduction in quantity from 91 to 84 was based on the plan to retire KC-130F aircraft as they are replaced by KC-130J aircraft. Changes in the technical requirements for SATCOM capability have caused us to alter the program and install the 1794C in all aircraft. OSIP had been changed to reflect SATCOM incorporation in all 84 aircraft (of which four were to be funded under a Common Avionics OSIP). Twenty-one aircraft previously modified will have to be retrofitted with the 1794C capability (The 21 reflects the 1556 kits acquired in FY98 and prior). Quantity of affected aircraft has been further reduced from 84 to 38 (12 Active and 26 Reserve) due to the increased numbers of KC-130J aircraft and the start of the AMP program (OSIP 13-04) in FY04.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| -900 CDNU COMPONENT | 32 | 3.0 | 8 | 0.8 | | | | | | | | | | | | | | | | |
| 1556 CT KITS | 1 | 0.1 | | | | | | | | | | | | | | | | | | |
| 1556 F KITS | 5 | 0.2 | | | | | | | | | | | | | | | | | | |
| 1556 KT KITS | 6 | 0.4 | | | | | | | | | | | | | | | | | | |
| 1556 R KITS | 9 | 0.5 | | | | | | | | | | | | | | | | | | |
| DIRECTION FINDER (DF) ANTENNAS | 97 | * | | | | | | | | | | | | | | | | | | |
| RETRO-RETROFIT KITS (1F,7R) A3 | 5 | 0.4 | | | | | | | | | | | | | | | | | | |
| SATCOM CT(A7) KITS | 3 | 0.4 | | | | | | | | | | | | | | | | | | |
| SATCOM F(A5) KITS | 3 | 0.3 | | | | | | | | | | | | | | | | | | |
| SATCOM KT(A7/A8) KITS | 2 | 0.3 | | | | | | | | | | | | | | | | | | |
| SATCOM R(A6) KITS | 3 | 0.3 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 1.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL SUPPORT | 2 | 0.4 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.4 | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | * | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.2 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.8 | | 0.1 | | * | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 30 | 2.4 | 21 | 2.6 | 6 | 0.6 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 13.8 | | 3.5 | | 0.6 | | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-130T, KC-130F/R/T MODIFICATION TITLE: AN/ARC-210 RADIO (OSIP 02-92)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Commercial FMT (2 radios per aircraft).

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (57) kits | 30 | 2.4 | 21 | 2.6 | 6 | 0.6 | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 30 | 2.4 | 21 | 2.6 | 6 | 0.6 | | | | | | | | | | | | | | |

NOTE: Included in the prior year amount is 21 install kits bought by PMA-209, Common Avionics

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 30 | | | 7 | 14 | | | 3 | 3 | | | | | | | | | | | | | | | | |
| Out | 29 | 1 | | | 7 | 7 | 7 | | 2 | 2 | 2 | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: KC-130 NIGHT VISION LIGHTING (NVL) (OSIP 09-94)

MODELS OF SYSTEMS AFFECTED: KC-130F/R/T and OPS Trainer TYPE MODIFICATION: Performance Enhancement (HONA Category C)

DESCRIPTION / JUSTIFICATION: The KC-130 has no NVL capability to support flight operations to accomplish tactical missions at night. The lack of NVL capability creates significant interoperability problems with other Night Vision Display (NVD) capable aircraft. Incorporation of a non-developmental NVL system, that has been prepared for other USMC/USAF tactical aircraft and is compatible with KC-130 tactical missions and avionics, will alleviate this critical shortfall and allow the accomplishment of tactical missions without unnecessarily jeopardizing the crew's safety and the safety of the aircraft. This modification will allow C-130 aircraft to navigate visually at night at low altitudes (using night vision and rear vision devices), aerial refuel at night with Night Vision Goggle (NVG) capable receivers, conduct clandestine (NVD only) tactical landings and takeoffs from austere sites, conduct ground refueling (using rapid ground refueling pods) and air-landed support operations. This modification is covered by a singular ECP and will be incorporated in 16 aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: The initial in-production engineering change proposal to incorporate non-developmental NVL in USMCR KC-130T aircraft was funded with NG&RE. Design/development of retrofit aircraft affected by this OSIP was originally based on the KC-130T NG&RE program. Development commenced in FY 1994 with procurement of two trial kits that were installed in FY 1995. Funding constraints delayed continuation of this program. Limited funds were required in FY97/98 to provide Maintenance Plans, pubs, and other logistics support for the aircraft already fielded. A competed contract was awarded in FY00 that allowed us to restart this program with non-recurring engineering, kit manufacture, and installation. First four recurring kits were purchased in FY00 and one val/ver install was completed. Technical difficulties during the install delayed DT and the remaining FY00 installs. Two additional val/ver installs were completed in FY01. The last val/ver install was completed in FY02 with recurring installs to begin FY03. The quantity of aircraft affected by this OSIP has been reduced from 24 to 16 (12 Active and 4 Reserve) due to the start of the Avionics Modernization Program (AMP) program (OSIP 13-04).

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ALL TMS | 14 | 5.4 | 2 | 0.8 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 2.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| EQUIPMENT | 1 | 0.3 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | * | | | | | | | | | | | | | | | | | | |
| ILS | | 0.2 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.8 | | * | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 14 | 2.4 | 2 | 0.2 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 11.8 | | 1.1 | | | | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: KC-130F/R/T and OPS Trainer

MODIFICATION TITLE: KC-130 NIGHT VISION LIGHTING (NVL) (OSIP 09-94)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation will be accomplished by Contractor Field Mod Team

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 7 Months

CONTRACT DATES: FY 2005 Dec 04 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Jul 05 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (14) kits | 14 | 2.4 | | | | | | | | | | | | | | | | | | |
| FY 2005 (2) kits | | | 2 | 0.2 | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 14 | 2.4 | 2 | 0.2 | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 14 | | | | 2 | | | | | | | | | | | | | | | | | | | | |
| Out | 14 | | | | | 1 | 1 | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: Aircraft Survivability Equipment (ASE) (OSIP 020-03)

MODELS OF SYSTEMS AFFECTED: C/KC-130F/R/T TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: Subject funding is being used to improve aircraft survivability by upgrading or replacing certain Defensive Electronic Countermeasures (DECM), installing Fuel Tank Foam, and installing ballistic armor protection. DECM Upgrades/Replacements: the existing AN/AAR-47 Missile Warning System (MWS), AN/ALQ-157(V)1 Infrared Countermeasures (IRC) system, and replacing the AN/ALE-39 Countermeasure Dispensing System (CMDS). The AN/AAR-47(V)2 (MWS) improves performance over the existing system in the following areas: reduction in signal noise and false alarms, increased sensor sensitivity and range, greater detection efficiency, extends the overall temperature range sensed, and improves reliability. The new AN/ALQ-157(V)2 IRCM provides many reliability and maintainability enhancements. The new AN/ALE-47 CMDS is an integrated, threat adaptive, reprogrammable, computer-controlled expendable dispensing system. Installation of fuel tank foam in the main, external, and auxiliary fuel tanks reduces the susceptibility of loss or severe damage to the aircraft and loss of life from fuel fire/tank rupture due to surface-to-air or air-to-air fire. The installation of ballistic armor provides crew protection and enhances aircraft survivability.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ALQ-157(5F/7R/8KT/17J) ALE- | 57 | 3.3 | | | | | | | | | | | | | | | | | | |
| KC-130 DECM A-KIT | | | 5 | 4.0 | 5 | 14.7 | | | | | | | | | | | | | | |
| KC-130J ARMOR A-KIT | 13 | * | 8 | * | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 5.2 | | 3.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| C-130T ARMOR | 21 | 0.4 | 7 | 0.8 | | | | | | | | | | | | | | | | |
| KC-130F/R/T FUEL TANK FOAM KITS | | | 25 | 0.9 | | | | | | | | | | | | | | | | |
| KC-130J ARMOR B-KIT | 13 | 1.5 | 8 | 0.9 | | | | | | | | | | | | | | | | |
| C-130 APR-39 B KIT | | | | | 5 | 1.0 | | | | | | | | | | | | | | |
| ALE-47 B KIT | | | | | 5 | 0.3 | | | | | | | | | | | | | | |
| AAR-47 B KIT | | | | | 5 | 0.3 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | 0.4 | | 0.2 | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.2 | | 0.0 | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.4 | | | | | | | | | | | | | | | | |
| ILS | | 0.7 | | 0.3 | | 0.2 | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.9 | | 1.2 | | 1.3 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 20 | 1.5 | 4 | 8.2 | 26 | | 5 | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 13.8 | | 20.3 | | 18.0 | | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. A Kit cost increase in FY06 is due to going to a turnkey procurement and install strategy to shorten Production Lead Time.
3. FY05 Fuel Foam: No "A Kit" required for this effort. Effort includes "B Kit" and Installation costs only.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **C/KC-130F/R/T**

MODIFICATION TITLE: AIRCRAFT SURVIVABILITY EQUIPMENT (ASE) - KC-130T DECM GROUND UP OSIP 020-03
(Also reflected is foam kits)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Field Modification Team**

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 Jul 05 (DECM) FY 2006 Mar 06 FY 2007

DELIVERY DATE: FY 2005 Nov 05 (DECM) FY 2006 Jun 06 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (20) kits | 20 | 1.5 | | | | | | | | | | | | | | | | | | |
| FY 2005 (30) kits | | | 4 | 8.2 | 26 | | | | | | | | | | | | | | | |
| FY 2006 (5) kits | | | | | | | 5 | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 20 | 1.5 | 4 | 8.2 | 26 | | 5 | | | | | | | | | | | | | |

ASE Funding received June 21 2005
FY06 and FY07 installation costs are funded in FY05.

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 20 | | | | 4 | 8 | 9 | 4 | 5 | 3 | 2 | | | | | | | | | | | | | | |
| Out | 20 | | | | | 4 | 8 | 9 | 4 | 5 | 3 | 2 | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: AVIONICS MODERNIZATION PROGRAM (AMP) OSIP 013-04

MODELS OF SYSTEMS AFFECTED: C-130T, KC-130T TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: Objectives of the USN/USMC AMP are to lower the cost of ownership and increase survivability of the U.S. Navy/Marine Corps' Reserve C-130 fleet, while complying with Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. The AMP effort will upgrade the overall electrical system, modernize the cockpit by adding current Night Vision Lighting (NVL) requirements, Defensive Electronic Countermeasures (DECM), as well as the inclusion of newer, faster and more robust data processing systems. A full DECM suite will be installed into one validation/verification aircraft (KC-130T) with provisions for DECM into the other 47 aircraft. Additional improvements to the C-130's precision approach and landing capability will also be installed, as well as interfaces necessary to integrate real time information in the cockpit (RTIC). In addition to providing enhanced capabilities, AMP will lower the overall cost of ownership of the C-130 fleet by generating a reduction of cockpit crew manning, and by implementing a cost effective and open systems architecture to increase reliability, maintainability, and sustainability (RM&S) of the avionics suite. AMP objectives will be achieved through a comprehensive cockpit modernization.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: The AMP affects 48 USN/USMC C/KC-130T Reserve aircraft. Navy is providing 48 kits (comprised of the boxes and wiring; 1 each per aircraft) and installs for the basic avionics portion of this upgrade. Both the CNS/ATM and avionics upgrade portions will be installed concurrently and are non-severable. The USN/USMC AMP program has a joint interest in the following USAF requirements documents: meeting the operational requirements identified in the MAF/CAF/AFSOC 902-98-I/II Operational Requirements Document (ORD) for C-130X Phase I AMP dated 26 Mar 99, AFSOC JORD 022-91-IC, Rev 1, Improved Terrain Following/Terrain Avoidance (TF/TA) Navigation System dated 16 Mar 98, AFSOC ORD 022-91-ID, SOF Enhanced Situational Awareness dated 5 Jun 98, and AFSOC ORD 007-94-1, Electronic Warfare Bus with Consolidated Display dated 13 Jul 98. The USN/USMC AMP will be an evolutionary acquisition, block approach, integration effort that will go out procure kits through FY15 with installs through FY16.

The USN/USMC Avionics Modernization Program (AMP) will leverage off of the USAF developmental program by the same name, an ACAT ID program, to achieve the greatest possible commonality between equivalent USAF and USN/USMC aircraft. The USAF program will modify approximately 500 USAF C-130 aircraft. The USN/USMC program will modify 48 C/KC-130T aircraft; including 1 Validation aircraft in FY06 and 1 Verification aircraft in FY07. Based on the maturity of the U.S. Air Force (USAF) program in FY 2004, APN-5 funds were originally budgeted to integrate the USAF-developed C-130 AMP into the USN/USMC C/KC-130T AMP. The USAF schedule has slipped, with a Milestone C Low Rate Initial Production currently expected to occur in March 2006. Given the current status of the USAF program, recent guidance from the Assistant Secretary of the Navy (Financial Management and Comptroller) states that the USN/USMC C-130 joint effort with USAF should be funded with RDT&E,N funds.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A KIT FOR PRODUCTION | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | 12.8 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| B KIT FOR PRODUCTION | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 4.8 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | 3.7 | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | 1.0 | | | | | | | | | | | | | | |
| ILS | | 1.1 | | | | 2.6 | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 2.7 | | | | 4.2 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 3.8 | | | | 29.2 | | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. Per ASN FMC - APN-5 funding through FY08 should be reclassified to PE 0604125N, BLI 0572.
   An Above Threshold Reprogramming (ATR) for FY06 has been initiated with expected approval in 2nd Qtr FY06.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: **C-130T, KC-130T** MODIFICATION TITLE: AVIONICS MODERNIZATION PROGRAM (AMP) OSIP 013-04 - Avionics Kits for Production

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Drive-In MOD**

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 16 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (4) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (6) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (74) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: C-130 ELECTRONIC PROP CONTROL SYSTEM (EPCS) (OSIP 21-04)

MODELS OF SYSTEMS AFFECTED: C-130T, KC-130T TYPE MODIFICATION: READINESS IMPROVEMENT

DESCRIPTION / JUSTIFICATION: The USMC KC-130 and Navy C-130T aircraft currently operate with a hydro-mechanical valve housing designed in the 1950's. This component controls the pitch angle of the propeller blades and it is consistently in the top three readiness degraders and is the number one reason for in flight aborts. The current valve housing is a significant readiness degrader and a high manhour unscheduled maintenance driver for the fleet. EPCS has the following OAG prioritites: #4 Navy OAG and #9 USMC OAG.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: This OSIP represents the first recurring installation. This OSIP affects 20 C-130T (Reserve) aircraft and 27 KC-130T (active) aircraft.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| EPCS KITS (47 T) | 1 | 0.3 | 2 | 1.1 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.1 | | 0.4 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.3 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.4 | | 1.0 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 1 | 0.2 | 2 | 0.4 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 1.0 | | 3.2 | | | | | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K
2. FY06 Installations are funded in FY05

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-130T, KC-130T

MODIFICATION TITLE: C-130 ELECTRONIC PROP CONTROL SYSTEM (EPCS) (OSIP 21-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Commercial FMT (2 radios per aircraft).

ADMINISTRATIVE LEADTIME: 10 Months

PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005 Jul 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Jan 06 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (1) kits | 1 | 0.2 | | | | | | | | | | | | | | | | | | |
| FY 2005 (2) kits | | | 2 | 0.4 | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (44) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 1 | 0.2 | 2 | 0.4 | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 1 | | | | | | 1 | 1 | | | | | | | | | | | | | | | | | |
| Out | 1 | | | | | | | 1 | 1 | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: LIFE RAFTS (OSIP 016-05)

MODELS OF SYSTEMS AFFECTED: C/KC-130F/R/T TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: The C/KC-130 aircraft is a four-engine, high-wing, long range, land based monoplane capable of all weather transport of cargo or personnel and in-flight refueling. The objective of the U.S. Navy/U.S. Marine Corp (USN/USMC) Life Raft OSIP is to replace the current life rafts with the LRU-33/A 20-Man raft. This new raft is to replace the current inventory of LRU-15/A 20-Man life raft in the C/KC-130F/R/T Fleet which is experiencing un-commanded deployment while in-flight. These deployments are causing uncontrollable flight issues with the aircraft. There have been six incidents of un-commanded deployment since 1990 on the C/KC-130. The latest incident in April 2005 nearly ended catastrophically. This constitutes a Category 1 Hazard Severity, which could result in loss of aircraft and crew. The new Air Cruisers LRU-33/A Life Raft System with Survival Kit has been approved by NAVAIR to correct this issue. The KC-130J is currently fielding the LRU-33/A Life Raft System.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| KITS C/KC-130F/R/T LIFERAFTS | | | 77 | 2.5 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.3 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 77 | 2.7 | | | | | | | | | | | | | | | | |

Notes:
1. Total Aircraft affected = 77
   C-130 (20)
   KC-130F (19)
   KC-130R (10)
   KC-130T (28)
2. 1 Kit consists of (4) rafts and (4) survival kits

Exhibit P-3a

MODIFICATION TITLE: C-130J CNS/ATM OSIP 010-06

MODELS OF SYSTEMS AFFECTED: KC-130J TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: Objective of the Communication Navigation Surveillance/Air Traffic Management (CNS/ATM) OSIP is to preserve utilization of current KC-130J capabilities world-wide by meeting International Civil Aviation Organization (ICAO) Air Traffic Management mandates through a series of commercial procurements and post-production retrofit installations. ICAO mandates elementary Mode-S, enhanced Mode-S and Required Navigation Performance/Area Navigation (RNP/RNAV) capabilities in the European Flight Information Region (FIR) starting in FY06, followed by the requirement of enhanced Mode-S, which is the Automatic Dependent Surveillance-Broadcast (ADS-B) comm-link, and will be required in FY07. This OSIP will upgrade the KC-130J to elementary Mode-S, enhanced Mode-S and RNP/RNAV through two separate initiatives. The first and least intensive, elementary Mode-S begins in FY06, and the second, enhanced Mode-S and RNP/RNAV solution, which is software intensive and highly complicated, will begin in FY09. This OSIP is required in order to avoid airspace utilization limitations, ranging from usage restrictions to total airspace exclusion, as well as ensuring continuous KC-130J transport of personnel, material and aerial refueling services within and through these FIRS. Major DoD logistic hubs supporting Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) are located in the European FIR. This OSIP affects all 51 KC-130J aircraft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Lockheed Martin has been tasked to deliver, by November 2005, an ECP to incorporate Mode S & 8.33 KHZ into Military Baseline 5.4 Software already developed for the USAF. The new Software version 5.5 will be available FY07. A second ECP will be requested of Lockheed Martin to incorporate the remaining requirements; RNP/RNAV and Military Embedded GPS Inertial (EGI) with Selective Availability Anti Spoofing Module (SAASM) and Receiver Autonomous Integrity Monitoring (RAIM). The new Identification Friend or Foe (IFF) upgrade program is in progress, with Mission Computer upgrades to begin FY06. Reduced Vertical Separation Minima (RVSM) certification requires a new Static Source Error Correction for the Air Data Computer scheduled for FY06. All kits are Commercial Off The Shelf (COTS) equipment.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| VDL-3 AND RNP/RNAV SYSTEM | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| MODE (S) SYSTEM | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 1.4 | | 2.1 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | 0.2 | | 0.4 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 0.7 | | 0.9 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | 2.4 | | 3.5 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: KC-130J MODIFICATION TITLE: CNS/ATM

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive-in mod

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (15) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (24) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (12) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (50) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Note: FY2010/FY2011 are two separate enhancements being installed on the same aircraft.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **FEWSG** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 59.3 | A | 2.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 2.7 | 68.7 | |

DESCRIPTION: This line item funds modifications to several aircraft and equipment. The overall goal of the budgeted modification is to accurately simulate the known and postulated electronic warfare characteristics and tactics of different threats for fleet training. OSIP 119-83 FEWSG equipment, AN/AST-6 (V), AN/ALQ-167pods, AN/ALE-43 (V) and the AN/DLQ-3 and AN/ULQ-21 aircraft install equipment from AST-6 and ALQ-167 respectively are installed and /or carried aboard the F/A-18, EA-6B, F-14 and on the Gulfstream G-1.

(TOA, $ in millions)

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 119-83 AN/ALQ-167/AST-6 POD | 59.3 | 2.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 2.7 | 68.7 |
| TOTAL | 59.3 | 2.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 2.7 | 68.7 |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: AN/ALQ-167/AST-6 POD( OSIP 119-83 )

MODELS OF SYSTEMS AFFECTED: N/A

TYPE MODIFICATION: RELIABILITY, MAINTAINABILITY, CAPABILITY UPGRADES

DESCRIPTION / JUSTIFICATION: The AN/ALQ-167 Pods eletronically simulate threat airborne radar jamming systems. The AN/ALQ-167 pods internal components are also installed internally in aircraft. When these components are utilized in this type of installation, they are nomenclatured AN/DLQ-3 and AN/ULQ-21. The AN/AST -6(V) pod electronically simulates several types of threat anti-ship missile seeker systems. These podded devices were first introduced into the fleet in 1980 and proved exceptionally useful in readiness exercises. The AN/ALE-43 (V) Countermeasures, Chaff Dispenser Set (CCDS) is an integral, high capacity, bulk chaff cutting/dispensing system used for self-protection, fleet screening, corridor seeding and training operations. This program provides for the procurement and continued support of additional quantities of these pods for use by logistic support squadrons and other operational fleet units. No aircraft modifications are required to use these pods.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The objective for the AN/ALQ-167 is 186 pods, there are currently 146. There are 25 AN/AST-6(V) production assets; the objective is to achieve a total of 50 pods. The AN/ALQ-167 avionics are being upgraded. When these upgraded avionics are internally installed in aircraft, they are nomenclatured as AN/ULQ-21 systems.

Financial Plan: (TOA, $ in millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIP (B Kits) | 1,012 | 51.2 | 3 | 0.3 | 2 | 0.1 | 2 | 0.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.5 | | * | | * | | 0.1 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | 2.1 | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | * | | * | | * | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.6 | | * | | * | | * | | | | | | | | | | | | |
| SUPPORT EQUIP | | 5.2 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.0 | | | | * | | * | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.7 | | 0.3 | | 0.5 | | 0.4 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 1,012 | 59.3 | 3 | 2.7 | 2 | 0.6 | 2 | 0.6 | | | | | | | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | DATE: February 2006 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | P-1 ITEM NOMENCLATURE: **CARGO TRANSPORT A/C SERIES** |
| Program Element for Code B Items: | Other Related Program Elements |

| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | |
| COST (In Millions) | 53.4 | A | 8.2 | 27.2 | 30.3 | 20.8 | 18.0 | 18.3 | 18.7 | 21.0 | 215.9 |

DESCRIPTION: This line item funds modifications to the following cargo and transport aircraft: (C-9B/DC-9B, C-40A, C-20A/D/G, C-37A/B, UC-35C/D, RC-12F/M, UC-12B/F/M, NC-12B, TC-12B and EC/RC-26D.

The C-9B/DC-9B Skytrain II, C-40A Clipper, C-20A/D/G Gulfstream IV, C-37A/B Gulfstream V and UC-35C/D Cessna Citation, are commercial twin jet transport aircraft that provide time-critical medium lift logistic support for the fleet combatant commanders. C-9/DC-9 is capable of carrying up to 32,000 pounds of cargo and personnel for over 3,300 nautical miles at a maximum speed of 430+ knots. C-40 can accommodate 121 passengers, or 8 pallets of cargo, or a combination configuration of 3 pallets and 70 passengers with a range of 3,400 nautical miles. C-20D/G is capable of high-speed transport of 13 passengers or cargo over a range of 4,100 nautical miles at 437 knots. C-20A and C-37 provides worldwide executive transport to SECNAV, CNO, CMC, and Fleet Commanders. C-35 provides transport for high priority passenger/cargo missions with time, place or mission sensitive requirements. C-35 can accommodate six passengers or 1,200 pounds of cargo with a range of 1,300 nautical miles at 234 knots. The C-12 King Air and C-26 Metro variants are commercial twin turbo-prop aircraft that provide shorter-range light lift passenger/cargo transport and range control missions. C-12 is capable of carrying six passengers or maximum cargo capacity of 2,850 pounds, 1, 075 nautical miles at 225 knots. C-26 is capable of carrying 19 passengers 1, 300 nautical miles at 234 knots.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 071-86 C-9/UC-12/CT-39/FAA | 20.2 | 0.3 | * | * | * | * | * | * | | 20.6 |
| 014-98 C-12 FLT SAFETY UPGR | 26.5 | 1.4 | 0.6 | | | | | | | 28.5 |
| 012-04 CNS/ATM | 4.5 | 6.6 | 19.0 | 30.3 | 20.7 | 17.9 | 18.3 | 18.7 | 21.0 | 157.1 |
| 027-04 C-37 MODIFICATION | 2.1 | | | | | | | | | 2.1 |
| 016-06 UC-35 AIRCRAFT SURVIVABILITY EQUIPMENT | | | 7.5 | | | | | | | 7.5 |
| TOTAL | 53.4 | 8.2 | 27.2 | 30.3 | 20.8 | 18.0 | 18.3 | 18.7 | 21.0 | 215.9 |

NOTE: * amount less than $50K

FY2006 does not match the P-1 due to a technical error.

FY2006 amount shown above includes $7.5M in Title IX funding.

Exhibit P-3a

MODIFICATION TITLE: C-9/UC-12/CT-39/FAA( OSIP 071-86 )

MODELS OF SYSTEMS AFFECTED: CARGO TRANSPORT A C SERIES TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: Federal Aviation Regulations require manufacturers of commercial aircraft and associated systems/subsystems to investigate discrepant conditions, failures, and potential safety problems reported by all operators. The results of these investigations with recommended corrective action are reviewed/approved by the FAA and Navy and provided to all operators as service bulletins. Each service bulletin is a complete technical directive that provides corrective change information or detailed modification instructions. To ensure safe, reliable, FAA/Navy certified aircraft and to provide a program that will assure continued life extension at minimum cost, the Navy must maintain configuration and integrity compatible with FAA certified commercial models by incorporation of applicable service bulletins. The incorporation of certain service bulletins also serves to preclude extensive repairs/repetitive inspections. Crew equipment requirements in accordance with FAA directives and Navy requirements will be incorporated to ensure maximum safety in case of emergency. Specific modifications budgeted in this OSIP include the incorporation of C-9B/DC-9, C-20, C-26 and C-12 FAA Bulletins and Directives.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Service Bulletins are reviewed for possible incorporation on an as required basis. Prototype verification has been previously accomplished and approved by the FAA.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| C-12 PROPELLERS | 94 | 1.1 | | | | | | | | | | | | | | | | | | |
| C-20 | 298 | 0.9 | | | | | | | | | | | | | | | | | | |
| C-26 | 11 | 0.4 | | | | | | | | | | | | | | | | | | |
| C-9 | 282 | 5.2 | | | | | | | | | | | | | | | | | | |
| C-9 ENGINES | 13 | 0.2 | | | | | | | | | | | | | | | | | | |
| C-9 HUSH KITS | 1 | 1.2 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 2.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | 0.3 | | * | | * | | | | | | | | | | | | |
| DATA | | 0.3 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.2 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | * | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.5 | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | 0.2 | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 594 | 7.2 | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 1,293 | 20.2 | | 0.3 | | * | | * | | | | | | | | | | | | |

NOTE: * amount less than $50K

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: C-12 FLT SAFETY UPGR( OSIP 014-98 )

MODELS OF SYSTEMS AFFECTED: CARGO TRANSPORT A C SERIES TYPE MODIFICATION: SAFETY/ RELIABILITY

DESCRIPTION / JUSTIFICATION: The crash of a U.S. Air Force CT-43 while flying a Non-Directional Radio Beacon (NDB) approach resulted in a Department of Defense initiative to upgrade flight safety systems as soon as possible in all passengers carrying aircraft. This OSIP was established to ensure compliance with this initiative on 81 C-12 model aircraft and identified flight safety systems required to be upgraded, Flight Safety Upgrade (FSU). FSU upgrade replaced existing flight management system, weather radar, radar altimeter and added TCAS and TAWS. Initiatives for the last two years have lead to divesting of CONUS based UC-12B aircraft. The number of UC-12 aircraft to receive FSU has dropped from the original 81 to 44. Further, planned FSU installations have over run upgrade efforts under OSIP 12-04, CNS/ATM. To maximize fleet aircraft availability, minimize impact to planned fleet operations and minimize upgrade costs; a decision was made in FY04 to combine the installation of the remaining seven FSU installations for the C-12F with planned Block 1 CNS/ATM installations under OSIP 12-04. Efforts to be funded under this OSIP will include 44 'A' and 'B' kits and 37 installations. The remaining 7 installations will be concurrent with C-12F CNS/ATM installations

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL KITS FLIGHT SAFETY | 42 | 13.8 | 2 | 0.4 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 6.4 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | 0.3 | | | | | | | | | | | | | | | | | | |
| DATA | | 0.4 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 1.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | 0.9 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.4 | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 36 | 2.3 | 4 | 1.0 | 4 | 0.6 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 78 | 26.5 | 6 | 1.4 | 4 | 0.6 | | | | | | | | | | | | | | |

NOTE: * amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: CARGO TRANSPORT A C SERIES MODIFICATION TITLE: C-12 FLT SAFETY UPGR( OSIP 014-98 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 Nov 04 FY 2006 Nov-05 FY 2007 FY 2008

DELIVERY DATE: FY 2005 Dec 05 FY 2006 Dec 06 FY 2007 FY 2008

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (42) kits | 36 | 2.3 | 4 | 1.0 | 2 | 0.3 | | | | | | | | | | | | | | |
| FY 2005 (2) kits | | | | | 2 | 0.3 | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| #REF! | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 36 | 2.3 | 4 | 1.0 | 4 | 0.6 | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 36 | 4 | | | | 4 | | | | | | | | | | | | | | | | | | | |
| Out | 36 | | | | | 4 | | | | 4 | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: CNS/ATM( OSIP 012-04 )

MODELS OF SYSTEMS AFFECTED: CARGO TRANSPORT A C SERIES TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: World-wide airspace congestion and communication bandwidth saturation has lead the International Civil Aviation Organization (ICAO) to restructure the world-wide airspace structure to improve safety through a series of equipment and performance mandates implemented by regional authorities. The above Type/Series/Models will be required to comply with the following mandates to retain the Navy's capability to operate these aircraft worldwide. Failure to comply with these time-phased mandates will result in being denied access to high-volume airspace (routing and altitudes) and airfields, or at a minimum resulting in circuitous routing and sub optimal altitudes for fuel consumption. The following CNS-ATM mandates will be implemented in post production aircraft in this OSIP: Communications - 8.33Khz VHF channel spacing, SATCOM voice and data, Controller Pilot Data Link Communications (CPDLC), Automatic Dependent Surveillance ADS-B. Navigation – Required Navigation Performance (RNP) 10NM, 5NM, 4NM, and less than NM; Reduced Separation Minimum (RVSM); Protected-ILS; and digital navigation databases. Navigational accuracy mandate progressively tightens over time until GPS based aircraft routing, Standard Instrument Departures (SID) and Standard Terminal Arrival Routes (STARS) are implemented worldwide. This will result in a series of equipment changes. Surveillance – Enhanced Terrain Awareness Warning System (TAWS), Traffic Alert and Collision Avoidance System (TCAS), Automatic Dependent Surveillance ADS-B, Emergency Locator Transmitter (ELT) and Mode S Transponder.

To minimize the impact of successive modifications and maximize aircraft availability, a block upgrade approach has been taken during this budget submit. C-20D, C-12 and C-26 expenditures in FY04 and prior years comprise part of Block 1 as noted below by an *. Block upgrades have been prioritized and phased to meet regional mandates' just in time' to ensure that commercial CNS-ATM solutions are available off the shelf to minimize non-reoccurring engineering associated with FAA supplemental type certification. In order to incorporate CNS-ATM mandates several older aircraft (C-20A, C-37A, C-35C, all C-26 and C-12) required the installation of a digital flight management and communication system

CNS-ATM capabilities associated with each Block Upgrade listed below:
C-9 C-9B: Block 1 - CPDLC, Mode S, TAWS Upgrade, and ELT: Block 2 - ADS-B
C-40 C-40A: Block 1 – Mode S, and TAWS Upgrade: Block 2 – CPDLC
C-20 C-20A: Block 1 – RNP-1 Flight Management System, Mode S, ELT, TAWS upgrade, DME upgrade, and CPDLC: C-20D –Block 1 Avionics Upgrade* HF Radio Upgrade*, Mode S, ELT, TAWS upgrade: Block 2 – CPDLC; C-20G – CPDLC, Mode S and TAWS upgrade
C-37 C-37A: Block 1 –RNP-1, Flight Management System, CPDLC, Mode S, and TAWS upgrade: Block 2 – ADS-B: C-37B – Block 1 Mode S, CPDLC: Block 2 – ADS-B
C-35 C-35C: Block 1 – RNP-1, Flight Management System, Mode S, ELT, DME upgrade: Block 2 – CPDLC: C-35D Block 1 – CPDLC, Mode S, and TAWS upgrade: Block 2 – ADS-B
C-26 EC/RC/UC-26D: Block 1 – TAWS* and TCAS-II*: Block 2 – RNP-1, Flight Management System, RVSM and CPDLC
C-12 C-12B: Block 1 – P-ILS*, 8.33 KHz VHF Channel Spacing*: Block 2 –SATCOM, CPDLC, RNP-1, Flight Management System, Mode S, ADS-B: C-12F Block – 1 Flight Management System, 8.33 KHz VHF Channel Spacing*, P-ILS*, RVSM, ELT and Mode S: Block 2 – SATCOM, CPDLC and ADS-B: C-12M Block 1 – 8.33 KHz KHz Channel Spacing*, ELT, RNP-1, Flight Management System, ELT, and RVSM; Block 2 – SATCOM, CPDLC and ADS-B

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| 8.33 KHz | 16 | 0.7 | | | | | | | | | | | | | | | | | | |
| AVIONICS UPGRADE C-20D | 1 | 2.4 | | | | | | | | | | | | | | | | | | |
| BLOCK 1 | | | | | 18 | 6.3 | 37 | 8.9 | | | | | | | | | | | | |
| BLOCK 2 | | | | | | | | | | | | | | | | | | | | |
| DATA LINK | 7 | 0.6 | | | | | | | | | | | | | | | | | | |
| HF RADIO UPGRADE C-20A | 1 | 0.2 | | | | | | | | | | | | | | | | | | |
| P-ILS | 42 | 0.5 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | 0.6 | | 2.1 | | 1.5 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| BLOCK 1 | | | 6 | 4.2 | 12 | 2.4 | 37 | 9.0 | | | | | | | | | | | | |
| BLOCK 2 | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | 0.4 | | 1.8 | | 1.3 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | 0.1 | | 0.4 | | 0.3 | | | | | | | | | | | | |
| DATA | | | | 0.1 | | 0.4 | | 0.3 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | 0.1 | | 0.4 | | 0.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | 0.2 | | 0.4 | | 0.4 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 0.8 | | 2.8 | | 2.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 44 | 0.2 | 7 | 0.1 | 4 | 2.0 | 22 | 6.3 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 111 | 4.5 | 13 | 6.6 | 34 | 19.0 | 96 | 30.3 | | | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

NOTE: * amount less than $50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-40A/C-9 MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 Feb 06 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (8) kits | | | | | | | 8 | 1.7 | | | | | | | | | | | | |
| FY 2007 (17) kits | | | | | | | 6 | 1.2 | | | | | | | | | | | | |
| FY 2008 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (8) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (17) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 14 | 2.9 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 5 | 5 | 4 | | | | | | | | | | | | |
| Out | | | | | | | | | | | 5 | 5 | 4 | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-37A MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (1) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY2011 (3) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: UC-35 MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 Feb 06 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (2) kits | | | | | | | 2 | 0.4 | | | | | | | | | | | | |
| FY 2007 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | 2 | 0.4 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | 2 | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | 2 | | | | |
| Out | | 2 | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-26 MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 Jan 05 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 Feb 05 FY 2006 Feb 06 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (7) kits | | | 7 | 0.1 | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (7) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | 7 | 0.1 | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 3 | 4 | | | | | | | | | | | | | | | | | | | | | |
| Out | | | 3 | 4 | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-20 MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (2) kits | 2 | 0.1 | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (0) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 2 | 0.1 | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | 2 | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-12 MODIFICATION TITLE: CNS/ATM (OSIP 12-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Depot Contractor

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 Feb 06 FY 2007 Feb 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (58) kits | 42 | 0.1 | | | | | | | | | | | | | | | | | | |
| FY 2005 (0) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (8) kits | | | | | 4 | 2.0 | 4 | 2.0 | | | | | | | | | | | | |
| FY 2007 (2) kits | | | | | | | 2 | 1.0 | | | | | | | | | | | | |
| FY 2008 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (5) kits | | | | | | | | | | | | | | | | | | | | |
| FY2010 (10) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (18) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (8) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 42 | 0.1 | | | 4 | 2.0 | 6 | 3.0 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 42 | | | | | | 4 | | | | 3 | 3 | | | | | | | | | | | | | |
| Out | 42 | | | | | | 4 | | | | 3 | 3 | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | 20 | |
| Out | | | | | 20 | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: UC-35 AIRCRAFT SURVIVABILITY EQUIPMENT( OSIP 016-06 )

MODELS OF SYSTEMS AFFECTED: CARGO TRANSPORT A C SERIES TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: Marine Forces are currently engaged in combat operations and have a stated need to utilize the UC-35 within Iraq now. Marine Corps UC-35's do not possess Aircraft Survivability Equipment (ASE). The Marine Corps maintains a UC-35 deployed presence in South West Asia, but is precluded by CMC from flying into Iraq (and other threat areas) without ASE. By equipping the UC-35 with ASE, it will be able to perform its mission of time-sensitive transport of high priority passengers and cargo in high threat environments
(Iraq & other nations). This enhanced capability will reduce the amount of time required to move high priority passengers and cargo by enabling the aircraft to get closer to Marine, Joint and Coalition forces in theater. Additionally, installation of ASE will remove the requirement of this mission from our already over burdened and less-suited KC-130's. Allowing for use of the UC-35 in Iraq (and other high threat areas) by equipping it with ASE, "greatly reduces impact on KC-130 aircraft thereby allowing aircraft to perform primary mission of tactical support to the Marine Expeditionary Force." (CG III MAW 18 Jan 05).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ASE KIT | | | | | 4 | 2.0 | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | 1.0 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ASE EQUIP | | | | | 4 | 3.0 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 1.0 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | 0.2 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | 0.1 | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 0.2 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | 8 | 7.5 | | | | | | | | | | | | | | |

NOTE: * amount less than $50K

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **E-6 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 883.9 | A | 19.5 | 11.1 | 99.2 | 149.6 | 142.8 | 107.6 | 108.0 | 153.1 | 1674.8 | |

DESCRIPTION: This line item funds modifications to E-6 "Take Charge and Move Out", TACAMO aircraft. All sixteen (16) aircraft in the TACAMO fleet will receive each modification. The E-6 TACAMO is a manned airborne communications relay platform designed to provide a survivable, reliable, endurable airborne command and control communications link between the President, Secretary of Defense and U.S. strategic and non-strategic forces. The Navy and Air Force were directed to take actions necessary to incorporate Airborne Command Post (ABNCP) (OSIP 32-93) functions into the E-6A, which were completed in Nov 03. The last install to complete the additional requirements of the ADP, DAMA, Weight and Space (ADWS) Program under OSIP 32-93, will start in FY06. The Multifunction Display System (MDS) (OSIP 27-99) was approved as the solution to maintain worldwide deployability due to changing Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) requirements. The Modified Miniature Receiver Terminal (MMRT) (OSIP 10-01), to enhance command and control of the strategic forces, began installs in FY02 and completed in FY04. Mission Support (OSIP 07-02) corrects Follow-On Test & Evaluation (FOT&E - Sep 98) deficiencies by updating the design of and fabricating new rewind machines, purchasing "off-the-shelf" power carts to provide adequate aircraft power for full mission checkout and upgrading the aircraft Frequency Reference Auto Paralleling Unit (FRAPU) to allow proper power transfer from/to ground/aircraft power. Correction of Safety Deficiencies (OSIP 08-02) started in FY02 and includes a smoke detection system, replacement of fuel tank Kapton wiring, replacement of an uncertified Cartridge Activated Device (CAD) (explosive) for severing the Long Trailing Wire Antenna in emergencies, new improved inertia reels and shoulder harnesses, replacement of unsafe fuel boost pumps, replacement of A/C battery and charging system prone to thermal overload, replacement of the APU crossover and exhaust ducts and installation of a heat shield for the aircraft auxiliary power unit (APU), replacement of aircraft Kapton wiring, installation of the Crash Survivable Flight Incident Recorder (CSFIR), replacement of the Fuel Quantity Indicating System (FQIS) and replacement of the A/C thermal blankets. Technology Insertion (OSIP 03-04) addresses supportability, new technologies, systems updates and interoperability issues in the areas of: Mission Computer Set (MCS) hardware obsolescence, Mission Avionics Processing System (MAPS) obsolescence, Flight Management Computer System obsolescence, Secure Telephone Unit (STU) obsolescence, Velocity Loop Controller (VLC) incompatibility and the unsupportable Standard Distribution Switching Unit (SDSU). Service Life Extension Program (SLEP) (OSIP 03-07) is designed to extend the service life of the E-6 A/C to 2040+. Block I, Mission Deficiencies (OSIP 03-08), replaces the Digital Airborne Intercommunication Switching Set (DAISS) and installs an Open System Architecture that will allow low cost modifications for emerging requirements. It also replaces the Mission Computer Set, adds flat panel displays in the battle staff area and replaces the UHF C3 modem. The E-6B Mod (ADWS) and Multifunction Display System programs were restructured to increase A/C availability, reduce fleet A/C configurations, reduce logistics costs, increase operational flexibility, maximize production effort and allow trainer modifications to be done concurrently. IP Upgrade (OSIP 012-07) increases communications bandwidth to 45 Mbps to support battlestaff command and control and first responder operations.

| BUDGET ITEM JUSTIFICATION SHEET<br>P-40 | DATE:<br>February 2006 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | P-1 ITEM NOMENCLATURE<br>**E-6 SERIES** |
| Program Element for Code B Items: | Other Related Program Elements |

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 032-93 E-6B MOD | 705.9 | 4.6 | 0.4 | 0.1 | | | | | | 711.0 |
| 027-99 MULTIFUNCTION DISPLAY SYST | 145.3 | 10.7 | 0.4 | | | | | | | 156.4 |
| 007-02 E-6 MISSION SUPPORT | 11.2 | | | 1.7 | 9.8 | 1.1 | | | | 23.7 |
| 008-02 SAFETY DEFICIENCIES | 4.9 | 0.9 | 2.7 | 4.5 | 13.8 | 11.4 | 9.1 | 11.5 | | 58.7 |
| 003-04 TECH INSERTION | 2.9 | 3.4 | 7.5 | 16.5 | 13.6 | 0.7 | 6.7 | 23.2 | 14.1 | 88.6 |
| 003-07 SLEP | | | | 6.7 | 18.5 | 11.8 | 11.2 | 12.2 | 38.2 | 98.6 |
| 012-07 COMMUNICATIONS (IP/T3) UPGRADE | | | | 69.7 | 93.9 | 68.3 | | | | 231.8 |
| 003-08 MISSION DEFICIENCIES (BLOCK I) | | | | | | 49.5 | 80.6 | 61.1 | 100.9 | 292.1 |
| TOTAL | 870.1 | 19.5 | 11.1 | 99.2 | 149.6 | 142.8 | 107.6 | 108.0 | 153.1 | 1661.0 |

Exhibit P-3a

MODIFICATION TITLE: E-6B MOD (OSIP 032-93 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: Mission Needs Statement: E-6A TACAMO/Airborne Command Post (ABNCP) Consolidation Program, MO-40-88-93, dated 22 Sep 93, substantiates the transfer of avionics equipment from the Air Force EC 135 ABNCP platform to all 16 Navy E-6A TACAMO aircraft. This program consolidates Joint Chiefs of Staff (JCS) Strategic Command and Control tasking into one survivable airborne strategic platform and achieves significant operations and maintenance savings of at least $50M annually. The addition of the ABNCP mission to the TACAMO aircraft results in one platform having the ability to relay Emergency Action Messages from the President and Secretary of Defense to U.S. Strategic Forces and for the STRATCOM Commander to directly execute command and control of those forces. Operational Requirements Document E-6B ORD 629-78-04, 5 Feb 04, supports modifications for the High Power Transmit Set, original ABNCP avionics systems and MILSTAR capabilities. These are encompassed in ECP CTAS-100R3. E-6B ORD 629 78-04, 5 Feb 04 incorporates newly identified requirements, including approved ECP RCS-100R1 for Voice Satellite (VOSAT) Communications and Engineering Change Proposals (ECPs) for Cryptographic (CRYPTO) equipment upgrades, Ultra High Frequency (UHF) Demand Assigned Multiple Access (DAMA) installation, Automated Data Processing Capability (ADP) and Weight Savings. VOSAT capability is a voice recognition system that is required by COMSTRAT for uncompromised communications. CRYPTO upgrade is required by COMSTRAT to ensure ABNCP receipt and distribution of encrypted messages in accordance with relay timing parameters. UHF DAMA is required for communications across the spectrum of Command and Control responsibilities. ADP capability is required by COMSTRAT for efficient operations by the embarked Battle Staff and for the capability to receive and generate encrypted and classified correspondence. The weight savings is required to offset the effects of other modifications on E-6 zero gross fuel weight parameters. The ADP, UHF DAMA and Weight Savings requirements are combined into the ADWS program and will apply to all 16 E-6s in the active fleet inventory. The ADWS program was restructured in FY03 to increase A/C availability, reduce fleet A/C configurations, reduce logistics costs, increase operational flexibility, maximize production effort and allow trainer modifications to be done concurrently. TACLANE (Tactical Local Area Network Encryptor) Crypto was installed through FY05. This modification program is not applicable to any aircraft in either the National Guard or the Reserves.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Milestone III decision on ABNCP modifications granted January 1995. Milestone III decision for Avionics Upgrade and HPTS granted December 1995. FOT&E completed June 1998. Initial Operating Capability (IOC) date of 1 October 1998 was met. September 1997 message from STRATCOM delineated additional requirements and associated program cost growth which resulted in E-6 program restructure with ABNCP Full Operating Capability shifting from January 2001 to February 2003. All ABNCP aircraft modifications have been completed. IOC for VOSAT modification was met 1 October 1998 and IOC for CRYPTO was met 1 July 2000. TACLANE Crypto kit buys completed FY04. A contract was awarded for the ADWS program September 2000. Installation planned to be completed at the beginning of FY07. E-6B Modification ADWS Program was extended to increase A/C availability, reduce fleet A/C configurations, reduce logistics costs, increase operational flexibility, maximize production effort and allow trainer modifications to be done concurrently.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | 107.3 | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| ABNCP Kit | 15 | 55.9 | | | | | | | | | | | | | | | | | | |
| ADWS Kit | 16 | 10.6 | | | | | | | | | | | | | | | | | | |
| ASCET | 1 | 0.1 | | | | | | | | | | | | | | | | | | |
| CRYPTO Kit | 16 | 1.0 | | | | | | | | | | | | | | | | | | |
| HPTS Kit | 16 | 19.7 | | | | | | | | | | | | | | | | | | |
| LAB Kit | 1 | 0.1 | | | | | | | | | | | | | | | | | | |
| SIL Kit | 1 | 0.4 | | | | | | | | | | | | | | | | | | |
| VOSAT Kit | 16 | 0.3 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 49.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ABNCP Equip | 15 | 31.1 | | | | | | | | | | | | | | | | | | |
| ADWS Equip | 16 | 10.6 | | | | | | | | | | | | | | | | | | |
| ASCET | 1 | * | | | | | | | | | | | | | | | | | | |
| CRYPTO Equip | 16 | 0.3 | | | | | | | | | | | | | | | | | | |
| HPTS TIMING DIV Equip | 19 | 5.8 | | | | | | | | | | | | | | | | | | |
| HPTS/CFA Equip | 18 | 139.3 | | | | | | | | | | | | | | | | | | |
| LAB Equip | 1 | * | | | | | | | | | | | | | | | | | | |
| MILSTAR Equip | 7 | 38.1 | | | | | | | | | | | | | | | | | | |
| SDRS Equip | 1 | 0.6 | | | | | | | | | | | | | | | | | | |
| SIL Equip | 1 | 0.4 | | | | | | | | | | | | | | | | | | |
| TACLANE | 12 | 0.5 | | | | | | | | | | | | | | | | | | |
| VOSAT Equip | 16 | 2.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 30.5 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 23.2 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 12 | 41.8 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 7.7 | | | | | | | | | | | | | | | | | | |
| ILS | | 19.9 | | * | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 114.8 | | 0.4 | | 0.4 | | 0.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | 1.1 | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 86 | 100.6 | 6 | 4.2 | 4 | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 705.9 | | 4.6 | | 0.4 | | 0.1 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. 1 ABNCP Prototype Kit procured in R&D.
4. Installation quantities include HPTS and ABNCP kits separately to account for kit purchases although they were combined for installation purposes in 1996.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES MODIFICATION TITLE: E-6B MOD (OSIP 032-93 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive-In/Field Modification

ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (80) kits | 70 | 94.0 | 6 | 4.2 | 4 | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 70 | 94.0 | 6 | 4.2 | 4 | | | | | | | | | | | | | | | |

Notes: Total quantities and dollars exclude 12 trainers, 2 Labs and 2 SILs.

ADWS Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 6 | 2 | 1 | 1 | 2 | | 2 | 2 | | | | | | | | | | | | | |
| Out | 4 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: MULTIFUNCTION DISPLAY SYSTEM (OSIP 027-99 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: Operational Requirements Document E-6B ORD 629-78-04, 5 Feb 04 requires installation of the Multifunction Display System (MDS) in all 16 TACAMO aircraft. Current and future changes to Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) required by Federal Aviation Administration/International Civil Aviation Origination (FAA/ICAO) are satisfied by the installation of the MDS. Modifications to the E-6 cockpit display system are required due to changes in the FAA/ICAO Required Vertical Separation Minimums and other airspace restrictions. Analog gauges are becoming antiquated and difficult to maintain and require replacement in order to meet these and upcoming navigational changes. Incorporation of MDS into the cockpit will replace over 100 dials and gauges with integrated display screens that are customizable for the E-6. The MDS requires modification of a Commercial Off-the-Shelf (COTS) item to an E-6 configuration. Because it is similar to commercial equipment, any further modifications will be less costly. Upgrades to installed systems and changes to the Flight Management Computer System can then be accomplished by changing software without changing the hardware. The MDS program was restructured in FY03 to increase A/C availability, reduce fleet A/C configurations, avoid $16M logistics costs, increase operational flexibility, maximize production effort and allow trainer modifications to be done concurrently. GPS-A receiver controls are required to support currently installed military GPS receivers. Nav Table update gives the Navigator Station the ability to provide services during a degraded mission and to support the E-6 Mission Commander and Battlestaff.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: MDS was granted a Milestone III decision 5 May 98. Contract award on 9 Sep 99. Specific and separate Non-Recurring Engineering (NRE) efforts for systems integration of COTS hardware/software occurred in the first two years. Production of NRE COTS article for E-6 configuration began October 2000 with subsequent installation and testing in February 2001. Production deliveries/installations funded through September 2005. Funding provided via Program Decision Memorandum (PDM)-1 requires partial spread of NRE efforts. Cost growth from original estimates allows for 1 NRE A/C Kit/Installation, 15 Production A/C Kits/Installations and 1 Operational Flight Trainer Kit/Installation. Initial Operating Capability achieved March 2005. Increased cost and schedule requirements for modification of the Operational Flight Trainer (OFT) have required a Milestone Decision Authority (MDA) approved change #2 (16 May 03) to the Acquisition Program Baseline (APB). This modification provided additional funding for OFT #1 (by delaying aircraft modifications) and cut funding for OFT #2 in FY04 (funding to be used to complete remainder of aircraft modifications.) Subsequent program restructure and TOA realignment provides full funding for the program, including OFT #2, with Full Operational Capability (FOC) planned for 1st Q FY07. GPS-A receiver controls were procured in FY03 and FY04. The Nav Table Update NRE occurred in FY04 with kit procurement and installations in FY05.

FINANCIAL PLAN: (TOA, $ In Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| MDS Kit | 16 | 12.6 | | | | | | | | | | | | | | | | | | |
| NAV UPDATE | | | 16 | * | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 21.5 | | 0.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GPS "A" | 16 | 0.1 | | | | | | | | | | | | | | | | | | |
| MDS Equip | 16 | 25.2 | | | | | | | | | | | | | | | | | | |
| NAV UPDATE | | | 16 | * | | | | | | | | | | | | | | | | |
| NON-RECURRING RECOUPMENT | | 39.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 3 | 12.9 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.5 | | 0.1 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 14.4 | | 2.3 | | 0.4 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 8 | 16.9 | 23 | 8.1 | 4 | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 145.3 | | 10.7 | | 0.4 | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. Trainer installations include: two in FY03, one in FY05.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES

MODIFICATION TITLE: MULTIFUNCTION DISPLAY SYSTEM (OSIP 027-99 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive-In Modification

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: 1 Months

CONTRACT DATES: FY 2005 Jul 05 FY 2006 FY 2007

DELIVERY DATE: FY 2005 Aug 05 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (16) kits | 6 | 14.7 | 6 | 4.6 | 4 | | | | | | | | | | | | | | 16 | 19.3 |
| FY 2005 (16) kits | | | 16 | 0.1 | | | | | | | | | | | | | | | 16 | 0.1 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 6 | 14.7 | 22 | 4.7 | 4 | | | | | | | | | | | | | | 32 | 19.4 |

Notes: Total quantities and dollars exclude three trainers. GPS "A" does not require install kits or installation.

MDS Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 6 | 2 | 1 | 1 | 2 | | 2 | 2 | | | | | | | | | | | | | |
| Out | 4 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Nav Table Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 0 | | | | 16 | | | | | | | | | | | | | | | | |
| Out | 0 | | | | 16 | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: E-6 MISSION SUPPORT (OSIP 007-02 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: The program has corrected Follow-On Test & Evaluation (FOT&E) (September 1998) deficiencies by funding design update and fabrication of new rewind machines and purchase of "off-the-shelf" power carts to provide adequate aircraft power for full mission ground checkout and will upgrade the Frequency Referencing Auto Parallel Unit (FRAPU) to provide uninterrupted transfer of power from A/C to ground systems. There were too few rewind machines which were rapidly becoming unsupportable, resulting in the inability to replace the mission antenna at multiple locations when the Long Trailing Wire Antenna is lost. Power carts did not provide adequate ground power causing system shutdown and failure of critical system components on A/C startup. FRAPU will prevent system shutdown and failure of critical system components on transfer from A/C to ground power systems. The program also procures various ground support and Peculiar Support Equipment (PSE) for the E-6 A/C.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: February 03 procured “off-the-shelf” power carts. A February 2003 contract was awarded for NRE to update the design of rewind machines, to replace obsolete components with off-the-shelf technology, and to procure 1 unit; the remaining 3 units were procured in FY04. Planned procurement of PSE in FY07 and FY08. FRAPU fabrication, prototype installation and validation/verification will occur in FY08 with all 16 A/C completing in FY09.

FINANCIAL PLAN: (TOA, $ In Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| FRAPU | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| FRAPU | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | 10 | 10.4 | | | | | 17 | 1.0 | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 0.8 | | | | | | 0.7 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 11.2 | | | | | | 1.7 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. Includes an Electrical Trainer.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES MODIFICATION TITLE: E-6 MISSION SUPPORT (OSIP 007-02 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Modification

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (16) kits | | | | | | | | | | | 16 | 0.6 | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | 16 | 0.6 | | | | | | | | |

Note: Install dollars and quantities do not include one trainer.

FRAPU Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: SAFETY DEFICIENCIES (OSIP 008-02 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: Correction of safety deficiencies for the protection of personnel and equipment. FAA APA 19-98 requires a smoke detection system in the aircraft lower avionics bays. The safety modification also replaces fuel tank Kapton wiring and an uncertified Cartridge Activated Device (CAD) (explosive) for severing the long trailing wire antenna under emergency conditions, installs new improved inertia reels and shoulder harnesses, replaces unsafe fuel boost pumps to comply with FAA SFAR 88 requirements, replaces the current A/C battery an charging system which is prone to thermal run-away, corrects safety deficiencies in the aircraft auxiliary power unit (APU) which requires a heat shield and replaces the APU crossover and exhaust ducts to prevent potential fire or explosion, replaces aircraft Kapton wiring and the Fuel Quant Indicating System (FQIS) to comply with FAA SFAR 88 requirements, installs the Crash Survivable Flight Incident Recorder (CSFIR) to meet DoD requirements and replaces the A/C thermal blankets to meet FAA requirements. The program takes advantage of available and emerging commercial technology for crew/aircraft safety.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Smoke NRE in FY03 and FY05 with kit procurement in FY06 and installs in FY06-07. Fuel tank Kapton wiring kit buys will occur in FY06 with installation in FY06 at no cost using Fleet resources. NRE for CAD complete FY03, fabrication and installation completed in FY04. Inertia reels procured in FY03 with installation in FY05-06 at no cost using Fleet resources. Fuel Boost Pumps completed in FY04. A/C Battery/Charger NRE and kit procurement FY04 effort. APU heat shield kit buys in FY03 with installation in FY04-05 at no cost using Fleet resources and APU crossover and exhaust ducts NRE and kit buys in FY07 with installation FY07 at no cost using Fleet resources. Aircraft Kapton wiring kit production and installation in FY07-09. CSFIR NRE in FY08 with kit buys and installa in FY08 -FY09. FQIS NRE and kit buys in FY08 with installation in FY09. A/C thermal blanket NRE and kit buys in FY09 with installation in FY10 and FY11.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A/C BATTERY | 16 | * | | | | | | | | | | | | | | | | | | |
| APU | 16 | 0.4 | | | | | | | | | | | | | | | | | | |
| CSFIR | | | | | | | | | | | | | | | | | | | | |
| FUEL BOOST PUMPS | 16 | 0.7 | | | | | | | | | | | | | | | | | | |
| KAPTON WIRE | | | | | | | 6 | 0.2 | | | | | | | | | | | | |
| SMOKE DETECTOR | | | | | 16 | 0.2 | | | | | | | | | | | | | | |
| KAPTON WIRE FUEL PUMP | | | | | | | | | | | | | | | | | | | | |
| APU DUCTS | | | | | | | 16 | * | | | | | | | | | | | | |
| FQIS | | | | | | | | | | | | | | | | | | | | |
| BLANKETS | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.3 | | 0.2 | | * | | 2.9 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| A/C BATTERY | 16 | 0.7 | | | | | | | | | | | | | | | | | | |
| CSFIR | | | | | | | | | | | | | | | | | | | | |
| HPTS CAD CUTTER | 16 | 0.1 | | | | | | | | | | | | | | | | | | |
| INERTA REELS | 16 | 0.4 | | | | | | | | | | | | | | | | | | |
| KAPTON WIRE FUEL PUMP | | | | | 16 | 0.2 | | | | | | | | | | | | | | |
| SMOKE DETECTOR | | | | | 16 | 0.7 | | | | | | | | | | | | | | |
| APU DUCTS | | | | | | | 16 | 0.1 | | | | | | | | | | | | |
| FQIS | | | | | | | | | | | | | | | | | | | | |
| BLANKETS | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.9 | | 0.5 | | 0.5 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | * | | | | * | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | 1 | * | | | 1 | 0.1 | 1 | 0.1 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.2 | | 0.2 | | 0.9 | | 0.4 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 33 | 0.2 | | | 2 | 0.1 | 17 | 0.6 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 4.9 | | 0.9 | | 2.7 | | 4.5 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. Inertia Reels do not require install kits.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES MODIFICATION TITLE: SAFETY DEFICIENCIES (OSIP 008-02 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Modification

ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: Various Months

CONTRACT DATES: FY 2005 FY 2006 Nov-05 FY 2007 Nov-06

DELIVERY DATE: FY 2005 FY 2006 Aug 06 FY 2007 Aug 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (32) kits | 32 | 0.2 | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (16) kits | | | | | 2 | 0.1 | 14 | 0.4 | | | | | | | | | | | | |
| FY 2007 (6) kits | | | | | | | 1 | 0.1 | | | | | | | | | | | | |
| FY 2008 (29) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (29) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 32 | 0.2 | | | 2 | 0.1 | 15 | 0.6 | | | | | | | | | | | | |

Notes: Does not include five trainers. No installs required for Fuel Boost Pumps, Kapton Wire Fuel Pump and APU.

Aircraft Battery Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 16 | | | | | | | | | | | | | | | | | | | | |
| Out | 16 | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

HPTS CAD Cutters Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 16 | | | | | | | | | | | | | | | | | | | | |
| Out | 16 | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Smoke Detectors Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | 2 | 5 | 5 | 4 | | | | | | | | | |
| Out | | | | | | | | | 2 | 5 | 5 | 4 | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Kapton Wire Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | 1 | | | | | | | | |
| Out | | | | | | | | | | | | | 1 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

CSFIR Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

FQIS Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Blankets Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: TECH INSERTION (OSIP 003-04 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: Funding to fix supportability/obsolescence issues, address interoperability issues, update systems and insert new technologies into the E-6 platform. With the E-6's having 35 individual computers dealing with communications and mission systems, Technology Insertion addresses supportability, new technologies, systems updates and interoperability issues in the areas of: Mission Computer Set (MCS), Flight Management Computer System (FMCS) and Mission Avionics Processing System (MAPS) hardware obsolescence. The MCS is rapidly becoming unsupportable. Intervention is required to ensure this mission critical system continues to operate. Also, the FMCS will become obsolete and needs to be upgraded in order to be supportable beyond FY08. The unsupportable Standard Distribution Switching Unit (SDSU) provides mission critical timing throughout the A/C and will be replaced with an off-the shelf unit. Existing KG-3X crypto must be replaced with DoD standard equipment for compatibility. The existing Secure Telephone Unit (STU) must be replaced with the Secure Telephone Equipment (STE) due to obsolescence. The Velocity Loop Controller (VLC) will be modified to replace incompatible components. The mission critical MAPS is currently under development as part of the Block I program to replace the MCS and is expected to require Tech Refresh starting FY10 in order to avoid COTS obsolescence issues during production.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: MCS update is divided into Spirals. Spiral 1, which started in FY04, added an uninterruptible power supply and replaced the current mechanical hard drive with a solid state device. NRE for Spiral 2, the Message Processing System (MPS), started in FY05 with all obsolete equipment being replaced in FY07. STE NRE, kit buys and installation will occur in FY07. KG-3X family crypto replacement NRE in FY07 with kit procurement and installation in FY08. FMCS Single Board NRE, kit buys and installs in FY08. SDSU NRE will start in FY07 with kit procurement and installation in FY08. VLC kit buys in FY08 with installation in FY08 at no cost using Fleet resources. The MAPS Technical Refresh will start in FY10 with NRE; installs will start in FY12.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| KG-3x | | | | | | | | | | | | | | | | | | | | |
| MAPS Upgrade | | | | | | | | | | | | | | | | | | | | |
| MCS SPIRAL 1 (UPS) | 16 | 0.1 | | | | | | | | | | | | | | | | | | |
| MCS SPIRAL 2 (MPS) | | | | | | | 16 | 0.4 | | | | | | | | | | | | |
| SDSU | | | | | | | | | | | | | | | | | | | | |
| STE | | | | | | | 16 | 0.4 | | | | | | | | | | | | |
| SIL | 1 | * | | | | | 2 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 1.5 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| FMCS Single Board | | | | | | | | | | | | | | | | | | | | |
| LAB | | | | | | | | | | | | | | | | | | | | |
| MAPS Upgrade | | | | | | | | | | | | | | | | | | | | |
| MCS SPIRAL 1 (UPS) | 16 | 1.0 | | | | | | | | | | | | | | | | | | |
| MCS SPIRAL 2 (MPS) | | | | | | | 16 | 1.0 | | | | | | | | | | | | |
| SDSU | | | | | | | | | | | | | | | | | | | | |
| SIL | 1 | 0.1 | | | | | 2 | 0.3 | | | | | | | | | | | | |
| STE | | | | | | | 16 | 2.7 | | | | | | | | | | | | |
| VLC | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.5 | | 2.9 | | 5.7 | | 3.3 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.2 | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 0.1 | | | | | 6 | 1.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.3 | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.0 | | 0.2 | | 1.8 | | 3.7 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 19 | 0.2 | | | 39 | 1.5 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 2.9 | | 3.4 | | 7.5 | | 16.5 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.
3. MCS requires no installation kits.
4. KG-3X does not require install equipment kits.
5. MCS Spiral 1: three install kits and three install equipment kits used for two trainers and a lab.
6. FMCS Single Board install kits not required.
7. VLC requires no install kits.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES MODIFICATION TITLE: TECH INSERTION (OSIP 003-04 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Modification

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Nov-06

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Apr-07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (16) kits | | | 16 | 0.2 | | | | | | | | | | | | | | | 16 | 0.2 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (32) kits | | | | | | | 32 | 1.0 | | | | | | | | | | | 32 | 1.0 |
| FY 2008 (48) kits | | | | | | | | | 48 | 0.8 | | | | | | | | | 48 | 0.8 |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (10) kits | | | | | | | | | | | | | | | | | 10 | 2.5 | 10 | 2.5 |
| TO COMPLETE (6) kits | | | | | | | | | | | | | | | | | 6 | 1.5 | 6 | 1.5 |
| TOTAL | | | 16 | 0.2 | | | 32 | 1.0 | 48 | 0.8 | | | | | | | 16 | 4.0 | 112 | 6.0 |

Notes: Does not include 6 SIL or 16 trainer installs. VLC requires no installs.

MCS Spiral 1 Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | 1 | 5 | 5 | 5 | | | | | | | | | | | | | | | | |
| Out | | 1 | 5 | 5 | 5 | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

MCS Spiral 2 Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 8 | 8 | | | | | | | | |
| Out | | | | | | | | | | | | 8 | 8 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

SDSU Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

KG-3X Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

FMCS Single Board Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

MAPS Upgrade Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

STE Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 8 | 8 | | | | | | | | |
| Out | | | | | | | | | | | | 8 | 8 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: SLEP (OSIP 003-07 )

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION / JUSTIFICATION: Funding to do extensive engineering analysis using modern analytic tools (Service Life Assessment Program - SLAP) will identify E-6B structural areas requiring rework to extend the E-6B service life to 2040+ (Service Life Extension Program - SLEP).
FY07 funding is required for NRE for the Service Life Extension rework. FY08 NRE will be used for the Individual Aircraft Tracking System (IATS). The IATS will enable the fleet and program office to track the fatigue life expended on each E-6B in the inventory. This tracking capability will identify the next critical fatigue damaged component that will need repair, generate cost savings by allowing future modifications to be tailored to meet each aircraft's need, and increase E -6B fleet availability for operational use. The components of the modification kits and the processes to install the kits will be identified after the completion of SLAP Phase 2 (4Q 07). Current E-6 usage indicates A/C modification must commence in FY08 to prevent the E-6 from becoming unable to perform its mission with the downing of more than two aircraft in 2016. There is a potential safety of flight issue due to unknown rate of deterioration of the E-6 airframe.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: FY04 RDT&E contract award for SLAP to identify structural areas requiring rework. FY07 MS C for SLAP. SLEP contract award and prototype installation in FY08. SLEP full rate production in FY09 with an additional 15 kits fabricated FY09-FY13. Installation ends in FY14.

FINANCIAL PLAN: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | 5.6 | | 0.9 | | 3.9 | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| SLEP | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 5.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 1.3 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 0.3 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | | 6.7 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Asterisk indicates amount less than $50K.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES MODIFICATION TITLE: SLEP (OSIP 003-07 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive-In Modification

ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (3) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (5) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

SLEP Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | |
| In | | | | | | | | | 9 | |
| Out | | | | | | | | | 9 | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: COMMUNICATIONS (IP/T3) UPGRADE (OSIP 012-07)

MODELS OF SYSTEMS AFFECTED: E-6 SERIES TYPE MODIFICATION: Capability

DESCRIPTION/JUSTIFICATION: OSD PDM III directs funding to increase the number and bandwidth of communications links in support of command and control operations onboard the E-6B aircraft. It provides a Ku band transmit capability of 1-5 Mbps; Secure Video Teleconferencing at designated positions; installs Mystic Star UHF/HF DoD UFO satellite capability and INMARSAT L Band commercial satellite access for global communications connectivity; installs the Northstar Digital Ground Entry Point (GEP) capability for high speed UHF LOS communications; provides a T3 transmit/receive capability and provides First Responder communications capabilities to support local, state and national connectivity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY07 contract award and NRE. FY08 prototype install, MS C, kit procurement (9 kits) and 3 installs. FY09 procures 6 kits and installs the remaining 12 kits. FY10 FOC (16 A/C.)

FINANCIAL PLAN : (TOA, $ In Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| A/C KITS | | | | | | | 1 | 1.2 | | | | | | | | | | | | |
| LAB KITS | | | | | | | 1 | 1.2 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 19.1 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| A/C KITS | | | | | | | 1 | 3.4 | | | | | | | | | | | | |
| LAB KITS | | | | | | | 1 | 3.4 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 4.2 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | 15.0 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | 3.5 | | | | | | | | | | | | |
| ILS | | | | | | | | 2.4 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | 15.1 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 1 | 1.1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | | 69.7 | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding.
2. Includes LAB installs in FY07 & FY08, WST trainer install in FY08 and MAS trainer installs in FY08 & FY09

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: E-6 SERIES

MODIFICATION TITLE: COMMUNICATIONS (IP/T3) UPGRADE (OSIP 012-07)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Field Modification

ADMINISTRATIVE LEADTIME: 1 Months

PRODUCTION LEADTIME: Various Months

CONTRACT DATES: FY 2005 ____ FY 2006 ____ FY 2007 Nov-06

DELIVERY DATE: FY 2005 ____ FY 2006 ____ FY 2007 Nov 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 (1) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (9) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (6) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | | | | | | | | | | | |

NOTE: Does not include the LAB or Trainer Installs

IP Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3B/C

MODIFICATION TITLE: P-3 Intelligence Sensors and Systems (OSIP 19-97)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive In and Navy Field Mod Team.

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: 3/05 FY 2006: 2/06 FY 2007: 2/07

DELIVERY DATE: FY 2005: 11/05 FY 2006: 10/06 FY 2007: 10/07

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | 0.4 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | 4.1 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | 2.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | 0.4 | | | | 4.1 | | 2.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | COMPLETE | TOTAL |
| In | | | | | | |
| Out | | | | | | |

NOTE: Installation equipment includes both Mission Unique and Improved Communication and Collection Capabilities to be installed concurrently.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **EXECUTIVE HELICOPTERS SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 168.8 | A | 25.7 | 21.5 | 40.2 | 15.5 | 15.9 | 16.1 | 16.4 | 4.2 | 324.1 | |

This line item funds modifications to the (11) VH-3D and (8) VH-60N Executive Helicopters. These aircraft are assigned to Marine Helicopter Squadron One to support the President of the United States. The Communications/Navigation/Survivability modification to both the VH-3D and VH-60N consists of a communications system upgrade to provide communications commonality between Executive Helicopters, Air Force One, and N-Cap, Traffic Collision Avoidance System (TCAS), VH-60 Maintenance Trainer, TACAN Upgrade, GPS Upgrade; and a tailored electronic warfare (EW) suite. The VH-60N Cockpit consists of an upgrade to an all-glass instrumentation. The Communication Suite Upgrade consists of SATCOM radio upgrade, Digital FM radio upgrade, HF radio upgrade, and Data Transfer capability upgrade. The overall goal of modifications budgeted in FY 2007 is to continue procurement efforts in accordance with the planned procurement strategy implemented during FY 1993. The VH-3D Lift Improvement program consists of the operational level install of 55 composite main rotor blades on all eleven VH-3Ds.

NOTE: FY2006 Program Funding does not match P-1 due to Database errors.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 022-93 VH-3D/VH-60N SURVIVABILITY | 126.1 | 1.1 | | | | | | | | 127.2 |
| 009-02 VH-60N COCKPIT UPGRADE | 24.4 | 14.4 | 9.6 | 10.0 | 12.9 | 11.6 | 16.1 | 16.4 | 4.2 | 119.6 |
| 014-02 VH COMM UPGRADE | 18.3 | 10.2 | 6.9 | 5.2 | 2.6 | 4.2 | | | | 47.4 |
| DERF (non add) | 10.1 | | | | | | | | | 10.1 |
| 011-06 VH-3D LIFT IMPROVEMENT PROGRAM | | | 5.0 | 25.0 | | | | | | 30.0 |
| TOTAL | 168.8 | 25.7 | 21.5 | 40.2 | 15.5 | 15.9 | 16.1 | 16.4 | 4.2 | 324.1 |

Exhibit P-3a

MODIFICATION TITLE: VH-3D/VH-60N SURVIVABILITY( OSIP 22-93 )

MODELS OF SYSTEMS AFFECTED: VH-3D/VH-60N TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: The VH-3D and VH-60N Executive Helicopters provide worldwide emergency evacuation and executive transport missions for the President of the United States. Missions include operations in areas subject to terrorist infiltrations, light anti-aircraft weapons, small arms, infrared seeking missiles, laser weapons, and other external threats. The survivability improvements will provide mission aircraft with tailored Aircraft Survivability Equipment (ASE). International and federal laws governing commercial air traffic require collision avoidance systems for certain aircraft which carry passengers. FAA requirements call for installation of a collision avoidance warning system no later than 1996 for most commercial aircraft. The collision warning system will give pilots a real time indication of proximity threat traffic. The system will augment radar tracking and provide traffic advisories when operating in areas with no radar coverage.

Modification will include:60%

(1) 19 Survivability change kits and GFE (11 VH-3D and 8 VH-60N) in FY 1993 through FY 1998. One prototype kit was procured in FY 1993 for the VH-3D and one in FY 1994 for the VH-60N. 10 production kits were procured for the VH-3D in FY 1995 through FY 1998, and 7 VH-60N production kits were procured in FY 1996 through FY 1998. Installation of these systems are being performed as part of ECP 5976 (VH-3D) and ECP 3407 (VH-60N).

(2) Traffic Alert and Collison Avoidance System (TCAS) install kits and IFF (8 VH-60N), included as part of the MUG/CNSU kits in FY 1996 through FY 2002. VH-60N TCAS production kits were procured as part of the MUG/CNSU kits in FY 1996 through FY 1998 and was installed as part of ECP 3407. TCAS/IFF kits for the VH-3D were procured in FY 1998 through FY 2001 and installed under ECP 5981 in FY2000 through FY2005. Mode "S" update will follow as technology matures. ORD OR-315-05-92 and OR-316-05-92 apply.

(3) An interim Auto Ignition system was developed and installed on the VH-60N aircraft in FY 1994. Permanent systems will be installed coincident with the VH-60N survivability mod installations.

(4) Two Aircrew Procedures Trainers/Simulators (APT).

(5) In FY 01 an FM immunity capability was procured/installed on the VH-60N and VH-3D to prevent receiving erroneous signals and false position indications for the VOR/ILS system.

(6) VH-60N Maintenance Trainer

(7) MAGR 2000 GPS Upgrade for VH-3D/VH-60N

(8) TACAN Navigation Upgrade for VH-3D/VH-60N

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Integration efforts to the airframes will be performed by either Sikorsky Aircraft or the individual kit manufacturer. Software integration, which started in FY 1993, is being developed by NAWC-AD. The first installation of TCAS/IFF was in May 1999 for the VH-60N and was in February 2001 for the VH-3D. TCAS installations completed in FY05. FY04 Tailored Emitter Identification Device files, Tailored Mission Data Files, Modified Blanking pulse, Production integration engineering support, Test integration engineering support, Modeling and Simulation, Effectiveness testing and Operational Validation/Verification.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| VH-3D ALQ-144A | 11 | * | | | | | | | | | | | | | | | | | | |
| VH-3D Collision Warning System (TCAS) | 11 | 1.6 | | | | | | | | | | | | | | | | | | |
| VH-3D Survivability Kits | 11 | 11.8 | | | | | | | | | | | | | | | | | | |
| VH-3D Survivability Kits (Update) | 1 | 0.1 | | | | | | | | | | | | | | | | | | |
| VH-60N ALQ-144A | 8 | * | | | | | | | | | | | | | | | | | | |
| VH-60N Auto Ignition | 8 | 1.1 | | | | | | | | | | | | | | | | | | |
| VH-60N Survivability Kits | 8 | 5.0 | | | | | | | | | | | | | | | | | | |
| VH-60N Survivability Kits -Proto Update | 2 | 0.7 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 20.4 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ALE-47 MLVS | | 0.1 | | | | | | | | | | | | | | | | | | |
| CXP-100 Upgrade | 19 | 0.5 | | | | | | | | | | | | | | | | | | |
| MUST Radio | 3 | 0.3 | | | | | | | | | | | | | | | | | | |
| VH-3D ALE-47 | 8 | 0.4 | | | | | | | | | | | | | | | | | | |
| VH-3D ALQ-144A | 11 | 1.9 | | | | | | | | | | | | | | | | | | |
| VH-3D Collision Warning System (TCAS) | 11 | 0.9 | | | | | | | | | | | | | | | | | | |
| VH-3D FM Immunity Kits | 11 | 0.2 | | | | | | | | | | | | | | | | | | |
| VH-60N ALE-47 | 3 | 0.3 | | | | | | | | | | | | | | | | | | |
| VH-60N ALQ-144A | 8 | 0.5 | | | | | | | | | | | | | | | | | | |
| VH-60N FM Immunity Kits | 8 | 0.1 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 7.8 | | | | | | | | | | | | | | | | | | |
| ECO | | 0.1 | | | | | | | | | | | | | | | | | | |
| DATA | | 4.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 2 | 21.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | 3 | 1.5 | | | | | | | | | | | | | | | | | | |
| ILS | | 1.0 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 24.7 | | 0.7 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 58 | 20.0 | 1 | 0.3 | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 205 | 126.1 | 1 | 1.1 | | | | | | | | | | | | | | | | |

**Note:**

(1) VH-60N Survivability Kit Prototype Update previously funded under Install Kit N/R line.

Asterisk indicates amount less than $51K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: VH-3D/VH-60N MODIFICATION TITLE: VH-3D/VH-60N SURVIVABILITY( OSIP 22-93 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: ALQ-144 Phase Lock kits will be installed as Drive-In Mod. Survivability kits (AAR-47, APR-39, AVR-2 and ALE-47) will be installed on VH-3D and VH-60N during SPAR. Collision avoidance warning systems are currently being evaluated and will be incorporated during SPAR. (All turn-key in FY 1996 and prior fiscal years.)

ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (59) kits | 58 | 20.0 | 1 | 0.3 | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 58 | 20.0 | 1 | 0.3 | | | | | | | | | | | | | | | | |

Installation Schedule - VH-3D Survivability

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 |
| In | 12 | | | | | | | | | | | | | | | | | | | | | |
| Out | 12 | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Installation Schedule - VH-60N Survivability

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 |
| In | 9 | | | | | | | | | | | | | | | | | | | | | |
| Out | 9 | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: VH-3D/VH-60N MODIFICATION TITLE: VH-3D/VH-60N SURVIVABILITY( OSIP 22-93 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Collision avoidance warning systems will be incorporated during SPAR.

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 16 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

Installation Schedule - VH-3D TCAS

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 |
| In | 10 | 1 | | | | | | | | | | | | | | | | | | | | |
| Out | 8 | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: VH-60N COCKPIT UPGRADE( OSIP 009-02 )

MODELS OF SYSTEMS AFFECTED: VH-60N TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: In order to meet the requirement of providing safe and timely transportation for the President, Vice President, and other parties as directed by the Director of the White House Military Office (WHMO) in support of the alert and contingency mission requirement of the WHMO Operations plan, the VH-60N aircraft cockpit must be upgraded to provide enhanced communication, navigation, and survivability capabilities while reducing pilot workload. The cockpit upgrade should be an all-glass instrumentation built around multi-function pilot workload. A moving map display complete with terrain database should be incorporated, while maintaining the current capabilities of TACAN, VOR, ILS, ADF, TCAS, CSFIR, FM Immunity, Mode S IFF, ALE-47 and ALQ-144. The Survivability capabilities will provide a countermeasure dispenser and an infrared countermeasure system. The navigation system should include laser ring gyros with embedded GPS that has integrity monitoring/IFR certification. A color radar with stormscope should be incorporated. Communication capabilities must be consistent with WHCA (White House Communications Agency) planning and NSA requirements. Three UHF/VHF/FM radios shall be included. Four FM radios, SATCOM, HF with ALE currently on the VH-60N must be maintained. A coupled autopilot function shall be incorporated into the cockpit management system.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Program was approved as an ACAT IV-T program in July 2001. A Milestone B decision was approved in November 2003. Non-Recurring Engineering (NRE) for the cockpit ugrade began in FY 2002 with a prototype kit bought in FY 2006. In FY 2004 Install Equipment NRE (software modification ) began. Installation of 1st production kit will begin in FY2007. Development and Operational Testing is scheduled for FY 2007/8. Initial Operating Capability is scheduled for FY 2008 with Full Operating Capability scheduled for FY 2012.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| VH-60N Cockpit Upgrade Kit | | | | | 1 | 1.0 | 2 | 2.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 8.8 | | 10.3 | | 6.5 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Production | | | | | | 0.6 | | 1.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 13.7 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | 1.1 | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.5 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | 1 | 1.2 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.6 | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.9 | | 3.1 | | 0.3 | | 0.6 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | 1.0 | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | 2 | 4.0 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 24.4 | | 14.4 | 2 | 9.6 | 4 | 10.0 | | | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: VH-60N MODIFICATION TITLE: VH-60N COCKPIT UPGRADE( OSIP 009-02 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation of Cockpit Upgrade during SPAR.

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 FY 2006 Dec 06 FY 2007 Dec 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 (2) kits | | | | | | | 2 | 4.0 | | | | | | | | | | | | |
| FY 2007 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (2) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (1) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | **2** | **4.0** | | | | | | | | | | | | |

Total Quantity includes 1 Trainer

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: VH COMM UPGRADE( OSIP 14-02 )

MODELS OF SYSTEMS AFFECTED: VH-60N/VH3D TYPE MODIFICATION: SAFETY

DESCRIPTION / JUSTIFICATION: JCS Directive MJCS-63-89 states that all access to UHF SATCOM will use demand assigned multiple access (DAMA). The White House Communication Agency (WHCA) has directed that all White House Military Organization (WHMO) elements be connected and have the ability to operate in the DAMA mode by the year 2005. WHCA has also directed that all WHMO elements have the ability to operate in the High Frequency/Automatic Link Establishment (HF/ALE) mode by the year 2007. Additionally, the WHMO directed the upgrade to the data transfer computer and printer on board the VH-60N which is required to transmit, receive, and print secure data files via the SATCOM and HF radios. Satisfaction of the DAMA SATCOM requirement will require the incorporation of 2 DAMA capable radios in each aircraft to satisfy the need for full duplex communication. OFP software will be modified by NAWC-AD to allow the new system to work in the aircraft. An install kit will be built to house the radio and equipment and then installed in the aircraft. Satisfaction of the Data Transfer Computer/Printer requirement will require the procurement of a compatible, TEMPEST certified data transfer computer and printer. OFP software will be modified by NAWC-AD to allow the new equipment to operate in the aircraft. This is to be an operational level install. To satisfy the HF/ALE requirement will require a software modification to the OFP to enable the current HF radio to utilize this function. OFP software will be modified by NAWC-AD. WHMO has also directed that FM radios operate in the digital mode.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: This program was approved as an Abbreviated Acquisition Program in July 2001. Program was upgraded to ACAT IV-M in March 2003. DAMA SATCOM upgrade will be performed between FY-2002 through FY-2009. Installations are performed in conjunction with scheduled depot maintenance. VAL/VER will be performed on the delivery of the first production VH-3D and VH-60N. This was planned for FY-2005. HF/ALE modification will be performed between FY-2005 through FY-2008 with a Val/Ver scheduled for FY-2007. The Data Transfer capability modification has been performed between FY-2003 through FY-2005 with a Val/Ver in FY-2006. Performance testing and EMC/EMI testing performed by NAWC-AD. Val/Ver performed by HMX-1 to ensure interoperability with all WHMO elements. Digital FM capability performed between FY 2003 through FY 2005, with a Val/Ver in FY 2004.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| SATCOM (O-level) | | 0.5 | | | | | | | | | | | | | | | | | | |
| VH Digital FM | 28 | 1.5 | | | | | | | | | | | | | | | | | | |
| VH-3D SATCOM | 5 | 0.3 | 1 | 0.1 | 3 | 0.2 | 2 | 0.1 | | | | | | | | | | | | |
| VH-60 SATCOM | | | 5 | 0.9 | 2 | 0.4 | 1 | 0.2 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 16.3 | | 1.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Data Transfer Computer/ Printer | 8 | 0.2 | | | | | | | | | | | | | | | | | | |
| Digital FM | 21 | 0.3 | | | | | | | | | | | | | | | | | | |
| SATCOM | 27 | 2.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.5 | | 1.8 | | 1.0 | | 0.4 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| Data Transfer | | | | 0.3 | | | | | | | | | | | | | | | | |
| Digital FM | | | | 0.9 | | | | | | | | | | | | | | | | |
| SATCOM | | | | | | 0.6 | | | | | | | | | | | | | | |
| Simulator Kit | | | | 0.1 | | | | | | | | | | | | | | | | |
| DATA | | 0.9 | | 0.5 | | 0.5 | | 0.3 | | | | | | | | | | | | |
| TRAINING EQUIP | 5 | 0.4 | | 0.1 | | | | 0.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.1 | | 0.2 | | 0.2 | | 0.1 | | | | | | | | | | | | |
| ILS | | | | 0.8 | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 4.0 | | 1.7 | | 1.5 | | 1.0 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 4 | 1.7 | 5 | 2.6 | 5 | 2.7 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 94 | 28.4 | 10 | 10.2 | 10 | 6.9 | 8 | 5.2 | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: VH-60N/VH3D

MODIFICATION TITLE: VH COMM UPGRADE( OSIP 14-02 )

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Installation of Comm Suite Upgrade during SPAR.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 2005 Jan 05 FY 2006 Jan-06 FY 2007 Jan-07

DELIVERY DATE: FY 2005 Sep 05 FY 2006 Sep 06 FY 2007 Sep 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (5) kits | | | 3 | 0.8 | 2 | 1.0 | | | | | | | | | | | | | | |
| FY 2005 (6) kits | | | 1 | 0.9 | 2 | 0.5 | 3 | 2.1 | | | | | | | | | | | | |
| FY 2006 (5) kits | | | | | 1 | 1.0 | 2 | 0.5 | | | | | | | | | | | | |
| FY 2007 (3) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **4** | **1.7** | **5** | **2.6** | **5** | **2.7** | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 |
| In | | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | | | | | | | | | |
| Out | | | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: VH-3D LIFT IMPROVEMENT PROGRAM( OSIP 011-06 )

MODELS OF SYSTEMS AFFECTED: VH-3D TYPE MODIFICATION: SAFETY

DESCRIPTION/JUSTIFICATION: The VH-3D Lift Improvement program consists of the operational level install of 55 composite main rotor blades on all eleven VH-3D aircraft. These blades will improve performance allowing increased passengers and fuel loads. Composite blades reduce the torque required to hover and for level flight. Composite blades reduce vibrations and structural loads. VH-3D is the only aircraft in the inventory using metal blades.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Flight test for the procurement of the VH-3D composite main rotor blades will take place in the 4th quarter of FY 2006 and 1st quarter of FY 2007. Procurement and operational install of these blades will take place in the 1st and 2nd quarter of FY 2007.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION A KITS | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| VH-3D B KITS | | | | | | | 11 | 17.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 3.1 | | 2.8 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 2.2 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | 1.0 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | 0.6 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 1.9 | | 1.2 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | 5.0 | 11 | 25.0 | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3B/C

MODIFICATION TITLE: P-3 Intelligence Sensors and Systems (OSIP 19-97)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive In and Navy Field Mod Team.

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: 3/05 FY 2006: 2/06 FY 2007: 2/07

DELIVERY DATE: FY 2005: 11/05 FY 2006: 10/06 FY 2007: 10/07

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | 0.4 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | 4.1 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | 2.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | 0.4 | | | | 4.1 | | 2.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | COMPLETE | TOTAL |
| In | | | | | | |
| Out | | | | | | |

NOTE: Installation equipment includes both Mission Unique and Improved Communication and Collection Capabilities to be installed concurrently.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **SPECIAL PROJECT AIRCRAFT** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 173.0 | A | 16.5 | 26.3 | 14.3 | 14.7 | 15.0 | 15.2 | 15.5 | 95.7 | 386.1 | |

DESCRIPTION:
The Special Projects program modifies and/or replaces obsolete intelligence collection equipment as required in (6) P-3 aircraft. Procurements vary in each fiscal year and include common Navy systems for increased capability, reduced operator workload and common logistics. Active PAA inventory is 4 with additional 2 BAA aircraft in the Special Mission inventory. A total of 6 aircraft have been delivered. The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 019-97 INTELLIGENCE SENSORS | 98.6 | 16.5 | 26.3 | 14.3 | 14.7 | 15.0 | 15.2 | 15.5 | 95.7 | 311.7 |
| TOTAL | 98.6 | 16.5 | 26.3 | 14.3 | 14.7 | 15.0 | 15.2 | 15.5 | 95.7 | 311.7 |

Exhibit P-3a

MODIFICATION TITLE: INTELLIGENCE SENSORS( OSIP 19-97 )

MODELS OF SYSTEMS AFFECTED: P-3B/C TYPE MODIFICATION: Operational Improvement

DESCRIPTION / JUSTIFICATION:
This modification replaces obsolescence intelligence collection equipemnt in six P-3 Special Project aircraft by:

1. Procurement of special mission equipment as directed by the Chief of Naval Operations.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Approval for full rate production is not required.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| P-3 KITS (MISSION UNIQUE) | 4 | 0.7 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| IMPROVED COMM AND COLL CAP | | 19.6 | | 4.5 | | 4.3 | | 1.0 | | | | | | | | | | | | |
| MISSION UNIQUE EQUIPMENT | | 42.7 | | 5.6 | | 8.4 | | 4.6 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 24.5 | | 3.9 | | 4.4 | | 2.0 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.7 | | 0.3 | | 0.5 | | 0.4 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | 0.4 | | 0.2 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | 0.1 | | 0.1 | | | | | | | | | | | | |
| ILS | | 1.1 | | 0.6 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| OTHER SUPPORT | | 8.9 | | 1.6 | | 3.7 | | 3.4 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | 0.4 | | | | 4.1 | | 2.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 4 | 98.6 | | 16.5 | | 26.3 | | 14.3 | | | | | | | | | | | | |

1. Asterisk indicates amount less than 51K

NOTE: Installation of equipment will be completed by a combination of Contractor drive in and Navy Field Mod Team.

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: P-3B/C

MODIFICATION TITLE: P-3 Intelligence Sensors and Systems (OSIP 19-97)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Drive In and Navy Field Mod Team.

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: 3/05 FY 2006: 2/06 FY 2007: 2/07

DELIVERY DATE: FY 2005: 11/05 FY 2006: 10/06 FY 2007: 10/07

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | 0.4 | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | 4.1 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | 2.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | 0.4 | | | | 4.1 | | 2.2 | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | TO | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | COMPLETE | TOTAL |
| In | | | | | | |
| Out | | | | | | |

NOTE: Installation equipment includes both Mission Unique and Improved Communication and Collection Capabilities to be installed concurrently.

| BUDGET ITEM JUSTIFICATION SHEET P-40 | DATE: February 2006 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | P-1 ITEM NOMENCLATURE: **T-45 SERIES** |
| Program Element for Code B Items: | Other Related Program Elements |

| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | |
| COST (In Millions) | 106.5 | A | 43.3 | 45.2 | 34.9 | 38.9 | 29.6 | 34.3 | 35.0 | 374.2 | 742.1 |

DESCRIPTION: This line item funds modifications to T-45A aircraft. The T-45A Goshawk is a tandem-seat, carrier capable derivative of the existing British Aerospace Hawk aircraft powered by a single Rolls Royce Adour engine. It serves as the aircraft component of the T45TS integrated jet pilot training system which replaces the three decade old TA-4 and T-2 technology. The overall goal of the modifications budgeted in FY 2007 is to correct discrepancies and deficiencies discovered after delivery of the aircraft and to commence major upgrades to the aircraft cockpit, navigation system, and aircrew ejection seats. FY03 funded simulator is an analog conversion and supported production aircraft that was delivered to Kingsville in FY04. T-45 aircraft and simulators are facing critical avionics obsolescence and Diminishing Manufacturing Source (DMS) issues. OSIP 17-04 (Required Avionics Modernization Program (RAMP)) was established to convert the T-45As (analog) to the digital T-45C configuration. OSIP ( 02-06) (Synthetic Radar) was established because the T-2/T39 are going to be divested in 2006/2013 and the training command cannot complete UMFO training. No new Type Model Series will be developed to pickup this requirement, as a result, the T-45 will modify 30 aircraft to incorporate Synthetic Radar Training into curriculm. OSIP 13-06 will fund the Non-recurring Engineering (NRE) associated with modification of the Airborne Data Recorder (ADR) to provide a Crash Survivable Memory Unit (CSMU). The CSMU will assure flight incident data is available after an aircraft mishap to assist in reconstructing the cause of mishaps.

The designed service life of the aircraft is 14,400 hours with the average remaining service life of inventory aircraft estimated at 11,692 hours.

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 008-95 T-45TS CORR OF DEFIC | 84.0 | 16.5 | 12.0 | 6.3 | 5.4 | 3.8 | 7.9 | 7.9 | 124.9 | 268.8 |
| 011-02 IMPROVEMENT DIRECTIONAL CONTROL | 3.7 | 0.7 | 0.7 | | | | | | | 5.1 |
| 003-03 ENGINE SURGE | 5.4 | 3.5 | 3.3 | 3.3 | 4.6 | 6.9 | 9.5 | 10.4 | 232.7 | 279.6 |
| 010-04 T-45TS GPS | 1.1 | 1.2 | 1.5 | 1.4 | 1.5 | 1.6 | 1.1 | 0.9 | 2.0 | 12.3 |
| 017-04 AVIONICS OBSOLESCENCE | 2.7 | 21.3 | 24.8 | 19.4 | 23.6 | 17.0 | 15.8 | 15.8 | 7.3 | 147.8 |
| 002-06 SYNTHETIC RADAR | | | | 4.5 | 3.9 | 0.3 | | | 7.3 | 16.0 |
| 013-06 CRASH SURVIVABLE MEMORY UNIT | | | 2.8 | | | | | | | 2.8 |
| TOTAL | 96.9 | 43.3 | 45.2 | 34.9 | 38.9 | 29.6 | 34.3 | 35.0 | 374.2 | 732.5 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: T-45TS CORR OF DEFIC( OSIP 008-95 )

MODELS OF SYSTEMS AFFECTED: T-45TS

TYPE MODIFICATION: Safety, Reliability, Increased Service Life, Improved Mission Capabilities

DESCRIPTION/JUSTIFICATION:

Ejection Seat Changes
Modifications will enhance aircrew safety. Potential modifications are to include pitot tube covers, changes to the ejection sequencer and rail system.

Uncommanded Gear Extension: MDA-T45TS-TBDs Modification will increase travel of the landing gear control interconnect cable, increase cable friction, and change the gear selector valve actuation signal to only when the handle is in the full up or full down position. Installation of this ECP is in response to a T45TS Engineering Investigation that documented a deficiency and proposed recommendations relating to incidents of uncommanded landing gear extensions.

Ground Training Systems: MDA-T45TS-TBDs
Updates to the T-45 aircraft simulator will be made to match evolving aircraft configurations / modifications and flight characteristics / software / academics enhancements to improve training capabilities.

Structural ECPs
Modifications will incorporate changes to improve structural details to increase aircraft service life to 21,600 flight hours. During FSD testing of the T45 aircraft it was determined that incorporation of redesigned components applicable to the critical load paths will significantly increase the service life of the aircraft. This structural portion of this OSIP effects several structural components including, but not limited to: Wing Dolly, SS 02 Monitor Bracket, Horizontal Stabilators, Frame 24 Crossbeam Lugs, Wing Leading Edge Redesign, Frame 29 Lower Flange, Uplock Beam Forward Attach, Slat Track Rib 5 Downstop Bolt, Frame 28/32 Boundary/Vertical Fin, Inlet Close-Out Fuel, Airframe Engine Mount, Frame 21 Structure, MLG Bay Tilted & Fasteners, Longitudial Systems Viscous, Frame 20 Structures, Frame 12 Vertical Splice, NLF Trunnion Beam, Slat Actuator Fitting Angle, Structure Life Improvement, Speed Brake Upgrade, Engine Mount Link Option, Stabilizer Back-Up Structures, Fuselage/Frame 10 Door, and Fin Bracket Lever Box Assembly.

Airframe ECP's
Modifications to the airframe other than structural defficiencies are also required to ensure safety of flight, aero-performance and maintainability to enable satisfactory PTR levels. This Airframe OSIP affects several airframe components and their sub-assemblies including: forward, center and aft fuselage components, landing gear, tail cone, wing, horizontal and vertical control surfaces, flaps, canpoy/windscreen, hydraulic system, oxygen system, electrical system, fuel system, instrumentation systems, environmental controls, communications, navigation and emergency systems.

Avionics
Modifications to the Avionics will be required to update the Display unit, Heads Up Display, Global Positioning System and Inertial Navigation Assembly to enhance effectiveness of pilot training and avoid obsolescence. The following ECP's are part of the Avionics package of the aircraft
and include: Air Data Recorder/Signal Data Computer/Advanced Signal Data Computer, Almanac Loading System, Mission Computer, communication systems, navigation systems and GPS.

Engines
Engine Modifications will increase engine service life and correct safety related issues. Modifications may occur to Engine Mounts, Fuel Pumps, Combustion Chamber, Compressors, Nozzle Guide Vanes, Drive Systems, Oil System, Air Systems, Turbines, Fuel Distribution and Control
Systems, Gas Turbine Starter, Ignition and Electrical Systems, Tailpipe, Engine-Related Aircraft Systems, and modifications to address engine surge/compressor stall.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Airframe | 36 | 1.4 | 39 | 1.4 | 150 | 1.5 | 80 | 0.8 | | | | | | | | | | | | |
| Avionics | 353 | 3.6 | 60 | 3.6 | 60 | 1.0 | 30 | 0.5 | | | | | | | | | | | | |
| Ejection Seat Handle MB-9155 | 112 | 0.3 | | | | | | | | | | | | | | | | | | |
| Engines | 588 | 4.9 | 141 | 1.2 | 120 | 1.0 | 80 | 0.8 | | | | | | | | | | | | |
| Ground Training Systems TBD | 49 | 2.3 | | | | | | | | | | | | | | | | | | |
| Structural ECPs | 916 | 21.2 | 256 | 2.9 | 150 | 2.0 | 80 | 0.7 | | | | | | | | | | | | |
| Uncommanded Gear Extension | 35 | 0.7 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 7.1 | | 3.3 | | 0.1 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| Airframe ECPs | | | | 0.5 | | 0.9 | | 0.3 | | | | | | | | | | | | |
| Avionics | | 1.3 | | 0.1 | | | | | | | | | | | | | | | | |
| Ejection Seat Handle MB-9155 | | 0.2 | | | | | | | | | | | | | | | | | | |
| Engines | | 2.0 | | | | | | | | | | | | | | | | | | |
| Ground Training Systems TBD | | 0.7 | | | | | | | | | | | | | | | | | | |
| Structural ECPs | | 0.4 | | | | | | | | | | | | | | | | | | |
| Uncommanded Gear Extension | | * | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 2.0 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.8 | | * | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 7.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.9 | | * | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 1.1 | | 0.1 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 2,087 | 26.1 | 242 | 3.6 | 569 | 5.5 | 290 | 3.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 4,176 | 84.0 | 738 | 16.5 | 1,049 | 12.0 | 560 | 6.3 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEM AFFECTD: **T45TS** MODIFICATION TITLE: T45TS Correction to Deficiencies (OSIP 08-95)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **"I" and "D" Level Installation: Contractor Field Modification Team-Separate Contract**

ADMINISTRATIVE LEADTIME: VARIOUS Months PRODUCTION LEADTIME: VARIOUS Months

CONTRACT DATES: FY 2005: N/A FY 2006: N/A FY 2007: N/A

DELIVERY DATE: FY 2005: N/A FY 2006: N/A FY 2007: N/A

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** | Qty | $ | Qty | **$** | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | 2,087 | 26.1 | 2 | * | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | 240 | 3.5 | 196 | 1.9 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 373 | 3.6 | 107 | 1.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 183 | 2.0 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **2,087** | **26.1** | **242** | **3.6** | **569** | **5.5** | **290** | **3.2** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 2087 | 60 | 60 | 60 | 62 | 142 | 142 | 142 | 143 | 72 | 72 | 72 | 74 | | | | | | | | | | | | |
| Out | 2087 | 60 | 60 | 60 | 62 | 142 | 142 | 142 | 143 | 72 | 72 | 72 | 74 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | | |
| In | | | | | | | |
| Out | | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: IMPROVEMENT DIRECTIONAL CONTROL( OSIP 011-02 )

MODELS OF SYSTEMS AFFECTED: T-45TS TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: Loss of Directional Control during the high speed ground rollout has resulted in six Class A T-45 mishaps. The proposed modification will significantly improve the Ground Handling characteristics by improvements such as: Providing yaw rate feedback to the nosewheel steering system and the Stability Augmented Steering System (SASS). This improvement will make external forces less influential on yaw rates, and provide for lower susceptibility to pilot induced oscillations.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Non-recurring engineering efforts associated with this modification were conducted during FY02. Kit procurement commenced in FY03 and installations began in FY05.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Directional Control | 168 | 2.7 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.5 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.5 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | 17 | * | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | * | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | 96 | 0.7 | 72 | 0.7 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 185 | 3.7 | 96 | 0.7 | 72 | 0.7 | | | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) MODIFICATION TITLE: T45TS IMPROVED DIRECTIONAL CONTROL (OSIP 11-02)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Field Mod Team**

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2005: Jan-05 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: Jun-06 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2004 | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | 96 | 0.7 | 72 | 0.7 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | **96** | **0.7** | **72** | **0.7** | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | 15 | 27 | 27 | 27 | 27 | 27 | 18 | | | | | | | | | | | | | | | |
| Out | | | | 15 | 27 | 27 | 27 | 27 | 27 | 18 | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: ENGINE SURGE( OSIP 003-03 )

MODELS OF SYSTEMS AFFECTED: T-45TS TYPE MODIFICATION:

DESCRIPTION / JUSTIFICATION: Engine Surge: T-45 engine surge is a critical safety concern for a single engine aircraft with over 195 surge events documented. Kits include modifications to airframe, engine, and fuel control system.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Funding was provided to correct T-45 F405 engine surge. Non- Recurring Engineering efforts started in FY03. Kit procurement begins in FY07.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Airframe Kits | | | | | | | 43 | 1.3 | | | | | | | | | | | | |
| Engine Kits | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 5.4 | | 3.5 | | 3.3 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.1 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | 2.0 | | | | | | | | | | | | |
| ILS | | * | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | 5.4 | | 3.5 | | 3.3 | 43 | 3.3 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) MODIFICATION TITLE: T45TS AIRFRAME KITS (OSIP 03-03)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **TBD**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: Mar-07

DELIVERY DATE: FY 2005: FY 2006: FY 2007: Aug-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T-45 TRAINING SYSTEM (T45TS) MODIFICATION TITLE: T45TS ENGINE KITS (OSIP 03-03)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **TBD**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007: Mar-07

DELIVERY DATE: FY 2005: FY 2006: FY 2007: Aug-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: T-45TS GPS( OSIP 010-04 )

MODELS OF SYSTEMS AFFECTED: Analog Cockpit TYPE MODIFICATION: PS Safety

DESCRIPTION / JUSTIFICATION: Congressional requirement that all DoD aircraft be capable of navigating via Global Positioning System Inertial Naviation Assembly (GINA) to support T45T's mission to train the next generation of warfighters in the use of INS, GPS, and GPS/INS hybrid systems by the end of year 2005. A retrofit program will incorporate GPS in the existing Analog aircraft. There are currently 73 aircraft that will be retrofitted. Kits in 2010 and 2011 address obsolescence issues for the entire fleet.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Kit deliveries and installations began in FY06.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| GPS Kits | 12 | 1.1 | 12 | 1.0 | 12 | 1.0 | 12 | 1.0 | | | | | | | | | | | | |
| Obsolescence Kits | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.1 | | * | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | 0.1 | | 0.1 | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 12 | 0.4 | 12 | 0.4 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 12 | 1.1 | 12 | 1.2 | 24 | 1.5 | 24 | 1.4 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: ANALOG COCKPIT

MODIFICATION TITLE: T45TS GPS (OSIP10-04)
GPS/Avionics Obsolescence

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor field mod team**

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 21 Months

CONTRACT DATES: FY 2005: Jan-05 FY 2006: Jan-06 FY 2007: Jan-07

DELIVERY DATE: FY 2005: Oct-06 FY 2006: Oct-07 FY 2007: Oct-08

($ in Millions)

| Cost: | Prior Years | | FY 2004 | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | 12 | 0.4 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | 12 | 0.4 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | **12** | **0.4** | **12** | **0.4** | | | | | | | | | | | | |

Notes:
1. Quantity totals include trainers

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| Out | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: AVIONICS OBSOLESCENCE( OSIP 017-04 )

MODELS OF SYSTEMS AFFECTED: T-45TS TYPE MODIFICATION: PS Safety

DESCRIPTION / JUSTIFICATION: T45TS is facing critical obsolescence/performance issues. Components of various avionics boxes will not be supportable as a result of Diminishing Manufacturing Source issues that result in part obsolescence or supplier mortality. RAMP will resolve obsolescence issues and add two multi-function displays (MFDs) per cockpit, mission display processor (MDP), associated cockpit controls, and a 1553 digital bus, integrating them with the existing head-up display (HUD), the airborne data recorder (ADR), and a separately procured Global Positioning System/Inertial Navigation (GINA).

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: FY03 provided funding (OSIP 16-96) for 1 simulator conversion and OSIP 17-04 provided FY04 funding for DMS/obsolescence risk mitigation efforts.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| DP/MDP | 2 | 1.6 | | | | | | | | | | | | | | | | | | |
| RAMP/Obsolescence Kits | | | 12 | 13.6 | 12 | 2.2 | 9 | 1.7 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 0.7 | | 4.2 | | 0.3 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AS-3822/URN GPS Antenna (FRPA-3) | | | 12 | * | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| CN-1684/ASN-166 (GINA) | | | | | 12 | 0.5 | 9 | 0.4 | | | | | | | | | | | | |
| CP-2092 (P)/A(DDS) | | | 12 | * | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| DDS Data Loads | | | 12 | 0.5 | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| DP/MDP | 2 | 0.3 | | | 12 | 8.7 | 9 | 5.5 | | | | | | | | | | | | |
| Electronic Clock | | | | | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| MDP | | | | | 12 | 0.6 | 9 | 0.5 | | | | | | | | | | | | |
| MT-6936/ASN-166 (INU Mount Tray) | | | | | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| MU-1053/A (Program Loader) | | | 12 | 0.1 | 12 | 0.1 | 9 | 0.1 | | | | | | | | | | | | |
| SMFCD (MFD) | | | | | 12 | 0.4 | 9 | 0.3 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | 2.4 | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | * | | | | 0.5 | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | 2 | 2.9 | 2 | 7.3 | 2 | 8.2 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 0.1 | | 0.4 | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 0.6 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | 2 | 0.3 | 14 | 2.4 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 4 | 2.7 | 62 | 21.3 | 136 | 24.8 | 115 | 19.4 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: T45TS

MODIFICATION TITLE: T45 RAMP/AVIONICS OBSOLESCENCE (17-04)
DP & MDP/RAMP/AVIONICS OBSOLESCENCE

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor field mod team**

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 2005: Dec-04 FY 2006: Dec-05 FY 2007: Dec-06

DELIVERY DATE: FY 2005: Dec-06 FY 2006: Dec-07 FY 2007: Dec-08

($ in Millions)

| Cost: | Prior Years | | FY 2004 | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | 2 | 0.3 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | 14 | 2.4 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 (10) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | **2** | **0.3** | **14** | **2.4** | | | | | | | | | | | | |

Notes:
1. Quantity totals include trainers

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | 2 | | | | 2 | 4 | 4 | 4 | | | | | | | | | | | | |
| Out | | | | | | 2 | | | | 2 | 4 | 4 | 4 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | TOTAL |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a

MODIFICATION TITLE: SYNTHETIC RADAR( OSIP 002-06 )

MODELS OF SYSTEMS AFFECTED: T-45TS TYPE MODIFICATION: PS Safety

DESCRIPTION / JUSTIFICATION: With the T-2/T39 divesture in 2006 and 2013, the training command cannot complete UMFO training. No new Type Model Series will be developed to pickup this requirement, as a result, the T-45 will modify 30 aircraft to incorporate Synthetic Radar Training into curriculm.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: FY07 provided funding for NRE, FY08 provides funding for 14 kits.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| SYNTHETIC RADAR | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | 2.0 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| GINA 4 MODULE | | | | | | | | | | | | | | | | | | | | |
| IFF MODE S | | | | | | | | | | | | | | | | | | | | |
| JOINT TACTICAL RADIO SYSTEMS | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | 2.0 | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | 0.1 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | 0.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | 0.1 | | | | | | | | | | | | |
| ILS | | | | | | | | 0.1 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | | | 4.5 | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **T45TS** MODIFICATION TITLE: Synthetic Radar Training

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Contractor Field Mod Team**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2004 | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | | | | | | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: CRASH SURVIVABLE MEMORY UNIT( OSIP 013-06 )

MODELS OF SYSTEMS AFFECTED: T-45TS TYPE MODIFICATION: PS Safety

DESCRIPTION / JUSTIFICATION: The T45 Airborne Data Recorder is not a crash survivable recorder. As a result, flight incident data may not be available after a mishap to assist investigators in reconstructing the cause of the mishap. T45 should have a modern state of art crash survivable unit to assure critical data is preserved.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Non-Recurring Engineering began in FY2006.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | 2.8 | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | | 2.8 | | | | | | | | | | | | | | |

*Asterisk indicates amounts less than 51K

| BUDGET ITEM JUSTIFICATION SHEET<br>P-40 | | | | | | | | | | | DATE:<br>February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>**Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE<br>**POWER PLANT CHANGES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 337.0 | A | 26.0 | 26.0 | 24.6 | 22.3 | 21.9 | 21.2 | 21.4 | 20.5 | 520.9 | |

DESCRIPTION: This line item funds modifications to all in-service aircraft engines. Power Plant Changes are required throughout the service life of each aircraft to correct flight deficiencies and improve operational readiness while reducing engine operating costs. This program finances the procurement and installation of retrofit kits for all Navy and Marine Corp aircraft engines and related propulsion hardware such as propellers, starters and transmission. The overall goal of the modifications budgeted in FY 2007 is to continue modification efforts previously initiated on the engines for the F-14, AV-8B, S-3, H-60, E/A6-B, A-6, H-2, AH-1W, T-38, F-5, F/A-18E/F, H-46, H-3, C-2, E-2, A-4, H-53, MH-60, C-130, F/A-18C/D, T-2, P-3, VH-60, UH-1N, T-45, F-16 and V-22 aircraft.

The following depicts the current funding levels budgeted and programed for Power Plant Changes:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 040-00 POWER PLANT CHANGES | 337.0 | 26.0 | 26.0 | 24.6 | 22.3 | 21.9 | 21.2 | 21.4 | 20.5 | 520.9 |
| TOTAL | 337.0 | 26.0 | 26.0 | 24.6 | 22.3 | 21.9 | 21.2 | 21.4 | 20.5 | 520.9 |

Exhibit P-3a

MODIFICATION TITLE: POWER PLANT CHANGES( OSIP 040-00 )

MODELS OF SYSTEMS AFFECTED: POWER PLANT CHANGES TYPE MODIFICATION: Approx. 80% Safety, 20% Reliability

DESCRIPTION / JUSTIFICATION:

This program corrects aircraft flight safety deficiencies, improves operational fleet readiness and reduces engine cost of ownership by incorporating approved power plant changes. Power plant changes are required throughout the aircraft service life as the engine ages and operationally revealed deficiencies are discovered, researched, and solutions engineered. The Component Improvement Program (CIP) which is funded in RDT&E,N develops and demonstrates engineering solutions to these deficiencies and through the Engineering Change Proposal (ECP) process, initiates power plant changes. The power plant change program procures the necessary power plant change retrofit kit, its installation, and technical data. This program provides retrofit kits for all Navy and Marine aircraft engines and propulsion related hardware such as propellers, starters, generators, and transmissions. Reliability Improvements are designed to increase Mean Time Between Failure and Mean Time Between Engine Removal by 30% on average and are expected to generate savings/cost avoidance in excess of $50M annually.

F100 Engine F-16:
F100-1 ECP TBD Cmprssr Sfty Chg
F100-2 ECP TBD Trbne Sfty Chng

F110 Engine Program F-14 B/D:
F110-1 ECP T130 Master Chip Detect.Relocator moves the MCD to an area which is easily accessible through the daily inspection doors. The redesigned MCD has an improved capture efficiency, and is less prone to leakage.
F110-10 ECP TBD CMC Flameholder
F110-11 ECP T155 MEC Improvement
F110-2 ECP T144 LPT Stg1 Shroud Improvement provides a shroud configuration that will consistently achieve a 4000 TAC inspection interval. The assembly will eliminate ingestion of flow path air and add a disassembly feature to the shrouds.
F110-3 ECP T139 Fuel Boost Pump Mod. introduces a new Fuel Boost Pump with an increased orifice diameter. This change will prevent the oil supply source from being lost due to contamination in the oil system.
F110-4 ECP T086-Vented IDG Ejector Valve
F110-5 EMSP Improvements
F110-6 ECP T151 Fuel Nozzle Moeller Fit.
F110-7 ECP TBD Pyrometer Improvements
F110-8 ECP T158 Frnt Frm Damper Migrat.
F110-9 ECP TBD T2.5 Sensor Brazejoint

F402 Engine A/V-8B:
F402-1 EVICS
F402-10 ECP 3881Clamp FMU Shutoff Valve
F402-11 ECP 3813 Oil Pipe Vane
F402-12 ECP 3887 IGV POS Transmitter
F402-13 ECP 3883 FMU IBI Wiring Change
F402-14 ECP TBD Brake Seal
F402-15 ECP LPC1 Vane Fod Tlrnce (LPB)
F402-16 ECP LPT1 Vane Coat(LPB) Safety
F402-17 ECP TBD LPC1 Blde Dovetail Coat
F402-18 ECP LPC2 Rotor Blde Revised Stag
F402-2 ECP 3843 Revised Water Injection
F402-20 ECP 3877 Evics Dither Fix
F402-21 ECP 3893 LPC123 Vane Serializtion
F402-22 ECP 3532 Bulkhead Cracking
F402-23 ECP 3784-Encapsulated Wrng Hrnss Encapulation of main engine harness to prevent foreign material penetration (sand, dust, moisture) into the harness and resultant loss of signal quality
F402-24 ECP3782 ARMCO Liner/LPC Rear Lip Fan case liner moves forward and requires a more robust attachment scheme. The LPC fan case rear lip cracks and can fall into the gas path. The redesign fixes the design deficiency.
F402-25 ECP 3683 FCS&EMS P3 Pipe provides revisions to the environmental control system and engine monitoring system P3 signal pipe and associated clippings to accommodate earlier redesign of the P3 transducer mount.
F402-26 ECP 3722 Bleed Pipe Extention Increases sleeve length between stage 3 bleed pipe and heat exchanger to accommodate installation difficulties.
F402-27 ECP 3729 Revised Attachment JPT provides revisions to JPT harness with revised attachment nuts to alleviate clearance problems.
F402-28 ECP 3733-Curvic Cplng Corrosion introduces corrosion protection to the curvic coupling to eliminate corrosion attack and resultant reduction in component life.
F402-29 ECP 3739-NGV Locating Ring introduces an improved outer high pressure stage 1 turbine nozzle guide vane locating ring to alleviate assembly problems.
F402-3 ECP 3826 Mod BottomHeat Shld
F402-30 ECP 3744 #2 BRG Seal Housing introduces an elongated bore shape to the #2 bearing to correct a design deficiency.
F402-31 ECP 3748- #1 BRG Nut Changes revised material and plating the number 1 bearing to alleviate design deficiency.
F402-32 ECP 3771-HP Rotor Nut Revision revised high pressure rotor center front nut and cupwasher to improve structural weakness.
F402-33 ECP 3787 DECU Hybrid Circuits revised T1 thermocouple hybrid circuits to the DECU for improved data accuracy.
F402-34 ECP 3837-R1 LPC BLADES
F402-35 ECP 3852 LPC2 Vane Platform Wear
F402-36 ECP 3855 PresComprsStg Damping Foil
F402-37 ECP 3798-PLAU Bonded Shells Revised bonded electrical connector shells to the power lever angle unit to improve durability.
F402-38 ECP 3800-Transducer New vibration isolation mount for the P3 transducer to prevent premature failures of the transducer.
F402-39 ECP 3806 Hot Nozzle Cracking Redesign of the hot nozzles to minimize or prevent the current problem of cracking and part attrition
F402-4 ECP TBD FMU HP Pump PRV
F402-40 ECP SRD Comb/fuel Nozzle
F402-41 ECP SRD Fuel Control Kits
F402-42 ECP 3889 Encapsulated Revision
F402-43 ECP 3886 PDR Assembly Redesign
F402-44 ECP 3705 Butterfly Valve
F402-45 ECP 3843 HPT Stg2 Nozzle Vanes
F402-46 ECP 3755 Rev. LPC Stg2 Vane Stop
F402-47 ECP 3794 FMU Shielded Bearings Revised fuel metering unit shielded bearings to the stepper motor assembly to alleviate design deficiency.
F402-48 ECP 3797 FMU Bonded Shells Revised bonded electrical connector shells to the fuel metering unit to improve durability.
F402-49 ECP TBD GTS Sealing Ring
F402-5 ECP 3705 LPC Stg1 Damping Foil
F402-50 ECP TBD IPPC227 FDS
F402-51 TBD IPPC XXX IGVC Gasket Rev.
F402-6 ECP TBD Mod to Accept EVICS
F402-7 ECP 3606 INCO 718 Bolt
F402-8 ECP 3709C2 IGVC Redesign Bushing
F402-9 ECP 3763 FMU Mod Safety modification package to the Fuel Metering Unit which will supply a high-pressure fuel supply to the hydro-mechanical backup unit.

F404 Engine F/A 18:
F404-1 ECP E78 Main Fuel Cntrl Selector
F404-10 ECP A27VEN PositionTrnsmtrImprv.
F404-11 ECP TBD AB Liner TBC
F404-12 C72 HPC
F404-13 ECP TBD Flame Holder Durability
F404-14 ECP E91-Imprv MFCRationBoostPstn
F404-15 ECP F15 Frnt Frm Transducer Brkt
F404-16 ECP C75 MFM Kits
F404-17 ECP E-83 Oil Tank Mounting Imprv
F404-18 ECP F20 Mech. System Mod Kits
F404-19 ECP TBD AB Pilot Manifold B Nut
F404-2 ECP A27 VEN Position Transmitter
F404-20 Front Frame Oil Tube Durability

F404 Engine F/A 18:
F404-1 ECP E78 Main Fuel Cntrl Selector
F404-10 ECP A27VEN PositionTrnsmtrImprv.
F404-11 ECP TBD AB Liner TBC
F404-12 C72 HPC
F404-13 ECP TBD Flame Holder Durability
F404-14 ECP E91-Imprv MFCRationBoostPstn
F404-15 ECP F15 Frnt Frm Transducer Brkt
F404-16 ECP C75 MFM Kits
F404-17 ECP E-83 Oil Tank Mounting Imprv
F404-18 ECP F20 Mech. System Mod Kits
F404-19 ECP TBD AB Pilot Manifold B Nut
F404-2 ECP A27 VEN Position Transmitter
F404-20 Front Frame Oil Tube Durability
F404-21 ECP TBD AB Servo Return Line
F404-22 ECP TBD HPT Blade Improv.
F404-23 ECP TBD Exhaust Frame Cracking
F404-24 ECP H17 HPT Nzle Seg. Durability
F404-25 ECP C71 HPVGManifoldTelfnFireslv
F404-26 ECP TBD Mag. Plug Improv.
F404-27 ECP TBD 718 Mixer
F404-28 ECP TBD Nitrided No. 4 Bearing
F404-29 ECP TBD No.4 BearingLengthdRller
F404-3 ECP C67 MFC Manifold Redesign
F404-30 ECP No.5 Carbon Seal
F404-31 ECP Low Pressure Bnd Clmp Crckg
F404-32 ECP TBD Combustion Liner
F404-33 ECP A40 Radial Flameholder
F404-34 ECP TBD CILOP -400 to -402
F404-35 ECP TBD HPT Inducer -400 to -402
F404-36 ECP C73 Imprv Life CombustorCase
F404-37 ECP C70 HPC Var. Geo Link Durabl
F404-38 ECP F22 Australian Opt Bracket
F404-4 ECP E70- T1 Caution Capacitor
F404-6 ECP H21 HPT DiskBoltHoleThrdMark
F404-7 ECP E88 MFP Sunstrand
F404-8 ECP H22- ME3/R104 ACP
F404-9 ECP L17R1 LPT Cooling Circuit

F405 Engine T-45:
F405-10 ECP TBD LP Stator Coating
F405-11 ECP A01623 Dash Pot
F405-12 ECP TBD Surge Mod Kits
F405-13 ECP TBD Omega Seals
F405-14 ECP TBD Electrical Harness
F405-15 ECP Module 02 Coating
F405-16 ECP HVC Vane Coating
F405-17 ECP Modules 3, 10, 11 Coatings
F405-21 ECP TBD LPNGV
F405-22 ECP TBD COSSI Drum
F405-3 ECP TS-23/A01586 Rising Idle Mod.
F405-8 ECP TBD Fuel Control Unit Life
F405-9 ECP Compressor Improved Coating

F414 Engine F/A18-E/F:
F414-1 ECP TBD Combustor Flameout
F414-10 ECP TBD VEN Start Line Cracking
F414-11 ECP TBD Control System Mod Kits
F414-12 ECP TBD IGV Mod Kits
F414-13 ECP TBD Gas Path Mod Kits
F414-14 ECP A/B MANIFOLD TUBE WEAR
F414-15 ECP TBDFrnt Frm VG Actuator Ring
F414-16 ECP TBD CDP Duct-Seal Imprvmnt
F414-17 ECP Main Fuel Manifld Dmpr Brkt
F414-18 ECP VEN Fuel Strt Tube Replacmnt
F414-19 ECP TBD A/I Brkt Redesign
F414-2 ECP C-10 HPC Durability & Perform
F414-20 ECP TBD Chip Detector Imprvmnt
F414-21 ECP E-26 Sftwre Upgrd 18E-4E9
F414-22 ECP E-30 A/I CDP Valve Material
F414-23 ECP C-15 A/I Supply&Return Hose
F414-24 ECP TBD HPT Shroud CMAS Elimin.
F414-25 ECP TBD High Pressure Turbine
F414-26 ECP TBD Rotor Compressor Improv
F414-27 ECP TBD Mechanical System Improv
F414-28 ECP TBD Gear Box Improvements
F414-29 ECP TBD Fan Improvements
F414-3 ECP C-09 MFMRobust Main Fuel Nzle
F414-30 ECP TBD Lube Improvements

F414-4 ECP G414-F-02 MFC Brcket Rewrk
F414-5 ECP TBD Transfer Lever Arm
F414-6 ECP G414-S-03 HPT Nzle RetainRing
F414-7 ECP G414-C12 A-sump Tube Bracket
F414-8 ECP A-02 A/B Case Aft Ring Hard
F414-9 ECP C-06 Balance Piston Vent

J52 Engine EA 6/B, A-6, A-4:
J52-1 ECP 95XA013 Pres. Ratio & Compressor Slator Controls reduce the susceptbility that can cause friction between the shank and the reset diaphragm.
J52-10 ECP TBD Imprv. IGV Retention
J52-11 ECP 03XC006 Lwr Twr Shaft SnapRng
J52-12 ECP TBD Gearbox Scrn
J52-13 ECP TBD COMBUSTOR LUG
J52-15 ECP 02XW002 4.5 Breather System
J52-16 ECP 03XA014 Bearing Pres.Manifold
J52-17 ECP 02XC003 Scavenge Line Chip

F414-4 ECP G414-F-02 MFC Brcket Rewrk
F414-5 ECP TBD Transfer Lever Arm
F414-6 ECP G414-S-03 HPT Nzle RetainRing
F414-7 ECP G414-C12 A-sump Tube Bracket
F414-8 ECP A-02 A/B Case Aft Ring Hard
F414-9 ECP C-06 Balance Piston Vent

J52 Engine EA 6/B, A-6, A-4:
J52-1 ECP 95XA013 Pres. Ratio & Compressor Slator Controls reduce the susceptbility that can cause friction between the shank and the reset diaphragm.
J52-10 ECP TBD Imprv. IGV Retention
J52-11 ECP 03XC006 Lwr Twr Shaft SnapRng
J52-12 ECP TBD Gearbox Scrn
J52-13 ECP TBD COMBUSTOR LUG
J52-15 ECP 02XW002 4.5 Breather System
J52-16 ECP 03XA014 Bearing Pres.Manifold
J52-17 ECP 02XC003 Scavenge Line Chip
J52-2 ECP TBD Tec Alignment
J52-3 ECP CP93XA069 Thermal Barrier Coated will increase the durability of the vanes. This change is also required for a 1500 hr engine build.
J52-4 ECP 95XA275C1-J52 Engine Retrofit
J52-5 ECP 02XA021 4 1/2 Bearing Redesign
J52-7 ECP Turbine Mod Kits
J52-8 ECP 94XA154-No. 6 Bearing
J52-9 ECP 03XC009 Cmprsr Bld Tip Abrdble

J85 Engine F-5, T-2, T-38:
J85-1 ECP J85S-99-Carbide VEN Leafs
J85-2 ECP J85N-55-Improved Ignition
J85-3 ECP Turbine Improvements
J85-4 ECP Fuel Control Improvement
J85-5 ECP Imprv Ignitor System Compnts
J85-6 ECP 85E-106-High TempClamps

T400 Engine AH1W, UH1N:
T400-1 ECP TBD Bearing Pressure Oil Tube
T400-10 ECP Creation/CM
T400-2 ECP TBD Improved Air Inlet Screen
T400-3 ECP TBD Non Asbestos T5 Jumper
T400-4 ECP PWC 5232 Sprag Cluth Assy
T400-5 ECP T400-18 Improved P3 Filter
T400-6 ECP TBD Impvd. No5&8 Cup Washers
T400-7 ECP Improved No. 10 Bearing
T400-8 ECP TBD AFCU Upgrade to COTS
T400-9 ECP TBD No.3 Bearing Cover

T406 Engine V22:
T406-1 ECP TBD GEAR BOX MOD
T406-2 ECP TBD TURBINE SYSTEM MOD
T406-3 ECP TBD Drive System Improvement

T56 Engine P-3, C-2, E-2, C-130:
T56-1 ECP 2112R1-15 Micron Oil Filter
T56-10 ECP 2143 Dome Shell Seal Kit
T56-11 ECP 2122B-EMS/EAU Software
T56-12 ECP 2144 DETC Omnibus Change
T56-13 ECP 2134 Stiffened Main Diaphram
T56-14 ECP 2102 Rear Engine Mount
T56-15 ECP 2115 TD Amp Harness
T56-16 ECP/AEM 104491 14 Stage Wheel
T56-17 ECP 2013R1 Custom 450 Comp Vane
T56-18 ECP Micron Scavenge Oil Filter
T56-19 ECP Bleed Air Y-Duct E2/C2
T56-2 ECP2132 DummyPlug Redesign(SIII)
T56-20 ECP TBD Dual Element Fire Warn
T56-21 ECP TBD QECK Maintanance Plan/Sling Pub Updates
T56-22 ECP 2124 MFC Omnibus Change
T56-23 ECP AFT Engine Mount CoolingRtrft
T56-24 ECP Anti-Ice/Oil CoolerEjctorVlve
T56-25 ECP Lwer Cowl Hnge Fitting Mod
T56-26 ECP TBD GCU Legacy Retrofit
T56-27 ECP E2/C2 Cockpit Switch & ATS
T56-28 ECP C-2 APU Hot Weather Perfrmnce
T56-29 ECP ATS Sun Gear Improv
T56-3 ECP 2132 DummyPlug Redesign (IV)
T56-30 ECP 2140 Mod II Fuel Nzzle (SIII)
T56-31 ECP 2142 Pin-Fin Van (SIII)
T56-32 ECP AEM 113059 Thrmocuples (SIII)
T56-33 ECP 2147 4-5 Sprng Safty Coupling
T56-34 ECP TBD Trbine Sddle Vane Redesgn
T56-36 ECP JAX-28-002 (SIV CM)
T56-37 ECP TBD Cmprssor Blde Coating

T56-38 ECP TBD Cmprssor Vane Coating
T56-39 ECP 280760 Prop Filter Improvemnt
T56-4 ECP 2136 S/V Turbine Blade Rework
T56-40 ECP 271993 Prop Dome Seal
T56-42 ECP TBD QECK Sling Pub
T56-43 ECP JAX-28-002 (SIII)
T56-44 ECP TBD Drive System Improv
T56-45 ECP TBD Gearbox Improvement
T56-46 ECP TBD Turbine Improvement
T56-5 ECP 2141 Polished Swirl Plate
T56-7 ECP 56-A-427-001 Fuel Nozzle Purge
T56-8 ECP 2129R1 Prop Shaft Plugs
T56-9 ECP TBD Dummy Plug Redesign SIV

T58 Engine H-3, H-46:
T58-1 ECP EPD 58F235ExcterBoxRedsgn
T58-10 ECP58T-20-C4 High Temp O-Rings
T58-11 ECP 58F29 Flow Divider Imp

T58 Engine H-3, H-46:
T58-1 ECP EPD 58F235ExcterBoxRedsgn
T58-10 ECP58T-20-C4 High Temp O-Rings
T58-11 ECP 58F29 Flow Divider Imp
T58-12 ECP 58C-24-Small Features Imp
T58-13 ECP Stage 1 Nozzle Imp
T58-14ECP 58E-70#1Tabbed/Anti-Rot Bearng
T58-15 ECP #2 Engine Seal Puller
T58-16 ECP Mech System Mod Kits
T58-17 ECP 58K-23-AGB Chip Detector
T58-2 ECP EPD 58M158 FCU Aft Brackets
T58-3 ECP EPD 58P011 A/I Bracket Redsgn
T58-4 ECP EPD 58C55 Cmbstor Lner Update
T58-6 ECP 58F31 Drain Cover Improv.
T58-7 ECP 58N-18 Rev. Improv. Reliab. T5
T58-8 ECP 58R-78 Stage3 Nzle Antirtn
T58-9 ECP Overspeed Switch

T64 Engine H-53:
T64-1 ECP 64E-55 Single Ring Carbon Seal at the Nos 2,3, and 4 bearing positions with more durable single-ring seals.
T64-10 ECP 64A817 High Temp Wolf Gasket
T64-11 ECP 64T-23 Lube Filter Bypass Val
T64-12 ECP T-62T-27 Elbow
T64-13 ECP ReliabltyCentrdMaintnceImprv
T64-14 ECP 64C-13R2B Anti Leak Chck Vlve
T64-15 ECP TBD Build Spec. Review
T64-16 ECP TBD Nzl Supprt Ring Wear Coat
T64-17 ECP TBD RotatingAirSealWearCoat
T64-18 ECP TBD Other BSR Major Design Im
T64-19 ECP TBD Fuel Nzl Imprv.
T64-2 ECP TBD Hot Section Wash
T64-20 ECP TBD Cmprsr Bld Retention
T64-21 ECP TBD Redesign #3 Bearing Suprt
T64-22 ECP TBD Fuel Imprv. Systm
T64-23 ECP TBD Oil Systm Imprv
T64-24 ECP TBD Vibration Analysis (VXP)
T64-25 ECP TBD PT ROTOR IMPROVEMENT
T64-26 ECP TBD NGB PULLEYS AND BELTS
T64-27 ECP TBD APU Air Inlet Housing
T64-28 ECP TBD APU INLET FILTER
T64-29 ECP TBD ARC FaultCircuitBrkerTest
T64-3 ECP Improved Main Fuel Control
T64-30 ECP TBD Off-Brd Wrng Diagnotics
T64-31 ECP On-AircrftWiringDiagnostics
T64-32 ECP TBD GCU Modrniztion Prgm
T64-33 ECP TBD Combustor Improv.
T64-34 ECP TBD External Improv
T64-35 ECP TBD Compressor Improv.
T64-36 ECP TBD MGB Elastomeric Seals
T64-37 ECP TBD AGB FWU Improvements
T64-38 ECPTBD Portable Water Meas. Equip
T64-39 ECP TBD Lub Oil Condition Monitor
T64-4 ECP TBD High Temp Bolt AntiSeize
T64-40 ECP TBD Anti-Ice Regulator
T64-41 ECP TBD Comp Lock Washer
T64-42 ECP TBD VG Linkage Upgrade
T64-43 ECP TBD GGT Improvements
T64-44 ECP TBD Nozzle Support Ring Wear
T64-45 ECP TBD Rotating Air Seal Wear
T64-46 ECP TBD PPC 101 Improvements
T64-47 ECP TBD APU Clutch Bleed Air Line
T64-5 ECP 64F-23Combust.LnerAntiRotation
T64-6 ECP 64C-13R2A Tin Coating
T64-7 ECP 64N-13 PT OverSpeed Switch
T64-8 ECP TBD Thermocouple Relay
T64-9 ECP TBD Comp Rear Spool Oil Drain

T700 Engine H-2, H-60, AH-1:
T700-1 ECP 700117C1 Interstage SealImprv
T700-10 ECP T700-Turbine Blade Redesign
T700-11 ECP T700 PT SHAFT RUB FIX
T700-12 ECP PPC- 16 Rev A Blade Damper
T700-13 ECP Compressor System Mod Kits
T700-14 ECP Combustor Mod Kits
T700-15 ECP H60-001 DESU
T700-16 ECP TBD COMBUSTOR LINER
T700-17 ECP TBD Turbine Improvement
T700-18 ECP TBD Drive System Improvement
T700-2 ECP 70012-TD Modification Kits
T700-3 ECP 700102C1-Stage 1&2 TrbneDmprs
T700-4 ECP 136R2-No. 2 Bring Hsing &Dmpr provides an Output Drive Assembly (ODA) with improved housing, damper and spline lubrication for the No two bearing housing.
T700-5 ECP 700158R1 Stg3 Rotor Ring/Nzle adds a stage three containment ring to the power turbine module on all T700 GE 401C and T700-GE-701C engines to compensate for the increase in temperature when these engines operate in aircraft equipped with infrared suppressors.
T700-6 ECP 123-Stg 1BldeTipCorrosionRes.
T700-7 ECP 124-Exhst Frme Drn Hole
T700-8 ECP 125-HydomchnlUnit(HMU)Imprv
T700-9 ECP 126-HMU O-Ring

TF34 Engine S-3:
TF34-1 ECPJax 001-Eng. Compressor Stator Reconcile discrepancies contained in ECP 23EG5504, Variable Geometry System Improvements, ECP 23EG5512 Compressor Arm Retention, and ECP 23EG5529 for Improved Compressor Abradable Coating and combine in the correct sequence the improvements into one ECP. The combined approach will streamline incorporation and reduce total maintenance actions including replacement of separate right and left VG linkages with a single improved linkage; installation of VG linkage retaining hardware; and incorporation of an improved stator coating.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | 317.138 | | 50.431 | | 67.778 | | 58.684 | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| F100-1 ECP TBD Cmprssr Sfty Chg | | | | | 10 | 0.050 | | | | | | | | | | | | | | |
| F100-2 ECP TBD Trbne Sfty Chng | | | | | 12 | 0.060 | | | | | | | | | | | | | | |
| F110-1 ECP T130 Master Chip | 270 | 1.749 | | | | | | | | | | | | | | | | | | |
| F110-10 ECP TBD CMC Flameholder | 270 | 1.112 | | | | | | | | | | | | | | | | | | |
| F110-11 ECP T155 MEC Improvement | 153 | 0.153 | | | | | | | | | | | | | | | | | | |
| F110-2 ECP T144 LPT Stg1 Shroud | 270 | 1.123 | | | | | | | | | | | | | | | | | | |
| F110-3 ECP T139 Fuel Boost Pump | 270 | 0.575 | | | | | | | | | | | | | | | | | | |
| F110-4 ECP T086-Vented IDG Ejector | 337 | 0.474 | | | | | | | | | | | | | | | | | | |
| F110-5 EMSP Improvements | 229 | 0.592 | | | | | | | | | | | | | | | | | | |
| F110-6 ECP T151 Fuel Nozzle Moeller | 270 | 0.630 | | | | | | | | | | | | | | | | | | |
| F110-7 ECP TBD Pyrometer | 210 | 0.544 | | | | | | | | | | | | | | | | | | |
| F110-8 ECP T158 Frnt Frm Damper | 270 | 0.394 | | | | | | | | | | | | | | | | | | |
| F110-9 ECP TBD T2.5 Sensor Brazejoint | 480 | 0.096 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| F402-1 EVICS | 2 | 0.245 | 2 | 0.240 | | | | | | | | | | | | | | | | |
| F402-10 ECP 3881Clamp FMU Shutoff | | | | | | | 215 | 0.020 | | | | | | | | | | | | |
| F402-11 ECP 3813 Oil Pipe Vane | | | | | | | 215 | 0.080 | | | | | | | | | | | | |
| F402-12 ECP 3887 IGV POS | | | | | | | 215 | 0.040 | | | | | | | | | | | | |
| F402-13 ECP 3883 FMU IBI Wiring | | | | | | | 215 | 0.020 | | | | | | | | | | | | |
| F402-14 ECP TBD Brake Seal | | | | | | | 215 | 0.020 | | | | | | | | | | | | |
| F402-15 ECP LPC1 Vane Fod Tlrnce | | | | | | | | | | | | | | | | | | | | |
| F402-16 ECP LPT1 Vane Coat(LPB) | | | | | | | | | | | | | | | | | | | | |
| F402-17 ECP TBD LPC1 Blde Dovetail | | | | | | | | | | | | | | | | | | | | |
| F402-18 ECP LPC2 Rotor Blde Revised | | | | | | | | | | | | | | | | | | | | |
| F402-2 ECP 3843 Revised Water | 3 | 0.024 | | | | | | | | | | | | | | | | | | |
| F402-20 ECP 3877 Evics Dither Fix | | | | | | | 215 | 0.020 | | | | | | | | | | | | |
| F402-21 ECP 3893 LPC123 Vane | | | | | | | 215 | 0.200 | | | | | | | | | | | | |
| F402-22 ECP 3532 Bulkhead Cracking | | | | | | | 215 | 0.100 | | | | | | | | | | | | |
| F402-23 ECP 3784-Encapsulated Wrng | 313 | 1.946 | 18 | 0.205 | | | | | | | | | | | | | | | | |
| F402-24 ECP3782 ARMCO Liner/LPC | 164 | 0.027 | | | | | | | | | | | | | | | | | | |
| F402-25 ECP 3683 FCS&EMS P3 Pipe | 139 | 0.082 | | | | | | | | | | | | | | | | | | |
| F402-26 ECP 3722 Bleed Pipe Extension | 139 | 0.066 | | | | | | | | | | | | | | | | | | |
| F402-27 ECP 3729 Revised Attachment | 139 | 0.133 | | | | | | | | | | | | | | | | | | |
| F402-28 ECP 3733-Curvic Cplng | 116 | 0.386 | | | | | | | | | | | | | | | | | | |
| F402-29 ECP 3739-NGV Locating Ring | 118 | 0.397 | | | | | | | | | | | | | | | | | | |
| F402-3 ECP 3826 | 4 | 0.024 | | | | | | | | | | | | | | | | | | |
| F402-30 ECP 3744 #2 BRG Seal | 147 | 0.142 | | | | | | | | | | | | | | | | | | |
| F402-31 ECP 3748- #1 BRG Nut | 147 | 0.142 | | | | | | | | | | | | | | | | | | |
| F402-32 ECP 3771-HP Rotor Nut | 139 | 0.061 | | | | | | | | | | | | | | | | | | |
| F402-33 ECP 3787 DECU Hybrid | 114 | 0.512 | 25 | 0.125 | 25 | 0.125 | | | | | | | | | | | | | | |
| F402-34 ECP 3837-R1 CuNiln LPC | | | | | | | 215 | 0.200 | | | | | | | | | | | | |
| F402-35 ECP 3852 LPC2 Vane Platform | | | | | | | 215 | 0.200 | | | | | | | | | | | | |
| F402-36 ECP 3855 Stg 1 Damping Foil | | | | | | | 215 | 0.100 | | | | | | | | | | | | |
| F402-37 ECP 3798-PLAU Bonded Shells | 151 | 0.268 | | | | | | | | | | | | | | | | | | |
| F402-38 ECP 3800-Transducer | 139 | 0.642 | | | | | | | | | | | | | | | | | | |
| F402-39 ECP 3806 Hot Nozzle Cracking | 139 | 1.141 | 25 | 0.456 | 80 | 1.507 | | | | | | | | | | | | | | |
| F402-4 ECP TBD FMU HP Pump PRV | 7 | 0.130 | 7 | 0.130 | | | | | | | | | | | | | | | | |
| F402-40 ECP SRD Comb/fuel Nozzle | | | | | 6 | 0.102 | | | | | | | | | | | | | | |
| F402-41 ECP SRD Fuel Control Kits | | | | | | | | | | | | | | | | | | | | |
| F402-42 ECP 3889 Encapsulated | | | | | | | 215 | 0.100 | | | | | | | | | | | | |
| F402-43 ECP 3886 PDR Assembly | | | | | | | 215 | 0.020 | | | | | | | | | | | | |
| F402-44 ECP 3705 Butterfly Valve | | | | | | | 215 | 0.150 | | | | | | | | | | | | |
| F402-45 ECP 3843 HPT | | | | | | | 100 | 0.200 | | | | | | | | | | | | |
| F402-46 ECP 3755 Rev. LPC Stg2 Vane | | | | | | | | | | | | | | | | | | | | |
| F402-47 ECP 3794 FMU Shielded | 139 | 0.381 | | | | | | | | | | | | | | | | | | |
| F402-48 ECP 3797 FMU Bonded Shells | 139 | 0.158 | | | | | | | | | | | | | | | | | | |
| F402-49 ECP TBD GTS Sealing Ring | | | | | | | 215 | 0.065 | | | | | | | | | | | | |
| F402-5 ECP 3705 Bottom Heat Shield | 10 | 0.260 | 10 | 0.260 | | | | | | | | | | | | | | | | |
| F402-50 ECP TBD IPPC227 FDS | | | | | | | 215 | 0.200 | | | | | | | | | | | | |
| F402-51 TBD IPPC XXX IGVC Gasket | | | | | | | 215 | 0.090 | | | | | | | | | | | | |
| F402-6 ECP TBD Mod to Accept EVICS | 8 | 1.049 | 13 | 1.300 | 100 | 1.790 | | | | | | | | | | | | | | |
| F402-7 ECP 3606 INCO 718 Bolt | 91 | 0.032 | | | | | | | | | | | | | | | | | | |
| F402-8 ECP 3709C2 IGVC Redesign | 212 | 0.469 | | | | | | | | | | | | | | | | | | |
| F402-9 ECP 3763 FMU Mod | 88 | 1.242 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F404-1 ECP E78 Main Fuel Cntrl | 2,607 | 0.978 | | | | | | | | | | | | | | | | | | |
| F404-10 ECP A27VEN | | | | | | | 500 | 0.130 | | | | | | | | | | | | |
| F404-11 ECP TBD AB Liner TBC | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-12 C72 HPC | | | | | | | 50 | 0.200 | | | | | | | | | | | | |
| F404-13 ECP TBD Flame Holder | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-14 ECP E91-Imprv | 769 | 1.134 | 69 | 0.080 | | | 500 | 0.230 | | | | | | | | | | | | |
| F404-15 ECP F15 Frnt Frm Transducer | 1,125 | 0.562 | 25 | 0.011 | | | | | | | | | | | | | | | | |
| F404-16 ECP C75 MFM Kits | 11 | 0.175 | 11 | 0.175 | | | 500 | 0.150 | | | | | | | | | | | | |
| F404-17 ECP E-83 Oil Tank Mounting | | | 7 | 0.425 | | | 150 | 0.200 | | | | | | | | | | | | |
| F404-18 ECP F20 Mech. System Mod | | | | | 7 | 0.343 | | | | | | | | | | | | | | |
| F404-19 ECP TBD AB Pilot Manifold B | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-2 ECP A27 VEN Position | 1,532 | 1.172 | 32 | 0.025 | | | | | | | | | | | | | | | | |
| F404-20 Front Frame Oil Tube Durability | | | | | | | 1 | 0.010 | | | | | | | | | | | | |
| F404-21 ECP TBD AB Servo Return Line | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-22 ECP TBD HPT Blade Improv. | | | | | | | 1 | 0.020 | | | | | | | | | | | | |
| F404-23 ECP TBD Exhaust Frame | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-24 ECP H17 HPT Nzle Seg. | | | | | | | 1 | 0.001 | | | | | | | | | | | | |
| F404-25 ECP C71 | | | | | | | 1 | 0.009 | | | | | | | | | | | | |
| F404-26 ECP TBD Mag. Plug Improv. | | | | | | | 1 | 0.020 | | | | | | | | | | | | |
| F404-27 ECP TBD 718 Mixer | | | | | | | 1 | 0.020 | | | | | | | | | | | | |
| F404-28 ECP TBD Nitride No. 4 Bearing | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-29 ECP TBD No.4 | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-3 ECP C67 MFC Manifold | 1,200 | 1.743 | 36 | 0.056 | | | | | | | | | | | | | | | | |
| F404-30 ECP No.5 Carbon Seal | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-31 ECP Low Pressure Bnd Clmp | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-32 ECP TBD Combustion Liner | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F404-33 ECP A40 Radial Flameholder | | | | | | | 250 | 0.200 | | | | | | | | | | | | |
| F404-34 ECP TBD CILOP -400 to -402 | | | | | | | 500 | 0.300 | | | | | | | | | | | | |
| F404-35 ECP TBD HPT Inducer -400 to - | | | | | | | 500 | 0.200 | | | | | | | | | | | | |
| F404-36 ECP C73 Imprv Life | | | | | | | 1 | 0.007 | | | | | | | | | | | | |
| F404-37 ECP C70 HPC Var. Geo Link | | | | | | | 1 | 0.011 | | | | | | | | | | | | |
| F404-38 ECP F22 Australian Opt | | | | | | | 250 | 0.200 | | | | | | | | | | | | |
| F404-4 ECP E70- T1 Caution Capacitor | 1,666 | 2.748 | 32 | 0.353 | | | | | | | | | | | | | | | | |
| F404-6 ECP H21 HPT | | | | | | | 1 | 0.025 | | | | | | | | | | | | |
| F404-7 ECP E88 MFP Sunstrand | | | | | | | 1 | 0.025 | | | | | | | | | | | | |
| F404-8 ECP H22- ME3/R104 ACP | | | | | | | 1 | 0.025 | | | | | | | | | | | | |
| F404-9 ECP L17R1 LPT Cooling Circuit | | | | | | | 1 | 0.025 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| F405-10 ECP TBD LP Stator Coating | 80 | 0.444 | | | | | | | | | | | | | | | | | | |
| F405-11 ECP A01623 Dash Pot | | | | | | | 150 | 0.150 | | | | | | | | | | | | |
| F405-12 ECP TBD Surge Mod Kits | 83 | 0.150 | 83 | 0.150 | | | | | | | | | | | | | | | | |
| F405-13 ECP TBD Omega Seals | 83 | 0.075 | | | | | | | | | | | | | | | | | | |
| F405-14 ECP TBD Electrical Harness | 83 | 0.075 | 64 | 0.058 | | | | | | | | | | | | | | | | |
| F405-15 ECP Module 02 Coating | 83 | 0.075 | 83 | 0.075 | | | 1 | 0.035 | | | | | | | | | | | | |
| F405-16 ECP HVC Vane Coating | 83 | 0.050 | 83 | 0.050 | | | 45 | 0.050 | | | | | | | | | | | | |
| F405-17 ECP Modules 3, 10, 11 | 83 | 0.050 | 83 | 0.050 | | | 50 | 0.075 | | | | | | | | | | | | |
| F405-21 ECP TBD LPNGV | | | | | 240 | 0.394 | | | | | | | | | | | | | | |
| F405-22 ECP TBD COSSI Drum | 50 | 0.090 | | | 150 | 0.366 | | | | | | | | | | | | | | |
| F405-3 ECP TS-23/A01586 Rising Idle | 332 | 0.163 | 28 | 0.080 | | | 20 | 0.050 | | | | | | | | | | | | |
| F405-8 ECP TBD Fuel Control Unit Life | 60 | 7.200 | | | | | | | | | | | | | | | | | | |
| F405-9 ECP Compressor Improved | 88 | 0.265 | | | 26 | 0.074 | 70 | 0.045 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| F414-1 ECP TBD Combustor Flameout | 300 | 0.030 | 100 | 0.500 | | | | | | | | | | | | | | | | |
| F414-10 ECP TBD VEN Start Line | 110 | 0.022 | 110 | 0.035 | | | | | | | | | | | | | | | | |
| F414-11 ECP TBD Control System Mod | | | 75 | 0.647 | 36 | 0.325 | | | | | | | | | | | | | | |
| F414-12 ECP TBD IGV Mod Kits | | | 62 | 0.468 | 50 | 0.377 | | | | | | | | | | | | | | |
| F414-13 ECP TBD Gas Path Mod Kits | | | 80 | 0.758 | 30 | 0.318 | | | | | | | | | | | | | | |
| F414-14 ECP A/B MANIFOLD TUBE | | | | | | | 240 | 0.140 | | | | | | | | | | | | |
| F414-15 ECP TBDFrnt Frm VG Actuator | | | | | | | 200 | 0.400 | | | | | | | | | | | | |
| F414-16 ECP TBD CDP Duct-Seal | | | | | | | 60 | 0.190 | | | | | | | | | | | | |
| F414-17 ECP Main Fuel Manifld Dmpr | | | | | | | 75 | 0.120 | | | | | | | | | | | | |
| F414-18 ECP VEN Fuel Strt Tube | | | | | | | 55 | 0.110 | | | | | | | | | | | | |
| F414-19 ECP TBD A/I Brkt Redesign | | | | | | | 500 | 0.110 | | | | | | | | | | | | |
| F414-2 ECP C-10 HPC Durability & | 145 | 0.077 | 100 | 0.667 | | | | | | | | | | | | | | | | |
| F414-20 ECP TBD Chip Detector | | | | | | | 260 | 0.060 | | | | | | | | | | | | |
| F414-21 ECP E-26 Sftwre Upgrd 18E- | | | | | | | 1 | 0.030 | | | | | | | | | | | | |
| F414-22 ECP E-30 A/I CDP Valve | | | | | | | 100 | 0.286 | | | | | | | | | | | | |
| F414-23 ECP C-15 A/I Supply&Return | | | | | | | 250 | 0.250 | | | | | | | | | | | | |
| F414-24 ECP TBD HPT Shroud CMAS | | | | | | | 250 | 0.250 | | | | | | | | | | | | |
| F414-25 ECP TBD High Pressure | | | | | | | | | | | | | | | | | | | | |
| F414-26 ECP TBD Rotor Compressor | | | | | | | | | | | | | | | | | | | | |
| F414-27 ECP TBD Mechanical System | | | | | | | | | | | | | | | | | | | | |
| F414-28 ECP TBD Gear Box | | | | | | | | | | | | | | | | | | | | |
| F414-29 ECP TBD Fan Improvements | | | | | | | | | | | | | | | | | | | | |
| F414-3 ECP C-09 MFMRobust Main Fuel | 50 | 0.350 | 100 | 0.990 | 50 | 0.386 | | | | | | | | | | | | | | |
| F414-30 ECP TBD Lube Improvements | | | | | | | | | | | | | | | | | | | | |
| F414-4 ECP G414-F-02 MFC Brcket | 50 | 0.150 | 75 | 0.225 | 50 | 0.150 | | | | | | | | | | | | | | |
| F414-5 ECP TBD Transfer Lever Arm | 75 | 0.371 | 50 | 0.250 | 30 | 0.150 | | | | | | | | | | | | | | |
| F414-6 ECP G414-S-03 HPT Nzle | 150 | 0.156 | 200 | 0.315 | 200 | 0.216 | 250 | 0.300 | | | | | | | | | | | | |
| F414-7 ECP G414-C12 A-sump Tube | 100 | 0.035 | 62 | 0.137 | | | | | | | | | | | | | | | | |
| F414-8 ECP A-02 A/B Case Aft Ring | 10 | 0.034 | 75 | 0.756 | | | | | | | | | | | | | | | | |
| F414-9 ECP C-06 Balance Piston Vent | 15 | 0.033 | | | | | | | | | | | | | | | | | | |
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Totals may not add due to rounding
DD Form 2454, Jun 86

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| J52-1 ECP 95XA013 Pres. Ratio & | 228 | 0.566 | 38 | 0.124 | 38 | 0.124 | | | | | | | | | | | | | | |
| J52-10 ECP TBD Imprv. IGV Retention | | | | | | | 360 | 0.350 | | | | | | | | | | | | |
| J52-11 ECP 03XC006 Lwr Twr Shaft | | | | | | | 300 | 0.020 | | | | | | | | | | | | |
| J52-12 ECP TBD Gearbox Scrn | | | | | | | 360 | 0.020 | | | | | | | | | | | | |
| J52-13 ECP TBD COMBUSTOR LUG | | | | | | | 360 | 0.020 | | | | | | | | | | | | |
| J52-15 ECP 02XW002 4.5 Breather | | | | | | | 100 | 0.400 | | | | | | | | | | | | |
| J52-16 ECP 03XA014 Bearing | | | | | | | 360 | 0.150 | | | | | | | | | | | | |
| J52-17 ECP 02XC003 Scavenge Line | | | | | | | 360 | 0.200 | | | | | | | | | | | | |
| J52-2 ECP TBD Tec Algmnt | | | | | | | 360 | 0.200 | | | | | | | | | | | | |
| J52-3 ECP CP93XA069 Thermal Barrier | 91 | 3.332 | 35 | 1.550 | 18 | 0.800 | | | | | | | | | | | | | | |
| J52-4 ECP 95XA275C1-J52 Engine | 14 | 1.507 | | | | | | | | | | | | | | | | | | |
| J52-5 ECP 02XA021 41/2 Bearing | 270 | 0.300 | 90 | 1.000 | | | | | | | | | | | | | | | | |
| J52-7 ECP Turbine Mod Kits | | | | | | | | | | | | | | | | | | | | |
| J52-8 ECP 94XA154-No. 6 Bearing | | | | | | | 360 | 0.380 | | | | | | | | | | | | |
| J52-9 ECP 03XC009 Cmprsr Bld Tip | | | | | | | 360 | 0.120 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| J85-1 ECP J85S-99-Carbide VEN Leafs | 38 | 0.448 | 42 | 0.434 | 16 | 0.200 | | | | | | | | | | | | | | |
| J85-2 ECP J85N-55-Improved Ignition | 96 | 0.248 | 36 | 0.088 | | | 50 | 0.050 | | | | | | | | | | | | |
| J85-3 ECP Turbine Improvements | 36 | 0.200 | 36 | 0.100 | 36 | 0.100 | 20 | 0.020 | | | | | | | | | | | | |
| J85-4 ECP Fuel Control Improvement | 36 | 0.090 | 36 | 0.090 | 36 | 0.090 | | | | | | | | | | | | | | |
| J85-5 ECP Imprv Ignitor System | 36 | 0.061 | | | | | | | | | | | | | | | | | | |
| J85-6 ECP 85E-106-High TempClamps | 143 | 0.063 | | | | | 20 | 0.020 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| T400-1 ECP TBD Bearing Pressure Oil | 10 | 0.007 | | | | | | | | | | | | | | | | | | |
| T400-10 ECP Creation/CM | | | | | | | 188 | 0.100 | | | | | | | | | | | | |
| T400-2 ECP TBD Improved Air Inlet | 15 | 0.006 | | | | | | | | | | | | | | | | | | |
| T400-3 ECP TBD Non Asbestos T5 | 80 | 0.008 | | | | | | | | | | | | | | | | | | |
| T400-4 ECP PWC 5232 Sprag Cluth | 250 | 0.010 | | | | | | | | | | | | | | | | | | |
| T400-5 ECP T400-18 Improved P3 Filter | 30 | 0.180 | 30 | 0.184 | | | | | | | | | | | | | | | | |
| T400-6 ECP TBD Impvd. No5&8 Cup | 60 | 0.010 | | | | | | | | | | | | | | | | | | |
| T400-7 ECP PWC-D6727 Imp. No. 10 | 400 | 0.685 | | | | | 10 | 0.075 | | | | | | | | | | | | |
| T400-8 ECP TBD AFCU Upgrade to | | | | | | | 100 | 0.300 | | | | | | | | | | | | |
| T400-9 ECP PWC-D6155No.3 Bearing | | | | | | | 20 | 0.050 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| T406-1 ECP TBD GEAR BOX MOD | | | | | 6 | 0.047 | 5 | 0.036 | | | | | | | | | | | | |
| T406-2 ECP TBD TURBINE SYSTEM | | | | | 6 | 0.052 | 5 | 0.060 | | | | | | | | | | | | |
| T406-3 ECP TBD Drive System | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| T56-1 ECP 2112R1-15 Micron Oil Filter | 4,004 | 3.329 | | | | | | | | | | | | | | | | | | |
| T56-10 ECP 2143 Dome Shell Seal Kit | 40 | 0.250 | 40 | 0.250 | | | | | | | | | | | | | | | | |
| T56-11 ECP 2122B-EMS/EAU Software | 60 | 0.090 | | | | | | | | | | | | | | | | | | |
| T56-12 ECP 2144 DETC Omnibus | 40 | 0.150 | | | | | | | | | | | | | | | | | | |
| T56-13 ECP 2134 Stiffened Main | 70 | 0.035 | 100 | 0.224 | | | 40 | 0.659 | | | | | | | | | | | | |
| T56-14 ECP 2102 Rear Engine Mount | 50 | 0.015 | | | | | | | | | | | | | | | | | | |
| T56-15 ECP 2115 TD Amp Harness | 100 | 0.056 | | | | | | | | | | | | | | | | | | |
| T56-16 ECP/AEM 104491 14 Stage | 3 | 0.018 | | | | | | | | | | | | | | | | | | |
| T56-17 ECP 2013R1 Custom 450 Comp | 4 | 0.036 | | | | | | | | | | | | | | | | | | |
| T56-18 ECP TBDMicron Scavenge Oil | 60 | 0.019 | | | | | | | | | | | | | | | | | | |
| T56-19 ECP Bleed Air Y-Duct E2/C2 | | | | | | | 100 | 0.070 | | | | | | | | | | | | |
| T56-2 ECP2132 DummyPlug | 25 | 0.168 | | | | | | | | | | | | | | | | | | |
| T56-20 ECP 91145 Dual Element Fire | | | | | | | 100 | 0.400 | | | | | | | | | | | | |
| T56-21 ECP TBD QECK Maintanance | | | | | | | 1 | 0.200 | | | | | | | | | | | | |
| T56-22 ECP 2124 MFC Omnibus | 40 | 0.344 | 40 | 0.300 | 40 | 0.300 | | | | | | | | | | | | | | |
| T56-23 ECP AFT Engine Mount | | | | | | | 40 | 0.070 | | | | | | | | | | | | |
| T56-24 ECP Anti-Ice/Oil CoolerEjctorVlve | | | | | | | 100 | 0.090 | | | | | | | | | | | | |
| T56-25 ECP Lwer Cowl Hnge Fitting Mod | | | | | | | 25 | 0.100 | | | | | | | | | | | | |
| T56-26 ECP TBD GCU Legacy Retrofit | | | | | | | 50 | 0.200 | | | | | | | | | | | | |
| T56-27 ECP E2/C2 Cockpit Switch & | | | | | | | 5 | 0.010 | | | | | | | | | | | | |
| T56-28 ECP C-2 APU Hot Weather | | | | | | | 25 | 0.020 | | | | | | | | | | | | |
| T56-29 ECP ATS Sun Gear Improv | | | | | | | 50 | 0.020 | | | | | | | | | | | | |
| T56-3 ECP 2132 DummyPlug Redesign | 25 | 0.181 | | | | | | | | | | | | | | | | | | |
| T56-30 ECP 2140 Mod II Fuel Nzzle | | | | | | | 50 | 0.200 | | | | | | | | | | | | |
| T56-31 ECP 2142 Pin-Fin Van (SIII) | | | | | | | 100 | 0.460 | | | | | | | | | | | | |
| T56-32 ECP AEM 113059 Thrmocuples | | | | | | | 100 | 0.400 | | | | | | | | | | | | |
| T56-33 ECP 2147 4-5 Sprng Safty | | | | | | | 100 | 0.080 | | | | | | | | | | | | |
| T56-34 ECP TBD Trbine Sddle Vane | | | | | | | 100 | 0.250 | | | | | | | | | | | | |
| T56-36 ECP JAX-28-002 (SIV CM) | | | | | | | 1 | 0.150 | | | | | | | | | | | | |
| T56-37 ECP TBD Cmprssor Blde | | | | | | | | | | | | | | | | | | | | |
| T56-38 ECP TBD Cmprssor Vane | | | | | | | | | | | | | | | | | | | | |
| T56-39 ECP 280760 Prop Filter | | | | | | | 50 | 0.400 | | | | | | | | | | | | |
| T56-4 ECP 2136 S/V Turbine Blade | 10 | 0.055 | | | | | | | | | | | | | | | | | | |
| T56-40 ECP 271993 Prop Dome Seal | | | | | | | 50 | 0.400 | | | | | | | | | | | | |
| T56-42 ECP TBD QECK Sling Pub | | | | | | | 1 | 0.080 | | | | | | | | | | | | |
| T56-43 ECP JAX-28-002 (SIII) | | | | | | | 1 | 0.050 | | | | | | | | | | | | |
| T56-44 ECP TBD Drive System Improv | | | | | | | | | | | | | | | | | | | | |
| T56-45 ECP TBD Gearbox Improvement | | | | | | | | | | | | | | | | | | | | |
| T56-46 ECP TBD Turbine Improvement | | | | | | | | | | | | | | | | | | | | |
| T56-5 ECP 2141 Polished Swirl Plate | 30 | 0.490 | 134 | 2.200 | 40 | 0.656 | 107 | 1.742 | | | | | | | | | | | | |
| T56-7 ECP 56-A-427-001 Fuel Nozzle | 26 | 0.060 | | | | | | | | | | | | | | | | | | |
| T56-8 ECP 2129R1 Prop Shaft Plugs | 60 | 0.400 | | | | | 20 | 0.200 | | | | | | | | | | | | |
| T56-9 ECP TBD Dummy Plug Redesign | 19 | 0.130 | | | | | | | | | | | | | | | | | | |
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| T58-1 ECP EPD 58F235 Excter Box | | | | | | | 50 | 0.050 | | | | | | | | | | | | |
| T58-10 ECP58T-20-C4 High Temp O- | 300 | 0.127 | | | | | | | | | | | | | | | | | | |
| T58-11 ECP 58F29 Flow Divider Imp | 16 | 0.075 | | | | | 100 | 0.500 | | | | | | | | | | | | |
| T58-12 ECP 58C-24-Small Features Imp | 16 | 0.018 | | | | | 1 | 0.050 | | | | | | | | | | | | |
| T58-13 ECP Stage 1 Nozzle Imp | 16 | 0.019 | | | | | | | | | | | | | | | | | | |
| T58-14ECP 58E-70#1Tabbed/Anti-Rot | 108 | 0.216 | 108 | 0.216 | 108 | 0.216 | | | | | | | | | | | | | | |
| T58-15 ECP #2 Engine Seal Puller | 1 | 0.030 | | | | | | | | | | | | | | | | | | |
| T58-16 ECP Mech System Mod Kits | | | | | | | | | | | | | | | | | | | | |
| T58-17 ECP 58K-23-AGB Chip Detector | | | 25 | 0.376 | 12 | 0.188 | | | | | | | | | | | | | | |
| T58-2 ECP EPD 58M158 FCU Aft | | | | | | | 100 | 0.050 | | | | | | | | | | | | |
| T58-3 ECP EPD 58P011 A/I Bracket | | | | | | | 1 | 0.050 | | | | | | | | | | | | |
| T58-4 ECP EPD 58C55 Cmbstor Lner | | | | | | | 1 | 0.050 | | | | | | | | | | | | |
| T58-6 ECP 58F31 Drain Cover Improv. | | | | | | | 1 | 0.050 | | | | | | | | | | | | |
| T58-7 ECP 58N-18 Rev. Improv. Reliab. | | | | | | | 420 | 0.050 | | | | | | | | | | | | |
| T58-8 ECP 58R-78 Stg 3 Nzle | 16 | 0.167 | | | | | | | | | | | | | | | | | | |
| T58-9 ECP Overspeed Switch | 100 | 0.150 | 121 | 0.182 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| T64-1 ECP 64E-55 Single Ring Carbon | 584 | 1.198 | | | | | | | | | | | | | | | | | | |
| T64-10 ECP 64A817 High Temp Wolf | 100 | 0.024 | | | 498 | 0.250 | | | | | | | | | | | | | | |
| T64-11 ECP 64T-23 Lube Filter Bypass | 100 | 0.010 | | | | | | | | | | | | | | | | | | |
| T64-12 ECP T-62T-27 Elbow | 100 | 0.050 | | | | | | | | | | | | | | | | | | |
| T64-13 ECP Reliability Centrd | 14 | 0.125 | 14 | 0.125 | 5 | 0.100 | 20 | 0.050 | | | | | | | | | | | | |
| T64-14 ECP 64C-13R2B Anti Leak Chck | 100 | 0.024 | | | | | | | | | | | | | | | | | | |
| T64-15 ECP TBD Build Spec. Review | | | | | 5 | 0.100 | | | | | | | | | | | | | | |
| T64-16 ECP TBD Nzl Supprt Ring Wear | | | | | 125 | 0.255 | | | | | | | | | | | | | | |
| T64-17 ECP 64U-15 Rotating AirSeal | | | | | 1,000 | 0.505 | | | | | | | | | | | | | | |
| T64-18 ECP TBD Other BSR Major | | | | | 1,000 | 0.205 | | | | | | | | | | | | | | |
| T64-19 ECP 64L-56 Fuel Nzl Imprv. | | | | | 250 | 0.234 | 50 | 0.200 | | | | | | | | | | | | |
| T64-2 ECP TBD Hot Section Wash | | | | | | | 140 | 0.100 | | | | | | | | | | | | |
| T64-20 ECP TBD Cmprsr Bld Retention | | | | | 150 | 0.100 | | | | | | | | | | | | | | |
| T64-21 ECP TBD Redesign #3 Bearing | | | | | 330 | 0.500 | 132 | 0.200 | | | | | | | | | | | | |
| T64-22 ECP TBD Fuel Imprv. Systm | | | | | 450 | 0.535 | 294 | 0.350 | | | | | | | | | | | | |
| T64-23 ECP TBD Oil Systm Imprv | | | | | 445 | 0.535 | 100 | 0.150 | | | | | | | | | | | | |
| T64-24 ECP TBD Vibration Analysis | | | | | | | 30 | 0.080 | | | | | | | | | | | | |
| T64-25 ECP TBD PT ROTOR | | | | | | | 60 | 0.250 | | | | | | | | | | | | |
| T64-26 ECP TBD NGB PULLEYS AND | | | | | 60 | 0.600 | 140 | 0.100 | | | | | | | | | | | | |
| T64-27 ECP TBD APU Air Inlet Housing | | | | | 20 | 0.100 | 100 | 0.150 | | | | | | | | | | | | |
| T64-28 ECP TBD APU INLET FILTER | | | | | 100 | 0.500 | | | | | | | | | | | | | | |
| T64-29 ECP TBD ARC Fault Circuit | | | | | | | 200 | 0.250 | | | | | | | | | | | | |
| T64-3 ECP Improved Main Fuel Control | 93 | 0.280 | | | | | | | | | | | | | | | | | | |
| T64-30 ECP TBD Off-Brd Wrng | | | | | | | 150 | 0.300 | | | | | | | | | | | | |
| T64-31 ECP On-Aircrft Wiring | | | | | | | 100 | 0.300 | | | | | | | | | | | | |
| T64-32 ECP TBD GCU Modmiztion | | | | | 20 | 0.100 | 140 | 0.100 | | | | | | | | | | | | |
| T64-33 ECP TBD Combustor Improv. | | | | | | | | | | | | | | | | | | | | |
| T64-34 ECP TBD External Improv | | | | | | | | | | | | | | | | | | | | |
| T64-35 ECP TBD Compressor Improv. | | | | | | | | | | | | | | | | | | | | |
| T64-36 ECP TBD MGB Elastomeric | | | | | | | 65 | 0.100 | | | | | | | | | | | | |
| T64-37 ECP TBD AGB FWU | | | | | | | 65 | 0.100 | | | | | | | | | | | | |
| T64-38 ECPTBD Portable Water Meas. | | | | | | | 80 | 0.120 | | | | | | | | | | | | |
| T64-39 ECP64E-59 Lube Oil Condition | | | | | | | 65 | 0.150 | | | | | | | | | | | | |
| T64-4 ECP TBD High Temp Bolt | | | | | | | 65 | 0.300 | | | | | | | | | | | | |
| T64-40 ECP 64A-11 Anti-Ice Regulator | | | | | | | 65 | 0.300 | | | | | | | | | | | | |
| T64-41 ECP TBD Comp Lock Washer | | | | | | | 65 | 0.150 | | | | | | | | | | | | |
| T64-42 ECP 64B-25 VG Linkage | | | | | | | 65 | 0.300 | | | | | | | | | | | | |
| T64-43 ECP TBD GGT Improvements | | | | | | | 150 | 0.300 | | | | | | | | | | | | |
| T64-44 ECP TBD Nozzle Support Ring | | | | | | | 50 | 0.200 | | | | | | | | | | | | |
| T64-45 ECP TBD Rotating Air Seal Wear | | | | | | | 25 | 0.200 | | | | | | | | | | | | |
| T64-46 ECP TBD PPC 101 | | | | | | | 140 | 0.100 | | | | | | | | | | | | |
| T64-47 ECP TBD APU Clutch Bleed Air | | | | | | | 140 | 0.070 | | | | | | | | | | | | |
| T64-5 ECP 64F-23Combustor Liner Anti- | 30 | 0.195 | | | 19 | 0.120 | | | | | | | | | | | | | | |
| T64-6 ECP 64C-13R2A Tin Coating | 24 | 0.024 | | | | | | | | | | | | | | | | | | |
| T64-7 ECP 64N-13 PT OverSpeed | 50 | 0.075 | | | | | | | | | | | | | | | | | | |
| T64-8 ECP TBD Thermocouple Relay | 35 | 0.050 | | | | | | | | | | | | | | | | | | |
| T64-9 ECP TBD Comp Rear Spool Oil | 35 | 0.018 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| T700-1 ECP 700117C1 Interstage | | | | | | | | | | | | | | | | | | | | |
| T700-10 ECP T700-Turbine Blade | 28 | 0.200 | 443 | 2.650 | 519 | 3.268 | 10 | 0.040 | | | | | | | | | | | | |
| T700-11 ECP T700 PT SHAFT RUB FIX | | | | | | | 150 | 0.280 | | | | | | | | | | | | |
| T700-12 ECP PPC- 16 Rev A Blade | 150 | 0.870 | | | | | | | | | | | | | | | | | | |
| T700-13 ECP Compressor System Mod | | | | | 200 | 1.200 | 1 | 0.100 | | | | | | | | | | | | |
| T700-14 ECP Combustor Mod Kits | | | | | 80 | 0.415 | 20 | 0.100 | | | | | | | | | | | | |
| T700-15 ECP H60-001 DESU | 50 | 0.078 | | | | | | | | | | | | | | | | | | |
| T700-16 ECP TBD COMBUSTOR | | | | | 255 | 1.788 | | | | | | | | | | | | | | |
| T700-17 ECP TBD Turbine Improvement | | | | | | | | | | | | | | | | | | | | |
| T700-18 ECP TBD Drive System | | | | | | | | | | | | | | | | | | | | |
| T700-2 ECP 70012-TD Modification Kits | | | | | | | | | | | | | | | | | | | | |
| T700-3 ECP 700102C1-Stg 1&2 | 26 | 0.973 | | | | | | | | | | | | | | | | | | |
| T700-4 ECP 136R2-No. 2 Bring Hsing | 306 | 2.499 | 200 | 1.500 | 200 | 1.780 | | | | | | | | | | | | | | |
| T700-5 ECP 700158R1 Stg3 Rotor | 1,091 | 2.776 | 175 | 0.539 | | | 266 | 0.800 | | | | | | | | | | | | |
| T700-6 ECP 123-Stg | 396 | 6.290 | | | | | | | | | | | | | | | | | | |
| T700-7 ECP 124-Exhst Frme Drn Hole | 800 | 0.820 | | | | | | | | | | | | | | | | | | |
| T700-8 ECP 125-HMU Imprv | 367 | 1.564 | 108 | 0.497 | 43 | 0.200 | | | | | | | | | | | | | | |
| T700-9 ECP 126-HMU O-Ring | 479 | 1.994 | 176 | 0.792 | 36 | 0.180 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| TF34-1 ECPJax 001-Eng. Compressor | 346 | 0.450 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Completed ECPs From Prior Years | 32,169 | 193.063 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.321 | | 0.050 | | 0.050 | | 0.050 | | | | | | | | | | | | |
| Non Recurring | | 0.164 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 0.106 | | 0.000 | | 0.000 | | 0.000 | | | | | | | | | | | | |
| ILS | | 4.418 | | 0.390 | | 0.505 | | 0.300 | | | | | | | | | | | | |
| OTHER SUPPORT | | 36.160 | | 1.130 | | 0.957 | | 0.811 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 6,830 | 32.045 | 923 | 0.914 | 1,557 | 1.419 | 968 | 0.673 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 68,234 | 337.021 | 4,775 | 25.957 | 8,825 | 26.007 | 19,253 | 24.580 | | | | | | | | | | | | |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: POWER PLANT CHANGES MODIFICATION TITLE: POWER PLANT CHANGES( OSIP 040-00 )

INSTALLATION INFORMATION: The tables below list the quantities, installation schedules, and costs for those ECPs for which there is an installation cost. Of those ECPs with installation costs, three are not shown as they are labor-only modifications and require no kit. The reason they are not shown in these tables is that the procurement quantity and installation quantities would not be equal.

METHOD OF IMPLEMENTATION: Current with engine/module repair (where installation cost is zero), or by forced retrofit (shown below).

ADMINISTRATIVE LEADTIME: Average of 6 Months PRODUCTION LEADTIME: Average of 12 Months

CONTRACT DATES: FY 2005 Varies FY 2006 Varies FY 2007 Varies

DELIVERY DATE: FY 2005 Varies FY 2006 Varies FY 2007 Varies

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (6830) kits | 6,830 | 32,045 | 523 | 504 | | | | | | | | | | | | | | | | | | |
| FY 2005 (923) kits | | | 400 | 410 | | | | | | | | | | | | | | | | | | |
| FY 2006 (1557) kits | | | | | 401 | 410 | | | | | | | | | | | | | | | | |
| FY 2007 (968) kits | | | | | 1,156 | 1,009 | 968 | 673 | | | | | | | | | | | | | | |
| FY 2008 (780) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (719) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (683) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (740) kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 6,830 | 32,045 | 923 | 914.0 | 1,557 | 1,419 | 968 | 673.0 | | | | | | | | | | | | | | |

Installation Schedule

| | PRIOR | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 6830 | 230 | 231 | 231 | 231 | 389 | 389 | 389 | 390 | 242 | 242 | 242 | 242 | | | | | | | | | | | | |
| Out | 6830 | 230 | 231 | 231 | 231 | 389 | 389 | 389 | 390 | 242 | 242 | 242 | 242 | | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **JPATS SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 0.5 | A | 1.2 | 0.7 | 1.7 | 1.3 | 1.5 | 1.5 | 1.6 | 15.9 | 25.9 | |

DESCRIPTION: This line item funds modifications to T-6A aircraft. The T-6A Texan II is a tandem-seat, turboprop aircraft derivative of the Pilatus PC-9 aircraft powered by a single Pratt & Witney PT6A-68 engine. It serves as the aircraft component of the JPATS integrated primary pilot training system which replaces the T-34C primary training aircraft. The overall goal of the modifications budgeted in FY 2007 is to correct discrepancies and deficiencies discovered after delivery of the aircraft, and maintain joint configuration with Air Force aircraft and the joint program. It also incorporates major upgrades to the aircraft cockpit, navigation system, and aircrew life support system (ALSS).

The specific modifications budgeted and programmed are:

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 011-04 JPATS CORRECTION OF DEFIC. | 0.5 | 1.2 | 0.7 | 1.7 | 1.3 | 1.5 | 1.5 | 1.6 | 15.9 | 25.9 |
| TOTAL | 0.5 | 1.2 | 0.7 | 1.7 | 1.3 | 1.5 | 1.5 | 1.6 | 15.9 | 25.9 |

Exhibit P-3a

MODIFICATION TITLE: JPATS CORRECTION OF DEFICIENCIES( OSIP 011-04 )

MODELS OF SYSTEMS AFFECTED: T-6A TYPE MODIFICATION: PS SAFETY

DESCRIPTION / JUSTIFICATION:
* Corrections to discrepancies found during testing and evaluation can sometimes be incorporated into production aircraft, effective with the physical configuration audit which establishes the product baseline of the aircraft. However when this cannot be done due to time constraints, retrofit of the changes into already delivered aircraft requires funding through the Aircraft Modification Program. Additionally, deficiencies discovered during Fleet operations must be corrected. The unacceptable alternative to retrofitting would be multiple configurations in the Fleet, which creates maintenance and supply problems, and in many cases the mission capability of the aircraft would be adversely affected as well as reduced service life. Corrections to the following items/conditions are required:

| | |
|---|---|
| VHF radio ECP (ECP-055) | Provide for the correction of volume and reception level discrepancies. Current volume inequities between the UHF/VHF radios make the radio unintelligible and a safety concern for aircrew. |
| Nose Wheel Centering (ECP-052) | Safety modification to provide positive nose wheel centering inflight. Category 1 Deficiency, |
| MLG door tie rods | Retrofit of improved durability MLG door tie rod. |
| MLG Sidebrace Redesign (ECP-059) | Re-work of existing MLG drag link. Improve grease fitting access to maintainablity improvement. |
| Oil Pressure Warning | Safety modifications to correct oil pressure cockpit warning indications and associated systems to improving aircrew situational awareness and overall systems operation. |
| OBOGS upgrades (ECP-049) | Safety modifications to improve the normal and emergency aircrew oxygen supply systems. Mods address increased supply , delivery control box and software logic corrections. |
| Trim System Redesign | Safety modification to reduce trim actuator force limit, decrease activation speed. Results in shorter landing distances. |
| Braking (anti-skid) | Safety modification to improve the short field abort and stopping distances of the aircraft through the introduction of improved tires and braking system. |
| NACWS replacement | Safety modification to replace the obsolete and unsupportable Naval Aircraft Collision Warning System (NACWS) due to FAA changes in the National Airspace System. |
| Ejection Mode Selector | Modifies Interseat Sequencing System (Ejection system) to add two additional modes allowing command ejection authority designated to each seat. |
| ASV Regulator/EL Panel increase | Safety modification addressing excessive force required to breathe utilizing current Anti-Suffocation Valve (ASV). This Correction will solve unconscience aircrew air supply requirements. In addition, a safety modification will replace the current EL Panel to the oxygen regulator blinker visibility at night. Deficiency noted during OPEVAL. |
| Landing Gear Doors & Bellcrank | Structural fixes to gear doors & bellcrank to eliminate cracking. |
| UWARS addition to ejection seat | Safety modification to add UWARS to Ejection Seat. Current system lacks UWARS, resticting overwater flight operations. |
| Acceptance of Ground Power (ECP-056) | Operational modification to allow acceptance of electric power commercial ground power carts. |
| Life Raft Addition to Ejection Seat | Safety modification to install Life raft to ejection seat. Current system lacks raft, restricting overwater flight operations. |
| Cockpit Improvements (ECP-058/063) | Safety and Human Factors modification to the cockpit to improve aircrew efficiencies and to eliminate excessive pilot workload and other dangerous situations. Modifications include rearview mirrors, improved cockpit storage, improved night lighting, reducing excessive ambient noise, improved trim relays, open avionic wire bundles, communication audio volume solutions, nose wheel position/positioning systems and flight instrument display issues. |
| Increase Gross Weight | Structural mods to increase weight capacity. Need driven by weight additions for Anti-Skid, Life Raft, Oil Pressure warning system. |
| OBOGS Low Pressure Switch | Safety modification to improve OBOGS low pressure switch. In-flight failures have caused numerous aborts. |
| Condensor blower motor-longer life | Replace air conditioning blower with longer life, brushless motor, reducing life cycle costs |
| Supplemental Oxygen System | Safety modification to increase volume of emergency oxygen. Class A safety board recommendation. |

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Feb 93 received MS 0 and MS I approval, Aug 95 received MSII and LRIP approval, Dec 01 received MS III approval, and Navy IOC occurred 4th Qtr FY03.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| AFT Fuselage Structural Upgrades | | | | | 20 | * | 24 | * | | | | | | | | | | | | |
| ASV Regulator/EL Panel | | | 14 | 0.1 | 12 | * | 26 | 0.2 | | | | | | | | | | | | |
| Acceptance of Ground Power | | | 43 | 0.1 | | | | | | | | | | | | | | | | |
| Anti-G Valve | | | | | 24 | * | 17 | * | | | | | | | | | | | | |
| Avionics Obsolescence | | | | | 49 | * | 49 | * | | | | | | | | | | | | |
| Braking Improvement (Anti-skid) | | | | | | | 4 | 0.1 | | | | | | | | | | | | |
| Cockpit Improvements | | | 7 | * | 4 | 0.1 | 4 | 0.1 | | | | | | | | | | | | |
| Condenser Blower Motor - Longer Life | | | | | 1 | * | 1 | * | | | | | | | | | | | | |
| Ejection Mode Selector | | | | | 24 | * | 5 | * | | | | | | | | | | | | |
| Engine Oil Dipstick and Bottle | | | | | | | 5 | * | | | | | | | | | | | | |
| Engine PMU Upgrade | | | | | | | | | | | | | | | | | | | | |
| GPS Receiver Upgrade - LAAS | | | | | | | 1 | * | | | | | | | | | | | | |
| Increase Gross Weight | | | | | 1 | * | 1 | * | | | | | | | | | | | | |
| Landing Gear Doors & Bellcrank | | | 66 | 0.1 | 2 | * | 12 | 0.1 | | | | | | | | | | | | |
| Life Raft Addition to Ejection Seat | | | | | 2 | * | 20 | 0.1 | | | | | | | | | | | | |
| MFOQA | | | | | | | 1 | * | | | | | | | | | | | | |
| MLG Door Tie Rods | | | | | 10 | 0.1 | 2 | * | | | | | | | | | | | | |
| MLG Sidebrace Redesign | | | 36 | 0.1 | | | | | | | | | | | | | | | | |
| NACWS Replacement | | | | | | | 3 | 0.1 | | | | | | | | | | | | |
| Nose Wheel Centering | 30 | 0.1 | 6 | * | | | | | | | | | | | | | | | | |
| OBOGS Low Pressure Switch | | | | | 24 | * | 1 | * | | | | | | | | | | | | |
| OBOGS upgrades (ECP-049) | 12 | 0.1 | 12 | 0.1 | 9 | 0.1 | 1 | * | | | | | | | | | | | | |
| Oil Pressure Warning | | | | | 6 | * | 38 | 0.2 | | | | | | | | | | | | |
| Sealed rudder Position Sensor | | | | | | | 6 | * | | | | | | | | | | | | |
| Supplemental Oxygen System | | | | | | | 1 | * | | | | | | | | | | | | |
| Trim System Redesign | | | | | 3 | * | 15 | 0.2 | | | | | | | | | | | | |
| UWARS Addition to Ejection Seat | | | | | 2 | * | 44 | 0.1 | | | | | | | | | | | | |
| VHF Radio (Audio Volume) | | | 39 | 0.1 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | * | | | | * | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| AFT Fuselage Structural Upgrade | | | | | 20 | * | 24 | * | | | | | | | | | | | | |
| ASV Regulator/EL Panel | | | 14 | * | 12 | * | 26 | * | | | | | | | | | | | | |
| Acceptance of Ground Power | | | 43 | 0.1 | | | | | | | | | | | | | | | | |
| Anti-G Valve | | | | | 24 | * | 17 | * | | | | | | | | | | | | |
| Avionics Obsolescence | | | | | 49 | * | 49 | * | | | | | | | | | | | | |
| Braking Improvement (Anti-skid) | | | | | | | 4 | 0.1 | | | | | | | | | | | | |
| Cockpit Improvements | | | 7 | * | 4 | * | 4 | * | | | | | | | | | | | | |
| Condenser Blower Motor - Longer Life | | | | | 1 | * | 1 | * | | | | | | | | | | | | |
| Ejection Mode Selector | | | | | 24 | * | 5 | * | | | | | | | | | | | | |
| Engine Oil Dipstick and Bottle | | | | | | | 5 | * | | | | | | | | | | | | |
| Engine PMU Upgrade | | | | | | | | | | | | | | | | | | | | |
| GPS Receiver Upgrade - LAAS | | | | | | | 1 | * | | | | | | | | | | | | |
| Increase Gross Weight | | | | | 1 | * | 1 | * | | | | | | | | | | | | |
| Landing Gear Doors & Bellcrank | | | 66 | 0.1 | 2 | * | 12 | * | | | | | | | | | | | | |
| Life Raft Addition to Ejection Seat | | | | | 2 | * | 20 | * | | | | | | | | | | | | |
| MFOQA | | | | | | | 1 | * | | | | | | | | | | | | |
| MLG Door Tie Rods | | | | | 10 | * | 2 | * | | | | | | | | | | | | |
| MLG Sidebrace Redesign | | | 36 | 0.1 | | | | | | | | | | | | | | | | |
| NACWS Replacement | | | | | | | 3 | * | | | | | | | | | | | | |
| Nose Wheel Centering | 30 | 0.3 | 6 | * | | | | | | | | | | | | | | | | |
| OBOGS Low Pressure Switch | | | | | 24 | * | 1 | * | | | | | | | | | | | | |
| OBOGS upgrades (ECP-049) | 12 | | 12 | * | 9 | * | 1 | * | | | | | | | | | | | | |
| Oil Pressure Warning | | | | | 6 | * | 38 | * | | | | | | | | | | | | |
| Sealed Rudder Position Sensor | | | | | | | 6 | * | | | | | | | | | | | | |
| Supplemental Oxygen System | | | | | | | 1 | * | | | | | | | | | | | | |
| Trim System Redesign | | | | | 3 | * | 15 | * | | | | | | | | | | | | |
| UWARS Addition to Ejection Seat | | | | | 2 | * | 44 | 0.1 | | | | | | | | | | | | |
| VHF Radio (Audio Volume) | | | 39 | 0.1 | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | * | | * | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | | | * | | * | | | | | | | | | | | | |
| TRAINING EQUIP | | | 1 | * | 12 | * | 18 | * | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | * | | * | | | | | | | | | | | | |
| ILS | | | | | | * | | * | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | * | | * | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 42 | * | 223 | 0.1 | 193 | 0.1 | 281 | 0.1 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 126 | 0.5 | 670 | 1.2 | 591 | 0.7 | 861 | 1.7 | | | | | | | | | | | | |

*Asterisk indicate amounts less than

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: JPATS Correction of Deficiencies (OSIP 11-04)

INSTALLATION INFORMATION: VHF Radio (Audio Volume)/OBOGS Upgrades (ECP-049)/Oil Pressure Warning/ASV Regulator/EL Panel/Ejection Mode Selector/Cockpit Improvements/NACWS Replacement/ Avionics Obsolescence/Braking Improvement (Antiskid)/Nose Wheel Centering/MLG Door Tie Rods/MLG Sidebrace Redesign/Trim System Redesign/Landing Gear Doors & Bellcrank/UWARS Addition to Ejection Seat/Acceptance of Ground Power/Life Raft Addition to Ejection Seat/Increase Gross Weight/OBOGS Low Pressure Switch/ GPS Repeater for Simulator/Baro Altimeter Repeater for Simulator/Condenser Blower Motor-Longer Life/Supplemental Oxygen System/GPS Receiver Upgrade-LAAS-WAAS Engine PMU Upgrade/Anti-G Valve/Simulator Mods to Reflect A/C Systems/AFT Fuselage Structural Upgrade/Sealed Rudder Position Sensor/Engine Oil Dipstick and Bottle/MFOQA

MODELS OF SYSTEMS AFFECTED: T-6A — TYPE MODIFICATION: PS SAFETY

ADMINISTRATIVE LEADTIME: * Months — PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 2005: Various — FY 2006: Various — FY 2007: Various

DELIVERY DATE: FY 2005: Various — FY 2006: Various — FY 2007: Various

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2004 & PY ( ) kits | 42 | * | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | 223 | 0.1 | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 193 | 0.1 | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 281 | 0.1 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **42** | ***** | **223** | **0.1** | **193** | **0.1** | **281** | **0.1** | | | | | | | | | | | | |

Notes: Includes trainer kits

Asterisk indicates amount less than 51K

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 42 | | 75 | 75 | 73 | 48 | 48 | 48 | 49 | 70 | 70 | 70 | 71 | | | | | | | | | | | | |
| Out | 42 | | 75 | 75 | 73 | 48 | 48 | 48 | 49 | 70 | 70 | 70 | 71 | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | TOTAL |
| In | | | | | | |
| Out | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **AVIATION LIFE SUPPORT MODS** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 3.6 | A | 0.5 | 0.3 | 14.3 | 18.0 | 9.3 | 7.9 | 11.0 | 34.4 | 99.2 | |

DESCRIPTION:

The specific modifications budgeted and planned are:
(1) Detector installation on rotary and cargo aircraft to identify the presence of chemical warfare (CW) vapors.
(2) The addition of the Mobile Aircrew Restraint System (MARS) to helicopters. MARS will replace existing fixed length tether with a locking retraction system tha allows safe movement of the aircrew within the cargo area while affording protection during a mishap or combat. MARS will be mounted to the aircraft overhead.
(3) Installation of new aircrew endurance modifications in legacy ejection seat equipped aircraft due to extended range missions.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 002-05 CW DETECTORS | | 0.5 | 0.3 | 0.5 | 4.2 | 5.3 | 5.6 | 5.9 | 32.5 | 54.8 |
| 001-07 MARS | | | | 13.9 | 11.7 | 2.4 | 2.4 | 5.1 | 1.8 | 37.3 |
| 001-08 EJECTION SEAT ENDURANCE | | | | | 2.0 | 1.6 | | | | 3.6 |
| TOTAL | 0.0 | 0.5 | 0.3 | 14.3 | 18.0 | 9.3 | 7.9 | 11.0 | 34.4 | 95.7 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: CW DETECTORS( OSIP 002-05 )

MODELS OF SYSTEMS AFFECTED: AH-1W/Z-CH-53-KC-130J/T-MH-53E-MH-60S-MV-22B-UH-1N/Y TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: Installation of the Joint Chemical Agent Detector (JCAD) will automatically and simultaneously detect, identify, and quantify CW agent vapors by agent class(e.g. nerve, blister, and blood agents). The JCAD Detectors will be procured and provided to the NAVAIRSYSCOM by the Joint Chemical Biological Defense Program (CBDP) Office. The CH-53 installation has 2 JCADS per platform. Installation of the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD) on the CH-53 will provide standoff detection of CW agents at a distance of 0 to 5 km. The CH-53 installation has 1 JSLSCAD per platform.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: JPEO (CBD) MS-C for JCAD detector Is planned for 2QTR FY07. All CW Detector CH-53 installation equipment will be provided to NAVAIR by the CBDP procurements.
The kits for each platform is different and will have to be made. The first two kits for each platform will be for validation and verification - which can be purchased and installed the same year. The other kits will take longer to be delivered so that is the reason for the installation schedule.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | .0 |
| AH-1W/Z INSTALLATION KITS | | | | | | | | | | | 2 | * | 22 | 0.2 | 20 | 0.2 | 144 | 1.6 | 188 | 2.1 |
| CH-53 INSTALLATION KITS | | | | | | | 2 | * | 20 | 0.2 | 15 | 0.2 | 10 | 0.1 | | | 102 | 1.2 | 149 | 1.7 |
| KC-130J/T INSTALLATION KITS | | | | | | | | | | | | | | | 2 | * | 75 | 0.8 | 77 | .9 |
| MH-53E INSTALLATION KITS | | | | | | | | | | | | | | | | | 37 | 0.4 | 37 | .4 |
| MH-60S INSTALLATION KITS | | | | | | | | | | | | | 2 | * | 10 | 0.1 | 227 | 2.6 | 239 | 2.7 |
| MV-22B INSTALLATION KITS | | | | | | | | | | | 2 | * | 10 | 0.1 | 10 | 0.1 | 190 | 2.1 | 212 | 2.4 |
| UH-1N/Y INSTALLATION KITS | | | | | | | | | 2 | * | 20 | 0.2 | 25 | 0.3 | 20 | 0.2 | 26 | 0.3 | 93 | 1.0 |
| INSTALLATION KITS N/R | | | | 0.4 | | 0.2 | | 0.2 | | 1.4 | | 1.5 | | 1.4 | | 1.4 | | 0.1 | | 6.5 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | .0 |
| INSTALL EQUIPMENT N/R | | | | | | | | | | 0.1 | | 0.1 | | 0.1 | | 0.1 | | | | .2 |
| ECO | | | | | | | | | | | | | | | | | | | | .0 |
| DATA | | | | | | | | 0.1 | | 0.4 | | 0.7 | | 0.5 | | 0.5 | | 0.5 | | 2.5 |
| TRAINING EQUIP | | | | | | * | | | | 0.2 | | 0.3 | | 0.2 | | 0.1 | | 0.1 | | .9 |
| SUPPORT EQUIP | | | | | | * | | | | * | | * | | 0.1 | | 0.1 | | | | .2 |
| ILS | | | | | | 0.1 | | * | | 0.1 | | 0.2 | | 0.1 | | 0.1 | | | | .5 |
| OTHER SUPPORT | | | | 0.1 | | 0.1 | | 0.1 | | 1.9 | | 1.6 | | 1.7 | | 1.5 | | 1.7 | | 8.5 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | .0 |
| INSTALLATION COST | | | | | | | 2 | 0.1 | 2 | 0.1 | 24 | 0.6 | 37 | 0.8 | 69 | 1.6 | 861 | 21.1 | 995 | 24.2 |
| TOTAL PROCUREMENT | | | | 0.5 | | 0.3 | 4 | 0.5 | 24 | 4.2 | 63 | 5.3 | 106 | 5.6 | 131 | 5.9 | 1,662 | 32.5 | 1,990 | 54.8 |

*equal less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: AH-1W/Z-CH-53-KC-130J/T-MH-53E-MH-60S-MV-22B-UH-1N/Y MODIFICATION TITLE: CW DETECTORS( OSIP 002-05 )

INSTALLATION INFORMATION: NAVY DURING SDLM, NAVY DRIVE-IN MOD, CONTRACTOR DURING SDLM, CONTRACTOR DRIVE-IN MOD

METHOD OF IMPLEMENTATION: DEPOT, CONTRACTOR

ADMINISTRATIVE LEADTIME: N/A Months PRODUCTION LEADTIME: N/A Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007

DELIVERY DATE: FY 2005 FY 2006 FY 2007

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | 0 | 0.0 |
| FY 2007 (2) kits | | | | | | | 2 | 0.1 | | | | | | | | | | | 2 | 0.1 |
| FY 2008 (22) kits | | | | | | | | | 2 | 0.1 | 20 | 0.5 | | | | | | | 22 | 0.6 |
| FY 2009 (39) kits | | | | | | | | | | | 4 | 0.1 | 35 | 0.7 | | | | | 39 | 0.8 |
| FY 2010 (69) kits | | | | | | | | | | | | | 2 | 0.1 | 67 | 1.5 | | | 69 | 1.6 |
| FY 2011 (62) kits | | | | | | | | | | | | | | | 2 | 0.1 | 60 | 1.1 | 62 | 1.2 |
| TO COMPLETE (801) kits | | | | | | | | | | | | | | | | | 801 | 20.0 | 801 | 20.0 |
| TOTAL 995 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.1 | 2 | 0.1 | 24 | 0.6 | 37 | 0.8 | 69 | 1.6 | 861 | 21.1 | 995 | 24.2 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | 2 | | | | 2 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 10 |
| Out | | | | | | | | | | | | | 2 | | | | 2 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 10 |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | 17 | 17 | 17 | 18 | 861 | 995 |
| Out | 17 | 17 | 17 | 18 | 861 | 995 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: MARS( OSIP 001-07 )

MODELS OF SYSTEMS AFFECTED: C-130/H-46/H-53D/H-53E/H-60R/H-60S/UH-1Y/V-22 TYPE MODIFICATION: Safety

DESCRIPTION / JUSTIFICATION: Safety initiative to replace the existing mobile crewmember safety belt system with the Mobile Aircrew Restraint System (MARS). The new MARS design increases crash survivability by providing improved aircrew restraint within the cabin through the use of a "g" and velocity sensitive locking reel mechanism and crewmember harness. The MARS retractor systems and associated aircraft installation modifications will be procured and provided to the NAVAIRSYSCOM by PMA-202 office.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: MS-C for MARS installation into H-60R aircraft is planned for 3QTR FY07

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | .0 |
| C-130 INSTALLATION (2 per a/c) | | | | | | | | | 100 | 1.1 | 8 | 0.1 | 7 | 0.1 | | | 33 | 0.4 | 148 | 1.6 |
| H-46 INSTALLATION (3 per a/c) | | | | | | | | | | | | | | | 224 | 1.4 | 100 | 0.5 | 324 | 1.9 |
| H-53D INSTALLATION ((4 per a/c) | | | | | | | 140 | 2.0 | | | | | | | | | | | 140 | 2.0 |
| H-60R INSTALLATION (2 per a/c) | | | | | | | | | | | | | | | 58 | 0.2 | | | 58 | .2 |
| H-60S INSTALLATION (3 per a/c) | | | | | | | 387 | 1.0 | | | | | | | | | | | 387 | 1.0 |
| M/C H-53E INSTALLATION (4 per a/c) | | | | | | | 244 | 3.4 | 348 | 4.9 | | | | | | | | | 592 | 8.3 |
| UH-1Y INSTALLATION (4 per a/c) | | | | | | | | | | | | | | | 36 | 0.3 | | | 36 | .3 |
| V-22 INSTALLTIONS (3 per a/c) | | | | | | | | | 25 | 0.2 | 50 | 0.4 | 96 | 0.7 | 57 | 0.4 | | | 228 | 1.6 |
| INSTALLATION KITS N/R | | | | | | | | 2.7 | | 1.9 | | 1.1 | | 0.8 | | 0.6 | | | | 7.1 |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | .0 |
| C-130 EQUIPMENT (2 per a/c) | | | | | | | | | 100 | 0.8 | 8 | 0.1 | 7 | 0.1 | | | 33 | 0.3 | 148 | 1.2 |
| H-46 EQUIPMENT (3 per a/c) | | | | | | | | | | | | | | | 224 | 1.0 | 100 | 0.3 | 324 | 1.2 |
| H-53D EQUIPMENT (4 per a/c) | | | | | | | 140 | 0.7 | | | | | | | | | | | 140 | .7 |
| H-60R EQUIPMENT (2 per a/c) | | | | | | | | | | | | | | | 58 | 0.3 | | | 58 | .3 |
| H-60S EQUIPMENT (3 per a/c) | | | | | | | 387 | 2.1 | | | | | | | | | | | 387 | 2.1 |
| M/C H-53E EQUIPMENT (4 per a/c) | | | | | | | 244 | 1.3 | 348 | 1.8 | | | | | | | | | 592 | 3.1 |
| UH-1Y EQUIPMENT (4 per a/c) | | | | | | | | | | | | | | | 36 | 0.2 | | | 36 | .2 |
| V-22 EQUIPMENT (3 per a/c) | | | | | | | | | 25 | 0.1 | 50 | 0.3 | 96 | 0.5 | 57 | 0.3 | | | 228 | 1.2 |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | .0 |
| ECO | | | | | | | | | | | | | | | | | | | | .0 |
| DATA | | | | | | | | 0.3 | | 0.2 | | 0.2 | | 0.1 | | | | | | .8 |
| TRAINING EQUIP | | | | | | | | * | | * | | | | | | | | | | .1 |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | .0 |
| ILS | | | | | | | | | | | | | | | | | | | | .0 |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | .0 |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | .0 |
| INSTALLATION COST | | | | | | | 469 | 0.4 | 548 | 0.7 | 268 | 0.3 | 55 | 0.1 | 267 | 0.5 | 306 | 0.5 | 1,913 | 2.5 |
| TOTAL PROCUREMENT | | | | | | | 2,011 | 13.9 | 1,494 | 11.7 | 384 | 2.4 | 261 | 2.4 | 1,017 | 5.1 | 572 | 1.8 | 5,739 | 37.3 |

*equal less than 50K

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: C-130/H-46/H-53D/H-53E/H-60R/H-60S/UH-1Y/V-22 MODIFICATION TITLE: MARS( OSIP 001-07 )

INSTALLATION INFORMATION: NAVY FIELD MOD TEAM

METHOD OF IMPLEMENTATION: DEPOT, CONTRACTOR

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 0 Months

CONTRACT DATES: FY 2005 FY 2006 FY 2007 Jun-07

DELIVERY DATE: FY 2005 FY 2006 FY 2007 Jun 07

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS () kits | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2005 () kits | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | 0 | 0 |
| FY 2007 (771) kits | | | | | | | 469 | 0.4 | 302 | 0.4 | | | | | | | | | 771 | 1 |
| FY 2008 (473) kits | | | | | | | | | 246 | 0.3 | 227 | 0.3 | | | | | | | 473 | 1 |
| FY 2009 (58) kits | | | | | | | | | | | 41 | 0.1 | 17 | 0.1 | | | | | 58 | 0 |
| FY 2010 (103) kits | | | | | | | | | | | | | 38 | 0.1 | 65 | 0.1 | | | 103 | 0 |
| FY 2011 (375) kits | | | | | | | | | | | | | | | 202 | 0.3 | 173 | 0.3 | 375 | 1 |
| TO COMPLETE (133) kits | | | | | | | | | | | | | | | | | 133 | 0.1 | 133 | 0 |
| TOTAL 1913 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 469 | 0.4 | 548 | 0.7 | 268 | 0.3 | 55 | 0.1 | 267 | 0.4 | 306 | 0.4 | 1,913 | 2.5 |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | 234 | 235 | 137 | 137 | 137 | 137 | 67 | 67 | 67 | 67 | 13 | 14 | 14 | 14 |
| Out | | | | | | | | | | | | 134 | 235 | 137 | 137 | 137 | 137 | 67 | 67 | 67 | 67 | 13 | 14 | 14 | 14 |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | 66 | 67 | 67 | 67 | 306 | 1913 |
| Out | 66 | 67 | 67 | 67 | 306 | 1913 |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | | DATE: February 2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **COMMON ECM EQUIPMENT** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 498.8 | A | 77.1 | 65.2 | 35.9 | 36.1 | 36.5 | 37.3 | 75.8 | 148.4 | 1011.3 | |

DESCRIPTION: This line item funds common equipment (B kits) for multiple aircraft. The overall goal of the modification budget is to provide a reprogrammable radar and missile warning system, provide attacking missile declaration and sector direction finding, laser detection, and self production capability devices to applicable user aircraft.

(TOA, $ in millions)

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 072-88 AN/AAR-47 DETECTION | 229.4 | 21.2 | 16.4 | 0.7 | | | | | | 267.8 |
| 014-90 AN/APR-39(V)2 RWR | 181.7 | 10.3 | 3.4 | | | | | | | 195.4 |
| 006-00 ALE-39 to 47 RETROFIT | 59.5 | 9.5 | | | | | | | | 69.1 |
| 007-03 IDECM | 15.9 | 36.1 | 42.4 | 35.2 | 36.1 | 36.5 | 37.3 | 38.8 | 148.4 | 426.8 |
| 014-06 AN/ALQ-157A(V) | | | 3.0 | | | | | | | 3.0 |
| 001-11 TADIRCM | | | | | | | | 37.0 | | 37.0 |
| TOTAL | 486.6 | 77.1 | 65.2 | 35.9 | 36.1 | 36.5 | 37.3 | 75.8 | 148.4 | 999.1 |

NOTE: FY2006 does not match the P-1 due to a technical error.
FY2006 amount shown above includes $11.1M in Title IX funding.

Exhibit P-3a

MODIFICATION TITLE: AN/AAR-47 DETECTION( OSIP 072-88 )

MODELS OF SYSTEMS AFFECTED: CH-46E, CH-53A/D/E, RH-53D, MH-53E, UH-1, AH-1, C-130, P-3, HH-60H, SH-60B, VH-3, VH-60, V-22

TYPE MODIFICATION: MISSION CAPABILITY

DESCRIPTION/JUSTIFICATION: The AN/AAR-47 warns of approaching missiles by detecting radiation associated with the rocket motor and automatically initiates flare ejection. Detection algorithms are used to discriminate against non-approaching radiation sources. The AN/AAR-47 is a passive missile approach warning system consisting of four sensor assemblies housed in two or more sensor domes, a central processor unit and a control indicator. The AN/AAR-47 provides attacking missile declaration and sector direction finding (DF) and will be interfaced directly to the ALE-39/47 countermeasures dispenser. Without the AAR-47, helicopters and Fixed Wing Aircraft have no capability to detect an infrared (IR) missile attack.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Milestone II was passed in 1982. OPEVAL (on the CH-53E) was passed in Oct 86.

Milestone III was passed in May 87 for full production with extension of application to all other platforms. Production of 709 systems and preparation of a Level III data package followed, with deliveries completed in early 1992. Under full and open competition, a contract for up to 1200 systems was awared to Hercules (now Alliant) in Dec 91. Actual orders were for 1122 systems with deliveries completed in Jan 97. Under full and open competition, a contract for up to 1077 systems was awarded to Lockheed Martin in Sep 95. Deliveries began in Jan 97 and were completed in Jul 99.

There are two upgrade programs: FY-97/98/99 funded a microprocessor upgrade to replace the 8086 board with an 80486 running new software to enhance threat declaration and to better control false alarms. This software delivers the maximum performance attainable using current sensors. FY-06 and beyond also funds a sensor upgrade. The current sensors are starting to wear out after 5 years, due to temperature sensitive materials. The new sensors will remove this limitation and will also provide improved performance. This will allow the AAR-47 to better respond to new threats via software changes only. Both upgrades are 100 percent retrofit. There are 2500 systems for installation on all applicable aircraft. TEMP # 543 documents the current requirement. ORD DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Milestone II was passed in 1982. OPEVAL (on the CH-53E) was passed in Oct 86.

Financial Plan: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| NOTE: FY2006 does not match the P-1 | | | | | | | | | | | | | | | | | | | | |
| FY2006 amount shown above | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| ECO (SENSOR UPGRADE EQUIP | 851 | 40.9 | 166 | 7.9 | 110 | 7.0 | | | | | | | | | | | | | | |
| FY05 Sup (Sensor Upgrade Equip) | | | 39 | 4.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIP (AAR-47 EQUIP) | 1,250 | 90.2 | | | | | | | | | | | | | | | | | | |
| Title 9 Sup (Sensor Upgrade) | 151 | 9.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 24.6 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO (CP UPGRADE EQUIP ECO) | | 7.0 | | 0.9 | | | | | | | | | | | | | | | | |
| ECO (Dynamic Blanking) | | 1.3 | | | | | | | | | | | | | | | | | | |
| FY05 Sup (Dynamic Blanking ECO) | | | | 6.7 | | | | | | | | | | | | | | | | |
| Title 9 Sup (Dynamic Blanking) | | | | | | 8.1 | | | | | | | | | | | | | | |
| DATA | | 3.9 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 0.6 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 5.6 | | | | | | | | | | | | | | | | | | |
| ILS | | 5.1 | | | | 0.2 | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | 41.1 | | 1.5 | | 1.1 | | 0.5 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 2,252 | 229.4 | 205 | 21.2 | 110 | 16.4 | | 0.7 | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: AN/APR-39(V)2 RWR( OSIP 014-90 )

MODELS OF SYSTEMS AFFECTED: AN/APR-39(V)2, AH-1W, AH-1Z, UH-1N, UH-1Y, HH-60H, CH-53D/E/HM-53E, KC-130F/R/T, VH-3D, VH-60N, SH-60B, MV-22, AN/V4-2/2(V), AH-1W, UH-1N, UH-1Y, VH-3, VH-50, SH-60R

TYPE MODIFICATION: MISSION CAPABILITY

DESCRIPTION / JUSTIFICATION: The AN/APR-39A(V)2 Radar Signal Detecting Set (RSDS) is designed for use on US Marine Corps, US Navy, and US Army Assault Support aircraft to provide onboard warning of radar threats. The AN/APR-39A(V)2 provides control and display of the entire Assault Support Equipment(ASE) Suite, and is required for control and display of the AN/AVR-2/2A(V) and the AAR-47. The system consists of five antennas, one Cockpit Control Unit, one or two Display indicators, two to four receivers, and one processor. The AN/AVR-2/2A(V) laser detection set (LDS) is designed for use on U.S. Army, U.S. Marine Corps, and U.S. Navy Assault Support aircraft. The AN/AVR-2/2A(V) reduces the susceptability of helicopters to attack from laser guided and laser aided threats by providing warning of laser illumination. The system consists of four to six sensor units and one or two comparators. The system requires the APR-39A(V)2 Cockpit Control Unit for On/Off and BIT. AVR-2/2A(V) warnings are displayed on the APR-39A(V)2 cockpit display.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The U. S. Army awarded a production contract for the AVR-2 in FY 90 and for the AVR-2A(V) in FY 94. Procurement for the U.S. Marine Corps and the U.S. Navy is via Military Interdepartmental Purchase Request (MIPR) to the U.S. Army. The AN/APR-39A(V)2 is in the production phase of development (MSIII 3Q/96). The U.S. Navy is the lead service of this joint service program. The U.S. Army awarded the production contract 3Q/96, and continues to administer the contract. U. S. Navy delivery of production systems commenced June 99. Procurement of an AN/AVR-2/2A(V) in the AN/APR-39(V)2 for the additional requiring platforms will be by extension of application with the required follow-on test and evaluation conducted on each platform.

Financial Plan: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL KITS | 7 | 0.2 | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| NOTE: FY2006 does not match the P-1 | | | | | | | | | | | | | | | | | | | | |
| FY2006 amount shown above | | | 23 | 5.2 | | | | | | | | | | | | | | | | |
| INSTALL EQUIP (APR-39A) | 442 | 68.8 | 17 | 4.1 | 13 | 3.0 | | | | | | | | | | | | | | |
| INSTALL EQUIP (AVR-2) | 254 | 32.2 | | | | | | | | | | | | | | | | | | |
| Title 9 Supplemental (Install Equip)39a | 28 | 5.2 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 17.0 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | 18.0 | | | | | | | | | | | | | | | | | | |
| DATA | | 1.0 | | | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 1.0 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 2.1 | | | | | | | | | | | | | | | | | | |
| ILS | | 6.3 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 29.9 | | 1.0 | | 0.4 | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 731 | 181.7 | 40 | 10.3 | 13 | 3.4 | | | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: ALE-39 to 47 RETROFIT( OSIP 006-00 )

MODELS OF SYSTEMS AFFECTED: F-14B/D (114), CH-53E (181), EA-6B (3), AH-1W (146), CH-46E (147) UH-1N (86), KC-130FRT (20), CH-53D (7)

TYPE MODIFICATION: MISSION CAPABILITY

DESCRIPTION / JUSTIFICATION: The replacement of the AN/ALE-39 Dispenser System with the AN/ALE-47 Dispenser System will correct some serious safety problems while at the same time greatly improve aircraft survivability. The AN/ALE-39 system has serious problems with Things Falling Off Aircraft (TFOA) as well as numerous occurrences of uncommanded firing of chaff and flare stores. The reliability of the ALE-39 is another major factor with continuous reports of hung or unfired stores, a serious ground safety concern as well as a serious aircraft survivability concern. The AN/ALE-47 System has been developed to correct the safety issues of the ALE-39. USD(Acq) memo of Nov 86 directed U.S. Navy and U.S. Army to participate in EMD phase. Air Force Statement of Operational Requirements Document (SORD) number 341.88-11-D of 8 July 92. OSIP 06-00 had been cancelled beginning FY04. But operational requirements in support of the Global War on Terrorism have resulted in accelerated installs and additional aircraft being identified for retrofit incorporation.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The AN/ALE-47 System is in production and being installed in multiple U.S. Navy and Marine aircraft. MS III decision awarded Mar 93. FY 00 systems procured under Air Force contract F33657-96-D-0001. FY 01-06 systems procured under follow on ID/IQ contract F09603-01-D-0367.

Financial Plan: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A Kits) | 637 | 1.6 | | 1.1 | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| NOTE: FY2006 does not match the P-1 | | | 368 | 5.6 | | | | | | | | | | | | | | | | |
| FY2006 amount shown above | 1 | 2.0 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIP (TACAIR/HELOS) | 758 | 30.4 | 10 | 0.1 | | | | | | | | | | | | | | | | |
| Title 9 Supplemental (Install Equip) | 120 | 5.7 | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 1.8 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| ECO | | 0.3 | | | | | | | | | | | | | | | | | | |
| DATA | | | | 0.1 | | | | | | | | | | | | | | | | |
| TRAINING EQUIP | | 3.1 | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | 4.8 | | 1.2 | | | | | | | | | | | | | | | | |
| ILS | | 0.8 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | 9.2 | | 1.5 | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 1,516 | 59.5 | 378 | 9.5 | | | | | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: F-14B/D (114), CH-53E (181), EA-6B (3), AH-1W (146), CH-46E (147) UH-1N (86), KC-130FRT (20), CH-53D (7)

MODIFICATION TITLE: ALE-39 to 47 RETROFIT( OSIP 006-00 )

INSTALLATION INFORMATION: ALE-47 Retrofit requires different types of Installation Equipment Kits based on the quantity of dispensers in each aircraft. TACAIR (F-14B/D, EA-6B) and Helos (CH-53E, CH-53D, AH-1W, UH-1) require two (2) dispensers per aircraft, and C-130 F/R/T require 10 dispensers per aircraft.

METHOD OF IMPLEMENTATION: Installation Equipment, Install Kits and Installation costs are therefore different as indicated in the above financial plan.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 2005 ____ FY 2006 ____ FY 2007 ____ FY 2008 ____

DELIVERY DATE: FY 2005 ____ FY 2006 ____ FY 2007 ____ FY 2008 ____

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| PRIOR YEARS (476) kits | 476 | 2.9 | | | | | | | | | | | | | | | | | | | | |
| FY 2005 (368) kits | | | 368 | 5.6 | | | | | | | | | | | | | | | | | | |
| FY 2006 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2007 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 () kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE () kits | | | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 476 | 2.9 | 368 | 5.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 376* | 25 | 25 | 25 | 33 | 33 | 34 | 82 | 66 | 63 | 28 | 18 | 18 | | | | | | | | | | | | |
| Out | 376* | 20 | 22 | 22 | 22 | 33 | 33 | 34 | 77 | 60 | 63 | 28 | 18 | 18 | | | | | | | | | | | |

| | FY 2011 | | | | TO COMPLETE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | To Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

*120 kits were procured with FY04 Title IX supplemental funds. Title IX supplemental funds were received in FY05, 20 kits were installed in FY04 4Q. The remaining 100 kits are scheduled to be installed in FY05.

Exhibit P-3a

MODIFICATION TITLE: Integrated Defensive Electronic Countermeasures (IDECM), Radio Frequency Countermeasures (RFCM) ( OSIP 007-03 )

MODELS OF SYSTEMS AFFECTED: F/A-18E/F TYPE MODIFICATION: MISSION CAPABILITY

DESCRIPTION / JUSTIFICATION: The RFCM subsystem consists of an onboard jammer and a fiber optic towed decoy, which integrates with a Radar Warning Receiver (RWR), countermeasures dispensing set (CMDS), and associated cockpit controls and displays to provide the lead aircraft (F/A-18E/F) with increased survivability against Radio Frequency (RF) threats. The Operational Requirements Document number is 494-88-98. The number of ALQ-214 systems is 424 plus spares for the F/A-18E/F. This Operational Safety Improvement Program (OSIP) procures ALQ-214s for retrofit into F/A-18E/F aircraft. FY03 includes funding for ALR-67V3 integration, ORD 360-88-94.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The IDECM RFCM program is currently in E&MD. MS 0,I, II approval was granted 26 October 1995. The IDECM RFCM subsystem completed an OA in the second quarter of FY00 leading to an NPR , LRIPI 1Q FY01 , LRIPII 1Q FY02, and LRIPIII 2Q FY04. The AN/ALQ-214 onboard jammer passed OPEVAL in Oct 2003 and received MS III approval in Jan 04. The FRP I contract was awarded in 4Q FY04

Financial Plan: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIP (B Kits) | 3 | 5.5 | 12 | 21.6 | 20 | 32.2 | 16 | 33.2 | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.3 | | 3.4 | | | | 0.7 | | | | | | | | | | | | |
| NOTE: FY2006 does not match the P-1 | | | | | | | | | | | | | | | | | | | | |
| FY2006 amount shown above | | 0.2 | | 1.5 | | | | | | | | | | | | | | | | |
| DATA | | | | 0.1 | | | | 0.3 | | | | | | | | | | | | |
| TRAINING EQUIP | | | | | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | 0.4 | | 0.2 | | | | | | | | | | | | |
| OTHER SUPPORT | | 9.9 | | 9.5 | | 9.9 | | 0.8 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 3 | 15.9 | 12 | 36.1 | 20 | 42.4 | 16 | 35.2 | | | | | | | | | | | | |

Totals may not add due to rounding

Exhibit P-3a

MODIFICATION TITLE: AN/ALQ-157A(V) INFRARED COUNTERMEASURES (OSIP 014-06)

MODELS OF SYSTEMS AFFECTED: CH-46E, CH-53D, KC-130T AND KC-130J TYPE MODIFICATION: MISSION CAPABILITY

DESCRIPTION / JUSTIFICATION: In the late 1970's and early 1980's, the AN/ALQ-157 was developed and qualified in order to provide protection to heavy/medium lift helicopters and KC130's from infrared guided missiles. The system was produced and deployed from the mid 1980's through 1992. During the initial deployments in 1991 several failures were identified that impacted the mission readiness of the employing platforms.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: The reliability and maintainability upgrade was inititated in 2004 in order to address the reliability issues caused by the identified failures in support of Operation Enduring Freedom and Operation Iraqi Freedom. Also addressed were parts obsolescence issues with the high failure rate items that would severely impact the ability to maintain the system in operating condition.

Financial Plan: (TOA, $ in Millions)

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | 6 | 1.8 | | | | | | | | | | | | | | |
| INSTALL KITS | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| NOTE: FY2006 does not match the P-1 | | | | | | | | | | | | | | | | | | | | |
| FY2006 amount shown above | | | | | | .2 | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | | | .8 | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | .2 | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | | | 6 | 3.0 | | | | | | | | | | | | | | |

Totals may not add due to rounding

**CLASSIFICATION: UNCLASSIFIED**

**Exhibit P-40, BUDGET ITEM JUSTIFICATION**

DATE: **February 2006**

APPROPRIATION/BUDGET ACTIVITY
**Aircraft Procurement, Navy/APN-5 Aircraft Modifications**

P-1 ITEM NOMENCLATURE
**Common Avionics**

Program Element for Code B Items:

Other Related Program Elements

| | Prior Years | ID Code | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QTY | | A | | | | | | | | | |
| COST (In Millions) | **939.8** | A | **160.9** | **178.7** | **177.5** | **156.2** | **149.6** | **150.2** | **149.4** | **1,038.9** | **3,101.1** |

This line item funds common avionics equipment for multiple aircraft. With the exception of OSIPs 43-94 (Flight Data Recorders), 14-97 (KC-130T GPWS), 17-98 (Helo GPWS), and 24-99 (CAS), the individual aircraft platforms fund the "A" kits and installation in the appropriate aircraft line.

The specific modifications budgeted and programmed are: (1) The NAVSTAR GPS (Global Positioning System) is designed to provide a highly accurate passive position (16 meters) velocity (0.1 meter/sec) and time to users worldwide in all weather conditions. The GPS will interface with communication, navigation, and weapon systems equipment (standard attitude heading reference systems, inertial navigation systems, on-board computers, etc.) in selected applications. GPS is a DoD mandated requirement for all aircraft operating in the National Air Space System after the year 2000. (2) The AN/ARC-210 Electronic Protection (EP) Combination Radio provides dual UHF capability for CV based TACAIR; VHF AM for close air support and maritime channels; VHF AM for air traffic control; and EP capabilities. The AN/ARC-210 can be controlled by either a remote control unit or via MIL-STD-1553 multiplex data bus. (3) The Crash Survivable Flight Incident Recorder (CSFIR) is a crash hardened recorder which will be used in support of aircraft mishap and incident investigations. (4) The Embedded Global Positioning System/Inertial Navigation System (EGI) contains full Precise Position Service GPS on a single electronic module, plus a state-of-the-art Ring Laser Gyro inertial navigation system. (5) The AN/ARC- 182 Reuse Programs utilizes previously procured AN/ARC-182 systems which will become available as the AN/ARC-210 system is retrofitted into Navy aircraft. (6) The Ground Proximity Warning System (GPWS) provides visual and aural warnings to the pilot when the aircraft is in conditions that could result in a controlled flight into terrain accident. (7) The Traffic Alert & Collision Avoidance System (TCAS) will provide a display of situation awareness to aid in the prevention of mid-air mishaps. (8) The Advanced Mission Computer and Display (AMC&D) system will replace existing aging/obsolete and performance limited AN/AYK-14(V) Mission Computer and Contractor Furnished Equipment Displays. (9) The Tactical Air Moving Map Capability (TAMMAC), the common solution for US Naval Aviation, provides a common tactical aircraft moving map and data loading capability and replaces current obsolete Fleet equipment. (10) Communication Navigation Surveillance/ Air Traffic Management (CNS/ATM) provides civil upgrades to communications, navigation, and surveillance systems enabling shift from Air Traffic Control to Air Traffic Management in increasingly congested airspace and frequency spectrum. (11) HH-60 H A/A24G-39 AHRS Reliability Improvement Program. (12) Aircrew Wireless Intercom Communications System (AWICS) will provide a wireless, spread spectrum intercom system to allow for unimpeded movement throughout the aircraft and prevent aircrew/passenger entanglement with intercom system cords in the event of mishap. (13) Attitude Gyro Upgrade replaces obsolete gyros with a more reliable and, maintainable gyro. (14) Military Flight Operations Quality Assurance (MFOQA) is a program that provides the warfighter with timely and quantitative information regarding aircrew and system performance for improving safety, operational efficiency, and readiness every flight. The overall goal of the modifications budgeted in FY 2007 is to procure the common equipment required for the individual aircraft platforms. The specific modifications budgeted and programmed are:

(TOA, $ in Millions)

| OSIP No. | Description | Prior Years | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | Complete | To Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-88 | NAVSTAR GPS (Hardware) | 288.5 | 0.1 | 8.2 | 20.2 | 20.7 | 19.2 | 19.5 | 20.8 | 365.9 | **763.0** |
| 04-94 | AN/ARC-210 (Hardware) | 255.4 | 23.4 | 9.4 | 1.4 | | | | | | **289.6** |
| 43-94 | Crash Survivable Flight Incident Recorders (CSFIR) | 81.6 | 2.8 | 1.2 | 0.4 | | | | | | **86.0** |
| 40-95 | AN/ARC-182 Reuse Program | 2.6 | | | | | | | | | **2.6** |
| 14-97 | GPWS (CAT I) Fixed Wing | 66.1 | 10.4 | 14.4 | 8.5 | 7.9 | 5.1 | 4.3 | 3.6 | 10.0 | **130.3** |
| 17-98 | GPWS (CAT III) Rotary Wing | 67.7 | 3.7 | | | | | | | | **71.4** |
| 25-98 | Traffic Alert & Collision Avoidance System (TCAS) | 54.4 | 3.2 | 2.9 | 0.3 | | | | | | **60.7** |
| 21-01 | CNS/ATM | 25.0 | 60.7 | 58.8 | 59.9 | 47.7 | 57.4 | 62.2 | 90.2 | 568.6 | **1,030.7** |
| 02-02 | Tactical Air Moving Map Capability (TAMMAC) | 26.7 | 13.4 | 15.3 | 23.8 | 17.8 | 11.7 | 6.3 | | 34.0 | **149.0** |
| 01-02 | AMC&D/MPCD | 66.9 | 27.7 | 51.7 | 43.4 | 45.3 | 48.4 | 51.7 | 27.3 | 13.4 | **375.9** |
| 07-04 | Attitude Gyro Upgrade | 4.0 | 14.8 | 10.5 | 11.6 | 12.2 | 1.8 | | | 6.9 | **61.8** |
| 08-04 | HH-60 AHRS Reliability & Improvement (CREI) | 1.0 | 0.7 | | | | | | | | **1.6** |
| 09-04 | Aircrew Wireless Internal Communications System (AWICS) | | | 6.2 | 8.0 | 4.6 | 4.4 | 4.6 | 4.4 | 35.2 | **67.4** |
| 02-08 | Military Flight Operations Quality Assurance (MFOQA) | | | | | | 1.6 | 1.6 | 3.0 | 4.8 | **11.0** |
| **Total** | | **939.8** | **160.9** | **178.7** | **177.5** | **156.2** | **149.6** | **150.2** | **149.4** | **1,038.9** | **3,101.1** |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: Global Positioning System (GPS) (OSIP 71-88)

MODELS OF SYSTEMS AFFECTED: All aircraft | TYPE MODIFICATION: Common Avionics (Safety) (Added Capability)

DESCRIPTION/JUSTIFICATION: The NAVSTAR GPS is designed to provide highly accurate passive position (16 meters), velocity (0.1 meter/sec) and time to users worldwide in all weather conditions. GPS will be integrated with communication, navigation, and weapon systems equipment (attitude heading reference systems, inertial navigation systems, mission computers, etc.). This OSIP procures the GPS B-kit equipment (receivers, antennas, amplifiers, CDNU, DDS, SDC, etc.) as required for the above platforms. Hardware configuration varies depending on the TMS of the aircraft. Approximately 2500 aircraft will be modified with equipment provided through this OSIP. The Global Positioning System Operational Requirement Document (ORD) 003-78 dated 22 Jan 90 was based on an Air Force General Operating Requirement (GOR) dated 28 Jan 1978. The Navy ORD for Enhanced GPS User Equipment for Navigation Warfare and GPS Modernization was approved on 7 June 2000.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: The NAVSTAR GPS program completed Phase II (Full Scale Engineering Development) and completed Milestone IIIA (Approval for Limited Production) in June 1986. Milestone IIIB (Approval for Full Production) was completed in January 1992. Research, Development, Test and Evaluation, Navy (RDT&E,N) is funded under program element #0604777N.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| NAVWAR | 123 | 1.5 | | | 16 | 0.4 | 51 | 1.0 | | | | | | | | | | | | |
| Installation Kits N/R | 1 | * | | | | 3.8 | | 11.9 | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| GPS | 2,047 | 173.8 | | | | | | | | | | | | | | | | | | |
| NAVWAR | 123 | 4.5 | | | 16 | 1.9 | 51 | 4.1 | | | | | | | | | | | | |
| Installation Equipment N/R | | 18.7 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| NAVWAR Kit ECO | | 0.3 | | | | | | | | | | | | | | | | | | |
| Data | | 7.8 | | | | * | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| GPS | 114 | 7.8 | | | | | | | | | | | | | | | | | | |
| NAVWAR | 1 | 0.1 | | | 1 | 0.1 | | | | | | | | | | | | | | |
| Support Equipment | | 0.3 | | | | | | | | | | | | | | | | | | |
| ILS | | 0.4 | | | | 0.1 | | 0.2 | | | | | | | | | | | | |
| Other Support | | 72.2 | | 0.1 | | 1.6 | | 2.7 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 91 | 1.1 | 6 | 0.1 | 25 | 0.2 | 10 | 0.2 | | | | | | | | | | | | |
| **Total Procurement** | | **288.5** | | **0.1** | | **8.2** | | **20.2** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Installation Equipment NR provides non recurring engineering on kits installed in subsequent years. Qty of 1 in FY03 procured as prototype and not installed.
4. Installation Kit, Installation Equipment and Installation unit costs vary by platform due to different equipment configurations.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: All aircraft

MODIFICATION TITLE: Global Positioning System (GPS) (OSIP 71-88)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Equipment is provided to the platform PMA and installed as per airframe ECP/AFC.

ADMINISTRATIVE LEADTIME: 3

PRODUCTION LEADTIME: 10

CONTRACT DATES: FY 2005: _____ FY 2006: Dec-05 FY 2007: Dec-06

DELIVERY DATE: FY 2005: _____ FY 2006: Oct-06 FY 2007: Oct-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 91 | 1.1 | 6 | 0.1 | 25 | 0.02 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 10 | 0.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **91** | **1.1** | **6** | **0.1** | **25** | **0.02** | **10** | **0.2** | | | | | | | | | | | | |

**FY03 (1) HH-60 A-kit installation reflected in Installation Kit N/R line.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 91 | | | | 6 | | 8 | 8 | 9 | 3 | 3 | 3 | 1 | | | | | | | | | | | | |
| Out | 91 | | | | 6 | | 8 | 8 | 9 | 3 | 3 | 3 | 1 | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: AN/ARC-210 Electronic Protection (EP) Combination Radio (OSIP 04-94)

MODELS OF SYSTEMS AFFECTED: AH-1W, AV-8B, C-2, CH-46E, C/MH-53D/E, EA-6B, KC-130F/R/T, F/A-18C/D, UH-1N, C-130, HH-60 TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: The AN/ARC-210 is a combination UHF/VHF, AM/FM jam-resistant radio that was developed to allow for EP interoperability with the Air Force, Army and NATO. The radio provides dual UHF capability for CV based TACAIR; VHF AM for close air support and maritime channels; VHF AM for air traffic control; and EP capabilities using the Air Force developed waveforms (UHF-AM HAVEQUICK I and II), and the Army developed waveform (VHF-FM SINCGARS). The AN/ARC-210 can be controlled by either a remote control unit or via a MIL-STD-1553 multiplex data bus. The EP parameters and single channel preset information can be loaded via a CYZ-10 Data Transfer Device (DTD). The fill information can consist of word-of-the-day for HAVEQUICK; the KGV-10 transec variable, hopsets and frequency lock-out tables for SINCGARS. Engineering Change Proposal (ECP) 12 incorporated embedded Demand Assigned Multiple Access (DAMA) Satellite Communications (SATCOM), embedded COMSEC, embedded Variable Message Format (VMF), Link 4A, and is compatible with the memory loader verifier. ORD # 333-06-93 dated 4/20/93 validated this modification.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: The AN/ARC-210 Common OSIP provides B-kits and common logistics requirements to multiple aircraft. Individual platform OSIPs include non-recurring engineering, integration, A-kit manufacturing and unique aircraft logistic requirements. Full rate Production Decision was approved in May 1994. Incorporation of these hardware mods will be accomplished via an ECP to the production receiver/transmitters configuration. Corresponding platform OSIP numbers; C-2A OSIP 24-94; AH-1W OSIP 3-93; AV-8B OSIP 23-93; CH-46E OSIP 9-92; EA-6B OSIP 42-93; F/A-18C/D OSIP 39-92 and 10-99; K/C-130F/R/T OSIP 2-92; UH-1N OSIP 15-92; CH/MH-53D/E OSIP 11-92.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| AN/ARC-210 Kit | 31 | 2.8 | 47 | 1.6 | 42 | 0.3 | | | | | | | | | | | | | | |
| Installation Kits N/R | | 3.5 | | 3.9 | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| AN/ARC-210 Equip | 2,980 | 175.2 | 170 | 10.3 | 94 | 5.2 | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 5.0 | | 0.9 | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | 8.0 | | | | | | | | | | | | | | | | | | |
| Data | | 4.8 | | 0.3 | | | | | | | | | | | | | | | | |
| Training Equipment | 36 | 3.0 | | 0.1 | | * | | | | | | | | | | | | | | |
| Support Equipment | | 9.7 | | 0.2 | | | | | | | | | | | | | | | | |
| ILS | | 11.7 | | 1.6 | | 0.6 | | | | | | | | | | | | | | |
| Other Support | | 31.8 | | 4.0 | | 1.7 | | 0.4 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 7 | 0.6 | 20 | 1.7 | 12 | 1.0 | | | | | | | | | | | | |
| **Total Procurement** | | **255.4** | | **23.4** | | **9.4** | | **1.4** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. A-Kits for F/A-18C/D and KC-130 procured in FY 04-06. Installs are reflected in platform OSIP's.
4. A kits in FY04-06 are for KC-130, F/A-18C/D, HH-60

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: AH-1W, AV-8B, C-2, CH-46E, C/MH-53D/E, EA-6B, KC-130F/R/T, F/A-18C/D, UH-1N, C-130, HH-60

MODIFICATION TITLE: AN/ARC-210 Electronic Protection (EP) Combination Radio (OSIP 04-94)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Prime Contractor

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005: Mar-05 FY 2006: Mar-06 FY 2007:

DELIVERY DATE: FY 2005: Feb-06 FY 2006: Feb-07 FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | 7 | 0.6 | 3 | 0.3 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | 17 | 1.4 | 10 | 0.9 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 2 | 0.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **7** | **0.6** | **20** | **1.7** | **12** | **1.0** | | | | | | | | | | | | |

*Note: KC-130 installation reflected in OSIP 02-92.
F/A-18 installations are reflected in OSIP 10-99.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 1 | 3 | 3 | 3 | 5 | 6 | 6 | 5 | 4 | 3 | | | | | | | | | | | | | |
| Out | | | 1 | 3 | 3 | 3 | 5 | 6 | 6 | 5 | 4 | 3 | | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: Crash Survivable Flight Incident Recorders (CSFIR) (OSIP 43-94)

MODELS OF SYSTEMS AFFECTED: AV-8B, F/A-18, VH-3D/60N, C/T-130, C-2, C-12, T-39, U/VP-3

TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: Chief of Naval Operations letter, Ser N8/5U640779 of 2 May 1995, directed the CSFIR implementation policy on Naval Aircraft. This modification will provide procurement and integrated logistics support of Navy common CSFIR and will include addressing obsolescence of commercial components. The CSFIR will be a crash hardened recorder of selective aircraft systems and position parameters to be used in support of aircraft mishap and incident investigations. RDC01-88-97 validate this modification.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Commercial off-the-shelf and non-developmental systems will be procured to the maximum extent feasible via open competition. Completed F/A-18 val/ver in 3rd quarter FY00. F/A-18 installations delayed due to war-time efforts; schedule extended out into FY07.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| CSFIR Kit | 424 | 12.0 | 7 | * | | | | | | | | | | | | | | | | |
| Installation Kits N/R | 12 | 20.6 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| CSFIR Equip | 443 | 9.8 | 7 | 0.1 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 3.6 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 1.2 | | | | | | | | | | | | | | | | | | |
| Training Equipment | 2 | 0.4 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | 3.2 | | * | | | | | | | | | | | | | | | | |
| ILS | | 3.0 | | 0.2 | | 0.1 | | | | | | | | | | | | | | |
| Other Support | | 18.5 | | 1.9 | | 0.9 | | 0.1 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 356 | 9.3 | 33 | 0.5 | 19 | 0.3 | 23 | 0.3 | | | | | | | | | | | | |
| **Total Procurement** | | **81.6** | | **2.8** | | **1.2** | | **0.4** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: F/A-18, VH-3D/60N, C/T-130, C-2, C-12, T-39, U/VP-3

MODIFICATION TITLE: Crash Survivable Flight Incident Recorders (CSFIR) (OSIP 43-94)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor or USN Field Modification Team

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 2005: Dec-04 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: Jul-05 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 356 | 9.3 | 33 | 0.5 | 19 | 0.3 | 16 | 0.2 | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | 7 | 0.1 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **356** | **9.3** | **33** | **0.5** | **19** | **0.3** | **23** | **0.3** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 356 | 8 | 8 | 8 | 9 | 5 | 5 | 9 | | 8 | 8 | 7 | | | | | | | | | | | | | |
| Out | 356 | 8 | 8 | 8 | 9 | 5 | 5 | 9 | | 8 | 8 | 7 | | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a Individual Modification

MODIFICATION TITLE: AN/ARC-182 Reuse Modification Program (OSIP 40-95)

MODELS OF SYSTEMS AFFECTED: P-3C, S-3B, SH-2G TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: The AN/ARC-182 Modification Program will utilize previously procured AN/ARC-182 systems which will become available as the AN/ARC-210 system is retrofitted into Navy aircraft. The replaced AN/ARC-182 will be upgraded to meet the configuration needs of current AN/ARC-182 users vice procurement of a new system. The AN/ARC-182 modification will include receiver-transmitter and remote control units. Mounts, filters, switching units, and antennas will be procured by the platform OSIP to complete the aircraft AN/ARC-182 configuration requirements. ORD # W0661-CC dated 13 June 78, validates this modification.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: AN/ARC-182 is in production. Modified systems will be provided GFE to user platforms to meet aircraft installation requirements.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| AN/ARC-182 Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| AN/ARC-182 Equip | 185 | 0.6 | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.2 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | | | | | | | | | | | | | | | |
| Other Support | | 1.8 | | | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **Total Procurement** | | **2.6** | | | | | | | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: Ground Proximity Warning System (GPWS CAT I) Fixed Wing (OSIP 14-97)

MODELS OF SYSTEMS AFFECTED: KC-130T/F/R, VP-3, C-2A, S-3, UP-3, EA-6B, T-45 TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: The Ground Proximity Warning System (GPWS) is a low-cost, highly reliable stand-alone commercial set built to provide reliable integration of on-board sensor data and provides an aural warning for excessive descent rate, terrain closure rate, inadvertent descent below glideslope and descent below minimum. Commercial GPWS implementation has shown a demonstrated dramatic reduction in controlled flight into terrain incidents. ECP-130-108 increases system safety by eliminating known deficiencies and applies to military application during normal and low level mission requirements. ORD # 555-88-00 signed 1 May 00 validates this modification.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: GPWS CAT-I OPEVAL (P-3C) was successfully completed October 1993. USAF retrofitting all C-130 T/M/S with same unit as part of Autopilot Upgrade Program. USAF OPEVAL in C-130.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| GPWS CAT I Kit | 172 | 2.9 | 5 | * | 46 | 0.9 | 36 | 0.4 | | | | | | | | | | | | |
| Installation Kits N/R | 1 | 9.2 | | | | 0.4 | | 0.1 | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| GPWS CAT I Equip | 194 | 10.9 | 5 | 0.2 | 46 | 3.6 | 36 | 1.4 | | | | | | | | | | | | |
| Installation Equipment N/R | | 7.0 | | 3.9 | | 0.9 | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.9 | | | | 0.1 | | 0.1 | | | | | | | | | | | | |
| Training Equipment | 3 | 1.6 | | | | 0.3 | | 0.1 | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 2.2 | | 0.5 | | 0.5 | | 0.5 | | | | | | | | | | | | |
| Other Support | | 28.2 | | 5.5 | | 6.7 | | 4.5 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 132 | 3.1 | 11 | 0.4 | 32 | 1.0 | 47 | 1.6 | | | | | | | | | | | | |
| **Total Procurement** | | **66.1** | | **10.4** | | **14.4** | | **8.5** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Installation qty differ from Install kits/equipment due to installation of OFT trainers listed in training material.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: KC-130T/F/R, VP-3, C-2A, S-3, UP-3, EA-6B, T-45

MODIFICATION TITLE: Ground Proximity Warning System (GPWS CAT I) Fixed Wing (OSIP 14-97)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor or USN Field Modification Team

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: None FY 2006: Dec-05 FY 2007: Dec-06

DELIVERY DATE: FY 2005: FY 2006: Dec-06 FY 2007: Dec-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 132 | 3.1 | 11 | 0.4 | 28 | 0.9 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | 4 | 0.2 | 1 | * | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 46 | 1.5 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **132** | **3.1** | **11** | **0.4** | **32** | **1.0** | **47** | **1.6** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 132 | | 3 | 4 | 4 | 8 | 8 | 8 | 8 | 11 | 12 | 12 | 12 | | | | | | | | | | | | |
| Out | 132 | | 3 | 4 | 4 | 8 | 8 | 8 | 8 | 11 | 12 | 12 | 12 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: Ground Proximity Warning System (GPWS CAT III) Rotary Wing (OSIP 17-98)

MODELS OF SYSTEMS AFFECTED: C/MH-53, H-46, H-60 | TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: The Ground Proximity Warning System (GPWS), is a low-cost, highly reliable stand-alone commercial set built to provide reliable integration of on-board sensor data and provides an aural warning for excessive rate of descent, terrain closure rate, inadvertent descent below ILS glidescope and descent below minimum. Commercial GPWS implementation has demonstrated dramatic reduction in controlled flight into terrain (CFIT) accidents. NADEP CP ECP H53-004 and H46-75 will assist pilots in preventing collisions with the ground or water. ORD # 555-88-00 signed 1 May 00 validates this modification.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: GPWS CAT III completed Milestone II in July 1993. DT was fully successful in May 1996. OPEVAL was successfully completed in August 1996. Milestone III was completed in May 1997.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| GPWS CAT III (A-Kit) | 459 | 4.5 | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | 1.3 | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| GPWS CAT III Equip (** | 460 | 20.5 | | | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 9.4 | | * | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 1.0 | | | | | | | | | | | | | | | | | | |
| Training Equipment | | 1.4 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 1.3 | | 0.1 | | | | | | | | | | | | | | | | |
| Other Support | | 21.7 | | 2.4 | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 408 | 6.6 | 51 | 1.1 | | | | | | | | | | | | | | | | |
| **Total Procurement** | | **67.7** | | **3.7** | | | | | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Two Asterisks indicate that one additional B-Kit was procured for software integration laboratory use in FY98.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: C/MH-53, H-46, H-60 MODIFICATION TITLE: Ground Proximity Warning System (GPWS CAT III) Rotary Wing (OSIP 17-98)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor or USN Depot Field Modification Team

ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY 2005: FY 2006: FY 2007:

DELIVERY DATE: FY 2005: FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits** | 408 | 6.6 | 51 | 1.1 | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **408** | **6.6** | **51** | **1.1** | | | | | | | | | | | | | | | | |

**(2) kits in FY04 not installed due to loss of aircraft.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 408 | 13 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | | | |
| Out | 408 | 13 | 13 | 13 | 12 | | | | | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: Traffic Alert & Collision Avoidance System (TCAS) (OSIP 25-98)

MODELS OF SYSTEMS AFFECTED: C-2, C-130T, VP-3, KC-130, UP-3 | TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: CNO memorandum of 09 Nov 1999 directed TCAS implementation policy on Naval Aircraft. This modification will provide procurement and logistics support of a common TCAS. The TCAS will provide a display of situation awareness to aid in the prevention of midair mishaps. An ECP was approved in FY 99 to incorporate this change.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: TCAS Off-The-Shelf processor was selected. The ECP NRE effort for C-2, VP-3, and C-130T/KC-130 was accelerated and began in FY 98. Milestone III approved March FY01.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| TCAS Kit | 110 | 7.3 | 4 | 0.2 | | | | | | | | | | | | | | | | |
| Installation Kits N/R | 1 | 7.3 | | 0.1 | | 0.5 | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| TCAS Equip | 111 | 12.7 | 4 | 0.5 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 3.0 | | | | 0.4 | | | | | | | | | | | | | | |
| Engineering Change Orders | | 1.8 | | | | | | | | | | | | | | | | | | |
| Data | | 1.8 | | | | 0.2 | | | | | | | | | | | | | | |
| Training Equipment | 8 | 1.6 | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | 2.2 | | 0.2 | | 0.2 | | 0.1 | | | | | | | | | | | | |
| Other Support | | 12.5 | | 1.4 | | 0.9 | | 0.2 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | 89 | 4.2 | 15 | 0.8 | 11 | 0.7 | | | | | | | | | | | | | | |
| **Total Procurement** | | **54.4** | | **3.2** | | **2.9** | | **0.3** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: C-2, C-130T, VP-3, KC-130, UP-3

MODIFICATION TITLE: Traffic Alert & Collision Avoidance System (TCAS) (OSIP 25-98)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor or USN Field Modification Team

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: Dec-04 FY 2006: FY 2007:

DELIVERY DATE: FY 2005: Dec-05 FY 2006: FY 2007:

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | 89 | 4.2 | 15 | 0.8 | 7 | 0.4 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | 4 | 0.3 | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | **89** | **4.2** | **15** | **0.8** | **11** | **0.7** | | | | | | | | | | | | | | |

*KC130 Qty includes installation of (1) Maint. Trainer

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 89 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | | | | | | | | | | | | | | | | |
| Out | 89 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | | | | | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: Communication - Navigation - Surveillance / Air Traffic Management (CNS/ATM) Systems (OSIP 21-01)

MODELS OF SYSTEMS AFFECTED: P-3C, EP-3E, C-2A, EA-6B, KC130J, VH-3D, VH-60N, F/A-18E/F, F/A-18C/D, E-2C, MH-60S, MH-60R, F/A-18A+, H-1, CH-53E, AV-8B, TAV-8B, UP/VP-3A, NP-3C/D, MV-22B, MH-53E

TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: CNS/ATM provides new and enhanced Common Avionics equipment to comply with increasing ICAO (International Civil Aviation Organization) Standards and mandates. Areas impacted are worldwide, including transoceanic routes, as well as European and US National Air Space. Aircraft which are non-compliant with these standards and country mandates will be operationally delayed, circuitously rerouted, or denied access to controlled airspace. Some requirements are already in place (i.e. 8.33KHz VHF radio channels in Europe, Oct 99), while others are scheduled for implementation throughout the next several years (i.e.: Mode S, March 2009).

Prioritization of platform type and quantity is based on mission and anticipated operation in affected airspace. Enhanced functionality includes Mode S (Common Transponder and Aircraft Personality Module), 8.33KHz VHF channel spacing, RNP-4 integrity, Protected Instrument Landing System (P-ILS), Multi-Mode Receiver, and cockpit processing and display capability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
Began Mode S and RNP/RNAV integration into P-3 and C-2 in 2004. Achieve IOC by 07
Began Mode S and RNP/RNAV integration into E-2 in 2005 . Achieve IOC by 07
Began integration of 8.33 KHz VHF Radio into P-3C by 05 . Achieve IOC by 2007

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| CNS/ATM Kit | 15 | 0.2 | 46 | 2.2 | 60 | 2.5 | 277 | 6.2 | | | | | | | | | | | | |
| Installation Kits N/R | | 1.2 | | 0.8 | | 1.7 | | 0.8 | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| CNS/ATM Equip | 48 | 1.4 | 50 | 7.2 | 80 | 10.6 | 295 | 15.9 | | | | | | | | | | | | |
| CNS/ATM P-ILS | 574 | 2.2 | 139 | 0.5 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 9.9 | | 25.0 | | 9.3 | | 3.2 | | | | | | | | | | | | |
| Engineering Change Orders | | 0.1 | | | | 1.7 | | 1.4 | | | | | | | | | | | | |
| Data | | * | | 0.8 | | 0.3 | | 1.0 | | | | | | | | | | | | |
| Training Equipment | | | | 0.6 | | 3.2 | | 4.1 | | | | | | | | | | | | |
| Support Equipment | | | | | | 0.3 | | 0.4 | | | | | | | | | | | | |
| ILS | | 0.1 | | 1.2 | | 2.0 | | 1.4 | | | | | | | | | | | | |
| Other Support | | 9.9 | | 22.0 | | 23.3 | | 20.6 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 12 | 0.5 | 56 | 3.8 | 155 | 5.0 | | | | | | | | | | | | |
| **Total Procurement** | | 25.0 | | 60.7 | | 58.8 | | 59.9 | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. A-Kits, B-Kits, and Installation cost varies due to multiple & different functionalities/systems on each aircraft T/M/S
4. B-Kits quantities differ from A-Kits where B-Kits consists of a card or module that will be integrated without A-Kit requirement.
5. Installation Kit/Installation Equipment quantities reflect number of units procured, installation quantity reflects number of aircraft.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: P-3C, EP-3E, C/KC-130, C-2A, EA-6B, KC130J, VH-3D, VH-60N, F/A-18E/F, F/A-18C/D E-2C, MH-60S, MH-60R, F/A-18A+, H-1, CH-53E, AV-8B, TAV-8B,UP/VP-3A, NP-3C/D, MV-22B, MH-53E

MODIFICATION TITLE: CNS/ATM (OSIP 21-01)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: USN Field Modification Team

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 2005: Feb-05 FY 2006: Feb-06 FY 2007: Feb-07

DELIVERY DATE: FY 2005: Jan-06 FY 2006: Jan-07 FY 2007: Jan-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | 48 | 1.5 | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | 12 | 0.5 | 56 | 3.8 | 2 | 0.1 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 97 | 3.1 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 8 | 0.3 | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **12** | **0.5** | **56** | **3.8** | **155** | **5.0** | | | | | | | | | | | | |

**Notes: E-2C GNS-530 COTS item; no production lead time.
Difference in A-kits and Installations (589) are as follows: Increase of KC-130J (50) B-kits, MH-60R (7) B-kits, MH-60S (78) B-kits, F/A-18E/F (86) B-kits and (163) B-kits procured by PMA265, F/A-18A+ (72) B-kits, F/A-18C/D (135) B-kits, Decrease of MH-53E (2) installed by platform OSIP.

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 4 | 4 | 4 | | 18 | 19 | 19 | 38 | 38 | 39 | 40 | | | | | | | | | | | | |
| Out | | | 4 | 4 | 4 | | 18 | 19 | 19 | 38 | 38 | 39 | 40 | | | | | | | | | | | | |

| | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: Tactical Aircraft Moving Map Capability (TAMMAC) (OSIP 02-02)

MODELS OF SYSTEMS AFFECTED: F/A-18C/D/E/F, AV-8B, AH-1W, UH-1Y — TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: TAMMAC provides the aircrew an easily assimilated graphical presentation of the aircraft's position and the relative positions of targets, threats, terrain features, planned mission flight path, no fly zones, safe bases and other objects. TAMMAC will present the aircraft's current situation on a map using new or existing cockpit displays. In addition to providing a basic moving map capability, the TAMMAC system will serve as a memory resource for the overall aircraft mission system and will incorporate an improved data transfer and recording capability. This memory resource includes a data loader function of sufficient memory capacity and speed to load/update all required map theater and mission specific databases as well as the ability to record mission and maintenance data. TAMMAC will also provide a Terrain Awareness Warning System (TAWS) capability. The principle benefits anticipated, increased mission effectiveness and survivability, arise from improved situation awareness, reduced crew workload and enhanced capability for precision navigation, targeting, terrain avoidance, and mission replanning. TAMMAC is comprised of two Weapon Replaceable Assemblies (WRA), the Advanced Memory Unit (AMU) and the Digital Map Computer (DMC). The Digital Video Map Computer (DVMC) , a DMC variant, will be utilized for Lot 26 and above F/A-18E/F aircraft . The TAMMAC system will replace the existing Navy AN/ASQ-196 Digital Map Set in the older aircraft, which is facing major parts obsolescence problems and is not capable of growing to support future requirements. TAMMAC will also replace the AN/ASQ-194 Data Storage Set which has insufficient memory and loading speed to load map theater databases. DVMCs are procured to replace F/A-18E/F DMCs installed in Lot 26 and 27. The DMC will be reused in the C/D retrofit program.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
Milestone III approved April 01.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| TAMMAC Kit | 80 | 0.1 | 80 | 0.1 | 99 | 1.2 | 93 | 0.8 | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| TAMMAC Equip | 236 | 9.3 | 116 | 7.5 | 76 | 5.6 | 171 | 9.4 | | | | | | | | | | | | |
| Installation Equipment N/R | | 12.4 | | 0.9 | | 1.4 | | 8.0 | | | | | | | | | | | | |
| Engineering Change Orders | | | | 0.5 | | 0.8 | | 0.4 | | | | | | | | | | | | |
| Data | | 0.1 | | 0.3 | | 0.7 | | | | | | | | | | | | | | |
| Training Equipment | | | | 0.1 | | * | | 0.2 | | | | | | | | | | | | |
| Support Equipment | 70 | 0.8 | 90 | 0.3 | 77 | 0.2 | 90 | 0.3 | | | | | | | | | | | | |
| ILS | | 0.2 | | 0.4 | | 0.5 | | 0.5 | | | | | | | | | | | | |
| Other Support | | 3.6 | | 3.4 | | 4.3 | | 2.4 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | 4 | 0.1 | 83 | 0.6 | 97 | 1.9 | | | | | | | | | | | | |
| **Total Procurement** | | **26.7** | | **13.4** | | **15.3** | | **23.8** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Difference in A and B kits reflect procurements of AMU only and DVMC retrofits - no A kit required.
4. F/A-18 OSIP # 16-01 reflects 29 AMU only procurements in FY01.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: F/A-18C/D/E/F, AV-8B, AH-1W, UH-1Y

MODIFICATION TITLE: Tactical Aircraft Moving Map Capability (TAMMAC) (OSIP 02-02)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: USN Field Modification Team

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: Jan-05 FY 2006: Jan-06 FY 2007: Jan-07

DELIVERY DATE: FY 2005: Jan-06 FY 2006: Jan-07 FY 2007: Jan-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits ** | | | 4 | 0.1 | 83 | 0.6 | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | 85 | 1.6 | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 12 | 0.2 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | **4** | **0.1** | **83** | **0.6** | **97** | **1.9** | | | | | | | | | | | | |

**Notes:

** FY02 F/A-18 C/D/E/F (8) VAL/VER units: corresponding A-kits are in F-18 OSIP NRE line.

** FY04 AV-8B (3) VAL/VER units: corresponding A-kits are in AV-8B OSIP NRE line.

**FY05 AV-8B Trainer (5) units: corresponding A-kits are in AV-8B OSIP NRE line.

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | 4 | | | | 27 | 28 | 28 | | 32 | 32 | 33 | | | | | | | | | | | | |
| Out | | | 4 | | | | 27 | 28 | 28 | | 32 | 32 | 33 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: Advanced Mission Computer & Displays (AMC&D)/ Multipurpose Color Display (MPCD) (OSIP 01-02)

MODELS OF SYSTEMS AFFECTED: F/A-18C/D/E/F, AV-8B, T-45 TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: Advanced Mission Computer and Displays (AMC&D) System is targeted to replace existing aging/obsolete and performance limited AN/AYK-14(V) Mission Computer (MC) and Contractor Furnished Equipment Displays. AMC&D system consists of an Advanced Mission Computer (AMC) which includes Mission Processing and Display Processing, Display Heads (DH), High-Speed Data Bus interfaces with Fiber Channel Network Switches (FCNS) and an 8x10 display. AMC&D system will have modular components integrated on an Open Systems Architecture so that it can be tailored and configured for each application, and can address new performance requirements and technologies with minimum cost. AMC&D will provide improved mission computers and displays to handle increased requirement for flight, mission, and imagery data. Due to obsolescence problems with the current Multipurpose Color Display (MPCD) display, the AMC&D program is leveraging the 5x5 DH to provide a form, fit, function and interface replacement (no install funding required). Analysis of parts obsolescence will be required to maintain current AMC&D configuration and to determine life of type procurements as required. MPCD production buys begin in FY02 (no installation required) and AMC&D LRIP production buys began in FY01 with FRP buys planned in FY04. The F/A-18E/F Retrofit Program (begins in FY06) goal is to achieve a 2-block configuration. Block 1 aircraft include Lots 23-25 and Block 2 includes Lots 26 and above. Block 1 will consist of replacing the AN/AYK-14 computers in Lots 23-24 and replacing the AMC with an newer configuration AMC in Lot 25. The computers are obtained as part of a reuse program from Block 2 portion of the upgrade and all Lots will require an A-kit. Lots 26 and 27 of Block 2 are provisioned to accept all WRAs for Block 2. The 06 procurement for Lots 26 consists of FCNS, displays and digital video mapping card. The 06 procurement for Lot 27 consists of displays, DVMC, and upgrade to a card in the AMC. To maintain the common block configuration, new AMCs are procured for both Lots in the out years. The AMCs removed from Lots 26 and 27 will be part of the reuse to the Block 1 configuration. The AMCs procured for Lot 28 and 29 do not require installation costs since they are a form fit function replacement for as-delivered AMCs. The systems removed from Lots 28 and 29 will be part of the reuse process. AMC&D MNS - M061-88-94 of 2 December 1994. AMC&D ORD Ser. No. 549-88-00 Approved 21 March 2000.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
AMC and 5x5 display CDR - 2nd Qtr FY01. FCNS CDR - 4th Qtr FY01, 8x10 CDR - 2nd Qtr FY02.
F/A-18E/F: OPEVAL - 2nd Qtr FY03, Milestone III - 4th Qtr FY04, OA - 3rd Qtr FY02, FOT&E 3rd Qtr FY04.
AV-8B DT-IIB-2 - 4th Qtr FY01, OPEVAL - 4th Qtr FY02, Milestone III - 2nd Qtr FY03.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| AMC&D Kit | | | | | | | 22 | 1.6 | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| AMC&D / MPCD Equip | 282 | 31.9 | 76 | 9.5 | 109 | 33.1 | 101 | 29.3 | | | | | | | | | | | | |
| Installation Equipment N/R | | 20.1 | | 13.8 | | 11.7 | | 4.8 | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | 0.9 | | 1.3 | | | | | | | | | | | | |
| Data | | 1.0 | | | | 0.1 | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | 1.4 | | 0.6 | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | 0.6 | | 0.6 | | | | | | | | | | | | |
| ILS | | 2.7 | | 1.8 | | 2.7 | | 2.9 | | | | | | | | | | | | |
| Other Support | | 9.8 | | 2.0 | | 2.6 | | 2.4 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | 12 | 0.3 | | | | | | | | | | | | |
| **Total Procurement** | | **66.9** | | **27.7** | | **51.7** | | **43.4** | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. MPCD is a drop-in-replacement. No A-kit required.
4. B-Kit (WRA) procured in outyears are necessary to meet common block configuration.
5. See Install footnote for further clarification.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: F/A-18C/D/E/F, AV-8B, T-45

MODIFICATION TITLE: Advanced Mission Computer & Displays (AMC&D)/ Multipurpose Color Display (MPCD) (OSIP 01-02)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Prime Contractor

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: _____ FY 2006: Mar-06 FY 2007: Mar-07

DELIVERY DATE: FY 2005: _____ FY 2006: Mar-07 FY 2007: Mar-08

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | 12 | 0.3 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | **12** | **0.3** | | | | | | | | | | | | |

Installation Schedule

| | FY 2004 | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | & Prior | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | 4 | 4 | 4 | | | | | | | | | | | | |
| Out | | | | | | | | | | | 4 | 4 | 4 | | | | | | | | | | | | |

| | FY 2011 | | | | To | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Complete | |
| In | | | | | | |
| Out | | | | | | |

* A-Kits, B-Kits and Installs do not align. A or B-Kits which require installation are shown.

** F/A-18's longest lead time component is 15 months.

**Note 1:**

**F/A-18E/F Installation Equipment per Lot that have cost**

| **Lot** | **Year of Procurement** | **Description** |
|---|---|---|
| Lot 27 | 2006/07/08/10 | B-Kits only |
| Lot 28 | 2006/07/08/09/10/11 | B-Kits only- AMC's (no installation costs) |
| Lot 29 | 2006/10/11 | B-Kits only- AMC's (no installation costs) |

**Year of Installation**

2007/08/11 (15 month lead time) A-kit previously provisioned. Only (25) 8x10 displays and FCNS require install costs.

Exhibit P-3a — Individual Modification

MODIFICATION TITLE: Attitude Gyro Upgrade (OSIP 07-04)

MODELS OF SYSTEMS AFFECTED: CH-53E, MH-53E, CH-60S, OP-3C, HH-60H/J, P-3C, H-46, SH-60B/F/H, and MH-60R

TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION: There are eleven (11) current attitude gyro systems in the CH-53E, MH-53E, CH-60S, EP-3C, HH-60H/J , P-3C, H-46, SH-60B/F/H, and MH-60R aircraft that are significant fleet operational and support cost drivers in the flight hour program. Two state-of-the-art Commercial-off-the-Shelf (COTS) products are available to improve readiness and reduce fleet operational and support costs in the flight hour program. The solution to the problem is to replace these obsolete gyros with a more reliable and maintainable gyro at the very lowest cost. In order to minimize time and cost for fleet introduction, replacement units shall be COTS in nature and be a form, fit, functional replacement.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Initial procurement awards were Rate Gyro's - March 2004 and Displacement Gyro's - May 2004.
COTS/NDI replacement system.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| Attitude Gyro Upgrade Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| Attitude Upgrade Equip | 89 | 2.0 | 2,003 | 8.6 | 916 | 4.3 | 984 | 8.2 | | | | | | | | | | | | |
| Installation Equipment N/R | | 1.0 | | 2.8 | | 2.2 | | 0.4 | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | 0.1 | | 0.7 | | 0.6 | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | 0.2 | | 0.3 | | 0.2 | | | | | | | | | | | | |
| Other Support | | 1.0 | | 2.5 | | 3.2 | | 2.6 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **Total Procurement** | | **4.0** | | **14.8** | | **10.5** | | **11.6** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: HH-60 AHRS Reliability & Improvement (CREI) (OSIP 08-04)

MODELS OF SYSTEMS AFFECTED: HH-60H | TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION:
The Attitude Heading Reference Systems (AHRS) Reliability Improvement initiative will address reliability, obsolescence and support problems for the HH-60H. The replacement system, A/A24G-51 is a COTS/NDI system which replaces the gyroscope, amplifier and remote compass transmitter. This more reliable, maintainable system is currently fielded in the CH-46E platform.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
COTS/NDI replacement system.

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| AHRS Kit | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| AHRS Equip | | | 32 | 0.6 | | | | | | | | | | | | | | | | |
| Installation Equipment N/R | | 1.0 | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | | | | | | | | | | | |
| Data | | | | | | | | | | | | | | | | | | | | |
| Training Equipment | | | | | | | | | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | * | | | | | | | | | | | | | | | | |
| Other Support | | * | | 0.1 | | | | | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | | |
| **Total Procurement** | | **1.0** | | **0.7** | | | | | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: Aircrew Wireless Internal Communications System (AWICS) (OSIP 09-04)

MODELS OF SYSTEMS AFFECTED: MH-53E, CH-46E, CH-53D/E, SH-60B/F, MH-60S/R, KC-130R/T, C-130T, KC-130J, MV-22B, C-2A, UH-3H, SH-3D, P-3 (all TMS), and UH-1

TYPE MODIFICATION: Common Avionics Modification

DESCRIPTION/JUSTIFICATION:
A wireless intercom system that will allow for unimpeded movement throughout the aircraft. This safety improvement will prevent aircrew/passenger entanglement with ICS (intercom system) cords in the event of a mishap. Unencrypted system will begin procurements in FY06, with encrypted system beginning procurements in FY08.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
Installation Decision (Unencrypted) 2nd Quarter 2006
Secure Transmission (encrypted) ECP 1st Quarter 2008

FINANCIAL PLAN: (TOA, $ in Millions)

| | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | |
| AWICS Kit | | | | | 87 | 0.2 | 244 | 0.5 | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | 0.6 | | 0.1 | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | |
| AWICS Equip | | | | | 87 | 1.1 | 244 | 3.2 | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | | | | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | 0.7 | | | | | | | | | | | | | | |
| Data | | | | | | 0.3 | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | | | | | 0.1 | | * | | | | | | | | | | | | |
| Support Equipment | | | | | | | | | | | | | | | | | | | | |
| ILS | | | | | | 0.6 | | 0.3 | | | | | | | | | | | | |
| Other Support | | | | | | 1.7 | | 1.3 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | 87 | 0.9 | 244 | 2.5 | | | | | | | | | | | | |
| **Total Procurement** | | | | | | **6.2** | | **8.0** | | | | | | | | | | | | |

Notes:
1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K
3. Differences in A Kit and B Kit quantities results from 406 FY08 and out encrypted type 1 appliques that have previously provisioned A kits.

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: MH-53E, CH-46E, CH-53D/E, SH-60B/F, MH-60S/R, KC-130R/T, C-130T, KC-130J, MV-22B, C-2A, UH-3H, SH-3D, P-3 (all TMS), and UH-1

MODIFICATION TITLE: Aircrew Wireless Intercom Communications System (AWICS) (OSIP 09-04)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor or USN Field Modification Team

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 2005: FY 2006: Mar-06 FY 2007: Nov-06

DELIVERY DATE: FY 2005: FY 2006: Jun-06 FY 2007: Feb-07

($ in Millions)

| Cost: | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | 87 | 0.9 | | | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | 244 | 2.5 | | | | | | | | | | | | |
| FY 2008 ( ) kits ** | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | **87** | **0.9** | **244** | **2.5** | | | | | | | | | | | | |

**Note: FY08 retrofits unencrypted maintenance trainers to type 1 applique (encrypted) maintenance trainers. The following maintenance trainers apply: MH-53E (1), CH-46E (2), and CH-53D (1).

Installation Schedule

| | FY 2004 & Prior | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | 41 | 46 | | 81 | 81 | 82 | | | | | | | | | | | | |
| Out | | | | | | | | 41 | 46 | | 81 | 81 | 82 | | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **COMMON DEFENSIVE WEAPON SYSTEM** | | | | | |
| Program Element for Code B Items: 0205601N | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | | B | 7.7 | 13.6 | 13.7 | | | | | 27.9 | 62.8 | |

DESCRIPTION:

The Common Defensive Weapon System (CDWS) is a .50 Caliber Medium Pintle Head (MPH) mounted weapon system which is being procured to replace the GAU-16 and the XM-218.50 caliber machine guns. The CDWS provides a significant increase in firepower, accuracy, lethality, and reliability, and will maximize survivability through suppressive fire capabilities for Marine Corps assault support aircraft. Procurement of the system began in FY03. The CDWS consists of a GAU-21 .50 Caliber machine gun, a MPH mount with recoil dampening buffers, and an aircraft integration/mounting kit. This system will increase aircraft/aircrew survivability during assault support missions by increasing the effective range and rate of fire as compared to current systems.

Basis for FY07 Funding: Complete the outfitting of the CH-46 and begin outfitting of UH-1.

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 003-06 CDWS | | 7.7 | 13.6 | 13.7 | | | | | 27.9 | 62.8 |
| TOTAL | | 7.7 | 13.6 | 13.7 | | | | | 27.9 | 62.8 |

Totals may not add due to rounding
DD Form 2454, Jun 86

Exhibit P-3a

MODIFICATION TITLE: COMMON DEFENSIVE WEAPON SYSTEM( OSIP 003-06 )

MODELS OF SYSTEMS AFFECTED: CH-53D/E, CH-46, UH-1, V-22 TYPE MODIFICATION: MISSION/MISSION ENHANCEMENT

DESCRIPTION / JUSTIFICATION:

The Common Defensive Weapon System (CDWS) is a .50 Caliber Medium Pintle Head (MPH) mounted weapon system which will provide enhanced defensive and suppressive fire for Marine Corps assault support aircraft. The CDWS consists of a GAU-21 .50 Caliber machine gun, a MPH mount with recoil dampening buffers, and an aircraft integration/mounting kit. This system will increase aircraft/aircrew survivability during assault support missions by increasing the effective range and rate of fire as compared to current systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

The GAU-21 .50 Caliber Machine Gun is a Commercial Off-the-Shelf (COTS) item ready for deployment on Marine Corps assault support aircraft (CH-46, CH-53, and UH-1, V-22). The MPH and aircraft integration kit's base designs are also COTS though kit modifications for each T/M/S aircraft must still be finalized. CDWS is also being integrated on USN platform MH-60R/S through their own budget line, thus enhancing the common configurations between USN and USMC. All non-recurring engineering efforts were completed during FY03 under BLI 052800, H-53 Series, OSIP 18-03. Total does not include FY04 Operation Iraqi Freedom (OIF) supplemental received under H-53 Series, OSIP 18-03 which procured the Ramp Mounted Weapons System. Milestone C review for Left-Hand Right-Hand Window GAU-21 .50 Caliber Machine Gun is scheduled for February 2006.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53E/D A KITS | | | 104 | 3.7 | 218 | 7.7 | | | | | | | | | | | | | | |
| CH-46 | | | | | 10 | 0.4 | 142 | 5.0 | | | | | | | | | | | | |
| UH-1 | | | | | | | 92 | 3.3 | | | | | | | | | | | | |
| V-22 | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| CH-53E/D | | | 104 | 1.9 | 218 | 3.9 | | | | | | | | | | | | | | |
| CH-46 | | | | | 10 | 0.2 | 142 | 2.6 | | | | | | | | | | | | |
| UH-1 | | | | | | | 92 | 1.7 | | | | | | | | | | | | |
| V-22 | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | | | * | | 0.4 | | | | | | | | | | | | | | |
| TRAINING EQUIP | | | | * | | | | | | | | | | | | | | | | |
| SUPPORT EQUIP | | | | 1.7 | | | | | | | | | | | | | | | | |
| ILS | | | | | | 0.6 | | 0.8 | | | | | | | | | | | | |
| OTHER SUPPORT | | | | 0.3 | | 0.3 | | 0.3 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | | | | | | | | | | | | | | | | | | | | |
| TOTAL PROCUREMENT | | | 208 | 7.7 | 456 | 13.6 | 468 | 13.7 | | | | | | | | | | | | |

Notes:
1. Asterisk indicates amount less than $51k.
2. O-Level Installation

**CLASSIFICATION: UNCLASSIFIED**

**Exhibit P-40, BUDGET ITEM JUSTIFICATION**

DATE: **February 2006**

APPROPRIATION/BUDGET ACTIVITY
**Aircraft Procurement, Navy/APN-5 Aircraft Modifications**

P-1 ITEM NOMENCLATURE
**ID SYSTEMS**

Program Element for Code B Items:

Other Related Program Elements

| | | Prior Years | ID Code | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QTY | | | B | | | | | | | | | |
| COST (In Millions) | | | B | **1.6** | **7.6** | **11.1** | **11.3** | **6.7** | **24.0** | **30.8** | **147.1** | **240.2** |

DESCRIPTION/JUSTIFICATION:
MK XIIA Mode 5 provides improved secure cooperative combat identification throughout Identification Friend or Foe (IFF). MODE 5 is a product improvement which is designed to be installed throughout engineering changes to digital MK XII interrogators and transponders including, but not limited to, the APX-118, UPX-37, APX-111, RT-1832, APX-119, and XS-950SI. Mode 5 is designed to be installed in all Navy T/M/S aircraft which are currently Mode 4 IFF capable. Mode 5 is developed in cooperation with NATO and is governed by STANAG 4193. Mode 5 was designated a "JROC special interest" program in March 2001 and is interoperable across all services. ORD # 577-06-01. Mode 5 procurements will include, but not limited to, cryptography, long lead items, low-rate initial production units, full rate productions units, support/test equipment, and associated hardware and software changes for aircraft installations. FY07 funding will be used for Mode 5 Engineering Change Proposal (ECP) non-recurring integration efforts for Mode 5 lead Air platforms including, but not limited to, EA-6B, MH-60, and E-2.
FY03 funding for this OSIP resides in BLI 052500 under OSIP number 15-03.

(TOA, $ in Millions)

| OSIP No. | Description | PRIOR YEARS | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15-03 | MARK XIIA Mode 5 IFF | | 1.6 | 7.6 | 11.1 | 11.3 | 6.7 | 24.0 | 30.8 | **147.1** | **240.2** |
| **Total** | | | **1.6** | **7.6** | **11.1** | **11.3** | **6.7** | **24.0** | **30.8** | **147.1** | **240.2** |

Exhibit P-3a | Individual Modification

MODIFICATION TITLE: MARK XIIA MODE 5 IFF OSIP (15·MARK XIIA MODE 5 IFF OSIP (15-03)

MODELS OF SYSTEMS AFFECTED: VARIOUS (49 Separate T/M/S) TYPE MODIFICATION: CAPABILITY IMPROVEMENT

DESCRIPTION/JUSTIFICATION:
MK XIIA Mode 5 provides improved secure cooperative combat identification throughout Identification Friend or Foe (IFF). MODE 5 is a product improvement which is designed to be installed throughout engineering changes to digital MK XII interrogators and transponders including the APX-118, UPX-37, APX-111, RT-1832, APX-119, and XS-950SI. Mode 5 is designed to be installed in all Navy T/M/S aircraft which are currently Mode 4 IFF capable. Mode 5 is developed in cooperation with NATO and is governed by STANAG 4193. Mode 5 was designated a "JROC special interest" program in March 2001 and is interoperable across all services. ORD # 577-06-01. Mode 5 upgrades existing Mode 4 IFF equipment, including but not limited to cryptography, support equipment, and associate hardware and software changes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MODE 5 completed a brassboard development in December 1997. Modeling and Simulation to demonstrate interoperability was completed in February of 1998 to support NATO STANAG development. Proof of concept flight testing completed in December 1999. A Preliminary Design Review (PDR) for the proposed ICP to incorporate MODE 5 in the APX-118 was completed in July 2001. Contracts to develop a prototype Cryptographic Module and ECP kit are presently being executed. Milestone B was completed in May 2003. Milestone C and LRIP decision are scheduled for June 2006. Operational Assessment (OA) is scheduled for 1Q-2Q FY06 with Operational Evaluation (OE) in 1Q FY08. Due to the need for additional developmental efforts resulting from requirements definitization, numerous test events have been rescheduled, and Milestone C delayed from September 2005 to June 2006. A revised Acquisition Program Baseline Agreement is being drafted, per ASN(RDA) direction, and is being routed for approval. Milestone C and LRIP decision are scheduled for June 2006.

FINANCIAL PLAN: (TOA, $ in Millions)

| | | | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY2010 | | FY2011 | | To Complete | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| RDT&E | | | | 42.2 | | 5.7 | | 14.4 | | 13.4 | | 13.7 | | 13.9 | | 16.3 | | 16.6 | | | | 136.2 |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | | | |
| Installation Kits | | | | | | | | | | | | | | | | | | | | | | |
| PLATFORM Installation A-Kits | | | | | | | | | | | | | | | | | | | | | | |
| Installation Kits N/R | | | | | | 1.1 | | | | | | | | | | | | | | | | |
| Installation Equipment | | | | | | | | | | | | | | | | | | | | | | |
| Mode 5 IFF B-KIT | | | | | | | 23 | 0.4 | 95 | 1.5 | | | | | | | | | | | | |
| Installation Equipment N/R | | | | | | 0.4 | | 1.5 | | 2.4 | | | | | | | | | | | | |
| Engineering Change Orders | | | | | | | | | | 0.1 | | | | | | | | | | | | |
| Data | | | | | | | | 0.1 | | 0.1 | | | | | | | | | | | | |
| Training Equipment | | | | | | * | | 0.3 | | 0.4 | | | | | | | | | | | | |
| Support Equipment | | | | | | | | 1.6 | | 3.3 | | | | | | | | | | | | |
| ILS | | | | | | | | 0.3 | | 0.3 | | | | | | | | | | | | |
| Other Support | | | | | | | | 3.4 | | 3.0 | | | | | | | | | | | | |
| Interim Contractor Support | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | 23 | 0.1 | | | | | | | | | | | | |
| **Total Procurement** | | | | | | **1.6** | | **7.6** | | **11.1** | | | | | | | | | | | | |

Notes:

1. Totals may not add due to rounding
2. Asterisk indicates amount less than $50K

**Exhibit P-3a**

MODELS OF SYSTEMS AFFECTED: **VARIOUS (49 Separate T/M/S)** MODIFICATION TITLE: MARK XIIA MODE 5 IFF OSIP (15-03)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **FIELD INSTALL KITS and VENDOR DEPOT ECP INSTALLATION**

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2005: N/A FY 2006: Mar-06 FY 2007: Nov-06

DELIVERY DATE: FY 2005: N/A FY 2006: Mar-07 FY 2007: Nov-07

($ in Millions)

| Cost: | | | Prior Years | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | To Complete | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | **$** |
| FY 2003 & PY ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2004 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2005 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2006 ( ) kits | | | | | | | | | 23 | 0.1 | | | | | | | | | | | | |
| FY 2007 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2008 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2009 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2010 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| FY 2011 ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| To Complete ( ) kits | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | **23** | **0.1** | | | | | | | | | | | | |

Installation Schedule

| | PRIOR | FY 2004 | | | | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | YEARS | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | | | | | | | | | | | | | | | 3 | 10 | 10 | | | | | | | | |
| Out | | | | | | | | | | | | | | | 3 | 10 | 10 | | | | | | | | |

| | FY 2010 | | | | FY 2011 | | | | To | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | Complete | Total |
| In | | | | | | | | | | |
| Out | | | | | | | | | | |

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | DATE: February 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: **Aircraft Procurement, Navy / APN5 Aircraft Modifications** | | | | | | | P-1 ITEM NOMENCLATURE: **V-22 SERIES** | | | | | |
| Program Element for Code B Items: | | | | | | | Other Related Program Elements | | | | | |
| | PRIOR YEARS | ID Code | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL | |
| QUANTITY | | | | | | | | | | | | |
| COST (In Millions) | 60.0 | B | 3.7 | 80.0 | 85.8 | 46.9 | 25.1 | 25.6 | 26.2 | 1123.2 | 1476.5 | |

DESCRIPTION: The V-22 is a tilt-rotor, vertical takeoff and landing aircraft currently being developed for joint service application. The program is being designed to provide an aircraft to meet the amphibious/vertical assault needs of the Marine Corps, the strike rescue needs of the Navy, and supplement USSOCOM special mission aircraft. The aircraft will be capable of flying 2,100 miles with one refueling, giving the Services the advantage of a Vertical/Short Takeoff and Landing (V/STOL) aircraft the could rapidly self-deploy to any location in the world.

The FY 2007 budget request reflects the funding level necessary to correct currently known deficiencies and allow the program to move forward. The FY 2007 modifications program procures retrofit kits necessary to correct discrepancies identified during initial flight testing as well as those resulting from any redesign efforts.

The current procurement objective is 458: 360 MV-22 Marine Corps aircraft, 48 HV-22 Navy aircraft, and 50 CV-22 aircraft for USSOCOM.

Type Modifications: Safety, Reliability, Increased Service Life, Improved Mission Capabilities

| OSIP No. / DESCRIPTION | PRIOR YEARS | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | TO COMPLETE | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 022-01 MV-22 CORR OF DEFIENCIES AND PRE BLOCK A THROUGH C | 60.0 | 3.7 | 80.0 | 85.8 | 46.9 | 25.1 | 25.6 | 26.2 | 1123.2 | 1476.5 |
| TOTAL | 60.0 | 3.7 | 80.0 | 85.8 | 46.9 | 25.1 | 25.6 | 26.2 | 1123.2 | 1476.5 |

Exhibit P-3a

MODIFICATION TITLE: MV-22 CORRECTION OF DEFIENCIES AND PRE BLOCK A THROUGH C (OSIP 022-01 )

MODELS OF SYSTEMS AFFECTED: V-22 SERIES TYPE MODIFICATION:

DESCRIPTION / JUSTIFICATION:
Future ECPs:
PRE BLOCK A, BLOCK A, BLOCK B, and BLOCK C: Major configuration changes are associated with the aircraft Propulsion/Drive, Electrical, Avionics, Hydraulics, Structure/Airframe, Fuel, Software, and Environmental Control System (ECS).
Specifically included are Nacelle changes, Avionics, Blade Fold Harness, Fuel Probe, Active Vibration Suppression System, Constant Frequency Generator and Variable Frequency Generator. Additional configuration changes include Effectiveness and Suitability and Enhanced Capability. ECPs for (R&M changes, Ice Protection and Clam Shell Doors) are configuration items associated with production Block A, Block B, and Block C changes. Aircraft Retrofits are implemented to coincide with resources and aircraft availability , stand-alone retrofit ECPs are generated. These Retrofit ECPs are the implemention of the approved production Block Configuration changes.

ECP-344:
REGULATED CONVERTER: Incorporates fixes to alleviate concerns associated with spec compliance and eliminate nuisance failures for fleet aircraft.
SHAFT DRIVEN COMPRESSOR SCREEN: Incorporates a new shaft drive compressor screen with one piece inner and outer frames to reduce the number of parts and larger holes to increase air flow.
RAMP ACTUATOR: Incorporates fixes for reliability and life limit deficiencies. There are two ramp actuators per aircraft.
CARGO RESTRAINT SYSTEM: Changes the cargo restraint factors from a dynamic to a static tie down system to improve Fleet suitability.
FUEL ISOLATION TUBES: Incorporates the productionized final design for resistive tubes on hoses for lightning strike protection.
AVIONICS: Avionics modifications to the V-22 will improve display reliability, eliminate communication security issues and alleviate parts obsolescence/vendor problems. Changes to the V-22 avionics will include: Display System upgrade, Cockpit Inter Communication System modification, upgraded Mission Computer, updated Data Transfer Module, Control Display Unit/Engine Instrument Caution Advisory System upgrade, Control Display Unit Keyboard upgrad, and Avionics Interface Units upgrades.
POWER TRANSMISSION AND CONTROL: Changes to the V-22 Power Transmission and Control System will improve reliability and maintainability. Changes to the V-22 Power Transmission and Control System will include: swashplate reliability upgrades, engine gimbal ring/spherical bearing installation revision, updated refuel/defuel valve, bull gear shroud and engine gimbal ring.
COCKPIT: Changes to the V-22 cockpit will improve crew safety, mission suitability and overall reliability. Changes to the V-22 cockpit include: night vision goggle compatible hardware, upgraded inertial reels, upgraded pilot and co-pilot restraint system, throttle control lever soft stop modification, and improved rain removal.
STRUCTURAL: Structural changes to the V-22 will increase survivability, improve maintainability and aircraft availability, eliminate component interferences, improve suitability and correct safety related issues. Structural changes include: forward sponson fuel bladder access redesign/install powder panels, environmental control unit Ram air barrier filter, avionics left hand mounting tray, aft upper door strut, add manual drive decal, fold blades in high winds and modified trunnion fitting.
PRODUCTION ROTOR LIGHTING PROTECTION: Improves rotor system lighting protection by adding improved bonding harness and grounding strap bracket.
BRACKET HYDRAULIC LINE CLAMPING: Relocate clamping provisions from the removable conversion actuator fairing to the frame and improve the tube installation.
SWASHPLATE DRAG TUBE: Redesign Swashplate Drag Tube to increase part life.
WASHER: Washer to now be included with attach hardware to ensure adequate tying of the assembly.
RELIABILITY & MAINTAINABILITY FIXES: Includes Corrective Action Plans to make the aircraft compliant with Operation Requirements Document requirements.

ECP-400:
AIRCRAFT MAINTENANCE TRAINER: Improves training and pilot proficiency by incorporating modifications to the AMT #1 to reflect most current aircraft configuration as directed by Blue Ribbon Panel.

ECP-397:
FULL FIDELITY SIMULATOR (FFS) UPGRADES: Improves training and pilot proficiency by incorporating modifications to the FFS #1 & #2 to reflect most current aircraft configuration as directed by Blue Ribbon Panel.
FLIGHT TRAINING DEVICE (FTD) UPGRADES: Improves training and pilot proficiency by incorporating modifications to the FTD #1 to reflect most current aircraft configuration as directed by Blue Ribbon Panel.

ECP-427R1:
MECHANICAL PART TASK TRAINER: Improves maintainer and aircrew proficiency by incorporating Block 'A' configuration changes.

ECP-451:
INTERACTIVE MULTIMEDIA INSTRUCTION: Improves maintainer and aircrew proficiency by incorporating Block 'A' configuration changes.

ECP-511:
AIRFRAME PART TASK TRAINER , Incorporate Block 'B' configuration changes.

ECP-###: Block B safety configuration changes required to meet mission requirements. Changes are associated with the aircraft Propulsion/Drive, Electrical, Avionics, Hydraulics, and Structure/Airframe.

ECP-###: Block B safety, reliability and maintainability changes required to meet mission requirements. Changes are associated with the aircraft Propulsion/Drive, Electrical, Avionics, Hydraulics, and Structure/Airframe.

ECP-###: Shaft Driven Compressor Inlet Barrier Filter,

ECP-###: Wing Stow System, Incorporate hydraulic system isolation valve normally closed to inhibit Wing Stow System Forward 2 Lock Pin actuator from extending when performing wing maintenance.

ECP-###: Refuel/Defuel Valve, redesign of the refuel/defuel valve.

ECP-###: Gussets to Fairings, Install gussets to upper and lower flanges of fairings assembly.

ECP-###: Ramp Tunnel Redesign, redesign of the ramp tunnel.

ECP-###: Rotor Harness Redesign, Change the moldings area, extending them to the clamp locations on each side of the strap and squaring off the molded area.

ECP-###: MLG Door Hinge Redesign, new-thicker machined hinge replacement designed to meet current loading requirements.

ECP-###: ECU Water Spray Redesign, redesigned the water spray inlet assembly (U-tube) and the heat exchangercrossover tube assembly so the system tolerance can be increased to sand and dust ingestion.

ECP-###:
AMT #2, Improves training and pilot proficiency by incorporating modifications to the AMT #2 to reflect most current Block A and Block B aircraft configuration.

ECP-###: Forward Engine Air Bleed, Redesigned Air tube will improve reliability and increase aircraft safety.

ECP-539: Plugs & Covers, Redesigned plugs and covers to meet durability and operational suitability.

ECP-###: Lightweight Paint, improves aircraft suitability and reduces IR Vulnerability.

ECP-###: Cargo Hook Door Actuator, new design improves cargo hook door reliability and operational suitability.

ECP-###: NLG Shock Struts, Nose Landing Gear shock struts are a life limited part, redesigned struts will eliminate safety of flight issue.

ECP-493: Wheel & Brake, Redesign to improve reliability on the wheel, brake and components.

ECP-470: Lateral Mass Balance, design change that will increase lateral mass balance by 9 lbs and add new pads, tungsten plates and bellcrank.

ECP-471: Life Raft, designed for 20-man raft with overflow capacity to 30-man.

ECP-478: SDC Duct Leak Switch Set Point, Reliability change to SDC duct leak switches to reduce false alarm pilot nuisance alarms.

ECP-478: SDC Duct Leak Switch Set Point, Reliability change to SDC duct leak switches to reduce false alarm pilot nuisance alarms.

ECP-479: Suction Lift Pump Bypass Valve, Redesigned valve to prevent the diaphram inverting due to pressure spike.

ECP-###: Swashplate Actuator Hose, Redesign Hose end fittings of the swashplate Actuator ports by adding tabs so hoses can be oriented one way.

ECP-510: Climb Dive Valve, provides for redesign of the valve to decrease cracking pressure to 1.0-1.5ps.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
Future ECPs:
The MV-22 aircraft are currently in Low Rate Production. First acceptance and incorporation has been in production aircraft. All Awarded Kit deliveries and Installations are on schedule.
Installs: (284) does not include O-Level Installations at New River.

| FISCAL YEAR | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ | QTY | $ |
| RDT&E | | | | | | | | | | | | | | | | | | | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION KITS (A KITS) | | | | | | | | | | | | | | | | | | | | |
| Block A to B | | | | | | | 9 | 44.0 | | | | | | | | | | | | |
| Block B #1 | | | | | | | 20 | 0.3 | | | | | | | | | | | | |
| Block B #2 | | | | | | | 17 | 0.3 | | | | | | | | | | | | |
| Block C (120 A/C) | | | | | | | | | | | | | | | | | | | | |
| CCP-0107/Thrust Cntrl Lever Soft | 2 | 0.1 | | | | | | | | | | | | | | | | | | |
| CCP-0138/Aft Upper Door Strut | 8 | 0.1 | | | | | | | | | | | | | | | | | | |
| CCP-0147 Rain Removal | 6 | 0.2 | | | | | | | | | | | | | | | | | | |
| CCP-0151/Add Manual Drive Decal | 4 | * | | | | | | | | | | | | | | | | | | |
| CCP-0161/Shaft Driven Compressor | 8 | 0.3 | | | | | | | | | | | | | | | | | | |
| CCP-0163/Swashplate Gimbal Ring | 8 | 0.6 | | | | | | | | | | | | | | | | | | |
| CCP-0177R1/Inst Powder Panels, | 8 | 2.6 | | | | | | | | | | | | | | | | | | |
| CCP-0188/Data Transfer Module | 8 | 0.4 | | | | | | | | | | | | | | | | | | |
| CCP-0192R1/Regulator Converter | 8 | 2.0 | | | | | | | | | | | | | | | | | | |
| CCP-0206/Inertial Reels | 8 | 0.2 | | | | | | | | | | | | | | | | | | |
| CCP-0208/Fuel Isolation Tubes | 8 | 0.3 | | | | | | | | | | | | | | | | | | |
| CCP-0216/Cntrl Display Unit | 8 | 1.0 | | | | | | | | | | | | | | | | | | |
| CCP-0217/Shaft Driven Compressor | 8 | 0.1 | | | | | | | | | | | | | | | | | | |
| CCP-0224/Avi Left Hand Mounting | 8 | 0.2 | | | | | | | | | | | | | | | | | | |
| CCP-0249/Enviro Cntrl Unit Ram | 8 | 2.6 | | | | | | | | | | | | | | | | | | |
| CCP-0279/Update Ramp Actuator | 8 | 1.4 | | | | | | | | | | | | | | | | | | |
| CCP-0301/Cntrl Display Unit | 8 | 0.6 | | | | | | | | | | | | | | | | | | |
| CCP-0319/Refuel-Defuel Valve | 8 | 0.4 | | | | | | | | | | | | | | | | | | |
| CCP-10641R2/Display Sys Upg/Flat | 8 | 2.2 | | | | | | | | | | | | | | | | | | |
| CCP-10670R1/Implem Cockpit | 8 | 0.3 | | | | | | | | | | | | | | | | | | |
| CCP-10692/Trunnion | 8 | 0.8 | | | | | | | | | | | | | | | | | | |
| CCP-10703R1/AMC Post Part No Roll | 8 | 3.0 | | | | | | | | | | | | | | | | | | |
| CCP-10716/Swashplate Actuator | 8 | 4.6 | | | | | | | | | | | | | | | | | | |
| CCP-10718/Eng Gimbal Ring Spher | 4 | 0.3 | | | | | | | | | | | | | | | | | | |
| CCP-40008/NVG Compat Cockpit | 8 | 0.2 | | | | | | | | | | | | | | | | | | |
| Cargo Hook Door Actuator | | | | | 14 | 0.4 | 17 | 0.5 | | | | | | | | | | | | |
| Clam Shell Doors (16) | | | | | | | | | | | | | | | | | | | | |
| Climb Dive Valve | | | 28 | 0.4 | | | | | | | | | | | | | | | | |
| ECP 471 Life Rafts | 3 | * | | | | | | | | | | | | | | | | | | |
| ECP 478 SDC DUCT LEAK SWITCH | 19 | * | | | | | | | | | | | | | | | | | | |
| ECP 479 SUCTION LIFT PUMP | 20 | * | | | | | | | | | | | | | | | | | | |
| ECP 493 Wheel & Brake | | | | | 24 | 0.8 | 7 | 0.1 | | | | | | | | | | | | |
| ECP-V-22-0348 Interface Units | 8 | 0.3 | | | | | | | | | | | | | | | | | | |
| ECU Water Spray Design | | | | | | | 57 | 0.2 | | | | | | | | | | | | |
| FWD Engine Bleed Air | | | | | 38 | 0.7 | | | | | | | | | | | | | | |
| Gussets To Fairings | | | | | | | 25 | 0.1 | | | | | | | | | | | | |
| Ice Protection - Block B (20) | | | | | | | 20 | 12.2 | | | | | | | | | | | | |
| Lightweight Paint | | | | | 5 | 0.6 | | | | | | | | | | | | | | |
| MLG Door Hinge Redesign | | | | | | | 20 | 0.3 | | | | | | | | | | | | |
| Plugs & Covers | | | | | 27 | 0.6 | | | | | | | | | | | | | | |
| Ramp Tunnel Redesign | | | | | | | 16 | 0.1 | | | | | | | | | | | | |
| Refuel/Defuel Valve | | | | | | | 28 | 0.7 | | | | | | | | | | | | |
| Rotor Harness Redesign | | | | | | | 20 | 0.2 | | | | | | | | | | | | |
| Shaft Driven Comp Inlet Barrier | | | | | | | 20 | 0.2 | | | | | | | | | | | | |
| Swashplate Actuator Hose | | | | | | | 30 | 0.5 | | | | | | | | | | | | |
| Wing Stow System | | | | | | | 20 | 0.1 | | | | | | | | | | | | |
| INSTALLATION KITS N/R | | 3.5 | | | | 11.7 | | 1.0 | | | | | | | | | | | | |
| INSTALL EQUIPMENT (B KITS) | | | | | | | | | | | | | | | | | | | | |
| INSTALL EQUIPMENT N/R | | 0.6 | | | | | | | | | | | | | | | | | | |
| ECO | | | | | | | | | | | | | | | | | | | | |
| DATA | | 0.2 | | * | | 0.3 | | 0.3 | | | | | | | | | | | | |
| TRAINING EQUIP | 7 | 27.8 | 2 | 3.2 | 12 | 61.3 | 6 | 18.3 | | | | | | | | | | | | |
| SUPPORT EQUIP | | * | | 0.1 | | 2.1 | | 2.5 | | | | | | | | | | | | |
| ILS | | 1.0 | | | | | | | | | | | | | | | | | | |
| OTHER SUPPORT | | | | | | 1.2 | | 1.6 | | | | | | | | | | | | |
| INTERIM CONTRACTOR SUPPORT | | | | | | | | | | | | | | | | | | | | |
| INSTALLATION COST | 197 | 2.0 | 2 | * | 2 | 0.2 | 65 | 2.2 | | | | | | | | | | | | |
| TOTAL PROCUREMENT | 438 | 60.0 | 32 | 3.7 | 122 | 80.0 | 397 | 85.8 | | | | | | | | | | | | |

Exhibit P-3a

MODELS OF SYSTEMS AFFECTED: V-22 SERIES

MODIFICATION TITLE: MV-22 CORRECTION OF DEFIENCIES AND PRE BLOCK A THR(

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: Various Months

PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 2005 Various FY 2006 Various FY 2007 Various FY 2008 Various

DELIVERY DATE: FY 2005 Various FY 2006 Various FY 2007 Various FY 2008 Various

($ in Millions)

| Cost: | PRIOR YEARS | | FY 2005 | | FY 2006 | | FY 2007 | | FY 2008 | | FY 2009 | | FY 2010 | | FY 2011 | | TO COMPLETE | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ | Qty | $ |
| FY 2004 & PY (2) kits | 197 | 2.0 | 2 | * | | | | | | | | | | | | | | | | |
| FY 2005 (2) kits | | | | | 2 | 0.2 | | | | | | | | | | | | | | |
| FY 2006 (41) kits | | | | | | | 41 | 1.4 | | | | | | | | | | | | |
| FY 2007 (204) kits | | | | | | | 24 | 0.8 | | | | | | | | | | | | |
| FY 2008 (90) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2009 (20) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2010 (11) kits | | | | | | | | | | | | | | | | | | | | |
| FY 2011 (0) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE (84) kits | | | | | | | | | | | | | | | | | | | | |
| TO COMPLETE | 197 | 2.0 | 2 | * | 2 | 0.2 | 65 | 2.2 | | | | | | | | | | | | |

Installation Schedule

| | PRIOR YEARS | FY 2005 | | | | FY 2006 | | | | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| In | 197 | 2 | | | | 2 | | | | 23 | 14 | 14 | 14 | | | | | | | | | | | | |
| Out | 197 | | | 2 | | | | 2 | | | 23 | 14 | 14 | 14 | | | | | | | | | | | |

| | FY 2011 | | | | To Complete | Total |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| In | | | | | | |
| Out | | | | | | |

Totals may not add due to rounding