

**NAVY TRAINING SYSTEM PLAN**  
**FOR THE**  
**AN/UPX-29(V) INTERROGATOR SYSTEM**

**N88-NTSP-E-30-7815D/D**

**MARCH 2002**

## **AN/UPX-29(V) INTERROGATOR SYSTEM**

### **EXECUTIVE SUMMARY**

This Navy Training System Plan provides an overview of the AN/UPX-29(V) Interrogator System program and its concepts for operation, support, manpower, and training requirements. The AN/UPX-29(V) Interrogator System is a centralized, stand-alone MK XII Identification Friend or Foe system. The AN/UPX-29(V) Interrogator System functions independently or interfaces directly with Shipboard Weapons Control, Command and Decision, Combat Direction, and Naval Tactical Data Systems.

The AN/UPX-29(V) Interrogator System is in the Operations and Support Phase of the Defense Acquisition System. However, the system continues to evolve with technological advances. The AN/UPX-27 Interrogator Set, a component of the AN/UPX-29(V) Interrogator System, is being replaced by the AN/UPX-37 Digital Interrogator Set. The AN/UPX-24(V) Interrogator Set component is being upgraded with AN/UPX-29(V) Field Change (FC) 5. FC5 will allow for the incorporation of an open systems architecture design thus enabling MK XIIA Mode 5 and Mode S operating capability.

The AN/UPX-29(V) Interrogator System is operated by personnel from the Operations Specialist (OS) rating, officers assigned to the ship's Combat Information Center (CIC), and Air Traffic Controller (AC) personnel during flight operations. OS and Electronics Technician (ET) personnel perform preventive maintenance. ET personnel with Navy Enlisted Classification 1571, AN/UPX-29 Ship System Maintainer, perform corrective maintenance. Quantitative and qualitative manpower requirements associated with the AN/UPX-29(V) Interrogator System will not change as a result of this NTSP.

Specific operator training for the AN/UPX-29(V) Interrogator System is not available. AN/UPX-29(V) operator training is an integrated part of ship CIC Team, Combat Officer, Fire Control, OS, and AC training courses.

AN/UPX-29(V) Interrogator System follow-on maintenance training is provided by contractor personnel at Naval Air Warfare Center Aircraft Division, St. Inigoes, Maryland. FC5 information will be incorporated into this course and be ready for training in FY03.

**AN/UPX-29(V) INTERROGATOR SYSTEM**

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**AN/UPX-29(V) INTERROGATOR SYSTEM**

**LIST OF ACRONYMS**

|             |  |
|-------------|--|
| AC          | Air Traffic Controller   |
| ACDU        | Active Duty  |
| AIMS        | A-Air Traffic Control Radar Beacon Systems<br>I- Identification Friend or Foe<br>M-Mark XII Identification System<br>S- Systems (indicating many configurations) |
| ALSP        | Acquisition Logistics Support Plan   |
| AOB         | Average Onboard  |
| BAE         | British Aerospace  |
| CFY         | Current Fiscal Year  |
| CG          | Guided Missile Cruiser   |
| CIC         | Combat Information Center  |
| CIN         | Course Identification Number   |
| CINCLANTFLT | Commander in Chief, U.S. Atlantic Fleet  |
| CINCPACFLT  | Commander in Chief, U.S. Pacific Fleet   |
| CM          | Corrective Maintenance   |
| CNET        | Chief of Naval Education and Training  |
| CNO         | Chief of Naval Operations  |
| CV          | Aircraft Carrier   |
| CVN         | Aircraft Carrier Nuclear   |
| C4I         | Command, Control, Communications, Computers, &<br>Intelligence   |
| DDG         | Guided Missile Destroyer   |
| DT          | Developmental Test   |
| EM          | Electronic Module  |
| ESA         | Electronically Steered Antenna   |
| ET          | Electronics Technician   |
| FC          | Field Change   |
| FMS         | Foreign Military Sales   |
| FY          | Fiscal Year  |
| ICSTF       | Integrated Combat System Test Facility   |
| IFF         | Identification Friend or Foe   |

**AN/UPX-29(V) INTERROGATOR SYSTEM**

**LIST OF ACRONYMS**

|                   |  |
|-------------------|--|
| ILSP              | Integrated Logistics Support Plan          |
| IMA               | Intermediate Maintenance Activity          |
| IPB               | Illustrated Parts Breakdown                |
| ISLS              | Interrogation Side Lobe Suppression        |
| JMSDF             | Japan Maritime Self-Defense Force          |
| LHD               | Amphibious Assault Ship                    |
| LPD               | Amphibious Transport Dock                  |
| MHz               | Megahertz                                  |
| MIP               | Maintenance Index Pages                    |
| MPT               | Manpower, Personnel, and Training          |
| MRC               | Maintenance Requirement Card               |
| MSD               | Material Support Date                      |
| NA                | Not Applicable                             |
| NAVAIRSYSCOM      | Naval Air Systems Command                  |
| NAVAIRWARCENACDIV | Naval Air Warfare Center Aircraft Division |
| NAVICP            | Navy Inventory Control Point               |
| NEC               | Navy Enlisted Classification               |
| NOBC              | Naval Officer Billet Classification        |
| NTDS              | Naval Tactical Data System                 |
| NTSP              | Navy Training System Plan                  |
| OPNAV             | Office of the Chief of Naval Operations    |
| OPO               | OPNAV Principal Official                   |
| OS                | Operations Specialist                      |
| OSA               | Open System Architecture                   |
| OT                | Operational Test                           |
| PCB               | Printed Circuit Boards                     |
| PDA               | Principal Development Agency               |
| PFY               | Previous Fiscal Year                       |
| PM                | Preventive Maintenance                     |
| PMA               | Program Manager, Air                       |
| PMS               | Planned Maintenance System                 |
| PNEC              | Primary Navy Enlisted Classification       |

**AN/UPX-29(V) INTERROGATOR SYSTEM**

**LIST OF ACRONYMS**

|       |  |
|-------|--|
| PQS   | Personnel Qualification Standards      |
| RF    | Radio Frequency                        |
| RFT   | Ready For Training                     |
| SIF   | Selective Identification Feature       |
| SNEC  | Secondary Navy Enlisted Classification |
| TBD   | To Be Determined                       |
| TD    | Training Device                        |
| TFMMS | Total Force Manpower Management System |
| TSA   | Training Support Agency                |
| TTE   | Technical Training Equipment           |
| ULSS  | User's Logistics Support Summary       |

**AN/UPX-29(V) INTERROGATOR SYSTEM**

**PREFACE**

This Draft Navy Training System Plan (NTSP) has been developed to update the Approved AN/UPX-29(V) Interrogator System Navy Training System Plan, E-30-7815C/A, dated April 1996. This document has been updated to comply with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97. Major changes incorporated in this update include:

- Updated delivery schedule for AN/UPX-29(V) Interrogator System Field Change (FC)5 that updates the AN/UPX-24(V) Interrogator Set, thus enabling MK XII Mode 5 and Mode S operation capability
- Introduction of the AN/UPX-37 Digital Interrogator Set that will replace the AN/UPX-27 Interrogator Set
- Updated all parts to include latest program data

**PART I - TECHNICAL PROGRAM DATA**

**A. NOMENCLATURE-TITLE-PROGRAM**

**1. Nomenclature-Title-Acronym.** AN/UPX-29(V) Interrogator System

**2. Program Element**

Training ..... 84771Q, 84731Q  
Hardware ..... 24292N

**B. SECURITY CLASSIFICATION**

- 1. System Characteristics** ..... Unclassified
- 2. Capabilities** ..... Unclassified
- 3. Functions**..... Unclassified

**C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS**

OPNAV Principal Official (OPO) Program Sponsor..... CNO (N766)

OPO Resource Sponsor ..... CNO (N766)

Developing Agency..... NAVAIRSYSCOM (PMA213)

Training Agency ..... CINCLANTFLT  
CINCPACFLT  
CNET

Training Support Agency..... NAVAIRSYSCOM (PMA205)

Manpower and Personnel Mission Sponsor ..... CNO (N12)  
NAVPERSCOM (PERS-4, PERS-404)

Director of Naval Training..... CNO (N79)

**D. SYSTEM DESCRIPTION**

**1. Operational Uses.** The AN/UPX-29(V) Interrogator System is a centralized MK XII interrogator and target processor. It employs a challenge and reply technique to distinguish friendly platforms in a multi-targeted environment. The system interrogates MK XII

Identification Friend or Foe (IFF) transponders using a standard shipboard interrogator set, a target processor, and an Electronically Steered Antenna (ESA) system. The use of the Naval Tactical Data System (NTDS) computer interface and the ESA makes it possible to redirect the system to any bearing to interrogate high priority or pop-up targets on demand. The system uses an interrogator set to supply symbology to operators at as many as 22 remote locations, and synchronized with up to four different radar sweeps. It provides digital target reporting to the combat systems and weapons system computer via full scan, sectored, and pop-up interrogations. It also supplies instantaneous target reporting at requested range and azimuth by redirecting the ESA, while providing electronically evaluated Mode 4 target reporting directly to both operators and the ship's computer system.

The AN/UPX-29(V) Interrogator System is used aboard the Ticonderoga class Guided Missile Cruisers (CG), Arleigh Burke class Guided Missile Destroyers (DDG), Wasp class Amphibious Assault Ships (LHD), new construction class Amphibious Transport Dock (LPD), Nimitz class Aircraft Carrier Nuclear (CVN), new construction CVN 77 class ships, and the Japan Maritime Self-Defense DDG 2313 class ships.

**2. Foreign Military Sales.** Japan purchased four AN/UPX-29(V) Interrogator Systems as part of their Japan Maritime Self-Defense Force (JMSDF) program and intends to purchase an additional system in Fiscal Year (FY) 03. The South Korean government is also interested in purchasing the AN/UPX-29(V) for use aboard their Korean Foreign Military Sales (FMS) class ships. AN/UPX-29(V) Interrogator System FMS information is available through Naval Air Systems Command (NAVAIRSYSCOM) Program Manager, Air (PMA) 213.

**E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** AN/UPX-29(V) Interrogator System Developmental Testing (DT) and Operational Testing (OT) were successfully completed aboard the USS John F. Kennedy CV 67 in FY78. Approval for Service Use was granted in FY83.

The AN/UPX-27 Interrogator Set, a AN/UPX-29(V) Interrogator System component, is being replaced with the AN/UPX-37 Digital Interrogator Set. The AN/UPX-37 Digital Interrogator Set was tested as part of the Air Traffic Control Radar Beacon Systems, Identification Friend or Foe, Mark XII Identification System, Systems (indicating many configurations) (AIMS) System. Refer to the AIMS MK XII Identification Friend or Foe NTSP, E-30-7115E/A, dated April 2000, for AN/UPX-37 DT and OT information. Currently, AN/UPX-37 Digital Interrogator Set software is undergoing AEGIS class shipboard testing. Certification is expected to be completed in fourth quarter FY02. MK XIIA Mode 5 and Mode S DT and OT are currently scheduled to be conducted simultaneously, beginning in FY03 at Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV) Patuxent River, Maryland.

**F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.** The AN/UPX-29(V) Interrogator System did not replace an existing system. The AN/UPX-37 Digital Interrogator Set will replace the AN/UPX-27 Interrogator Set.

## G. DESCRIPTION OF NEW DEVELOPMENT

**1. Functional Description.** The AN/UPX-29(V) Interrogator System is a stand-alone IFF system used for air traffic control and positive secure friend identification. The AN/UPX-29(V) performs reply detection, defruiting, active and passive decoding, Mode 4 IFF evaluation, altitude decoding, mode code validation, and display symbol generation. The AN/UPX-29(V) uses separate uplink and downlink frequencies while converting analog data of conventional IFF operations into digital data. Specifically, the AN/UPX-29(V) Interrogator System provides the following capabilities:

- Processes and stores 400 complete and separate target reports
- Provides high-speed automated identification of targets by instantaneous antenna redirection to computer designated locations
- Provides electronic evaluation of Mode 4 return reliability
- Provides direct readout of operator-designated target information from data storage
- Provides simultaneous display of IFF targets synchronized with up to four separate radars
- Provides for up to 22 operator positions, with all interrogation, reply processing, and information available to each individual operator
- Provides sector interrogation capability, while interfacing directly with shipboard computer control systems

**a. AN/UPX-24(V) Interrogator Set.** The AN/UPX-24(V) Interrogator Set consists of a Processor Controller CP-1273, Control Monitor C-10065, and up to 22 Remote Control Indicators C-10064. The AN/UPX-24(V) is the core IFF processor of the AN/UPX-29(V) Interrogator System. Its major function is to integrate other systems, and interface and control the ESA antenna. The AN/UPX-24(V) replaces the individual IFF systems previously associated with each of the many radar systems used aboard ships. The AN/UPX-24(V) provides IFF displays and target data converted to the frame of reference of each interfacing radar system. A digital interface provides all target information to the ship's Command, Control, Communications, Computers, and Intelligence (C4I) system, and then generates the antenna and interrogation commands in response to C4I system requests for priority target identification. The AN/UPX-24(V) also identifies aircraft and surface platforms equipped with Selective Identification Feature (SIF) Modes 1, 2, 3A, and C, and provide secure, positive identification of cooperative Mode 4 targets. The AN/UPX-24(V) operates in three modes: pop-up, active, and passive.

- Pop-up mode requires an ESA, which in response to a pop-up request, is immediately redirected to interrogate the area of interest. This permits immediate acquisition of IFF data relative to a specified target or area. Pop-up and active mode processing can be performed simultaneously without system degradation.

- Active mode operates with either antenna type. In response to an active request, the AN/UPX-24(V) waits until the antenna (or ESA scan) rotates to the area of interest before data is acquired. Active and pop-up mode processing can be performed simultaneously without system degradation.
- Passive mode data from a complete 360-degree scan is retained in memory. On receipt of a passive request, data can be obtained from scan memory.

Currently, the AN/UPX-24(V) Interrogator Set is being upgraded with FC5. FC5 is a significant upgrade to FC4, and will incorporate Open System Architecture (OSA) for increased capability. OSA uses a Versa Module European bus. Main and bypass units are replaced with completely redundant units, designated Unit A and Unit B. The change also incorporates an auto-switch assembly that automatically transfers all signals to the secondary unit if a fault is detected in the primary unit. System controls are contained within the operator control panels using touch screen display technology. Additional external computer interfaces are provided. Main and bypass power supplies are replaced with identical sealed power supplies.

**b. AN/UPX-27 Interrogator Set.** Although the AN/UPX-27 Interrogator Set is being replaced by the AN/UPX-37(V) Digital Interrogator Set, the AN/UPX-27 is still currently used on numerous surface ships. The AN/UPX-27 Interrogator Set is a transportable radar recognition set, which is intended primarily for use with one or more decoder groups, radar indicators, and radar sets. It is capable of interrogating MK XII IFF/SIF type radar identification transponder sets, receiving replies, and processing the replies into proper video signals to be applied to the decoders and indicators. The interrogations are transmitted on a crystal-controlled frequency of 1030 Megahertz (MHz); the replies are received at 1090 MHz. The AN/UPX-27 generates interrogation pulse pairs for Modes 1, 2, 3A, and C whenever one of these modes is challenged. It is also capable of transmitting auxiliary Mode 4 interrogations. Operation from an external coder is also available.

**c. AN/UPX-37(V) Digital Interrogator Set.** The AN/UPX-37(V) Digital Interrogator Set is a modern replacement and will be used for MK XI and Next Generation IFF processing. The AN/UPX-37(V) does not provide any additional functionality over the AN/UPX-27, but allows for the incorporation of digital technology and will facilitate future growth to address Mode S and a new Mode 5 waveform when they become military operational requirements. Digital target reports can be provided in addition to wide band video for subsequent passive and active decoding. The AN/UPX-37(V) also provides amplitude monopulse for significant azimuth accuracy improvement over conventional systems. The AN/UPX-37(V) Digital Interrogator Set operates autonomously or in conjunction with a host radar.

**d. OE-120/UPX Antenna Group.** The OE-120/UPX antenna group consists of the Antenna Assembly AS-3134( )/UPX, Antenna Position Programmer CV-3372/UPX, and a below deck Antenna Control Unit C-10063/UPX. The OE-120/UPX antenna group is a significant part of the AN/UPX-29(V) Interrogator System. It is used to locate and identify aircraft as friend or foe. The OE-120/UPX antenna is configured with 64 vertically arrayed, equally spaced, radiating, dipole pairs mounted in a circle around the ship mast. Unlike

conventional IFF systems that employ mechanically rotated antennas, the antenna elements remain stationary while the beam is steered electronically to scan a full 360 degrees around the ship. The beam can be positioned selectively in any direction within microseconds and has a continuous scan rate of up to 90 revolutions per minute. The beam can also be randomly positioned or scanned rapidly over designated sector elements. The dipole pairs are electronically azimuthal arrayed to produce directional and omnidirectional beam patterns. The antenna position programmer receives commands from the antenna control unit to control the antenna's beam mode and boresight direction. The control unit processes the host system's digital or analog commands. The control unit continuously translates synchronized data from shipboard environment sensors and modifies its commands to the antenna position programmer to compensate for the ship's roll, pitch, and heading.

**e. Back-up Antenna Group.** The back-up antenna group provides a back-up antenna system in the event that the OE-120/UPX antenna system fails. The group consists of the AS-4328 (or similar) rotating directional antenna, AS-177B/UPX omnidirectional antenna, and AN/UPA-61 Radio Frequency (RF) Switching Group.

**(1) AS-4328 Rotating Directional Antenna.** The rotating directional antenna radiates the sum directional RF pattern of the interrogations in accordance with directions from the CV-3372/UPX Antenna Programmer. The rotating directional antenna can be mounted piggyback or integrated with the search radar antenna.

**(2) AS-177B/UPX Omnidirectional Antenna.** The omnidirectional antenna radiates the Interrogation Side Lobe Suppression (ISLS) pulses in an omnidirectional pattern when used with the interrogator via the RF Switching group.

**(3) AN/UPA-61 Radio Frequency Switching Group.** The AN/UPA-61 RF switching group receives the RF signals and an ISLS trigger from the AN/UPX-27 or AN/UPX-37 Interrogator Set. It also sends directional pulses to the rotating antenna and the ISLS pulse to the omnidirectional antenna. It accepts RF reply signals from the rotating antenna and routes them to the AN/UPX-27 or AN/UPX-37.

**f. BZ-173A/UPA-59(V) Alarm Monitor.** The alarm monitor provides audible and visual indications of decoded emergency replies.

**g. SG-841/UPX Pulse Generator.** The pulse generator is installed only aboard DDG 51 class ships. It provides the triggers for smooth sweep and long range display.

**2. Physical Description.** AN/UPX-29(V) Interrogator System physical description information is listed in the following table.

| <b>NOMENCLATURE/EQUIPMENT</b>  | <b>DIMENSIONS<br/>H x W x D (INCHES)</b>                                 | <b>WEIGHT<br/>(POUNDS)</b>     |
|--|--|--------------------------------|
| AN/UPX-24(V) Interrogator Set<br>CP-1273 Processor Controller<br>C-10064 Control Indicator<br>C-10065 Control Monitor                | 72 x 29 x 32<br>16 x 9 x 14<br>9 x 17 x 13                               | 868.0<br>41.0<br>36.0          |
| AN/UPX-27 Interrogator Set   | 11 x 16 x 18   | 57.0                           |
| AN/UPX-37 Digital Interrogator Set   | 10.56 x 14.75 x 18   | 62.0                           |
| OE-120/UPX Antenna Group<br>AS-3134( )/UPX Assembly<br>CV-3372/UPX Position Programmer<br>C-10063/UPX Control Unit<br>Remote Display | 16.25 x 151 (diameter)<br>45 x 34 x 20<br>21 x 21 x 22<br>9.5 x 13 x 9.5 | 448.0<br>310.0<br>78.0<br>22.0 |
| Back-up Antenna Group<br>AS-177B/UPX Antenna<br>AS-4328 Antenna  | 20.125 x 6.5 x 6.5<br>19 x 112 x 14                                      | 7.0<br>74.0                    |
| AN-UPA-61 RF Switching Group<br>C-8834 Control Monitor<br>SA-1807 Electronic Switch  | 7 x 17 x 9<br>6.25 x 11.50 x 2.75  | 20.0<br>4.4                    |
| BZ-173A/UPA-59(V) Alarm Monitor  | 6.6 x 4.7 x 4  | 3.0                            |
| SG-841 Pulse Generator   | 5 x 10.5 x 12  | 13.0                           |

**3. New Development Introduction.** The MK XII Improvement Strategy, approved February 1996, states that the services will incrementally upgrade the current MK XII system with Non-Developmental Item digital technology. Further, the incorporation of digital technology will facilitate future growth to address Mode S and a new Mode 5 waveform. The AN/UPX-37 Digital Interrogator Set satisfies this requirement and will replace the AN/UPX-27 Interrogator Set on a one-for-one basis by retrofitting each system. The AN/UPX-37 Digital Interrogator Set conforms to United States Frequency Modulation, Department of Defense, North Atlantic Treaty Organization, and International Civil Aviation Organization requirements.

**4. Significant Interfaces.** The AN/UPX-29(V) Interrogator System, although a stand-alone IFF system, interfaces with a variety of shipboard systems including: Command and Decision, NTDS, Combat Direction System, Shipboard Weapons Control Systems, Amphibious Air Traffic Control, Carrier Air Traffic Control Center, Ship Self-Defense System MK II,

AN/SPS-48 Radar Set, AN/USQ-T46A Battle Force Tactical Training System, AN/SPS-73 Surface Search Radar, and AN/SPQ-9B Anti-Ship Missile Defense Radar systems.

## **5. New Features, Configurations, or Material**

**a. AN/UPX-29(V) Interrogator System Field Change 5.** The AN/UPX-29(V) FC5 modification will provide an OSA configuration that will allow for increased expansion capability, to include Mode S and Mode 5 interrogation capability.

**(1) Mode S.** The AN/UPX-24(V) Mode S provides improved shipboard combat identification and increases the probability of identification of neutral aircraft. The Mode S beacon system is a combined secondary surveillance radar and ground-air-ground data link system. It is capable of providing the aircraft surveillance and communication necessary to support air traffic control automation in dense traffic environments. Mode S is available and used commercially, and will provide for improved functionality to the Mode 4C system. The fundamental difference between Mode S and standard identification Modes 1, 2, 3A, and C is the manner by which aircraft are addressed, allowing selection of which aircraft will respond to an interrogation.

**(2) Mode 5.** The Mark XIIA Mode 5 upgrade is an improvement to the aging MK XII IFF system. The Mode 5 uses modern modulation, coding, and cryptographic techniques to overcome performance and security problems in the current MK XII waveform. It will provide high confidence, accurate, and continuous friendly identification to prevent fratricide. Additionally, MK XIIA Mode 5 will offer expanded data handling capable of passing Global Positioning System position and other extended data.

**b. AN/UPX-37 Digital Interrogator Set.** In conjunction with FC5, the addition of the AN/UPX-37 Digital Interrogator Set will enable digital technology expansion, including Mode S, a new Mode 5 waveform, and target data extraction.

## **H. CONCEPTS**

**1. Operational Concept.** The AN/UPX-29(V) Interrogator System operator duties consist of energizing and de-energizing the equipment, selecting modes of operation, and challenging and interpreting replies. The AN/UPX-29(V) Interrogator System operator functions are performed by officers and Operations Specialist (OS) personnel with various Naval Officer Billet Classification (NOBC) and Navy Enlisted Classification (NEC) codes assigned to the Combat Information Center (CIC). Air Traffic Controller (AC) personnel also operate the system during flight operations. The AN/UPX-29(V) Interrogator System is capable of operating on a continuous basis. The addition of the AN/UPX-37 Digital Interrogator Set will be transparent to the operators.

## 2. Maintenance Concept

**a. Organizational.** AN/UPX-29(V) Interrogator System organizational level maintenance consists of performing Preventive Maintenance (PM) and Corrective Maintenance (CM) to the Printed Circuit Board (PCB) and Electronic Module (EM) level. AN/UPX-29(V) organizational level maintenance mainly consists of removing and replacing a failed unit. Electronics Technician (ET) personnel with NEC 1571 perform AN/UPX-29(V) organizational level maintenance.

**(1) Preventive Maintenance.** AN/UPX-29(V) Interrogator System PM includes operational readiness testing, Built-In Test, periodic inspections, and scheduled maintenance. PM is performed in accordance with Maintenance Index Pages (MIP), MIP-4551/292, and the Maintenance Requirements Cards (MRC) that are a part of the Planned Maintenance System (PMS). ET and OS personnel perform AN/UPX-29(V) PM.

**(2) Corrective Maintenance.** AN/UPX-29(V) Interrogator System CM includes troubleshooting, measuring, adjusting, aligning, and repairing by removing and replacing defective PCBs and EMs. The defective PCB and EM items are sent to an Intermediate Maintenance Activity (IMA) for repair. CM of the AN/UPX-29(V) beyond the Commercial Off-The-Shelf modules is limited to replacing failed light-emitting diodes, connectors, and switches. ET personnel perform AN/UPX-29(V) CM.

**b. Intermediate.** AN/UPX-29(V) Interrogator System intermediate maintenance actions includes fault verification, fault isolation, and repair of the MK XII equipment to the PCB and EM piece-part level. The shipboard microminiature repair shop or shore IMA performs these actions.

**c. Depot.** AN/UPX-29(V) Interrogator System depot level maintenance includes repairing modules, recording failure analysis, and performing required calibration.

- Identification Systems Division, NAVAIRWARCENACDIV St. Inigoes, Maryland, is the primary depot repair activity for the AN/UPX-29(V), including FC5 and OE-120/UPX FC1 and FC2 circuit cards and modules. British Aerospace (BAE) perform OE-120/UPX Antenna Group repairs.
- The AN/UPX-24(V), because of its size, cannot be removed during overhaul. NAVAIRWARCENACDIV St. Inigoes personnel accomplish any repair, refurbishment, modification, or restoration aboard the ship.
- Space and Naval Warfare Systems Center, San Diego, California, is the organic depot level maintenance facility for the OE-120/UPX Antenna repairable modules.
- Naval Weapons Station, Seal Beach, California, has been designated as the overhaul point and performs OE-120/UPX overhauls.

- Naval Surface Warfare Center (Code 8095), Crane, Indiana, provides back-up repair for OE-120/UPX power dividers and phase shifters that NAVAIRWARCENACDIV St. Inigoes cannot repair.

**d. Interim Maintenance.** Not Applicable (NA)

**e. Life Cycle Maintenance Plan.** NA

**3. Manning Concept.** The current quantitative and qualitative operator and maintenance manpower is sufficient to sustain fleet operations. No changes will be required. Current qualitative and quantitative manpower requirements for ET personnel were extracted from the Total Force Manpower Management System (TFMMS).

**4. Training Concept.** AN/UPX-29(V) Interrogator System operation training is provided during CIC Team, Combat Officer, Fire Control, OS, and AC training. AN/UPX-29(V) Interrogator System maintenance training is provided by contractor personnel at NAVAIRWARCENACDIV St. Inigoes.

NAVAIRWARCENACDIV St. Inigoes will conduct informal operator and maintenance training to ship's crew during installation of FC5. Formal training for AN/UPX-29(V) Interrogator System FC5 maintenance will start in first quarter FY03. Current plans are for three to four students (out of an average class size of eight) to receive an additional week of AN/UPX-24(V) FC5 maintenance training after completion of the existing course: Course Identification Number (CIN) *S-102-0085, Interrogator System AN/UPX-29(V) Maintenance*.

In FY04, *S-102-0085, Interrogator System AN/UPX-29(V) Maintenance*, will be modified to incorporate FC5 information to the existing course. *S-102-0085* will be extended one week, from 26 to 33 days, to facilitate this additional information.

In FY08, *S-102-0085, Interrogator System AN/UPX-29(V) Maintenance*, will delete all AN/UPX-24(V) FC4 information. This modification to *S-102-0085* will complete the AN/UPX-29(V) training transition. At that time the *S-102-0085* course length will decrease from 33 to 19 days.

**a. Initial Training.** Initial AN/UPX-29(V) Interrogator System operator and maintenance training was completed in FY77.

**b. Follow-on Training**

**(1) Operator.** Specific operator training for the AN/UPX-29(V) Interrogator System is not available. AN/UPX-29(V) operator training is an integrated part of CIC Team, Combat Officer, Fire Control, OS, and AC training courses.

**(2) Maintenance.** ET personnel receive the following AN/UPX-29(V) Interrogator System maintenance training.

**Title .....** **Interrogator System AN/UPX-29(V) Maintenance**

**CIN .....** S-102-0085

**Model Manager ...** NAVAIRWARCENACDIV St. Inigoes

**Description .....** This course provides training to the ET, including:

- MK XII IFF Review and AN/UPX-29(V) Introduction
- AN/UPX-29(V) Operating Modes and Functional Descriptions
- AN/UPX-24 Controls and Indicators
- IFF Data Processor and Interface Control Unit Functional Descriptions
- Display Processor, IFF Bypass Unit, and Maintenance Monitor Unit Functional Descriptions
- CP-1273 Power Supplies Functional Description
- NTDS Interface Operation and Functional Description
- OE-120/UPX Description and Functional Flow
- C-10063, CV-3372, and AS-3134( )/UPX Functional Descriptions
- AN/UPX-24 and AN/UPX-29(V) Troubleshooting
- AN/UPX-29(V) CM and PM Procedures

Upon completion, the student will be able to perform CM and PM on the AN/UPX-29(V) Interrogator System under limited supervision.

**Location .....** NAVAIRWARCENACDIV St. Inigoes

**Length .....** 26 days (33 days with FC5)

**RFT date .....** Currently available (FY04 with FC5 modification)

**Skill identifier.....** 1571

**TTE/TD.....** Various AN/UPX-29(V) interrogator system and subsystem equipment

**Prerequisites .....**

- A-102-0062, AIMS MK-12 IFF System Maintenance
- Assigned to CG-47, DDG-51, or LHD-1 class ship
- NEC 1572
- Security Clearance - Secret

**c. Foreign Military Sales Training.** Japan received AN/UPX-29(V) Interrogator System technical training in FY96, FY97, and FY01. They are currently scheduled to receive additional training in FY02 and FY03. For information related to Japan's technical training, contact PMA213.

**d. Student Profiles**

| <b>SKILL IDENTIFIER</b> | <b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>  |
|-------------------------|---|
| ET 1571                 | <ul style="list-style-type: none"><li>◦ A-100-0138, Electronics Technician Core A School</li><li>◦ A-100-0139, Advanced Electronics Technical Core</li><li>◦ A-100-0140, Electronics Technician Strand A School</li><li>◦ S-102-0062, AIMS System Technician</li><li>◦ S-102-0085, Interrogator System AN/UPX-29(V) Maintenance</li></ul> |

**e. Training Pipelines. NA**

**I. ONBOARD (IN-SERVICE) TRAINING**

**1. Proficiency or Other Training Organic to the New Development.** AN/UPX-29(V) Interrogator System operators use various Programmed Instruction Handbooks for Decoder Groups as well as the AIMS MK XII IFF Systems Operators Manual. There is no AN/UPX-29(V) maintenance or other proficiency training available for NEC 1571. ET 1571 cannot be earned through On-the-Job Training.

**a. Maintenance Training Improvement Program. NA**

**b. Aviation Maintenance Training Continuum System. NA**

**2. Personnel Qualification Standards.** Specific AN/UPX-29(V) Interrogator System Personnel Qualification Standards (PQS) do not exist. However, AN/UPX-29(V) Interrogator System operator material is contained in the Naval Education and Training 10061 (series) MK XII Operator PQS. PQS information is also contained in the individual CIC requirements.

**3. Other Onboard or In-Service Training Packages.** Each ship has a proficiency training program for personnel assigned to the CIC that has been tailored to encompass specific procedures unique to the platform's mission.

## J. LOGISTICS SUPPORT

### 1. Manufacturer and Contract Numbers

| CONTRACT NUMBER                  | MANUFACTURER     | ADDRESS   |
|----------------------------------|------------------|---|
| OE-120/UPX<br>N00019-91-C-0195   | BAE              | 65 River Road<br>Nashua, NH 03051               |
| AN/UPX-24(V)<br>N00019-91-C-0244 | Northrup Grumman | 1840 Century Park<br>East Los Angeles, CA 90067 |
| AN/UPX-37<br>N00019-98-C-0156    | BAE              | 65 River Road<br>Nashua, NH 03051               |

**2. Program Documentation.** The AN/UPX-29(V) Interrogator System Integrated Logistics Support Plan (ILSP), ATCE-ILSP-006, Revision A, November 1993, was discontinued. An AN/UPX-29(V) Interrogator System User's Logistics Support Summary (ULSS) ATC-ULSS-006 Rev C is currently being updated and expected to be completed in FY02. Additionally, the Acquisition Logistics Support Plan (ALSP) for the AN/UPX-37 Digital Interrogator, ATC-ALSP-0010, approved in June 1998, is available.

**3. Technical Data Plan.** All required AN/UPX-29(V) Interrogator System technical publications, MRCs, MIP, and PMS are available, including the AN/UPX-37 Digital Interrogator Set publications. Mode S and Mode 5 technical information will be included in the AN/UPX-29 Technical manuals listed below. These changes are expected to be completed in FY03. When updated information becomes available it will be included in future editions of this document.

- AN/UPX-29-OMI-100, Technical Manual, Operation and Maintenance Instructions, AN/UPX-29(V) Interrogator System
- AN/UPX-29 NTDS Manual, Interrogator System AN/UPX-29(V) Naval Tactical Data System Interface Manual
- WS 33578, Combat Systems to Interrogator System AN/UPX-29(V) Interface Design Specification

**4. Test Sets, Tools, and Test Equipment.** AN/UPX-29(V) Interrogator System test sets, tools, and test equipment are listed in Part IV of this NTSP.

**5. Repair Parts.** The Navy Inventory Control Point (NAVICP), Mechanicsburg, Pennsylvania, has overall supply support responsibility for provisioning all spares and repair parts for the AN/UPX-29(V) Interrogator System. Currently, Identification Systems Division, NAVAIRWARCENACDIV Patuxent River (Code 4.5.9) St. Inigoes, Maryland, provides interim

supply support for AN/UPX-24(V) Engineering Change Proposals and FC5 spares and repair parts until the Material Support Date (MSD) is achieved. AN/UPX-29(V) Interrogator System MSD is scheduled for FY03. When accomplished, NAVICP will assume responsibility for AN/UPX-24(V) supply support.

**6. Human Systems Integration.** Established human engineering principles and practices have been and will continue to be used in development of the AN/UPX-29(V) Interrogator System. These principles will guide the design and development of system functions and features. This design will be directed toward developing and improving effective human performance for AN/UPX-29(V) operation and maintenance efforts.

**K. SCHEDULES**

**1. Installation and Delivery Schedules.** The AN/UPX-29(V) Interrogator System FC5, Mode 5, and Mode S installation schedules are contained in the following tables.

| <b>PRODUCTION LINE FC5 INSTALLATION</b> |             |             |             |
|---|-------------|-------------|-------------|
| <b>SHIP</b>                             | <b>FY01</b> | <b>FY02</b> | <b>FY03</b> |
| DDG Class                               | 3           | 7           | 3           |
| CV/CVN Class                            |             | 2           | 2           |
| LPD Class                               |             | 4           | 3           |
| <b>Total</b>                            | <b>3</b>    | <b>13</b>   | <b>8</b>    |

| <b>PRODUCTION LINE FC5, MODE 5, AND MODE S INSTALLATION</b> |             |             |             |             |             |             |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>SHIP</b>   | <b>FY04</b> | <b>FY05</b> | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> |
| CV/CVN Class  | 1           |             | 1           | 2           | 1           | 1           |
| DDG Class   | 2           |             |             |             |             |             |
| LPD Class   | 2           | 1           |             |             |             |             |
| <b>Total</b>  | <b>5</b>    | <b>1</b>    | <b>1</b>    | <b>2</b>    | <b>1</b>    | <b>1</b>    |

| <b>FC5 FIELD INSTALLATION SCHEDULE</b> |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>SHIP</b>                            | <b>FY03</b> | <b>FY04</b> | <b>FY05</b> | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> | <b>FY10</b> |

| <b>FC5 FIELD INSTALLATION SCHEDULE</b> |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>SHIP</b>                            | <b>FY03</b> | <b>FY04</b> | <b>FY05</b> | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> | <b>FY10</b> |
| CG Class                               |             | 2           | 3           | 6           | 4           | 4           | 2           | 1           |
| CV/CVN Class                           |             |             |             |             |             |             | 1           |             |
| DDG Class                              |             | 3           | 4           | 7           | 11          | 8           | 1           | 1           |
| LDP Class                              | 1           | 1           |             |             |             |             |             |             |
| LHD Class                              |             |             |             | 3           | 2           | 1           |             |             |
| NSSCPHD                                |             | 1           |             |             |             |             |             |             |
| <b>Total</b>                           | <b>1</b>    | <b>7</b>    | <b>7</b>    | <b>16</b>   | <b>17</b>   | <b>13</b>   | <b>4</b>    | <b>2</b>    |

| <b>MODE S INSTALLATION</b>                        |             |             |             |             |             |             |              |
|---|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>SHIP/ACTIVITY</b>                              | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> | <b>FY10</b> | <b>FY11</b> | <b>FY12+</b> |
| CG Class  | 4           |             | 3           | 4           | 6           | 2           | 7            |
| CV/CVN Class                                      |             |             |             | 2           | 1           | 1           | 2            |
| DDG Class   | 5           | 6           | 9           | 8           | 5           | 11          | 11           |
| LHD Class   |             |             | 1           | 2           | 1           | 2           | 1            |
| LPD Class   |             |             |             | 1           |             |             | 7            |
| CSEDS   |             |             |             |             |             | 1           |              |
| Integrated Combat System<br>Test Facility (ICSTF) |             |             |             |             |             |             | 1            |
| NAVAIRWARCENACDIV                                 |             |             |             |             |             |             | 1            |
| Wallops Island                                    |             |             |             |             |             |             | 1            |
| <b>Total</b>                                      | <b>9</b>    | <b>6</b>    | <b>13</b>   | <b>17</b>   | <b>13</b>   | <b>17</b>   | <b>31</b>    |

| <b>MODE 5 INSTALLATION</b> |             |             |             |             |             |             |              |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>SHIP/ACTIVITY</b>       | <b>FY05</b> | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> | <b>FY10</b> | <b>FY11+</b> |
| CG Class                   |             |             | 3           | 2           | 6           | 2           | 14           |
| CV/CVN Class               |             |             |             | 2           | 1           | 1           | 2            |

| <b>MODE 5 INSTALLATION</b> |             |             |             |             |             |             |              |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>SHIP/ACTIVITY</b>       | <b>FY05</b> | <b>FY06</b> | <b>FY07</b> | <b>FY08</b> | <b>FY09</b> | <b>FY10</b> | <b>FY11+</b> |
| DDG Class                  | 4           | 4           | 6           | 5           | 5           | 11          | 20           |
| LHD Class                  |             |             |             | 1           | 1           | 1           | 3            |
| LPD Class                  |             |             |             | 1           |             |             | 7            |
| CSEDS                      |             |             |             |             |             |             | 1            |
| ICSTF                      |             |             |             |             |             |             | 1            |
| NAVAIRWARCENACDIV          |             |             |             |             |             |             | 1            |
| Wallops Island             |             |             |             |             |             |             | 1            |
| <b>Total</b>               | <b>4</b>    | <b>4</b>    | <b>9</b>    | <b>11</b>   | <b>13</b>   | <b>15</b>   | <b>50</b>    |

**2. Ready For Operational Use Schedule.** The AN/UPX-29(V) Interrogator System, including the AN/UPX-37, FC5, Mode S, and Mode 5 are ready for operational use upon installation and operational checkout.

**3. Time Required to Install at Operational Sites.** The AN/UPX-29(V) Interrogator System is installed in the shipyard. FC5 requires approximately three weeks to install, AN/UPX-37(V) requires approximately one week, and Mode S and Mode 5 require approximately two weeks to install.

**4. Foreign Military Sales and Other Source Delivery Schedule.** Four AN/UPX-29(V) Interrogator Systems were delivered to Japan in support of their JMSDF program. The four ships that received the AN/UPX-29(V) Interrogator Systems are the Kongo DDG 173, Kirisma DDG 174, Myoko DDG 174, and Chokai DDG 176. In FY03, Japan is scheduled to receive an additional system. Additional information is available through the program office, NAVAIRSYSCOM, PMA213.

**5. Training Device and Technical Training Equipment Delivery Schedule.** Identification Systems Division, NAVAIRWARCENACDIV Patuxent River (Code 4.5.9) St. Inigoes, has all required Technical Training Equipment (TTE). No Training Devices (TD) are required.

**L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA**

**M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS**

| <b>DOCUMENT<br/>OR NTSP TITLE</b>                                 | <b>DOCUMENT<br/>OR NTSP NUMBER</b> | <b>PDA<br/>CODE</b> | <b>STATUS</b>      |
|---|------------------------------------|---------------------|--------------------|
| AN/UPX-29(V) User's Logistics Support Summary                     | ATC-ULSS-006                       | PMA213              | Draft              |
| AIMS Mark XII IFF Navy Training Systems Plan                      | E-30-7115E/A                       | PMA213              | Approved<br>Apr 00 |
| AN/UPX-37 Digital Interrogator Acquisition Logistics Support Plan | ATC-ALSP-0010                      | PMA213              | Approved<br>Jun 98 |

## **PART II - BILLET AND PERSONNEL REQUIREMENTS**

The following elements are not affected by the AN/UPX-29(V) and, therefore, are not included in Part II of this NTSP:

### **II.A. Billet Requirements**

#### **II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule**

**II.A. BILLET REQUIREMENTS**

**SOURCE OF SCHEDULE:** NAWCAD St. Inigoes

**DATE:** Jan 2002

**SOURCE OF MANPOWER:** TFMMS

**DATE:** Jan 2002

**Note:** Some of the ships listed below have not yet been commissioned, but manpower requirements are in place and training has begun.

**II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE**

| ACTIVITY, UIC                | PFYs  | CFY02 | FY03 | FY04 | FY05 | FY06 |
|------------------------------|-------|-------|------|------|------|------|
| OPERATIONAL ACTIVITIES - USN |       |       |      |      |      |      |
| CG 47 Ticonderoga            | 21281 | 1     | 0    | 0    | 0    | 0    |
| CG 48 Yorktown               | 21225 | 1     | 0    | 0    | 0    | 0    |
| CG 51 Thomas S. Gates        | 21344 | 1     | 0    | 0    | 0    | 0    |
| CG 55 Leyte Gulf             | 21388 | 1     | 0    | 0    | 0    | 0    |
| CG 56 San Jacinto            | 21389 | 1     | 0    | 0    | 0    | 0    |
| CG 58 Philippine Sea         | 21429 | 1     | 0    | 0    | 0    | 0    |
| CG 60 Normandy               | 21449 | 1     | 0    | 0    | 0    | 0    |
| CG 61 Monterey               | 21450 | 1     | 0    | 0    | 0    | 0    |
| CG 64 Gettysburg             | 21624 | 1     | 0    | 0    | 0    | 0    |
| CG 66 Hue City               | 21656 | 1     | 0    | 0    | 0    | 0    |
| CG 68 Anzio                  | 21658 | 1     | 0    | 0    | 0    | 0    |
| CG 69 Vicksburg              | 21684 | 1     | 0    | 0    | 0    | 0    |
| CG 71 Cape St. George        | 21828 | 1     | 0    | 0    | 0    | 0    |
| CG 72 Vella Gulf             | 21829 | 1     | 0    | 0    | 0    | 0    |
| DDG 51 Arleigh Burke         | 21487 | 1     | 0    | 0    | 0    | 0    |
| DDG 52 Barry                 | 21660 | 1     | 0    | 0    | 0    | 0    |
| DDG 55 Stout                 | 21685 | 1     | 0    | 0    | 0    | 0    |
| DDG 57 Mitscher              | 21687 | 1     | 0    | 0    | 0    | 0    |
| DDG 58 Laboon                | 21820 | 1     | 0    | 0    | 0    | 0    |
| DDG 61 Ramage                | 21823 | 1     | 0    | 0    | 0    | 0    |
| DDG 64 Carney                | 21923 | 1     | 0    | 0    | 0    | 0    |
| DDG 66 Gonzalez              | 21833 | 1     | 0    | 0    | 0    | 0    |
| DDG 67 Cole                  | 21941 | 1     | 0    | 0    | 0    | 0    |
| DDG 68 The Sullivans         | 21942 | 1     | 0    | 0    | 0    | 0    |
| DDG 71 Ross                  | 21945 | 1     | 0    | 0    | 0    | 0    |
| DDG 72 Mahan                 | 21946 | 1     | 0    | 0    | 0    | 0    |
| DDG 74 McFaul                | 21948 | 1     | 0    | 0    | 0    | 0    |
| DDG 75 Donald Cook           | 21949 | 1     | 0    | 0    | 0    | 0    |
| DDG 78 Porter                | 21952 | 1     | 0    | 0    | 0    | 0    |
| DDG 79 Oscar Austin          | 21953 | 1     | 0    | 0    | 0    | 0    |
| DDG 80 Roosevelt             | 21954 | 1     | 0    | 0    | 0    | 0    |
| DDG 84 Bulkeley              | 22992 | 1     | 0    | 0    | 0    | 0    |
| DDG 85 MC Campbell           | 22993 | 1     | 0    | 0    | 0    | 0    |
| DDG 86 Shoup                 | 22994 | 1     | 0    | 0    | 0    | 0    |
| DDG 87 Mason                 | 22995 | 1     | 0    | 0    | 0    | 0    |
| DDG 88 Preble                | 22996 | 1     | 0    | 0    | 0    | 0    |
| DDG 89 Mustin                | 22997 | 1     | 0    | 0    | 0    | 0    |
| DDG 90 Chafee                | 23155 | 1     | 0    | 0    | 0    | 0    |
| LHD 1 Wasp                   | 21560 | 1     | 0    | 0    | 0    | 0    |
| LHD 3 Kearsarge              | 21700 | 1     | 0    | 0    | 0    | 0    |
| LHD 5 Bataan                 | 21879 | 1     | 0    | 0    | 0    | 0    |
| LHD 7 Iwo Jima               | 23027 | 1     | 0    | 0    | 0    | 0    |

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

| ACTIVITY, UIC                   |       | PFYs | CFY02 | FY03 | FY04 | FY05 | FY06 |
|---------------------------------|-------|------|-------|------|------|------|------|
| CG 49 Vincennes                 | 21295 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 50 Valley Forge              | 21296 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 52 Bunker Hill               | 21345 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 53 Mobile Bay                | 21346 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 54 Antietam                  | 21387 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 57 Lake Champlain            | 21428 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 59 Princeton                 | 21447 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 62 Chancellorsville          | 21451 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 63 Cowpens                   | 21623 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 65 Chosin                    | 21625 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 67 Shiloh                    | 21657 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 70 Lake Erie                 | 21827 | 1    | 0     | 0    | 0    | 0    | 0    |
| CG 73 Port Royal                | 21830 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 53 John Paul Jones          | 21313 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 54 Curtis Wilbur            | 21640 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 56 John S. McCain           | 21686 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 59 Russell                  | 21821 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 60 Paul Hamilton            | 21822 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 62 Fitzgerald               | 21824 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 63 Stethem                  | 21825 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 65 Benfold                  | 21940 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 69 Milius                   | 21943 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 70 Hopper                   | 21944 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 73 Decatur                  | 21947 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 76 Higgins                  | 21950 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 77 O'Kane                   | 21951 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 81 Winston Churchill        | 21955 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 82 Lassen                   | 21956 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 83 Howard                   | 22999 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 91 Pinckney                 | 23145 | 1    | 0     | 0    | 0    | 0    | 0    |
| DDG 92 Momsen                   | 23146 | 1    | 0     | 0    | 0    | 0    | 0    |
| LHD 2 Essex                     | 21533 | 1    | 0     | 0    | 0    | 0    | 0    |
| LHD 4 Boxer                     | 21808 | 1    | 0     | 0    | 0    | 0    | 0    |
| LHD 6 Bonhomme Richard          | 22202 | 1    | 0     | 0    | 0    | 0    | 0    |
| TAH 19 Mercy                    | 46245 | 1    | 0     | 0    | 0    | 0    | 0    |
| <b>TOTAL:</b>                   |       | 77   | 0     | 0    | 0    | 0    | 0    |
| OPERATIONAL ACTIVITIES - OTHER  |       |      |       |      |      |      |      |
| Japan JMSDF                     | 00000 | 4    | 0     | 1    | 0    | 0    | 0    |
| <b>TOTAL:</b>                   |       | 4    | 0     | 1    | 0    | 0    | 0    |
| FLEET SUPPORT ACTIVITIES - USN  |       |      |       |      |      |      |      |
| AEGIS Technical Representative  | 39029 | 1    | 0     | 0    | 0    | 0    | 0    |
| FTSC LANT Detachment Mayport    | 0038A | 1    | 0     | 0    | 0    | 0    | 0    |
| FTSC LANT Detachment Naples     | 67562 | 1    | 0     | 0    | 0    | 0    | 0    |
| FTSC LANT Norfolk               | 65912 | 1    | 0     | 0    | 0    | 0    | 0    |
| SIMA Mayport                    | 32779 | 1    | 0     | 0    | 0    | 0    | 0    |
| SIMA Norfolk                    | 32770 | 1    | 0     | 0    | 0    | 0    | 0    |
| SIMA Pascagoula                 | 47318 | 1    | 0     | 0    | 0    | 0    | 0    |
| SURFCOMBATSYSCEN Wallops Island | 45534 | 1    | 0     | 0    | 0    | 0    | 0    |

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**II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE**

| <b>ACTIVITY, UIC</b>             | <b>PFYs</b> | <b>CFY02</b> | <b>FY03</b> | <b>FY04</b> | <b>FY05</b> | <b>FY06</b> |   |
|----------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|---|
| DEPMED NMC SD Detachment         | 46864       | 1            | 0           | 0           | 0           | 0           | 0 |
| FTSC PAC Detachment Pearl Harbor | 55302       | 1            | 0           | 0           | 0           | 0           | 0 |
| FTSC PAC Detachment Singapore    | 39449       | 1            | 0           | 0           | 0           | 0           | 0 |
| FTSC PAC Detachment Yokosuka     | 55305       | 1            | 0           | 0           | 0           | 0           | 0 |
| FTSC PAC San Diego               | 55304       | 1            | 0           | 0           | 0           | 0           | 0 |
| Ship Repair Facility Yokosuka    | 62758       | 1            | 0           | 0           | 0           | 0           | 0 |
| TAE 28 Santa Barbara             | 43054       | 1            | 0           | 0           | 0           | 0           | 0 |
| <b>TOTAL:</b>                    |             | 16           | 0           | 0           | 0           | 0           | 0 |

**Note:** AN/UPX29(V) maintenance on CV/CVNs is performed by ET 1572, AIMS System Technician personnel. Refer to the AIMS MK XII IFF System NTSP for billet and training requirements.

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT    | BILLETS |     | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|-------------------------------------|---------|-----|------------------|---------------|---------------|
|                                     | OFF     | ENL |                  |               |               |
| OPERATIONAL ACTIVITIES - USN        |         |     |                  |               |               |
| <b>CG 47 Ticonderoga, 21281</b>     |         |     |                  |               |               |
| ACDU                                | 0       | 2   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 48 Yorktown, 21225</b>        |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 51 Thomas S. Gates, 21344</b> |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 55 Leyte Gulf, 21388</b>      |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          | 1471          |
|                                     | 0       | 1   | ET3              | 1591          | 1571          |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 56 San Jacinto, 21389</b>     |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 58 Philippine Sea, 21429</b>  |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 60 Normandy, 21449</b>        |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |
| <b>CG 61 Monterey, 21450</b>        |         |     |                  |               |               |
| ACDU                                | 0       | 1   | ET2              | 1571          |               |
|                                     | 0       | 1   | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | 0       | 2   |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT    | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|-------------------------------------|----------|----------|------------------|---------------|---------------|
|                                     | OFF      | ENL      |                  |               |               |
| <b>CG 64 Gettysburg, 21624</b>      |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 66 Hue City, 21656</b>        |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 68 Anzio, 21658</b>           |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 69 Vicksburg, 21684</b>       |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 71 Cape St. George, 21828</b> |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 72 Vella Gulf, 21829</b>      |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET2              | 1571          |               |
|                                     | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 51 Arleigh Burke, 21487</b>  |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET1              | 1571          | 9608          |
|                                     | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 52 Barry, 21660</b>          |          |          |                  |               |               |
| ACDU                                | 0        | 1        | ET1              | 1571          | 9608          |
|                                     | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                     | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT   | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|------------------------------------|----------|----------|------------------|---------------|---------------|
|                                    | OFF      | ENL      |                  |               |               |
| <b>DDG 55 Stout, 21685</b>         |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          | 9526          |
|                                    | 0        | 1        | ET2              | 1678          | 1571          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 57 Mitscher, 21687</b>      |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET1              | 1571          | 9608          |
|                                    | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 58 Laboon, 21820</b>        |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET1              | 1571          | 9608          |
|                                    | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 61 Ramage, 21823</b>        |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1471          | 1571          |
|                                    | 0        | 1        | ET3              | 1571          | 9608          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 64 Carney, 21923</b>        |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET1              | 1571          | 9608          |
|                                    | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 66 Gonzalez, 21833</b>      |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          | 9526          |
|                                    | 0        | 1        | ET2              | 1678          | 1571          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 67 Cole, 21941</b>          |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET1              | 1571          | 9608          |
|                                    | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 68 The Sullivans, 21942</b> |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1471          | 1571          |
|                                    | 0        | 1        | ET3              | 1571          | 9608          |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT  | BILLETS |     | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|-----------------------------------|---------|-----|------------------|---------------|---------------|
|                                   | OFF     | ENL |                  |               |               |
| <b>DDG 71 Ross, 21945</b>         |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                   | 0       | 1   |                  |               |               |
| <b>DDG 72 Mahan, 21946</b>        |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 74 McFaul, 21948</b>       |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 75 Donald Cook, 21949</b>  |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 78 Porter, 21952</b>       |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 79 Oscar Austin, 21953</b> |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1571          | 9604          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 80 Roosevelt, 21954</b>    |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1571          | 9604          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |
| <b>DDG 84 Bulkeley, 22992</b>     |         |     |                  |               |               |
| ACDU                              | 0       | 1   | ET1              | 1571          | 9608          |
|                                   | 0       | 1   | ET2              | 1571          | 1427          |
| <b>ACTIVITY</b>                   | 0       | 2   |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|----------------------------------|----------|----------|------------------|---------------|---------------|
|                                  | OFF      | ENL      |                  |               |               |
| <b>DDG 85 MC Campbell, 22993</b> |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 86 Shoup, 22994</b>       |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 87 Mason, 22995</b>       |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 88 Preble, 22996</b>      |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 89 Mustin, 22997</b>      |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 90 Chafee, 23155</b>      |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET1              | 1571          | 9608          |
|                                  | 0        | 1        | ET2              | 1571          | 1471          |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>LHD 1 Wasp, 21560</b>         |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET2              | 1571          | 9527          |
|                                  | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>LHD 3 Kearsarge, 21700</b>    |          |          |                  |               |               |
| ACDU                             | 0        | 1        | ET2              | 1571          | 9527          |
|                                  | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                  | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT   | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|------------------------------------|----------|----------|------------------|---------------|---------------|
|                                    | OFF      | ENL      |                  |               |               |
| <b>LHD 5 Bataan, 21879</b>         |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          | 9527          |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>LHD 7 Iwo Jima, 23027</b>       |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          | 9527          |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 49 Vincennes, 21295</b>      |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 50 Valley Forge, 21296</b>   |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 52 Bunker Hill, 21345</b>    |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 53 Mobile Bay, 21346</b>     |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 54 Antietam, 21387</b>       |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 57 Lake Champlain, 21428</b> |          |          |                  |               |               |
| ACDU                               | 0        | 1        | ET2              | 1571          |               |
|                                    | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                    | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT     | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--------------------------------------|----------|----------|------------------|---------------|---------------|
|                                      | OFF      | ENL      |                  |               |               |
| <b>CG 59 Princeton, 21447</b>        |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 62 Chancellorsville, 21451</b> |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 63 Cowpens, 21623</b>          |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 65 Chosin, 21625</b>           |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 67 Shiloh, 21657</b>           |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 70 Lake Erie, 21827</b>        |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CG 73 Port Royal, 21830</b>       |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET2              | 1571          |               |
|                                      | 0        | 1        | ET3              | 1571          |               |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 53 John Paul Jones, 21313</b> |          |          |                  |               |               |
| ACDU                                 | 0        | 1        | ET1              | 1571          | 9608          |
|                                      | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                      | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT             | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--|----------|----------|------------------|---------------|---------------|
|  | OFF      | ENL      |                  |               |               |
| <b>DDG 54 Curtis Wilbur, 21640</b>           |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 56 John S. McCain, 21686</b>          |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 59 Russell, 21821</b>                 |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 60 Paul Hamilton, 21822</b>           |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 62 Fitzgerald, 21824</b>              |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 63 Stethem, 21825</b>                 |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET2              | 1571          | 9526          |
|  | 0        | 1        | ET2              | 1678          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 65 Benfold, 21940</b>                 |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>DDG 65 Benfold, 21940, FY02 Increment</b> |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET3              | 1571          | 9608          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>3</b> |                  |               |               |
| <b>DDG 69 Milius, 21943</b>                  |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT       | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--|----------|----------|------------------|---------------|---------------|
|  | OFF      | ENL      |                  |               |               |
| <b>DDG 70 Hopper, 21944</b>            |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 73 Decatur, 21947</b>           |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 76 Higgins, 21950</b>           |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 77 O'Kane, 21951</b>            |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 81 Winston Churchill, 21955</b> |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1571          | 9604          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 82 Lassen, 21956</b>            |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 83 Howard, 22999</b>            |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 9608          |
|  | 0        | 1        | ET2              | 1471          | 1571          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |
| <b>DDG 91 Pinckney, 23145</b>          |          |          |                  |               |               |
| ACDU                                   | 0        | 1        | ET1              | 1571          | 1677          |
|  | 0        | 1        | ET1              | 1571          | 9608          |
| <b>ACTIVITY</b>                        | <b>0</b> | <b>2</b> |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT             | BILLETS  |           | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--|----------|-----------|------------------|---------------|---------------|
|  | OFF      | ENL       |                  |               |               |
| <b>DDG 92 Momen, 23146</b>                   |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET1              | 1571          | 1677          |
|  | 0        | 1         | ET1              | 1571          | 9608          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>LHD 2 Essex, 21533</b>                    |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET2              | 1571          | 9527          |
|  | 0        | 1         | ET3              | 1571          |               |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>LHD 4 Boxer, 21808</b>                    |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET2              | 1571          | 9527          |
|  | 0        | 1         | ET3              | 1571          |               |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>LHD 6 Bonhomme Richard, 22202</b>         |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET2              | 1571          | 9527          |
|  | 0        | 1         | ET3              | 1571          |               |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>TAH 19 Mercy, 46245</b>                   |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET2              | 1571          |               |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>1</b>  |                  |               |               |
| OPERATIONAL ACTIVITIES - OTHER               |          |           |                  |               |               |
| <b>Japan JMSDF</b>                           |          |           |                  |               |               |
| Other  | 0        | 8         | FMS              |               |               |
| <b>Japan JMSDF, FY03 Increment</b>           |          |           |                  |               |               |
| Other  | 0        | 2         | FMS              |               |               |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>10</b> |                  |               |               |
| FLEET SUPPORT ACTIVITIES - USN               |          |           |                  |               |               |
| <b>AEGIS Technical Representative, 39029</b> |          |           |                  |               |               |
| ACDU   | 0        | 1         | ET1              | 1571          | 9608          |
|  | 0        | 1         | ET2              | 9608          | 1571          |
| <b>ACTIVITY</b>                              | <b>0</b> | <b>2</b>  |                  |               |               |

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| ACTIVITY, UIC, PHASING INCREMENT              | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|---|----------|----------|------------------|---------------|---------------|
|   | OFF      | ENL      |                  |               |               |
| <b>FTSC LANT Detachment Mayport, 0038A</b>    |          |          |                  |               |               |
| ACDU  | 0        | 1        | ETC              | 1571          | 1511          |
|   | 0        | 1        | ETC              | 1572          | 1571          |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>2</b> |                  |               |               |
| <b>FTSC LANT Detachment Naples, 67562</b>     |          |          |                  |               |               |
| ACDU  | 0        | 1        | ETC              | 1571          |               |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>1</b> |                  |               |               |
| <b>FTSC LANT Norfolk, 65912</b>               |          |          |                  |               |               |
| ACDU  | 0        | 1        | ETC              | 1507          | 1571          |
|   | 0        | 2        | ETC              | 1571          |               |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>3</b> |                  |               |               |
| <b>SIMA Mayport, 32779</b>                    |          |          |                  |               |               |
| ACDU  | 0        | 1        | ET1              | 1571          |               |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>1</b> |                  |               |               |
| <b>SIMA Norfolk, 32770</b>                    |          |          |                  |               |               |
| ACDU  | 0        | 2        | ET2              | 1571          | 9526          |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>2</b> |                  |               |               |
| <b>SIMA Pascagoula, 47318</b>                 |          |          |                  |               |               |
| ACDU  | 0        | 1        | ET2              | 1571          | 1486          |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>1</b> |                  |               |               |
| <b>SURFCOMBATSYSCEN Wallops Island, 45534</b> |          |          |                  |               |               |
| ACDU  | 0        | 1        | ETC              | 1510          | 1571          |
|   | 0        | 1        | ET1              | 1571          | 1460          |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>2</b> |                  |               |               |
| <b>SWOSCOLCOM Rhode Island, 63190</b>         |          |          |                  |               |               |
| ACDU  | 0        | 1        | ET2              | 1571          |               |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>1</b> |                  |               |               |
| <b>DEPMED NMC SD Detachment, 46864</b>        |          |          |                  |               |               |
| ACDU  | 0        | 1        | ET2              | 1571          |               |
| <b>ACTIVITY</b>                               | <b>0</b> | <b>1</b> |                  |               |               |

**II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

| ACTIVITY, UIC, PHASING INCREMENT               | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--|----------|----------|------------------|---------------|---------------|
|  | OFF      | ENL      |                  |               |               |
| <b>FTSC PAC Detachment Pearl Harbor, 55302</b> |          |          |                  |               |               |
| ACDU   | 0        | 1        | ETC              | 1510          | 1571          |
|  | 0        | 1        | ETC              | 1571          | 9503          |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>2</b> |                  |               |               |
| <b>FTSC PAC Detachment Singapore, 39449</b>    |          |          |                  |               |               |
| ACDU   | 0        | 1        | ETC              | 1510          | 1571          |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>1</b> |                  |               |               |
| <b>FTSC PAC Detachment Yokosuka, 55305</b>     |          |          |                  |               |               |
| ACDU   | 0        | 1        | ETC              | 1510          | 1571          |
|  | 0        | 1        | ETC              | 1571          |               |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>2</b> |                  |               |               |
| <b>FTSC PAC San Diego, 55304</b>               |          |          |                  |               |               |
| ACDU   | 0        | 1        | ETC              | 1571          | 1507          |
| TAR  | 0        | 1        | ETC              | 1510          | 1571          |
|  | 0        | 1        | ETC              | 1571          |               |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>3</b> |                  |               |               |
| <b>Ship Repair Facility Yokosuka, 62758</b>    |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET1              | 1571          |               |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>1</b> |                  |               |               |
| <b>TAE 28 Santa Barbara, 43054</b>             |          |          |                  |               |               |
| ACDU   | 0        | 1        | ET3              | 1571          | 1471          |
| <b>ACTIVITY</b>                                | <b>0</b> | <b>1</b> |                  |               |               |

**Note:** Japanese naval personnel receive AN/UPX-29(V) Interrogator System as part of their JMSDF operations.

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| DESIG/<br>RATING                     | PNEC/SNEC<br>PMOS/SMOS |      | PFYs |     | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|--------------------------------------|------------------------|------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                      |                        |      | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| USN OPERATIONAL ACTIVITIES - ACDU    |                        |      |      |     |       |     |      |     |      |     |      |     |      |     |
| ET1                                  | 1571                   | 1677 |      | 2   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET1                                  | 1571                   | 9608 |      | 36  |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1471                   | 1571 |      | 21  |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   |      |      | 26  |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 1427 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 1471 |      | 7   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 9526 |      | 9   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 9527 |      | 7   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 9604 |      | 3   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1678                   | 1571 |      | 3   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET3                                  | 1571                   |      |      | 34  |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET3                                  | 1571                   | 9608 |      | 2   |       | 1   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET3                                  | 1591                   | 1571 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| OTHER OPERATIONAL ACTIVITIES - OTHER |                        |      |      |     |       |     |      |     |      |     |      |     |      |     |
| Japan FMS                            |                        |      |      | 8   |       | 0   |      | 2   |      | 0   |      | 0   |      | 0   |
| USN FLEET SUPPORT ACTIVITIES - ACDU  |                        |      |      |     |       |     |      |     |      |     |      |     |      |     |
| ETC                                  | 1507                   | 1571 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1510                   | 1571 |      | 4   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1571                   |      |      | 4   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1571                   | 1507 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1571                   | 1511 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1571                   | 9503 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1572                   | 1571 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET1                                  | 1571                   |      |      | 2   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET1                                  | 1571                   | 1460 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET1                                  | 1571                   | 9608 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   |      |      | 2   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 1486 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 1571                   | 9526 |      | 2   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET2                                  | 9608                   | 1571 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ET3                                  | 1571                   | 1471 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| USN FLEET SUPPORT ACTIVITIES - TAR   |                        |      |      |     |       |     |      |     |      |     |      |     |      |     |
| ETC                                  | 1510                   | 1571 |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| ETC                                  | 1571                   |      |      | 1   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| DESIG/<br>RATING                     | PNEC/SNEC<br>PMOS/SMOS | PFYs |     | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|--------------------------------------|------------------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                      |                        | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| <b>SUMMARY TOTALS:</b>               |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| USN OPERATIONAL ACTIVITIES - ACDU    |                        | 152  |     | 1     |     | 0    |     | 0    |     | 0    |     | 0    |     |
| OTHER OPERATIONAL ACTIVITIES - OTHER |                        | 8    |     | 0     |     | 2    |     | 0    |     | 0    |     | 0    |     |
| USN FLEET SUPPORT ACTIVITIES - ACDU  |                        | 24   |     | 0     |     | 0    |     | 0    |     | 0    |     | 0    |     |
| USN FLEET SUPPORT ACTIVITIES - TAR   |                        | 2    |     | 0     |     | 0    |     | 0    |     | 0    |     | 0    |     |
| <b>GRAND TOTALS:</b>                 |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| USN - ACDU                           |                        | 176  |     | 1     |     | 0    |     | 0    |     | 0    |     | 0    |     |
| USN - TAR                            |                        | 2    |     | 0     |     | 0    |     | 0    |     | 0    |     | 0    |     |
| OTHER - OTHER                        |                        | 8    |     | 0     |     | 2    |     | 0    |     | 0    |     | 0    |     |

**II.A.2.b. BILLETS TO BE DELETED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

| ACTIVITY, UIC, PHASING INCREMENT             | BILLETS |     | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|--|---------|-----|------------------|---------------|---------------|
|  | OFF     | ENL |                  |               |               |
| OPERATIONAL ACTIVITIES - USN                 |         |     |                  |               |               |
| <b>DDG 65 Benfold, 21940, FY02 Increment</b> |         |     |                  |               |               |
| ACDU   | 0       | 1   | ET1              | 1571          | 9608          |
| <b>ACTIVITY</b>                              | 0       | 1   |                  |               |               |

II.A.2.c. TOTAL BILLETS TO BE DELETED IN OPERATIONAL AND FLEET SUPPORT ACTIVITIES

| DESIG/<br>RATING                  | PNEC/SNEC<br>PMOS/SMOS |      | PFYs<br>OFF ENL |   | CFY02<br>OFF ENL |    | FY03<br>OFF ENL |   | FY04<br>OFF ENL |   | FY05<br>OFF ENL |   | FY06<br>OFF ENL |   |
|-----------------------------------|------------------------|------|-----------------|---|------------------|----|-----------------|---|-----------------|---|-----------------|---|-----------------|---|
|                                   |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
| USN OPERATIONAL ACTIVITIES - ACDU |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
| ET1                               | 1571                   | 9608 |                 | 0 |                  | -1 |                 | 0 |                 | 0 |                 | 0 |                 | 0 |
| <b>SUMMARY TOTALS:</b>            |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
| USN OPERATIONAL ACTIVITIES - ACDU |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
|                                   |                        |      |                 | 0 |                  | -1 |                 | 0 |                 | 0 |                 | 0 |                 | 0 |
| <b>GRAND TOTALS:</b>              |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
| USN - ACDU                        |                        |      |                 |   |                  |    |                 |   |                 |   |                 |   |                 |   |
|                                   |                        |      |                 | 0 |                  | -1 |                 | 0 |                 | 0 |                 | 0 |                 | 0 |

**II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS**

| DESIG<br>RATING | PNEC/SNEC<br>PMOS/SMOS | PFYs |     | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|-----------------|------------------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                 |                        | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |

TRAINING ACTIVITY, LOCATION, UIC: NAVAIRWARCENADIV St. Inigoes, 64485

**INSTRUCTOR BILLETS**

|             |  |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|--|---|---|---|---|---|---|---|---|---|---|---|---|
| OTHER       |  |   |   |   |   |   |   |   |   |   |   |   |   |
| BAE Systems |  | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |

**SUPPORT BILLETS**

|             |  |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|--|---|---|---|---|---|---|---|---|---|---|---|---|
| OTHER       |  |   |   |   |   |   |   |   |   |   |   |   |   |
| BAE Systems |  | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |

|               |  |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------|--|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>TOTAL:</b> |  | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
|---------------|--|---|---|---|---|---|---|---|---|---|---|---|---|

**II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS**

| ACTIVITY,<br>LOCATION, UIC          | USN/<br>USMC | PFYs |     | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|-------------------------------------|--------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                     |              | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| NAVAIRWARCENADIV St. Inigoes, 64485 | USN          | 0.0  | 8.3 | 0.0   | 2.9 | 0.0  | 3.0 | 0.0  | 3.1 | 0.0  | 3.2 | 0.0  | 3.1 |
| <b>SUMMARY TOTALS:</b>              |              |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     | USN          | 0.0  | 8.3 | 0.0   | 2.9 | 0.0  | 3.0 | 0.0  | 3.1 | 0.0  | 3.2 | 0.0  | 3.1 |
| <b>GRAND TOTALS:</b>                |              |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |              | 0.0  | 8.3 | 0.0   | 2.9 | 0.0  | 3.0 | 0.0  | 3.1 | 0.0  | 3.2 | 0.0  | 3.1 |

**II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS**

| DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS | BILLET<br>BASE | CFY02<br>+/- CUM | FY03<br>+/- CUM | FY04<br>+/- CUM | FY05<br>+/- CUM | FY06<br>+/- CUM |
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|

a. OFFICER - USN                      Not Applicable

**b. ENLISTED - USN**

Operational Billets ACDU and TAR

|     |      |      |    |    |    |   |    |   |    |   |    |   |    |
|-----|------|------|----|----|----|---|----|---|----|---|----|---|----|
| ET1 | 1571 | 1677 | 2  | 0  | 2  | 0 | 2  | 0 | 2  | 0 | 2  | 0 | 2  |
| ET1 | 1571 | 9608 | 36 | -1 | 35 | 0 | 35 | 0 | 35 | 0 | 35 | 0 | 35 |
| ET2 | 1471 | 1571 | 21 | 0  | 21 | 0 | 21 | 0 | 21 | 0 | 21 | 0 | 21 |
| ET2 | 1571 |      | 26 | 0  | 26 | 0 | 26 | 0 | 26 | 0 | 26 | 0 | 26 |
| ET2 | 1571 | 1427 | 1  | 0  | 1  | 0 | 1  | 0 | 1  | 0 | 1  | 0 | 1  |
| ET2 | 1571 | 1471 | 7  | 0  | 7  | 0 | 7  | 0 | 7  | 0 | 7  | 0 | 7  |
| ET2 | 1571 | 9526 | 9  | 0  | 9  | 0 | 9  | 0 | 9  | 0 | 9  | 0 | 9  |
| ET2 | 1571 | 9527 | 7  | 0  | 7  | 0 | 7  | 0 | 7  | 0 | 7  | 0 | 7  |
| ET2 | 1571 | 9604 | 3  | 0  | 3  | 0 | 3  | 0 | 3  | 0 | 3  | 0 | 3  |
| ET2 | 1678 | 1571 | 3  | 0  | 3  | 0 | 3  | 0 | 3  | 0 | 3  | 0 | 3  |
| ET3 | 1571 |      | 34 | 0  | 34 | 0 | 34 | 0 | 34 | 0 | 34 | 0 | 34 |
| ET3 | 1571 | 9608 | 2  | 1  | 3  | 0 | 3  | 0 | 3  | 0 | 3  | 0 | 3  |
| ET3 | 1591 | 1571 | 1  | 0  | 1  | 0 | 1  | 0 | 1  | 0 | 1  | 0 | 1  |

Fleet Support Billets ACDU and TAR

|     |      |      |      |   |   |   |   |   |   |   |   |   |   |   |
|-----|------|------|------|---|---|---|---|---|---|---|---|---|---|---|
| ETC | 1507 | 1571 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ETC | 1510 | 1571 | 5    | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 |   |
| ETC | 1571 |      | 5    | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 |   |
| ETC | 1571 | 1507 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ETC | 1571 | 1511 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ETC | 1571 | 9503 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ETC | 1572 | 1571 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ET1 | 1571 |      | 2    | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |   |
| ET1 | 1571 | 1460 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ET1 | 1571 | 9608 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ET2 | 1571 |      | 2    | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |   |
| ET2 | 1571 | 1486 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |
| ET2 | 1571 | 9526 | 2    | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |   |
| ET2 |      | 9608 | 1571 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| ET3 | 1571 | 1471 | 1    | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |   |

Chargeable Student Billets ACDU and TAR

|  |  |  |   |    |   |   |   |   |   |   |   |   |   |
|--|--|--|---|----|---|---|---|---|---|---|---|---|---|
|  |  |  | 9 | -6 | 3 | 0 | 3 | 1 | 4 | 0 | 4 | 0 | 4 |
|--|--|--|---|----|---|---|---|---|---|---|---|---|---|

**II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS**

| DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS | BILLET<br>BASE | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|------------------|---------------|---------------|----------------|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                  |               |               |                | +/-   | CUM | +/-  | CUM | +/-  | CUM | +/-  | CUM | +/-  | CUM |

**TOTAL USN ENLISTED BILLETS:**

|                    |  |  |     |    |     |   |     |   |     |   |     |   |     |
|--------------------|--|--|-----|----|-----|---|-----|---|-----|---|-----|---|-----|
| Operational        |  |  | 152 | 0  | 152 | 0 | 152 | 0 | 152 | 0 | 152 | 0 | 152 |
| Fleet Support      |  |  | 26  | 0  | 26  | 0 | 26  | 0 | 26  | 0 | 26  | 0 | 26  |
| Chargeable Student |  |  | 9   | -6 | 3   | 0 | 3   | 1 | 4   | 0 | 4   | 0 | 4   |

**c. OFFICER - USMC**      Not Applicable

**d. ENLISTED - USMC**      Not Applicable

**II.B. ANNUAL TRAINING INPUT REQUIREMENTS**

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (current course)

**COURSE LENGTH:** 4.0 Weeks

**NAVY TOUR LENGTH:** 36 Months

**ATTRITION** Navy: 0%

**BACKOUT FACTOR:** 0.08

| TRAINING<br>ACTIVITY         | SOURCE | ACDU/TAR<br>SELRES | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|------------------------------|--------|--------------------|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                              |        |                    | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| NAVAIRWARCENADIV St. Inigoes |        |                    |       |     |      |     |      |     |      |     |      |     |
|                              | USN    | ACDU               |       | 40  |      | 18  |      | 0   |      | 0   |      | 0   |
|                              |        | TAR                |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
|                              | OTHER  | Other              |       | 2   |      | 4   |      | 0   |      | 0   |      | 0   |
|                              |        | TOTAL:             |       | 42  |      | 22  |      | 0   |      | 0   |      | 0   |

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (with FC 5)

**COURSE LENGTH:** 4.0 Weeks

**NAVY TOUR LENGTH:** 36 Months

**ATTRITION** Navy: 10%

**BACKOUT FACTOR:** 0.08

| TRAINING<br>ACTIVITY         | SOURCE | ACDU/TAR<br>SELRES | CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |
|------------------------------|--------|--------------------|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                              |        |                    | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| NAVAIRWARCENADIV St. Inigoes |        |                    |       |     |      |     |      |     |      |     |      |     |
|                              | USN    | ACDU               |       | 0   |      | 25  |      | 45  |      | 45  |      | 45  |
|                              |        | TAR                |       | 0   |      | 0   |      | 0   |      | 1   |      | 0   |
|                              | OTHER  | Other              |       | 0   |      | 0   |      | 3   |      | 3   |      | 3   |
|                              |        | TOTAL:             |       | 0   |      | 25  |      | 48  |      | 49  |      | 48  |

## PART III - TRAINING REQUIREMENTS

The following elements are not affected by the AN/UPX-29(V) and, therefore, are not included in Part III of this NTSP:

III.A.1. Initial Training Requirements

III.A.2. Follow-on Training

III.A.2.a. Existing Courses

III.A.2.b. Planned Courses

**III.A.2. FOLLOW-ON TRAINING**

**III.A.2.a. EXISTING COURSES**

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (current course)

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC:** St. Inigoes, 64485

**SOURCE:** USN                      **STUDENT CATEGORY:** ACDU - TAR

| CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 40  |      | 18  |      | 0   |      | 0   |      | 0   | ATIR       |
|       | 40  |      | 18  |      | 0   |      | 0   |      | 0   | Output     |
|       | 2.9 |      | 1.3 |      | 0.0 |      | 0.0 |      | 0.0 | AOB        |
|       | 2.9 |      | 1.3 |      | 0.0 |      | 0.0 |      | 0.0 | Chargeable |

**SOURCE:** OTHER                      **STUDENT CATEGORY:** Other

| CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 2   |      | 4   |      | 0   |      | 0   |      | 0   | ATIR       |
|       | 2   |      | 4   |      | 0   |      | 0   |      | 0   | Output     |
|       | 0.1 |      | 0.3 |      | 0.0 |      | 0.0 |      | 0.0 | AOB        |
|       | 0.1 |      | 0.3 |      | 0.0 |      | 0.0 |      | 0.0 | Chargeable |

**Note:** In FY03, upon completion of course *S-102-0085, Interrogator System AN/UPX-29(V) Maintenance*, approximately half the students will remain at NAWCAD, St. Inigoes for an additional one week of FC5 maintenance training. In FY04, S-102-0085 will begin transition from AN/UPX-29(V) FC4 to FC5 information; course length will increase from 26 to 33 days.

**III.A.2.b. PLANNED COURSES**

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (with FC 5)

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC:** St. Inigoes, 64485

**SOURCE:** USN                    **STUDENT CATEGORY:** ACDU - TAR

| CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 0   |      | 25  |      | 45  |      | 46  |      | 45  | ATIR       |
|       | 0   |      | 23  |      | 41  |      | 41  |      | 41  | Output     |
|       | 0.0 |      | 1.7 |      | 3.1 |      | 3.2 |      | 3.1 | AOB        |
|       | 0.0 |      | 1.7 |      | 3.1 |      | 3.2 |      | 3.1 | Chargeable |

**SOURCE:** OTHER                    **STUDENT CATEGORY:** Other

| CFY02 |     | FY03 |     | FY04 |     | FY05 |     | FY06 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 0   |      | 0   |      | 3   |      | 3   |      | 3   | ATIR       |
|       | 0   |      | 0   |      | 3   |      | 3   |      | 3   | Output     |
|       | 0.0 |      | 0.0 |      | 0.2 |      | 0.2 |      | 0.2 | AOB        |
|       | 0.0 |      | 0.0 |      | 0.2 |      | 0.2 |      | 0.2 | Chargeable |

## **PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

The following elements are not affected by the AN/UPX-29(V) and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B. Courseware Requirements

IV.B.1. Training Services

IV.C. Facility Requirements

IV.C.1. Facility Requirements Summary (Space/Support) by Activity

IV.C.2. Facility Requirements Detailed by Activity and Course

IV.C.3. Facility Project Summary by Program

#### IV.A. TRAINING HARDWARE

##### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC:** St. Inigoes, 64485

| ITEM NO.   | EQUIPMENT / TYPE OR RANGE OF REPAIR        | QTY REQD | DATE REQD | GFE CFE | STATUS  |
|------------|--|----------|-----------|---------|---------|
| <b>TTE</b> |  |          |           |         |         |
| 031        | Processor-Controller CP-1273/UPX-24(V)     | 1        | May 96    | GFE     | Onboard |
| 032        | Control Monitor, C-10065/UPX-24(V)         | 1        | May 96    | GFE     | Onboard |
| 033        | Control Indicator, C-10064/UPX-24(V)       | 1        | May 96    | GFE     | Onboard |
| 034        | Interrogator, AS-3134/UPX                  | 1        | May 96    | GFE     | Onboard |
| 035        | Antenna Position Programmer, CV3372/UPX    | 1        | May 96    | GFE     | Onboard |
| 036        | Antenna Controller, C-10063/UPX            | 1        | May 96    | GFE     | Onboard |
| 037        | Interim Set AN/UPX-27                      | 1        | May 96    | GFE     | Onboard |
| 038        | Interim Set AN/UPX-37                      | 1        | May 96    | GFE     | Onboard |
| 039        | RF Switching Group AN/UPA-61               | 1        | May 96    | GFE     | Onboard |
| 040        | Crypto Computer, KIR-1C/TSEC               | 1        | May 96    | GFE     | Onboard |
| 041        | Crypto Keyer, KIK-18/TSEC                  | 1        | May 96    | GFE     | Onboard |
| 042        | Alarm Monitor, BZ-173A/UPA-59(A)           | 1        | May 96    | GFE     | Onboard |
| 043        | IFF Junction Box                           | 1        | May 96    | GFE     | Onboard |
| 044        | Radar Switchboard, SB-440/SP               | 1        | May 96    | GFE     | Onboard |
| 045        | Test Target Generator                      | 1        | May 96    | GFE     | Onboard |
| 046        | Radar Trigger/Synchro Simulator            | 1        | May 96    | GFE     | Onboard |
| 047        | NTDS Interface Simulator                   | 1        | May 96    | GFE     | Onboard |
| 048        | Control Monitor, C-8834/UPA-61             | 1        | May 96    | GFE     | Onboard |
| 049        | Electronic Switch Assembly, SA-1807/UPA-61 | 1        | May 96    | GFE     | Onboard |

#### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

##### GPTE

|     |                           |   |        |     |         |
|-----|---------------------------|---|--------|-----|---------|
| 001 | Oscilloscope, 2246-1Y     | 1 | May 96 | GFE | Onboard |
| 002 | Multimeter, 77AN          | 1 | May 99 | GFE | Onboard |
| 003 | Power Meter, 4358         | 1 | May 96 | GFE | Onboard |
| 004 | Digital Multimeter, 27AN  | 1 | May 96 | GFE | Onboard |
| 005 | 75 ohm Terminator         | 1 | May 96 | GFE | Onboard |
| 006 | Crystal Detector BNC/N(M) | 1 | May 96 | GFE | Onboard |
| 007 | Terminator, 50 ohm        | 1 | May 96 | GFE | Onboard |
| 008 | Terminator, 75 ohm        | 1 | May 96 | GFE | Onboard |
| 009 | Attenuator, Fixed 10DB    | 1 | May 96 | GFE | Onboard |

##### SPETE

|     |                           |   |        |     |         |
|-----|---------------------------|---|--------|-----|---------|
| 020 | OE-120 Antenna Horn       | 1 | May 96 | GFE | Onboard |
| 021 | AN/UPM-155 Radar Test Set | 1 | May 96 | GFE | Onboard |

#### IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (current course)

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC:** St. Inigoes, 64485

| <b>TYPES OF MATERIAL OR AID</b>      | <b>QTY<br/>REQD</b> | <b>DATE<br/>REQD</b> | <b>STATUS</b> |
|--------------------------------------|---------------------|----------------------|---------------|
| Instructor Guides                    | 6                   | May 96               | Onboard       |
| Multimedia Projector                 | 1                   | May 96               | Onboard       |
| Personal Computers                   | 10                  | May 96               | Onboard       |
| Power Point Presentation, 150 Slides | 1                   | May 96               | Onboard       |
| Prefaulted Modules                   | 40                  | May 96               | Onboard       |
| Student Guides                       | 48                  | May 96               | Onboard       |
| Student Test Package                 | 48                  | May 96               | Onboard       |
| Wall Charts                          | 12                  | May 96               | Onboard       |

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance (with FC 5)

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC:** St. Inigoes, 64485

| <b>TYPES OF MATERIAL OR AID</b>              | <b>QTY<br/>REQD</b> | <b>DATE<br/>REQD</b> | <b>STATUS</b> |
|--|---------------------|----------------------|---------------|
| Instructor Guides with FC5                   | 12                  | Jan 03               | Pending       |
| Power Point Presentation with FC5, 20 Slides | 1                   | Jan 03               | Pending       |
| Student Guides with FC5                      | 48                  | Jan 03               | Pending       |
| Student Test Package with FC5                | 48                  | Jan 03               | Pending       |
| Wall Charts with FC5                         | 12                  | Jan 03               | Pending       |

**Note:** NAVAIRWARCENADIV St. Inigoes is currently developing FC5 material for S-102-0085, Interrogator System AN/UPX-29(V) course.

**IV.B.3. TECHNICAL MANUALS**

**CIN, COURSE TITLE:** S-102-0085, Interrogator System AN/UPX-29(V) Maintenance

**TRAINING ACTIVITY:** NAVAIRWARCENADIV

**LOCATION, UIC :** St. Inigoes, 64485

| <b>TECHNICAL MANUAL NUMBER / TITLE</b>  | <b>MEDIUM</b> | <b>QTY REQD</b> | <b>DATE REQD</b> | <b>STATUS</b> |
|---|---------------|-----------------|------------------|---------------|
| ACP-160<br>IFF/SIF Operation  | Hard copy     | 8               | May 96           | Onboard       |
| AE-UPX24-OMI-200<br>Technical Manual, Operation and Maintenance Instructions,<br>AN/UPX-24(V) Interrogator Set                            | Hard copy     | 8               | May 96           | Onboard       |
| AE-UPX29-OMI-100<br>Technical Manual, Operation and Maintenance Instructions,<br>AN/UPX-29(V) Interrogator System                         | Hard copy     | 8               | May 96           | Onboard       |
| AIMS 86-100<br>Mode 4 Handbook  | Hard copy     | 8               | May 96           | Onboard       |
| AN/UPA-61<br>RF Switching Group   | Hard copy     | 8               | May 96           | Onboard       |
| AN/UPM-155<br>Radar Test Set Operations Instructions  | Hard copy     | 8               | May 96           | Onboard       |
| AN/UPX-29(V) NTDS Manual<br>Interrogator System AN/UPX-29(V) Naval Tactical Data System<br>Interface Manual                               | Hard copy     | 8               | May 96           | Onboard       |
| AS-177/UPX<br>Omnidirectional Antenna   | Hard copy     | 8               | May 96           | Onboard       |
| AS-177A/UPX<br>Omnidirectional Antenna  | Hard copy     | 8               | May 96           | Onboard       |
| AS-177B/UPX<br>Omnidirectional Antenna  | Hard copy     | 8               | May 96           | Onboard       |
| AS-3134( )/UPX<br>Technical Manual, Antenna Assembly  | Hard copy     | 8               | May 96           | Onboard       |
| BZ-173A/UPA-59(A)<br>Technical Manual for Decoder Groups (Alarm Monitor)  | Hard copy     | 8               | May 96           | Onboard       |
| DoD AIMS 86-100B<br>Technical Manual, Operation and Maintenance Overview<br>General All-Service Mode 4 Handbook, Identification Friend or | Hard copy     | 8               | May 96           | Onboard       |

### IV.B.3. TECHNICAL MANUALS

|  |           |   |        |         |
|--|-----------|---|--------|---------|
| KIR-1C/TSEC<br>Crypto Computer Maintenance Manual (Confidential)   | Hard copy | 8 | May 96 | Onboard |
| MK XII Users Guide<br>Maintenance Instructions for Shipboard AIMS  | Hard copy | 8 | May 96 | Onboard |
| NA 0967-LP-542-5010<br>Technical Manual, Operation and Maintenance Instructions,<br>Interrogator AN/UPX-27         | Hard copy | 8 | May 96 | Onboard |
| NA 0967-LP542-5010<br>Technical Manual, Maintenance Instructions Organizational,<br>Interrogator Set AN/UPX-27     | Hard copy | 8 | May 96 | Onboard |
| NA 16 30UPM155-1<br>UPM-155 Operation Instructions   | Hard copy | 8 | May 96 | Onboard |
| NA 16-30 UPM 155-2<br>Maintenance Instructions, Organizational and Intermediate<br>Maintenance                     | Hard copy | 8 | May 96 | Onboard |
| NA 16-60OE120/UPX-1<br>Technical Manual, Operation and Maintenance Instructions,<br>Antenna Group OE-120120( )/UPX | Hard copy | 8 | May 96 | Onboard |
| SG-841/UPX<br>Technical Manual, SG-841/UPX   | Hard copy | 8 | May 96 | Onboard |
| SG-841/UPX<br>Operator Instruction Chart   | Hard copy | 8 | May 96 | Onboard |
| SG-841/UPX<br>Performance Standard Sheet   | Hard copy | 8 | May 96 | Onboard |
| SG-841/UPX<br>Maintenance Standards Book   | Hard copy | 8 | May 96 | Onboard |
| WS 33578<br>Combat Systems to Interrogator System AN/UPX-29(V) Interface<br>Design Specification                   | Hard copy | 8 | May 96 | Onboard |
| NA 16-70UPX37-1<br>Technical Manual, Maintenance Instructions Organizational,<br>Digital Interrogator AN/UPX-37    | Hard copy | 8 | May 00 | Onboard |

**PART V - MPT MILESTONES**

| <b>COG CODE</b> | <b>MPT MILESTONES</b>  | <b>DATE</b> | <b>STATUS</b> |
|-----------------|--|-------------|---------------|
| TSA             | Conducted AN/UPX-29(V) Initial Training                                | FY77        | Completed     |
| OPTEVFOR        | Conducted AN/UPX-29(V) TECHEVAL/OPEVAL                                 | FY78        | Completed     |
| PDA             | Conducted analysis of AN/UPX-29(V) MPT Requirements                    | FY80        | Completed     |
| OPO             | Approved AN/UPX-29(V) NTSP   | FY81        | Completed     |
| TSA             | Began AN/UPX-29(V) Maintenance Follow-On Training                      | FY82        | Completed     |
| PDA             | Awarded AN/UPX-29(V) production contract                               | FY83        | Completed     |
| CNO             | Designated NAWCAD St. Inigoes AN/UPX-29(V) Permanent Training Activity | FY95        | Completed     |
| PDA             | Updated AN/UPX-29(V) NTSP  | FY96        | Completed     |
| PDA             | Began Incorporating AN/UPX-29(V) FC5 Into Fleet                        | FY00        | Completed     |
| OPO             | Updated Draft AN/UPX-29(V) NTSP  | Feb 02      | Completed     |
| OPTEVFOR        | Begin MK-XIIA Mode 5 and Mode S DT and OT                              | FY03        | Pending       |
| PDA             | Achieve AN/UPX-29(V) FC5 MSD   | FY03        | Pending       |
| TSA             | Begin AN/UPX-29(V) FC5 Transition Training at NAWCAD St. Inigoes       | FY03        | Pending       |
| TSA             | Incorporate FC5 AN/UPX-29 (V) Training Into Existing Course            | FY04        | Pending       |
| TSA             | Complete AN/UPX-29(V) FC5 Transition Training                          | FY08        | Pending       |

**PART VI - DECISION ITEMS / ACTION REQUIRED**

| <b>DECISION ITEM OR ACTION REQUIRED</b> | <b>COMMAND ACTION</b> | <b>DUE DATE</b> | <b>STATUS</b> |
|---|-----------------------|-----------------|---------------|
|---|-----------------------|-----------------|---------------|

There are no AN/UPX-29(V) Interrogator System action items pending.

PART VII - POINTS OF CONTACT

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL  | TELEPHONE NUMBERS   |
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PART VII - POINTS OF CONTACT

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL  | TELEPHONE NUMBERS  |
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**PART VII - POINTS OF CONTACT**

**NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL**

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