



# **NAVY TRAINING SYSTEM PLAN**

**FOR THE**

**TS-3846A/ASM-608(V)**

**INERTIAL MEASUREMENT UNIT TEST SET III**

**N88-NTSP-A-50-8116C/D**

**FEBRUARY 2004**

**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III****EXECUTIVE SUMMARY**

The TS-3846A/ASM-608(V) Inertial Measurement Unit Test Set (IMUTS) III was first introduced to the fleet in March 1997 onboard CVN 68, USS Nimitz. To date, 96 IMUTS III systems have been installed at various United States Navy Aircraft Intermediate Maintenance Departments (AIMD) both ashore and afloat and United States Marine Corps Marine Aviation Logistics Squadrons (MALs). IMUTS III was introduced into the fleet through retrofit of the IMUTS II equipment via Engineering Change Proposal 92-002. All IMUTS III systems have been installed and are operational. The IMUTS III system is in the Operations and Support phase of the Defense Acquisition System.

IMUTS III system manpower requirements are based on three working shifts for AIMDs ashore, and two working shifts for AIMDs afloat and MALs. The IMUTS III system is operated and maintained by Navy Aviation Electrician's Mate personnel with Navy Enlisted Classification 7197, and Marine Corps personnel with Military Occupational Specialty 6464, Aircraft Inertial Navigation System Technician. No increase in manpower was required with the introduction of the IMUTS III.

IMUTS III follow-on training became available in July 1997 at Maintenance Training Unit (MTU) 3010, Naval Air Maintenance Training Unit, Virginia, and at MTU 3011, Naval Air Maintenance Training Group Detachment, Marine Corps Air Station Miramar, California.

**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III**

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**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III**

**LIST OF ACRONYMS**

|                |  |
|----------------|--|
| AC             | Alternating Current                            |
| ACDU           | Active Duty                                    |
| A/D            | Analog-to-Digital                              |
| AE             | Aviation Electrician's Mate                    |
| AFB            | Air Force Base                                 |
| AIMD           | Aircraft Intermediate Maintenance Department   |
| AMTCS          | Aviation Maintenance Training Continuum System |
| AR             | Active Reserve                                 |
| CAINS          | Carrier Aircraft Inertial Navigation System    |
| CD-ROM         | Compact Disc-Read Only Memory                  |
| CETS           | Contractor Engineering Technical Services      |
| CFE            | Contractor Furnished Equipment                 |
| CFY            | Current Fiscal Year                            |
| CIN            | Course Identification Number                   |
| CMC            | Commandant of the Marine Corps                 |
| CNO            | Chief of Naval Operations                      |
| COMLANTFLT     | Commander In Chief Atlantic Fleet              |
| COMNAVAIRESFOR | Commander Naval Air Reserve Forces             |
| COMNAVRESFOR   | Commander Naval Reserve Forces                 |
| COMPACFLT      | Commander In Chief Pacific Fleet               |
| CV             | Aircraft Carrier                               |
| CVN            | Aircraft Carrier, Nuclear                      |
| DC             | Direct Current                                 |
| ECP            | Engineering Change Proposal                    |
| EVSA           | Equipment Verification Standard Assembly       |
| FMS            | Foreign Military Sales                         |
| FY             | Fiscal Year                                    |
| GPETE          | General Purpose Electronic Test Equipment      |
| GPTE           | General Purpose Test Equipment                 |
| HPRR           | Human Performance Requirements Review          |
| Hz             | Hertz  |

**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III**

**LIST OF ACRONYMS**

|               |  |
|---------------|--|
| ID            | Interface Device   |
| ILSP          | Integrated Logistics Support Plan                        |
| IMUTS         | Inertial Measurement Unit Test Set                       |
| INU           | Inertial Navigation Unit                                 |
| IPB           | Illustrated Parts Breakdown                              |
| JRB           | Joint Reserve Base                                       |
| MALS          | Marine Aviation Logistic Squadron                        |
| MAM           | Maintenance Assist Module                                |
| MB            | Megabyte   |
| MCAS          | Marine Corps Air Station                                 |
| MCCDC         | Marine Corps Combat Development Command                  |
| MOS           | Military Occupational Specialty                          |
| MSD           | Material Support Date                                    |
| MTU           | Maintenance Training Unit                                |
| NA            | Not Applicable   |
| NADEP         | Naval Aviation Depot                                     |
| NAMP          | Naval Aviation Maintenance Program                       |
| NAMTRAGRU DET | Naval Air Maintenance Training Group Detachment          |
| NAMTRAU       | Naval Air Maintenance Training Unit                      |
| NAS           | Naval Air Station  |
| NATEC         | Naval Air Technical Data and Engineering Service Command |
| NAVAIR        | Naval Air Systems Command                                |
| NAVMAC        | Navy Manpower Analysis Center                            |
| NAVPERSCOM    | Naval Personnel Command                                  |
| NEC           | Navy Enlisted Classification                             |
| NETC          | Naval Education Training Center                          |
| NETS          | Navy Engineering Technical Services                      |
| NTSP          | Navy Training System Plan                                |
| OPNAV         | Office of the Chief of Naval Operations                  |
| OPNAVINST     | Office of the Chief of Naval Operations Instruction      |
| OPO           | OPNAV Principal Official                                 |
| PCU           | Power Component Unit                                     |

**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III**

**LIST OF ACRONYMS**

|        |  |
|--------|--|
| PDA    | Principal Development Activity                       |
| PFY    | Previous Fiscal Year                                 |
| PMA    | Program Manager, Air                                 |
| RAIMD  | Reserve Aircraft Intermediate Maintenance Department |
| RFT    | Ready For Training                                   |
| SEC    | Support Equipment Change                             |
| SELRES | Selected Reserve                                     |
| SINS   | Ship's Inertial Navigation System                    |
| SPETE  | Special Purpose Electronic Test Equipment            |
| SPTE   | Special Purpose Test Equipment                       |
| SRA    | Shop Replaceable Assembly                            |
| ST     | Special Tool   |
| SVGA   | Super Video Graphics Array                           |
| TAR    | Training and Administration of the Naval Reserve     |
| TD     | Training Device                                      |
| TFS    | Total Force Structure                                |
| TMMT   | Technical Manual Management Team                     |
| TPS    | Test Program Set                                     |
| TSA    | Training Support Activity                            |
| TSM    | Test Station Medium                                  |
| TSMB   | Test Set Module Block                                |
| TTE    | Technical Training Equipment                         |
| ULSS   | User's Logistics Support Summary                     |
| USMC   | United States Marine Corps                           |
| USN    | United States Navy                                   |
| USS    | United States Ship                                   |
| UUT    | Unit Under Test                                      |
| VAC    | Volts Alternating Current                            |
| VDC    | Volts Direct Current                                 |
| WRA    | Weapon Replaceable Assembly                          |
| ZIF    | Zero Insertion Force                                 |



**N88-NTSP-A-50-8116C/D**  
February 2004

**TS-3846A/ASM-608(V) INERTIAL MEASUREMENT UNIT TEST SET III**

**PREFACE**

This Draft Navy Training System Plan (NTSP) for the Inertial Measurement Unit Test Set (IMUTS) III 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. This NTSP is an update to the Draft NTSP N88-NTSP A-50-8116B/A dated March 2000.

The transition from IMUTS II to IMUTS III is complete. All current IMUTS III information, including manpower, training, training support equipment, schedules, and points of contact, are included in this NTSP.



## D. SYSTEM DESCRIPTION

**1. Operational Uses.** The TS-3846A/ASM-608(V) IMUTS III, from here on referred to as the IMUTS system, has the capability to self-check, test, and diagnose Carrier Aircraft Inertial Navigation System (CAINS) and CAINS II Weapon Replaceable Assemblies (WRAs). These WRAs include the CAINS Inertial Measurement Unit CN-1263/ASN-92(V), CAINS IA Inertial Navigation Unit (INU) CN-1561/ASN-130A, and the CAINS II INU CN-1649 ASN-139 in support of the following aircraft: AV-8B, E-2C, EA-6B, ES-3A, F-14A/B/D, F/A-18A/B/C/D/E/F, and the S-3B. The IMUTS system is positioned at Aircraft Intermediate Maintenance Departments (AIMD), Naval Aviation Depots (NADEP), Mobile Maintenance Facility vans, Foreign Military Sales (FMS) sites, Marine Aviation Logistics Squadrons (MALS), and selected contractor facilities.

**2. Foreign Military Sales.** The IMUTS system is a candidate for FMS and has already been provided to some of our allies. For information on FMS refer to Program Manager, Air (PMA) 260.

**E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** Developmental Testing for the IMUTS system was successfully completed in Fiscal Year (FY) 96. No Operational Test was required.

## F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.

Engineering Change Proposal (ECP) 92-002 modified the IMUTS system, upgrading it from IMUTS II Part Number 262200-2 to IMUTS III Part Number 262200-3. Support Equipment Change (SEC) 5258 was the Technical Directive to implement the modification.

## G. DESCRIPTION OF NEW DEVELOPMENT

**1. Functional Description.** The basic IMUTS system has the capability to self-check, test, and diagnose WRAs to their faulty Shop Replaceable Assemblies (SRA). The IMUTS system operation and program execution is under control of the computer assembly installed in the IMUTS system. The Unit Under Test (UUT) application programs are stored on hard disk and executed in the computer. Test instructions are transmitted from the computer to the various modules in the IMUTS system via the computer bus network. Responses from test instructions are transmitted back to the computer via the same bus network. The computer executes interface control commands and selects the Test Station Modules (TSM) required to apply test stimuli and process UUT response data. TSMs interface with the computer assembly via the computer bus. The UUT is mounted on a holding fixture on the IMUTS system and tested via the associated Interface Device (ID). The operator control interface with the computer is provided by means of a Super Video Graphics Array (SVGA) monitor, keyboard, and printer. The major IMUTS system assemblies are the console, holding fixture, and hex extenders. The Console consists of the following (see Figure I-1):

## IMUTS III Console Arrangement

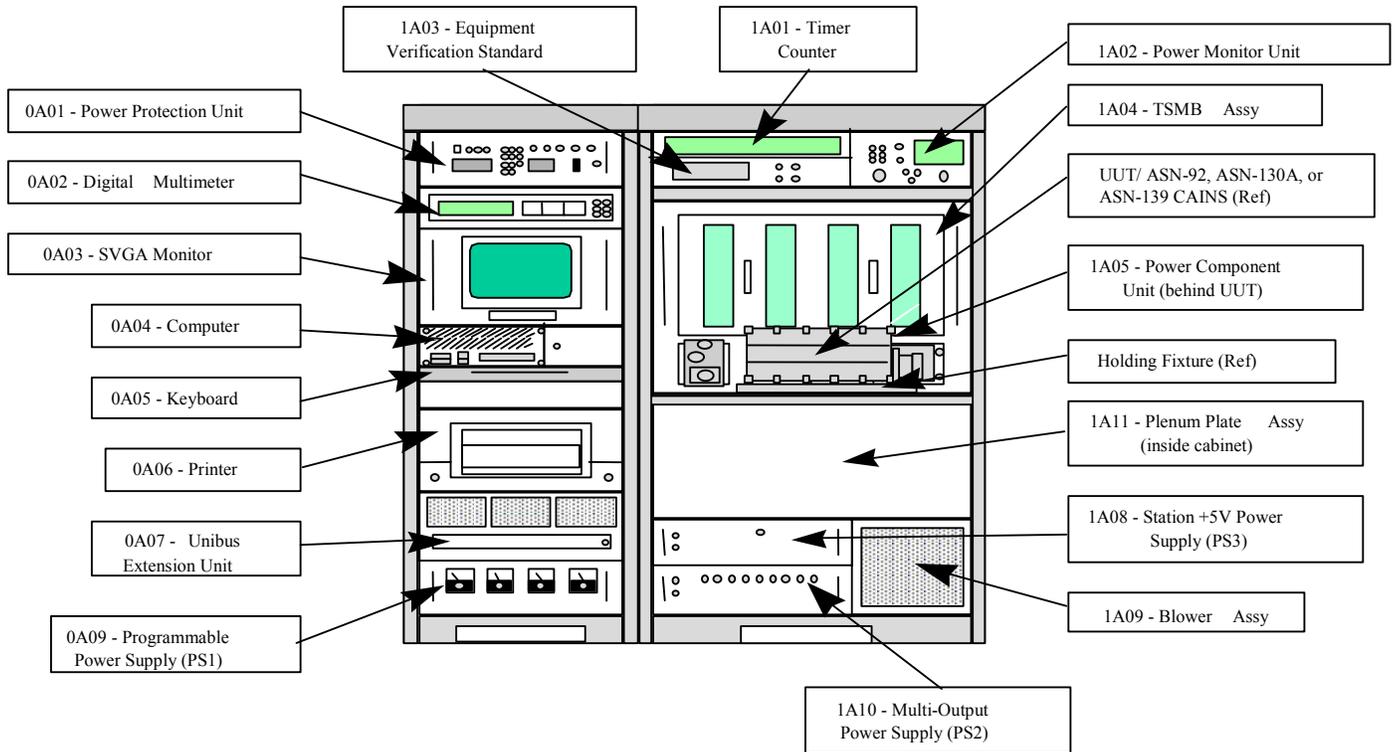


Figure I-1

**a. Digital Multimeter Assembly.** The programmable digital multimeter provides a continuous readout of Direct Current (DC), Alternating Current (AC), and resistance measurements. In the automatic mode of operation, the multimeter is controlled by the computer via the computer bus. Information is put on the computer bus by the multimeter for comparison to required values by the computer. In the manual mode of operation, the station maintenance technician may use the multimeter to assist in diagnosing problems with the IMUTS system.

**b. Unibus Extension Unit.** The unibus extension unit communicates with the computer assembly, and houses the unibus adapter module, output controller, bus buffer interface, and the Ship's Inertial Navigation System (SINS) interface.

**c. Timer-Counter.** The timer-counter provides universal counter measurement modes, computation capabilities, keyboard entry, 9-digit display, annunciators, and manual and automatic trigger level settings.

**d. Programmable Power Supply.** This astro-geo-marine power supply consists of two sections and provides 0 to +40 Volts Direct Current (VDC), 15 amperes, and zero to -40 VDC, five amperes.

**e. Station +5VDC Power Supply.** This astro-geo-marine power supply provides a regulated five VDC output with a full load rating of 100 amperes to operate certain functions of the Test Set Module Block (TSMB) assembly. Current limiting and overvoltage circuitry protect the power supply from electrical irregularities. The power supply contains two heat sinks: a transistor heat sink and a diode heat sink. Thermal detectors in each heat sink open at 100 degrees Celsius and shut down the power supply in the event of overheat conditions. Normal cooling is provided by one fan contained within the power supply.

**f. Multi-Output Power Supply.** This astro-geo-marine DC Power Supply consists of six sections and provides  $\pm 15$  VDC at four amperes,  $\pm 35$  VDC at six amperes,  $\pm 10$  VDC at one ampere,  $\pm 20$  VDC at one ampere, and  $\pm 28$  VDC at 10 amperes. Current limiting and overvoltage circuitry protects the power supply from excess current drain or overvoltage conditions. Thermal switches sense any overtemperature conditions and shut down the power supply. Two fans that operate from the line voltage provide cooling.

**g. Super Video Graphics Array.** The SVGA monitor displays information called up or composed by the keyboard and the results of software controlled tests. The kind of information called up will be the discrete program steps of the test programs. Should a fault be detected within the UUT, this will be displayed together with recommended corrective measures.

**h. Keyboard.** The keyboard allows the operator to communicate with the computer.

**i. Printer.** The Okidata OL600e is a laser quality printer with 300 dots per inch resolution, six pages per minute speed, and a standard bi-directional parallel port Centronics cable.

**j. Power Protection Unit.** The Power Protection Unit contains a 115 Volts Alternating Current (VAC) to 24 VAC step-down transformer, two voltage surge protectors, four voltage sensors, and three contained relays in a slide-mounted chassis. Circuit breakers, control switches, and indicator lights are mounted on the front panel of the chassis, while connectors and one switch are mounted on the rear panel.

**k. Power Monitor Unit.** The Power Monitor Unit monitors the magnitude of 60 and 400 Hertz (Hz) frequency supplied to the IMUTS system. Provisions are made for displaying these parameters on a front panel "*Voltage and Frequency*" meter. The operator may select the input to be read using the "*Display Select*" rotary switch. The 400Hz incoming voltage and frequency are monitored for proper phase rotation and if the proper rotation is present, the "*Phase Sequence Correct*" indicator will be illuminated.

**l. Equipment Verification Standard Assembly.** The Equipment Verification Standard Assembly (EVSA) permits the IMUTS system operator to make precision on-site verification of the accuracy of the counter and the multimeter while installed in the IMUTS system, resulting in no need to periodically remove the items for calibration. The EVSA provides precision outputs to the counter and multimeter via hardware. The outputs to be generated are selected via the front panel controls. The accuracy of the counter and multimeter are determined by the accuracy with which precision inputs are read.

**m. Power Component Unit.** The Power Component Unit (PCU) provides 115 VAC, 400 Hz, 3-phase,  $\pm 28$  VDC programmable power and 26 VAC reference phase power to the UUT. The PCU also provides 115 VAC, 400 Hz, A-phase power to the console assembly air valve. Additionally, the PCU monitors power to the UUT and status compared via the Analog-to-Digital (A/D) converter in the processor unit. Front panel test points are provided for monitoring the IMUTS system AC and DC voltages.

**n. Computer Assembly.** The computer assembly contains a passive back plane with a mounted Central Processing Unit module that contains a 16 Megabyte (MB) Random Access Memory, video module, unibus controller module, A/D converter, 1553 interface module, Institute of Electrical and Electronics Engineers (IEEE) 488 interface module/General Purpose Interface Bus, Simple Computer System Interface/Compact Disc-Read Only Memory (CD-ROM) controller module, 3.5-inch MB floppy drive, hard drive, four-speed CD-ROM drive, 400 watt power supply, computer chassis, monitor power cable, and computer power cable.

**o. Test Set Module Block Assembly.** The TSMB assembly develops UUT stimuli under computer control and monitors UUT responses. The UUT requires and outputs both analog and digital data while the computer provides and recognizes only digital data. The TSMB Assembly is primarily a relay switching network and signal conditioning system to permit proper communication between the computer and the UUT. The TSMB assembly contains the Zero Insertion Force (ZIF) connector.

**p. Plenum Plate Assembly.** The plenum plate assembly directs cooling air from the Blower Assembly to the UUT.

**q. Blower Assembly.** The blower assembly provides air to the UUT and the Console Assembly.

**r. Holding Fixture Assembly.** The holding fixture assembly is affixed to the IMUTS system work surface assembly to attach the UUTs in a manner consistent with that specified in MIL-N-81604. The fixture provides a surface stable in all axes to  $\pm 1.0$  arc-minute relative to the surface to which the test fixture is affixed. At installation time, the work surface to which the fixture is affixed must be leveled to within one degree with respect to local vertical. Each UUT ID is provided with mechanical locking devices relative to the work surface such that the device remains fixed in place after ZIF mating has occurred.

**s. Hex Extenders.** The hex extenders are used to extend cards in the TSMB or unibus unit for the purpose of troubleshooting during station maintenance.

**2. Physical Description.** The IMUTS system consists of a console assembly with the following dimensions:

|                 |                                      |
|-----------------|--------------------------------------|
| Height.....     | 76 inches                            |
| Depth.....      | 43 inches                            |
| Width.....      | 59 inches                            |
| Weight.....     | 1,560 pounds                         |
| Floor load..... | 200 pounds per square foot (maximum) |

**3. New Development Introduction.** The IMUTS system was introduced through retrofit of the IMUTS II via ECP 92-002 and SEC 5258. Upon completion of the ECP the unit was designated the IMUTS III system.

**4. Significant Interfaces.** The IMUTS system interfaces with the SINS. Interfaces for the IMUTS system remain the same as for the IMUTS II. There are no new interface requirements for the IMUTS system.

**5. New Features, Configurations, or Material.** The IMUTS system requires a floppy disk of start-up software (Part Number DS262200-802) and a Software Kit (Part Number CD262200-405) stored on a CD-ROM.

## H. CONCEPTS

**1. Operational Concept.** The daily usage for the IMUTS system is 20 hours per day. The expected service life is 30 years. The maintenance cycle is 2,400 hours and the Mean Time Between Failures is 450 hours. The IMUTS system is operated by United States Navy (USN) Aviation Electrician's Mate (AE) personnel with Navy Enlisted Classification (NEC) 7197, and United States Marine Corps (USMC) personnel with Military Occupational Specialty (MOS) 6464, Aircraft Inertial Navigation System Technician, Intermediate Maintenance Activity (IMA). The IMUTS system is not used at the organizational level of maintenance.

**2. Maintenance Concept.** The Naval Aviation Maintenance Program (NAMP), Office of the Chief of Naval Operations Instruction (OPNAVINST) 4790.2 series, provides general direction and guidance concerning the maintenance concept for the IMUTS system. The NAMP prescribes three levels of maintenance: organizational, intermediate, and depot.

**a. Organizational.** Not Applicable (NA)

**b. Intermediate.** Intermediate level maintenance personnel consist of USN AE personnel with NEC 7197 and USMC personnel with MOS 6464. Intermediate level maintenance personnel perform both Preventive and Corrective Maintenance as listed below.

**(1) Preventive.** Intermediate level maintenance personnel perform preventive maintenance per Part III of the IMUTS system Maintenance Plan (M70097037) and appropriate maintenance manuals and Maintenance Requirement Cards. Site calibration personnel calibrate items assigned as intermediate level responsibility per NAVAIR 17-35MTL-2. Preventive maintenance consists of cleaning and inspecting all vents and air filters, cleaning and lubricating, and performing a self-check program which is run daily or when the IMUTS system is started after a down period.

**(2) Corrective.** Intermediate level maintenance personnel fault-isolate the IMUTS system to a major assembly and repair the IMUTS system by repair or replacement of major assemblies. Fault-isolation is accomplished using Maintenance Assist Modules (MAM), Hex extenders, self-test or self-check program, and additional support equipment. Corrosion control is performed per NAVAIR 16-1-540 and any physical damage is repaired. Corrective Maintenance consists of using both self-test and diagnostic program disks to fault-isolate to the SRA level.

**c. Depot.** Depot level personnel perform both preventive and corrective maintenance as listed below.

**(1) Preventive.** Depot level personnel calibrate the IMUTS system as specified in NAVAIR 17-35MTL-1.

**(2) Corrective.** NADEP North Island, California, personnel repair or condemn items beyond the capability of maintenance at the intermediate level or items Source, Maintenance, and Recoverability coded for depot repair only.

**d. Interim Maintenance.** Interim maintenance was not required for the IMUTS system. Sufficient training was provided by the installation team for the IMUTS system technicians.

**e. Life Cycle Maintenance Plan.** There is no life cycle maintenance plan for the IMUTS system. In the event of a major problem, a depot field repair team including Litton representatives will complete on-site repair.

**3. Manning Concept.** The IMUTS system manpower requirements are based on three working shifts for AIMDs ashore, two working shifts for AIMDs afloat and MALSS. The IMUTS system is operated and maintained by USN personnel with NEC 7197, ASM-608 Inertial Measurement Unit Test Set Maintenance Technician, and USMC personnel with MOS 6464, Aircraft Inertial Navigation System Technician. All authorized manpower is in place to support IMUTS III.

**4. Training Concept.** The goal of the IMUTS system training concept is to provide qualified intermediate level USN AEs with NEC 7197 to AIMDs ashore and afloat, and to provide qualified USMC personnel with MOS 6464 to MALSS in the United States and overseas. Training is provided by Maintenance Training Units (MTU) 3010 and 3011 at Naval

Air Maintenance Training Unit (NAMTRAU) Oceana, Virginia, and Naval Air Maintenance Training Group Detachment (NAMTRAGRU DET), Marine Corps Air Station (MCAS) Miramar, California. Each MTU has two complete IMUTS systems used as Technical Training Equipment (TTE).

The IMUTS training analysis and media selection was based on task analysis and media technology available during the 1980s. This led to instructor led theory combined with practical application as the most effective and affordable method of training to support intermediate maintenance technicians' knowledge and skill requirements. The IMUTS III modifications consist of software changes and the impact on technicians' skill and knowledge requirements is not significant enough to warrant changes in training methods from the IMUTS II training.

For reserve program units, Training and Administration of the Naval Reserve (TAR) personnel receive their training through attending the MTU training, while Selected Reserve (SELRES) personnel may earn intermediate level maintenance qualifications by attending formal training at the MTUs, providing quotas, funding, and students are available to attend the training. Specific guidelines are contained in NAVPERS 18068F Volume II, Chapter IV, Navy Enlisted Classifications.

The established training concept for most aviation maintenance training divides "A" School courses into two or more segments called *Core* and *Strand*. The "C" School courses are also divided into separate *Initial* and *Career* training courses which are not required for intermediate level training at this time. "A" School *Core* courses include general knowledge and skills training for the particular rating, while "A" School *Strand* courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. *Strand* training immediately follows *Core* training and is part of the "A" School. Upon completion of *Core* and *Strand* "A" School, graduates attend the appropriate "C" School for additional specific training. "C" School training is provided for personnel to enhance skills and knowledge within their field.

**a. Initial Training.** Initial training for the IMUTS system was completed in FY97. No additional initial training is required.

**b. Follow-on Training.** Follow-on training is provided by MTU 3010 NAMTRAU Oceana for personnel assigned to the east coast and by MTU 3011 NAMTRAGRU DET MCAS Miramar for personnel assigned to the west coast. MTU 3010 and 3011 provide training for both USN and USMC personnel and is currently available at both locations. In January 1999, the course length of C-198-3060, AN/ASM-608(V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance, was reduced from 47 days to 40 days. C-198-3060 is the heart of training track D/E-150-6010, AN/ASM-608(V) Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance, which is the track required for USN and USMC personnel to receive NEC 7197 or MOS 6464.

|                        |  |
|------------------------|--|
| Title.....             | <b>AN/ASM-608 Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance</b>   |
| CIN .....              | D/E-150-6010   |
| Model Manager .....    | MTU 3011 NAMTRAGRU DET Miramar   |
| Description .....      | <p>This track provides IMUTS operation and maintenance training to the USN Aviation Electrician's Mate or USMC Aircraft Inertial Navigation System Technician, including:</p> <ul style="list-style-type: none"> <li>° Testing</li> <li>° Troubleshooting and Repair</li> <li>° AN/ASN-92 Inertial Measuring Unit</li> <li>° AN/ASN-130A Inertial Navigation Unit</li> <li>° AN/ASN-139 Inertial Navigation Unit</li> <li>° Publications</li> <li>° Safety Procedures</li> </ul> <p>Upon completion the graduate will be able to operate and maintain the AN/ASM-608 IMUTS in an intermediate maintenance environment under limited supervision.</p> |
| Delivery Method ....   | <p>Total Course of Instruction .....240 hours</p> <p>Instructor-Led .....72 hours/periods</p> <p>IMI (Interactive Multimedia Instruction)</p> <p>Level 1 .....0 hours</p> <p>Level 2 .....0 hours</p> <p>Level 3 .....0 hours</p> <p>Practical Application .....150 hours/periods</p>  |
| Length.....            | 44 days  |
| Locations .....        | <ul style="list-style-type: none"> <li>° MTU 3011 NAMTRAGRU DET MCAS Miramar</li> <li>° MTU 3010 NAMTRAU Oceana</li> </ul>   |
| RFT Date .....         | Currently available  |
| Skill Identifiers..... | <ul style="list-style-type: none"> <li>° AE 7197</li> <li>° MOS 6464</li> </ul>  |
| TTE/TD .....           | The TS-3846A/ASM-608(V) is used as TTE.  |
| Prerequisites .....    | <ul style="list-style-type: none"> <li>° C-100-2020, Avionics Common Core Class A1</li> <li>° C-100-2017, Avionics Technician I Level Class A1</li> </ul>  |

**d. Student Profiles**

| <b>SKILL IDENTIFIER</b> | <b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>   |
|-------------------------|--|
| AE 7197                 | <ul style="list-style-type: none"> <li>◦ C-100-2020, Avionics Common Core Class A1</li> <li>◦ C-602-2039, Aviation Electrician’s Mate O Level Strand Class A1</li> </ul> |
| MOS 6464                | <ul style="list-style-type: none"> <li>◦ C-100-2020, Avionics Common Core Class A1</li> <li>◦ C-100-2017, Avionics Technician I Level Class A1</li> </ul>                |

**d. Training Pipelines.** No new training tracks are required for the IMUTS system. D-150-6010 and E-150-6010 are currently on-line with the IMUTS III system information included as of July 1997. There are no other major modifications planned.

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

**1. Proficiency or Other Training Organic to the New Development.** Proficiency training will be conducted to provide onboard personnel with improved knowledge and understanding of the IMUTS III system. Senior enlisted personnel, along with Contractor Engineering Technical Services (CETS) and Naval Engineering Technical Services (NETS) personnel, will provide onboard training where and when it is required.

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

**b. Aviation Maintenance Training Continuum System.** Aviation Maintenance Training Continuum System (AMTCS) provides the Sailor or Marine career path training from their initial Service entry to the end of their military career. AMTCS is an integrated system, which satisfies the training/administrative requirements of both the individual and the organization; the benefits are manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. By capitalizing on technological advances and integrating systems and processes where appropriate the right amount of training can be provided, at the right time, thus meeting the CNO’s mandated “just-in-time” training approach.

AMTCS provides a cost effective training continuum as an integrated system, which satisfies the training/administrative requirements of both the individual technician Sailor/Marine and the organization. Technology investments enabled the design/development of several state-of-the-art training/administrative tools: Computer-Based Training for the technicians in the Fleet in the form of Interactive Courseware with Computer Managed Instruction and Computer Aided Instruction for the schoolhouse.

Included in the AMTCS development effort is the AMTCS Software Module which provides testing (Test and Evaluation), recording (Electronic Certification Qualification Records), and a Feedback system. The core functionality of these AMTCS tools are based and designed around actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List data bank. These tools are procured and fielded with appropriate COTS hardware and software, i.e. Fleet Training Devices (TD) - Laptops, PCs, Electronic Class Rooms, Learning Resource Centers, operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N889H), AMTCS is to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS serves as the standard training system for aviation maintenance training within the Navy and Marine Corps.

**2. Personnel Qualification Standards.** NA

**3. Other Onboard or In-Service Training Packages.** Marine Corps onboard training is based on the current series of Marine Corps Order (MCO) P4790.12, Individual Training Standards System and AMTCS. This program is designed to meet Marine Corps, as well as Navy maintenance training requirements in accordance with OPNAVINST 4790.2 series. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. Maintenance Training Improvement Program questions coupled to Maintenance Training Management and Evaluation Program (MATMEP) tasks helped identify training deficiencies that could be enhanced with refresher training. (MATMEP is planned replaced by AMTCS in FY05.)

**J. LOGISTICS SUPPORT**

**1. Manufacturer and Contract Number**

| CONTRACT NUMBER  | MANUFACTURER                                 | ADDRESS   |
|------------------|--|---|
| N00019-91-G-0126 | Litton Guidance and Control Systems Division | 2211 West North Temple<br>Salt Lake City, UT 84116-2993 |

**2. Program Documentation.** Documentation is listed in the following table. No Integrated Logistics Support Plan (ILSP) was specifically developed for the IMUTS III system, although there is an ILSP (PGSE-1027:AB) that was approved in 1980 and updated in 1987 for IMUTS II.

| DOCUMENT TITLE             | DOCUMENT NUMBER | PDA CODE | STATUS             |
|----------------------------|-----------------|----------|--------------------|
| IMUTS ILSP                 | PGSE-1027:AB    | PMA260   | Approved<br>Jun 87 |
| IMUTS III ULSS             | U70097037       | PMA260   | Approved<br>Jan 98 |
| IMUTS III Maintenance Plan | M70097037       | PMA260   | Approved<br>Jan 98 |

**3. Technical Data Plan.** Technical Manuals are required to operate and maintain the IMUTS system and are determined by the Technical Manual Management Team (TMMT). The function of the TMMT is to establish and define technical documentation requirements for the programs, provide a focal point of management skills and responsibilities, and to ensure maximum coordination of data management efforts. Technical Manuals required by MTU 3010 and MTU 3011 for training are listed in element IV.B.3 of this NTSP.

**4. Test Sets, Tools, and Test Equipment.** The IMUTS system requires Test Program Sets (TPSs) to operate. The TPS includes the system software, self-maintenance software, UUT Software, Test Program Disk, Test Program Instruction, Master Test Program Set Index, and the ID required to test a UUT.

MAMs are WRAs and SRAs that are used as a tool to fault isolate a system or test set when an ambiguity test group exists in a TPS. The ULSS lists 22 MAMs.

For information on test sets, tools, and test equipment required for training refer to element IV.A.1 of this NTSP.

**5. Repair Parts.** The Material Support Date (MSD) is the date on which the Navy assumes responsibility for all spares and repair parts for an end item. The MSD for the IMUTS system was January 2000. Naval Inventory Control Point Mechanicsburg, Pennsylvania, is the Program Support Inventory Control Point for the IMUTS system and is responsible for procurement, management, and distribution of outfitting requirements, and the replenishment of in-use assets with the exception of the TPSs.

**6. Human Systems Integration.** The IMUTS system has been operational for 20 plus years, and data that would have been contained in a formal fidelity analysis for the IMUTS training system is unavailable. Communications with training model managers and Subject Matter Experts indicate the legacy training system to be of high fidelity.

The Naval Education and Training Command (NETC) (via Chief of Naval Education and Training Instruction 1500.30) established policy, procedures, and responsibility for the administration and operation of the NETC training feedback program. This program provides a web-based homepage template containing a training feedback form icon. Each school is to develop a form following this format with a link back to the NETC homepage at <https://www.cnet.navy.mil>. This web page is used to receive feedback on any training issue, training concerns, or to make a recommendation that is general in nature. A Fleet partnership program is established to maintain a close relationship with representative samples of IMUTS operator and maintainers to evaluate the quality of the trained graduates and the relevance of skills trained.

In conjunction with this Fleet feedback program, a Human Performance Requirements Review (HPRR) process is required by OPNAVINST 1500.69A. HPRRs provide a process for resource and program sponsors to identify and correct training deficiencies.

**7. Contractor Engineering Technical Services.** CETS are used for maintenance and for training Navy and Marine Corps personnel. Services of CETS and NETS personnel are provided through the Naval Air Technical Data and Engineering Service Command (NATEC) at the direction of the Type Commander. The following CETS and NETS requirements were obtained from NATEC.

| SUPPORTED ACTIVITY                                       | NETS BILLETS | CETS BILLETS |
|--|--------------|--------------|
| MALS MCAS Cherry Point                                   | 1            | 0            |
| MALS MCAS Iwakuni, Japan                                 | 1            | 0            |
| AIMD NAS Lemoore   | 1            | 0            |
| AIMD NAS Norfolk   | 0            | 1            |
| AIMD NAS Oceana  | 2            | 0            |
| Reserve AIMD (RAIMD) Joint Reserve Base (JRB) Fort Worth | 1            | 0            |
| RAIMD Andrews Air Force Base (AFB)                       | 0            | 1            |

**Note:** All CETS and NETS billets are not always filled.

**K. SCHEDULES**

**1. Installation and Delivery Schedules.** IMUTS system deliveries began in March 1997 and continued through FY00. There have been 96 IMUTS systems installed. This installation schedule was provided by NADEP North Island and is valid as of August 2003.

| <b>INSTALLATION SCHEDULE</b>                 |  |
|--|--|
| <b>ACTIVITY</b>                              | <b>INSTALLATION DATES</b>                  |
| CVN 68 USS Nimitz                            | Mar 97, Jul 97                             |
| Litton Guidance and Control Systems, Norfolk | May 97, (2) Dec 97, Jul 98                 |
| NADEP North Island                           | Jun 97, Feb 98                             |
| MTU 3011 NAMTRAGRU DET Miramar               | Jul 97, Sep 97                             |
| Litton (CAINS) San Diego                     | Jul 97, Aug 98, Oct 98                     |
| MTU 3010 NAMTRAU Oceana                      | Jul 97, Oct 97                             |
| MALS 11 MCAS Miramar                         | Jul 97, (2) Aug 97, Oct 98, Nov 98, Dec 98 |
| AIMD NAS Oceana                              | Jul 97, Aug 97, Feb 98, (2) Mar 98         |
| AIMD NAS North Island                        | (2) Aug 97, Apr 98, Oct 98                 |
| AIMD NAS Norfolk                             | Aug 97, Feb 98                             |
| CVN 65 USS Enterprise                        | Aug 97, Sep 97                             |
| MALS 12 MCAS Iwakuni                         | (2) Oct 97, Nov 97                         |
| CVN 72 USS Abraham Lincoln                   | Jan 98, Feb 98                             |
| CV 67 USS John F. Kennedy                    | Jun 98, Jul 98                             |
| Litton (GCS) Salt Lake City                  | Aug 97                                     |
| CVN 70 USS Carl Vinson                       | (2) Aug 97                                 |
| AIMD NAS Whidbey Island                      | (3) Sep 97                                 |
| CVN 74 USS John C. Stennis                   | (2) Sep 97                                 |
| CVN 69 USS Dwight D. Eisenhower              | (2) Sep 97                                 |
| AIMD NAS Atsugi, Japan                       | Oct 97                                     |
| CV 62 USS Independence                       | (2) Oct 97                                 |
| CV 63 USS Kitty Hawk                         | (2) Oct 97                                 |
| AIMD NAS Lemoore                             | (3) Oct 97                                 |

| INSTALLATION SCHEDULE         |                    |
|-------------------------------|--------------------|
| ACTIVITY                      | INSTALLATION DATES |
| AIMD NAS Cecil Field          | Oct 97, (3) Nov 97 |
| CV 64 USS Constellation       | (2) Nov 97         |
| MALS 14 MCAS Cherry Point     | (4) Feb 98         |
| AIMD NAS Patuxent River       | Feb 98             |
| MALS 13 MCAS Yuma             | (3) Feb 98         |
| MALS 31 MCAS Beaufort         | (3) Mar 98         |
| AIMD NAS Point Mugu           | Mar 98             |
| RAIMD JRB Fort Worth          | (2) Apr 98         |
| MALS 41 JRB Fort Worth        | Apr 98             |
| CVN 71 USS Theodore Roosevelt | (2) Apr 98         |
| RAIMD NAS New Orleans         | Apr 98             |
| AIMD NAS Fallon               | (2) May 98         |
| RAIMD Andrews AFB             | May 98             |
| Northrop-Grumman Aircraft     | Jun 98             |
| EMMMF1 Aviano, Italy          | Jul 98             |
| EMMMF2 Aviano, Italy          | Jul 98             |
| CVN 73 USS George Washington  | Apr 99             |
| CVN 75 USS Harry S. Truman    | (2) Oct 99         |
| NADEP North Island            | Dec 99             |
| Litton (CAINS) Norfolk        | Feb 00             |
| Litton GCS, Salt Lake City    | Apr 00             |

**2. Ready For Operational Use Schedule.** All IMUTS systems are Ready For Operational Use after installation and checkout. The installation dates listed above are after installation and checkout.

**3. Time Required to Install at Operational Sites.** Installation of the IMUTS system requires approximately one week after the site has been prepared. Installation time including preparation varies by site.

**4. Foreign Military Sales and Other Source Delivery Schedule.** The IMUTS system is a candidate for FMS and has already been provided to some of our allies. For information on FMS refer to PMA260.

**5. Training Device and Technical Training Equipment Delivery Schedule.** Each of the MTUs has upgraded two complete IMUTS systems. MTU 3010 NAMTRAU Oceana and MTU 3011 NAMTRAGRU DET Miramar upgraded their first IMUTS system in July 1997. MTU 3011 upgraded their second IMUTS system in September 1997 and MTU 3010 upgraded their second IMUTS system in October 1997. At this point all IMUTS system upgrades for training have been installed.

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

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

| <b>DOCUMENT OR NTSP TITLE</b>    | <b>DOCUMENT OR NTSP NUMBER</b> | <b>PDA CODE</b> | <b>STATUS</b>      |
|----------------------------------|--------------------------------|-----------------|--------------------|
| E-2C Aircraft                    | A-50-8716E/A                   | PMA231          | Approved<br>Apr 03 |
| EA-6B Aircraft                   | A-50-7904E/D                   | PMA234          | Draft<br>Jul 03    |
| ES-3A Aircraft                   | A-50-8818C/D                   | PMA290          | Draft<br>Jul 98    |
| F/A-18 Aircraft                  | A-50-7703I/D                   | PMA265          | Draft<br>Oct 02    |
| F-14A, F-14B, and F-14D Aircraft | A-50-8511C/A                   | PMA253          | Approved<br>Feb 03 |
| S-3B Aircraft                    | A-50-8310E/D                   | PMA244          | Draft<br>Mar 03    |
| T/AV-8B Harrier II Weapon System | A-50-8210D/A                   | PMA257          | Approved<br>Sep 01 |

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

The following elements are not affected by the IMUTS III System 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.2.b. Billets to be Deleted in Operational and Fleet Support Activities

II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities

**PART II - BILLET AND PERSONNEL REQUIREMENTS**

**II.A. BILLET REQUIREMENTS**

**SOURCE OF SCHEDULE:** PMA260

**DATE:** July 2003

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

| ACTIVITY, UIC                     |       | PFYs | CFY04 | FY05 | FY06 | FY07 | FY08 |
|-----------------------------------|-------|------|-------|------|------|------|------|
| OPERATIONAL ACTIVITIES - USN      |       |      |       |      |      |      |      |
| AIMD Jacksonville                 | 44319 | 1    | 0     | 0    | 0    | 0    | 0    |
| AIMD Norfolk                      | 44325 | 1    | 0     | 0    | 0    | 0    | 0    |
| AIMD Oceana                       | 44327 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 67 USS John F. Kennedy         | 03367 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 65 USS Enterprise              | 03365 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 69 USS Dwight D. Eisenhower    | 03369 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 71 USS Theodore Roosevelt      | 21247 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 73 USS George Washington       | 21412 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 75 USS Harry S. Truman         | 21853 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 76 USS Ronald Reagan           | 22178 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAS Jacksonville SEAOPDET         | 46965 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAS Norfolk SEAOPDET              | 46966 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAS Oceana SEAOPDET               | 46963 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAVAIRES Norfolk                  | 63102 | 1    | 0     | 0    | 0    | 0    | 0    |
| RAIMD NAF Washington              | 44492 | 1    | 0     | 0    | 0    | 0    | 0    |
| VAQ-209 NAF Andrews               | 53870 | 1    | 0     | 0    | 0    | 0    | 0    |
| VAW-78 Norfolk                    | 09102 | 1    | 0     | 0    | 0    | 0    | 0    |
| VFA-204 JRB New Orleans           | 09032 | 1    | 0     | 0    | 0    | 0    | 0    |
| AIMD Atsugi                       | 44323 | 1    | 0     | 0    | 0    | 0    | 0    |
| AIMD Fallon                       | 44317 | 1    | 0     | 0    | 0    | 0    | 0    |
| AIMD Misawa                       | 44331 | 1    | 0     | 0    | 0    | 0    | 0    |
| COMAEWWINGPAC Point Mugu          | 44328 | 1    | 0     | 0    | 0    | 0    | 0    |
| COMSEACONTROLWINGPAC North Island | 44326 | 1    | 0     | 0    | 0    | 0    | 0    |
| COMSTRKFIGHTWINGPAC Lemoore       | 44321 | 1    | 0     | 0    | 0    | 0    | 0    |
| COMVAQWINGPAC Whidbey Island      | 44329 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 63 USS Kitty Hawk              | 03363 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 64 USS Constellation           | 03364 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV/CVN SEAOPDET                   | 46968 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV/CVN SEAOPDET Whidbey Island    | 46967 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 68 USS Nimitz                  | 03368 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 70 USS Carl Vinson             | 20993 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 72 USS Abraham Lincoln         | 21297 | 1    | 0     | 0    | 0    | 0    | 0    |
| CV 74 USS John C. Stennis         | 21847 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAS JRB Fort Worth                | 44487 | 1    | 0     | 0    | 0    | 0    | 0    |
| VFA-201 Fort Worth                | 09309 | 1    | 0     | 0    | 0    | 0    | 0    |
| VFA-203 Fort Worth                | 31633 | 1    | 0     | 0    | 0    | 0    | 0    |
| <b>TOTAL:</b>                     |       | 36   | 0     | 0    | 0    | 0    | 0    |
| OPERATIONAL ACTIVITIES - USMC     |       |      |       |      |      |      |      |
| MALS-14 Fixed Wing East           | 01068 | 1    | 0     | 0    | 0    | 0    | 0    |
| MALS-31 Fixed Wing East           | 01086 | 1    | 0     | 0    | 0    | 0    | 0    |
| VMAQ-1                            | 01237 | 1    | 0     | 0    | 0    | 0    | 0    |

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

| ACTIVITY, UIC                            |       | PFYs | CFY04 | FY05 | FY06 | FY07 | FY08 |
|--|-------|------|-------|------|------|------|------|
| VMAQ-2                                   | 01238 | 1    | 0     | 0    | 0    | 0    | 0    |
| VMAQ-3                                   | 01239 | 1    | 0     | 0    | 0    | 0    | 0    |
| VMAQ-4                                   | 01012 | 1    | 0     | 0    | 0    | 0    | 0    |
| VMAT-203                                 | 01203 | 1    | 0     | 0    | 0    | 0    | 0    |
| MALS-11 Fixed Wing West                  | 01065 | 1    | 0     | 0    | 0    | 0    | 0    |
| MALS-12 Fixed Wing West                  | 01038 | 1    | 0     | 0    | 0    | 0    | 0    |
| MALS-13 Fixed Wing West                  | 01191 | 1    | 0     | 0    | 0    | 0    | 0    |
| MALS-41 Fixed Wing West                  | 01136 | 1    | 0     | 0    | 0    | 0    | 0    |
| VMFAT 101 MCAS Miramar (Navy Detachment) | 01192 | 1    | 0     | 0    | 0    | 0    | 0    |
| <b>TOTAL:</b>                            |       | 12   | 0     | 0    | 0    | 0    | 0    |
| FLEET SUPPORT ACTIVITIES - USN           |       |      |       |      |      |      |      |
| NAVAIRWARCENAD OPDET Patuxent River      | 35679 | 1    | 0     | 0    | 0    | 0    | 0    |
| NAVTEST WINGLANT Patuxent River          | 39782 | 1    | 0     | 0    | 0    | 0    | 0    |
| EA-6B Van OPDET                          | 31179 | 1    | 0     | 0    | 0    | 0    | 0    |
| <b>TOTAL:</b>                            |       | 3    | 0     | 0    | 0    | 0    | 0    |

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>AIMD Jacksonville, 44319</b>              |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
|  | 0        | 2         | AE2              | 7197          |               |
|  | 0        | 2         | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>5</b>  |                  |               |               |
| <b>AIMD Norfolk, 44325</b>                   |          |           |                  |               |               |
| ACDU   | 0        | 2         | AE2              | 7197          |               |
|  | 0        | 2         | AE3              | 7197          |               |
| SELRES                                       | 0        | 1         | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>5</b>  |                  |               |               |
| <b>AIMD Oceana, 44327</b>                    |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
|  | 0        | 4         | AE2              | 7197          |               |
|  | 0        | 6         | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>11</b> |                  |               |               |
| <b>CV 67 USS John F. Kennedy, 03367</b>      |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
|  | 0        | 1         | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>CV 65 USS Enterprise, 03365</b>           |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
|  | 0        | 1         | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>CV 69 USS Dwight D. Eisenhower, 03369</b> |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
| SELRES                                       | 0        | 1         | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b>  |                  |               |               |
| <b>CV 71 USS Theodore Roosevelt, 21247</b>   |          |           |                  |               |               |
| ACDU   | 0        | 1         | AE1              | 7197          |               |
|  | 0        | 1         | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b>  |                  |               |               |

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

| ACTIVITY, UIC, PHASING INCREMENT          | BILLETS  |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|---|----------|----------|------------------|---------------|---------------|
|   | OFF      | ENL      |                  |               |               |
| <b>CV 73 USS George Washington, 21412</b> |          |          |                  |               |               |
| ACDU                                      | 0        | 1        | AE1              | 7197          |               |
| SELRES                                    | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV 75 USS Harry S. Truman, 21853</b>   |          |          |                  |               |               |
| ACDU                                      | 0        | 1        | AE1              | 7197          |               |
|   | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV 76 USS Ronald Reagan, 22178</b>     |          |          |                  |               |               |
| ACDU                                      | 0        | 1        | AE1              | 7197          |               |
|   | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>2</b> |                  |               |               |
| <b>NAS Jacksonville SEAOPDET, 46965</b>   |          |          |                  |               |               |
| ACDU                                      | 0        | 5        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>5</b> |                  |               |               |
| <b>NAS Norfolk SEAOPDET, 46966</b>        |          |          |                  |               |               |
| ACDU                                      | 0        | 5        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>5</b> |                  |               |               |
| <b>NAS Oceana SEAOPDET, 46963</b>         |          |          |                  |               |               |
| ACDU                                      | 0        | 6        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>6</b> |                  |               |               |
| <b>NAVAIRES Norfolk, 63102</b>            |          |          |                  |               |               |
| TAR                                       | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                    | <b>0</b> | <b>1</b> |                  |               |               |
| <b>RAIMD NAF Washington, 44492</b>        |          |          |                  |               |               |
| ACDU                                      | 0        | 1        | AE3              | 7197          |               |
| TAR                                       | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</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>VAQ-209 NAF Andrews, 53870</b>               |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 1   |                  |               |               |
| <b>VAW-78 Norfolk, 09102</b>                    |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE3              | 7197          |               |
| TAR   | 0       | 2   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 3   |                  |               |               |
| <b>VFA-204 JRB New Orleans, 09032</b>           |         |     |                  |               |               |
| TAR   | 0       | 1   | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 1   |                  |               |               |
| <b>AIMD Atsugi, 44323</b>                       |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE2              | 7197          |               |
|   | 0       | 2   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 3   |                  |               |               |
| <b>AIMD Fallon, 44317</b>                       |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE1              | 7197          |               |
|   | 0       | 1   | AE2              | 7197          |               |
|   | 0       | 1   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 3   |                  |               |               |
| <b>AIMD Misawa, 44331</b>                       |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE2              | 7197          | 9527          |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 1   |                  |               |               |
| <b>COMAEWWINGPAC Point Mugu, 44328</b>          |         |     |                  |               |               |
| ACDU  | 0       | 2   | AE2              | 7197          |               |
|   | 0       | 1   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 3   |                  |               |               |
| <b>COMSEACONTROLWINGPAC North Island, 44326</b> |         |     |                  |               |               |
| ACDU  | 0       | 1   | AE1              | 7197          |               |
|   | 0       | 5   | AE2              | 7197          |               |
|   | 0       | 6   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                          | 0       | 12  |                  |               |               |

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>COMSTRKFIGHTWINGPAC Lemoore, 44321</b>    |          |          |                  |               |               |
| ACDU   | 0        | 4        | AE2              | 7197          |               |
|  | 0        | 4        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>8</b> |                  |               |               |
| <b>COMVAQWINGPAC Whidbey Island, 44329</b>   |          |          |                  |               |               |
| ACDU   | 0        | 1        | AE2              | 7197          |               |
|  | 0        | 1        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV 63 USS Kitty Hawk, 03363</b>           |          |          |                  |               |               |
| ACDU   | 0        | 1        | AE1              | 7197          |               |
|  | 0        | 2        | AE2              | 7197          |               |
|  | 0        | 3        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>6</b> |                  |               |               |
| <b>CV 64 USS Constellation, 03364</b>        |          |          |                  |               |               |
| ACDU   | 0        | 1        | AE1              | 7197          |               |
|  | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV/CVN SEAOPDET, 46968</b>                |          |          |                  |               |               |
| ACDU   | 0        | 4        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>4</b> |                  |               |               |
| <b>CV/CVN SEAOPDET Whidbey Island, 46967</b> |          |          |                  |               |               |
| ACDU   | 0        | 9        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>9</b> |                  |               |               |
| <b>CV 68 USS Nimitz, 03368</b>               |          |          |                  |               |               |
| ACDU   | 0        | 1        | AE1              | 7197          |               |
|  | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV 70 USS Carl Vinson, 20993</b>          |          |          |                  |               |               |
| ACDU   | 0        | 1        | AE1              | 7197          |               |
|  | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                       | <b>0</b> | <b>2</b> |                  |               |               |

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

| ACTIVITY, UIC, PHASING INCREMENT        | BILLETTS |          | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|---|----------|----------|------------------|---------------|---------------|
|   | OFF      | ENL      |                  |               |               |
| <b>CV 72 USS Abraham Lincoln, 21297</b> |          |          |                  |               |               |
| ACDU                                    | 0        | 1        | AE1              | 7197          |               |
|   | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>CV 74 USS John C. Stennis, 21847</b> |          |          |                  |               |               |
| ACDU                                    | 0        | 1        | AE1              | 7197          |               |
|   | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>2</b> |                  |               |               |
| <b>NAS JRB Fort Worth, 44487</b>        |          |          |                  |               |               |
| TAR                                     | 0        | 1        | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>1</b> |                  |               |               |
| <b>VFA-201 Fort Worth, 09309</b>        |          |          |                  |               |               |
| TAR                                     | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>1</b> |                  |               |               |
| <b>VFA-203 Fort Worth, 31633</b>        |          |          |                  |               |               |
| TAR                                     | 0        | 1        | AE2              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>1</b> |                  |               |               |
| OPERATIONAL ACTIVITIES - USMC           |          |          |                  |               |               |
| <b>MALS-14 Fixed Wing East, 01068</b>   |          |          |                  |               |               |
| USMC                                    | 0        | 1        | CPL              | 6464          |               |
|   | 0        | 3        | LCPL             | 6464          |               |
|   | 0        | 1        | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>5</b> |                  |               |               |
| <b>MALS-31 Fixed Wing East, 01086</b>   |          |          |                  |               |               |
| USMC                                    | 0        | 1        | CPL              | 6464          |               |
|   | 0        | 3        | LCPL             | 6464          |               |
|   | 0        | 1        | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>5</b> |                  |               |               |
| <b>VMAQ-1, 01237</b>                    |          |          |                  |               |               |
| USMC                                    | 0        | 1        | LCPL             | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                  | <b>0</b> | <b>1</b> |                  |               |               |

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

| ACTIVITY, UIC, PHASING INCREMENT      | BILLETS |     | DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS |
|---------------------------------------|---------|-----|------------------|---------------|---------------|
|                                       | OFF     | ENL |                  |               |               |
| <b>VMAQ-2, 01238</b>                  |         |     |                  |               |               |
| USMC                                  | 0       | 1   | LCPL             | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 1   |                  |               |               |
| <b>VMAQ-3, 01239</b>                  |         |     |                  |               |               |
| USMC                                  | 0       | 1   | LCPL             | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 1   |                  |               |               |
| <b>VMAQ-4, 01012</b>                  |         |     |                  |               |               |
| USMC                                  | 0       | 1   | LCPL             | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 1   |                  |               |               |
| <b>VMAT-203, 01203</b>                |         |     |                  |               |               |
| USMC                                  | 0       | 3   | LCPL             | 6464          |               |
|                                       | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 4   |                  |               |               |
| <b>MALS-11 Fixed Wing West, 01065</b> |         |     |                  |               |               |
| USMC                                  | 0       | 1   | CPL              | 6464          |               |
|                                       | 0       | 3   | LCPL             | 6464          |               |
|                                       | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 5   |                  |               |               |
| <b>MALS-12 Fixed Wing West, 01038</b> |         |     |                  |               |               |
| USMC                                  | 0       | 1   | CPL              | 6464          |               |
|                                       | 0       | 3   | LCPL             | 6464          |               |
|                                       | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 5   |                  |               |               |
| <b>MALS-13 Fixed Wing West, 01191</b> |         |     |                  |               |               |
| USMC                                  | 0       | 1   | CPL              | 6464          |               |
|                                       | 0       | 3   | LCPL             | 6464          |               |
|                                       | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 5   |                  |               |               |
| <b>MALS-41 Fixed Wing West, 01136</b> |         |     |                  |               |               |
| USMC                                  | 0       | 1   | CPL              | 6464          |               |
|                                       | 0       | 3   | LCPL             | 6464          |               |
|                                       | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                | 0       | 5   |                  |               |               |

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>VMFAT 101 MCAS Miramar (Navy Detachment), 01192</b> |         |     |                  |               |               |
| ACDU   | 0       | 1   | AE3              | 7197          |               |
| USMC   | 0       | 2   | CPL              | 6464          |               |
|  | 0       | 1   | SGT              | 6464          |               |
| <b>ACTIVITY TOTAL:</b>                                 | 0       | 4   |                  |               |               |
| FLEET SUPPORT ACTIVITIES - USN                         |         |     |                  |               |               |
| <b>NAVAIRWARCENAD OPDET Patuxent River, 35679</b>      |         |     |                  |               |               |
| ACDU   | 0       | 1   | AE2              | 7197          | 7133          |
| <b>ACTIVITY TOTAL:</b>                                 | 0       | 1   |                  |               |               |
| <b>NAVTEST WINGLANT Patuxent River, 39782</b>          |         |     |                  |               |               |
| ACDU   | 0       | 1   | AE1              | 7197          |               |
|  | 0       | 1   | AE3              | 7136          | 7197          |
| <b>ACTIVITY TOTAL:</b>                                 | 0       | 2   |                  |               |               |
| <b>EA-6B Van OPDET, 31179</b>                          |         |     |                  |               |               |
| ACDU   | 0       | 5   | AE3              | 7197          |               |
| <b>ACTIVITY TOTAL:</b>                                 | 0       | 5   |                  |               |               |

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

| DESIG/<br>RATING                    | PNEC/SNEC<br>PMOS/SMOS | PFYs |     | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|-------------------------------------|------------------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                     |                        | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| USN OPERATIONAL ACTIVITIES - ACDU   |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| AE1                                 | 7197                   |      | 17  | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE2                                 | 7197                   |      | 43  | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE2                                 | 7197                   | 9527 | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE3                                 | 7197                   |      | 51  | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN OPERATIONAL ACTIVITIES - TAR    |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| AE2                                 | 7197                   |      | 5   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE3                                 | 7197                   |      | 3   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN OPERATIONAL ACTIVITIES - SELRES |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| AE2                                 | 7197                   |      | 3   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USMC OPERATIONAL ACTIVITIES - ACDU  |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| AE3                                 | 7197                   |      | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| CPL                                 | 6464                   |      | 8   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| LCPL                                | 6464                   |      | 25  | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| SGT                                 | 6464                   |      | 8   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN FLEET SUPPORT ACTIVITIES - ACDU |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| AE1                                 | 7197                   |      | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE2                                 | 7197                   | 7133 | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE3                                 | 7136                   | 7197 | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| AE3                                 | 7197                   |      | 5   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| <b>SUMMARY TOTALS:</b>              |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| USN OPERATIONAL ACTIVITIES - ACDU   |                        |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |                        |      | 112 | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN OPERATIONAL ACTIVITIES - TAR    |                        |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |                        |      | 8   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN OPERATIONAL ACTIVITIES - SELRES |                        |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |                        |      | 3   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USMC OPERATIONAL ACTIVITIES - USMC  |                        |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |                        |      | 41  | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
|                                     |                        |      | 1   | 0     | 0   | 0    | 0   | 0    | 0   | 0    | 0   | 0    | 0   |
| USN FLEET SUPPORT ACTIVITIES - ACDU |                        |      |     |       |     |      |     |      |     |      |     |      |     |
|                                     |                        |      | 8   | 0     | 0   | 0    | 0   | 0    | 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 |     | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|----------------------|------------------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                      |                        | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| <b>GRAND TOTALS:</b> |                        |      |     |       |     |      |     |      |     |      |     |      |     |
| USN - ACDU           |                        |      | 121 |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| USN - TAR            |                        |      | 8   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| USN - SELRES         |                        |      | 3   |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |
| USMC - USMC          |                        |      | 41  |       | 0   |      | 0   |      | 0   |      | 0   |      | 0   |

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

| DESIG<br>RATING | PNEC/SNEC<br>PMOS/SMOS | PFYs |     | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|-----------------|------------------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                 |                        | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |

**TRAINING ACTIVITY, LOCATION, UIC:** MTU 3010 NAMTRAU Oceana, 66045

**INSTRUCTOR BILLETS**

|               |      |      |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------|------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| USN           |      |      |   |   |   |   |   |   |   |   |   |   |   |   |
| AE1           | 7197 | 9502 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| AE2           | 7197 | 9502 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| <b>TOTAL:</b> |      |      | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |

**TRAINING ACTIVITY, LOCATION, UIC:** MTU 3011 NAMTRAGRU DET Miramar, 42148

**INSTRUCTOR BILLETS**

|               |      |      |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------|------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| USN           |      |      |   |   |   |   |   |   |   |   |   |   |   |   |
| AE1           | 7197 | 9502 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| AE2           | 7197 | 9502 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| <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 |     | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|---------------------------------------|--------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                       |              | OFF  | ENL | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| MTU 3010 NAMTRAU Oceana, 66045        |              |      |     |       |     |      |     |      |     |      |     |      |     |
|                                       | USN          | 0.0  | 2.6 | 0.0   | 2.6 | 0.0  | 2.6 | 0.0  | 2.6 | 0.0  | 2.6 | 0.0  | 2.6 |
|                                       | USMC         | 0.0  | 0.6 | 0.0   | 0.6 | 0.0  | 0.6 | 0.0  | 0.6 | 0.0  | 0.6 | 0.0  | 0.6 |
| MTU 3011 NAMTRAGRU DET Miramar, 42148 |              |      |     |       |     |      |     |      |     |      |     |      |     |
|                                       | USN          | 0.0  | 3.1 | 0.0   | 3.1 | 0.0  | 3.1 | 0.0  | 3.1 | 0.0  | 3.1 | 0.0  | 3.1 |
|                                       | USMC         | 0.0  | 0.7 | 0.0   | 0.7 | 0.0  | 0.7 | 0.0  | 0.7 | 0.0  | 0.7 | 0.0  | 0.7 |
| <b>SUMMARY TOTALS:</b>                |              |      |     |       |     |      |     |      |     |      |     |      |     |
|                                       | USN          | 0.0  | 5.7 | 0.0   | 5.7 | 0.0  | 5.7 | 0.0  | 5.7 | 0.0  | 5.7 | 0.0  | 5.7 |
|                                       | USMC         | 0.0  | 1.3 | 0.0   | 1.3 | 0.0  | 1.3 | 0.0  | 1.3 | 0.0  | 1.3 | 0.0  | 1.3 |
| <b>GRAND TOTALS:</b>                  |              | 0.0  | 7.0 | 0.0   | 7.0 | 0.0  | 7.0 | 0.0  | 7.0 | 0.0  | 7.0 | 0.0  | 7.0 |

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

| DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS | BILLET<br>BASE | CFY04<br>+/- CUM | FY05<br>+/- CUM | FY06<br>+/- CUM | FY07<br>+/- CUM | FY08<br>+/- CUM |
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|

a. OFFICER - USN Not Applicable

**b. ENLISTED - USN**

Operational Billets ACDU and TAR

|     |      |      |    |   |    |   |    |   |    |   |    |   |    |
|-----|------|------|----|---|----|---|----|---|----|---|----|---|----|
| AE1 | 7197 |      | 17 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 17 |
| AE2 | 7197 |      | 48 | 0 | 48 | 0 | 48 | 0 | 48 | 0 | 48 | 0 | 48 |
| AE2 | 7197 | 9527 | 1  | 0 | 1  | 0 | 1  | 0 | 1  | 0 | 1  | 0 | 1  |
| AE3 | 7197 |      | 55 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |

Fleet Support Billets ACDU and TAR

|     |      |      |   |   |   |   |   |   |   |   |   |   |   |
|-----|------|------|---|---|---|---|---|---|---|---|---|---|---|
| AE1 | 7197 |      | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| AE2 | 7197 | 7133 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| AE3 | 7136 | 7197 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| AE3 | 7197 |      | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 |

Staff Billets ACDU and TAR

|     |      |      |   |   |   |   |   |   |   |   |   |   |   |
|-----|------|------|---|---|---|---|---|---|---|---|---|---|---|
| AE1 | 7197 | 9502 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| AE2 | 7197 | 9502 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |

Chargeable Student Billets ACDU and TAR

|  |  |  |   |   |   |   |   |   |   |   |   |   |   |
|--|--|--|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 |
|--|--|--|---|---|---|---|---|---|---|---|---|---|---|

SELRES Billets

|     |      |  |   |   |   |   |   |   |   |   |   |   |   |
|-----|------|--|---|---|---|---|---|---|---|---|---|---|---|
| AE2 | 7197 |  | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
|-----|------|--|---|---|---|---|---|---|---|---|---|---|---|

**TOTAL USN ENLISTED BILLETS:**

|                    |  |  |     |   |     |   |     |   |     |   |     |   |     |
|--------------------|--|--|-----|---|-----|---|-----|---|-----|---|-----|---|-----|
| Operational        |  |  | 121 | 0 | 121 | 0 | 121 | 0 | 121 | 0 | 121 | 0 | 121 |
| Fleet Support      |  |  | 8   | 0 | 8   | 0 | 8   | 0 | 8   | 0 | 8   | 0 | 8   |
| Staff              |  |  | 6   | 0 | 6   | 0 | 6   | 0 | 6   | 0 | 6   | 0 | 6   |
| Chargeable Student |  |  | 6   | 0 | 6   | 0 | 6   | 0 | 6   | 0 | 6   | 0 | 6   |
| SELRES             |  |  | 3   | 0 | 3   | 0 | 3   | 0 | 3   | 0 | 3   | 0 | 3   |

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

| DESIG/<br>RATING | PNEC/<br>PMOS | SNEC/<br>SMOS | BILLET<br>BASE | CFY04<br>+/- CUM | FY05<br>+/- CUM | FY06<br>+/- CUM | FY07<br>+/- CUM | FY08<br>+/- CUM |
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|------------------|---------------|---------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|

c. OFFICER - USMC            Not Applicable

**d. ENLISTED - USMC**

Operational Billets USMC and AR

|      |      |  |    |   |    |   |    |   |    |   |    |   |    |
|------|------|--|----|---|----|---|----|---|----|---|----|---|----|
| CPL  | 6464 |  | 8  | 0 | 8  | 0 | 8  | 0 | 8  | 0 | 8  | 0 | 8  |
| LCPL | 6464 |  | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 | 25 |
| SGT  | 6464 |  | 8  | 0 | 8  | 0 | 8  | 0 | 8  | 0 | 8  | 0 | 8  |

Chargeable Student Billets USMC and AR

|  |  |  |   |   |   |   |   |   |   |   |   |   |   |
|--|--|--|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
|--|--|--|---|---|---|---|---|---|---|---|---|---|---|

**TOTAL USMC ENLISTED BILLETS:**

|                    |  |  |    |   |    |   |    |   |    |   |    |   |    |
|--------------------|--|--|----|---|----|---|----|---|----|---|----|---|----|
| Operational        |  |  | 41 | 0 | 41 | 0 | 41 | 0 | 41 | 0 | 41 | 0 | 41 |
| Chargeable Student |  |  | 2  | 0 | 2  | 0 | 2  | 0 | 2  | 0 | 2  | 0 | 2  |

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

**CIN, COURSE TITLE:** D-150-6010, AN/ASM-608 Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance  
**COURSE LENGTH:** 6.4 Weeks **NAVY TOUR LENGTH:** 36 Months  
**ATTRITION FACTOR:** Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.13

| TRAINING<br>ACTIVITY    | SOURCE | ACDU/TAR<br>SELRES | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|-------------------------|--------|--------------------|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                         |        |                    | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| MTU 3010 NAMTRAU Oceana |        |                    |       |     |      |     |      |     |      |     |      |     |
|                         | USN    | ACDU               |       | 21  |      | 21  |      | 21  |      | 21  |      | 21  |
|                         |        | TAR                |       | 2   |      | 2   |      | 2   |      | 2   |      | 2   |
|                         |        | SELRES             |       | 0   |      | 0   |      | 1   |      | 0   |      | 0   |
|                         | USMC   | USMC               |       | 5   |      | 5   |      | 5   |      | 5   |      | 5   |
|                         |        | TOTAL:             |       | 28  |      | 28  |      | 29  |      | 28  |      | 28  |

**CIN, COURSE TITLE:** E-150-6010, AN/ASM-608 Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance  
**COURSE LENGTH:** 6.4 Weeks **NAVY TOUR LENGTH:** 36 Months  
**ATTRITION FACTOR:** Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.13

| TRAINING<br>ACTIVITY           | SOURCE | ACDU/TAR<br>SELRES | CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |
|--------------------------------|--------|--------------------|-------|-----|------|-----|------|-----|------|-----|------|-----|
|                                |        |                    | OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |
| MTU 3011 NAMTRAGRU DET Miramar |        |                    |       |     |      |     |      |     |      |     |      |     |
|                                | USN    | ACDU               |       | 26  |      | 26  |      | 26  |      | 26  |      | 26  |
|                                |        | TAR                |       | 1   |      | 1   |      | 1   |      | 1   |      | 1   |
|                                | USMC   | USMC               |       | 6   |      | 6   |      | 6   |      | 6   |      | 6   |
|                                |        | TOTAL:             |       | 33  |      | 33  |      | 33  |      | 33  |      | 33  |

### **PART III - TRAINING REQUIREMENTS**

The following elements are not affected by the IMUTS III System 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.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

**CIN, COURSE TITLE:** D-150-6010, AN/ASM-608 Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance  
**TRAINING ACTIVITY:** MTU 3010 NAMTRAU  
**LOCATION, UIC:** NAS Oceana, 66045

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

| CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 23  |      | 23  |      | 23  |      | 23  |      | 23  | ATIR       |
|       | 21  |      | 21  |      | 21  |      | 21  |      | 21  | Output     |
|       | 2.6 |      | 2.6 |      | 2.6 |      | 2.6 |      | 2.6 | AOB        |
|       | 2.6 |      | 2.6 |      | 2.6 |      | 2.6 |      | 2.6 | Chargeable |

**SOURCE:** USN                      **STUDENT CATEGORY:** SELRES

| CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 0   |      | 0   |      | 1   |      | 0   |      | 0   | ATIR       |
|       | 0   |      | 0   |      | 1   |      | 0   |      | 0   | Output     |
|       | 0.0 |      | 0.0 |      | 0.1 |      | 0.0 |      | 0.0 | AOB        |
|       | 0.0 |      | 0.0 |      | 0.0 |      | 0.0 |      | 0.0 | Chargeable |

**SOURCE:** USMC                      **STUDENT CATEGORY:** USMC - AR

| CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 5   |      | 5   |      | 5   |      | 5   |      | 5   | ATIR       |
|       | 5   |      | 5   |      | 5   |      | 5   |      | 5   | Output     |
|       | 0.6 |      | 0.6 |      | 0.6 |      | 0.6 |      | 0.6 | AOB        |
|       | 0.6 |      | 0.6 |      | 0.6 |      | 0.6 |      | 0.6 | Chargeable |

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

**CIN, COURSE TITLE:** E-150-6010, AN/ASM-608 Inertial Measurement Unit Test Set (IMUTS) Operation/Maintenance  
**TRAINING ACTIVITY:** MTU 3011 NAMTRAGRU DET  
**LOCATION, UIC:** MCAS Miramar, 42148

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

| CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 27  |      | 27  |      | 27  |      | 27  |      | 27  | ATIR       |
|       | 24  |      | 24  |      | 24  |      | 24  |      | 24  | Output     |
|       | 3.1 |      | 3.1 |      | 3.1 |      | 3.1 |      | 3.1 | AOB        |
|       | 3.1 |      | 3.1 |      | 3.1 |      | 3.1 |      | 3.1 | Chargeable |

**SOURCE:** USMC                      **STUDENT CATEGORY:** USMC - AR

| CFY04 |     | FY05 |     | FY06 |     | FY07 |     | FY08 |     |            |
|-------|-----|------|-----|------|-----|------|-----|------|-----|------------|
| OFF   | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL | OFF  | ENL |            |
|       | 6   |      | 6   |      | 6   |      | 6   |      | 6   | ATIR       |
|       | 6   |      | 6   |      | 6   |      | 6   |      | 6   | Output     |
|       | 0.7 |      | 0.7 |      | 0.7 |      | 0.7 |      | 0.7 | AOB        |
|       | 0.7 |      | 0.7 |      | 0.7 |      | 0.7 |      | 0.7 | Chargeable |

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the IMUTS III System and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

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

**PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

**IV.A. TRAINING HARDWARE**

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

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track D-150-6010)

**TRAINING ACTIVITY:** MTU 3010 NAMTRAU

**LOCATION, UIC:** NAS Oceana, 66045

| ITEM NO.   | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS                            | QTY REQD | DATE REQD | GFE CFE | STATUS  |
|------------|--|----------|-----------|---------|---------|
| <b>TTE</b> |  |          |           |         |         |
| 001        | Inertial Measuring Unit (Part No. 680100-20)                         | 4        | Jul 97    | CFE     | Onboard |
| 002        | Inertial Navigation Unit (Part No. 879010-2)                         | 4        | Jul 97    | CFE     | Onboard |
| 003        | Inertial Navigation Unit (Part No. 886401-1)                         | 2        | Jul 97    | CFE     | Onboard |
| 004        | Computer (Part No. 284710-1)   | 1        | Jul 97    | CFE     | Onboard |
| 005        | Display Monitor (Part No. 225959C)                                   | 1        | Jul 97    | CFE     | Onboard |
| 006        | Screw Assembly (Part No. SFSW10F8CPS25GY)                            | 1        | Jul 97    | CFE     | Onboard |
| 007        | Circuit Card Assembly - Discrete I/O (Part No. 262330-1)             | 3        | Jul 97    | CFE     | Onboard |
| 008        | Circuit Card Assembly - SDC Interface (Part No. 264875-2)            | 3        | Jul 97    | CFE     | Onboard |
| 009        | Circuit Card Assembly - Programmable Termination (Part No. 264870-1) | 3        | Jul 97    | CFE     | Onboard |
| 010        | Circuit Card Assembly - Relay Type II (Part No. 02-182)              | 4        | Jul 97    | CFE     | Onboard |
| 011        | Circuit Card Assembly - Memory Interface (Part No. 264855-3)         | 3        | Jul 97    | CFE     | Onboard |
| 012        | Circuit Card Assembly - No - Go Monitor (Part No. 264860-3)          | 3        | Jul 97    | CFE     | Onboard |
| 013        | Circuit Card Assembly - Delta Function (Part No. 264840-4)           | 3        | Jul 97    | CFE     | Onboard |
| 014        | Circuit Card Assembly - Synchro Resolver (Part No. 262470-3)         | 3        | Jul 97    | CFE     | Onboard |
| 015        | Circuit Card Assembly - Output Controller (Part No. 264865-3)        | 3        | Jul 97    | CFE     | Onboard |
| 016        | Circuit Card Assembly - SINS Interface (Part No. 264825-4)           | 3        | Jul 97    | CFE     | Onboard |
| 017        | Circuit Card Assembly - BUS Buffer (Part No. 2771709-1)              | 3        | Jul 97    | CFE     | Onboard |
| 018        | Circuit Card Assembly - R/D Input 2 Speed (Part No. 264835-3)        | 2        | Jul 97    | CFE     | Onboard |
| 018        | Circuit Card Assembly - Power Control (Part No. 264850-4)            | 3        | Jul 97    | CFE     | Onboard |

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

|              |  |   |        |     |         |
|--------------|--|---|--------|-----|---------|
| 019          | Circuit Card Assembly - SDC Buffer (Part No. 264830-1)         | 3 | Jul 97 | CFE | Onboard |
| 020          | Circuit Card Assembly - SIN Buffer (Part No. 264845-5)         | 1 | Jul 97 | CFE | Onboard |
| 021          | Circuit Card Assembly - Two Speed Resolver (Part No. 264835-3) | 1 | Jul 97 | CFE | Onboard |
| 022          | Interface Device (Part No. 284730-1)                           | 2 | Jul 97 | CFE | Onboard |
| 023          | Interface Device (Part No. 262360-2)                           | 2 | Jul 97 | CFE | Onboard |
| 024          | Interface Device (Part No. 281566-1)                           | 2 | Jul 97 | CFE | Onboard |
| <b>ST</b>    |  |   |        |     |         |
| 200          | Iron Bird (Part No. 692101-50)                                 | 1 | Jul 97 | CFE | Onboard |
| 201          | Platform Fill Station (Part No. 251810-4)                      | 2 | Jul 97 | CFE | Onboard |
| 202          | Hex Extender (Part No. 924019-11)                              | 4 | Jul 97 | CFE | Onboard |
| 203          | Flange Support (Part No. T-209807)                             | 2 | Jul 97 | CFE | Onboard |
| 204          | Extractor Set (Part No. T-20964)                               | 2 | Jul 97 | CFE | Onboard |
| 205          | Lifter Tool (Part No. T-207943)                                | 2 | Jul 97 | CFE | Onboard |
| 206          | Fixture Support (Part No. T-20968)                             | 2 | Jul 97 | CFE | Onboard |
| 207          | Gimbal Alignment Fixture (Part No. 150322)                     | 2 | Jul 97 | CFE | Onboard |
| 208          | Alignment Fixture (Part No. T-209663)                          | 2 | Jul 97 | CFE | Onboard |
| 209          | Torque Wrench (Part No. QTSP135)                               | 1 | Jul 97 | CFE | Onboard |
| 210          | Torque Wrench (Part No. QJR217C)                               | 1 | Jul 97 | CFE | Onboard |
| 211          | Tool Set (Part No. A/E-1)                                      | 1 | Jul 97 | CFE | Onboard |
| 212          | Tool Set (Part No. A/E-2)                                      | 1 | Jul 97 | CFE | Onboard |
| <b>GPETE</b> |  |   |        |     |         |
| 400          | Main Frame Oscilloscope (Part No. 7704A)                       | 2 | Jul 97 | CFE | Onboard |
| 401          | Multimeter (Part No. 77BN)                                     | 1 | Jul 97 | CFE | Onboard |
| <b>SPETE</b> |  |   |        |     |         |
| 500          | IMUTS III Test Station Assembly (Part No. 262200-3)            | 2 | Jul 97 | CFE | Onboard |

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

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track E-150-6010)

**TRAINING ACTIVITY:** MTU 3011 NAMTRAGRU DET

**LOCATION, UIC:** MCAS Miramar, 42148

| ITEM NO.   | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS                            | QTY REQD | DATE REQD | GFE CFE | STATUS  |
|------------|--|----------|-----------|---------|---------|
| <b>TTE</b> |  |          |           |         |         |
| 001        | Inertial Measuring Unit (Part No. 680100-20)                         | 4        | Jul 97    | CFE     | Onboard |
| 002        | Inertial Navigation Unit (Part No. 879010-2)                         | 4        | Jul 97    | CFE     | Onboard |
| 003        | Inertial Navigation Unit (Part No. 886401-1)                         | 2        | Jul 97    | CFE     | Onboard |
| 004        | Computer (Part No. 284710-1)   | 1        | Jul 97    | CFE     | Onboard |
| 005        | Display Monitor (Part No. 225959C)                                   | 1        | Jul 97    | CFE     | Onboard |
| 006        | Screw Assembly (Part No. SFSW10F8CPS25GY)                            | 1        | Jul 97    | CFE     | Onboard |
| 007        | Circuit Card Assembly - Discrete I/O (Part No. 262330-1)             | 3        | Jul 97    | CFE     | Onboard |
| 008        | Circuit Card Assembly - SDC Interface (Part No. 264875-2)            | 3        | Jul 97    | CFE     | Onboard |
| 009        | Circuit Card Assembly - Programmable Termination (Part No. 264870-1) | 3        | Jul 97    | CFE     | Onboard |
| 010        | Circuit Card Assembly - Relay Type II (Part No. 02-182)              | 4        | Jul 97    | CFE     | Onboard |
| 011        | Circuit Card Assembly - Memory Interface (Part No. 264855-3)         | 3        | Jul 97    | CFE     | Onboard |
| 012        | Circuit Card Assembly - No - Go Monitor (Part No. 264860-3)          | 3        | Jul 97    | CFE     | Onboard |
| 013        | Circuit Card Assembly - Delta Function (Part No. 264840-4)           | 3        | Jul 97    | CFE     | Onboard |
| 014        | Circuit Card Assembly - Synchro Resolver (Part No. 262470-3)         | 3        | Jul 97    | CFE     | Onboard |
| 015        | Circuit Card Assembly - Output Controller (Part No. 264865-3)        | 3        | Jul 97    | CFE     | Onboard |
| 016        | Circuit Card Assembly - SINS Interface (Part No. 264825-4)           | 3        | Jul 97    | CFE     | Onboard |
| 017        | Circuit Card Assembly - BUS Buffer (Part No. 2771709-1)              | 3        | Jul 97    | CFE     | Onboard |
| 018        | Circuit Card Assembly - Power Control (Part No. 264850-4)            | 3        | Jul 97    | CFE     | Onboard |
| 018        | Circuit Card Assembly - R/D Input 2 Speed (Part No. 264835-3)        | 2        | Jul 97    | CFE     | Onboard |
| 019        | Circuit Card Assembly - SDC Buffer (Part No. 264830-1)               | 3        | Jul 97    | CFE     | Onboard |
| 020        | Circuit Card Assembly - SIN Buffer (Part No. 264845-5)               | 1        | Jul 97    | CFE     | Onboard |

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

|              |  |   |        |     |         |
|--------------|--|---|--------|-----|---------|
| 021          | Circuit Card Assembly - Two Speed Resolver (Part No. 264835-3) | 1 | Jul 95 | CFE | Onboard |
| 022          | Interface Device (Part No. 284730-1)                           | 2 | Jul 97 | CFE | Onboard |
| 023          | Interface Device (Part No. 262360-2)                           | 2 | Jul 97 | CFE | Onboard |
| 024          | Interface Device (Part No. 281566-1)                           | 2 | Jul 97 | CFE | Onboard |
| <b>ST</b>    |  |   |        |     |         |
| 200          | Iron Bird (Part No. 692101-50)                                 | 1 | Jul 97 | CFE | Onboard |
| 201          | Platform Fill Station (Part No. 251810-4)                      | 2 | Jul 97 | CFE | Onboard |
| 202          | Hex Extender (Part No. 924019-11)                              | 4 | Jul 97 | CFE | Onboard |
| 203          | Flange Support (Part No. T-209807)                             | 2 | Jul 97 | CFE | Onboard |
| 204          | Extractor Set (Part No. T-20964)                               | 2 | Jul 97 | CFE | Onboard |
| 205          | Lifter Tool (Part No. T-207943)                                | 2 | Jul 97 | CFE | Onboard |
| 206          | Fixture Support (Part No. T-20968)                             | 2 | Jul 97 | CFE | Onboard |
| 207          | Gimbal Alignment Fixture (Part No. 150322)                     | 2 | Jul 97 | CFE | Onboard |
| 208          | Alignment Fixture (Part No. T-209663)                          | 2 | Jul 97 | CFE | Onboard |
| 209          | Torque Wrench (Part No. QTSP135)                               | 1 | Jul 97 | CFE | Onboard |
| 210          | Torque Wrench (Part No. QJR217C)                               | 1 | Jul 97 | CFE | Onboard |
| 211          | Tool Set (Part No. A/E-1)                                      | 1 | Jul 97 | CFE | Onboard |
| 212          | Tool Set (Part No. A/E-2)                                      | 1 | Jul 97 | CFE | Onboard |
| <b>GPETE</b> |  |   |        |     |         |
| 400          | Main Frame Oscilloscope (Part No. 7704A)                       | 2 | Jul 97 | CFE | Onboard |
| 401          | Multimeter (Part No. 77BN)                                     | 1 | Jul 97 | CFE | Onboard |
| <b>SPETE</b> |  |   |        |     |         |
| 500          | IMUTS III Test Station Assembly (Part No. 262200-3)            | 2 | Jul 97 | CFE | Onboard |

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

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track D-150-6010)

**TRAINING ACTIVITY:** MTU 3010 NAMTRAU

**LOCATION, UIC:** NAS Oceana, 66045

| TYPES OF MATERIAL OR AID  | QTY REQD | DATE REQD | STATUS  |
|---|----------|-----------|---------|
| Course Evaluation Sheet   | 50       | Jul 97    | Onboard |
| Instructor Guide  | 3        | Jul 97    | Onboard |
| Panasonic Recorder/Player (Part No. AG-1300P)                         | 1        | Jul 97    | Onboard |
| Projection Screen (Part No. 4H1D)                                     | 1        | Jul 97    | Onboard |
| Projector (Part No. 213HCDU)  | 1        | Jul 97    | Onboard |
| Student Guide   | 50       | Jul 97    | Onboard |
| Student Test  | 50       | Jul 97    | Onboard |
| Television (Part No. AV-2080S)  | 1        | Jul 97    | Onboard |
| Transparencies (Set of 21)  | 3        | Jul 97    | Onboard |
| Videotape (803784DN) - Electro-Static Discharge, The Invisible Threat | 3        | Jul 97    | Onboard |
| Videotape (V-1030-1) - Fundamentals of Inertial Navigation Part I     | 3        | Jul 97    | Onboard |
| Videotape (V-1030-2) - Fundamentals of Inertial Navigation Part II    | 3        | Jul 97    | Onboard |
| Videotape (V-1041) - Introduction to Inertial Navigation              | 3        | Jul 97    | Onboard |
| Wall Chart - AN/ASN-130A Functional Block Diagram                     | 3        | Jul 97    | Onboard |
| Wall Chart - AN/ASN-92 Functional Block Diagram                       | 3        | Jul 97    | Onboard |

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track E-150-6010)

**TRAINING ACTIVITY:** MTU 3011 NAMTRAGRU DET

**LOCATION, UIC:** MCAS Miramar, 42148

| TYPES OF MATERIAL OR AID  | QTY REQD | DATE REQD | STATUS  |
|---|----------|-----------|---------|
| Course Evaluation Sheet   | 50       | Jul 97    | Onboard |
| Instructor Guide  | 3        | Jul 97    | Onboard |
| Panasonic Recorder/Player (Part No. AG-1300P)                         | 1        | Jul 97    | Onboard |
| Projection Screen (Part No. 4H1D)                                     | 1        | Jul 97    | Onboard |
| Projector (Part No. 213HCDU)  | 1        | Jul 97    | Onboard |
| Student Guide   | 50       | Jul 97    | Onboard |
| Student Test  | 50       | Jul 97    | Onboard |
| Television (Part No. AV-2080S)  | 1        | Jul 97    | Onboard |
| Transparencies (Set of 21)  | 3        | Jul 97    | Onboard |
| Videotape (803784DN) - Electro-Static Discharge, The Invisible Threat | 3        | Jul 97    | Onboard |
| Videotape (V-1030-1) - Fundamentals of Inertial Navigation Part I     | 3        | Jul 97    | Onboard |
| Videotape (V-1030-2) - Fundamentals of Inertial Navigation Part II    | 3        | Jul 97    | Onboard |
| Videotape (V-1041) - Introduction to Inertial Navigation              | 3        | Jul 97    | Onboard |
| Wall Chart - AN/ASN-130A Functional Block Diagram                     | 3        | Jul 97    | Onboard |
| Wall Chart - AN/ASN-92 Functional Block Diagram                       | 3        | Jul 97    | Onboard |

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

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track D-150-6010)

**TRAINING ACTIVITY:** MTU 3010 NAMTRAU

**LOCATION, UIC:** NAS Oceana, 66045

| TECHNICAL MANUAL NUMBER / TITLE   | MEDIUM    | QTY REQD | DATE REQD | STATUS  |
|---|-----------|----------|-----------|---------|
| A1-220AC-730-000<br>Inertial Navigation Unit CN-1561-130A, Intermediate Maintenance with IPB  | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404144<br>An Introduction to Inertial Navigation, Litton Guidance and Control Systems                                      | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404317<br>Automatic Test equipment, Computer Bus Theory of Operation, Litton Guidance and Control Systems                  | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404747<br>Digital Fundamentals, Litton Guidance and Control Systems  | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404795<br>CAINS AN/ASN-92 IMU, Litton Guidance and Control Systems   | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 405118<br>AN/ASN-130A Prime Equipment Manual, Litton Guidance and Control Systems  | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 405149<br>Fundamentals of Inertial Navigation, Litton Guidance and Control Systems   | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 4067221<br>AN/ASN-139 Ring Laser Gyro INU, Litton Guidance and Control Systems   | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 406909<br>CAINS II Familiarization, Litton Guidance and Control Systems  | Hard copy | 6        | Jul 97    | Onboard |
| NA 01-1A-23<br>Electronics Assembly Repair Standard Maintenance Practices   | Hard copy | 6        | Jul 97    | Onboard |
| NA 05-35KAA-49<br>Inertial Measuring Unit CN-1263/AN/ASN-92 and Inertial Measuring Unit Mount MT-4100/AN/ASN-92 Intermediate Maintenance with IPB | Hard copy | 6        | Jul 97    | Onboard |

### IV.B.3. TECHNICAL MANUALS

|  |           |   |        |         |
|--|-----------|---|--------|---------|
| NA 16-1-8.2.4<br>Aeronautical Support Equipment Index, Work Unit Code Manual                                     | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-10<br>Power Supply PS-2 (Part Number PS-363) Depot Maintenance with IPB                           | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-11<br>Power Supply PS-1 (Part Number PS-361) Depot Maintenance with IPB                           | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-15<br>Power Protection Unit (part Number 281130-1) Intermediate Maintenance with IPB              | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-3<br>Power Monitor Unit (Part Number 262290-4) Intermediate Maintenance with IPB                  | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-4<br>Test Station Module Block Assembly (Part Number 262210-15) Intermediate Maintenance with IPB | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-5<br>Power Component Unit (Part Number 262285-2) Intermediate Maintenance with IPB                | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-7<br>Self Check Assembly (Part Number 2622370-3) Intermediate Maintenance with IPB                | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-8<br>IMU Interconnecting Device Assembly (Part Number 262360-2) Intermediate Maintenance with IPB | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-9<br>Power Supply PS-3 (Part Number PS-362-1) Depot Maintenance with IPB                          | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-73<br>IMUTS TS-3846A/ASM-608(V) (Part Number 262200-3) Intermediate Maintenance with IPB             | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-600-133-6-2<br>IMUTS III TS-3846A/ASM-608(V) Periodic Maintenance Requirement Manual                       | Hard copy | 6 | Jul 97 | Onboard |

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

|   |           |   |        |         |
|---|-----------|---|--------|---------|
| OPNAVINST 4790.2 (series)<br>Naval Aviation Maintenance Program                                     | Hard copy | 6 | Jul 97 | Onboard |
| TPI 407798<br>Self Check Program Instruction for IMUTS III<br>TS-3846A/ASM-608(V)                   | Digital   | 6 | Jul 97 | Onboard |
| TPI 407799<br>CAINS Test Program Instruction for Inertial Measuring Unit<br>CN-1263/AN/ASN-92       | Digital   | 6 | Jul 97 | Onboard |
| TPI 407800<br>CAINS IA Test Program Instruction for Inertial Navigation Unit<br>CN-1561/AN/ASN-130A | Digital   | 6 | Jul 97 | Onboard |
| TPI 407801<br>CAINS II TPI for Inertial Navigation Unit CN-1649/AN/ASN-139                          | Digital   | 6 | Jul 97 | Onboard |

**CIN, COURSE TITLE:** C-198-3060, AN/ASM-608 (V) Inertial Measurement Unit Test Set Operator/Maintainer Intermediate Maintenance (Track E-150-6010)

**TRAINING ACTIVITY:** MTU 3011 NAMTRAGRU DET

**LOCATION, UIC:** MCAS Miramar, 42148

| TECHNICAL MANUAL NUMBER / TITLE  | MEDIUM    | QTY REQD | DATE REQD | STATUS  |
|--|-----------|----------|-----------|---------|
| A1-220AC-730-000<br>Inertial Navigation Unit CN-1561-130A, Intermediate Maintenance with IPB                                     | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404144<br>An Introduction to Inertial Navigation, Litton Guidance and Control Systems                     | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404317<br>Automatic Test equipment, Computer Bus Theory of Operation, Litton Guidance and Control Systems | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404747<br>Digital Fundamentals, Litton Guidance and Control Systems                                       | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 404795<br>CAINS AN/ASN-92 IMU, Litton Guidance and Control Systems  | Hard copy | 6        | Jul 97    | Onboard |
| Litton Document Number 405118<br>AN/ASN-130A Prime Equipment Manual, Litton Guidance and Control Systems                         | Hard copy | 6        | Jul 97    | Onboard |

### IV.B.3. TECHNICAL MANUALS

|   |           |   |        |         |
|---|-----------|---|--------|---------|
| Litton Document Number 405149<br>Fundamentals of Inertial Navigation, Litton Guidance and Control Systems   | Hard copy | 6 | Jul 97 | Onboard |
| Litton Document Number 4067221<br>AN/ASN-139 Ring Laser Gyro INU, Litton Guidance and Control Systems   | Hard copy | 6 | Jul 97 | Onboard |
| Litton Document Number 406909<br>CAINS II Familiarization, Litton Guidance and Control Systems  | Hard copy | 6 | Jul 97 | Onboard |
| NA 01-1A-23<br>Electronics Assembly Repair Standard Maintenance Practices   | Hard copy | 6 | Jul 97 | Onboard |
| NA 05-35KAA-49<br>Inertial Measuring Unit CN-1263/AN/ASN-92 and Inertial Measuring Unit Mount MT-4100/AN/ASN-92 Intermediate Maintenance with IPB | Hard copy | 6 | Jul 97 | Onboard |
| NA 16-1-8.2.4<br>Aeronautical Support Equipment Index, Work Unit Code Manual  | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-10<br>Power Supply PS-2 (Part Number PS-363) Depot Maintenance with IPB  | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-11<br>Power Supply PS-1 (Part Number PS-361) Depot Maintenance with IPB  | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-15<br>Power Protection Unit (part Number 281130-1) Intermediate Maintenance with IPB   | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-3<br>Power Monitor Unit (Part Number 262290-4) Intermediate Maintenance with IPB   | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-4<br>Test Station Module Block Assembly (Part Number 262210-15) Intermediate Maintenance with IPB                                  | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-5<br>Power Component Unit (Part Number 262285-2) Intermediate Maintenance with IPB   | Hard copy | 6 | Jul 97 | Onboard |

### IV.B.3. TECHNICAL MANUALS

|  |           |   |        |         |
|--|-----------|---|--------|---------|
| NA 17-15CAB-72-7<br>Self Check Assembly (Part Number 2622370-3) Intermediate Maintenance with IPB                | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-8<br>IMU Interconnecting Device Assembly (Part Number 262360-2) Intermediate Maintenance with IPB | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-72-9<br>Power Supply PS-3 (Part Number PS-362-1) Depot Maintenance with IPB                          | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-15CAB-73<br>IMUTS TS-3846A/ASM-608(V) (Part Number 262200-3) Intermediate Maintenance with IPB             | Hard copy | 6 | Jul 97 | Onboard |
| NA 17-600-133-6-2<br>IMUTS III TS-3846A/ASM-608(V) Periodic Maintenance Requirement Manual                       | Hard copy | 6 | Jul 97 | Onboard |
| OPNAVINST 4790.2 (series)<br>Naval Aviation Maintenance Program  | Hard copy | 6 | Jul 97 | Onboard |
| TPI 407798<br>Self Check Program Instruction for IMUTS III TS-3846A/ASM-608(V)                                   | Digital   | 6 | Jul 97 | Onboard |
| TPI 407799<br>CAINS Test Program Instruction for Inertial Measuring Unit CN-1263/AN/ASN-92                       | Digital   | 6 | Jul 97 | Onboard |
| TPI 407800<br>CAINS IA Test Program Instruction for Inertial Navigation Unit CN-1561/AN/ASN-130A                 | Digital   | 6 | Jul 97 | Onboard |
| TPI 407801<br>CAINS II TPI for Inertial Navigation Unit CN-1649/AN/ASN-139                                       | Digital   | 6 | Jul 97 | Onboard |

**PART V - MPT MILESTONES**

| <b>COG CODE</b> | <b>MPT MILESTONES</b>                                | <b>DATE</b> | <b>STATUS</b> |
|-----------------|--|-------------|---------------|
| PDA             | Analyzed MPT Requirements                            | Feb 82      | Completed     |
| TA              | Began Follow-On Training                             | May 85      | Completed     |
| PDA             | Approved NTP for IMUTS II                            | May 88      | Completed     |
| PDA             | Began Deliveries of IMUTS II                         | Mar 96      | Completed     |
| PDA             | Completed Developmental Training                     | FY96        | Completed     |
| TSA             | Began Initial Training                               | FY96        | Completed     |
| TA              | Began Follow-On Training for IMUTS III               | Jul 97      | Completed     |
| TSA             | Delivered IMUTS III System to MTU 3010 (First Unit)  | Jul 97      | Completed     |
| TSA             | Delivered IMUTS III System to MTU 3011 (First Unit)  | Jul 97      | Completed     |
| TSA             | Delivered IMUTS III System to MTU 3011 (Second Unit) | Sep 97      | Completed     |
| TSA             | Delivered IMUTS III System to MTU 3010 (Second Unit) | Oct 97      | Completed     |
| PDA             | Approved Maintenance Plan for IMUTS III              | Jan 98      | Completed     |
| PDA             | Approved ULSS for IMUTS III                          | Jan 98      | Completed     |
| TA              | Reduced Course Length by One Week for IMUTS III      | Jan 99      | Completed     |
| TSA             | Developed IMUTS III Draft NTSP                       | Aug 99      | Completed     |
| TSA             | Distributed IMUTS III Draft NTSP for Review          | Sep 99      | Completed     |
| TSA             | Developed IMUTS III Proposed NTSP                    | Nov 99      | Completed     |
| PDA             | Attained MSD for IMUTS III System                    | Jan 00      | Completed     |
| PDA             | Completed Fleet IMUTS III Deliveries                 | FY00        | Completed     |
| TSA             | Developed IMUTS III Draft NTSP Update                | Feb 04      | Completed     |

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

| DECISION ITEM OR ACTION REQUIRED                                    | COMMAND ACTION | DUE DATE | STATUS |
|---|----------------|----------|--------|
| There are no actions or decisions pending for the IMUTS III System. |                |          |        |
|   |                |          |        |
|   |                |          |        |
|   |                |          |        |

PART VII - POINTS OF CONTACT

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PART VII - POINTS OF CONTACT

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PART VII - POINTS OF CONTACT

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| <p><b>ATCS Norris Jones</b><br/>ATE Technical Support<br/>COMNAVAIRES, N421F1A<br/>norris.jones@navy.mil</p>                                 | <p><b>COMM:</b> (505) 678-6066<br/><b>DSN:</b> 678-6066<br/><b>FAX:</b> (504) 678-6579</p>                     |
| <p><b>MAJ Henry Domingue, USMC</b><br/>Head, ACE Branch, TFS Division<br/>MCCDC, C5325A<br/>henry.domingue@usmc.mil</p>                      | <p><b>COMM:</b> (703) 784-6241<br/><b>DSN:</b> 278-6241<br/><b>FAX:</b> (703) 784-6072</p>                     |
| <p><b>MSGT Anthony B. Rahatt, USMC</b><br/>USMC CBT Coordinator<br/>MCCDC, C4610<br/>ruhatta@tecom.usmc.mil</p>                              | <p><b>COMM:</b> (703) 784-6879<br/><b>DSN:</b> 278-6879<br/><b>FAX:</b> (703) 784-3729</p>                     |
| <p><b>CDR Rose Wynne</b><br/>Aviation Department Head<br/>NAVMAC, 30<br/>rosemary.wynne@navy.mil</p>   | <p><b>COMM:</b> (901) 874-6218<br/><b>DSN:</b> 882-6218<br/><b>FAX:</b> (901) 874-6471</p>                     |
| <p><b>Ms. Susan Webb</b><br/>NTSP Coordinator<br/>NAVMAC, 30<br/>susan.webb@navy.mil</p>   | <p><b>COMM:</b> (901) 874-6242<br/><b>DSN:</b> 882-6242<br/><b>FAX:</b> (901) 874-6471</p>                     |
| <p><b>Mr. Brett Hollowell</b><br/>NETC/NPDC NTSP Coordinator<br/>NPDC, N7<br/>brett.hollowell@navy.mil</p>                                   | <p><b>COMM:</b> (757) 444-2269 ext. 3225<br/><b>DSN:</b> 564-2269 ext. 3225<br/><b>FAX:</b> (757) 445-8082</p> |
| <p><b>Mr. Steve Berk</b><br/>NTSP Distribution<br/>NETC, ETS-23<br/>stephen.berk@navy.mil</p>  | <p><b>COMM:</b> (850) 452-8919<br/><b>DSN:</b> 922-8919<br/><b>FAX:</b> (850) 452-4853</p>                     |
| <p><b>MAJ Robert Turpin, USMC</b><br/>Marine Integration Team Leader<br/>CNATT, N55<br/>robert.turpin@navy.mil</p>                           | <p><b>COMM:</b> (850) 452-9790 ext. 135<br/><b>DSN:</b> 922-9790 ext. 135<br/><b>FAX:</b> (850) 452-3262</p>   |
| <p><b>ATCS Robert Doyle</b><br/>Functional Integration Directorate Maritime/AIMD Coordinator<br/>CNATT, N512<br/>robert.a.doyle@navy.mil</p> | <p><b>COMM:</b> (859) 452-9790 ext. 246<br/><b>DSN:</b> 922-9790 ext. 246<br/><b>FAX:</b> (850) 452-3262</p>   |
| <p><b>GYSGT E. B. Carter, USMC</b><br/>USMC MATMEP Coordinator<br/>MCCDC, C4610<br/>cartereb@tecom.usmc.mil</p>                              | <p><b>COMM:</b> (703) 784-2839<br/><b>DSN:</b> 278-2839<br/><b>FAX:</b> (703) 784-3729</p>                     |

PART VII - POINTS OF CONTACT

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL  | TELEPHONE NUMBERS  |
|--|--|
| <p><b>ATCS Les Evans</b><br/>Leading Chief Petty Officer<br/>MTU 3011 NAMTRAGRU Miramar<br/>atcs-les.evans@cnet.navy.mil</p> | <p><b>COMM:</b> (858) 577-6029<br/><b>DSN:</b> 267-6029<br/><b>FAX:</b> (858) 577-1225</p> |
| <p><b>AE2 Larry Lewis</b><br/>IMUTS Course Manager<br/>MTU 3010 Oceana<br/>larry.j.lewis@navy.mil</p>                        | <p><b>COMM:</b> (757) 433-3108<br/><b>DSN:</b> 433-3108<br/><b>FAX:</b> (757) 433-3166</p> |
| <p><b>Mr. Earl Smith</b><br/>IMUTS Project Manager<br/>NADEP North Island, 48970<br/>earl.l.smith@navy.mil</p>               | <p><b>COMM:</b> (619) 545-4015<br/><b>DSN:</b> 735-4015<br/><b>FAX:</b> (619) 545-4047</p> |
| <p><b>Mr. James Roth</b><br/>IMUTS III Logistic Manager/APML<br/>NADEP North Island, 32800<br/>james.roth@navy.mil</p>       | <p><b>COMM:</b> (619) 545-4021<br/><b>DSN:</b> 735-4021<br/><b>FAX:</b> (619) 545-4047</p> |
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| <p><b>Mr. John Beers</b><br/>Engineering Technical Services Manager<br/>NATEC, 3.7.4B<br/>john.beers@navy.mil</p>            | <p><b>COMM:</b> (619) 545-5563<br/><b>DSN:</b> 735-5563<br/><b>FAX:</b> (619) 545-1663</p> |
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| <p><b>Mr. Bob Kresge</b><br/>NTSP Manager<br/>NAVAIR, AIR 3.2.6<br/>robert.kresge@navy.mil</p>                               | <p><b>COMM:</b> (301) 757-1844<br/><b>DSN:</b> 757-1844<br/><b>FAX:</b> (301) 342-7737</p> |
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