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IN REPLY REFER TO

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Ser N889H1/0U662334
14 July 2000

From: Chief of Naval Operations (N889H)
To: Commander, Naval Air Systems Command (PMA205-3B1)

REQUEST FOR APPROVAL OF PROPOSED NAVY TRAINING SYSTEMS PLAN (NTSP) FOR THE MARINE AIR TRAFFIC CONTROL AND LEARNING SYSTEMS (MATCALS) N88-NTSP-A-50-9804/A

(a) COMNAVAIRSYSCOM ltr 3502 Ser PMA205-3B1/0600012

(1) NTSP dated June 2000

1. In reply to reference (a), subject NTSP has been reviewed and is approved after incorporation of minor changes marked in enclosure (1). The NTSP will be distributed via the OPNAV N889H (Naval Aviation Technical Training) web site (http://www.avtechtra.navy.mil). If your activity is unable to access the OPNAV web site and download the subject NTSP for review, contact ATCS (AW) Morris at DSN 757-9173, Comm: (301) 757-9173 for assistance.

2. OPNAV point of contact is LCDR M. E. Belcher (N889H1), DSN 664-7714, Comm: (703) 604-7714.

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Copy to:
COMNAVAIRSYSCOM (AIR-3.4.1)

NAVY TRAINING SYSTEM PLAN

FOR THE

MARINE AIR TRAFFIC CONTROL

AND LANDING SYSTEMS

N88-NTSP-A-50-9804/A

JULY 2000

MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS

EXECUTIVE SUMMARY

The Marine Air Traffic Control and Landing Systems (MATCALS) is a fully automated, all-weather, expeditionary terminal Air Traffic Control (ATC) System that provides tactical ATC services at forward operating bases, expeditionary airfields, and existing airfields. MATCALS provides arrival, departure, and en route surveillance control, automated precision approach and landing control for suitably equipped aircraft, and Ground Controlled Approach to accommodate other aircraft. It provides the ability to expeditiously move combat aircraft throughout the Amphibious Operational Area, allowing more time for mission response and task accomplishments. MATCALS and its associated equipment are in Phase III (Production, Deployment, and Operational Support) of the Weapon System Acquisition Process.

The AN/TSQ-216 Remote Landing Site Tower (RLST) is replacing the AN/TRC-195 Control Central Tower. Introduction began in second quarter Fiscal Year (FY) 00, and will achieve Initial Operating Capability in June 2000. The AN/ARC-210(V) Electronic Protection (EP) Radio System will be introduced as a new production item replacing the AN/GRC-171(V) and AN/GRC-211 Radio Sets in the AN/TSQ-120B ATCC Tower, beginning in fourth quarter FY00, with an estimated completion date of FY06. The AN/TPN-22 Precision Approach Radar (PAR) is being upgraded with a Solid-State Modulator (SSM). The upgrade began in June 1999, and has an estimated completion date of fourth quarter FY00. The AN/TRN-44 Tactical Air Navigation (TACAN) Beacon is being upgraded using a 20' International Standards Organizational shelter. The first upgrade was delivered in September 1998, and has an estimated completion date of FY10.

The maintenance concept for MATCALS is based on two levels, organizational and depot. The ATC Detachment performs all organizational level maintenance, which includes functions normally accomplished by an intermediate maintenance activity. Depot level maintenance is performed on assemblies, subassemblies, and end items requiring overhaul or modification.

Initial training for MATCALS and its associated equipment, including the AN/TSQ-216 RLST and the AN/ARC-210(V) EP Radio System has been completed. Follow-on training courses are established at the Naval Air Technical Training Center Pensacola, Florida. The AN/ARC-210(V) EP Radio System and the AN/TPN-22 PAR SSM upgrade will be integrated into existing MATCALS operator and maintenance courses. The AN/TSQ-216 RLST will be integrated into existing MATCALS operator courses, and a new course will be developed for maintenance, with an estimated course length of 38 days and a Ready For Training (RFT) date of fourth quarter FY00. A new course is being developed for ATC Managers and will be called the Managers Course. This course will be RFT in FY01, with a projected course length of four weeks.

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MATCALS manpower has been established in the Marine Air Control Squadron Table of Organization. Marine Corps personnel with Military Occupational Specialties (MOSs) 7220, 7252, 7253, 7254, 7257, and 7291 operate MATCALS, and Marine Corps personnel with MOSs 5952, 5953, and 5954 maintain MATCALS. Minimal maintenance support is also provided by non-ATC Marine Corp personnel with MOSs 1142, 1341, 1161, 1169, 6492, and 8641. The addition of the AN/TSQ-216 RLST, the AN/ARC-210(V) EP Radio System, and the AN/TPN-22 PAR SSM upgrade will not affect manpower requirements for MATCALS.

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MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS

LIST OF ACRONYMS

ADC	Arrival and Departure Control
AERG	Auxiliary Equipment Repair Group
AM	Amplitude Modulation
ASPARCS	Air Surveillance and Precision Approach Radar Control System
ASR	Airport Surveillance Radar
ATC	Air Traffic Control
ATCC	Air Traffic Control Central
ATCS	Air Traffic Control Subsystem
ATIS	Automatic Terminal Information Service
BIT	Built-In Test
BITE	Built-In Test Equipment
CACD	Collins Avionics and Communications Division
CC	Control Central
CCS	Control and Communication Subsystem
CERG	Communications Equipment Repair Group
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CMC	Commandant Marine Corps
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
DT	Developmental Test
ECU	Environmental Control Unit
EMRG	Electronic Module Repair Group
EP	Electronic Protection
FC	Final Control
FM	Frequency Modulation
FMF	Fleet Marine Force
FMS	Foreign Military Sales
FY	Fiscal Year
HF	High Frequency
HMMWV	Highly Mobile Multi-purpose Wheeled Vehicle

MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS

LIST OF ACRONYMS

Hz	Hertz
ILSP	Integrated Logistics Support Plan
ISEA	In-Service Engineering Agency
ISO	International Standards Organizational
LCMP	Life-Cycle Maintenance Plan
MACCS	Marine Air Command and Control Systems
MACS	Marine Air Control Squadron
MATC	Marine Air Traffic Control
MATCALS	Marine Air Traffic Control and Landing Systems
MATMEP	Maintenance Training Management and Evaluation Program
MCCDC	Marine Corps Combat Development Command
MHz	Megahertz
MIP	Maintenance Index Page
MOS	Military Occupational Specialty
MRAALS	Marine Remote Area Approach and Landing Systems
MRC	Maintenance Requirements Card
MRG	Maintenance Repair Group
MSD	Material Support Date
NA	Not Applicable
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAVICP	Naval Inventory Control Point
NAWCAD	Naval Air Warfare Center Aircraft Division
NTSP	Navy Training System Plan
OCG	Operations Central Group
OJT	On-the-Job Training
OLSS	Operational Logistics Support Summary
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	OPNAV Principal Official
ORD	Operational Requirements Document
OT	Operational Test
PAR	Precision Approach Radar

MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS

LIST OF ACRONYMS

PDS	Processor Display Set
PMA	Program Manager, Air
RERG	Radar Equipment Repair Group
RFT	Ready For Training
RLST	Remote Landing Site Tower
SD	San Diego, California
SNC	Sierra Nevada Corporation
SPAWAR	Space and Naval Warfare Systems Command
SSC	Space and Naval Warfare Systems Center
SSR	Secondary Surveillance Radar
SSM	Solid-State Modulator
STG	Storage Transport Group
TACAN	Tactical Air Navigation
TBD	To Be Determined
TD	Training Device
TFS	Total Force Structure
TG	Terminal Group
TR	Training
TTE	Technical Training Equipment
UHF	Ultra High Frequency
VFR	Visual Flight Rules
VHF	Very High Frequency

MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEMS

PREFACE

The previous Marine Air Traffic Control Landing System and Equipment Navy Training Plan, E-50-8313A/G, was approved 20 March 1996. The Navy Training System Plan (NTSP) has been re-titled and renumbered as the Marine Air Traffic Control and Landing Systems, N88-NTSP-A-50-9804/D. This Approved NTSP has been developed to update the Draft NTSP, N88-NTSP-A-50-9804/D, dated November 1999. This NTSP update complies with guidelines set forth in the Navy Training Requirements Documentation Manual, OPNAV P-751-1-9-97.

Two significant events have taken place since the last document approval. The more critical of the two was program responsibility shift from Commander, Space and Naval Warfare Systems Command (SPAWAR), to Commander, Naval Air Systems Command (NAVAIRSYSCOM). The second was relocation of the Marine Air Traffic Control (ATC) and Maintenance Schools from Naval Air Technical Training Center (NATTC), Millington, Tennessee, to NATTC Pensacola, Florida. This version also updates manpower, training, points of contact, and incorporates comments on the November 1999 Draft NTSP.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

1. Nomenclature-Title-Acronym. Marine Air Traffic Control and Landing Systems (MATCALS)

2. Program Element

a. MATCALS
Hardware 0202696N
Training..... PD084771X

b. AN/TSQ-216 RLST. 0604504N

B. SECURITY CLASSIFICATION

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

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor..... CNO (N885)

OPO Resource Sponsor..... CNO (N885F3)

Marine Corps Program Sponsor..... CMC (APC-5)

Developing Agency..... NAVAIRSYSCOM (PMA213)

Training Agency ..... CINCLANTFLT (N721)
CINCPACFLT (N343)
CNET (ETE321)
MCCDC (C462)

Manpower and Personnel Mission Sponsor..... CNO (N12)
CMC (ASM-1)

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

Director of Naval Training..... CNO (N75K)

Marine Corps Force Structure..... CMC (ASM1)
MCCDC (C53)

D. SYSTEM DESCRIPTION

1. Operational Uses. MATCALS is a fully automated, all-weather, expeditionary terminal ATC system used by Marine Air Control Squadrons (MACS0 to rapidly establish communications, take-off, landing, and other ATC services required for Visual Flight Rules (VFR) and Instrument Flight Rules control of aircraft at remote area landing sites.

MATCALS integrates with other Marine Air Command and Control Systems (MACCS) and federal agencies, such as the Federal Aviation Agency. It provides the ability to expeditiously move combat aircraft throughout the Amphibious Operational Area without regard to the effects of weather. ATC and landing automation reduce air traffic handling and management time, allowing more time for mission response and task accomplishment. Thus, it supports an increase to aircraft sortie rates and directly contributes to extending an aircraft's time-on-target. The system provides for integration of the ATC and landing systems into the total MACCS interfacing by means of automated transfer.

2. Foreign Military Sales. Two AN/TPN-30A MRAALS have been procured by the government of Japan for U. S. Navy field carrier landing practice on Iwo Jima. There have been no additional Foreign Military Sales (FMS) of MATCALS or its subsystems to any other Military Force at this time. Information concerning FMS of MATCALS may be obtained from the Deputy Program Manager, Air (PMA) 2134, Naval Air Systems Command (NAVAIRSYSCOM).

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.

Developmental Test (DT) and Operational Test (OT) for MATCALS were completed in FY85. DT for the AN/TSQ-216 RLST was completed in February 1998 and OT was completed in June 1998. DT and OT were conducted at Marine Corps Auxiliary Landing Field, Bogue Field, North Carolina.

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

The AN/ARC-210(V) EP Radio System is replacing the AN/GRC-171(V) and AN/GRC-211 Radio Sets in the AN/TSQ-120B ATCC Tower, beginning in fourth quarter FY00, with an estimated completion date of FY06.

The AN/TSQ-216 RLST is replacing the AN/TRC-195 CC Tower. Replacement began in second quarter FY00, with an estimated completion date of FY01.

The AN/TRN-44 Tactical Air Navigation (TACAN) Beacon is being upgraded using a 20' ISO shelter, replacing the S-659 shelter. The first upgrade was delivered in September 1998, with an estimated completion date of FY10.

Future plans call for the replacement of MATCALS with new production ASPARCS. This lightweight, highly mobile, ATC system with advanced aircraft technologies will replace MATCALS as it reaches its service life limits. Information concerning replacement schedule of MATCALS may be obtained from PMA2134, NAVAIRSYSCOM.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. MATCALS has three primary subsystems: (1) the AN/TSQ-131(V) Control and Communications Subsystem (CCS) with Communications Control Group, radios, computer software, multi-mode displays, and peripherals; (2) the Air Traffic Control Subsystem (ATCS) consisting of AN/TPS-73 Airport Surveillance Radar (ASR) and various peripheral equipment; and (3) the All-Weather Landing Subsystem consisting of the AN/TPN-22 PAR and various peripheral equipment. Other related systems include the AN/TSQ-120A/B ATCC Towers, the AN/TSQ-216 RLST, the AN/TPN-30A MRAALS, the AN/TRN-44 TACAN Beacon, and other related support items that contribute to the safe and expeditious flow of air traffic at expeditionary airfields and remote landing sites.

a. AN/TSQ-131(V) Control and Communications Subsystem. The AN/TSQ-131(V) CCS is a transportable ATC radar facility. Each AN/TSQ-131(V) CCS houses one set of four radar operator positions for the AN/UYQ-34(V)2 Processor Display Set (PDS), a supervisor position, and the required equipment for data processing, voice communications, and data communications. The AN/TSQ-131(V) CCS integrates data received from the AN/TPS-73 ASR, the AN/TPN-22 PAR, other Marine ATC (MATC) systems, including AN/TSQ-120A/B ATCC Towers, AN/TRN-44/A TACAN Beacons, AN/TPN-30A MRAALS, and external ATC agencies into a unified ATC System. There are provisions for installing and using the C-10363/URN Control Indicator, and the C-10194/TPN-30 Control Indicator or C-10195/TPN-30 Remote Control as required by the MACS. Voice communications provide coverage of the following nets: Ultra High Frequency (UHF), Very High Frequency (VHF), and High Frequency (HF), using Amplitude Modulation (AM) and Frequency Modulation (FM). Aircraft operations are coordinated with remote facilities and agencies by use of telephone and intercommunication control systems. Components of the AN/TSQ-131(V) CCS include:

- AN/UYQ-34(V)2 ..... Processor Display Set
- TD-1089/UYQ-4..... Modem
- AN/UYQ-41..... Digitizer-Switching Set
- AN/UYQ-42..... Control-Distribution Set
- COTS Epson ..... Line Printer Data Processing
- AN/GMQ-31 ..... Wind Measuring Set
- AN/GRC-171(V)1/2..... UHF Radio Sets *
- AN/GRC-211 ..... VHF Radio Set *
- AN/URC-94(V)2..... HF (AM)/VHF (FM) Radio Set
- AN/GSH-60 ..... Recorder-Reproducer Set

- AN/USH-26(V)..... Signal Data Recorder-Reproducer Set
- AN/USQ-94 ..... Bus Access Set

* AN/GRC-171(V) and AN/GRC-211 Radio Sets in the AN/TSQ-120B ATCC Tower will be replaced by the AN/ARC-210(V) EP Radio System.

b. Air Traffic Control Subsystem. The ATCS is a transportable, tactical ASR subsystem for MATCALS. It provides AN/TPS-73 ASR, Secondary Surveillance Radar (SSR), and Autotracker functions to the Radar Controllers assigned to the ATC Detachment of the MACS. During operations, the ATCS is unmanned. It is controlled from the AN/TSQ-131(V) CCS through the ATCS remote control panel. The ATCS design includes numerous redundant functions to ensure continued independent operation in case of failure of one system. The ATCS features end-to-end on-line performance monitoring, self-alignment capability during operation, fully integrated Built-In Test (BIT) and Built-In Test Equipment (BITE), and on-line repair capability of the fail-soft ASR transmitter.

(1) AN/TPS-73 Airport Surveillance Radar. The AN/TPS-73 ASR is an S-band non-linear frequency modulated system. It contains a solid-state transmitter that generates a 10.3 and a 100-microsecond pulse. The AN/TPS-73 ASR nominally operates on three different frequencies, however, the transmitted pulses can be any of 20 different frequencies in the 2,705 megahertz (MHz) to 2,895 MHz range in ten-MHz steps. It uses a digital receiver to decode and interpret radar returns. The AN/TPS-73 ASR can detect one square-meter targets at ranges from 0.5 to 60 nautical miles and altitudes to 60,000 feet above ground level. The AN/TPS-73 ASR receives beacon plot and video data from the SSR, performs radar-to-beacon correlation and synchronization, and forwards this data to the Autotracker.

(2) Secondary Surveillance Radar. The SSR is an L-band monopulse beacon with a Mode 4 capability for Identification Friend or Foe. The SSR can detect targets at ranges up to 120 nautical miles. Each of the two SSRs contains a solid-state transmitter that powers the sum, delta, and omni-beams of the monopulse antenna. Each logarithmic receiver provides three signals (sum, delta, and omni-beams) that are processed and sent to the AN/TPS-73 ASR for synchronization with the AN/UYQ-34(V)2 PDS.

(3) Autotracker. The Autotracker accepts AN/TPS-73 ASR and SSR synchronized video data from the AN/TPS-73 ASR. It detects and tracks up to 600 air targets, correlates AN/TPS-73 ASR and SSR targets, and develops digital track data. The serial data bus of the MATCALS is used to transmit this data to the AN/TSQ-131(V) CCS for use by controllers. Additional components of the ATCS include:

- AN/UYQ-34(V)2 ..... Processor Display Set
- C-11515/UYQ-41..... Operator Control Unit
- HD-1099/TSQ..... Environmental Control Unit
- MEP-006A ..... Generator Set
- AN/USQ-94 ..... Bus Access Set

c. AN/TPN-22 Precision Approach Radar. The AN/TPN-22 PAR is a transportable, computerized, pencil-beam, three dimension, track-while-search, radar system for use in execution of multi-mode, automatic precision approach and landing recovery of tactical aircraft. The AN/TPN-22 PAR uses phase and frequency scanning techniques in an electronically-steered beam antenna array to provide data at a high rate for detection and automatic tracking of up to six aircraft simultaneously in the approach and landing airspace. The frequency range is 9,000 to 9,200 MHz. The AN/TPN-22 PAR has 46 degrees coverage in azimuth, 8 degrees (-1 to +7) angular coverage in elevation, and 750 feet to 10 nautical miles coverage in range. The AN/TPN-22 PAR operates as an integral data acquisition and processing computer subsystem in concert with the AN/TSQ-131(V) CCS and AN/TPS-73 ASR for simultaneous use of manual, semi-automatic, and automatic aircraft approach and landing operations. Currently, the automatic aircraft and approach capability has not matured to the point of Fleet use. The AN/TPN-22 PAR is being upgraded with a SSM beginning in June 1999, with an estimated completion date of fourth quarter FY00. Components of the AN/TPN-22 PAR include:

- AN/UYQ-34(V)2 ..... Processor Display Set
- C-11515/UYQ-41..... Operator Control Unit
- AN/UYK-20X(V)..... General Purpose Data Processor
- AN/USH-26(V)..... Signal Data Recorder-Reproducer Set
- MEP-006A ..... Generator Set
- AN/USQ-94 ..... Bus Access Set

d. AN/TSQ-120A Air Traffic Control Central. The AN/TSQ-120 Air Traffic Control Central is a transportable and environmentally controlled Air Traffic Control Tower. The AN/TSQ-120 provides for ground and air traffic control of fixed and rotary wing aircraft in a designated control zone. Runway vehicular traffic is also controlled by the AN/TSQ-120. While performing its functions, the AN/TSQ-120 interacts with other units of the Marine Air Traffic Control and Landing System (MATCALS), remote facilities, and agencies by telephone and interfacility communications systems. The AN/TSQ-120 can be operated independently or in conjunction with other aircraft landing systems and equipment. The AN/TSQ-120A ATCC Tower consists of:

(1) OK-312/TSQ-120A Operations Central Group. The Operations Central Group consists of an operations central shelter and associated external equipment. The OK-312/TSQ-120 is mounted on Tower AB-1236/TSQ-120 and has operating facilities for three Air Traffic Controllers. Windows on all sides provide 360° observation. The replaceable windowpanes are abrasion resistant, smoke tinted, shatterproof polycarbonate. Internal roller mounted shades provide relief from sun glare with a minimum of visual obstruction. There are provisions for installing and using the C-10363/URN Control Indicator, the C-8534/TRA-45 TACAN Remote Control Indicator, and the C-10194/TPN-30 Control Indicator or C-10195/TPN-30 Remote Control as required by the MACS. Radio equipment in the OK-312/TSQ-120A OCG Tower Cab includes:

- C-10618/TSQ-120A ..... Receiver-Transmitter Control

- C-7999/GRC-171(V)..... UHF Radio Control - two each
- C-8314/GRC-211 ..... VHF Radio Control - one each

(2) OW-81A/TSQ-120A Terminal Group. The OW-81A/TSQ-120A Terminal Group (TG) contains radios, telephone equipment, recorders, intercom, and signal and power distribution systems that provide required communications information to the operating positions in the tower cab. In addition, a maintenance console and workbench are provided for maintenance personnel to simultaneously select voice communications on any or all of the system radios, select voice communications on any one of the ten system telephone lines, and monitor audio input-output signals to the radios.

(a) Radio Equipment. Radio equipment in the OW-81A/TSQ-120A TG includes:

- SA-2257/TSQ-120 ..... Switching Matrix
- J-3638/TSQ-120..... Interface Unit
- AN/GRC-171(V)1..... UHF Radio Sets - five each
- AN/GRC-211 ..... VHF Radio Sets - three each
- AN/URC-94(V)2..... HF (AM/SSB)/VHF (FM) Radios - two each
- AN/VRC-82(V)2..... VHF-FM Radio Set
- No nomenclature ..... Audio Patch Panel

(b) OA-7621(V)/FSA-52(V) Landline Selector Group. The OA-7621(V)/FSA-52(V) Landline Selector Group provides interface and signaling for up to ten telephone lines in two or four wire configuration. Two lines are capable of WESCOM SS-1A Selective Signaling (FAA compatible), and one line is dedicated to voice only.

(c) Recording Equipment

- AN/GSH-60 ..... Recorder-Reproducer
- CDD-1000..... Digital Deck Automatic Terminal Information Service (ATIS) Recorder

(d) Antennas

- TACO D-2118..... UHF-VHF Antenna - three each
- AS-1729/VRC..... VHF Antenna - two each
- AT-1011/U..... HF Antenna - two each
- 121022-4..... Crash Net Antenna

(3) AB-1236/TSQ-120 Tower. The AB-1236/TSQ-120 Tower is a portable, field-erected structure that supports the OK-312/TSQ-120A OCG Tower Cab at an elevation of eight, 16, or 24 feet above the ground. An inclined stairway with handrails, rising around the tower perimeter and leading to a platform at the top level, is provided for personnel access to the OK-312/TSQ-120A OCG Tower Cab. The design of the tower allows it to

surround the OK-312/TSQ-120A OCG Tower Cab at ground level, providing clear access for raising and lowering the OK-312/TSQ-120A OCG Tower Cab.

(4) OA-8883/TSQ-120 Storage-Transport Group. The OA-8883/TSQ-120 Storage Transport Group (STG) consists of a metal pallet fitted with cable reels to stow the inter-shelter power, signal, and antenna cables. Other installed containers provide stowage for the transportation of components within the Operations Control Shelter or the Terminal Shelter. The principal components of the storage-transport are a transport pallet, four cable reels with connecting cables, and transport containers for the wind direction-velocity transmitter three antenna masts and miscellaneous equipment.

e. AN/TSQ-120B Air Traffic Control Central. The AN/TSQ-120B ATCC Tower provides the same essential services as the AN/TSQ-120A ATCC Tower. However, some operational, embarkation, and reliability enhancements have been incorporated. These include secure voice capability incorporated with the AN/UYQ-41 Digitizer Switching Set and racks for TSEC/KY-58 and TSEC/KY-75 Speech Security Equipment. The OW-81/TSQ-120A TG shelter is replaced with a standard sized shelter (8-feet wide, 8-feet high, and 10-feet deep). The Equipment Storage Pallet (part of the OA-8883/TSQ-120 STG) is deleted. Component equipment previously stored on the pallet is packed-out in one of the two shelters, and in the tower scaffolding box for embarkation.

f. AN/TRC-195 Control Central. The AN/TRC-195 CC provides a limited tower capability for remote site operations. It contains four telephone lines, two UHF, one VHF-AM, one HF/VHF-FM, and one crash net radio, and a wind measuring set powered by a single MEP-003 Generator or equivalent power source. AN/TRC-195 CC Tower full operating power requirement is 3.0 kilowatts, the emergency operating power requirement is 1.5 kilowatts. The AN/TRC-195 CC Tower communication systems are capable of encrypted transmitting and receiving. The unit is transportable by forklift (no mobilizer), and is usually loaded into and employed from the back of a Highly Mobile Multi-purpose Wheeled Vehicle (HMMWV). However, the AN/TRC-195 CC Tower can be loaded on a variety of vehicles. The radios (except for the AN/VRC-82 Radio), speech security equipment, and wind measuring set are provided from other MATC systems to enable full operational capability. The 28-volt power supply is provided with each system. The assembled unit has a nylon top and four mast assemblies. The system includes the following MATCALS equipment:

- AN/GRC-171(V)2..... UHF Radio Sets - two each
- AN/GRC-211 ..... VHF Radio Set
- AN/URC-94 ..... HF (AM)/VHF (FM) Radio Set
- AN/VRC-82 ..... Radio Set
- AN/GMQ-31 ..... Wind Measuring Set
- TSEC/KY-58..... Crypto, for UHF, VHF, and VHF/FM bands - three each
- TSEC/KY-75..... Crypto, for HF band
- Trio Labs..... 28 volt power supply

* The AN/TRC-195 CC Tower is being replaced by the AN/TSQ-216 RLST. Replacement began in second quarter FY00 and is estimated to be completed in FY01. As each AN/TSQ-216 RLST is fielded, the replaced AN/TRC-195 CC Tower will be sent to Space and Naval Warfare Systems Center (SSC) San Diego, California (SD), for disposition.

g. AN/TSQ-216 Remote Landing Site Tower. The AN/TSQ-216 RLST is currently being introduced through new production. The AN/TSQ-216 RLST has been developed as an interim tower, to be used when the AN/TSQ-120A/B ATCC Towers are unavailable. It provides for a rapid emplacement and expeditious establishment and withdrawal of communications and related capabilities required for VFR services. Its communications systems provide coverage of the following nets: HF AM, VHF AM, and UHF AM radio bands; tactical air command, combat information and detection, air defense alert or communication coordination HF nets; and VHF-FM base defense and crash nets. The AN/TSQ-216 RLST is transported on a Heavy HMMWV and consists of a mounted shelter and trailer.

h. AN/TRN-44 Tactical Air Navigation Beacon. The AN/TRN-44 TACAN Beacon is a transportable, dual-channel navigational aid which provides TACAN-equipped aircraft with range, bearing, and station identification information effectively within a 200 nautical miles radius. It is used for both en route navigation guidance and as an instrument approach aid. It has 126 operating channels in X band and 126 operating channels in Y band; transmitting and receiving in the frequency range of 962 MHz to 1213 MHz. It can provide distance information for as many as 100 aircraft and provides an infinite number of aircraft with azimuth information and station identification. The AN/TRN-44 TACAN Beacon can be remotely controlled and monitored, and incorporates an external one degree monitor. The 12’ 8” S-659 shelter is air-conditioned and heated for environmental control. The AN/TRN-44 TACAN Beacon requires primary power of 120/208 volts, 60 Hz, 3 phase, 4 wire. Power consumption is 18.7 kilowatts.

i. AN/TRN-44A Tactical Air Navigation Beacon. The AN/TRN-44A TACAN Beacon provides the same essential services as the AN/TRN-44 TACAN Beacon, except with a reduced footprint. The new designation is given when an AN/TRN-44 TACAN Beacon restoration is needed and provided by SSC SD. Restoration is based on equipment condition and Operational Readiness Data provided to SSC SD by each site. Included in the restoration is the addition of a 20’ ISO shelter, replacing the S-659 shelter. Equipment normally housed in the S-659 shelter will be retrofitted into the 20’ ISO shelter. The reduced footprint occurs during embarkation, when all three packaging groups, Antenna, Tactical Tower, and Transponder/Monitoring equipment, are stored inside the 20’ ISO shelter, with a total combined weight of 14,500 pounds.

j. AN/TPN-30A Marine Remote Area Approach and Landing Set. The AN/TPN-30A MRAALS is a two-person transportable, all-weather landing system which transmits azimuth, elevation angle, and range data to specially equipped aircraft. The airborne system translates the data and provides glideslope, localizer, range, and range rate information to the pilot’s indicators. The AN/TPN-30A MRAALS transmits azimuth, distance, and elevation data in the K-Band frequency range, l5.412 to 15.688 gigahertz, and Distance Measuring Equipment and Station Identification data in the L-band frequency range of 962 to 1,213 MHz, as well as 15 Hz TACAN bearing data to provide 360 degrees of bearing information.

The AN/TPN-30A MRAALS can be set up in one of two configurations, co-located or split site. The co-located configuration is employed at landing zones and uses one AN/TPN-30A MRAALS to provide azimuth, elevation, distance, and station identification data. The split site configuration is employed at airfields and airports and uses two AN/TPN-30A MRAALS, one at the end of the runway (aligned with the runway centerline) to provide azimuth data, and one parallel to the runway (parallel to the designated touchdown point) to provide elevation and range data. In the co-located configuration, the AN/TPN-30A MRAALS can be remotely controlled (up to 1000 feet) using field wire by the C-10195/TPN-30 Remote Control. The C-10194/TPN-30 Control Indicator may be operated remotely by cable and provides status information. In the split site configuration, the C-10194/TPN-30 remotely controls and provides status of the two AN/TPN-30A MRAALS, which are synchronized with field wire.

k. AN/TSM-170 Maintenance Repair Group. The AN/TSM-170 Maintenance Repair Group (MRG) consists of four shelters that contain workbenches, test equipment, cabinets, tools, and other equipment necessary for section maintenance of MATC equipment. All shelters allow some degree of flexibility to accommodate changed maintenance demands based on mission and equipment configuration.

(a) OA-9141/TSM-170 Auxiliary Equipment Repair Group. The OA-914/TSM-170 Auxiliary Equipment Repair Group (AERG) provides the work space necessary for the maintenance of the environmental control units (ECU), diesel generator sets, and other designated support equipment.

(b) OA-9142/TSM-170 Communications Equipment Repair Group. The OA-9142/TSM-170 Communications Equipment Repair Group (CERG) provides workspace and parts storage for the maintenance of all MATC communications equipment.

(c) OA-9143/TSM-170 Radar Equipment Repair Group. The OA-9143/TSM-170 Radar Equipment Repair Group (RERG) provides workspace and parts storage for the repair of the AN/UYQ-34(V)2 PDS, its associated hardware, and other radar component equipment.

(d) OA-9144/TSM-170 Electronic Module Repair Group. The OA-9144/TSM-170 Electronic Module Repair Group (EMRG) provides micro-miniature repair capabilities for the maintenance of printed circuit boards. It also contains space for maintenance management functions including the maintenance data system computer.

2. Physical Description. The physical dimensions of the systems that make up MATCALS are:

EQUIPMENT/ SUBSYSTEM	HEIGHT (INCHES)	WIDTH (INCHES)	LENGTH (INCHES)	WEIGHT (POUNDS)
AN/TSQ-131(V)	96	96	240	15,000

EQUIPMENT/ SUBSYSTEM	HEIGHT (INCHES)	WIDTH (INCHES)	LENGTH (INCHES)	WEIGHT (POUNDS)
AN/TPS-73				
• Shelter	96	96	120	14,800
• Pallet	18	48	73	1,068
AN/TPN-22				
• OY-75/TPN-22	100	96	118	7,660
• AS-3471/TPN-22	72	96	144	5,732
AN/TSQ-120A/B				
• AB-1236/TSQ-120 (Storage Container)	48	65	156	4,500
• OW-81/TSQ-120	96	90	90	2,660
• OK-312/TSQ-120	63	87	147	6,000
• OW-81B/TSQ-120	96	96	120	8,300
AN/TRC-195	52	52	75	1,620
AN/TRN-44 (Transit)				
• S-659/TRN-44	83	84	152	6.950
• AB-1302/GRN	48	60	111	1,500
• AS-3184/URN	76	71	140	1,200
AN/TRN-44A	96	96	240	14,500
AN/TPN-30A	45	48	36	130
OA-9141/TSM-170	96	96	240	13,500
OA-9142/TSM-170	96	96	240	13,500
OA-9143/TSM-170	96	96	240	13,500
OA-9144/TSM-170	96	96	240	13,500
HD-1099/TSQ	33	47	61	530
MEP-531A	22	16	30	143
MEP-006A				
• Skid Mounted	72	36	87	4,500
• with Mobilizer M-353	72	92	188	7,220
MEP-806A				
• Skid Mounted	59	36	87	3,556
• with Mobilizer M-353	72	92	100	6,279
AN/TSQ-216				
• Expandable Shelter	104	85	186	1,958
• Trailer Assembly	91	86	133	3,600

3. New Development Introduction. MATCALS was introduced through new production in FY86.

The AN/TSQ-216 RLST is being introduced through new production. An initial RLST was delivered to NATTC Pensacola, Florida, in October 1999, and the remaining towers began delivery in FY00, with an estimated completion date of FY01. The replacement of the AN/TRC-195 CC Tower began in FY00, with an estimated completion date of FY01.

The AN/ARC-210(V) EP Radio System will be introduced through new production. The replacement of the AN/GRC-171(V) and AN/GRC-211 Radio Sets in the AN/TSQ-120B ATCC Tower will begin in fourth quarter FY00, with an estimated completion date of FY06

The AN/TPN-22 PAR SSM upgrade is being introduced through modernization retrofit. The upgrade began in June 1999, with an estimated completion date of fourth quarter FY00.

The AN/TRN-44A TACAN Beacon upgrade, using a 20' ISO shelter, is being introduced through modernization restoration. The upgrade began in September 1998, with an estimated completion date of FY10.

4. Significant Interfaces. When set up, MATCALS and its related equipment uses telephone lines, electrical wiring, radio networks, and remote control signals to interface with its various components, aircraft, and other ATC agencies.

5. New Features, Configurations, or Material. The automation of ATC and all-weather landing control capabilities at expeditionary airfields provides ATC Detachments with greater versatility in identification, monitoring, and control of departures, arrivals, and landing of aircraft. Improvements to the ATC Detachment's equipment increased the capacity and sortie rate for aircraft. New systems and component equipment use state-of-the-art technology to provide improved reliability and maintainability. Systems are software integrated over a Serial Data Bus, and Processor-Display Sets are equipped with a Touch Sensor Screen person-machine interface. Equipment performance monitoring, alignment, and BIT/BITE have been integrated into the design of the systems to aid and improve maintainability and increase availability.

H. CONCEPTS

1. Operational Concept. MATCALS is operated by MACS personnel to provide ATC capabilities throughout an Amphibious Operational Area without regard to the effects of weather. This reduces air traffic handling and management time, allowing more time for mission response and task accomplishment. The following Marine Corps personnel operate MATCALS:

- ATC Officers ..... MOS 7220
- Air Traffic Controllers..... MOS 7257
- Senior Air Traffic Controllers..... MOS 7291
- Tower Air Traffic Controllers..... MOS 7252
- Radar Air Traffic Controllers..... MOS 7253

- Radar Approach Controllers..... MOS 7254

2. Maintenance Concept. MATCALS maintenance concept is based on two levels, organizational and depot, as outlined in the Marine ATC Systems and Equipment Maintenance and Logistics Support Policy and Procedures (SPAWAR INST 4700.9E). This document is currently being rewritten and should be replaced by NAVAIRINST 4700.23 of the same name. Maintenance functions normally accomplished by an intermediate activity are performed at the organizational level.

a. Organizational. Organizational maintenance is the responsibility of and is performed by the using activity on their assigned equipment. The ATC Detachment performs all levels of organizational maintenance, which includes functions normally accomplished by an intermediate maintenance activity. Maintenance supervision, coordination, and administration is accomplished by the ATC Systems Maintenance Officer (MOS 5950) and the ATC Systems Maintenance Chief (MOS 5959). Marine Corps personnel with ATC MOSs 5952, 5953, and 5954 perform preventive and corrective maintenance on MATCALS. Minimal maintenance support is also provided by non-ATC Marine Corp personnel with MOSs 1142, 1161, 1169, 1341, 6492, and 8641. (Refer to the Manning Concept below for additional information on these MOSs.).

(1) Preventive Maintenance. Preventive maintenance includes, but is not limited to, basic operating procedures, removal and replacement of system components at planned maintenance scheduled intervals, inspecting, testing, adjusting, aligning, lubrication, and corrosion inspections.

(2) Corrective Maintenance. Corrective maintenance consists of, but is not limited to, inspecting, testing, adjusting, aligning, diagnosing malfunctions, isolating malfunctions to the faulty assembly, module, or subassembly, removing and replacing the faulty parts, verifying the fault has been corrected, and equipment installation. Maintenance also includes providing technical assistance to deployed detachments, repairing subassemblies, modules, assemblies, units, groups, components, sets, subsystems, systems, and equipment, and additionally determining disposition of repairable items and emergency manufacturing of non-available parts.

b. Intermediate. Not Applicable (NA)

c. Depot. Depot level maintenance is performed on material requiring overhaul, restoration, manufacture of parts and modification, or complete rebuild of parts for assemblies, subassemblies and end items. For ATC Detachments, support of software maintenance corrections, reproduction, and enhancements is also considered a depot level maintenance function. The In-Service Engineering Agency (ISEA) for MATCALS is SSC SD. Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, Maryland, and SSC SD perform depot level maintenance for software. Depot level maintenance on hardware and equipment is performed by SSC SD. The Navy Support Date for the AN/TSQ-216 RLST is scheduled for June 2000.

d. Interim Maintenance. NA

e. Life-Cycle Maintenance Plan. The Life-Cycle Maintenance Plan (LCMP) for MATCALS, and associated equipment, utilizes a five-year management concept, as outlined in NAVELEX INST 5450.16B, dated February 24, 1983. For all MATCALS equipment, SSC SD established and maintains a Fleet Marine Force (FMF) ATC LCMP that records, summarizes, and displays a consolidated effort in support of the FMF ATC community. Based on equipment condition and Operational Readiness Data provided to SSC SD by each ATC site, SSC SD submits an annual LCMP that displays personnel requirements, cost data, and those events involving the current year, plus five additional years. The LCMP includes, but is not limited to, Equipment Installation and Restoration Plans, Technical Manual Update Plans, Onboard Training Plans, Support Equipment Plans, Software Enhancement Plans, Procurement of Government Furnished Equipment (GFE) Plans, and Maintainability and Improvement Plans.

3. Manning Concept. Marine Corps personnel with specific MOSs in ATC maintain and operate MATCALS and its associated equipment. The addition of the AN/TSQ-216 RLST to MATCALS will not affect quantitative and qualitative manpower requirements.

a. Operational Manning. There are six MOSs for various positions in the operation of the MATCALS. These include:

- MOS 7220, ATC Officer
- MOS 7252, Air Traffic Controller - Tower
- MOS 7253, Air Traffic Controller - Radar
- MOS 7254, Radar Approach Controller
- MOS 7257, Air Traffic Controller
- MOS 7291, Senior Air Traffic Controller

b. Maintenance Manning. Supervision, coordination, and administration of maintenance is accomplished by the ATC Systems Maintenance Officer, MOS 5950, ATC Systems Maintenance Chief, MOS 5959, and Utilities Chief, MOS 1169. ATC maintenance technicians with the following MOSs are responsible for the maintenance of equipment as depicted below (including minimal maintenance support provided by non-ATC Marine Corps personnel):

MOS	TITLE	DESCRIPTION
1142 1341	The Electrical Equipment Repair Specialist Engineer Equipment Mechanic	Performs maintenance on the MEP-006A Generator Set, Mobilizers, Power Distribution Boxes and Converters, and OA-9141/TSM-170 AERG
1161	Refrigeration Mechanic	Performs maintenance on the HD-1099/TSQ ECU
5952	ATC Navigational Aids Technician	Performs maintenance on the AN/TRN-44 TACAN, AN/TPN-30A MRAALS, MEP-531A Generator Set, and OA-9144/TSM-170 EMRG

MOS	TITLE	DESCRIPTION
5953	ATC Radar Technician	Performs maintenance on the AN/TSQ-131(V) CCS and its radar components, AN/TPS-73 ASR, AN/TPN-22 PAR, OA-9143/TSM-170 RERG, and OA-9144/TSM-170 EMRG
5954	ATC Communications Technician	Performs maintenance on the AN/TSQ-131(V) communications components, AN/TSQ-120A/B ATCC Towers, AN/TRC-195 CC Tower, AN/TSQ-216, OA-9142/TSM-170 CERG, and OA-9144/TSM-170 EMRG
6492	Aviation Precision Measurement Equipment/Automatic Test Equipment Calibration and Repair Technician	Performs calibration and maintenance on the General Purpose Electronic Test Equipment.
8641	Microminiature Circuit Repair Specialist	Performs maintenance on the Printed Circuit Boards

4. Training Concept. Formal training courses are established at NATTC Pensacola. Personnel selected by Headquarters, Marine Corps for MOSs 59XX, MATC maintenance personnel, and 72XX, Marine Air Traffic Controllers, are trained in these courses to maintain and operate MATCALS and its associated equipment.

Personnel from the Marine Forces Reserve ATC Detachments are provided a limited number of student billets in both the controller and maintenance courses. See element II.B.1 for reserve personnel training input requirements.

a. Initial Training. Initial training of the AN/TSQ-216 RLST for government DT/OT personnel, NATTC instructors, the initial cadre of fleet personnel, depot, and maintenance engineering personnel was conducted at the Sierra Nevada Corporation (SNC), Sparks, Nevada, facilities in February 1997.

Initial training on the AN/TPN-22 PAR, with a replacement SSM, for radar technicians, radar instructors, and civilian personnel from the MATC community was conducted at SNC facilities in September 1998. A second training class was also provided by SNC at NATTC Pensacola in August 1999.

Initial training on the AN/ARC-210(V) EP Radio System for NATTC instructors, the initial cadre of fleet personnel, depot, and maintenance engineering personnel was conducted at Collins Avionics and Communications Division (CACD) of Rockwell International, Cedar Rapids, Iowa, in April 1994.

Initial training on the AN/TPN-30A MRAALS TACAN Bearing Modification for NATTC instructors and the initial cadre of fleet personnel was conducted at NATTC, Pensacola, Florida, in May 1998.

Initial training on the AN/TRN-44A TACAN, with replacement 20' ISO shelter, for NATTC instructors, the initial cadre of fleet personnel, depot, and maintenance engineering personnel is To Be Determined (TBD).

b. Follow-on Training

(1) Air Traffic Controller Training. Marine Air Traffic Controller training utilizes a building block approach through formal training and On-the-Job Training (OJT), as established within the Aviation Training and Readiness Manual, MCO 3500.19B.

Officer and enlisted trainees receive 16 weeks of instruction at the Air Traffic Controller A1 Course (C-222-2010), conducted at NATTC Pensacola. The trainees receive basic skills and knowledge required to perform routine duties in the control and handling of aircraft in a tower or radar environment.

Upon successful completion of the Air Traffic Controller A1 Course (C-222-2010), Basic Air Traffic Controller Trainees (MOS 7251) receive instruction on the operation of MATCALS equipment. Marine Controllers attend this course in lieu of the Navy carrier familiarization course at the end of the Air Traffic Controller Course. The MATCALS Operator (Basic) Course (C-222-2021) is two days in length and provides MATC personnel with familiarization training on the MATCALS following entry level schooling. This course was modified to include familiarization with the AN/TSQ-216 RLST and increased to five days in length, and is currently available.

Trainees are then assigned to an ATC Facility (or a MACS for reservists assigned to the 4th Marine Aircraft Wing). At their assigned duty station, enlisted personnel receive further training through OJT on either Radar Final Control and Radar Flight Data or Ground Control and Tower Flight Data. Once qualified, trainees are then awarded their Primary MOS 7257, Air Traffic Controller. Additional training through OJT is then required to become qualified for MOS 7252, Tower Air Traffic Controller, or MOS 7253, Radar Air Traffic Controller. Selected Radar Air Traffic Controllers return to NATTC Pensacola for training in Advanced Radar ATC (C-222-2022). This phase of training provides students with the skills and knowledge to perform at a basic level as a Radar Approach Controller at all operating positions at a Radar Approach Control Facility and become qualified for MOS 7254. Officers are awarded MOS 7220, ATC Officer, once qualified through OJT on Radar Final Control and Ground Control.

Additional advanced training for senior MATC personnel is the MATCALS Advanced Operator Course (C-2G-2018), which provides comprehensive training on the employment and operation of MATCALS. Students receive instruction on the operation, capabilities, and limitations of the MATCALS. Students are also instructed on developing and

designing United States Standard Terminal Instrument Procedures. This course was modified to include training on the AN/TSQ-216 RLST.

A new course is being developed for ATC Managers and will be called the Managers Course. This course will be Ready For Training (RFT) in FY01, with a projected course length of four weeks.

The following courses have been established specifically for MATCALS operator training:

Title	**MATCALS Operator**
CIN	C-222-2021
Model Manager ..	NATTC Pensacola
Description	This course provides MATC personnel with familiarization training on the MATCALS following entry level schooling.
Location	NATTC Pensacola
Length	5 days
RFT date	Currently available
Skill identifier	None
TTE/TD	Various MATCALS subsystems and equipment
Prerequisite	C-222-2010, Air Traffic Controller Class A1

Title	**MATCALS Advanced Operator Course**
CIN	C-2G-2018
Model Manager ..	NATTC Pensacola
Description	This course provides comprehensive training on the employment and operation of MATCALS. Senior MATC personnel receive instruction on the operation, capabilities, and limitations of the MATCALS. Students are also instructed on developing and designing United States Standard Terminal Instrument Procedures.
Location	NATTC Pensacola
Length	26 days
RFT date	Currently available
Skill identifier	None
TTE/TD	Various MATCALS subsystems and equipment

Prerequisites ..... ° C-222-2021, MATCALS Operator
° E-5 and above

(2) Maintenance Training. MATC maintenance training is conducted at NATTC Pensacola. Prior to attending the MATC maintenance courses, students must complete two prerequisite courses: (1) Avionics Common Core Class A1 (C-100-2020) and (2) Avionics Technician 1 Level Class A1 (C-100-2017). After successful completion of these courses, trainees attend one of the three technician pipelines. Marines may return to NATTC Pensacola to receive initial or refresher training in a segment of the pipeline they had not previously attended, providing sufficient student seats are available.

Upcoming changes to MATCALS training will include the AN/ARC-210(V) EP Radio System, the AN/TSQ-216 RLST, and the AN/TPN-22 PAR SSM modification. The AN/ARC-210(V) EP Radio System will be incorporated into an existing course in the MATC Communications Technician Pipeline (C-103-2090) in fourth quarter 2000. The AN/ARC-210(V) EP Radio System information will add six days to the pipeline. A new course, C-103-2094, will be developed for the AN/TSQ-216 RLST including new radios, communications interface, and other VFR ATC-related equipment. This course will be added to the MATC Communications Technician Pipeline (C-103-2090) in fourth quarter 2000, with a projected course length of 38 days. The SSM information for the AN/TPN-22 PAR will be incorporated into an existing course in the MATC Radar Technician Pipeline (C-103-2080) in fourth quarter 2000. The AN/TPN-22 PAR SSM information will add 11 days to the pipeline.

Beginning in fourth quarter FY00, Miniature Component Repair Class M3 (C-103-2026) will be reduced from 19 to six training days. This course length is being reduced due to redundant training; the same information is being taught at Avionics Technician 1 Level Class A1 (C-100-2017).

Beginning in fourth quarter FY00, AN/TPN-30 MRAALS (C-103-2102) will be increased from 39 to 59 training days, and the course title will be changed to AN/TPN-30A MRAALS (C-103-2102). The course is being increased in length and re-titled due to the TACAN modification.

Beginning in first quarter FY01, AN/TPN-44 TACAN (C-103-2101) will be reduced from 68 to 53 training days. This course length is being reduced due to reduction of complexity of course and removal of detailed component level theory of operation.

The following pipelines reflect all the upcoming changes to MATCALS training. Additional information will be included in updates to this NTSP as new course curricula are developed and implemented.

Title ..... MATC Navigational Aids Technician Pipeline

CIN C-103-2100

Model Manager .. NATTC Pensacola

Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC navigational aids. This pipeline consists of four courses including: ° C-103-2072, MATC Technician Common Core Course ° C-103-2102, AN/TPN-30A MRAALS ° C-103-2101, AN/TRN-44 TACAN ° C-103-2026, Miniature Component Repair Class M3 Upon completion, the student will have the knowledge to perform maintenance on the MATC navigational aids in an organizational level environment without supervision.
Location	NATTC Pensacola
Length	128 days
RFT date	Currently available
Skill identifier	MOS 5952
TTE/TD	° AN/TRN-44 TACAN ° AN/TPN-30A MRAALS
Prerequisites	° C-100-2020, Avionics Common Core Class A1 ° C-100-2017, Avionics Technician 1 Level Class A1

Title	**MATC Radar Technician Pipeline**
CIN	C-103-2080
Model Manager ..	NATTC Pensacola
Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC radar equipment. This pipeline consists of five courses, including: ° C-103-2072, MATC Technician Common Core Course ° C-103-2081, AN/TPN-22 PAR ° C-103-2084, AN/TPS-73 ASR ° C-103-2083, AN/UYQ-34(V)2 PDS ° C-103-2026, Miniature Component Repair Class M3 Upon completion, the student will have the knowledge to perform maintenance on the MATC radar equipment in an organizational level environment without supervision.
Location	NATTC Pensacola
Length	232 days

RFT date ..... Currently available

Skill identifier ..... MOS 5953

TTE/TD .....
- AN/TPN-22 PAR
- AN/TPS-73 ASR
- AN/UYQ-34(V)2 PDS

Prerequisites .....
- C-100-2020, Avionics Common Core Class A1
- C-100-2017, Avionics Technician 1 Level Class A1

Title ..... MATC Communications Technician Pipeline

CIN C-103-2090

Model Manager .. NATTC Pensacola

Description ..... This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC communications equipment. This pipeline consists of five courses, including:

- C-103-2072, MATC Technician Common Core Course
- C-103-2091, MATCALS Radios Maintenance Course
- C-103-2092, AN/TSQ-120A/B ATCC Towers
- C-103-2093, AN/TSQ-131(V) CCS
- C-103-2026, Miniature Component Repair Class M3

Upon completion, the student will have the knowledge to perform maintenance on the MATC communications equipment in an organizational level environment without supervision.

Location ..... NATTC Pensacola

Length ..... 169 days

RFT date ..... Currently available

Skill identifier ..... MOS 5954

TTE/TD .....
- AN/GRC-171(V) Radio Set
- AN/GRC-211 Radio Set
- AN/URC-94(V)2 Radio Set
- AN/TSQ-120A/B ATCC Tower equipment
- AN/TSQ-131(V) CCS

Prerequisites .....
- C-100-2020, Avionics Common Core Class A1
- C-100-2017, Avionics Technician 1 Level Class A1

Title	**MATCALS Maintenance Management and System Analysis Pipeline**
CIN	C-103-2110
Model Manager ..	NATTC Pensacola
Description	This pipeline provides career MATC Technicians, Maintenance Officers, ATC Officers, and Maintenance Chiefs with advanced technical training to improve their skills and abilities in the performance of maintenance management, maintenance training, and supervision of an expeditionary ATC Detachment. ° C-103-2111, MATCALS Maintenance Management course provides instruction on maintenance management concepts, documentation, supply functions, and Federal Aviation Administration flight check certification procedures as they apply to all MATC systems. ° C-103-2112, MATCALS System Analysis course provides detailed technical instruction on MATC systems analysis, system troubleshooting techniques, and embarkation procedures. Upon completion, the student will have the knowledge to perform as a Maintenance Manager of an expeditionary ATC Detachment without supervision.
Location	NATTC Pensacola
Length	39 days
RFT date	Currently available
Skill identifier	None
TTE/TD	NA
Prerequisites	° C-100-2013, Avionics Technician Class A1 ° MOS 5950, 5952, 5953, 5954, or 5959 ° Paygrades E-6 through E-8, and W-1 and W-2 Or ° MOS 5902 or 7220, Paygrades O-1 through O-3

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
7220, 7252, 7253, 7257	° C-222-2010, Air Traffic Controller Class A1
7254	° C-222-2010, Air Traffic Controller Class A1 ° C-222-2022, Advanced Radar ATC
5952, 5953, 5954	° C-100-2020, Avionics Common Core Class A1 ° C-100-2017, Avionics Technician 1 Level Class A1

d. Training Pipelines. All Marine Air Traffic Controller and ATC maintenance training, including MATCALS, is conducted at NATTC Pensacola.

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development. Onboard training at the MACS consists of controller qualification and proficiency training and maintenance technical training programs. These systematic training programs are conducted by senior squadron personnel to ensure a high state of operational readiness of the squadron. This is accomplished by maintaining and improving the efficiency and technical expertise of MACS controllers and maintenance personnel within their MOSs. This training consists of classroom instruction and "hands-on" practical application with the supervision of qualified personnel. In addition, individual OJT can be accomplished with the use of audio-visual aids, technical manuals, and Planned Maintenance System documentation. The Marine Wing Communications Squadron, Marine Air Control Group, or qualified squadron personnel provide training on operational use for communications security equipment.

(a) Air Traffic Controllers. The AN/UYQ-34(V)2 PDS, which is part of the AN/TSQ-131(V) CCS, contains a Training (TR) mode for Air Traffic Controllers that provides scenarios closely resembling those of the Arrival and Departure Control (ADC) and Final Control (FC) displays. In addition, the TR mode provides the capability to generate, control, and display simulated radar sensor data. The TR function may be performed on any of the eight operator console positions in the AN/TSQ-131(V) CCS. Some types of simulation require the availability of the AN/TPN-22 PAR.

The TR mode consists of four sub-modes, which differ by the type of controller operations to be simulated (ADC or FC) and the role of the controller in the training situations (instructor or trainee). Instructor sub-modes provide the capability to generate simulated radar targets and to control them so that their behavior can be made to resemble a live radar target. The trainee sub-modes provide the same display and entry capabilities as the corresponding

operator modes (ADC or FC) and allows the controller to exercise those capabilities on the simulated targets.

(b) In-the-Field Controller. An annual In-the-Field Controller Training Program is presented by NAWCAD at selected ATC Detachment sites. This course provides familiarization training on the MATCALS to personnel who are new to the field or who have been stationed away from the ATC Detachments.

(c) On-Site Maintenance. SSC SD, as the ISEA for MATC systems and equipment, will provide on-site maintenance instruction for ATC Detachment personnel, if required.

(d) Annual Training Schedule. The quarterly MATC newsletter, published by SSC SD via the ISEA Web page, provides the annual training schedule for MATC maintenance and seat availability for Fleet Marine Force refresher training, as well as initial training for new systems.

2. Personnel Qualification Standards. NA

3. Other Onboard or In-Service Training Packages. Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System and Marine Training Management and Evaluation Program (MATMEP). This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series, maintenance training requirements. 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. Updates to this NTSP will include any future decisions concerning Marine Corps In-Service Training.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers. Prime contractor support for MATCALS is provided by Trandes Corporation, contract number N00244-95-D-5001. However, due to the maturity of MATCALS, many of the original equipment sub-contractors are no longer available for support. SSC SD and various Military Depots assumed all manufacturer responsibilities for MATCALS equipment no longer under contractor support.

The AN/TSQ-216 RLST production contract has been awarded to SNC, contract number N00039-95-C-0023.

EQUIPMENT/SYSTEM/ SUBSYSTEM	CONTRACT NUMBER	MANUFACTURER
AN/TSM-170 Maintenance Repair Group:		
OA-9141/TSM-170	N63274-81-PO-0445 N63274-81-PO-0444	Auxiliary Equipment Repair Group, McClellan Air Force Base
OA-9143/TSM-170	N63274-84-PW-W-0309	SSC SD
OA-9144/TSM-170	N63274-84-PO-Y-0310	SSC SD
	N00039-87-AFO-ELEX	Electronic Module Repair Group, Sacramento Army Depot, California
MEP-006A Generator Set	Army Contracts	Various Manufacturers
MEP-531A Generator Set	DAAK01-96-D-0072	Dewey Mechron
MEP-806A Generator Set	Army Contracts	Various Manufacturers
ML-8000 Intercommunication Station	GSA 6S00K94AGS0506	Tone Commander Systems
AN/UYQ-34(V)2 PDS	N00038-81-C-0275	Loral
AN/UYK-20X(V)	N00039-73-D-0432	Loral
AN/TPN-22 PAR	N00039-75-C-0021 N00039-90-C-0195	ITT Gilfillan
AN/TPN-30 MRAALS	N00039-75-C-2070 N00228-79-C-2033 N00039-93-C-0187	Singer-Kearfott (GEC-Marconi)
AN/TPN-30A MRAALS with TACAN bearing modification	N00039-90-C-0183	SNC
AN/URN-25	N00039-80-C-0436	Gould Incorporated
AN/TSQ-131(V) CCS	N00039-82-C-0312	Loral

EQUIPMENT/SYSTEM/ SUBSYSTEM	CONTRACT NUMBER	MANUFACTURER
AN/USQ-94 Bus Access Set	N00039-82-C-0312	Loral
AN/UYQ-41 Digitizer Switching Set	N00039-82-C-0312	Loral
AN/UYQ-42 Control-Distribution Set	N00039-82-C-0312	Loral
C-11515/UYQ-41 Operator Control Unit	N00039-82-C-0312	Loral
AN/TRN-44 TACAN	N00039-82-PO-EW-012	SSC SD
AN/TRN-44A TACAN with 20' ISO Shelter	NA	SSC SD
AN/TPS-73 ASR	N00039-86-C-0452 N00039-92-C-0101	Loral
RO-572/TSQ-131(V) Line Printer Data	N00039-89-C-0312	Data Products New England
AN/TPN-22 PAR (with replacement Frequency Synthesizer)	N00039-91-C-0102	Research and Development Laboratories
AN/TPN-22 PAR (with SSM)	N00039-93-C-0096	SNC
AN/TSQ-216 RLST	N00039-95-C-0023	SNC
AN/GSH-60 Recorder-Reproducer Set	N00123-87-C-4058	Dictaphone
AN/TRC-195 CC Tower	N00123-90-D-0301	SSC SD
AN/TSQ-120B ATCC Tower	N00123-90-D-0301	SSC SD
AN/ARC-210(V) EP Radio System	N00019-91-C0237	CACD of Rockwell International
TD-1089/UYQ-4	N00228-75-C-2221	Collins Radio Group

EQUIPMENT/SYSTEM/ SUBSYSTEM	CONTRACT NUMBER	MANUFACTURER
OE-258/URN	N00228-75-C-4547	RANTEC Division, Emerson Electric Company
AN/TSQ-120A ATCC Tower	N00228-76-C-4052	Craig Systems Corporation
AN/URC-94(V)2 Radio Set	N00228-82-C-7299	Harris Corporation
OA-7621/FSA-52	N00612-70-C-0026	Denro Labs
CDD-1000 Digital Deck ATIS Recorder	N63274-83-F-0094	COMEX
AN/GMQ-31 Wind Measuring Set	N66134-74-C-1409 N63274-77-C-0183 GS-005-04395	Belfort Instrument company
HD-1099/TQS ECU	NA	SSC SD
AN/VRC-82(V)2 Radio Set	NAVICP Contracts	General Electric
AN/USH-26(V) Signal Data Recorder-Reproducer	NAVSEA Contracts	Quantrex Division, North Atlantic Industries, Inc.
AN/GRC-171(V) Radio Sets	USAF Contracts	Collins Radio Group
AN/GRC-211 Radio Set	USAF Contracts	Collins Radio Group

2. Program Documentation. The MATC Systems and Equipment Operational Logistics Support System (OLSS), SPAWAR P4110.566B, is dated October 1993. This document is currently being updated as the MATCALS User Logistics Support Summary, and will be renumbered as a NAVAIRSYSCOM document. Additional documents, including Integrated Logistic Support Plans (ILSPs) for individual equipment, systems, and subsystems include:

EQUIPMENT/SYSTEM/ SUBSYSTEM	DOCUMENTATION
AN/ARC-210(V) EP Radio System	ILSP: AVILSP-322
AN/GMQ-31 Wind Measuring Set	OLSS: SPAWAR P4110.566B
AN/GRC-171(V) Radio Set	OLSS: SPAWAR P4110.566B

EQUIPMENT/SYSTEM/ SUBSYSTEM	DOCUMENTATION
AN/GRC-211 Radio Set	OLSS: SPAWAR P4110.566B
AN/GSH-60 Recorder-Reproducer Set	OLSS: SPAWAR P4110.566B
AN/TPN-22 PAR	OLSS: SPAWAR P4110.566B
AN/TPN-22 PAR (with replacement Frequency Synthesizer)	OLSS: SPAWAR P4110.566B
AN/TPN-22 PAR (with SSM)	OLSS: SPAWAR P4110.566B
AN/TPN-30A MRAALS	OLSS: SPAWAR P4110.566B
AN/TPN-30A MRAALS Aircraft Approach Control Transmitting Set	OLSS: SPAWAR P4110.566B
AN/TPS-73 ASR	ILSP: SPAWAR P4100.600
AN/TRC-195 CC Tower	OLSS: SPAWAR P4110.566B
AN/TRN-44 TACAN	OLSS: SPAWAR P4110.566B
AN/TSM-170 MRG: OA-9141/TSM-170 AERG OA-9142/TSM-170 CERG OA-9143/TSM-170 RERG OA-9144/TSM-170 EMRG	OLSS: SPAWAR P4110.566B
AN/TSQ-120A ATCC Tower	OLSS: SPAWAR P4110.566B
AN/TSQ-120B ATCC Tower	OLSS: SPAWAR P4110.566B
AN/TSQ-131(V) CCS	OLSS: SPAWAR P4110.566B
AN/TSQ-216 RLST	ILSP: ATC-ILSP-009
AN/URC-94(V)2 Radio Set	OLSS: SPAWAR P4110.566B
AN/URN-25	OLSS: SPAWAR P4110.566B
AN/USH-26(V) Signal Data Recorder-Reproducer	OLSS: SPAWAR P4110.566B
AN/USQ-94 Bus Access Set	OLSS: SPAWAR P4110.566B
AN/UYK-20X(V)	OLSS: SPAWAR P4110.566B

EQUIPMENT/SYSTEM/ SUBSYSTEM	DOCUMENTATION
AN/UYQ-34(V)2 PDS	OLSS: SPAWAR P4110.566B
AN/UYQ-41 Digitizer Switching Set	OLSS: SPAWAR P4110.566B
AN/UYQ-42 Control-Distribution Set	OLSS: SPAWAR P4110.566B
AN/VRC-82(V)2 Radio Set	OLSS: SPAWAR P4110.566B
C-11515/UYQ-41 Operator Control Unit	OLSS: SPAWAR P4110.566B
CDD-1000 Digital Deck ATIS Recorder	OLSS: SPAWAR P4110.566B
HD-1099/TQS ECU	OLSS: SPAWAR P4110.566B
MEP-006A Generator Set	Logistics Joint Operating Procedures for Mobile Electric Power, AR 700-101, AFR 400-50, and DSAR 4120.7
MEP-531A Generator Set	Logistics Joint Operating Procedures for Mobile Electric Power, AR 700-101, AFR 400-50, and DSAR 4120.7 ILSP: NAVELEX P4100.383
MEP-806A Generator Set	Logistics Joint Operating Procedures for Mobile Electric Power, AR 700-101, AFR 400-50, and DSAR 4120.7
ML-8000 Intercommunication Station	OLSS: SPAWAR P4110.566B
OA-7621/FSA-52	OLSS: SPAWAR P4110.566B
OE-258/URN	OLSS: SPAWAR P4110.566B
RO-572/TSQ-131(V) Line Printer Data	OLSS: SPAWAR P4110.566B
TD-1089/UYQ-4	OLSS: SPAWAR P4110.566B

3. Technical Data Plan. All technical manuals, Maintenance Requirements Cards (MRC), and Maintenance Index Pages (MIP) for each equipment, system, and subsystem of the MATCALS have been developed and are periodically updated as required. MATCALS operator

and maintenance manuals, MRC, and MIP are available through normal channels. Technical manuals for the AN/ARC-210(V) EP Radio System are currently available and will be used for the planned MATCALS application. Technical manuals have been updated with AN/TPN-22 PAR SSM, AN/TPN-30A MRAALS TACAN, and AN/TRN-44A TACAN upgrades prior to fleet installations. New technical manuals are required for the AN/TSQ-216 RLST and will be available through normal channels during fleet introduction. Refer to element IV.B.3 for the technical data required for training purposes.

4. Test Sets, Tools, and Test Equipment

a. HD-1099/TSQ Environmental Control Unit. Special Support Equipment includes the Robinair 13106 Charging Station and the Robinair 17500B Refrigerant Recovery and Recycling Station.

b. AN/TPS-73 Airport Surveillance Radar. Special requirements for the AN/TPS-73 ASR include the Tool Kit (14203-86061) and the Accessory Kit (14203-86062). Automatic Test Equipment includes the GenRad 2225-9011 Portable Service Processor and the Driver Expansion Module.

c. AN/UYK-20X(V) General Purpose Data Processor. Special tools are provided in the Maintenance Kit, MK-1724/UYK-20(V).

d. AN/TSQ-120A Air Traffic Control Central. Special tools include the Wire Wrap-Unwrap Tool Set for the FSA-52 (25512-255C502) and Combination Drill and Breaker (PIONJAR 120). Special Purpose Electronic Test Equipment required includes the TS-3598/FSA-52(V) Electronic Circuit Plug-In Test Set and Breaker (PIONJAR 120).

e. AN/TSQ-120B Air Traffic Control Central. Special tools include the Combination Drill and Breaker (PIONJAR 120).

f. AN/TRN-44 TACAN. Special tools include the Combination Drill and Breaker (PIONJAR 120).

5. Repair Parts. As a mature program, most of MATCALS repair parts are in stock and under the control of the Naval Inventory Control Point (NAVICP). NAVICP assumed supply support of MATCALS parts and spares on the Material Support Dates (MSDs) of each subsystem and equipment. Currently, the following subsystems and equipment will achieve MSD as stated below.

a. AN/TSQ-216 Remote Landing Site Tower. Interim repair parts are being provided by NAVAIRSYSCOM until MSD is achieved in June 2000. The AN/TSQ-216 RLST will be supported through NAVICP after MSD.

b. AN/TPN-22 Precision Approach Radar. The AN/TPN-22 PAR upgrade, with a SSM, is being provided by NAVAIRSYSCOM until MSD is achieved in October 2000. The AN/TPN-22 PAR SSM will be supported through NAVICP after MSD.

c. AN/TRN-44A Tactical Air Navigation Beacon. The AN/TRN-44A TACAN upgrade to the 20' ISO shelter is being provided by NAVAIRSYSCOM until MSD is achieved, date TBD. The AN/TRN-44A TACAN will be supported through NAVICP after MSD.

6. Human Systems Integration. NA

K. SCHEDULES

1. Installation and Delivery Schedules. Most of MATCALS subsystems and equipment has been delivered to the MACS.

MATCALS EQUIPMENT / SYSTEMS / SUBSYSTEMS PER ATC DETACHMENT

E/S/S	QUANTITY
AN/TSQ-131(V)	2
AN/TPS-73	1
AN/TPN-22	1
AN/TSQ-120A/B	1
AN/TRC-195	1
AN/TSQ-216	1
AN/TRN-44	1
AN/TPN-30A	5
AN/TSM-170: • OA-9141/TSM-170 • OA-9142/TSM-170 • OA-9143/TSM-170 • OA-9144/TSM-170	 1 1 1 1

An initial AN/TSQ-216 RLST was delivered to NATTC Pensacola in October 1999, and the remaining towers began delivery in FY00, with estimated completion in FY01. The projected delivery schedule for the AN/TSQ-216 RLST is as follows:

LOCATION	1999		2000				2001			
	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
NATTC Pensacola		1			1					
SSC SD					1					
MACS-2C						1				
MACS-2D						1				
MACS-1A						1				
MACS-1B							1			
MACS-4A									1	
MACS-4B									1	
MACS-2A									1	
MACS-2B										1
MACS-1C										1
MACS-1D										1

Delivery of the AN/TPN-22 PAR SSM began in June 1999, with an estimated completion of fourth quarter FY00. The projected installation schedule for the AN/TPN-22 PAR SSM upgrade is as follows:

LOCATION	1999							2000		
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
MACS-1B	1									
NATTC Pensacola			2							
MACS-4B			1							
MACS-2A			1							

LOCATION	1999							2000		
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
MACS-1A				1						
MACS-2B					1					
MACS-4A					1					
NAWCAD					1					
MACS-1C						1				
MACS-1D						1				
MACS-2C								1		
MACS-2D								1		
MACS-24A									1	
MACS-24B										1
SSC SD (FLOAT)										1

The AN/ARC-210(V) EP Radio System will replace the AN/GRC-171(V) and AN/GRC-211 Radio Sets in the AN/TSQ-120B ATCC Tower beginning in fourth quarter FY00, with an estimated completion in FY06. A delivery schedule for each site has not been determined yet. Additional information will be included in updates to this NTSP when an installation delivery is developed.

The AN/TPN-30A MRAALS upgrade, with TACAN Bearing Modification, which began in FY96, has been completed at all operating sites. There are currently twelve remaining AN/TPN-30 MRAALS, at SSC SD, not modified. Of the twelve, four are damaged beyond repair and the remaining eight will be modified with the TACAN Bearing Modification, as funding is available, at a projected rate of four per year, beginning in FY00, with an estimated completion date of FY02. A delivery schedule for the upgraded AN/TPN-30A MRAALS will not be established; each AN/TPN-30A MRAALS will be delivered to sites as the need arises. Additional information will be included in updates to this NTSP.

The AN/TRN-44A TACAN Beacon upgrade using a 20’ ISO shelter is being done as part of the Restoration Plan for the AN/TRN-44 TACAN, by SSC SD. A delivery schedule for the upgrade will not be established. The upgrade is based on equipment condition and Operational Readiness Data provided to SSC SD by each site, at a projected rate of one per year, beginning in

FY98 with an estimated completion date of FY10. The first upgrade was delivered to MACS-2C in September 1998, the second to MACS-4B in November1998, the third to MACS-4A in July 1999, the fourth to MACS-1B in October 1999, the fifth to MACS-1A in November 1999, the sixth to SSC in August 2000, and one is currently being tested for MACS-2C, with an estimated completion date of third quarter FY00. Additional information will be included in updates to this NTSP.

2. Ready For Operational Use Schedule. NA

3. Time Required to Install at Operational Sites

a. NATTC Pensacola. Time required to install equipment at NATTC Pensacola for training is depicted below. SSC SD will coordinate installation and checkout.

AN/TPN-22 PAR SSM.... One week
AN/TSQ-216 RLST ..... One week

b. MACS Detachments. The AN/TSQ-216 RLST does not require installation, however, delivery will be accompanied by an advisory team from SSC SD to provide Delivery Training. The AN/TPN-22 PAR SSM will require one week to install, by a team from SSC SD and the assistance of MACS personnel.

4. Foreign Military Sales and Other Source Delivery Schedule. Two AN/TPN-30A MRAALS have been procured by the government of Japan for U.S Navy field carrier landing practice on Iwo Jima. There have been no additional FMS of MATCALS or its subsystems to any other Military Force at this time. Information concerning FMS of MATCALS may be obtained from PMA213.

5. Training Device and Technical Training Equipment Delivery Schedule. All items of Technical Training Equipment (TTE) for MATCALS training were delivered to NATTC Pensacola when training moved from NATTC Millington, with the following exceptions:

- The AN/TPN-30A MRAALS TTE was delivered to NATTC Pensacola in February 1998.
- One AN/TSQ-216 RLST was delivered in October 1999 for use as TTE, and a second AN/TSQ-216 RLST is scheduled to be delivered in May 2000.
- One AN/TPN-22 PAR SSM upgrade was delivered in June 1999, and a second AN/TPN-22 PAR SSM upgrade was delivered in August 1999. Both were installed in August 1999.

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

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
AN/APX-100(V) Transponder Set	A-50-8305B/P	PMA209	Proposed Jan 00
AIMS MARK XII Identification Friend or Foe (IFF)	E-30-7115E/D	PMA213	Approved Oct 99

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the MATCALS 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 for Operational and Fleet Support Activities

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

PART II - BILLET AND PERSONNEL REQUIREMENTS

II.A. BILLET REQUIREMENTS

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

SOURCE: Extract from Table of Manpower Requirements, TFS, MCCDC **DATE:** 4/1/00

Note: The following is not a MATCALS delivery schedule. The activities listed are the activities manned with Marine Corps personnel holding ATC MOSs. The training courses for attainment of ATC MOSs will include MATCALS training.

ACTIVITY, UIC		PFYs	CFY00	FY01	FY02	FY03	FY04
FLEET SUPPORT ACTIVITIES - USMC							
COMCAB, Cherry Point	67358	1	0	0	0	0	0
H&HS MCAF Quantico	00262	1	0	0	0	0	0
H&HS MCAS Beaufort	60169	1	0	0	0	0	0
H&HS MCAS Cherry Point	00146	1	0	0	0	0	0
H&HS MCAS New River	62573	1	0	0	0	0	0
MACS-2 HQ, Cherry Point	09554	1	0	0	0	0	0
MACS-2, ATC Det A, Beaufort	09274	1	0	0	0	0	0
MACS-2, ATC Det B, New River	09554	1	0	0	0	0	0
MACS-2, ATC Det C, Cherry Point	57080	1	0	0	0	0	0
MACS-2, ATC Det D, Bouge Field	53980	1	0	0	0	0	0
MACS-24 HQ, Dam Neck	08854	1	0	0	0	0	0
MACS-24, Det B, Willow Grove	09504	1	0	0	0	0	0
MAD, Patuxent River	67356	1	0	0	0	0	0
MC Pers Dept of Navy Non-Dept	00000	1	0	0	0	0	0
MTACS-28, Cherry Point	57080	1	0	0	0	0	0
Pers Mgt Div HQMC	00000	1	0	0	0	0	0
COMCAB, Miramar	67428	1	0	0	0	0	0
H&HS MCAS Camp Pendleton	67604	1	0	0	0	0	0
H&HS MCAS Futenma	63026	1	0	0	0	0	0
H&HS MCAS Iwakuni	62613	1	0	0	0	0	0
H&HS MCAS Miramar	31200	1	0	0	0	0	0
H&HS MCAS Yuma	62974	1	0	0	0	0	0
MACS-1 HQ, Yuma	09541	1	0	0	0	0	0
MACS-1, ATC Det-A, Pendleton	31053	1	0	0	0	0	0
MACS-1, ATC Det-B, Miramar	46623	1	0	0	0	0	0
MACS-1, ATC Det-C, Yuma	31055	1	0	0	0	0	0
MACS-1, ATC Det-D, Twentynine Palms	31053	1	0	0	0	0	0
MACS-23 HQ, Aurora	67834	1	0	0	0	0	0
MACS-24, ATC Det-A, Fort Worth	55175	1	0	0	0	0	0
MACS-4 HQ, Futenma	08848	1	0	0	0	0	0
MACS-4, ATC Det-A, Iwakuni	09249	1	0	0	0	0	0
MACS-4, ATC Det-B, Futenma	62613	1	0	0	0	0	0
MATCS-38, Miramar	46623	1	0	0	0	0	0
MAWTS-1, Yuma	55167	1	0	0	0	0	0
MCAF, Kaneohe Bay	00318	1	0	0	0	0	0
MCAGCC, Twentynine Palms	67399	1	0	0	0	0	0
MTACS-18, Futenma	57079	1	0	0	0	0	0
TOTAL:		38	0	0	0	0	0

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES - USMC					
COMCAB, Cherry Point, 67358					
USMC	0	1	MSGT	7291	
	0	1	SSGT	7257	
ACTIVITY TOTAL:	0	2			
H&HS MCAF Quantico, 00262					
USMC	1	0	CWO3	5950	
	1	0	LT	7220	
	0	1	CPL	5953	5956
	0	1	CPL	5954	
	0	2	CPL	7257	7252
	0	4	CPL	7257	7253
	0	1	GYSGT	7257	
	0	2	LCPL	5953	5956
	0	3	LCPL	5954	
	0	5	LCPL	7257	7252
	0	5	LCPL	7257	7253
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	2	SSGT	7257	
ACTIVITY TOTAL:	2	31			
H&HS MCAS Beaufort, 60169					
USMC	1	0	CAPT	7220	
	1	0	CWO3	5950	
	1	0	LT	7220	
	0	1	CPL	5952	
	0	1	CPL	5953	5956
	0	1	CPL	5954	
	0	3	CPL	7257	7252
	0	2	CPL	7257	7253
	0	1	GYSGT	5953	5956
	0	2	GYSGT	7257	
	0	4	LCPL	5953	5956
	0	2	LCPL	5954	
	0	5	LCPL	7257	7252
	0	8	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5953	5956
	0	1	SSGT	5954	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	4	SSGT	7257	
ACTIVITY TOTAL:	3	42			
H&HS MCAS Cherry Point, 00146					
USMC	0	1	CPL	5952	
	0	1	CPL	5953	5956
	0	1	CPL	5954	
	0	2	CPL	7257	7252
	0	4	CPL	7257	7253
	0	2	GYSGT	7257	
	0	1	LCPL	5952	
	0	2	LCPL	5953	
	0	3	LCPL	5954	
	0	3	LCPL	7257	7252
	0	5	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	5956
	0	2	SGT	7257	7252
	0	5	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	8	SSGT	7257	
ACTIVITY TOTAL:	0	46			
H&HS MCAS New River, 62573					
USMC	1	0	CAPT	7220	
	0	1	CPL	5952	
	0	1	CPL	5953	
	0	1	CPL	5954	
	0	3	CPL	7257	7252
	0	1	CPL	7257	7253
	0	3	GYSGT	7257	
	0	2	LCPL	5952	
	0	3	LCPL	5953	
	0	2	LCPL	5954	
	0	8	LCPL	7257	7252
	0	2	LCPL	7257	7253
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5953	
	0	6	SSGT	7257	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY TOTAL:	1	41			
MACS-2 HQ, Cherry Point, 09554					
USMC	1	0	CAPT	7220	7277
	0	1	MGYSGT	7291	
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	1	4			
MACS-2, ATC Det-A, Beaufort, 09274					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-2, ATC Det-B, New River, 09554					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-2, ATC Det-C, Cherry Point, 57080					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-2, ATC Det-D, Bouge Field, 53980					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-24 HQ, Dam Neck, 08854					
AR	1	0	CAPT	7220	7277
SMCR	0	1	GYSGT	7257	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
SMCR	0	1	LCPL	5953	
	0	1	MGYSGT	7291	
	0	1	MSGT	5959	
	0	1	SGT	5953	
ACTIVITY TOTAL:	1	5			
MACS-24, Det-B, Willow Grove, 09504					
USMC	1	0	LT	7220	
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	1	GYSGT	7257	
	0	1	MSGT	5959	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	1	SSGT	7257	
SMCR	1	0	CAPT	7220	
	1	0	CWO2	5950	
	1	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	1	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	2	SSGT	7257	
ACTIVITY TOTAL:	4	57			
MAD, Patuxent River, 67356					
USMC	0	1	GYSGT	5953	
ACTIVITY TOTAL:	0	1			
MC Pers Dept of Navy Non-Dept, 00000					

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	1	0	CWO5	5950	
ACTIVITY TOTAL:	1	0			
MTACS-28, Cherry Point, 57080					
USMC	1	0	CAPT	7220	
ACTIVITY TOTAL:	1	0			
Pers Mgt Div HQMC, 00000					
USMC	0	1	MGYSGT	7291	
ACTIVITY TOTAL:	0	1			
COMCAB, Miramar, 67428					
USMC	0	1	MSGT	7291	
	0	1	SSGT	7257	
ACTIVITY TOTAL:	0	2			
H&HS MCAS Camp Pendleton, 67604					
USMC	1	0	CAPT	7220	
	1	0	CWO4	5950	
	1	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	5957
	0	2	CPL	5954	
	0	3	CPL	7257	7252
	0	9	CPL	7257	7253
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	1	LCPL	5952	
	0	5	LCPL	5953	5957
	0	4	LCPL	5954	
	0	5	LCPL	7257	7252
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	2	SGT	5953	5957
	0	1	SGT	7257	7252
	0	4	SGT	7257	7253
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	3	49			
H&HS MCAS Futenma, 63026					
USMC	3	0	LT	7220	
	0	2	CPL	5952	

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	CPL	5954	
	0	4	CPL	7257	7252
	0	7	CPL	7257	7253
	0	1	LCPL	5952	
	0	3	LCPL	5953	
	0	2	LCPL	5954	
	0	8	LCPL	7257	7252
	0	8	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	9954
	0	4	SGT	7257	7252
	0	3	SGT	7257	7253
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	3	52			
H&HS MCAS Iwakuni, 62613					
USMC	1	0	CAPT	7220	
	0	1	CPL	5953	
	0	1	CPL	5954	
	0	4	CPL	7257	7252
	0	3	CPL	7257	7253
	0	1	GYSGT	5952	
	0	2	GYSGT	7257	
	0	2	LCPL	5953	
	0	1	LCPL	5954	
	0	4	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	7252
	0	1	SGT	7257	7253
	0	1	SSGT	5953	
	0	6	SSGT	7257	
ACTIVITY TOTAL:	1	31			
H&HS MCAS Miramar, 31200					
USMC	1	0	LT	7220	
	0	2	CPL	5952	
	0	2	CPL	5953	5957
	0	3	CPL	5954	
	0	10	CPL	7257	7252
	0	1	CPL	7257	7253
	0	2	GYSGT	7257	
	0	1	LCPL	5952	

0	1	LCPL	5953	5957

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	2	LCPL	5954	
	0	7	LCPL	7257	7252
	0	6	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	2	SGT	5953	5957
	0	1	SGT	5954	
	0	3	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5952	
	0	1	SSGT	5953	5957
	0	1	SSGT	5954	
	0	6	SSGT	7257	
ACTIVITY TOTAL:	1	57			
H&HS MCAS Yuma, 62974					
USMC	0	1	CPL	5952	
	0	3	CPL	5953	5956
	0	3	CPL	5954	
	0	3	CPL	7257	7252
	0	10	CPL	7257	7254
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	5956
	0	3	LCPL	5954	
	0	6	LCPL	7257	7252
	0	13	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	5956
	0	2	SGT	5954	
	0	3	SGT	7257	7252
	0	5	SGT	7257	7254
	0	1	SSGT	5953	5956
	0	11	SSGT	7257	
ACTIVITY TOTAL:	0	73			
MACS-1 HQ, Yuma, 09541					
USMC	1	0	CAPT	7220	7277
	0	1	MGYSGT	7291	
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	1	4			

MACS-1, ATC Det-A, Pendleton, 31053

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-1, ATC Det-B, Miramar, 46623					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252

0	11	LCPL	7257	7253

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-1, ATC Det-C, Yuma, 31055					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-1, ATC Det-D, Twentynine Palms, 31053					

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

	BILLETS		DESIG/	PNEC/	SNEC/
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-23 HQ, Aurora, 67834					
SMCR	1	0	CAPT	7220	7277
	0	1	GYSGT	7257	
	0	1	LCPL	5953	
	0	1	MGYSGT	7291	
	0	1	MSGT	5959	
	0	1	SGT	5953	
ACTIVITY TOTAL:	1	5			
MACS-24, ATC Det-A, Fort Worth, 55175					
USMC	1	0	LT	7220	
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	1	GYSGT	7257	
	0	1	LCPL	5954	
	0	1	MSGT	5959	
	0	1	SGT	5952	

0	1	SGT	5953

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	SGT	5954	
	0	1	SGT	7257	7252
	0	1	SSGT	5953	
	0	1	SSGT	7257	
SMCR	1	0	CAPT	7220	
	1	0	CWO2	5950	
	1	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	3	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5954	
	0	2	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-4 HQ, Futenma, 08848					
USMC	1	0	CAPT	7220	7277
	0	1	GYSGT	7257	
	0	1	LCPL	5953	
	0	1	MGYSGT	7291	
	0	1	MSGT	5959	
	0	1	SGT	5953	
ACTIVITY TOTAL:	1	5			
MACS-4, ATC Det-A, Iwakuni, 09249					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	

0	1	GYSGT	5954

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	4	59			
MACS-4, ATC Det-B, Futenma, 62613					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	1	CPL	5952	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5952	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	2	GYSGT	7257	
	0	3	LCPL	5952	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5952	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5952	
	0	1	SSGT	5953	
	0	1	SSGT	5954	

0	3	SSGT	7257

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY TOTAL:	4	59			
MATCS-38, Miramar, 46623					
USMC	1	0	CAPT	7220	
ACTIVITY TOTAL:	1	0			
MAWTS-1, Yuma, 55167					
USMC	1	0	CAPT	7220	
	0	1	MSGT	7291	9962
ACTIVITY TOTAL:	1	1			
MCAF, Kaneohe Bay, 00318					
USMC	1	0	CWO3	5950	
	0	1	CPL	5952	
	0	1	CPL	5953	
	0	4	CPL	5954	
	0	2	CPL	7257	7252
	0	1	GYSGT	5954	
	0	1	LCPL	5952	
	0	2	LCPL	5953	
	0	5	LCPL	5954	
	0	1	SGT	5954	
	0	1	SSGT	5953	
ACTIVITY TOTAL:	1	19			
MCAGCC, Twentynine Palms, 67399					
USMC	0	1	CPL	5954	
	0	1	LCPL	5954	
ACTIVITY TOTAL:	0	2			
MTACS-18, Futenma, 57079					
USMC	1	0	CAPT	7220	
ACTIVITY TOTAL:	1	0			

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
USMC FLEET SUPPORT ACTIVITIES - USMC														
CAPT	7220		18		0		0		0		0		0	
CAPT	7220	7277	3		0		0		0		0		0	
CWO2	5950		10		0		0		0		0		0	
CWO3	5950		3		0		0		0		0		0	
CWO4	5950		1		0		0		0		0		0	
CWO5	5950		1		0		0		0		0		0	
LT	7220		29		0		0		0		0		0	
CPL	5952			20		0		0		0		0		0
CPL	5953			25		0		0		0		0		0
CPL	5953	5956		6		0		0		0		0		0
CPL	5953	5957		4		0		0		0		0		0
CPL	5954			39		0		0		0		0		0
CPL	7257	7252		56		0		0		0		0		0
CPL	7257	7253		31		0		0		0		0		0
CPL	7257	7254		30		0		0		0		0		0
GYSGT	5952			13		0		0		0		0		0
GYSGT	5953			14		0		0		0		0		0
GYSGT	5953	5956		1		0		0		0		0		0
GYSGT	5954			14		0		0		0		0		0
GYSGT	7257			39		0		0		0		0		0
LCPL	5952			37		0		0		0		0		0
LCPL	5953			53		0		0		0		0		0
LCPL	5953	5956		10		0		0		0		0		0
LCPL	5953	5957		6		0		0		0		0		0
LCPL	5954			69		0		0		0		0		0
LCPL	7257	7252		117		0		0		0		0		0
LCPL	7257	7253		161		0		0		0		0		0
MGYSGT	7291			4		0		0		0		0		0
MSGT	5959			18		0		0		0		0		0
MSGT	7291			21		0		0		0		0		0
MSGT	7291	9962		1		0		0		0		0		0
SGT	5952			15		0		0		0		0		0
SGT	5953			18		0		0		0		0		0
SGT	5953	5956		2		0		0		0		0		0
SGT	5953	5957		4		0		0		0		0		0
SGT	5954			19		0		0		0		0		0
SGT	5954	9954		1		0		0		0		0		0
SGT	7257	7252		41		0		0		0		0		0
SGT	7257	7253		16		0		0		0		0		0
SGT	7257	7254		40		0		0		0		0		0
SSGT	5952			12		0		0		0		0		0
SSGT	5953			16		0		0		0		0		0
SSGT	5953	5956		2		0		0		0		0		0
SSGT	5953	5957		1		0		0		0		0		0
SSGT	5954			16		0		0		0		0		0

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
SSGT	7257			84		0		0		0		0		0
USMC FLEET SUPPORT ACTIVITIES - AR														
CAPT	7220	7277	1		0		0		0		0		0	
USMC FLEET SUPPORT ACTIVITIES - SMCR														
CAPT	7220		2		0		0		0		0		0	
CAPT	7220	7277	1		0		0		0		0		0	
CWO2	5950		2		0		0		0		0		0	
LT	7220		2		0		0		0		0		0	
CPL	5952			2		0		0		0		0		0
CPL	5953			4		0		0		0		0		0
CPL	5954			4		0		0		0		0		0
CPL	7257	7252		4		0		0		0		0		0
CPL	7257	7254		2		0		0		0		0		0
GYSGT	7257			4		0		0		0		0		0
LCPL	5952			6		0		0		0		0		0
LCPL	5953			10		0		0		0		0		0
LCPL	5954			7		0		0		0		0		0
LCPL	7257	7252		14		0		0		0		0		0
LCPL	7257	7253		22		0		0		0		0		0
MGYSGT	7291			2		0		0		0		0		0
MSGT	5959			2		0		0		0		0		0
MSGT	7291			2		0		0		0		0		0
SGT	5953			2		0		0		0		0		0
SGT	7257	7252		3		0		0		0		0		0
SGT	7257	7254		6		0		0		0		0		0
SSGT	5952			2		0		0		0		0		0
SSGT	5954			1		0		0		0		0		0
SSGT	7257			4		0		0		0		0		0

SUMMARY TOTALS:

USMC FLEET SUPPORT ACTIVITIES - USMC												
65	1076	0	0	0	0	0	0	0	0	0	0	
USMC FLEET SUPPORT ACTIVITIES - AR												
1		0		0		0		0		0		
USMC FLEET SUPPORT ACTIVITIES - SMCR												
7	103	0	0	0	0	0	0	0	0	0	0	

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
GRAND TOTALS:													
USMC - USMC		65	1076	0	0	0	0	0	0	0	0	0	0
USMC - AR		1		0		0		0		0		0	
USMC - SMCR		7	103	0	0	0	0	0	0	0	0	0	0

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

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
TRAINING ACTIVITY, LOCATION, UIC: MATSG Pensacola, NATTC Pensacola, 39831														
INSTRUCTOR BILLETS														
USMC														
CPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
GYSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	5954		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		0	4	0	4	0	4	0	4	0	4	0	4
MSGT	5959		0	3	0	3	0	3	0	3	0	3	0	3
MSGT	7291		0	1	0	1	0	1	0	1	0	1	0	1
SGT	5952		0	5	0	5	0	5	0	5	0	5	0	5
SGT	5953		0	8	0	8	0	8	0	8	0	8	0	8
SGT	5954		0	5	0	5	0	5	0	5	0	5	0	5
SGT	7257	7252	0	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	0	5	0	5	0	5	0	5	0	5	0	5
SSGT	5952		0	4	0	4	0	4	0	4	0	4	0	4
SSGT	5953		0	3	0	3	0	3	0	3	0	3	0	3
SSGT	5954		0	5	0	5	0	5	0	5	0	5	0	5
SSGT	7257		0	11	0	11	0	11	0	11	0	11	0	11
SUPPORT BILLETS														
USMC														
CAPT	7220		1	0	1	0	1	0	1	0	1	0	1	0
CPL	5952		0	1	0	1	0	1	0	1	0	1	0	1
CPL	5953		0	1	0	1	0	1	0	1	0	1	0	1
CPL	5954		0	1	0	1	0	1	0	1	0	1	0	1
CWO3	5950		1	0	1	0	1	0	1	0	1	0	1	0
GYSGT	7257		0	1	0	1	0	1	0	1	0	1	0	1
LCPL	5952		0	2	0	2	0	2	0	2	0	2	0	2
LCPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
LCPL	5954		0	1	0	1	0	1	0	1	0	1	0	1
MGYSGT	5959		0	1	0	1	0	1	0	1	0	1	0	1
MSGT	5959		0	1	0	1	0	1	0	1	0	1	0	1
SGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	5954		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	7257		0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:			2	79	2	79	2	79	2	79	2	79	2	79

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
MATSG Pensacola, NATTC Pensacola, 39831													
	USMC	2.7	63.4	2.7	63.4	2.7	63.4	2.7	69.0	2.7	69.0	2.7	69.0
SUMMARY TOTALS:													
	USMC	2.7	63.4	2.7	63.4	2.7	63.4	2.7	69.0	2.7	69.0	2.7	69.0
GRAND TOTALS:													
		2.7	63.4	2.7	63.4	2.7	63.4	2.7	69.0	2.7	69.0	2.7	69.0

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
a. OFFICER - USN	Not Applicable												
b. ENLISTED - USN	Not Applicable												
c. OFFICER - USMC													
Fleet Support Billets USMC and AR													
CAPT	7220		18	0	18	0	18	0	18	0	18	0	18
CAPT	7220	7277	4	0	4	0	4	0	4	0	4	0	4
CWO2	5950		10	0	10	0	10	0	10	0	10	0	10
CWO3	5950		3	0	3	0	3	0	3	0	3	0	3
CWO4	5950		1	0	1	0	1	0	1	0	1	0	1
CWO5	5950		1	0	1	0	1	0	1	0	1	0	1
LT	7220		29	0	29	0	29	0	29	0	29	0	29
Staff Billets USMC and AR													
CAPT	7220		1	0	1	0	1	0	1	0	1	0	1
CWO3	5950		1	0	1	0	1	0	1	0	1	0	1
Chargeable Student Billets USMC and AR													
			3	0	3	0	3	0	3	0	3	0	3
SMCR Billets													
CAPT	7220		2	0	2	0	2	0	2	0	2	0	2
CAPT	7220	7277	1	0	1	0	1	0	1	0	1	0	1
CWO2	5950		2	0	2	0	2	0	2	0	2	0	2
LT	7220		2	0	2	0	2	0	2	0	2	0	2
TOTAL USMC OFFICER BILLETS:													
Fleet Support			66	0	66	0	66	0	66	0	66	0	66
Staff			2	0	2	0	2	0	2	0	2	0	2
Chargeable Student			3	0	3	0	3	0	3	0	3	0	3
SMCR			7	0	7	0	7	0	7	0	7	0	7

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
d. ENLISTED - USMC													
Fleet Support Billets USMC and AR													
CPL	5952		20	0	20	0	20	0	20	0	20	0	20
CPL	5953		25	0	25	0	25	0	25	0	25	0	25
CPL	5953	5956	6	0	6	0	6	0	6	0	6	0	6
CPL	5953	5957	4	0	4	0	4	0	4	0	4	0	4
CPL	5954		39	0	39	0	39	0	39	0	39	0	39
CPL	7257	7252	56	0	56	0	56	0	56	0	56	0	56
CPL	7257	7253	31	0	31	0	31	0	31	0	31	0	31
CPL	7257	7254	30	0	30	0	30	0	30	0	30	0	30
GYSGT	5952		13	0	13	0	13	0	13	0	13	0	13
GYSGT	5953		14	0	14	0	14	0	14	0	14	0	14
GYSGT	5953	5956	1	0	1	0	1	0	1	0	1	0	1
GYSGT	5954		14	0	14	0	14	0	14	0	14	0	14
GYSGT	7257		39	0	39	0	39	0	39	0	39	0	39
LCPL	5952		37	0	37	0	37	0	37	0	37	0	37
LCPL	5953		53	0	53	0	53	0	53	0	53	0	53
LCPL	5953	5956	10	0	10	0	10	0	10	0	10	0	10
LCPL	5953	5957	6	0	6	0	6	0	6	0	6	0	6
LCPL	5954		69	0	69	0	69	0	69	0	69	0	69
LCPL	7257	7252	117	0	117	0	117	0	117	0	117	0	117
LCPL	7257	7253	161	0	161	0	161	0	161	0	161	0	161
MGYSGT	7291		4	0	4	0	4	0	4	0	4	0	4
MSGT	5959		18	0	18	0	18	0	18	0	18	0	18
MSGT	7291		21	0	21	0	21	0	21	0	21	0	21
MSGT	7291	9962	1	0	1	0	1	0	1	0	1	0	1
SGT	5952		15	0	15	0	15	0	15	0	15	0	15
SGT	5953		18	0	18	0	18	0	18	0	18	0	18
SGT	5953	5956	2	0	2	0	2	0	2	0	2	0	2
SGT	5953	5957	4	0	4	0	4	0	4	0	4	0	4
SGT	5954		19	0	19	0	19	0	19	0	19	0	19
SGT	5954	9954	1	0	1	0	1	0	1	0	1	0	1
SGT	7257	7252	41	0	41	0	41	0	41	0	41	0	41
SGT	7257	7253	16	0	16	0	16	0	16	0	16	0	16
SGT	7257	7254	40	0	40	0	40	0	40	0	40	0	40
SSGT	5952		12	0	12	0	12	0	12	0	12	0	12
SSGT	5953		16	0	16	0	16	0	16	0	16	0	16
SSGT	5953	5956	2	0	2	0	2	0	2	0	2	0	2
SSGT	5953	5957	1	0	1	0	1	0	1	0	1	0	1
SSGT	5954		16	0	16	0	16	0	16	0	16	0	16
SSGT	7257		84	0	84	0	84	0	84	0	84	0	84
Staff Billets USMC and AR													
CPL	5952		1	0	1	0	1	0	1	0	1	0	1
CPL	5953		5	0	5	0	5	0	5	0	5	0	5
CPL	5954		1	0	1	0	1	0	1	0	1	0	1
GYSGT	5953		1	0	1	0	1	0	1	0	1	0	1

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
GYSGT	5954		1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		5	0	5	0	5	0	5	0	5	0	5
LCPL	5952		2	0	2	0	2	0	2	0	2	0	2
LCPL	5953		4	0	4	0	4	0	4	0	4	0	4
LCPL	5954		1	0	1	0	1	0	1	0	1	0	1
MGYSGT	5959		1	0	1	0	1	0	1	0	1	0	1
MSGT	5959		4	0	4	0	4	0	4	0	4	0	4
MSGT	7291		1	0	1	0	1	0	1	0	1	0	1
SGT	5952		5	0	5	0	5	0	5	0	5	0	5
SGT	5953		9	0	9	0	9	0	9	0	9	0	9
SGT	5954		5	0	5	0	5	0	5	0	5	0	5
SGT	7257	7252	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	5	0	5	0	5	0	5	0	5	0	5
SSGT	5952		4	0	4	0	4	0	4	0	4	0	4
SSGT	5953		4	0	4	0	4	0	4	0	4	0	4
SSGT	5954		6	0	6	0	6	0	6	0	6	0	6
SSGT	7257		12	0	12	0	12	0	12	0	12	0	12
Chargeable Student Billets USMC and AR			64	0	64	0	64	5	69	0	69	0	69
SMCR Billets													
CPL	5952		2	0	2	0	2	0	2	0	2	0	2
CPL	5953		4	0	4	0	4	0	4	0	4	0	4
CPL	5954		4	0	4	0	4	0	4	0	4	0	4
CPL	7257	7252	4	0	4	0	4	0	4	0	4	0	4
CPL	7257	7254	2	0	2	0	2	0	2	0	2	0	2
GYSGT	7257		4	0	4	0	4	0	4	0	4	0	4
LCPL	5952		6	0	6	0	6	0	6	0	6	0	6
LCPL	5953		10	0	10	0	10	0	10	0	10	0	10
LCPL	5954		7	0	7	0	7	0	7	0	7	0	7
LCPL	7257	7252	14	0	14	0	14	0	14	0	14	0	14
LCPL	7257	7253	22	0	22	0	22	0	22	0	22	0	22
MGYSGT	7291		2	0	2	0	2	0	2	0	2	0	2
MSGT	5959		2	0	2	0	2	0	2	0	2	0	2
MSGT	7291		2	0	2	0	2	0	2	0	2	0	2
SGT	5953		2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7252	3	0	3	0	3	0	3	0	3	0	3
SGT	7257	7254	6	0	6	0	6	0	6	0	6	0	6
SSGT	5952		2	0	2	0	2	0	2	0	2	0	2
SSGT	5954		1	0	1	0	1	0	1	0	1	0	1
SSGT	7257		4	0	4	0	4	0	4	0	4	0	4
TOTAL USMC ENLISTED BILLETS:													
Fleet Support			1076	0	1076	0	1076	0	1076	0	1076	0	1076

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
Staff			79	0	79	0	79	0	79	0	79	0	79
Chargeable Student			64	0	64	0	64	5	69	0	69	0	69
SMCR			103	0	103	0	103	0	103	0	103	0	103

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline
COURSE LENGTH: 5.8 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.12

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC	15	32	15	32	15	32	15	32	15	32
		AR	0		0		0		0		0	
		SMCR	1	0	1	1	1	0	1	1	1	0
		TOTAL:	16	32	16	33	16	32	16	33	16	32

CIN, COURSE TITLE: C-222-2021, MATCALS Operator Course
COURSE LENGTH: 1.0 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC	13	161	13	161	13	161	13	161	13	161
		AR	0		0		0		0		0	
		SMCR	0	6	1	6	0	6	1	6	0	6
		TOTAL:	13	167	14	167	13	167	14	167	13	167

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
COURSE LENGTH: 4.0 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.08

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC	13	68	13	68	13	68	13	68	13	68
		AR	0		0		0		0		0	
		SMCR	0	2	1	2	0	2	1	2	0	2
		TOTAL:	13	70	14	70	13	70	14	70	13	70

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
COURSE LENGTH: 33.2 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.66

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		0		46		46		46		46
		SMCR		0		2		2		2		2
		TOTAL:		0		48		48		48		48

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
COURSE LENGTH: 24.2 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.48

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		0		43		43		43		43
		SMCR		0		1		1		1		1
		TOTAL:		0		44		44		44		44

CIN, COURSE TITLE: C-103-2100, MATC Navigational Aids Technician Pipeline
COURSE LENGTH: 18.4 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.37

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		0		27		27		27		27
		SMCR		0		1		1		1		1
		TOTAL:		0		28		28		28		28

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
COURSE LENGTH: 30.6 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.61

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		46		0		0		0		0
		SMCR		2		0		0		0		0
		TOTAL:		48		0		0		0		0

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
COURSE LENGTH: 19.8 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.40

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		43		0		0		0		0
		SMCR		1		0		0		0		0
		TOTAL:		44		0		0		0		0

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-103-2100, MATC Navigational Aids Technician Pipeline
COURSE LENGTH: 19.8 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.40

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		27		0		0		0		0
		SMCR		1		0		0		0		0
		TOTAL:		28		0		0		0		0

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the MATCALS 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.c. Unique Courses

III.A. TRAINING COURSE REQUIREMENTS

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
15	32	15	32	15	32	15	32	15	32	ATIR
15	32	15	32	15	32	15	32	15	32	Output
1.6	3.4	1.6	3.4	1.6	3.4	1.6	3.4	1.6	3.4	AOB
1.6	3.4	1.6	3.4	1.6	3.4	1.6	3.4	1.6	3.4	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1	0	1	1	1	0	1	1	1	0	ATIR
1	0	1	1	1	0	1	1	1	0	Output
0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

CIN, COURSE TITLE: C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
13	161	13	161	13	161	13	161	13	161	ATIR
13	161	13	161	13	161	13	161	13	161	Output
0.2	2.2	0.2	2.2	0.2	2.2	0.2	2.2	0.2	2.2	AOB
0.2	2.2	0.2	2.2	0.2	2.2	0.2	2.2	0.2	2.2	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1	6	1	6	1	6	1	6	1	6	ATIR
1	6	1	6	1	6	1	6	1	6	Output
0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
13	68	13	68	13	68	13	68	13	68	ATIR
13	68	13	68	13	68	13	68	13	68	Output
0.9	4.8	0.9	4.8	0.9	4.8	0.9	4.8	0.9	4.8	AOB
0.9	4.8	0.9	4.8	0.9	4.8	0.9	4.8	0.9	4.8	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1	2	1	2	1	2	1	2	1	2	ATIR
1	2	1	2	1	2	1	2	1	2	Output
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

III.A.2.b. PLANNED COURSES

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	0		46		46		46		46	ATIR
	0		46		46		46		46	Output
	0.0		29.2		29.2		29.2		29.2	AOB
	0.0		29.2		29.2		29.2		29.2	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	0		2		2		2		2	ATIR
	0		2		2		2		2	Output
	0.0		1.3		1.3		1.3		1.3	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	0		43		43		43		43	ATIR
	0		43		43		43		43	Output
	0.0		19.9		19.9		19.9		19.9	AOB
	0.0		19.9		19.9		19.9		19.9	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	0		1		1		1		1	ATIR
	0		1		1		1		1	Output
	0.0		0.5		0.5		0.5		0.5	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.b. PLANNED COURSES

CIN, COURSE TITLE: C-103-2100, MATC Navigational Aids Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		27		27		27		27		ATIR
0		27		27		27		27		Output
0.0		9.5		9.5		9.5		9.5		AOB
0.0		9.5		9.5		9.5		9.5		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		1		1		1		1		ATIR
0		1		1		1		1		Output
0.0		0.4		0.4		0.4		0.4		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.3. EXISTING TRAINING PHASED OUT

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
46		0		0		0		0		ATIR
46		0		0		0		0		Output
26.8		0.0		0.0		0.0		0.0		AOB
26.8		0.0		0.0		0.0		0.0		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
2		0		0		0		0		ATIR
2		0		0		0		0		Output
1.2		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
43		0		0		0		0		ATIR
43		0		0		0		0		Output
16.1		0.0		0.0		0.0		0.0		AOB
16.1		0.0		0.0		0.0		0.0		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1		0		0		0		0		ATIR
1		0		0		0		0		Output
0.4		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.3. EXISTING TRAINING PHASED OUT

CIN, COURSE TITLE: C-103-2100, MATC Navigational Aids Technician Pipeline
TRAINING ACTIVITY: MATSG Pensacola
LOCATION, UIC: NATTC Pensacola, 39831

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

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
27		0		0		0		0		ATIR
27		0		0		0		0		Output
10.1		0.0		0.0		0.0		0.0		AOB
10.1		0.0		0.0		0.0		0.0		Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the MATCALS Program and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

IV.C. Facility Requirements

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

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

IV.C.3. Facility Project Summary by Program

IV.A. TRAINING HARDWARE

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

CIN, COURSE TITLE: C-103-2081, AN/TPN-22 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
005	AN/TPN-22	2	Oct 80	GFE	Onboard
006	AN/TPN-22 Solid-State Modulator	2	Apr 99	GFE	Onboard
007	AN/UYK-20X(V)	2	Oct 80	GFE	Onboard
008	AN/USH-26	2	Oct 80	GFE	Onboard
020	AN/UYQ-41	2	Oct 80	GFE	Onboard

CIN, COURSE TITLE: C-103-2083, AN/UYQ-34(V) Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
009	AN/UYQ-34(V)2	8	Oct 80	GFE	Onboard

CIN, COURSE TITLE: C-103-2084, AN/TPS-73 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
004	AN/TPS-73	2	Oct 90	GFE	Onboard

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

CIN, COURSE TITLE: C-103-2091, MATCALS Radio Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
015	RT-1230(V)1/URC-94(V)	4	Oct 80	GFE	Onboard
016	AN/VRC-82(V)2	7	Oct 80	GFE	Onboard
017	RT-1272/GRC-171(V)2	4	Oct 80	GFE	Onboard
018	RT-1369/GRC-211	4	Oct 80	GFE	Onboard
019	AN/ARC-210	4	Jan 00	GFE	Pending

CIN, COURSE TITLE: C-103-2092, AN/TSQ-120 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
011	AN/TSQ-120A	2	Oct 80	GFE	Onboard
012	AN/TSQ-120B	1	Jan 97	GFE	Onboard
013	AN/VRC-82	2	Oct 80	GFE	Onboard
014	OA-9142/TSM-170	1	Oct 80	GFE	Onboard

CIN, COURSE TITLE: C-103-2093, AN/TSQ-131 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
010	AN/TSQ-131(V)	4	Oct 80	GFE	Onboard

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

CIN, COURSE TITLE: C-103-2094, AN/TSQ-216 RLST Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
021	AN/TSQ-216 RLST	1	Oct 99	GFE	Onboard
		1	~~FY01~~FY00	GFE	Pending

CIN, COURSE TITLE: C-103-2101, AN/TRN-44 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
001	AN/TRN-44	2	Oct 84	GFE	Onboard

CIN, COURSE TITLE: C-103-2102, AN/TPN-30 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
003	AN/TPN-30A	4	Mar 96	GFE	Onboard

IV.B. COURSEWARE REQUIREMENTS

IV.B.1. TRAINING SERVICES

COURSE / TYPE OF TRAINING	SCHOOL LOCATION	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
AN/TPN-22 Solid-State Modulator Modification	NATTC Pensacola, Florida	1	1	Aug 99
AN/TSQ-216 RLST	Sparks, Nevada	2	6	Feb 97

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-103-2081, AN/TPN-22 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2083, AN/UYQ-34(V) Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2084, AN/TPS-73 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2091, MATCALS Radio Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2092, AN/TSQ-120 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

	QTY	DATE

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TYPES OF MATERIAL OR AID	REQD	REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2093, AN/TSQ-131 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2094, AN/TSQ-216 RLST Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Jan 00	Pending
Slides/Transparencies	1 set	Jan 00	Pending
Student Achievement Tests	10	Jan 00	Pending
Student Guides	10	Jan 00	Pending
Wall Charts	1 set	Jan 00	Pending

CIN, COURSE TITLE: C-103-2101, AN/TRN-44 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2102, AN/TPN-30 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Slides/Transparencies	1 set	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard
Wall Charts	1 set	Oct 80	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-103-2111, MATCALS Maintenance Management (Track C-103-2110)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Computer: Current processing standards for U. S. Navy and Marine Corps	4 each	Mar 94	Onboard
Instructor Guides	4	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2112, MATCALS System Analysis (Track C-103-2110)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard

CIN, COURSE TITLE: C-222-2021, MATCALS Operator Course
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Instructor Guides	4	Oct 80	Onboard
Student Achievement Tests	10	Oct 80	Onboard
Student Guides	10	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-2081, AN/TPN-22 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
ED510-AB-OMI-010/PD70-HD1099 HD-1099/TSQ Operation and Maintenance	Hard copy	10	Oct 80	Onboard
EE216-AC-DOP-010 AN/TPN-22 Overhaul and Repair Manual	Hard copy	30	Oct 80	Onboard
EE216-AC-DOP-020 AN/TPN-22 Overhaul and Repair Manual	Hard copy	30	Oct 80	Onboard
EE216-AC-DOP-030 AN/TPN-22 Overhaul and Repair Manual	Hard copy	30	Oct 80	Onboard
EE216-AC-OMI-010/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-OMI-030/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-OMI-050/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-OMI-062/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-OMI-070/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-SOM-010/TPN-22 AN/TPN-22 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE216-AC-WLM-010/TPN-22 AN/TPN-22 Wire List Manual	Hard copy	30	Oct 80	Onboard
EE216-AC-WLM-020/TPN-22 AN/TPN-22 Wire List Manual	Hard copy	30	Oct 80	Onboard
EE216-AC-WLM-030/TPN-22 AN/TPN-22 Wire List Manual	Hard copy	30	Oct 80	Onboard
NE0967-LP-598-1010 AN/UYK-20X(V) Operation and Maintenance	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-1020 AN/UYK-20X(V) Reference Data	Hard copy	10	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

NE0967-LP-598-1030 AN/UYK-20X(V) Equipment Diagrams	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-1040 AN/UYK-20X(V) Diagnostic Programs	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-1050 AN/UYK-20X(V) Diagnostic Program Listing, Basic Tests	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-1060 AN/UYK-20X(V) Diagnostic Program Listing, Special I/O Tests	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-5010 AN/USH-26 Operation and Maintenance	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-5020 AN/USH-26 Illustrations	Hard copy	10	Oct 80	Onboard
NE0967-LP-598-5030 AN/USH-26 Programmer's Operators Manual	Hard copy	10	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2083, AN/UYQ-34(V) Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
EE250-BC-OMI-010/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard
EE250-BC-OMI-020/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard
EE250-BC-OMI-030/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard
EE250-BC-OMI-040/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard
EE250-BC-OMI-050/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard
EE250-BC-OMI-060/W154 AN/UYQ-34(V)2 Operation and Maintenance Type II	Hard copy	10	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-2084, AN/TPS-73 Maintenance (Track C-103-2080)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
EE200-AB-MAN-010/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-020/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-030/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-040/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-050/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-060/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-070/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-080/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-090/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-100/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-110/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-120/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-130/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-140/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard
EE200-AB-MAN-150/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

EE200-AB-MAN-160/TPS-73 AN/TPS-73 Operation and Maintenance	Hard copy	30	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2091, MATCALS Radio Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
Collins 523-0767741-001212 AN/GRC-171(V)2 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
Collins TM523-0769780-00221A AN/GRC-211 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
Harris 1960-009F AN/URC-94(V)2 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
Harris PM-1330F AN/URC-94(V)2 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
No Number AN/GSH-60 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
NE0967-LP-544-5010 AN/GRC-171(V)1 Service Manual	Hard copy	10	Oct 80	Onboard
NE0967-LP-544-5020 AN/GRC-171(V)1 Illustrated Parts Breakdown Manual	Hard copy	10	Oct 80	Onboard
NE0967-LP-591-8010 AN/VRC-82(V)2 Service Manual	Hard copy	10	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2092, AN/TSQ-120 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
No Number AB-1236/TSQ-120 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard
No Number SA-2257/TSQ-120 Operation and Maintenance (Commercial)	Hard copy	10	Oct 80	Onboard
No Number AN/TSQ-120 Operation Manual (Commercial)	Hard copy	4	Oct 80	Onboard
No Number CDD 1000 Service Manual (Commercial)	Hard copy	10	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-2093, AN/TSQ-131 Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
DNE 24000763-000 RO-572/TSQ-131(V) Systems Operator Manual (Commercial)	Hard copy	10	Oct 80	Onboard
DNE 24000764-000 RO-572/TSQ-131(V) Systems Operator Manual (Commercial)	Hard copy	10	Oct 80	Onboard
ED510-AB-OMI-010/PD70-HD1099 HD-1099/TSQ Operation and Maintenance	Hard copy	1	Oct 80	Onboard
No Number AN/UYQ-42 Operation and Maintenance (Commercial)	Hard copy	10	Oct 80	Onboard
No Number AN/TSQ-131(V) Operation and Maintenance, Type III System	Hard copy	10	Oct 80	Onboard
NE0967-LP-547-7010 AN/GMQ-31 Operation and Maintenance	Hard copy	10	Oct 80	Onboard

CIN, COURSE TITLE: C-103-XXXX, AN/TSQ-216 RLST Maintenance (Track C-103-2090)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
TBD AN/TSQ-216 RLST Operation and Maintenance	Hard copy	10	Jan 00	Pending

CIN, COURSE TITLE: C-103-2101, AN/TRN-44 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
EE172-AB-OMI-010/5201 AN/URN-25 Operation and Maintenance	Hard copy	24	Oct 80	Onboard
EE172-AB-OMI-010/W154 AN/TRN-44 Operation and Maintenance Type III System	Hard copy	24	Oct 80	Onboard
EE172-AB-OMI-021/5201 AN/URN-25 Operation and Maintenance	Hard copy	24	Oct 80	Onboard
EE172-AB-OMI-022/5201 AN/URN-25 Operation and Maintenance	Hard copy	24	Oct 80	Onboard

IV.B.3. TECHNICAL MANUALS

EE172-AB-OMI-030/5201 AN/URN-25 Operation and Maintenance	Hard copy	24	Oct 80	Onboard
EE172-GA-OMI-010/W154 AN/TRN-44 Operation and Maintenance Type III System	Hard copy	24	Oct 80	Onboard
NE0967-LP-626-9010 OE-258/URN Operation and Maintenance	Hard copy	24	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2102, AN/TPN-30 Maintenance (Track C-103-2100)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
EE216-BC-OMI-010/E154 AN/TPN-30 Operation and Maintenance	Hard copy	24	Oct 80	Onboard

CIN, COURSE TITLE: C-103-2111, MATCALS Maintenance Management (Track C-103-2110)
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
FMFM 5-1 Marine Aviation Manual	Hard copy	4	Mar 94	Onboard
MCO 3120.6 Embarkation Procedures	Hard copy	4	Mar 94	Onboard
MIL-STD-1364H Standard General Purpose Electronic Test Equipment	Hard copy	4	Mar 94	Onboard
No Number Index of Navy Managed Repairable Items	Hard copy	4	Mar 94	Onboard
NAVSEA 0967-LP-000-XXX Electronic Installation and Maintenance Books Series	Hard copy	1	Mar 94	Onboard
NAVSEA P4790.4 (series) 3M Manual (PMS Only)	Hard copy	4	Mar 94	Onboard
NAVSUP PUB 2002 Navy Stock List of Publications and Forms	Hard copy	4	Mar 94	Onboard
NAVSUP PUB 4000 Introduction to Federal Supply Catalog and Related Publications	Hard copy	4	Mar 94	Onboard

IV.B.3. TECHNICAL MANUALS

NAVSUP PUB 409 MILSTRIP/MILSTRAP Desk Guide	Hard copy	4	Mar 94	Onboard
NAVSUP PUB 4500 Consolidated Hazardous Item List Storage and Handling	Hard copy	4	Mar 94	Onboard
NAVSUP PUB 567 Automated SNAP I Supply Procedures Logistics and Inventory Management	Hard copy	4	Mar 94	Onboard
NWP-10-1-10 Casualty Reporting Manual	Hard copy	4	Mar 94	Onboard
OPNAVINST 3721.1 Air Traffic Control Facilities Manual	Hard copy	4	Mar 94	Onboard
SECNAVINST 5216.5 Naval Correspondence Manual	Hard copy	4	Mar 94	Onboard
SPAWAR 0101, XXX Naval Shore Electronics Criteria Series	Hard copy	1	Mar 94	Onboard
SPAWAR-Vallejo 14203-0131139 Maintenance Management System	Hard copy	4	Mar 94	Onboard
SPAWARINST 4700.9 FMF ATC System and Equipment Maintenance and Logistics Support Policies and Procedures	Hard copy	4	Mar 94	Onboard
SPAWARINST P4110.566A FMF ATC Operational Logistics Support Summary	Hard copy	4	Mar 94	Onboard

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: NATTC Pensacola
LOCATION, UIC: NAS Pensacola, 60393

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
Not Applicable MATCALS System Operator Manual	Hard copy	10	Feb 95	Onboard
NAVAIR 00-80T-114 NATOPS Air Traffic Control Facilities Manual	Hard copy	10	Feb 95	Onboard
OPNAVINST 3722.16 Terminal Instrument Procedures	Hard copy	10	Feb 95	Onboard
OPNAVINST 5100.23 Navy Occupational (NAVOSH) Program Manual	Hard copy	1	Feb 95	Onboard

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
OPO	Approve and promulgate NTSP	FY83	Completed
TSA	Begin initial training on the AN/TSQ-216 RLST	Feb 97	Completed
TSA	Conduct training services on the AN/TSQ-216 RLST	FY97	Completed
OPTEVFOR	Conduct OPEVAL on the AN/TSQ-216 RLST	FY98	Completed
TSA	Distribute Draft NTSP for review	Sep 98	Completed
TSA	Deliver first TTE for the AN/TSQ-216 RLST	Oct 99	Completed
TSA	Install first TTE for the AN/TSQ-216 RLST	Oct 99	Completed
TSA	Distribute updated Draft NTSP for review	Oct 99	Completed
TSA	Deliver second TTE for the AN/TSQ-216 RLST	FY00	Completed
OPO	Chair NTSP Conference	FY00	If required
TSA	Begin follow-on training on the AN/TSQ-216 RLST	FY00	Completed
TSA	Deliver curricula materials for the AN/TSQ-216 RLST	FY00	Completed
DA	Fleet introduction for AN/TSQ-216 RLST	FY00	Completed
OPO	Approve NTSP	Jul 00	Completed
TSA	Install second TTE for the AN/TSQ-216 RLST	Oct 00	Pending
DA	Achieve NSD on the AN/TSQ-216 RLST	Oct 02	Pending

PART VI - DECISION ITEMS / ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
None			

PART VII - POINTS OF CONTACT

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