NAVY TRAINING SYSTEM PLAN

FOR THE

AVIATION DATA MANAGEMENT AND CONTROL SYSTEM

N78-NTSP-A-50-0009/A

MARCH 2002

AVIATION DATA MANAGEMENT AND CONTROL SYSTEM

EXECUTIVE SUMMARY

This Navy Training System Plan (NTSP) has been developed to identify the manpower and training requirements associated with the Aviation Data Management And Control System (ADMACS) program. The ADMACS program is an umbrella under which several automated systems will be developed and implemented. The ADMACS program development and implementation is divided into five increments. Each increment is being managed, funded, developed, and tested separately. The five increments for implementation are:

Increment I - ADMACS and Integrated Shipboard Information System (ISIS). The ADMACS is a real-time, redundant, configuration managed, tactical Local Area Network. Through the ADMACS, ISIS provides an electronic data processing and display system. The ADMACS and ISIS are in the Production and Deployment Phase of the Defense Acquisition System (DAS). Initial Operating Capability was achieved in April 2001. The ADMACS and ISIS are operated by Navy personnel in the Air Traffic Controller (AC) rating with Navy Enlisted Classifications (NEC) 6902 and 6903 and other data entry personnel within the Air Department. The ADMACS and ISIS hardware is maintained by Electronic Technicians with NEC 1678. The ADMACS and ISIS software is maintained by Information System Technicians with NEC 2735. All formal initial training requirements have been completed. Informal initial training will be provided at each site during installation. Follow-on operator training for AC personnel is being established at Naval Air Technical Training Center (NATTC) Pensacola, Florida. Operator training for other Air Department personnel will be accomplished through On-the-Job Training (OJT). Follow-on maintenance training will be provided in the form of OJT that addresses unique ADMACS and ISIS equipment and software. An increase to current quantitative operator manpower will not be required. At this point in development, it has not been determined if additional maintenance manpower will be required.

Increment II - Aviation Weapons Information Management System (AWIMS), including the Magazine Arrangement Planning Aid-Computerized (MAPA-C). Through ADMACS, AWIMS will provide improved information management, control, and communications for the Weapons Department. The AWIMS is not funded and has not entered the DAS. The MAPA-C component of the AWIMS is a computer-based graphics planning aid used in support of ordnance movement and weapons storage. Funding for MAPA-C is being provided by the Type Commanders. The MAPA-C is operated by Navy Aviation Ordnanceman assigned to the ship's Weapons Department. The MAPA-C is maintained by the same technicians that maintain the ADMACS and ISIS. Initial operator and maintenance training is provided at each site during installation. Due to the simplicity of the MAPA-C software, no formal follow-on operator training will be developed at this time. However, when the AWIMS program is funded, MAPA-C operator training may be incorporated into the AWIMS training. No additional manpower will be required to support the MAPA-C.

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Increment III - Visual Imaging System for Approach and Landing (VISUAL). The VISUAL is an electro-optical sensor and display system that will provide enhanced images of aircraft in low visibility and night conditions. The VISUAL will provide critical recovery information to the Landing Signal Officer (LSO) via ADMACS. The VISUAL is in the System Development and Demonstration Phase of the DAS. The VISUAL will be operated by Navy and Marine Corps LSOs. The VISUAL will be maintained aboard aircraft carriers by Interior Communications Electricians (IC) with NECs 4743 and 4745. The VISUAL will be maintained aboard amphibious assault ships by ICs with NEC 4779. Initial training will be required for Technical Evaluation (TECHEVAL), Operational Evaluation (OPEVAL), and cadre instructors. Follow-on VISUAL operator training will be incorporated into existing LSO training at the Navy LSO School at Oceana, Virginia; Marine Corps LSO training at Marine Air Group (MAG)-14 Marine Corps Air Station (MCAS) Cherry Point, North Carolina; and MAG-13 MCAS El Toro, California. Follow-on VISUAL maintenance training will be incorporated into existing courses at Service School Command, Great Lakes, Illinois, and NATTC Detachment (DET) Lakehurst, New Jersey. No increase to existing manpower will be required to support the VISUAL.

Increment IV - Advanced Launch and Recovery Control System (ALRCS). The ALRCS will integrate all catapult and arresting gear control, data acquisition, condition-based maintenance, and embedded training functions into a redundant microprocessor-based control system. The ALRCS will use ADMACS to transfer maintenance information from the machinery spaces to the Aircraft Launch and Recovery Maintenance Officer. ALRCS is in the Concept and Technology Development Phase of the DAS. The ALRCS will be operated and maintained by Navy personnel assigned to V-2 Division of the Air Department onboard Nimitz-Class Nuclear Aircraft Carriers. Initial training will be required for TECHEVAL, OPEVAL, and cadre instructor personnel. Follow-on operator and maintenance training will be incorporated into existing training courses at NATTC DET Lakehurst; Naval Air Maintenance Training Unit (NAMTRAU) Norfolk, Virginia; and NAMTRAU North Island, California. The ALRCS maintenance plan identifies potential reductions in maintenance manpower requirements. Upon completion of further manpower analysis, the results will be included in updates to this NTSP.

Increment V - Operations Planning and Information System (OPIS). The OPIS will utilize sensors, displays, signal processing, and digital data communications systems to provide, via ADMACS, modern, high performance, fully integrated aviation workstations throughout the Air Department. The OPIS has not been funded and has not entered the DAS. When more information becomes available it will be added to future updates to this NTSP.

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LIST OF ACRONYMS

AATCC	Amphibious Air Traffic Control Center
ABE	Aviation Boatswain's Mate (Launch and Recovery Equipment)
AC	Air Traffic Controller
ACDU	Active Duty
ADMACS	Aviation Data Management And Control System
AIR OPS	Air Operations
ALRCS	Advanced Launch and Recovery Control System
ALRE	Aircraft Launch and Recovery Equipment
ALREMP	ALRE Maintenance Program
AO	Aviation Ordnanceman
AOB	Average Onboard
AOCS	Aviation Ordnance Control Station
ATM	Asynchronous Transfer Mode
AWIMS	Aviation Weapons Information Management System
AWMCS	Aviation Weapons Movement Control Station
AZ	Aviation Maintenance Administrationman
BIT	Built-In Test
CATCC	Carrier Air Traffic Control Center
CBM-HM	Conditional Based Maintenance and Health Monitoring
CCA	Carrier Controlled Approach
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COMNAVAIRLANT	Commander, Naval Air Force Atlantic
COMNAVAIRPAC	Commander, Naval Air Force Pacific
COTS	Commercial Off-The-Self
CV	Aircraft Carrier
CVN	Aircraft Carrier, Nuclear
DT	Developmental Test
EM	Electrician's Mate
ET	Electronics Technician

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LIST OF ACRONYMS

FCTCLANT	Fleet Combat Training Center, Atlantic
FDC	Flight Deck Control
FISC	Fleet Industrial Supply Center
FLOLS	Fresnel Lens Optical Landing System
FMS	Foreign Military Sales
FOSAMS	Fleet Optical Scanning Ammunition Management System
FRS	Fleet Readiness Squadron
FY	Fiscal Year
GFE	Government Furnished Equipment
GOTS	Government Off-The-Shelf
HUD	Head-Up Display
IC	Interior Communications Electrician
IFLOLS	Improved Fresnel Lens Optical Landing System
ILARTS	Integrated Launch And Recovery Television Surveillance
ILSP	Integrated Logistics Support Plan
IPB	Illustrated Parts Breakdown
ISIS	Integrated Shipboard Information System
IT	Information Systems Technician
LAN	Local Area Network
LHA	Helicopter Assault Landing Ship
LHD	Multipurpose Amphibious Assault Ship
LSO	Landing Signal Officer
MAG	Marine Air Group
MAPA-C	Magazine Arrangement Planning Aid-Computerized
MCAS	Marine Corps Air Station
MCCDC	Marine Corps Combat Development Command
MMH/OH	Maintenance Man-Hours per Operating Hour
MOS	Military Occupational Specialty
MOVLAS	Manually Operated Visual Landing Aid System
MRC	Maintenance Requirements Card
MS	Maintenance Support
MSD	Material Support Date

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LIST OF ACRONYMS

NA	Not Applicable
NAF	Naval Air Facility
NAMTRAU	Naval Aviation Maintenance Training Unit
NAS	Naval Air Station
NATOPS	Naval Air Training and Operating Procedures Standardization
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAVEDTRA	Naval Education and Training
NAVPERSCOM	Naval Personnel Command
NAWCADLKE	Naval Air Warfare Center Aircraft Division Lakehurst
NDI	Non-Developmental Item
NEC	Navy Enlisted Classification
NS	Naval Station
NSA	Naval Security Annex
NTSP	Navy Training System Plan
OJT	On-the-Job Training
OPEVAL	Operational Evaluation
OPIS	Operations Planning and Information System
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	OPNAV Principal Official
ORD	Operational Requirements Document
PMA	Program Manager, Air
PQS	Personnel Qualification Standards
PRI FLY	Primary Flight Control
PSICP	Primary Support Inventory Control Point
QA	Quality Assurance
RFOU	Ready For Operational Use
RFT	Ready For Training
SELRES	Selected Reserve
SITU	Stabilized Imaging and Tracking Unit
TAC	Tactical Advanced Computer

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LIST OF ACRONYMS

TAD	Temporary Additional Duty
TAR	Training and Administration of the Naval Reserve
TBD	To Be Determined
TD	Training Device
TECHEVAL	Technical Evaluation
TFS	Total Force Structure
TTE	Technical Training Equipment
UIC	Unit Identification Code
UPS	Uninterruptible Power Supply
VISUAL	Virtual Imaging System For Approach and Landing
VSTOL OLS	Vertical Short Take-Off and Landing Optical Landing System

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PREFACE

This Approved Navy Training System Plan (NTSP) for the Aviation Data Management And Control System (ADMACS) updates the Draft NTSP for ADMACS, N78-NTSP-A-50-0009/D, dated March 2001. It has been developed to comply with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97.

This NTSP incorporates changes to the ADMACS program identified during the Aircraft Launch and Recovery Equipment (ALRE) Integrated Logistics Support Management Team meeting held at Naval Air Warfare Center Lakehurst (NAWCADLKE) on 24 April 2001, the ADMACS NTSP Conference held at NAWCADLKE on 5 November 2001, and via fleet review comments. Additionally, this iteration updates information in Parts II, III, and IV to include information for seven returnable-quota courses previously only discussed in Part I.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

1. Nomenclature-Title-Acronym. Aviation Data Management And Control System (ADMACS)

2. Program Element. 0603512N

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 (N78)

OPO Resource Sponsor ..... CNO (N78)

Functional Mission Sponsor ..... CNO (N78)

Developing Agency..... NAVAIRSYSCOM (PMA251)

Training Agency ..... CINCLANTFLT
CINCPACFLT
CNET

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

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

Director of Naval Training..... CNO (N795)

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

D. SYSTEM DESCRIPTION

1. Operational Uses. The ADMACS program is an umbrella under which several automated systems are being developed and implemented. ADMACS is the heart of the program, providing a real-time, redundant, configuration managed, tactical Local Area Network (LAN). The ADMACS will be used by ALRE work centers and other work centers supporting air and flight operations on Aircraft Carriers (CV), Aircraft Carriers, Nuclear (CVN), Helicopter Assault Landing Ships (LHA), and Multi-Purpose Amphibious Assault Ships (LHD).

The ADMACS program development and implementation is divided into five increments. Each increment will be managed, funded, developed, and tested separately and will be comprised of systems that contribute to the overall ADMACS program development objectives and address specific user requirements. The five increments for implementation are as follows:

- **Increment I:** ADMACS and the Integrated Shipboard Information System (ISIS)
- **Increment II:** Aviation Weapons Information Management System (AWIMS), including the Magazine Arrangement Planning Aid-Computerized (MAPA-C)
- **Increment III:** Virtual Imaging System For Approach and Landing (VISUAL)
- **Increment IV:** Advanced Launch and Recovery Control System (ALRCS)
- **Increment V:** Operations Planning and Information System (OPIS)

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The ADMACS is a tactical LAN that uses an open system architecture to manage the data flow within and among work centers. Additionally, the ADMACS is the data source for information to be exchanged with other command, control, communication, computer, and intelligence systems. Through the ADMACS, the ISIS provides an electronic data processing and display system that improves the timeliness and accuracy of air operations information provided to decision-makers during shipboard flight operations. Production and deployment of ADMACS and ISIS aboard CV and CVN ships has been funded. Funding for ADMACS and ISIS aboard LHA and LHD ships will be made available at a future To Be Determined (TBD) date.

b. Aviation Weapons Information Management System including the Magazine Arrangement Planning Aid-Computerized. The AWIMS will provide information management, control, and communications for the Weapons Department. It will fulfill requirements for improved planning, tracking, control, and monitoring of aviation weapons aboard CV, CVN, LHA, and LHD ships. These improvements will permit rapid response to situational changes, provide real-time data to decision-makers, and reduce the workload associated with these functions. The AWIMS will provide an integrated, economical tool supporting the Weapons Department information requirements by enhancing their ability to enter, store, retrieve, report, and communicate aviation weapons data in a high tempo, real-time operational environment. Functions to be performed by the AWIMS include Weapons Movement Tracking, Automated Load Planning, automated aids supporting on-loads and underway

replenishments, magazine arrangement functions, Weapons Build Status tracking and reporting, and Automated Display/Status Boards. Through the ADMACS, the AWIMS will provide weapons information to key decision-makers and be able to receive data essential to developing the Load Plan and respond to situational changes.

The AWIMS portion of Increment II has not been funded for development; therefore, the information required to develop an NTSP is not available. When the AWIMS has been funded and development begins, AWIMS information will be included in future updates to this NTSP.

The MAPA-C is a computer-based graphics planning aid used by Weapons Department personnel in support of ordnance movement and stowage evolutions aboard CV, CVN, LHA, and LHD ships. MAPA-C, as a stand-alone component of AWIMS, has not been funded through the Defense Acquisition System (DAS); however, the Type Commanders are providing funding for MAPA-C installation onboard CV and CVN ships. Installation will be accomplished concurrently with the installation of ADMACS and ISIS. The MAPA-C is installed aboard the USS Kearsarge (LHD 3) as a stand-alone system independent of ADMACS.

c. Virtual Imaging System for Approach and Landing. The VISUAL is an electro-optical sensor and display system that will provide the enhanced images of aircraft in low visibility and night conditions. The VISUAL will develop and integrate emerging technologies and data networks synergistically in order to provide critical recovery information via the ADMACS to the Landing Signal Officer (LSO) and other decision-makers.

d. Advanced Launch and Recovery Control System. ALRCS will provide catapult and arresting gear control systems to improve the performance, reliability, and safety of existing systems aboard Nimitz-Class CVNs, and to reduce the maintenance costs associated with these systems. The ALRCS will integrate all control and monitoring functions into a redundant microprocessor-based control system. This will also include the automatic generation of individualized Launch and Recovery Bulletins. The ALRCS will consist of several subsystems installed in critical aviation workspaces located throughout the ship. ALRCS will interface with the ADMACS and Integrated Communication Advanced Networks to share data with other shipboard systems. ALRCS will use ADMACS to transfer maintenance information from the Catapults and Arresting Gear areas to the V-2 Maintenance Officer.

e. Operations Planning and Information System. The OPIS will utilize sensors, displays, signal processing, and digital communications systems to provide modern, high performance, fully integrated aviation work centers. This will increase aircraft sortie generation rates while also increasing the safety of aviation operations and the affordability of these systems. The OPIS will accommodate the integration of future systems utilizing a robust systems architecture.

The OPIS, which comprises Increment V of the development and implementation plan, has not been funded; therefore, the information required to develop an NTSP is not

available. When the OPIS has been funded and development begins, OPIS information will be included in future updates to this NTSP.

2. Foreign Military Sales. No Foreign Military Sales (FMS) or other service procurements are planned for any component of the ADMACS.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST

1. Aviation Data Management And Control System and Integrated Shipboard Information System. The Advanced Development Model evaluation for ISIS, the core LAN component of ADMACS, was completed onboard the USS George Washington (CVN 73) during the ship's deployments in Fiscal Year (FY) 95 and FY97. ADMACS and ISIS Technical Evaluation (TECHEVAL) was successfully completed at NAWCADLKE, in April 1998 and aboard USS Theodore Roosevelt (CVN 71) in October 1998. Operational Evaluation (OPEVAL) was successfully completed aboard CVN 71 in November 1998.

2. Magazine Arrangement Planning Aid-Computerized. No OPEVAL or TECHEVAL was required for the MAPA-C. The MAPA-C feasibility model was developed for the Naval Sea Systems Command by the NAWCADLKE. The MAPA-C Feasibility Model was installed on CVN 73 in March 1995. CVN 73 endorsed the MAPA-C system in May 1995. The Amphibious Class Feasibility Model was funded in April 1996.

3. Virtual Imaging System for Approach and Landing. Developmental Test (DT)-I was successfully completed in June 1999. DT-IIA, design verification, environmental suitability, and Electromagnetic Compatibility testing is scheduled to begin in June 2002 and conclude in December 2002. DT-IIB, technical requirements verification, is scheduled to begin in August 2002 and be completed in January 2003. OPEVAL is scheduled to be conducted aboard the first available CV or CVN ship during deployment in FY03 and aboard an available LHA or LHD ship during an FY04 deployment.

4. Advanced Launch and Recovery Control System. ALRCS OPEVAL and TECHEVAL will be conducted in two phases, land-based and at-sea. The land-based testing will be conducted at NAWCADLKE. When specific evaluation dates have been established, this information will be included in future updates to this NTSP.

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

1. Aviation Data Management And Control System and Integrated Shipboard Information System. ADMACS is a new system and does not replace any existing system. ISIS replaces the Plexiglas status boards used in Air Operations (AIR OPS), Carrier Controlled Approach (CCA), Primary Flight Control (PRI FLY), and Flight Deck Control (FDC) with monitors and large screen displays.

2. Magazine Arrangement Planning Aid-Computerized. MAPA-C will replace the current Manual Magazine Arrangement Planning Aid kits in place onboard CV, CVN, LHA, and LHD ships.

3. Virtual Imaging System for Approach and Landing. The VISUAL will replace some of the components currently found in the Integrated Launch And Recovery Television Surveillance (ILARTS) system and the LSO Base Console and Head-Up Display (HUD) Unit on CV and CVN ships. The VISUAL is a new system for LHA and LHD ships.

4. Advanced Launch and Recovery Control System. ALRCS is a new system and will not replace any existing ALRE, with the exception of current catapult and arresting gear operator stations and associated panels and wiring.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description

a. Aviation Data Management And Control System and Integrated Shipboard Information System. ADMACS allows the incorporation of the functionality of many ALRE and Air Ops components into a single software and hardware baseline. The ADMACS is a real-time, redundant, survivable LAN supporting its components through one-way and two-way secure transfer of critical flight operations data. The ADMACS is a mission critical system that is required to act as a stand-alone, autonomous LAN with the ALRE and AIR OPS supporting work centers when failures and/or battle damage prevent communications with or through external interfaces. Overall, the ADMACS will provide an open system interface allowing future enhancements to be incorporated into the ADMACS baseline, including the processing of video and voice recognition, along with other audio data.

ISIS is an electronic data processing and display system that improves the timeliness and accuracy of AIR OPS information provided to decision-makers during shipboard flight operations. The ISIS employs existing and emerging technologies, interfacing with other shipboard tactical, navigational, and meteorological databases through the ADMACS. This enables rapid input, collection, processing, and distribution of relevant AIR OPS data and the display of this information to all Carrier Air Traffic Control Center work centers and to various locations throughout the ship. The system includes an emergency back-up capability for equipment supporting critical functions with a dedicated Uninterruptible Power Supply (UPS) to allow system operation in the event of power outages. The system also includes the capability for a workstation to operate autonomously. Other features include an electronic paperwork system to standardize and automate the preparation, distribution, and storage of official forms, reports, records, and logs.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C system will allow ordnance-handling personnel to plan and arrange weapons within the ships' magazines, weapons component storerooms, and ordnance related storage lockers. The MAPA-C has been developed in response to fleet requests for a means to quickly and easily develop

alternate load-out arrangements for magazines and to be able to meet changing operational requirements. The system is also capable of planning weapons movement on the flight deck and hangar bay during weapons on-loads and off-loads. The system allows the user to arrange the decks with aircraft, boats, handling equipment, and both containerized and ready service weapons to simulate anticipated conditions.

c. Virtual Imaging System for Approach and Landing. The goal of VISUAL is to improve the safety and efficiency of operations by enhancing the LSO's capability to effectively control the aircraft during the recovery process. The VISUAL effort will affect CV, CVN, LHA, and LHD type ships. The major components of the VISUAL are as follows:

(1) Stabilized Imaging and Tracking Unit. The Stabilized Imaging and Tracking Unit (SITU) will be a day-night, infrared television and laser ranging-tracking system that will image and track aircraft during approach and landing. The SITU will provide the LSO the ease of aircraft identification and accurate position and trend information relative to glidepath, as well as imagery, to assess aircraft attitude and response to controls, aircraft damage and condition, and gear and hook status throughout the landing process. The SITU will enhance operations in reduced visibility both day and night. All air capable ships will have SITU installed.

(2) LSO Workstation. The LSO workstation will provide the LSO with dynamic aircraft and ship information necessary to aid in expediting the safe and efficient recovery of aircraft. LHA and LHD ships do not currently have the benefit of a workstation specifically designed for this purpose. The CV and CVN LSO workstation will replace the existing LSO HUD console with an integrated display and control station. It will provide the LSO with a consolidated display of aircraft recovery data and flight deck status during recovery operations.

(3) Fixed Glidepath Sensor. LHA and LHD ships will utilize a fixed camera located on the aft end of the island that will provide an easily interpretable view of the aircraft during recoveries and provide the LSO with a reference for aircraft glide slope and line-up position.

d. Advanced Launch and Recovery Control System. The ALRCS will implement state-of-the-art sensor and control technologies to bring antiquated Launch and Recovery Control Systems up-to-date. This will be done by modernizing existing launch and recovery processes through automation, improved communication, and enhanced human interface. Modeling and simulation will be used to target the best process components for automation.

Existing catapult and arresting gear systems are workload intensive due to manual inputs, including manual logging and data recording, and excessive preventive maintenance. The current Catapult Control System is electro-mechanical and the current Arresting Gear Control system is hydro-mechanical. Both of these systems rely heavily on verbal sound powered phone communications. These existing systems and subsystems will be upgraded to provide smaller, more user-friendly control panels. During the design phase, the type of hardware and software required will be identified at a macro level. The investigation of sensor types, sensor reliability,

signal conditioning requirements, and sensor calibration requirements will also be conducted. This will entail an investigation of available Commercial Off-The-Shelf (COTS) equipment and COTS software that are applicable for use in ALRCS. It will also identify the type of software that would not be COTS and would need to be developed.

2. Physical Description

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The main components of this system are four Tactical Advanced Computer (TAC) servers, four network switches with Asynchronous Transfer Mode (ATM) and Ethernet interface, and a UPS. Primary work centers including AIR OPS, CCA, PRI FLY, and FDC will be configured as follows:

COMPONENT	QUANTITY			
	AIR OPS	**CCA**	**PRI FLY**	**FDC**
Large Screen Display	4	5	0	0
Executive Display	0	0	2	2
Operator Workstation	2	3	3	3
Printer	1	1	1	1

b. Magazine Arrangement Planning Aid-Computerized. Two different configurations of the MAPA-C will be employed. One configuration will be used on CV and CVN ships and the other will be used on LHA and LHD ships. MAPA-C is a computer software program that is produced on a Compact Disk.

(1) Aircraft Carriers and Nuclear Aircraft Carriers. Onboard CV and CVN ships, the MAPA-C system consists of four workstation sites linked together by an Ethernet interface and cable. Each workstation site has a Laser Printer, a 17-inch color monitor with 1280 x 1024 pixel resolution, a keyboard, and a mouse. One workstation is located in the Fleet Optical Scanning Ammunition Management System (FOSAMS) office and is a 715/50 File Server and Workstation or similar equipment. The workstation located in the G-3 Division Office consists of a monitor, keyboard, mouse, and an "X" terminal interface. The workstation in the Aviation Weapons Movement Control Station (AWMCS) and FDC also consists of a monitor, keyboard, mouse, and "X" terminal interface. All workstations use the UNIX Operating System and X-Windows graphical user interface system. Access to MAPA-C is controlled through logon names and passwords. The system is protected by a UPS. MAPA-C physical characteristics are as follows:

UNIT	COMPONENT	DIMENSIONS (INCHES)			WEIGHT (POUNDS)	LOCATION
		LENGTH	WIDTH	HEIGHT		
1	UPS	9.8	5.9	15.8	40	FOSAMS
2	Network Server	4.2	16.6	17.5	20	FOSAMS
3	Expansion Tower	17.7	6.7	14.4	15	FOSAMS
4	Workstation	23.0	18.0	17.5	53	FOSAMS
5	Printer	17.7	17.7	6.0	25	FOSAMS
6	Transceiver	6.0	3.0	2.0	1	FOSAMS
7	Transceiver	6.0	3.0	2.0	1	G-3 Division
8	“X” Terminal	16.0	16.0	2.0	5	G-3 Division
9	Work Station	23.0	18.0	17.5	53	G-3 Division
10	Printer	17.7	17.7	6.0	25	G-3 Division
11	Transient Supply	13.0	2.5	2.0	2.0	G-3 Division
12	Transceiver	6.0	3.0	2.0	1	AWMCS
13	“X” Terminal	16.0	16.0	2.0	5	AWMCS
14	Workstation	23.0	18.0	17.5	53	AWMCS
15	Printer	17.7	17.7	6.0	25	AWMCS
16	Transient Supply	13.0	2.5	2.0	2.0	AWMCS
17	Transceiver	6.0	3.0	2.0	1	FDC
18	“X” Terminal	16.0	16.0	2.0	5	FDC
19	Workstation	23.0	18.0	17.5	53	FDC
20	Printer	17.7	17.7	6.0	25	FDC
21	UPS	9.8	5.9	15.8	40	FDC

2. Helicopter Assault Landing Ships and Multi-Purpose Amphibious Assault Ships. Onboard LHA and LHD ships, the MAPA-C system, located at the Aviation Ordnance Control Station (AOCS), is comprised of one stand-alone workstation consisting of a HP 715 File Server, Laser Printer, a 17-inch color monitor with 1280 x 1024 pixel resolution, a keyboard, and a mouse. The workstation uses the UNIX Operating System and X-Windows graphical user interface system. Access to MAPA-C is controlled through logon names and passwords. The system is protected by an UPS. System physical characteristics are as follows:

UNIT	COMPONENT	DIMENSIONS (INCHES)			WEIGHT (POUNDS)	LOCATION
		LENGTH	WIDTH	HEIGHT		
1	UPS	9.8	5.9	15.8	40	AOCS
2	Network Server	4.15	16.6	17.5	20	AOCS
3	Workstation	23.0	18.0	17.5	53	AOCS
4	Printer	17.7	17.7	6.0	25	AOCS

c. Virtual Imaging System for Approach and Landing. The acquisition strategy for the VISUAL requires heavy reliance on Non-Developmental Items (NDI), COTS, and Government Off-The-Shelf (GOTS) hardware, software, and firmware, all repackaged for the shipboard operating environment. Therefore, a physical description is not currently available, but will be incorporated in later iterations of this NTSP.

d. Advanced Launch and Recovery Control System. Since equipment configurations are undefined, no physical descriptions are available at this time. When available, a physical description will be added in future versions of this document.

3. New Development Introduction

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The ADMACS and ISIS are being installed through a retrofit program onboard existing CV and CVN ships. ADMACS and ISIS will be installed as new production equipment onboard future new construction CVN, LHA, and LHD type ships.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C will be retrofitted aboard existing ships and installed as a production item on new construction.

c. Virtual Imaging System for Approach and Landing. The VISUAL will be retrofit on CV, CVN, LHA, and LHD type ships during overhaul periods as a new production item.

d. Advanced Launch and Recovery Control System. The ALRCS is a modernization retrofit program that will back fit current Nimitz-Class CVNs with new production equipment.

4. Significant Interfaces

a. Aviation Data Management And Control System and Integrated Shipboard Information System. ADMACS and ISIS interface with a ship's associated electrical power systems and integrate all component functions required to support flight operations. ADMACS is compatible with the Joint Maritime Command Information System.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C onboard CVs and CVNs will interface with ADMACS through the ISIS. The MAPA-C onboard amphibious ships is a stand-alone system that interfaces with the ship's electrical power system.

c. Virtual Imaging System for Approach and Landing. The CV and CVN VISUAL will interface with ADMACS. The LHA and LHD VISUAL will interface with various shipboard systems.

d. Advanced Launch and Recovery Control System. The ALRCS interfaces with arresting gear Improved Fresnel Lens Optical Landing System (IFLOLS) Cross-Check System, ISIS, Embarked Aircraft Tracking System, Improved ILARTS, Moriah, and ADMACS.

5. New Features, Configurations, or Material

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The ADMACS will use an ATM over a fiber optic backbone.

b. Magazine Arrangement Planning Aid-Computerized. Not Applicable (NA)

c. Virtual Imaging System for Approach and Landing. The VISUAL will develop and integrate emerging technologies and data networks synergistically in order to provide critical recovery information to the LSO.

d. Advanced Launch and Recovery Control System. NA

H. CONCEPTS

1. Operational Concept

a. Aviation Data Management And Control System and Integrated Shipboard Information System. For CV and CVN ships, ADMACS and ISIS will provide related data to CDC, AIR OPS, PRI-FLY, FDC, LSO Platform, and Squadron Ready Rooms, while an executive display will provide data to the bridge. For LHA and LHD ships, ADMACS and ISIS will provide related data to PRI-FLY, FDC, Hangar Deck Control, Tactical Air Control Center, Squadron Ready Rooms, and Debark Control. Manual input stations will require a variety of ratings from different divisions and branches to be manned during flight operations or special evolutions, as is done currently.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C is a computerized weapons inventory management tool that will be used on an as needed basis primarily by Aviation Ordnanceman (AO) personnel with Navy Enlisted Classification (NEC) 6801 assigned to the ship's G-3 Division.

c. Virtual Imaging System for Approach and Landing. The VISUAL is operated continuously during flight operations. The LSO is the primary operator.

d. Advanced Launch and Recovery Control System. The ALRCS will be operated by personnel in CVN and CV Air Department, V-2 Division. The ALRCS is manned at all times when the ship is at Flight Quarters.

2. Maintenance Concept

a. Aviation Data Management And Control System and Integrated Shipboard Information System. Maintenance of the ADMACS and ISIS is performed at the organizational and depot level. Within the two-level maintenance concept, two groups of maintainers will be used. Maintenance of the ADMACS and ISIS hardware is accomplished by Electronic Technicians (ET) with NEC 1678. The ADMACS and ISIS software is maintained by Information Systems Technicians (IT) with NEC 2735.

(1) Organizational

(a) Preventive Maintenance. Preventive maintenance consists of cleaning and system functional testing at specified intervals in accordance with procedures established by Maintenance Requirements Cards (MRC).

(b) Corrective Maintenance. Corrective maintenance consists of Built-In Test (BIT), fault isolation, and removal and replacement of failed modules.

(2) Intermediate. NA

(3) Depot. Depot level maintenance will be performed by the original equipment manufacturer or an authorized repair station. Depot level maintenance consists of repair, rework, and overhaul of the replaceable assemblies that are beyond the repair capability of organizational level maintenance.

(4) Interim Maintenance. NA

(5) Life Cycle Maintenance Plan. ADMACS and ISIS will be reworked as required during ship overhaul periods with configuration requests and upgrades documented through the current ship's Maintenance Plan.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C is maintained in accordance with the procedures outlined in the Naval Ships' Maintenance Material Management Manual, Office of the Chief of Naval Operations Instruction 4790.4. Maintenance will be accomplished at two levels, organizational and depot.

(1) Organizational

(a) Preventive Maintenance. Preventive maintenance consists of cleaning to be conducted at specified intervals in accordance with procedures established by MRCs.

(b) Corrective Maintenance. Corrective maintenance consists of BIT fault isolation, removal and replacement of failed modules and components, and system functional testing.

(2) Intermediate. NA

(3) Depot. NAWCADLKE will be the depot for the MAPA-C. Currently, basic depot level repair consists of one-for-one replacement of defective hardware.

(4) Interim Maintenance. Interim depot maintenance will be provided on an as needed basis by NAWCADLKE.

(5) Life Cycle Maintenance Plan. As the AWIMS program is implemented, a Life Cycle Maintenance Plan will be developed that includes MAPA-C.

c. Virtual Imaging System for Approach and Landing. The maintenance concept for the VISUAL follows the direction and guidance outlined in both the Aircraft Launch and Recovery Equipment Maintenance Program (ALREMP), OPNAVINST 4790.15, and the Naval Ships' Maintenance Material Management Manual, OPNAVINST 4790.4C. Maintenance will be accomplished at two levels, organizational and depot.

(1) Organizational

(a) Preventive Maintenance. Preventive maintenance will consist of cleaning to be conducted at specified intervals in accordance with procedures established by MRCs.

(b) Corrective Maintenance. Corrective maintenance will consist of BIT fault isolation, removal and replacement of failed modules and components, and system function testing.

1 Stabilized Imaging and Tracking System. The maintenance concept for the SITU will be at two levels, organizational and depot. It is anticipated that for CV and CVN ships Interior Communications Electricians (IC) with NEC 4743 will maintain the SITU. Aboard LHA and LHD ships, ICs with NEC 4779 will maintain the SITU.

2 Landing Signal Officer Workstation. The maintenance concept for the LSO workstation has not been determined. Currently, ICs with NEC 4745 maintain the existing LSO HUD aboard CV and CVN ships, and ICs with NEC 4779 maintain the LSO station onboard LHA and LHD ships. This is not expected to change.

3 Fixed Glidepath Sensor. The Fixed Glidepath Sensor is a fixed camera used on LHA and LHD VISUAL and it is anticipated that ICs with NEC 4779 will maintain this sensor. The maintenance concept has not been defined at this time but will be incorporated in later iterations of this document.

(2) Intermediate. NA

(3) Depot. The original equipment manufacturer or an authorized repair station will perform depot level maintenance. Depot level maintenance will consist of repair, rework, and overhaul of the replaceable assemblies that are beyond the repair capability of the organizational level.

(4) Interim Maintenance. Interim depot maintenance will be provided by the original equipment manufacturer.

(5) Life Cycle Maintenance Plan. VISUAL will be reworked during overhaul periods with configuration request and upgrades documented through the current ship's Maintenance Plan.

d. Advanced Launch and Recovery Control System. General direction and guidance regarding the ALRE maintenance concept is provided by the ALREMP, OPNAVINST 4790.15. The ALREMP prescribes the concept of three levels of maintenance and clearly defines each level. ALRCS logisticians propose that a Conditional-Based Maintenance and Health Monitoring (CBM-HM) program be implemented. The rationale for CBM-HM is as follows:

The Planned Maintenance System, the current maintenance philosophy being administered on both Catapult and Arresting Gear Equipment, is either event or time-driven. This method often requires maintenance actions that may not be warranted but are performed anyway. This results in higher maintenance costs in terms of labor hours and material. The reason this method is currently adopted is that the existing equipment is not capable of monitoring component performance and condition in order to more efficiently schedule maintenance actions. ALRCS will have these capabilities.

Systems that contain many mechanical components require that thousands of hours per ship be expended conducting preventive maintenance. In addition, there are far too many mechanical failure points in these critical control systems. Using CBM-HM will allow for the monitoring and diagnosis of the Catapults and Arresting Gear. CBM-HM will identify critical parameters and use the data obtained from the sensors in computerized algorithms to determine the "health" of the systems. Using these techniques, ALRCS will be able to determine when maintenance is required rather than the current event or time-driven Preventive Maintenance method. With CBM-HM, the maintenance actions themselves may not change, but the frequency of the maintenance actions will be reduced.

(1) Organizational

(a) Preventive Maintenance. ALRCS logisticians are evaluating the maintenance actions that are performed and will attempt to use the CBM-HM philosophy to reduce maintenance frequency and cost. As stated above, ALRCS will be able to determine when maintenance is required through performance and condition monitoring.

(b) Corrective Maintenance. As Corrective Maintenance requirements are determined, they will be added to updates to this document.

(2) Intermediate. ALRCS will explore a Reach Back Maintenance capability. This concept will allow data in various formats to be transmitted ashore to the activity that can provide assistance in direct support of diagnosing catapult or arresting gear problems.

(3) Depot. Depot level and other major maintenance and repair is available through Voyage Repair Teams provided by Naval Aviation Depots, NAWCADLKE, and Naval shipyards.

(4) Interim Maintenance. The NAWCADLKE Carrier and Field Service Team will provide interim maintenance support as required.

(5) Life Cycle Maintenance Plan. After the Design Phase is complete, a Life Cycle Maintenance Plan will be drafted by NAWCADLKE.

3. Manning Concept

a. Aviation Data Management And Control System and Integrated Shipboard Information System. No additional operator personnel will be required to support ADMACS and ISIS. Operator requirements for ADMACS and ISIS will be satisfied by personnel currently assigned operator (watch station) responsibilities with the existing system. Maintainer requirements will be satisfied by existing ships' personnel in the ET and IT ratings.

(1) Estimated Maintenance Man-Hours per Operating Hour. As ADMACS and ISIS have only been installed in operational activities a short time, not enough actual maintenance data has been collected to accurately determine the Maintenance Man-Hour per Operating Hour (MMH/OH). The technical parameter threshold values derived from the Operational Requirements Document for system reliability, availability, and repair times are as follows:

PARAMETER	DEFINITION	THRESHOLD	OBJECTIVE
System Reliability	Mean Time Between Operational Mission Failures	1406 hours	3626 hours
System Availability	Uptime/(Uptime + Downtime) (percent of uptime usage)	95%	98%
Weekly Downtime	Preventive and Corrective Maintenance per Week	8.4 hours	3.36 hours
Operational Mission System Maintainability	Maximum Corrective Mean Time for Operational Mission Failures	1.5 hours	1.0 hours

PARAMETER	DEFINITION	THRESHOLD	OBJECTIVE
Overall System Maintainability	Estimated Corrective MMH/OH	0.001 hours	0.0002 hours

(2) Proposed Utilization. The proposed utilization is 5040 hours annually (210 days times 24 hours).

(3) Recommended Qualitative and Quantitative Manpower Requirements

(a) Operator. Most ADMACS and ISIS operator functions will be performed by Air Traffic Controller (AC) personnel. CV and CVN operators will be ACs with NEC 6902, Carrier Air Traffic Control Center (CATCC) Controllers. LHA and LHD operators will be ACs with NEC 6903, Amphibious Air Traffic Control Center (AATCC) Controllers. Some operator functions may be performed by personnel who are not within the AC rating. ADMACS and ISIS do not generate any additional watch stations or operator positions; no additional operators will be necessary.

(b) Maintenance. ADMACS and ISIS maintainer functions are identified in two groups, hardware and software. Preventive and corrective maintenance will be accomplished by ETs with NEC 1678. Software will be maintained by ITs with NEC 2735. It has not been determined if the additional workload to support ADMACS and ISIS is sufficient to drive an increase in maintenance manpower. When this information becomes available it will be included in future updates to this NTSP.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C will be the primary method of performing magazine arrangement plans. If the system becomes inoperable due to hardware or software problems, the Manual MAPA kit will be the auxiliary method until system readiness is reinstated.

(1) Estimated Maintenance Man-Hours per Operating Hour

PARAMETER	DEFINITION	OBJECTIVE
System Reliability	Mean Time Between Mission Critical Failures	300 hours
System Availability	Uptime/(Uptime + Downtime) (percent of uptime usage)	95%
Overall System Maintainability	Mean Time To Repair	60 minutes

PARAMETER	DEFINITION	OBJECTIVE
System Logistics	Mean Logistic Delay Time	72 hours

(2) Proposed Utilization. The proposed utilization is 2620 hours annually (210 days times 12 hours).

(3) Recommended Qualitative and Quantitative Manpower Requirements

(a) Operator. AOs with NEC 6801 will operate the MAPA-C. No additional manpower requirements will be necessary.

(b) Maintenance. Maintenance of MAPA-C will be performed by the same technicians that maintain the ADMACS and ISIS.

c. Virtual Imaging System for Approach and Landing. Organizational level manpower requirements will not change due to the installation of VISUAL components. Manpower requirements were determined through workload comparability analysis procedures and information from subject matter experts.

(1) Estimated Maintenance Man-Hours per Operating Hour. The VISUAL and its related components are designated "non-continuously" operating systems and will be capable of distributing and processing information in support of AIR OPS 24 hours per day throughout a six-month deployment. The technical parameter threshold values derived from the Operational Requirements Document (ORD) for system reliability, availability, and repair time are as follows:

PARAMETER	DEFINITION	THRESHOLD	OBJECTIVE
System Reliability	Mean Time Between Operational Mission Failures	703 hours	1813 hours
System Availability	Uptime/(Uptime + Downtime) (percent of uptime usage)	95%	98%
Operational Mission System Maintainability	Maximum Corrective Mean Time for Operational Mission Failures	1.5 hours	1.0 hours

(2) Proposed Utilization. The proposed utilization is 2525 hours annually (210 days times 12.5 hours).

(3) Recommended Qualitative and Quantitative Manpower Requirements. Assuming the VISUAL threshold and objective goals are attained, the system will not generate enough maintenance actions to require any additional maintenance personnel. Further, since VISUAL does not generate any additional watch stations or operator positions, no additional operators will be necessary.

(a) Operator. On CV and CVN ships, the LSO Workstation is manned by an LSO with Navy Officer Billet Code 8662 and an IC with NEC 4745; the ILARTS Console is manned by an IC with NEC 4743. On LHA and LHD ships, the VISUAL will be manned by an IC with NEC 4779. When Marines are embarked, the LSO duties are performed by Marine Corps personnel with the Military Occupational Specialty (MOS) 7593 or 7594 on aircraft carriers and MOS 7589 for amphibious assault ships.

(b) Maintenance. Personnel in the IC rating will perform maintenance functions on CV and CVN VISUAL systems. ICs with NEC 4745 are responsible for the Fresnel Lens Optical Landing Systems (FLOLS), the manually operated Visual Landing Aid System, and the LSO HUD system, and will be trained to maintain the replaced components. ICs with NEC 4743 currently maintain the ILARTS and will be trained to perform maintenance tasks for replaced components. Vertical/Short Take-Off and Landing Optical Landing System Technicians with NEC 4779 will maintain the VISUAL system on LHA and LHD ships.

d. Advanced Launch and Recovery Control System. Manpower requirements for the V-2 Division are based on total workload requirements, with a daily operating period of 16 hours. Quality Assurance (QA) and Maintenance Support (MS) capabilities must be available 24 hours per day. The V-2 Division is divided into separate work centers for QA, MS, and operation of ALRE. The divisions are manned with Aviation Boatswain's Mate (Launch and Recovery Equipment) (ABE) personnel for the operation and maintenance of ALRE, Electrician's Mates (EM) to maintain the ALRE electrical systems, ICs to maintain the VISUAL landing systems, and Aviation Maintenance Administrationman (AZ) to perform the administrative, managerial, trend analysis, and clerical tasks of the division.

(1) Estimated Maintenance Man-Hours per Operating Hour. Modeling and simulation will be used to target the best process component for automation and, combined with CBM, should show significant reduction in man-hour requirements. After the final Design Review and component selection is complete, an estimate of Maintenance Man-Hours Per Operating Hour will be established.

(2) Proposed Utilization. The utilization rate for ALRCS is 18 hours per day during deployment. The deployment schedule requires six months out of each year.

(3) Recommended Qualitative and Quantitative Manpower Requirements. The existing catapult system requires 56 operators and the existing arresting gear requires 47, for a total of 103. Many of the personnel who work in machinery spaces assigned to operate the Catapults and Arresting Gear are not operators. They are strictly monitors. Their stations do not require any input during launch and recovery operations, but their function is

merely to observe and record information. ALRCS eliminates many of the monitor positions and will require 40 catapult operators and 37 arresting gear operators for a total of 77. This reduction in operator requirements will not reduce manpower requirements for the V-2 division but will reduce the workload currently assigned to each operator.

At this point in the development of the ALRCS, it is anticipated that there will not be any immediate change to the current manpower requirements aboard CVN ships. There is a possibility that some reduction in manpower may be realized after final system design is established and if the CBM philosophy is adopted. Results of additional analysis will be reflected in revisions to this document.

4. Training Concept

a. Aviation Data Management And Control System and Integrated Shipboard Information System. All initial ADMACS and ISIS training is complete. Follow-on operator training for ACs will be integrated into existing courses. No increases to current course lengths are anticipated. Follow-on operator training for ADMACS and ISIS manual data input operators not within the AC rating and follow-on maintenance training for ETs with NEC 1678 and ITs with NEC 2735 is currently being satisfied through On-the-Job Training (OJT). Follow-on ADMACS and ISIS training is currently being reviewed to determine if more in-depth training is required. Refer to Navy Training System Plan Conference (NTSPC) Action Items 002 and 003 in Part VI of this NTSP.

(1) Initial Training. Initial training to support TECHEVAL and OPEVAL has been completed. A CATCC instructor from Naval Air Technical Training Center (NATTC) Pensacola, Florida, served as part of the Fleet Project Team and will require no additional initial training.

(2) Follow-on Training

Title	**Carrier Air Traffic Control Center Operator**
CIN	C-222-2012
Model Manager ...	NATTC Pensacola
Description	This course provides training to prospective CATCC operators, including: ° The Organization, Directives, Rules, Procedures, and Phraseology Related to CATCC ° Shipboard Organization and Interrelations ° Operational Directives ° Carrier Naval Air Training and Operating Procedures Standardization (CV NATOPS) ° CATCC Doctrine, Operation Orders, and Daily Air Plans ° CATCC Radar ° Direct Altitude Indicator Readout System ° Internal and External Communications ° Informational Display System ° Duties, Responsibilities, and Skill Requirements Associated with Different Operational and Controller Positions in the CATCC ° CATCC Controller and Status Board Keeper Watch Station Operations Under Simulated Operational Conditions Upon completion, the student will be qualified to perform functions, under direct supervision, in a CATCC that lead to completion of Personnel Qualification Standards (PQS) for a CATCC Watch Stander.
Location	NATTC Pensacola
Length	42 days
RFT date	Currently available. TBD with ADMACS and ISIS
Skill identifier	AC 6902
TTE/TD	ADMACS and ISIS
Prerequisites	° AC Rating ° C-222-2010, Air Traffic Controller Class A1 ° Current NAVMED 6410/2 Clearance Notice (Aeronautical) signed by a Naval Flight Surgeon

Title	**Amphibious Air Traffic Control Center Operations**
CIN	C-222-2019
Model Manager ...	NATTC Pensacola
Description	This course provides training to prospective AATCC operators, including: ° Organization, Directives, Rules, Procedures, and Phraseology Related to AATCC ° Amphibious Air Operations ° Amphibious Task Force Organization and Command Relationships ° Tactical Air Control Squadron Operations and How They Relate to Operations in an AATCC ° Operations Control Division Responsibility for Equipment and Pre-Launch Brief ° Publications, Charts, and Messages Used During Amphibious Air Operations ° Publication and Use of the Daily Air Plan ° AATCC Watch Station Duties and Responsibilities ° Air Traffic Control Doctrine; Departure, Assault, and Recovery Procedures for Both Helicopter and Vertical/Short Take Off and Landing During Case I, II, and III Operations ° AATCC Radar ° Direct Altitude Indicator Readout System ° Status Boards ° AATCC Watch Station and System Operations Functions Under Simulated Operational Conditions Upon completion, the student will be qualified to perform functions, under direct supervision, in an AATCC that lead to the completion of PQS for an AATCC Watch Stander.
Location	NATTC Pensacola
Length	40 days
RFT date	Currently available
Skill identifier	AC 6903
TTE/TD	ADMACS and ISIS
Prerequisites	° AC Rating ° C-222-2010, Air Traffic Controller Class A1 ° Current NAVMED 6410/2 Clearance Notice (Aeronautical) signed by a Naval Flight Surgeon

(3) Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AC 6902, 6903	C-222-2010, Air Traffic Controller

(4) Training Pipelines. No new training pipelines, tracks, or courses will be required to support ADMACS and ISIS.

b. Magazine Arrangement Planning Aid-Computerized

(1) Initial Training. No formal initial training took place during program development. Informal initial operator training is being provided by NAWCADLKE personnel during MAPA-C installation aboard each ship.

(2) Follow-on Training. Due to the simplicity of the MAPA-C software, no formal follow-on operator training will be developed at this time. However, when the AWIMS program is funded, MAPA-C operator training may be incorporated into AWIMS follow-on training. MAPA-C will be maintained by the same ETs with NEC 1678 and ITs with NEC 2735 that maintain the ADMACS and ISIS.

(3) Student Profiles. NA

(4) Training Pipelines. No new training pipelines, tracks, or courses will be required to support MAPA-C training.

c. Virtual Imaging System for Approach and Landing. Initial VISUAL training will be required to support TECHEVAL, OPEVAL, and cadre instructor training. VISUAL operator information will be incorporated into existing follow-on training for Navy and Marine Corps LSOs. VISUAL information will also be incorporated into existing non-formal Marine Corps AV-8B LSO Training. Marine Corps AV-8B LSO designation is earned by completing an LSO training syllabus currently available at Marine Air Group (MAG)-14 Marine Corps Air Station (MCAS) Cherry Point, North Carolina, and MAG-13 MCAS El Toro, California. Follow-on VISUAL maintenance training will consist of replacing the current LSO HUD information contained in courses *C-670-2010, CV and CVN Optical Landing System* and *A-670-0064, LHA and LHD Vertical/Short Take-off and Landing Optical Landing System Maintenance,* with the new LSO workstation information. No increases in course lengths are anticipated. Additionally, course *A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance,* will require revision to include operation and maintenance procedures for new VISUAL components.

(1) Initial Training. Initial training will be required for TECHEVAL and OPEVAL personnel. Navy IC instructors will also require initial training so that they can

incorporate VISUAL information into existing follow-on training. No dates or location have been established for initial training. When more information becomes available it will be included in updates to this NTSP.

(2) Follow-on Training

Title	**Initial Formal Ground Training**
CIN	D-2G-0001
Model Manager ..	Navy LSO School
Description	This course provides training to prospective squadron LSOs, including: ° LSO Administrative and Operational Responsibilities Including Shore-Based and Shipboard Equipment ° Glide Slope Geometry ° Aircraft Recovery Bulletins ° Aircraft Characteristics ° Waving Concepts and Techniques ° Field Carrier Landing Practice ° Fleet Automated Performance Assessment and Readiness Training Systems Upon completion, the student will be able to perform the duties of a squadron LSO without supervision.
Location	Navy LSO School, Naval Air Station (NAS) Oceana
Length	10 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	None
TTE/TD	CV/CVN LSO Workstation
Prerequisites	° Designator 1310 or MOS 7590 ° Designation as LSO Trainee

Title	**Advanced Formal Ground Training**
CIN	D-2G-0002
Model Manager ..	Navy LSO School
Description	This course provides training to prospective Airwing and Staff LSOs, including: ° Administrative and Operational Responsibilities of an Airwing or Staff LSO ° Platform Strategy ° Barricade ° Pitching Deck Recoveries ° LSO Training and Evaluation ° Fleet Automated Performance Assessment and Readiness Training System Upon completion, the student will be able to perform the duties of a Wing or Staff LSO without supervision.
Location	Navy LSO School, NAS Oceana
Length	3 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	None
TTE/TD	CV/CVN LSO Workstation
Prerequisites	° Designator 1310 ° D-2G-0001, Initial Formal Ground Training ° Wing LSO Designation

Title	**Fleet Replacement Squadron Training Command**
CIN	D-2G-0003
Model Manager ..	Navy LSO School
Description	This course provides training to prospective Fleet Readiness Squadron (FRS) and training command LSOs, including: ° Administrative and Operational Responsibilities of a Training LSO ° Teaching Waving Techniques and Considerations ° Conducting Ground Training and Field Carrier Landing Practice ° Initial Carrier Qualification Requirements ° FRS Automated Performance Assessment and Readiness Training System Upon completion, the student will be able to perform the duties of an FRS or training command LSO without supervision.
Location	Navy LSO School, NAS Oceana
Length	3 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	None
TTE/TD	CV/CVN LSO Workstation
Prerequisites	° Designator 1310 ° D-2G-0002, Initial Formal Ground Training ° Squadron LSO Designation

Title	**Integrated Launch and Recovery Television Surveillance System Maintenance**
CIN	A-191-0011
Model Manager ..	Service School Command
Description	This course provides training to IC personnel, including: ° Analysis of Basic Television Circuits ° Basic Color and Monochrome Television Theory ° ILARTS and Related Equipment Operation and Maintenance Procedures ° Theory, Detailed Analysis, and Troubleshooting of the ILARTS Low Level Camera ° Theory, Detailed Analysis, and Troubleshooting of the ILARTS Airborne Video Tape Recorder ° Basic Operation and Troubleshooting Procedures for ILARTS Operation Console and Related Equipment Upon completion, the student will be able to perform maintenance on ILARTS and related equipment aboard CV and CVN ships without supervision.
Location	Service School Command, Great Lakes, Illinois
Length	124 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	IC 4743
TTE/TD	New VISUAL components that replace current ILARTS components.
Prerequisite	A-623-0105, IC Class “A” School

Title	**Optical Landing Systems Maintenance**
CIN	C-670-2010
Model Manager ..	NATTC Detachment (DET) Lakehurst
Description	This course provides training to IC personnel including: ° MK 6 MOD 3 FLOLS Operation, Maintenance, Fault Isolation, and Repair ° MK 1 MOD 2 Manually Operated Visual Landing Aid System (MOVLAS) Operation, Maintenance, Fault Isolation, and Repair ° MK 1 MOD 0 LSO HUD Operation, Maintenance, Fault Isolation, and Repair (Note: This MK-1 MOD 0 HUD training will be replaced with the new LSO workstation information when VISUAL information is incorporated.) Upon completion, the student will be able to maintain and repair the FLOLS, MOVLAS, and LSO HUD aboard CV and CVN ships without supervision.
Location	NATTC DET Lakehurst
Length	72 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	IC 4745
TTE/TD	CV/CVN LSO Workstation
Prerequisite	A-623-0105, IC Class “A” School

Title	**Vertical/Short Take-Off and Landing Optical Landing System Maintenance**
CIN	A-670-0064
Model Manager ..	Service School Command
Description	This course provides training to IC personnel, including: ° Vertical Short Take-Off and Landing Optical Lens System (VSTOL OLS) Operation ° VSTOL OLS Components ° VSTOL OLS Preventive Maintenance ° VSTOL OLS Fault Isolation and Troubleshooting ° VSTOL OLS Repair Upon completion, the student will be able to maintain and repair the VSTOL OLS aboard LHA and LHD ships without supervision.
Location	Service School Command, Great Lakes
Length	12 days
RFT date	Currently available. TBD with VISUAL.
Skill identifier	IC 4779
TTE/TD	LHA/LHD LSO Workstation
Prerequisite	° IC Rating ° Paygrades E-5 through E-7

(3) Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
Navy 1310	Qualified Fixed-Wing Pilot
Marine Corps MOS 7590, 7598	Basic Fixed-Wing Pilot
IC 4743, 4745, and 4779	A-623-0105, IC Class “A” School

(4) Training Pipelines. No new training pipelines, tracks, or courses will be required to support VISUAL training.

d. Advanced Launch and Recovery Control System. Initial ALRCS training will be required to support TECHEVAL, OPEVAL, and cadre instructor training. All existing follow-on catapult and arresting gear operator and maintenance courses will require revision to include the new ALRCS electronic sensors information. The current maintenance course for Steam Catapult Electrician will require a major revision. The proposed electronic sensors are within the scope of EM NEC 4672 but are currently not taught to the level required to maintain the ALRCS. As part of an Advanced Technology Demonstrator, Naval Air Warfare Center Training Systems Division, Orlando, Florida, is exploring embedded training as a concept for ALRCS operator training for use aboard future generation aircraft carriers and other Navy platforms.

(1) Initial Training. Initial training will be required for OPEVAL and TECHEVAL personnel. Navy instructors will also require initial training so that they can establish organic follow-on training. No dates or locations have been established for initial training. When this information becomes available it will be included in updates to this NTSP.

(2) Follow-on Training. The following NEC awarding courses will require revision to include ALRCS information. Course lengths for these courses are expected to increase.

Title	**Aircraft Launch and Recovery Equipment Maintenance Officer**
CIN	C-604-2011
Model Manager ...	NATTC DET Lakehurst
Description	This course provides training to prospective ALRE Maintenance Officers, including: ° ALRE Maintenance Management ° ALRE Records, Reports, and Logs ° Supply Procedures ° Catapult Systems ° Landing Gear Systems ° Visual Landing Aid Systems ° Technical Library Upon completion, the student will be able to perform as the ALRE Maintenance Officer aboard CV and CVN ships without supervision.
Location	NATTC DET Lakehurst
Length	38 days. TBD with ALRCS.

RFT date ..... Currently available. TBD with ALRCS.

Skill identifier ..... None

TTE/TD ..... Additional TTE and TDs to support ALRCS are TBD.

Prerequisites ..... ° Officers with orders to ALRE Maintenance Officer billets
or
° ABE Rating
° Paygrades E-7 through E-9

Title ..... CV Catapult Electrician

CIN C-604-2013

Model Manager ... NATTC DET Lakehurst

Description ..... This course provides training to EM personnel, including:

° Arresting Gear and Deck Accessories
° Catapults
° Electrical Schematics
° General Maintenance and Upkeep
° Safety
° Quality Assurance
° Technical Publications

Upon completion, the student will be able to maintain and repair the catapult and arresting gear electrical systems aboard CV and CVN ships without supervision.

Location ..... NATTC DET Lakehurst

Length ..... 26 days. TBD with ALRCS.

RFT date ..... Currently available. TBD with ALRCS.

Skill identifier ..... NEC 4672

TTE/TD ..... Additional TTE and TDs to support ALRCS are TBD.

Prerequisites ..... ° EM Rating
° Paygrade E-4
° Ultimate duty assignment to an aircraft carrier

Title	**Aircraft Launch and Recovery Equipment C13 Catapult Class C1**
CIN	C-604-2014
Model Manager ...	NATTC DET Lakehurst
Description	This course provides training to ABE personnel, including: ° Type C MK-13 MOD 0 Catapult Operation ° Type C MK-13 MOD 1 Catapult Operation ° Type C MK-13 MOD 2 Catapult Operation Upon completion, the student will be able operate Type C MK-13 series catapults aboard CV and CVN ships under supervision.
Location	NATTC DET Lakehurst
Length	44 days. TBD with ALRCS.
RFT date	Currently available. TBD with ALRCS.
Skill identifier	NEC 7004
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° ABE Rating ° Paygrades E-4 through E-9 ° C-604-2012, Aviation Boatswain's Mate Launch and Recovery Equipment Class A1

Title	**Aircraft Launch and Recovery Equipment Maintenance Technician**
CIN	C-604-2028
Model Manager ...	NATTC DET Lakehurst
Description	This course provides training to ABE personnel, including: ° ALRE Maintenance Administration ° Maintenance Programs and Practices ° Safety ° General Maintenance and Upkeep ° Hydraulic System Maintenance ° Jet Blast Deflectors ° Aircraft Recovery Equipment ° Barricades Upon completion, the student will be able to maintain and repair the catapult and arresting gear aboard CV and CVN ships without supervision.
Location	NATTC DET Lakehurst
Length	88 days. TBD with ALRCS.
RFT date	Currently available. TBD with ALRCS.
Skill identifier	NEC 7006
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° ABE 7004 or 7005 ° Paygrades E-5 through E-9

Title	**Aircraft Launch and Recovery Equipment Arresting Gear**
CIN	C-604-2029
Model Manager ...	NATTC DET Lakehurst
Description	This course provides training to ABE personnel, including: ° MK-7 MOD 2 Arresting Gear Operation ° MK-7 MOD 3 Arresting Gear Operation ° MK-7 MOD 4 Arresting Gear Operation Upon completion, the student will be able operate MK-7 series arresting gear aboard CV and CVN ships under supervision.

Location	NATTC DET Lakehurst
Length	24 days. TBD with ALRCS.
RFT date	Currently available. TBD with ALRCS
Skill identifier	NEC 7005
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° C-604-2012, Aviation Boatswain's Mate Launch and Recovery Equipment Class A1 ° ABE Rating ° Paygrade E-4

The following non-NEC awarding courses will require modification to include ALRCS information. Course lengths may or may not increase. Students attend these courses while in a no-cost Temporary Additional Duty (TAD) status.

Title	**Aircraft Launch and Recovery Equipment Refresher**
CIN	C-604-2016
Model Manager ...	Naval Air Maintenance Training Unit (NAMTRAU) North Island, California
Description	This course provides training to PQS qualified ABE, personnel including: ° Type C MK-13 Series Catapult Operation Upon completion, the student will be able operate MK-13 Series Catapults aboard CV and CVN ships under supervision.
Location	° NAMTRAU Norfolk, Virginia ° NAMTRAU North Island
Length	11 days
RFT date	Currently available. TBD with ALRCS.
Skill identifier	None
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° ABE Rating ° Paygrade E-5 through E-9

Title	**Aircraft Launch and Recovery Equipment Quality Assurance Administration**
CIN	C-604-2017
Model Manager ...	NAMTRAU Norfolk
Description	This course provides training to ABE, EM, and AZ personnel, including: ° ALRE Quality Assurance Program Overview ° Quality Assurance Instructions and Directives ° Quality Assurance Record Maintenance ° Quality Assurance Reports ° Monitoring Procedures Upon completion, the student will be able to administer and maintain a Quality Assurance Program aboard CV and CVN ships under all conditions of readiness, under limited supervision.
Location	° NAMTRAU Norfolk ° NAMTRAU North Island
Length	5 days
RFT date	Currently available. TBD with ALRCS.
Skill identifier	None
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° AZ Rating ° Paygrades E-4 through E-6 ° Assigned to V-2 Division or ° ABE or EM Rating ° Paygrade E-6 through E-9

Title	**Aircraft Launch and Recovery Equipment - Catapult Basic**
CIN	C-604-2024
Model Manager ...	NAMTRAU North Island
Description	This course provides training to ABE, EM, and AZ personnel, including: ° Basic Catapult System ° Catapult Operational Phases ° Component Identification ° Basic Troubleshooting ° Operation and Maintenance Publications ° Safety Precautions Upon completion, the student will be able to perform basic catapult maintenance functions aboard CV and CVN ships under close supervision.
Location	° NAMTRAU Norfolk ° NAMTRAU North Island
Length	10 days
RFT date	Currently available. TBD with ALRCS.
Skill identifier	None
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° ABE Rating ° Paygrades E-1 through E-9 (may be Non-Designated Airman striking for ABE rating)

Title	**Aircraft Launch and Recovery Equipment Arresting Gear**
CIN	C-604-2025
Model Manager ...	NAMTRAU North Island
Description	This course provides Aircraft Launch and Recovery personnel with sufficient knowledge of the MK-7 Arresting Gear System, including: ° Operational Phases ° Component Identification ° Basic Troubleshooting ° Safety Precautions Upon completion, the student will be able to perform arresting gear maintenance under close supervision.
Location	° NAMTRAU Norfolk ° NAMTRAU North Island
Length	9 days
RFT date	Currently available. TBD with ALRCS.
Skill identifier	None
TTE/TD	Additional TTE and TDs to support ALRCS are TBD.
Prerequisites	° ABE Rating ° Paygrades E-1 through E-9 (may be Non-Designated Airman striking for ABE rating)

(3) Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
ABE	° C-604-2012, Aviation Boatswain's Mate Aircraft Launching And Recovery Equipment Class A1
EM	° A-651-0118, Engineering Common Core ° A-651-0119, Engineering Electrical Core
AZ	° C-555-2010, Aviation Maintenance Administrationman Class A1

(4) Training Pipelines. No new training pipelines, tracks, or courses will be required to support ALRCS.

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development

a. Maintenance Training Improvement Program. NA

b. Aviation Maintenance Training Continuum System. NA

2. Personnel Qualification Standards. The following Naval Education and Training (NAVEDTRA) PQS publications will require revision to include applicable ADMACS, ISIS, VISUAL, and ALRCS information:

TITLE	NUMBER	MODEL MANAGER
Air Department MK 7 Arresting Gear	NAVEDTRA 43426-6C	Commander Naval Airforce Atlantic (COMNAVAIRLANT)
Air Department Steam Catapults	NAVEDTRA 42426-5D	COMNAVAIRLANT
Aircraft Launch And Recovery Officer	NAVEDTRA 43443-A	COMNAVAIRLANT
Amphibious Air Traffic Control Center/Helicopter Direction Center	NAVEDTRA 43315-6B	Commander Tactical Group ONE
CV/CVN Air Traffic Control Center	NAVEDTRA 43496-6C/SA	COMNAVAIRLANT
CV/CVN Air Traffic Control Center	NAVEDTRA 43496-6C	COMNAVAIRLANT
Fresnel Lens	NAVEDTRA 43225-6B	Commander Naval Airforce Pacific (COMNAVAIRPAC)
Fresnel Lens	NAVEDTRA 43225-6B/SA	COMNAVAIRPAC
Integrated Launch and Recovery Television System	NAVEDTRA 43225-7B	COMNAVAIRPAC
Integrated Launch and Recovery Television System	NAVEDTRA 43225-7B/SA	COMNAVAIRPAC

TITLE	NUMBER	MODEL MANAGER
Joint Maritime Command Information System Operator	NAVEDTRA 43555	Fleet Combat Training Center Atlantic (FCTCLANT)
Joint Maritime Command Information System, Administrator	NAVEDTRA 43555-2	FCTCLANT
Joint Maritime Command Information System Watch Officer/Manager	NAVEDTRA 43555-1	FCTCLANT
Landing Signalman Enlisted	NAVEDTRA 43436-A	COMNAVAIRPAC
Steam Catapult/Arresting Gear Electrician	NAVEDTRA 43426-25B	COMNAVAIRLANT
Steam Catapult/Arresting Gear Electrician	NAVEDTRA 43426-25B/S	COMNAVAIRLANT
Tactical Air Control Center	NAVEDTRA 43472-A	Commander Amphibious Group THREE

3. Other Onboard or In-Service Training Packages. Training requirements for ADMACS and ISIS manual data input operators not within the AC rating will be satisfied through OJT. Non-rated Non-Designated Airman and ABE personnel in paygrades E-3 through E-5 assigned to CV and CVN V-2 Divisions perform OJT in conjunction with PQS.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

a. Aviation Data Management And Control System and Integrated Shipboard Information System. ADMACS and ISIS are being developed and integrated by NAWCADLKE using GOTS, COTS, and NDI Procurement.

b. Magazine Arrangement Planning Aid-Computerized. MAPA-C is being developed and manufactured by NAWCADLKE using Government Furnished Equipment (GFE).

c. Virtual Imaging System for Approach and Landing

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N68335-00-C-0372	Boeing Aircraft Corporation	3370 East Miraloma Avenue Anaheim, CA 92806

d. Advanced Launch and Recovery Control System. TBD

2. Program Documentation. The ADMACS ORD (Number 459-88-97, dated April 1997) includes the ISIS, MAPA-C, VISUAL, and ALRCS programs. No individual ORDs will be published for these programs.

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The Initial Integrated Logistics Support Plan (ILSP), ILSP-82095001, was approved in October 1996. Maintenance Plans for ADMACS and ISIS are under development.

b. Magazine Arrangement Planning Aid-Computerized. A Preliminary Reference Manual for the MAPA-C Feasibility Model, SEA 03W46:MS, was published in June 1997.

c. Virtual Imaging System for Approach and Landing. An Acquisition Strategy for VISUAL was approved in June 1997 and updated in 1999. An Executive Summary for VISUAL, Increment III of ADMACS, was published April 1998.

d. Advanced Launch and Recovery Control System. An Executive Summary for ALRCS, Increment IV of ADMACS, was published in April 1998. A Detailed Plan of Action and Milestones for ALRCS, CVN Study Effort, was published in May 1998.

3. Technical Data Plan

a. Aviation Data Management And Control System and Integrated Shipboard Information System. NAWCADLKE is currently developing preliminary operator and maintenance manuals, as well as final operation and maintenance manuals with illustrated parts breakdown for the ADMACS and ISIS.

b. Magazine Arrangement Planning Aid-Computerized. NAWCADLKE will provide all required technical manuals for MAPA-C installation, operation, and maintenance.

c. Virtual Imaging System for Approach and Landing. All required technical publications will be provided by the contractor.

d. Advanced Launch and Recovery Control System. A Technical Data Plan has not been established at this time for ALRCS. When a plan has been established, the information will be included in future updates to this NTSP.

4. Test Sets, Tools, and Test Equipment. No new test sets, tools, or test equipment will be required to support ADMACS and ISIS, MAPA-C, or VISUAL. Some new support equipment may be required to support ALRCS. When this information is known, it will be added to updates to this NTSP.

5. Repair Parts

a. Aviation Data Management And Control System and Integrated Shipboard Information System. Supply support will be managed under the Primary Support Inventory Control Point (PSICP) concept. The PSICP will maintain land-based and shipboard allowance stock levels at Fleet Industrial Supply Centers (FISC) and fleet activities. Fleet users will requisition these items from FISC via military standard requisition and issue procedures. Interim support will be the responsibility of NAWCADLKE until the Material Support Date (MSD) is achieved in June 2002.

b. Magazine Arrangement Planning Aid-Computerized. Since the installation of MAPA-C is being funded by the Type Commanders and all hardware will be obtained through COTS procurement actions, no formal MSD will be established. Hardware replacements will be obtained through normal supply channels. Software replacements will be provided by NAWCADLKE.

c. Virtual Imaging System for Approach and Landing. Navy Supply Center Mechanicsburg, Pennsylvania, will serve as the PSICP after the MSD. MSD is scheduled for FY06. Prior to MSD, PSICP Mechanicsburg will provide interim support.

d. Advanced Launch and Recovery Control System. A Material Support Plan has not been established for ALRCS. When this information becomes available it will be included in updates to this NTSP.

6. Human Systems Integration. A human engineering effort has been integrated into the program to develop and improve the man-machine interface and to achieve required effectiveness of human performance during system operation and maintenance. The efforts for ADMACS and each of its components includes a Fleet Project Team composed of fleet representatives for whom the equipment will support. This will provide direct feedback on the effectiveness of the equipment and how it will be used. The human engineering effort includes, but is not necessarily be limited to, active participation in the following three major interrelated areas of system development: analysis, design and development, and test and evaluation.

K. SCHEDULES

1. Installation and Delivery Schedules

a. Aviation Data Management And Control System and Integrated Shipboard Information System. Funding for installations of ADMACS and ISIS is currently limited to CV and CVN ships. An installation schedule for ADMACS and ISIS aboard LHA and LHD ships will not be developed until funding becomes available. ADMACS and ISIS will not be installed aboard the USS Constellation (CV 64), due to scheduled decommissioning in FY02. Additionally, ADMACS and ISIS are not being installed at this time aboard USS Enterprise (CVN 65), USS John F. Kennedy (CV 67), and USS Carl Vinson (CVN 70).

PROCUREMENT AND INSTALLATION SCHEDULE

ACTIVITY	PROCUREMENT	INSTALLATION
USS Kitty Hawk, CV 63	FY01	FY02
USS Nimitz, CVN 68	FY98	FY00
USS Dwight D. Eisenhower, CVN 69	FY00	FY02
USS Theodore Roosevelt, CVN 71	FY01	FY02
USS Abraham Lincoln, CVN 72	FY00	FY01
USS George Washington, CVN 73	FY00	FY01
USS John C. Stennis, CVN 74	FY00	FY01
USS Harry S. Truman, CVN 75	FY00	FY01
USS Ronald Reagan, CVN 76	FY00	FY01

b. Magazine Arrangement Planning Aid-Computerized. MAPA-C will be installed concurrently with ADMACS and ISIS.

c. Virtual Imaging System for Approach and Landing. The VISUAL will be procured by the Navy at NAWCADLKE. NAWCADLKE will act as the system development agent. Current plans call for 12 CV and CVN configuration VISUAL systems to be procured and installed in FY06. The procurement and installation of amphibious configuration VISUAL systems is currently on hold for funding. When more definitive installation information becomes available it will be included in updates to this NTSP.

d. Advanced Launch and Recovery Control System. TBD

2. Ready For Operational Use Schedule

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The ADMACS and ISIS are considered Ready For Operational Use (RFOU) upon completion of installation and system checkout.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C will be RFOU upon completion of installation.

c. Virtual Imaging System for Approach and Landing. The VISUAL will be RFOU upon successful completion of the Performance and Certification Survey conducted by the Support Equipment and In-Service Engineering Division, Performance and Certification Branch, NAWCADLKE.

d. Advanced Launch and Recovery Control System. TBD

3. Time Required to Install at Operational Sites

a. Aviation Data Management And Control System and Integrated Shipboard Information System. Approximately four months will be required for equipment installation, check-out, and grooming.

b. Magazine Arrangement Planning Aid-Computerized. The MAPA-C will require approximately one week for installation and check-out.

c. Virtual Imaging System for Approach and Landing. TBD

d. Advanced Launch and Recovery Control System. TBD

4. Foreign Military Sales and Other Source Delivery Schedule. NA

5. Training Device and Technical Training Equipment Delivery Schedule

a. Aviation Data Management And Control System and Integrated Shipboard Information System. The CV and CVN version of ISIS has been installed at NATTC Pensacola.

b. Magazine Arrangement Planning Aid-Computerized. NA

c. Virtual Imaging System for Approach and Landing. The following TTE will be required to support VISUAL training. Required delivery dates have not been established at this early stage of development. When delivery dates have been determined they will be included in future updates to element IV.A.1 of this NTSP.

EQUIPMENT REQUIRED	QUANTITY REQUIRED	COURSE SUPPORTED	TRAINING LOCATION
CV and CVN Version LSO Workstation	2	D-2G-0001 D-2G-0002 D-2G-0003	Navy LSO School NAS Oceana
CV and CVN Version LSO Workstation	1	C-670-2010	NATTC DET Lakehurst
Amphibious Version LSO Workstation	1	A-670-0064	Service School Command Great Lakes
VISUAL Components (Note)	1 set	A-191-0011	Service School Command Great Lakes

Note: This TTE requirement consists of new VISUAL components that will replace existing ILARTS components. When more information becomes available it will be included in future updates to this NTSP.

d. Advanced Launch and Recovery Control System. TBD

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
Aircraft Carrier Visual Landing Aids Systems Navy Training System Plan	A-50-9202A/A	PMA251	Approved Nov 99
Amphibious Assault Ship Visual Landing Aids Systems Navy Training System Plan	A-50-9203A/A	PMA251	Approved Jul 00
Air Capable Ship Visual Landing Aids Systems Navy Training System Plan	A-50-9205A/P	PMA251	Proposed Feb 00

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
Integrated Logistics Support Plan for the Aviation Data Management and Control System	ILSP-82095001	PMA251	Approved Oct 96
Integrated Logistics Support Plan for the Integrated Shipboard Information System	ILSP-82094001	PMA251	Approved Apr 95
Maintenance Plan for ISIS	MP M84097002	PMA251	In Work
Maintenance Plan for ADMACS	MP M90097001	PMA251	In Work
Acquisition Strategy for VISUAL	NA	PMA251	Approved Jun 97
Detailed Plan of Action and Milestones, CVN Study Effort	NA	PMA251	May 98
Operational Requirements Document for ADMACS	459-88-97	PMA251	Approved Oct 97
Aviation Data Management And Control System Initial Navy Training System Plan	N78-NTSP-A-50-0009	PMA251	Initial Jun 99
Virtual Imaging System for Approach and Landing Initial Navy Training System Plan	NA	PMA251	Initial Feb 00
Advanced Launch and Recovery Control System Initial Navy Training System Plan	NA	PMA251	Initial Sep 99
Acquisition Logistics Support Plan for the Visual Imaging System for Approach and Landing (VISUAL)	ALSP-A84097001	PMA251	Approved Dec 99

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the ADMACS and, therefore, are not included in Part II of this NTSP:

II.A. Billet Requirements

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

II.A. BILLET REQUIREMENTS

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

SOURCE: Total Force Manpower Management System **DATE:** July 2001

ACTIVITY	UIC	PFYs	CFY02	FY03	FY04	FY05	FY06
OPERATIONAL ACTIVITIES - NAVY							
CVW-1	09732	1	0	0	0	0	0
CVW-17	09745	1	0	0	0	0	0
CVW-3	09731	1	0	0	0	0	0
CVW-7	09736	1	0	0	0	0	0
CVW-8	09748	1	0	0	0	0	0
CVWR-20	09393	1	0	0	0	0	0
USS Bataan (LHD 5)	21879	1	0	0	0	0	0
USS Dwight D. Eisenhower (CVN 69)	03369	1	0	0	0	0	0
USS Enterprise (CVN 65)	03365	1	0	0	0	0	0
USS George Washington (CVN 73)	21412	1	0	0	0	0	0
USS Harry S. Truman (CVN 75)	21853	1	0	0	0	0	0
USS Iwo Jima (LHD 7)	23027	1	0	0	0	0	0
USS John F. Kennedy (CV 67)	03367	1	0	0	0	0	0
USS Kearsarge (LHD 3)	21700	1	0	0	0	0	0
USS Nassau (LHA 4)	20725	1	0	0	0	0	0
USS Ronald Reagan (CVN 76)	22178	0	1	0	0	0	0
USS Saipan (LHA 2)	20632	1	0	0	0	0	0
USS Theodore Roosevelt (CVN 71)	21247	1	0	0	0	0	0
USS Wasp (LHD 1)	21560	1	0	0	0	0	0
VAW-120	09527	1	0	0	0	0	0
VAW-121	09467	1	0	0	0	0	0
VAW-123	09477	1	0	0	0	0	0
VAW-124	09526	1	0	0	0	0	0
VAW-125	09922	1	0	0	0	0	0
VAW-126	09963	1	0	0	0	0	0
VAW-78	09102	1	0	0	0	0	0
VF-101	09067	1	0	0	0	0	0
VF-102	09717	1	0	0	0	0	0
VF-103	09718	1	0	0	0	0	0
VF-11	09560	1	0	0	0	0	0
VF-143	09281	1	0	0	0	0	0
VF-2	09113	1	0	0	0	0	0
VF-213	09934	1	0	0	0	0	0
VF-31	09473	1	0	0	0	0	0
VF-32	09053	1	0	0	0	0	0
VF-41	09774	1	0	0	0	0	0
VFA-105	65183	1	0	0	0	0	0
VFA-106	09679	1	0	0	0	0	0
VFA-131	63934	1	0	0	0	0	0
VFA-136	55141	1	0	0	0	0	0
VFA-15	09015	1	0	0	0	0	0
VFA-203	09030	1	0	0	0	0	0

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

SOURCE: Total Force Manpower Management System **DATE:** July 2001

ACTIVITY	UIC	PFYs	CFY02	FY03	FY04	FY05	FY06
VFA-204	09032	1	0	0	0	0	0
VFA-34	09070	1	0	0	0	0	0
VFA-37	09478	1	0	0	0	0	0
VFA-81	09221	1	0	0	0	0	0
VFA-82	09122	1	0	0	0	0	0
VFA-83	09223	1	0	0	0	0	0
VFA-86	09943	1	0	0	0	0	0
VFA-87	63922	1	0	0	0	0	0
VMFA-312	09253	1	0	0	0	0	0
VS-22	09287	1	0	0	0	0	0
VS-24	09629	1	0	0	0	0	0
VS-30	09226	1	0	0	0	0	0
VS-31	09573	1	0	0	0	0	0
VS-32	09353	1	0	0	0	0	0
CVW-11	09734	1	0	0	0	0	0
CVW-2	09742	1	0	0	0	0	0
CVW-5	09733	1	0	0	0	0	0
CVW-9	09738	1	0	0	0	0	0
USS Abraham Lincoln (CVN 72)	21297	1	0	0	0	0	0
USS Belleau Wood (LHA 3)	20633	1	0	0	0	0	0
USS Bonhomme Richard (LHD 6)	22202	1	0	0	0	0	0
USS Boxer (LHD 4)	21808	1	0	0	0	0	0
USS Carl Vinson (CVN 70)	20993	1	0	0	0	0	0
USS Constellation (CV 64)	03364	1	0	0	0	0	0
USS Essex (LHD 2)	21533	1	0	0	0	0	0
USS John C. Stennis (CVN 74)	21847	1	0	0	0	0	0
USS Kitty Hawk (CV 63)	03363	1	0	0	0	0	0
USS Nimitz (CVN 68)	03368	1	0	0	0	0	0
USS Peleliu (LHA 5)	20748	1	0	0	0	0	0
USS Tarawa (LHA 1)	20550	1	0	0	0	0	0
VAQ-112	09458	1	0	0	0	0	0
VAQ-129	09995	1	0	0	0	0	0
VAW-112	09458	1	0	0	0	0	0
VAW-113	09459	1	0	0	0	0	0
VAW-113	09459	1	0	0	0	0	0
VAW-115	09463	1	0	0	0	0	0
VAW-115	09463	1	0	0	0	0	0
VAW-116	09465	1	0	0	0	0	0
VAW-116	09465	1	0	0	0	0	0
VAW-117	09985	1	0	0	0	0	0
VAW-117	09985	1	0	0	0	0	0
VF-154	09678	1	0	0	0	0	0
VFA-113	09092	1	0	0	0	0	0
VFA-115	09604	1	0	0	0	0	0
VFA-122	09355	1	0	0	0	0	0
VFA-125	09485	1	0	0	0	0	0
VFA-137	55142	1	0	0	0	0	0

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

SOURCE: Total Force Manpower Management System **DATE:** July 2001

ACTIVITY	UIC	PFYs	CFY02	FY03	FY04	FY05	FY06
VFA-146	09063	1	0	0	0	0	0
VFA-147	63925	1	0	0	0	0	0
VFA-151	09558	1	0	0	0	0	0
VFA-192	09076	1	0	0	0	0	0
VFA-195	09706	1	0	0	0	0	0
VFA-201	09309	1	0	0	0	0	0
VFA-22	09561	1	0	0	0	0	0
VFA-25	09637	1	0	0	0	0	0
VFA-27	65185	1	0	0	0	0	0
VFA-94	09295	1	0	0	0	0	0
VFA-97	63923	1	0	0	0	0	0
VS-21	09739	1	0	0	0	0	0
VS-29	09204	1	0	0	0	0	0
VS-33	09263	1	0	0	0	0	0
VS-35	09345	1	0	0	0	0	0
VS-38	09192	1	0	0	0	0	0
VS-41	09298	1	0	0	0	0	0
TOTAL:		105	1	0	0	0	0
OPERATIONAL ACTIVITIES - USMC							
VFMA-115	09234	1	0	0	0	0	0
VMAQ-1	41345	1	0	0	0	0	0
VMAQ-2	42362	1	0	0	0	0	0
VMAQ-3	42363	1	0	0	0	0	0
VMAQ-4	67837	1	0	0	0	0	0
VMFA-122	09407	1	0	0	0	0	0
VMFA-224	09501	1	0	0	0	0	0
VMFA-251	09241	1	0	0	0	0	0
VMFA-332	09193	1	0	0	0	0	0
VMFA-533	60169	1	0	0	0	0	0
VFMA-242	31200	1	0	0	0	0	0
VMFA-121	09257	1	0	0	0	0	0
VMFA-212	09112	1	0	0	0	0	0
VMFA-225	09232	1	0	0	0	0	0
VMFA-232	09242	1	0	0	0	0	0
VMFA-314	09230	1	0	0	0	0	0
VMFA-323	09235	1	0	0	0	0	0
VMFAT-101	53900	1	0	0	0	0	0
TOTAL:		18	0	0	0	0	0
FLEET SUPPORT ACTIVITIES - NAVY							
Landing Signal Officer School	68788	1	0	0	0	0	0
NALF Chesapeake	30774	1	0	0	0	0	0
NAMTRAU Norfolk	66046	1	0	0	0	0	0
NAS Cecil Field	60200	1	0	0	0	0	0
NAS Jacksonville	00207	1	0	0	0	0	0
NAS Oceana	60191	1	0	0	0	0	0

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

SOURCE: Total Force Manpower Management System **DATE:** July 2001

ACTIVITY	UIC	PFYs	CFY02	FY03	FY04	FY05	FY06
Naval Safety Center	48570	1	0	0	0	0	0
NAWCAD Lakehurst	68335	1	0	0	0	0	0
NAWCAD St. Inigoes	64485	1	0	0	0	0	0
NS Roosevelt Roads, Puerto Rico	00389	1	0	0	0	0	0
NS Rota, Spain	62863	1	0	0	0	0	0
NSA Naples, Italy	62588	1	0	0	0	0	0
Strike Test Squadron	39783	1	0	0	0	0	0
Supervisor of Shipbuilding Newport News	62793	1	0	0	0	0	0
VT-4	0395A	1	0	0	0	0	0
VT-7	0398A	1	0	0	0	0	0
VT-9	09177	1	0	0	0	0	0
COMNAVAIRPAC San Diego	57025	1	0	0	0	0	0
FACSFAC Pearl Harbor	43583	1	0	0	0	0	0
FASOTRAGRUPAC	35947	1	0	0	0	0	0
NAF Atsugi, Japan	62507	1	0	0	0	0	0
NAF Misawa, Japan	68212	1	0	0	0	0	0
NALF San Clemente Island	31466	1	0	0	0	0	0
NAMTRAU North Island	66065	1	0	0	0	0	0
NAS Kingsville	30776	1	0	0	0	0	0
NAS Lemoore	63042	1	0	0	0	0	0
NAS Point Mugu	0429A	1	0	0	0	0	0
NAWCWD China Lake	60530	1	0	0	0	0	0
TACRON-12 DET Sasebo, Japan	55623	1	0	0	0	0	0
VT-21	0400A	1	0	0	0	0	0
VT-22	0401A	1	0	0	0	0	0
TOTAL:		31	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
OPERATIONAL ACTIVITIES - NAVY					
CVW-1, 09732					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVW-17, 09745					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVW-3, 09731					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVW-7, 09736					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVW-8, 09748					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVWR-20, 09393					
SELRES	2	0	1312		
ACTIVITY TOTAL:	2	0			
USS Bataan (LHD 5), 21879					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS Dwight D. Eisenhower (CVN 69), 03369					
ACDU	1	0	6310		
	0	1	ABECS	7005	
	0	1	ABECS	7006	
	0	3	ABEC	7004	

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
ACDU	0	2	ABEC	7005	
	0	1	ABEC	7006	
	0	8	ABE1	7004	
	0	5	ABE1	7005	
	0	2	ABE1	7006	
	0	3	ABE2		
	0	15	ABE2	7004	
	0	4	ABE2	7005	
	0	1	ABE2	7005	9595
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	10	AC2	6902	
	0	8	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	4	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	2	IC2	4745	
	0	3	IC3	4743	
	0	88	AN		
ACTIVITY TOTAL:	1	245			
USS Enterprise (CVN 65), 03365					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	32	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	

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
ACDU	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	2	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	2	IC2	4745	
	0	1	IC3	4743	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	247			
USS George Washington (CVN 73), 21412					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		

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	240			
USS Harry S. Truman (CVN 75), 21853					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Iwo Jima (LHD 7), 23027					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS John F. Kennedy (CV 67), 03367					

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
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	40	ABE3		
	0	28	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	1	IC2	4745	
	0	1	IC3	4743	
	0	1	IC3	4745	
	0	86	AN		
ACTIVITY TOTAL:	1	239			
USS Kearsarge (LHD 3), 21700					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS Nassau (LHA 4), 20725					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	

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
ACDU	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	4728
	0	1	IC2	4756	4779
ACTIVITY TOTAL:	0	14			
USS Ronald Reagan (CVN 76), 22178, FY03 Increment					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Saipan (LHA 2), 20632					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	4728
	0	1	IC2	4756	4779

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:	0	14			
USS Theodore Roosevelt (CVN 71), 21247					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Wasp (LHD 1), 21560					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
VAW-120, 09527					
ACDU	4	0	1312		

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	0			
VAW-121, 09467					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-123, 09477					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-124, 09526					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-125, 09922					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-126, 09963					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-78, 09102					
SELRES	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-101, 09067					
ACDU	7	0	1312		
ACTIVITY TOTAL:	7	0			
VF-102, 09717					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-103, 09718					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	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
VF-11, 09560					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-143, 09281					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-2, 09113					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-213, 09934					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-31, 09473					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-32, 09053					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VF-41, 09774					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-105, 65183					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-106, 09679					
ACDU	6	0	1312		
ACTIVITY TOTAL:	6	0			
VFA-131, 63934					
ACDU	2	0	1311		

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:	2	0			
VFA-136, 55141					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-15, 09015					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-203, 09030					
SELRES	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-204, 09032					
SELRES	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-34, 09070					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-37, 09478					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-81, 09221					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-82, 09122					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-83, 09223					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-86, 09943					

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
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-87, 63922					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VMFA-312, 09253					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VS-22, 09287					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-24, 09629					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-30, 09226					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-31, 09573					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-32, 09353					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
CVW-11, 09734					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
CVW-2, 09742					
ACDU	2	0	1312		

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:	2	0			
CVW-5, 09733					
ACDU	3	0	1312		
ACTIVITY TOTAL:	3	0			
CVW-9, 09738					
ACDU	2	0	1312		
ACTIVITY TOTAL:	2	0			
USS Abraham Lincoln (CVN 72), 21297					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Belleau Wood (LHA 3), 20633					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	

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
ACDU	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	4728
	0	1	IC2	4756	4779
ACTIVITY TOTAL:	0	14			
USS Bonhomme Richard (LHD 6), 22202					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS Boxer (LHD 4), 21808					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS Carl Vinson (CVN 70), 20993					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	14	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	

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
ACDU	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	246			
USS Constellation (CV 64), 03364					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	40	ABE3		
	0	29	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	2	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	2	IC2	4745	
	0	2	IC3	4743	
	0	1	IC3	4745	
	0	86	AN		

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	241			
USS Essex (LHD 2), 21533					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	
	0	1	IC1	4779	4728
	0	1	IC2	4779	
ACTIVITY TOTAL:	0	15			
USS John C. Stennis (CVN 74), 21847					
ACDU	1	0	6310		
	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4745	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Kitty Hawk (CV 63), 03363					
ACDU	1	0	6310		

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
ACDU	0	2	ABECS	7006	
	0	5	ABEC	7004	
	0	3	ABEC	7005	
	0	2	ABEC	7006	
	0	11	ABE1	7004	
	0	2	ABE1	7005	
	0	3	ABE1	7006	
	0	3	ABE2		
	0	8	ABE2	7004	
	0	8	ABE2	7005	
	0	38	ABE3		
	0	31	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	3	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	1	IC2	4745	
	0	1	IC3	4743	
	0	1	IC3	4745	
	0	89	AN		
ACTIVITY TOTAL:	1	243			
USS Nimitz (CVN 68), 03368					
ACDU	1	0	6310		
	0	1	ABECS	7004	
	0	1	ABECS	7005	
	0	1	ABECS	7006	
	0	2	ABEC	7004	
	0	2	ABEC	7005	
	0	1	ABEC	7006	
	0	8	ABE1	7004	
	0	3	ABE1	7005	
	0	2	ABE1	7006	
	0	3	ABE2		
	0	13	ABE2	7004	
	0	6	ABE2	7005	
	0	1	ABE2	7005	9595

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
ACDU	0	42	ABE3		
	0	27	ABEAN		
	0	1	ACCS	6902	
	0	1	ACC	6902	
	0	4	AC1	6902	
	0	11	AC2	6902	
	0	6	AC3	6902	
	0	1	AZ1		
	0	1	AZ3		
	0	1	EM1	4672	
	0	1	EM2	4672	
	0	2	EM3	4672	
	0	1	ICC	4745	
	0	2	IC1	4743	
	0	1	IC1	4745	
	0	1	IC2	4743	
	0	2	IC2	4745	
	0	2	IC3	4743	
	0	1	IC3	4745	
	0	88	AN		
ACTIVITY TOTAL:	1	240			
USS Peleliu (LHA 5), 20748					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	4728
	0	1	IC2	4756	4779
ACTIVITY TOTAL:	0	14			
USS Tarawa (LHA 1), 20550					
ACDU	0	1	ACC	6903	
	0	1	AC1	6903	
	0	7	AC2	6903	
	0	3	AC3	6903	
	0	1	IC1	4779	4728
	0	1	IC2	4756	4779
ACTIVITY TOTAL:	0	14			
VAQ-112, 09458					
ACDU	1	0	1311		
ACTIVITY TOTAL:	1	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
VAQ-129, 09995					
ACDU	4	0	1312		
ACTIVITY TOTAL:	4	0			
VAW-112, 09458					
ACDU	1	0	1311		
ACTIVITY TOTAL:	1	0			
VAW-113, 09459					
ACDU	1	0	1311		
	1	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-115, 09463					
ACDU	1	0	1311		
	1	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-116, 09465					
ACDU	1	0	1311		
	1	0	1311		
ACTIVITY TOTAL:	2	0			
VAW-117, 09985					
ACDU	1	0	1311		
	1	0	1311		
ACTIVITY TOTAL:	2	0			
VF-154, 09678					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-113, 09092					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-115, 09604					
ACDU	2	0	1311		

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:	2	0			
VFA-122, 09355					
ACDU	6	0	1312		
ACTIVITY TOTAL:	6	0			
VFA-125, 09485					
ACDU	6	0	1312		
ACTIVITY TOTAL:	6	0			
VFA-137, 55142					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-146, 09063					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-147, 63925					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-151, 09558					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-192, 09076					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-195, 09706					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-201, 09309					
SELRES	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-22, 09561					

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
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-25, 09637					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-27, 65185					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-94, 09295					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VFA-97, 63923					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-21, 09739					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-29, 09204					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-33, 09263					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-35, 09345					
ACDU	2	0	1311		
ACTIVITY TOTAL:	2	0			
VS-38, 09192					
ACDU	2	0	1311		

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:	2	0			
VS-41, 09298					
ACDU	6	0	1312		
ACTIVITY TOTAL:	6	0			
OPERATIONAL ACTIVITIES - USMC					
VFMA-115, 09234					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMAQ-1, 41345					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMAQ-2, 42362					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMAQ-3, 42363					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMAQ-4, 67837					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-122, 09407					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-224, 09501					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-251, 09241					
USMC	2	0	7593		

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:	2	0			
VMFA-332, 09193					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-533, 60169					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VFMA-242, 31200					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-121, 09257					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-212, 09112					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-225, 09232					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-232, 09242					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-314, 09230					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	0			
VMFA-323, 09235					
USMC	2	0	7593		
ACTIVITY TOTAL:	2	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
VMFAT-101, 53900					
USMC	6	0	7594		
ACTIVITY TOTAL:	6	0			
FLEET SUPPORT ACTIVITIES - NAVY					
Landing Signal Officer School, 68788					
ACDU	3	0	1312		
ACTIVITY TOTAL:	3	0			
NALF Chesapeake, 30774					
ACDU	0	1	IC2	4745	
ACTIVITY TOTAL:	0	1			
NAMTRAU Norfolk, 66046					
ACDU	0	1	ABECS	7006	9502
	0	1	ABEC	7006	9502
	0	1	ABE1	7006	9502
ACTIVITY TOTAL:	0	3			
NAS Cecil Field, 60200					
ACDU	0	1	ACCS	6902	
	0	3	ACC	6902	
	0	13	AC1	6902	
	0	25	AC2	6902	
	0	11	AC3	6902	
	0	10	ACAN	6902	
ACTIVITY TOTAL:	0	63			
NAS Jacksonville, 00207					
ACDU	0	1	ACCS	6901	6902
	0	2	ACC	6901	6902
	0	20	AC1	6901	6902
	0	18	AC2	6901	6902
	0	10	AC3	6901	6902
ACTIVITY TOTAL:	0	51			
NAS Oceana, 60191					
ACDU	0	1	IC1	4745	
	0	2	IC2	4745	
	0	3	IC3	4745	
ACTIVITY TOTAL:	0	6			

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
Naval Safety Center, 48570					
ACDU	0	1	ACCS	6902	
ACTIVITY TOTAL:	0	1			
NAWCAD Lakehurst, 68335					
ACDU	3	0	6310		
	0	1	ABEC	7004	7005
	0	2	ABEC	7006	
	0	1	ABE1	7004	
	0	2	ABE1	7005	
	0	1	ABE1	7006	
	0	6	ABE2	7004	
	0	2	ABE2	7005	
	0	2	ABE2	7005	7004
ACTIVITY TOTAL:	3	17			
NAWCAD St. Inigoes, 64485					
ACDU	0	1	ACCM	6902	
	0	1	ACC	6902	
	0	1	ACC	6902	6901
ACTIVITY TOTAL:	0	3			
NS Roosevelt Roads, Puerto Rico, 00389					
ACDU	0	2	ABE1	7005	
	0	2	ABE2	7005	
ACTIVITY TOTAL:	0	4			
NS Rota, Spain, 62863					
ACDU	0	2	ABE2	7005	
ACTIVITY TOTAL:	0	2			
NSA Naples, Italy, 62588					
ACDU	0	1	ABE1	7006	9598
ACTIVITY TOTAL:	0	1			
Strike Test Squadron, 39783					
ACDU	1	0	1312		
	1	0	6310		
	0	1	ABEC	7004	7005
	0	1	ABE1	7004	

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
ACDU	0	1	ABE1	7005	
ACTIVITY TOTAL:	2	3			
Supervisor of Shipbuilding Newport News, 62793					
ACDU	0	1	ABEC	7006	
ACTIVITY TOTAL:	0	1			
VT-4, 0395A					
ACDU	4	0	1312		
SELRES	1	0	1312		
ACTIVITY TOTAL:	5	0			
VT-7, 0398A					
ACDU	1	0	1312		
ACTIVITY TOTAL:	1	0			
COMNAVAIRPAC San Diego, 57025					
ACDU	1	0	1312		
	0	1	ABECS	7004	
	0	1	ACCS	6902	
ACTIVITY TOTAL:	1	2			
FACSFAC Pearl Harbor, 43583					
ACDU	0	4	AC1	6902	
ACTIVITY TOTAL:	0	4			
FASOTRAGRUPAC, 35947					
ACDU	0	1	ACCS	6902	
ACTIVITY TOTAL:	0	1			
NAF Atsugi, Japan, 62507					
ACDU	0	1	IC2	4745	
SELRES	0	2	IC3	4745	
ACTIVITY TOTAL:	0	3			
NAF Misawa, Japan, 68212					
SELRES	0	1	IC3	4745	
ACTIVITY TOTAL:	0	1			

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
NALF San Clemente Island, 31466					
ACDU	0	1	ACCM	6902	
	0	2	ACC	6902	
	0	4	AC1	6902	
	0	10	AC2	6902	
	0	7	AC3	6902	
	0	2	ACAN	6902	
ACTIVITY TOTAL:	0	26			
NAMTRAU North Island, 66065					
ACDU	0	2	ABEC	7006	9502
	0	3	ABE1	7006	9502
ACTIVITY TOTAL:	0	5			
NAS Kingsville, 30776					
ACDU	0	1	ABE1	7005	
SELRES	0	1	ABE1	7005	
ACTIVITY TOTAL:	0	2			
NAS Lemoore, 63042					
ACDU	0	1	ABECS	7006	
	0	1	ABE1	7005	7006
	0	1	ACCM	6901	6902
ACTIVITY TOTAL:	0	3			
NAS Point Mugu, 0429A					
ACDU	0	2	IC2	4745	
ACTIVITY TOTAL:	0	2			
NAWCWD China Lake, 60530					
ACDU	0	1	IC2	4745	
ACTIVITY TOTAL:	0	1			
TACRON-12 DET Sasebo, Japan, 55623					
ACDU	0	1	AC3	6903	
ACTIVITY TOTAL:	0	1			

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
VT-21, 0400A					
ACDU	4	0	1312		
SELRES	1	0	1312		
ACTIVITY TOTAL:	5	0			
VT-22, 0401A					
ACDU	4	0	1312		
ACTIVITY TOTAL:	4	0			

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
NAVY OPERATIONAL ACTIVITIES - ACDU														
1311			108		0		0		0		0		0	
1312			58		0		0		0		0		0	
6310			12		0		1		0		0		0	
ABECS	7004			1		0		0		0		0		0
ABECS	7005			2		0		0		0		0		0
ABECS	7006			22		0		2		0		0		0
ABEC	7004			55		0		5		0		0		0
ABEC	7005			34		0		3		0		0		0
ABEC	7006			22		0		2		0		0		0
ABE1	7004			126		0		11		0		0		0
ABE1	7005			28		0		2		0		0		0
ABE1	7006			34		0		3		0		0		0
ABE2				36		0		3		0		0		0
ABE2	7004			114		0		8		0		0		0
ABE2	7005			90		0		8		0		0		0
ABE2	7005	9595		2		0		0		0		0		0
ABE3				496		0		42		0		0		0
ABEAN				336		0		27		0		0		0
ACCS	6902			12		0		1		0		0		0
ACC	6902			12		0		1		0		0		0
ACC	6903			12		0		0		0		0		0
AC1	6902			48		0		4		0		0		0
AC1	6903			12		0		0		0		0		0
AC2	6902			131		0		11		0		0		0
AC2	6903			84		0		0		0		0		0
AC3	6902			74		0		6		6		0		0
AC3	6903			36		0		0		0		0		0
AZ1				12		0		1		0		0		0
AZ3				12		0		1		0		0		0
EM1	4672			12		0		1		0		0		0
EM2	4672			12		0		1		0		0		0
EM3	4672			24		0		2		0		0		0
ICC	4745			12		0		1		0		0		0
IC1	4743			34		0		3		0		0		0
IC1	4745			12		0		1		0		0		0
IC1	4779			7		0		0		0		0		0
IC1	4779	4728		12		0		0		0		0		0
IC2	4743			6		0		0		0		0		0
IC2	4745			16		0		1		0		0		0
IC2	4756	4779		5		0		0		0		0		0
IC2	4779			7		0		0		0		0		0
IC3	4743			10		0		0		0		0		0
IC3	4745			11		0		1		0		0		0
AN				1053		0		88		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	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
NAVY OPERATIONAL ACTIVITIES - SELRES													
1311		8		0		0		0		0		0	
1312		2		0		0		0		0		0	
NAVY OPERATIONAL ACTIVITIES - USMC													
7593		2		0		0		0		0		0	
USMC OPERATIONAL ACTIVITIES - USMC													
7593		34		0		0		0		0		0	
7594		6		0		0		0		0		0	
NAVY FLEET SUPPORT ACTIVITIES - ACDU													
1312		18		0		0		0		0		0	
6310		4		0		0		0		0		0	
ABECS	7004		1		0		0		0		0		0
ABECS	7006		1		0		0		0		0		0
ABECS	7006 9502		1		0		0		0		0		0
ABEC	7004 7005		2		0		0		0		0		0
ABEC	7006		3		0		0		0		0		0
ABEC	7006 9502		3		0		0		0		0		0
ABE1	7004		2		0		0		0		0		0
ABE1	7005		6		0		0		0		0		0
ABE1	7005 7006		1		0		0		0		0		0
ABE1	7006		1		0		0		0		0		0
ABE1	7006 9502		4		0		0		0		0		0
ABE1	7006 9598		1		0		0		0		0		0
ABE2	7004		6		0		0		0		0		0
ABE2	7005		6		0		0		0		0		0
ABE2	7005 7004		2		0		0		0		0		0
ACCM	6901 6902		1		0		0		0		0		0
ACCM	6902		2		0		0		0		0		0
ACCS	6901 6902		1		0		0		0		0		0
ACCS	6902		4		0		0		0		0		0
ACC	6901 6902		2		0		0		0		0		0
ACC	6902		6		0		0		0		0		0
ACC	6902 6901		1		0		0		0		0		0
AC1	6901 6902		20		0		0		0		0		0
AC1	6902		21		0		0		0		0		0
AC2	6901 6902		18		0		0		0		0		0
AC2	6902		35		0		0		0		0		0
AC3	6901 6902		10		0		0		0		0		0
AC3	6902		18		0		0		0		0		0
AC3	6903		1		0		0		0		0		0
ACAN	6902		12		0		0		0		0		0
IC1	4745		1		0		0		0		0		0
IC2	4745		7		0		0		0		0		0
IC3	4745		3		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	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
NAVY FLEET SUPPORT ACTIVITIES - SELRES													
1312		2		0		0		0		0		0	
ABE1	7005		1		0		0		0		0		0
IC3	4745		3		0		0		0		0		0

SUMMARY TOTALS:

NAVY OPERATIONAL ACTIVITIES - ACDU													
178	3076	0	0	1	240	0	0	0	0	0	0		
NAVY OPERATIONAL ACTIVITIES - SELRES													
10		0		0		0		0		0			
NAVY OPERATIONAL ACTIVITIES - USMC													
2		0		0		0		0		0			
USMC OPERATIONAL ACTIVITIES - USMC													
40		0		0		0		0		0			
NAVY FLEET SUPPORT ACTIVITIES - ACDU													
22	203	0	0	0	0	0	0	0	0	0	0		
NAVY FLEET SUPPORT ACTIVITIES - SELRES													
2	4	0	0	0	0	0	0	0	0	0	0		

GRAND TOTALS:

NAVY - ACDU													
200	3279	0	0	1	240	0	0	0	0	0	0		
NAVY - SELRES													
12	4	0	0	0	0	0	0	0	0	0	0		
NAVY - USMC													
2		0		0		0		0		0			
USMC - USMC													
40		0		0		0		0		0			

II.A.2.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY DEACTIVATION SCHEDULE

SOURCE: Total Force Manpower Management System **DATE:** May 2001

ACTIVITY	UIC	PFYs	CFY02	FY03	FY04	FY05	FY06
OPERATIONAL ACTIVITIES - NAVY							
USS Constellation (CV 64)	03364	0	1	0	0	0	0
TOTAL:		0	1	0	0	0	0

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
NAVY OPERATIONAL ACTIVITIES - ACDU													
6310		1		-1		0		0		0		0	
ABECS	7006		2		-2		0		0		0		0
ABEC	7004		5		-5		0		0		0		0
ABEC	7005		3		-3		0		0		0		0
ABEC	7006		2		-2		0		0		0		0
ABE1	7004		11		-11		0		0		0		0
ABE1	7005		2		-2		0		0		0		0
ABE1	7006		3		-3		0		0		0		0
ABE2			3		-3		0		0		0		0
ABE2	7004		8		-8		0		0		0		0
ABE2	7005		8		-8		0		0		0		0
ABE3			40		-40		0		0		0		0
ABEAN			29		-29		0		0		0		0
ACCS	6902		1		-1		0		0		0		0
ACC	6902		1		-1		0		0		0		0
AC1	6902		4		-4		0		0		0		0
AC2	6902		11		-11		0		0		0		0
AC3	6902		6		-6		0		0		0		0
AZ1			1		-1		0		0		0		0
AZ3			1		-1		0		0		0		0
EM1	4672		1		-1		0		0		0		0
EM2	4672		1		-1		0		0		0		0
EM3	4672		2		-2		0		0		0		0
ICC	4745		1		-1		0		0		0		0
IC1	4743		2		-2		0		0		0		0
IC1	4745		1		-1		0		0		0		0
IC2	4743		1		-1		0		0		0		0
IC2	4745		2		-2		0		0		0		0
IC3	4743		2		-2		0		0		0		0
IC3	4745		1		-2		0		0		0		0
AN			86		-86		0		0		0		0

SUMMARY TOTALS:

NAVY OPERATIONAL ACTIVITIES - ACDU													
		1	241	-1	241	0	0	0	0	0	0	0	0

GRAND TOTALS:

NAVY - ACDU													
		1	241	-1	241	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	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
TRAINING ACTIVITY, LOCATION, UIC: Landing Signal Officer School, NAS Oceana, 68788													
INSTRUCTOR BILLETS													
ACDU													
1312		3	0	3	0	3	0	3	0	3	0	3	0
TOTAL:		3	0	3	0	3	0	3	0	3	0	3	0
TRAINING ACTIVITY, LOCATION, UIC: NAMTRAU Norfolk, 46680													
INSTRUCTOR BILLETS													
ACDU													
ABE1	7004 9502	0	1	0	1	0	1	0	1	0	1	0	1
ABE1	7005 9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:		0	2	0	2	0	2	0	2	0	2	0	2
TRAINING ACTIVITY, LOCATION, UIC: NAMTRAU North Island, 39476													
INSTRUCTOR BILLETS													
ACDU													
ABECS	7006 9502	0	1	0	1	0	1	0	1	0	1	0	1
ABE1	7004 9502	0	1	0	1	0	1	0	1	0	1	0	1
ABE1	7005 9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:		0	3	0	3	0	3	0	3	0	3	0	3

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

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
TRAINING ACTIVITY, LOCATION, UIC: NATTC DET Lakehurst, 63094														
INSTRUCTOR BILLETS														
ACDU														
6310			1	0	1	0	1	0	1	0	1	0	1	0
ABECS	7006	9502	0	1	0	1	0	1	0	1	0	1	0	1
ABEC	7004	9502	0	1	0	1	0	1	0	1	0	1	0	1
ABEC	7005	9502	0	1	0	1	0	1	0	1	0	1	0	1
ABEC	7006	9502	0	2	0	2	0	2	0	2	0	2	0	2
ABE1	7004	9502	0	1	0	1	0	1	0	1	0	1	0	1
ABE1	7005	9502	0	1	0	1	0	1	0	1	0	1	0	1
ABE1	7006	9502	0	2	0	2	0	2	0	2	0	2	0	2
EM1	4672	9502	0	2	0	2	0	2	0	2	0	2	0	2
ICC	4745	9502	0	1	0	1	0	1	0	1	0	1	0	1
IC1	4745	9502	0	2	0	2	0	2	0	2	0	2	0	2
TOTAL:			1	14	1	14	1	14	1	14	1	14	1	14
TRAINING ACTIVITY, LOCATION, UIC: NATTC Pensacola, 63093														
INSTRUCTOR BILLETS														
ACDU														
ACCS	6902	9502	0	1	0	1	0	1	0	1	0	1	0	1
ACCS	6903	9502	0	1	0	1	0	1	0	1	0	1	0	1
ACC	6902	9502	0	5	0	5	0	5	0	5	0	5	0	5
ACC	6903	9502	0	2	0	2	0	2	0	2	0	2	0	2
AC1	6902	9502	0	17	0	17	0	17	0	17	0	17	0	17
AC1	6903	9502	0	10	0	10	0	10	0	10	0	10	0	10
AC2	6903	9502	0	3	0	3	0	3	0	3	0	3	0	3
TOTAL:			0	39	0	39	0	39	0	39	0	39	0	39
TRAINING ACTIVITY, LOCATION, UIC: Service School Command, Naval Training Center, 30626														
INSTRUCTOR BILLETS														
ACDU														
IC1	4743	9502	0	1	0	1	0	1	0	1	0	1	0	1
IC1	4779	9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:			0	2	0	2	0	2	0	2	0	2	0	2

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
Landing Signal Officer School, NAS Oceana, 68788													
	NAVY	0.0		0.0		0.0		0.0		0.0		0.0	
	USMC	0.0		0.0		0.0		0.0		0.0		0.0	
NAMTRAU Norfolk, 46680													
	NAVY		0.0		0.0		0.0		0.0		0.0		0.0
NATTC DET Lakehurst, 63094													
	NAVY	0.3	20.9	0.3	21.5	0.4	24.0	0.4	20.8	0.4	20.8	0.4	20.8
NATTC Pensacola, 63093													
	NAVY		15.9		16.1		17.3		15.9		15.9		15.9
Service School Command, Naval Training Center, Great Lakes, 30626													
	NAVY		4.5		4.8		4.5		4.2		4.2		4.2
NAMTRAU North Island, 39476													
	NAVY		0.0		0.0		0.0		0.0		0.0		0.0
SUMMARY TOTALS:													
	NAVY	0.3	41.3	0.3	42.4	0.4	45.8	0.4	40.9	0.4	40.9	0.4	40.9
	USMC	0.0		0.0		0.0		0.0		0.0		0.0	
GRAND TOTALS:													
		0.3	41.3	0.3	41.3	0.3	42.4	0.4	45.8	0.4	40.9	0.4	40.9

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
a. OFFICER - USN													
Operational Billets ACDU and TAR													
1311			108	0	108	0	108	0	108	0	108	0	108
1312			58	0	58	0	58	0	58	0	58	0	58
6310			12	-1	11	1	12	0	12	0	12	0	12
Fleet Support Billets ACDU and TAR													
1312			18	0	18	0	18	0	18	0	18	0	18
6310			4	0	4	0	4	0	4	0	4	0	4
Staff Billets ACDU and TAR													
1312			3	0	3	0	3	0	3	0	3	0	3
6310			1	0	1	0	1	0	1	0	1	0	1
Chargeable Student Billets ACDU and TAR													
			0	0	0	0	0	1	1	0	1	0	1
SELRES Billets													
1311			8	0	8	0	8	0	8	0	8	0	8
1312			4	0	4	0	4	0	4	0	4	0	4
TOTAL USN OFFICER BILLETS:													
Operational			178	-1	177	1	178	0	178	0	178	0	178
Fleet Support			22	0	22	0	22	0	22	0	22	0	22
Staff			4	0	4	0	4	0	4	0	4	0	4
Chargeable Student			0	0	0	1	1	0	1	0	1	0	1
SELRES			12	0	12	0	12	0	12	0	12	0	12
b. ENLISTED - USN													
Operational Billets ACDU and TAR													
ABECS	7004		1	0	1	0	1	0	1	0	1	0	1
ABECS	7005		2	0	2	0	2	0	2	0	2	0	2
ABECS	7006		22	-2	20	2	22	0	22	0	22	0	22
ABEC	7004		55	-5	50	5	55	0	55	0	55	0	55
ABEC	7005		34	-3	31	3	34	0	34	0	34	0	34
ABEC	7006		22	-2	20	2	22	0	22	0	22	0	22

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
ABE1	7004		126	-11	115	11	126	0	126	0	126	0	1
ABE1	7005		28	-2	26	2	28	0	28	0	28	0	28
ABE1	7006		34	-3	31	3	34	0	34	0	34	0	34
ABE2			36	-3	33	3	36	0	36	0	36	0	36
ABE2	7004		114	-8	106	8	114	0	114	0	114	0	114
ABE2	7005		90	-8	82	8	90	0	90	0	90	0	90
ABE2	7005	9595	2	0	2	0	2	0	2	0	2	0	2
ABE3			496	-40	456	42	498	0	498	0	498	0	498
ABEAN			336	-29	307	27	334	0	334	0	334	0	334
ACCS	6902		12	-1	11	1	12	0	12	0	12	0	12
ACC	6902		12	-1	11	1	12	0	12	0	12	0	12
ACC	6903		12	0	12	0	12	0	12	0	12	0	12
AC1	6902		48	-4	44	4	48	0	48	0	48	0	48
AC1	6903		12	0	12	0	12	0	12	0	12	0	12
AC2	6902		131	-11	120	11	131	0	131	0	131	0	131
AC2	6903		84	0	84	0	84	0	84	0	84	0	84
AC3	6902		74	-6	68	6	74	0	74	0	74	0	74
AC3	6903		36	0	36	0	36	0	36	0	36	0	36
AZ1			12	-1	11	1	12	0	12	0	12	0	12
AZ3			12	-1	11	1	12	0	12	0	12	0	12
EM1	4672		12	-1	11	1	12	0	12	0	12	0	12
EM2	4672		12	-1	11	1	12	0	12	0	12	0	12
EM3	4672		24	-2	22	2	24	0	24	0	24	0	24
ICC	4745		12	-1	11	1	12	0	12	0	12	0	12
IC1	4743		34	-2	32	3	35	0	35	0	35	0	35
IC1	4745		12	-1	11	1	12	0	12	0	12	0	12
IC1	4779		7	0	7	0	7	0	7	0	7	0	7
IC1	4779	4728	12	0	12	0	12	0	12	0	12	0	12
IC2	4743		6	-1	5	0	5	0	5	0	5	0	5
IC2	4745		16	-2	14	1	15	1	15	0	15	0	15
IC2	4756	4779	5	0	5	0	5	0	5	0	5	0	5
IC2	4779		7	0	7	0	7	0	7	0	7	0	7
IC3	4743		10	-2	8	0	8	0	8	0	8	0	8
IC3	4745		11	-1	10	1	11	0	11	0	11	0	11
AN			1053	-86	967	88	1055	0	1055	0	1055	0	1055
Fleet Support Billets ACDU and TAR													
ABECS	7004		1	0	1	0	1	0	1	0	1	0	1
ABECS	7006		1	0	1	0	1	0	1	0	1	0	1
ABECS	7006	9502	1	0	1	0	1	0	1	0	1	0	1
ABEC	7004	7005	2	0	2	0	2	0	2	0	2	0	2
ABEC	7006		3	0	3	0	3	0	3	0	3	0	3
ABEC	7006	9502	3	0	3	0	3	0	3	0	3	0	3
ABE1	7004		2	0	2	0	2	0	2	0	2	0	2
ABE1	7005		6	0	6	0	6	0	6	0	6	0	6
ABE1	7005	7006	1	0	1	0	1	0	1	0	1	0	1
ABE1	7006		1	0	1	0	1	0	1	0	1	0	1
ABE1	7006	9502	4	0	4	0	4	0	4	0	4	0	4

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
ABE1	7006	9598	1	0	1	0	1	0	1	0	1	0	1
ABE2	7004		6	0	6	0	6	0	6	0	6	0	6
ABE2	7005		6	0	6	0	6	0	6	0	6	0	6
ABE2	7005	7004	2	0	2	0	2	0	2	0	2	0	2
ACCM	6901	6902	1	0	1	0	1	0	1	0	1	0	1
ACCM	6902		2	0	2	0	2	0	2	0	2	0	2
ACCS	6901	6902	1	0	1	0	1	0	1	0	1	0	1
ACCS	6902		4	0	4	0	4	0	4	0	4	0	4
ACC	6901	6902	2	0	2	0	2	0	2	0	2	0	2
ACC	6902		6	0	6	0	6	0	6	0	6	0	6
ACC	6902	6901	1	0	1	0	1	0	1	0	1	0	1
AC1	6901	6902	20	0	20	0	20	0	20	0	20	0	20
AC1	6902		21	0	21	0	21	0	21	0	21	0	21
AC2	6901	6902	18	0	18	0	18	0	18	0	18	0	18
AC2	6902		35	0	35	0	35	0	35	0	35	0	35
AC3	6901	6902	10	0	10	0	10	0	10	0	10	0	10
AC3	6902		18	0	18	0	18	0	18	0	18	0	18
AC3	6903		1	0	1	0	1	0	1	0	1	0	1
ACAN	6902		12	0	12	0	12	0	12	0	12	0	12
IC1	4745		1	0	1	0	1	0	1	0	1	0	1
IC2	4745		7	0	7	0	7	0	7	0	7	0	7
IC3	4745		3	0	3	0	3	0	3	0	3	0	3
Staff Billets ACDU and TAR													
ABECS	7006	9502	2	0	2	0	2	0	2	0	2	0	2
ABEC	7004	9502	1	0	1	0	1	0	1	0	1	0	1
ABEC	7005	9502	1	0	1	0	1	0	1	0	1	0	1
ABEC	7006	9502	2	0	2	0	2	0	2	0	2	0	2
ABE1	7004	9502	3	0	3	0	3	0	3	0	3	0	3
ABE1	7005	9502	3	0	3	0	3	0	3	0	3	0	3
ABE1	7006	9502	2	0	2	0	2	0	2	0	2	0	2
ACCS	6902	9502	1	0	1	0	1	0	1	0	1	0	1
ACCS	6903	9502	1	0	1	0	1	0	1	0	1	0	1
ACC	6902	9502	5	0	5	0	5	0	5	0	5	0	5
ACC	6903	9502	2	0	2	0	2	0	2	0	2	0	2
AC1	6902	9502	17	0	17	0	17	0	17	0	17	0	17
AC1	6903	9502	10	0	10	0	10	0	10	0	10	0	10
AC2	6903	9502	3	0	3	0	3	0	3	0	3	0	3
EM1	4672	9502	2	0	2	0	2	0	2	0	2	0	2
ICC	4745	9502	1	0	1	0	1	0	1	0	1	0	1
IC1	4743	9502	1	0	1	0	1	0	1	0	1	0	1
IC1	4745	9502	2	0	2	0	2	0	2	0	2	0	2
IC1	4779	9502	1	0	1	0	1	0	1	0	1	0	1
Chargeable Student Billets ACDU and TAR													
			41	2	43	3	46	0	46	-5	41	0	41

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
SELRES Billets													
ABE1	7005		1	0	1	0	1	0	1	0	1	0	1
IC3	4745		3	0	3	0	3	0	3	0	3	0	3
TOTAL USN ENLISTED BILLETS:													
Operational			3076	0	3076	-241	2835	240	3075	0	3075	0	3075
Fleet Support			203	0	203	0	203	0	203	0	203	0	203
Staff			60	0	60	0	60	0	60	0	60	0	60
Chargeable Student			41	0	41	2	43	3	46	-5	41	0	41
SELRES			4	0	4	0	4	0	4	0	4	0	4
c. OFFICER - USMC													
Operational Billets USMC and AR													
7593			36	0	36	0	36	0	36	0	36	0	36
7594			6	0	6	0	6	0	6	0	6	0	6
TOTAL USMC OFFICER BILLETS:													
Operational			42	0	42	0	42	0	42	0	42	0	42

d. ENLISTED - USMC Not Applicable

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance
COURSE LENGTH: 18.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.36

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Service School Command, Naval Training Center, Great Lakes												
	NAVY	ACDU		14		13		12		12		12
		TOTAL:		14		13		12		12		12

CIN, COURSE TITLE: C-604-2013, CV Catapult Electrician
COURSE LENGTH: 4.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.08

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU		16		19		16		16		16
		TOTAL:		16		19		16		16		16

CIN, COURSE TITLE: C-604-2014, Aircraft Launch and Recovery Equipment C13 Catapult Class C1
COURSE LENGTH: 6.4 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.13

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU		84		94		82		82		82
		TOTAL:		84		94		82		82		82

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
COURSE LENGTH: 1.8 Weeks **NAVY TOUR LENGTH:** 18 Months
ATTRITION FACTOR: Navy: 5% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NAMTRAU Norfolk												
	NAVY	ACDU		297		322		297		297		297
NAMTRAU North Island												
	NAVY	ACDU		297		322		297		297		297
		TOTAL:		594		644		594		594		594

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
COURSE LENGTH: 1.6 Weeks **NAVY TOUR LENGTH:** 18 Months
ATTRITION FACTOR: Navy: 5% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NAMTRAU Norfolk												
	NAVY	ACDU		558		605		559		559		559
NAMTRAU North Island												
	NAVY	ACDU		558		605		605		559		559
		TOTAL:		1116		1210		1118		1118		1118

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
COURSE LENGTH: 1.4 Weeks **NAVY TOUR LENGTH:** 18 Months
ATTRITION FACTOR: Navy: 5% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NAMTRAU Norfolk												
	NAVY	ACDU		558		605		559		559		559
NAMTRAU North Island												
	NAVY	ACDU		558		605		559		559		559
		TOTAL:		1116		1210		1118		1118		1118

CIN, COURSE TITLE: C-604-2028, Aircraft Launch And Recovery Equipment Maintenance Technician
COURSE LENGTH: 12.8 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.26

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU		18		21		18		18		18
		TOTAL:		18		21		18		18		18

CIN, COURSE TITLE: C-604-2029, Aircraft Launch and Recovery Equipment Arresting Gear
COURSE LENGTH: 3.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.07

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU		48		56		56		56		48
		TOTAL:		48		56		56		48		48

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: A-670-0064, Vertical/Short Take-Off and Landing Optical Landing System Maintenance
COURSE LENGTH: 2.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Service School Command, Naval Training Center, Great Lakes												
	NAVY	ACDU		9		9		9		9		9
		TOTAL:		9		9		9		9		9

CIN, COURSE TITLE: C-670-2010, Optical Landing System Maintenance
COURSE LENGTH: 10.4 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.21

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU		16		17		15		15		15
		TOTAL:		16		17		15		15		15

CIN, COURSE TITLE: D-2G-0001, Initial Formal Ground Training
COURSE LENGTH: 1.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 0% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Landing Signal Officer School												
	NAVY	ACDU	36		36		36		36		36	
		SELRES	1		1		1		1		1	
	USMC	USMC	11		11		11		11		11	
		TOTAL:	48		48		48		48		48	

CIN, COURSE TITLE: D-2G-0002, Advanced Formal Ground Training
COURSE LENGTH: 0.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 0% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Landing Signal Officer School												
	NAVY	ACDU	14		14		14		14		14	
	USMC	USMC	2		2		2		2		2	
		TOTAL:	16		16		16		16		16	

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: D-2G-0003, Fleet Replacement Squadron Training Command
COURSE LENGTH: 0.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 0% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Landing Signal Officer School												
	NAVY	ACDU	11		11		11		11		11	
		SELRES	0		1		0		1		0	
		TOTAL:	11		12		11		12		11	

CIN, COURSE TITLE: C-604-2011, Aircraft Launch and Recovery Equipment Maintenance Officer
COURSE LENGTH: 5.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 0% USMC: 0% **BACKOUT FACTOR:** 0.11

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC DET Lakehurst												
	NAVY	ACDU	3		4		4		4		4	
		ACDU		3		4		4		4		4
		TOTAL:	3	3	4	4	4	4	4	4	4	4

CIN, COURSE TITLE: C-222-2012, Carrier Air Traffic Control Operator
COURSE LENGTH: 6.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.12

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		96		109		96		96		96
		TOTAL:		96		109		96		96		96

CIN, COURSE TITLE: C-222-2019, Amphibious Air Traffic Control Center Operator
COURSE LENGTH: 6.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.12

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		52		52		52		52		52
		TOTAL:		52		52		52		52		52

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
COURSE LENGTH: 1.0 Weeks **NAVY TOUR LENGTH:** 18 Months
ATTRITION FACTOR: Navy: 5% USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NAMTRAU Norfolk												
	NAVY	ACDU		189		205		189		189		189
NAMTRAU North Island												
	NAVY	ACDU		189		205		189		189		189
		TOTAL:		378		410		378		378		378

Note 1: The NAVY TOUR LENGTH for courses C-604-2016, C-604-2017, C-604-2024, and C-604-2025 is actually 36 months. However, each student attends these courses twice during a normal tour, so throughput was calculated based on the nominal 18 month tour length.

Note 2: Students attend courses D-2G-0001, D-2G-0002, D-2G-0003, C-604-2016, C-604-2017, C-604-2024, and C-604-2025 on a "returnable Quota" basis. Therefore, attrition factors for Navy students attending these courses have been calculated at 5% to more accurately depict ATIRs.

PART III - TRAINING REQUIREMENTS

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

III.A.1. Initial Training Requirements

III.A.2. Follow-on Training

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	14		13		12		12		12	ATIR
	13		12		11		11		11	Output
	4.5		4.2		3.9		3.9		3.9	AOB
	4.5		4.2		3.9		3.9		3.9	Chargeable

CIN, COURSE TITLE: C-604-2013, CV Catapult Electrician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	16		19		16		16		16	ATIR
	14		17		14		14		14	Output
	1.1		1.3		1.1		1.1		1.1	AOB
	1.1		1.3		1.1		1.1		1.1	Chargeable

CIN, COURSE TITLE: C-604-2014, Aircraft Launch and Recovery Equipment C13 Catapult Class C1
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	82		94		82		82		82	ATIR
	74		86		74		74		74	Output
	9.4		10.8		9.4		9.4		9.4	AOB
	9.4		10.8		9.4		9.4		9.4	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	297		297		297		297		297	ATIR
	282		282		282		282		282	Output
	8.7		8.7		8.7		8.7		8.7	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	297		322		297		297		297	ATIR
	282		306		282		282		282	Output
	8.7		9.5		8.7		8.7		8.7	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	558		605		559		559		559	ATIR
	530		575		531		531		531	Output
	14.9		16.2		14.9		14.9		14.9	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	558		605		559		559		559	ATIR
	530		575		531		531		531	Output
	14.9		16.2		14.9		14.9		14.9	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	558		605		559		559		559	ATIR
	530		575		531		531		531	Output
	13.4		14.5		13.4		13.4		13.4	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	558		605		559		559		559	ATIR
	530		575		531		531		531	Output
	13.4		14.5		13.4		13.4		13.4	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

CIN, COURSE TITLE: C-604-2028, Aircraft Launch And Recovery Equipment Maintenance Technician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	18		21		18		18		18	ATIR
	16		19		16		16		16	Output
	4.1		4.8		4.1		4.1		4.1	AOB
	4.1		4.8		4.1		4.1		4.1	Chargeable

CIN, COURSE TITLE: C-604-2029, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	48		56		48		48		48	ATIR
	43		50		43		43		43	Output
	3.0		3.5		3.0		3.0		3.0	AOB
	3.0		3.5		3.0		3.0		3.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: A-670-0064, Vertical/Short Take-Off and Landing Optical Landing System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
9		9		9		9		9		ATIR
8		8		8		8		8		Output
0.3		0.3		0.3		0.3		0.3		AOB
0.3		0.3		0.3		0.3		0.3		Chargeable

CIN, COURSE TITLE: C-670-2010, Optical Landing System Maintenance
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
16		17		15		15		15		ATIR
14		15		14		14		14		Output
3.0		3.2		2.8		2.8		2.8		AOB
3.0		3.2		2.8		2.8		2.8		Chargeable

CIN, COURSE TITLE: D-2G-0001, Initial Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
36		36		36		36		36		ATIR
36		36		36		36		36		Output
1.0		1.0		1.0		1.0		1.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1		1		1		1		1		ATIR
1		1		1		1		1		Output
0.0		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.2.a. EXISTING COURSES

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
11		11		11		11		11		ATIR
11		11		11		11		11		Output
0.3		0.3		0.3		0.3		0.3		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

CIN, COURSE TITLE: D-2G-0002, Advanced Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
14		14		14		14		14		ATIR
14		14		14		14		14		Output
0.1		0.1		0.1		0.1		0.1		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
2		2		2		2		2		ATIR
2		2		2		2		2		Output
0.0		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: D-2G-0003, Fleet Replacement Squadron Training Command
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
11		11		11		11		11		ATIR
11		11		11		11		11		Output
0.1		0.1		0.1		0.1		0.1		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		1		0		1		0		ATIR
0		1		0		1		0		Output
0.0		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

CIN, COURSE TITLE: C-604-2011, Aircraft Launch and Recovery Equipment Maintenance Officer
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
3	3	4	4	4	4	4	4	4	4	ATIR
3	3	4	4	4	4	4	4	4	4	Output
0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	AOB
0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Chargeable

CIN, COURSE TITLE: C-222-2012, Carrier Air Traffic Control Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	96		109		96		96		96	ATIR
	86		98		86		86		86	Output
	10.5		11.9		10.5		10.5		10.5	AOB
	10.5		11.9		10.5		10.5		10.5	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-222-2019, Amphibious Air Traffic Control Center Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	52		52		52		52		52	ATIR
	47		47		47		47		47	Output
	5.4		5.4		5.4		5.4		5.4	AOB
	5.4		5.4		5.4		5.4		5.4	Chargeable

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	189		205		189		189		189	ATIR
	180		195		180		180		180	Output
	2.5		2.7		2.5		2.5		2.5	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

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

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	189		205		189		189		189	ATIR
	180		195		180		180		180	Output
	2.5		2.7		2.5		2.5		2.5	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

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

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B.1. Training Services

IV.C. Facility Requirements

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

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

IV.C.3. Facility Project Summary by Program

IV.A. TRAINING HARDWARE

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

CIN, COURSE TITLE: A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
SPTE					
208	Oscilloscope An/USM-425(V)1	13	May 95	GFE	Onboard
209	Digital Multimeter 302-68 MOD 126	10	May 95	GFE	Onboard
210	Tool Kit 40F60047900	1	May 95	GFE	Onboard
211	S-VHS Video Cassette	80	May 95	GFE	Onboard
212	ECSS Calibration Pole	1	May 95	GFE	Onboard
213	Extender Board for Data Generator 622902-X	1	May 95	GFE	Onboard
214	Extender Board for Interface 627310-1	1	May 95	GFE	Onboard
215	Extender Board for Cohu DM series Monitors	5	May 95	GFE	Onboard

CIN, COURSE TITLE: C-604-2013, CV Catapult Electrician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
004	C-13 Catapult MOD1	1	May 95	GFE	Onboard
005	MK7 MOD 3 Arresting Gear	1	May 95	GFE	Onboard
025	Lighted Deck Edge Panel	1	May 95	GFE	Onboard
030	Pressure Switch	1	May 95	GFE	Onboard
037	MK7 MOD 0 Auxiliary JDB Control Box	1	May 95	GFE	Onboard
061	Ground Fault Measuring Device Box Assembly	1	May 95	GFE	Onboard
062	Weight Assembly Confirmation	1	May 95	GFE	Onboard

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

063	Light Box Assembly	1	May 95	GFE	Onboard
064	Electromagnetic Relay	1	May 95	GFE	Onboard
065	CSV Encoder Shaft	1	May 95	GFE	Onboard
066	Brake Assembly Motor Unit	1	May 95	GFE	Onboard
067	Main Pump Push Switch	1	May 95	GFE	Onboard
068	Timer, Interval Clock	1	May 95	GFE	Onboard
069	Syncro Transmitter	1	May 95	GFE	Onboard
070	Limit Switch Assembly	1	May 95	GFE	Onboard
071	Syncro Receiver Transmitter	1	May 95	GFE	Onboard
072	Push Switch	1	May 95	GFE	Onboard
073	JBD Control Box	1	May 95	GFE	Onboard
074	Auxiliary JBD Control Box	1	May 95	GFE	Onboard
075	CSV Center Deck Box	1	May 95	GFE	Onboard

CIN, COURSE TITLE: C-604-2014, Aircraft Launch and Recovery Equipment C13 Catapult Class C1
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
004	C-13 Catapult MOD1	1	May 95	GFE	Onboard
007	Lock, Valve Assembly	1	May 95	GFE	Onboard
008	S-3 Tension Bar	2	May 95	GFE	Onboard
009	Scale Assembly Knot Indicator Ruler	1	May 95	GFE	Onboard
010	A-6 Tension Bar	1	May 95	GFE	Onboard
011	Strock Timer Clock	1	May 95	GFE	Onboard
012	Filtering Disk	1	May 95	GFE	Onboard
013	Module Assembly with Jet	1	May 95	GFE	Onboard

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

014	Steam Plug Mock-Up	1	May 95	GFE	Onboard
015	Grab Latch, Catapult	1	May 95	GFE	Onboard
016	Snubber and Rod Assembly	1	May 95	GFE	Onboard
017	Solenoid, Electrical Lock Valve	1	May 95	GFE	Onboard
018	A-6 Trail Bar Holdback	1	May 95	GFE	Onboard
019	Valve Bonnet Assembly	1	May 95	GFE	Onboard
020	Steam Fluid Valve	1	May 95	GFE	Onboard
021	Catapult Exhaust Valve with Hydraulic Actuator	1	May 95	GFE	Onboard
022	Accumulator Assembly	1	May 95	GFE	Onboard
023	Shuttle Grab Assembly	1	May 95	GFE	Onboard
024	Engine Assembly, Launching	1	May 95	GFE	Onboard
025	Lighted Deck Edge Panel	1	May 95	GFE	Onboard
026	CV 63-65 Maintenance Control Console	1	May 95	GFE	Onboard
027	Lighted Panel, Deck Edge Catapult	1	May 95	GFE	Onboard
028	Stroke Valve Launch Timer	1	May 95	GFE	Onboard
029	Launch Valve Control Piston	1	May 95	GFE	Onboard
030	Pressure Switch	1	May 95	GFE	Onboard
031	Water Break Cylinder	1	May 95	GFE	Onboard
032	Capacity Selection Valve	1	May 95	GFE	Onboard
033	Launch Valve Assembly	1	May 95	GFE	Onboard
034	Motorized Operator Valve	1	May 95	GFE	Onboard
035	Linear Actuating Cylinder, 21 Inch	1	May 95	GFE	Onboard
036	Digital Endspeed Indicator	1	May 95	GFE	Onboard
037	MK7 MOD 0 Auxiliary JDB Control Box	1	May 95	GFE	Onboard
038	Sealing Display Strip	1	May 95	GFE	Onboard

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

039	Portable JBD Control Box	1	May 95	GFE	Onboard
040	Catapult Launch Cylinder, 9- inch	1	May 95	GFE	Onboard
ST					
300	Micrometer 192-11V	1	May 95	GFE	Onboard
301	Micrometer 86091-1	1	May 95	GFE	Onboard
346	Eye Bolt A91477-11	6	May 95	GFE	Onboard

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
085	Catapult Control Station Board	1	May 90	GFE	Onboard
086	Catapult Launch Sequence Device	1	May 90	GFE	Onboard
087	Catapult Rotary Launch Valve	1	May 90	GFE	Onboard
088	Catapult Capacity Selector Valve	1	May 90	GFE	Onboard
ST					
374	Micrometer Outside Caliper	1	May 90	GFE	Onboard

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
085	Catapult Control Station Board	1	May 90	GFE	Onboard
086	Catapult Launch Sequence Device	1	May 90	GFE	Onboard
087	Catapult Rotary Launch Valve	1	May 90	GFE	Onboard
088	Catapult Capacity Selector Valve	1	May 90	GFE	Onboard
ST					
374	Micrometer Outside Caliper	1	May 90	GFE	Onboard

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

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
085	Catapult Control Station Board	1	May 90	GFE	Onboard
086	Catapult Launch Sequence Device	1	May 90	GFE	Onboard
087	Catapult Rotary Launch Valve	1	May 90	GFE	Onboard
088	Catapult Capacity Selector Valve	1	May 90	GFE	Onboard
089	Mk 2 Nose Gear Launch Assembly	1	May 90	GFE	Onboard
ST					
374	Micrometer Outside Caliper	1	May 90	GFE	Onboard
375	Depth Micrometer	1	May 90	GFE	Onboard

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
085	Catapult Control Station Board	1	May 90	GFE	Onboard
086	Catapult Launch Sequence Device	1	May 90	GFE	Onboard
087	Catapult Rotary Launch Valve	1	May 90	GFE	Onboard
088	Catapult Capacity Selector Valve	1	May 90	GFE	Onboard
089	Mk 2 Nose Gear Launch Assembly	1	May 90	GFE	Onboard
ST					
374	Micrometer Outside Caliper	1	May 90	GFE	Onboard
375	Depth Micrometer	1	May 90	GFE	Onboard

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

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
090	Wire Rope Pouring Station	1	May 90	GFE	Onboard
ST					
377	Tube, Strand Spreader	1	May 90	GFE	Onboard
378	Tube Bender	1	May 90	GFE	Onboard

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
090	Wire Rope Pouring Station	1	May 90	GFE	Onboard
ST					
377	Tube, Strand Spreader	1	May 90	GFE	Onboard
378	Tube Bender	1	May 90	GFE	Onboard

CIN, COURSE TITLE: C-604-2028, Aircraft Launch And Recovery Equipment Maintenance Technician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
023	Shuttle Grab Assembly	1	May 95	GFE	Onboard
032	Capacity Selection Valve	1	May 95	GFE	Onboard
033	Launch Valve Assembly	1	May 95	GFE	Onboard
048	Control Valve Stem	1	May 95	GFE	Onboard
049	Control Valve Seat	1	May 95	GFE	Onboard

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

ST

302	Pouring Cabinet Socket	1	May 95	GFE	Onboard
303	Portable Air Enricher Chamber	1	May 95	GFE	Onboard
304	Gas Furnace	2	May 95	GFE	Onboard
305	Zinc Melting Ladle	2	May 95	GFE	Onboard
306	Blast Cleaning Cabinet	1	May 95	GFE	Onboard
307	Hottop Cutter Assembly	1	May 95	GFE	Onboard
308	Saddle Assembly Clamp Loop	2	May 95	GFE	Onboard
309	CPV Installing Tool	3	May 95	GFE	Onboard
310	Launch Valve Table Lift	1	May 95	GFE	Onboard
311	Cable Clamp Wrench Assembly	2	May 95	GFE	Onboard
312	Electric Hot Plate	1	May 95	GFE	Onboard
313	Machinist Vice	1	May 95	GFE	Onboard
314	Jacking Block Assembly	1	May 95	GFE	Onboard
315	Pipe Bracket 523009-2	1	May 95	GFE	Onboard
316	Pipe Bracket 523009-1	1	May 95	GFE	Onboard
317	Socket and Ram Tester Assembly	1	May 95	GFE	Onboard
318	A Frame Gantry	1	May 95	GFE	Onboard
319	Special Tool Cart	1	May 95	GFE	Onboard
320	Ultrasonic Degreaser	1	May 95	GFE	Onboard
321	Packing Inserter	1	May 95	GFE	Onboard
322	Segment Depressor	1	May 95	GFE	Onboard
323	Piston Tool Assembly	1	May 95	GFE	Onboard
324	Piston Ring Compressor	1	May 95	GFE	Onboard
325	Cylinder Removal Fixture	1	May 95	GFE	Onboard
326	Piston Support Spear	1	May 95	GFE	Onboard

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

327	Gage, Water Brake	1	May 95	GFE	Onboard
328	Tension Tool Assembly	1	May 95	GFE	Onboard
329	Special Piston Rod Wrench	1	May 95	GFE	Onboard
330	Piston Rod Open End Wrench 514329-2	1	May 95	GFE	Onboard
331	Piston Rod Open End Wrench 514239-3	1	May 95	GFE	Onboard
332	Piston Bolt Wrench	1	May 95	GFE	Onboard
333	Spanner Wrench 87124-4	1	May 95	GFE	Onboard
334	Spanner Wrench 422091-1	1	May 95	GFE	Onboard
335	Choke Ring Wrench	1	May 95	GFE	Onboard
336	Sheque Grove Gage	1	May 95	GFE	Onboard
337	Engine Ram Holding Fixture	2	May 95	GFE	Onboard
338	Insertion Fixture	1	May 95	GFE	Onboard
339	Cylinder Assembly Support	1	May 95	GFE	Onboard
340	Spanner Wrench 315414-1	1	May 95	GFE	Onboard
341	Piston Removal Kit	1	May 95	GFE	Onboard
342	Loop Clamp	2	May 95	GFE	Onboard
343	Sheave Damper Assembly Tool	1	May 95	GFE	Onboard
344	Special Wrench 423376-1	1	May 95	GFE	Onboard
345	Straight Headed Alignment Pin	2	May 95	GFE	Onboard
347	Shaft Puller	1	May 95	GFE	Onboard
348	Packing Gland Ejector	1	May 95	GFE	Onboard
349	Union Nut Wrench 8F2239	1	May 95	GFE	Onboard
350	Union Nut Wrench 2B1742	1	May 95	GFE	Onboard
351	Weldment Aircraft Launching Bracket 626717-5	2	May 95	GFE	Onboard
352	Weldment Aircraft Launching Bracket 626717-1	2	May 95	GFE	Onboard

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

353	Micrometer 0-12 Inch	2	May 95	GFE	Onboard
354	Tensiometer	3	May 95	GFE	Onboard
355	Pyrometer 0-1200 Degrees Fahrenheit	2	May 95	GFE	Onboard
356	Torque Wrench 0-250 Foot Pound	2	May 95	GFE	Onboard
357	Torque Wrench 0-600 Foot Pound	2	May 95	GFE	Onboard
358	Torque Wrench 0-1000 Foot Pound	2	May 95	GFE	Onboard
359	Vernier Caliper	2	May 95	GFE	Onboard
360	Hydraulic Torque Machine	1	May 95	GFE	Onboard
361	Caliper Micro Tube Type 1,5-32 Inch	2	May 95	GFE	Onboard
362	Outside Caliper 0-1 Inch Range	2	May 95	GFE	Onboard
363	Outside Caliper 1-2 Inch Range	2	May 95	GFE	Onboard
364	Outside Caliper 2-3 Inch Range	2	May 95	GFE	Onboard
365	Outside Caliper 3-4 Inch Range	2	May 95	GFE	Onboard
366	Outside Caliper 4-5 Inch Range	2	May 95	GFE	Onboard
367	Outside Caliper 5-6 Inch Range	2	May 95	GFE	Onboard
368	Outside Caliper 7-8 Inch Range	2	May 95	GFE	Onboard
369	Outside Caliper 8-9 Inch Range	2	May 95	GFE	Onboard
370	Outside Caliper 9-12 Inch Range	2	May 95	GFE	Onboard
371	Outside Caliper 12-16 Inch Range	2	May 95	GFE	Onboard
372	Outside Caliper 16-20 Inch Range	2	May 95	GFE	Onboard
373	Outside Caliper 20-24 Inch Range	2	May 95	GFE	Onboard

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

CIN, COURSE TITLE: C-604-2029, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
005	MK7 MOD 3 Arresting Gear	1	May 95	GFE	Onboard
041	Barricade Power Pack	1	May 95	GFE	Onboard
042	Arresting Gear Barricade	1	May 95	GFE	Onboard
043	Piston Road Damper Assembly	2	May 95	GFE	Onboard
044	Cylinder Assembly 607955-1	1	May 95	GFE	Onboard
045	Cylinder and Ram Assembly 63094-95-0051	1	May 95	GFE	Onboard
046	Cylinder and Ram Assembly	1	May 95	GFE	Onboard
047	Fluid Cooler Repair Kit Status Board	1	May 95	GFE	Onboard
048	Control Valve Stem	1	May 95	GFE	Onboard
049	Control Valve Seat	1	May 95	GFE	Onboard
050	Special Screw 317310-1	1	May 95	GFE	Onboard
051	Valve Stem Sleeve	1	May 95	GFE	Onboard
052	Valve Cam	1	May 95	GFE	Onboard
053	Retractable Valve Stem	1	May 95	GFE	Onboard
054	Retractable Valve Stem Seat	1	May 95	GFE	Onboard
055	Flapper Control Valve	1	May 95	GFE	Onboard
056	Shaft Sheave A-497444	1	May 95	GFE	Onboard
057	Screw Assembly retractable Sheave	1	May 95	GFE	Onboard
058	Retractable Sheave Worm Shaft	1	May 95	GFE	Onboard
059	Retractable Valve Plunger	1	May 95	GFE	Onboard
060	Strap Assembly 317439-1	1	May 95	GFE	Onboard

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

CIN, COURSE TITLE: A-670-0064, Vertical/Short Take-Off and Landing Optical Landing System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
001	V/STOL Production Unit	1	May 95	GFE	Onboard
081	Amphibious LSO Workstation	1	May 95	GFE	Pending
GPTE					
100	CVS/260/6P Multimeter	10	May 95	GFE	Onboard
101	89536-8000A/BU AC Voltmeter	10	May 95	GFE	Onboard
102	AN/USM-425 Oscilloscope	10	May 95	GFE	Onboard
SPTE					
200	1313-6A Signal Generator	10	May 95	GFE	Onboard

CIN, COURSE TITLE: C-670-2010, Optical Landing System Maintenance
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
006	CV Configured LSO Workstation	1	Jan 00	GFE	Onboard
GPTE					
103	FLOLS Cell Tester, NAEC 6182801 Rev. C Assembly	1	Apr 90	GFE	Onboard
104	Multimeter, Simpson 260	2	Apr 90	GFE	Onboard
105	Weston 2261 Dial Thermometer	1	Apr 90	GFE	Onboard
106	Oscilloscope, Tektronix Model 434	1	Apr 90	GFE	Onboard
107	Fluke Model 8012A True RMS DVM	1	Apr 90	GFE	Onboard
108	Fluke 801-600 Current Probe	1	Apr 90	GFE	Onboard
109	Gyroscope Breakout Box 619603-1	1	Apr 90	GFE	Onboard
110	Cell Tester 618281-1	1	Apr 90	GFE	Onboard

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

111	De-soldering Station Model PRC150A	1	Apr 90	GFE	Onboard
112	Oscilloscope, F475TA	1	Apr 90	GFE	Onboard
113	Headset Sound-Powered Type H-200/U	1	Apr 90	GFE	Onboard
114	Hydraulic Filtration Unit HFB-2K3H-1	1	Apr 90	GFE	Onboard
SPTE					
201	Card Puller 41367-1	1	Apr 90	GFE	Onboard
202	Card Puller 424794-1	1	Apr 90	GFE	Onboard
203	Sighting Pole 616472-1	1	Apr 90	GFE	Onboard
204	Test Simulator NAEC A/E-24-145	1	Apr 90	GFE	Onboard
205	Test Set A/E-24T-145	1	Apr 90	GFE	Onboard
206	Test Cable Set 621110-1 through 621110-7	1	Apr 90	GFE	Onboard
207	Blocking Stand 621559-1	1	Apr 90	GFE	Onboard

CIN, COURSE TITLE: D-2G-0001, Initial Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
002	FLOLS MK6 MOD3	1	Jan 00	GFE	Onboard
003	LSO HUD Console	1	Jan 00	GFE	Onboard

CIN, COURSE TITLE: D-2G-0002, Advanced Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
002	FLOLS MK6 MOD3	1	Jan 00	GFE	Onboard
003	LSO HUD Console	1	Jan 00	GFE	Onboard

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

CIN, COURSE TITLE: D-2G-0003, Fleet Replacement Squadron Training Command
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
002	FLOLS MK6 MOD3	1	Jan 00	GFE	Onboard
003	LSO HUD Console	1	Jan 00	GFE	Onboard

CIN, COURSE TITLE: C-604-2011, Aircraft Launch and Recovery Equipment Maintenance Officer
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
002	FLOLS MK6 MOD3	1	May 95	GFE	Onboard
003	LSO HUD Console	1	May 95	GFE	Onboard
004	C-13 Catapult MOD1	1	May 95	GFE	Onboard
005	MK7 MOD 3 Arresting Gear	1	May 95	GFE	Onboard
006	CV Configured LSO Workstation	1	Jan 00	GFE	Onboard

CIN, COURSE TITLE: C-222-2012, Carrier Air Traffic Control Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
076	Headset/Chest Set, Electrical	2	May 95	GFE	Onboard
077	Ships Status Plotting Board	10	May 95	GFE	Onboard
078	Aircraft Console	2	May 95	GFE	Onboard
079	Display Unit	1	May 95	GFE	Onboard

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

CIN, COURSE TITLE: C-222-2019, Amphibious Air Traffic Control Center Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
077	Ships Status Plotting Board	5	May 95	GFE	Onboard
080	Headset, Microphone	24	May 95	GFE	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Transparencies	4 Sets	May 95	Onboard

CIN, COURSE TITLE: C-604-2013, CV Catapult Electrician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Prefaulted Module Electromagnetic Relay FC400-78	1	May 95	Onboard
Projector Screen	1	May 95	Onboard
Still Projector	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Television	1	May 95	Onboard
Transparencies	2 Sets	May 95	Onboard
Video Cassette Player	1	May 95	Onboard

CIN, COURSE TITLE: C-604-2014, Aircraft Launch and Recovery Equipment C13 Catapult Class C1
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Overhead Projector	2	May 95	Onboard
Projector Screen	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Television	1	May 95	Onboard
Transparencies	4 Sets	May 95	Onboard
Video Cassette Recorder	1	May 95	Onboard
Video Cassette Player	1	May 95	Onboard
Video Monitor	1	May 95	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard
Wall Chart	4	May 90	Onboard

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard
Wall Chart	4	May 90	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard
Wall Chart	4	May 90	Onboard

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard
Wall Chart	4	May 90	Onboard

CIN, COURSE TITLE: C-604-2028, Aircraft Launch And Recovery Equipment Maintenance Technician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Transparencies	8 Sets	May 95	Onboard

CIN, COURSE TITLE: C-604-2029, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Still Projector	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Television	1	May 95	Onboard
Transparencies	5 Sets	May 95	Onboard
Video Cassette Player	1	May 95	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: A-670-0064, Vertical/Short Take-Off and Landing Optical Landing System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC: Naval Training Center Great Lakes, 30626

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Transparencies	4 Sets	May 95	Onboard

CIN, COURSE TITLE: C-670-2010, Optical Landing System Maintenance
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	3	May 95	Onboard
Lesson Guide	50	May 95	Onboard
Student Evaluations	50	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	50	May 95	Onboard
Transparencies	9	May 95	Onboard
Wall Chart	6	May 95	Onboard

CIN, COURSE TITLE: D-2G-0001, Initial Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	Jan 00	Onboard
Instructor Guide	2	Jan 00	Onboard
Overhead Projector	1	Jan 00	Onboard

CIN, COURSE TITLE: D-2G-0002, Advanced Formal Ground Training
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	Jan 00	Onboard
Instructor Guide	2	Jan 00	Onboard
Overhead Projector	1	Jan 00	Onboard

CIN, COURSE TITLE: D-2G-0003, Fleet Replacement Squadron Training Command
TRAINING ACTIVITY: Landing Signal Officer School
LOCATION, UIC: NAS Oceana, 68788

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	Jan 00	Onboard
Instructor Guide	2	Jan 00	Onboard
Overhead Projector	1	Jan 00	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-604-2011, Aircraft Launch and Recovery Equipment Maintenance Officer
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC: Lakehurst, 63094

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Projector Screen	1	May 95	Onboard
Still Projector	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Transparencies	6 Sets	May 95	Onboard

CIN, COURSE TITLE: C-222-2012, Carrier Air Traffic Control Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Aperture Card Reader	1	May 95	Onboard
Curriculum Outline	10	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Overhead Projector	1	May 95	Onboard
Projector Screen	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Transparencies	3 Sets	May 95	Onboard
VIDS Board 50 Pocket	1	May 95	Onboard

CIN, COURSE TITLE: C-222-2019, Amphibious Air Traffic Control Center Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	10	May 95	Onboard
Flock Cards	Set of 18	May 95	Onboard
Instructor Guide	2	May 95	Onboard
Lesson Guide	4	May 95	Onboard
Overhead Projector	1	May 95	Onboard
Student Guide	30	May 95	Onboard
Student Test	30	May 95	Onboard
Television	1	May 95	Onboard
Transparencies	4 Sets	May 95	Onboard
Video Reproducer	1	May 95	Onboard
VTS Computer	1	May 95	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: Norfolk, 46680

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC: North Island, 39476

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curriculum Outline	20	May 90	Onboard
Instructor Guide	2	May 90	Onboard
Lesson Guide	20	May 90	Onboard
Overhead Projector	1	May 90	Onboard
Transparencies	2 sets	May 90	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: A-191-0011, Integrated Launch and Recovery Television Surveillance System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC : Naval Training Center Great Lakes, 30626

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-60-8-1 ILARTS Operation, Maintenance, and Overhaul with IPB	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-2 ILARTS Low Light Level Television Operation and Maintenance with IPB	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-3 ILARTS Console Control Operation and Maintenance with IPB	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-4 ILARTS Data Generator Operation and Maintenance with IPB	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-5 ILARTS DM Series Monochrome Television Monitor Operation and Maintenance	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-7 RD-453/GQX AVTR Intermediate Maintenance	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-7.1 RD-504/SSQ VCR Intermediate Maintenance	Hard copy	4	May 95	Onboard
NAVAIR 51-60-8-8 Airborne Video Tape Recorder Overhaul	Hard copy	4	May 95	Onboard

CIN, COURSE TITLE: C-604-2013, CV Catapult Electrician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 00-25-100 Technical Publications Library Management	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	15	May 95	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	2	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABC-1 Operating Instructions, Catapult Type C MK13, and MK13-1	Hard copy	15	May 95	Onboard
NAVAIR 51-15ABC-2 Maintenance and Overhaul Instructions, Catapults, Type C MK13, and MK13-1	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABC-3 IPB Catapult Type C Mk13, and Type C MK13-1	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABC-4 Forward ICCS Operation and Maintenance with IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABC-5 Deck Edge ICCS Operation and Maintenance with IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABD-1 Catapult Operation Instructions Type C MK13-1	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABD-2 CVN 68-73 Catapult Operating Instruction	Hard copy	15	May 95	Onboard
NAVAIR 51-15ABD-3 IPB for Type C MK13-1 Catapult	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABE-1 CSV Operation, Maintenance, and Overhaul with IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-15ABE-2 Digital Endspeed Indicator Maintenance	Hard copy	2	May 95	Onboard
NAVAIR 51-25-19 MK2 Nose Gear Launch Operations, Maintenance, and Overhaul with IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-50ABA-2 Visual Landing Aids on Aircraft Carriers	Hard copy	2	May 95	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	2	May 95	Onboard
NAVAIR 51-5BBA-1.2 MK7 MOD 2 Arresting Gear IPB	Hard copy	2	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	2	May 95	Onboard
NAVAIR 51-5BCA-1.2 MK7 MOD 3 Arresting Gear IPB	Hard copy	2	May 95	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	2	May 95	Onboard
NAVAIR51-5-27 MK2 and MK4 Bridle Arrester Maintenance	Hard copy	2	May 95	Onboard

CIN, COURSE TITLE: C-604-2014, Aircraft Launch and Recovery Equipment C13 Catapult Class C1
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 00-25-100 Technical Publications Library Management	Hard copy	1	May 95	Onboard
NAVAIR 51-15AAA-1 Type C MK7/11 Catapult Operation	Hard copy	5	May 95	Onboard
NAVAIR 51-15AAA-2 Type C MK7/11 Catapult Maintenance and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-15AAA-3 Type C MK7/11 Catapult IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABC-1 Operating Instructions, Catapult Type C MK13, and MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABC-2 Maintenance and Overhaul Instructions, Catapults, Type C MK13, and MK13-1	Hard copy	5	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-15ABC-3 IPB Catapult Type C Mk13, and Type C MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABD-1 Catapult Operation Instructions Type C MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABD-2 CVN 68-73 Catapult Operating Instruction	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABD-3 IPB for Type C MK13-1 Catapult	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABE-1 CSV Operation, Maintenance, and Overhaul with IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-5-32 Corrosion Control Handbook for Shipboard Launch and Recovery Systems	Hard copy	1	May 95	Onboard

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : Norfolk, 46680

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	15	May 90	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

CIN, COURSE TITLE: C-604-2016, Aircraft Launch and Recovery Refresher
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : North Island, 39476

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	15	May 90	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : Norfolk, 46680

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	15	May 90	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

CIN, COURSE TITLE: C-604-2024, Aircraft Launch and Recovery Equipment - Catapult
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : North Island, 39476

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	15	May 90	Onboard
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	15	May 90	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : Norfolk, 46680

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	15	May 90	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BBA-1.2 MK7 MOD 2 Arresting Gear IPB	Hard copy	15	May 95	Onboard
NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BCA-1.2 MK7 MOD 3 Arresting Gear IPB	Hard copy	15	May 90	Onboard

CIN, COURSE TITLE: C-604-2025, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : North Island, 39476

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	15	May 90	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BBA-1.2 MK7 MOD 2 Arresting Gear IPB	Hard copy	15	May 95	Onboard
NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BCA-1.2 MK7 MOD 3 Arresting Gear IPB	Hard copy	15	May 90	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-604-2028, Aircraft Launch And Recovery Equipment Maintenance Technician
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 00-25-100 Technical Publications Library Management	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABC-1 Operating Instructions, Catapult Type C MK13, and MK13-1	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABC-2 Maintenance and Overhaul Instructions, Catapults, Type C MK13, and MK13-1	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABC-3 IPB Catapult Type C Mk13, and Type C MK13-1	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABD-1 Catapult Operation Instructions Type C MK13-1	Hard copy	1	May 95	Onboard
NAVAIR 51-15ABD-3 IPB for Type C MK13-1 Catapult	Hard copy	1	May 95	Onboard
NAVAIR 51-5-32 Corrosion Control Handbook for Shipboard Launch and Recovery Systems	Hard copy	1	May 95	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	1	May 95	Onboard
NAVAIR 51-5BBA-1.2 MK7 MOD 2 Arresting Gear IPB	Hard copy	1	May 95	Onboard
NAVAIR 51-5BCA-1.2 MK7 MOD 3 Arresting Gear IPB	Hard copy	1	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-604-2029, Aircraft Launch and Recovery Equipment Arresting Gear
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 00-80T-105 Aircraft Carrier NATOPS Manual	Hard copy	1	May 95	Onboard
NAVAIR 51-5-32 Corrosion Control Handbook for Shipboard Launch and Recovery Systems	Hard copy	1	May 95	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-5BBA-1.2 MK7 MOD 2 Arresting Gear IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-5BCA-1.2 MK7 MOD 3 Arresting Gear IPB	Hard copy	5	May 95	Onboard

CIN, COURSE TITLE: A-670-0064, Vertical/Short Take-Off and Landing Optical Landing System Maintenance
TRAINING ACTIVITY: Service School Command
LOCATION, UIC : Naval Training Center Great Lakes, 30626

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-60-14 V/STOL OLS Maintenance Manual	Hard copy	30	May 95	Onboard
NAVAIR 51-60-14 V/STOL OLS Shipboard Operations Manual	Hard copy	30	May 95	Onboard

CIN, COURSE TITLE: C-670-2010, Optical Landing System Maintenance
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
34922-RSL-49 Maintenance Requirements Cards and Maintenance Index Page for the MK-6 MOD 3 Fresnel Lens Optical Landing System	Hard copy	1	Mar 99	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-40-ACA-2 Manually Operated Visual Landing Aid System Installation, Operation, and Maintenance Instruction with IPB	Hard copy	4	Mar 99	Onboard
NAVAIR 51-40ABA-10 Fresnel Lens Optical Landing System MK-6 MOD 3 Installation, Service, Operation and Maintenance Manual	Hard copy	4	Apr 99	Onboard
NAVAIR 51-40ABA-21 Improved Fresnel Lens Optical Landing System Operation and Maintenance Manual with IPB	Hard copy	4	Mar 01	Pending
NAVAIR 51-40BA-11 Illustrated Parts Breakdown for the MK-6 MOD 3 Fresnel Lens Optical Landing System	Hard copy	4	Mar 99	Onboard
NAVAIR 51-60-9 Landing Signal Officer Heads-Up Display Console System MK-1 MOD 0 Installation, Operation, and Maintenance Instruction	Hard copy	4	Mar 99	Onboard
NAVAIR 51-60-9.1 MK-1 MOD 0 Console System IPB	Hard copy	1	Mar 99	Onboard
NAVAIR 51-ABA-6 Long Range Line-UP Operation and Maintenance Manual with IPB	Hard copy	4	Mar 99	Onboard

CIN, COURSE TITLE: C-604-2011, Aircraft Launch and Recovery Equipment Maintenance Officer
TRAINING ACTIVITY: NATTC DET
LOCATION, UIC : Lakehurst, 63094

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 00-25-100 Technical Publications Library Management	Hard copy	1	May 95	Onboard
NAVAIR 00-80R-14-1 NATOPS Aircraft Emergency Rescue Information Manual	Hard copy	1	May 95	Onboard
NAVAIR 51-15AAA-1 Type C MK7/11 Catapult Operation	Hard copy	5	May 95	Onboard
NAVAIR 51-15AAA-2 Type C MK7/11 Catapult Maintenance and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-15AAA-3 Type C MK7/11 Catapult IPB	Hard copy	5	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-15ABB-1 MK13 MOD 0 Catapult Operation	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABB-3 MK13 MOD 0 Catapult IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABC-1 Operating Instructions, Catapult Type C MK13, and MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABC-2 Maintenance and Overhaul Instructions, Catapults, Type C MK13, and MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABC-3 IPB Catapult Type C Mk13, and Type C MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABD-1 Catapult Operation Instructions Type C MK13-1	Hard copy	5	May 95	Onboard
NAVAIR 51-15ABD-3 IPB for Type C MK13-1 Catapult	Hard copy	5	May 95	Onboard
NAVAIR 51-25-501 Catapult Vickers Pump Manual	Hard copy	5	May 95	Onboard
NAVAIR 51-40-8-1 Low Light Level Television System Operation, Maintenance, and Overhaul Manual with IPB	Hard copy	1	May 95	Onboard
NAVAIR 51-40-ACA-2 Manually Operated Visual Landing Aid System Installation, Operation and Maintenance Instruction with IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-40ABA-10 Fresnel Lens Optical Landing System MK-6 MOD 3 Installation, Service, Operation and Maintenance Manual	Hard copy	2	May 95	Onboard
NAVAIR 51-5-32 Corrosion Control Handbook for Shipboard Launch and Recovery Systems	Hard copy	1	May 95	Onboard
NAVAIR 51-50ABA-2 Visual Landing Aids on Aircraft Carriers	Hard copy	2	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

NAVAIR 51-60-8-1 ILARTS Operation, Maintenance, and Overhaul with IPB	Hard copy	1	May 95	Onboard
NAVAIR 51-60-9 MK1 MOD 0 LSO HUD Maintenance and Overhaul Manual with IPB	Hard copy	1	May 95	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	5	May 95	Onboard
NAVAIR 51-70-5 Deflector, Jet Blast, MK6 MOD 0, Operator, Maintenance, and Overhaul with IPB	Hard copy	5	May 95	Onboard

CIN, COURSE TITLE: C-222-2012, Carrier Air Traffic Control Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC : Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
EE216-SV-MMF-020/SPN46 (V) ACL Support Volume for AN/SPN-46 (V) ACLS	Hard copy	1	May 95	Onboard
NAVAIR 00-80T-105 Aircraft Carrier NATOPS Manual	Hard copy	60	May 95	Onboard
NAVAIR 00-80T-114 NATOPS Air Traffic Control Facilities Manual	Hard copy	1	May 95	Onboard
NAVAIR 00-80V-49 Air Navigation	Hard copy	1	May 95	Onboard
NAVAIR 16-60SPN43C-1-1 AN/SPN-43C Operation and Maintenance	Hard copy	1	May 95	Onboard
NAVAIR 51-50AAA-1 VLA Flight Deck Lighting	Hard copy	1	May 95	Onboard
NAVAIR AE-CVATC-OPM-000 Carrier Air Traffic Control Handbook	Hard copy	60	May 95	Onboard
NAWCAD No. 4.5.8.1-104 AN/SPN-46 ACLS Console Operating Procedures	Hard copy	1	May 95	Onboard
NESEA EE230-DD-OPI-010/E120 CATCC DAIR AN/TPX-42A (V) 8 Operations Manual Version 005	Hard copy	1	May 95	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-222-2019, Amphibious Air Traffic Control Center Operator
TRAINING ACTIVITY: NATTC
LOCATION, UIC : Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
HOSTAC Appendix 2D Helicopter Operating Procedures from Ships Other Than Aircraft Carriers	Hard copy	1	May 95	Onboard
Joint Publication 3-02 Joint Doctrine for Amphibious Operations	Hard copy	1	May 95	Onboard
Joint Publication 3.02.2 Ship-To-Shore Movement	Hard copy	1	May 95	Onboard
NAVAIR 00-80T-106 LHA/LHD/MCS NATOPS Manual	Hard copy	30	May 95	Onboard
NAVAIR 00-80T-114 NATOPS Air Traffic Control Facilities Manual	Hard copy	1	May 95	Onboard
NWP 3-04.1M Helicopter Operating Procedures for Air Capable Ships	Hard copy	1	May 95	Onboard
NWP 3-09.11M Supporting Arms in Amphibious Operations	Hard copy	1	May 95	Onboard

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : Norfolk, 46680

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	5	May 90	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-604-2017, Aircraft Launch and Recovery Equipment Quality Assurance Administration
TRAINING ACTIVITY: NAMTRAU
LOCATION, UIC : North Island, 39476

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NAVAIR 51-15ABB-2 MK13 MOD 0 Catapult Maintenance and Overhaul	Hard copy	5	May 90	Onboard
NAVAIR 51-5BBA-1.1 MK7 MOD 2 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-5BCA-1.1 MK7 MOD 3 Arresting Gear Operation, Maintenance, and Overhaul	Hard copy	10	May 90	Onboard
NAVAIR 51-70-3 Deflector, Jet Blast, MK7 MOD 0, Operation, Maintenance, and Overhaul with IPB	Hard copy	15	May 90	Onboard

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
PDA	Installed MAPA-C Feasibility Model	FY95	Completed
PDA	Completed Advanced Development Model for ISIS	FY97	Completed
PDA	Completed ADMACS and ISIS OPEVAL	FY98	Completed
TSA	Developed ADMACS Initial NTSP	Jun 99	Completed
TSA	Developed ALRCS Initial NTSP	Sep 99	Completed
OPO	Obtained Type Commanders Funded Commitment for MAPA-C	FY99	Completed
PDA	Achieved Approval for ALRCS Milestone I	FY99	Completed
PDA	Conducted VISUAL DT I	FY99	Completed
TSA	Developed VISUAL Initial NTSP	Feb 00	Completed
PDA	Achieved Approval for ADMACS Milestone III	FY00	Completed
PDA	Achieved Approval for VISUAL Milestone II	FY00	Completed
TSA	Developed ADMACS Draft NTSP	Nov 00	Completed
TSA	Distributed ADMACS Draft NTSP for Review	Jan 01	Completed
TSA	Conducted NTSP Conference	Nov 01	Completed
TSA	Updated ADMACS Draft NTSP	Nov 01	Completed
TSA	Developed ADMACS Proposed NTSP	Jan 02	Completed
TSA	Forwarded ADMACS Proposed NTSP to OPNAV	Feb 02	Completed
PDA	Begin VISUAL DT IIC	Jun 02	Pending
TSA	Submitted Approval NTSP	Mar 02	Completed
TSA	Achieve ADMACS and ISIS MSD	Jun 02	Pending
PDA	Complete MAPA-C Fleet CV and CVN Installations	FY03	Pending
PDA	Complete ADMACS and ISIS Fleet CV and CVN Installations	FY03	Pending
PDA	Conduct VISUAL OPEVAL	FY03	Pending
PDA	Begin VISUAL Fleet Installations	FY06	Pending
PDA	Achieve VISUAL MSD	FY06	Pending

PART VI - ACTION ITEMS/ACTION REQUIRED

The following action items are outstanding from the ADMACS NTSP Conference held at NAWCADLKE on November 5, 2001:

Action Item Number: NTSPC-001
Subject: ADMACS Manpower Issues
Originator: ACCM(AW/SW) Mike Holder
Organization: NAVAIRSYSCOM PMA205-3B1

Deficiency: Draft ADMACS NTSP states that "no additional manpower will be required to support ADMACS or ISIS". Fleet has expressed concern that there are a growing number of "stovepipe" systems that are being procured and deployed under the premise that there is no increase in manpower due to nominal increases in system specific maintenance tasks. Without identifying partial-man requirements the cumulative effect of this action is a continued increase in workload to an already over-burdened ship's work force.

Recommended Resolution: Document partial-man requirements for the ADMACS/ISIS. Identify ADMACS/ISIS preventive and corrective maintenance tasks and incorporate data into ADMACS NTSP.

Comments/Resolution: NAWCADLKE to release Naval message to Type Commanders NLT 15 November 2001 requesting Fleet maintenance data on ADMACS/ISIS. TYCOMS to provide maintenance data to NAWCADLKE for review NLT 15 December 2001.

Status: NAWCADLKE sent naval message R 131526Z NOV 01 ZYB to all concerned on 14 November.

Action Item Number: NTSPC-002
Subject: ADMACS/ISIS Maintenance Training
Originator: ACCM(AW/SW) Mike Holder
Organization: NAVAIRSYSCOM PMA205-3B1

Deficiency: (1) NTSP states that "ADMACS/ISIS hardware maintenance will be performed by shipboard Electronics Technicians (ET) with NEC 1677." NEC ET 1677 Course of Instruction (COI) does not adequately address ADMACS router and server maintenance. (2) NEC 1677 COI does not address ISIS unique hardware/software maintenance. There is a potential requirement for ISIS unique follow-on maintenance training.

Recommended Resolution: Per BUPERS MSG R 261540 SEP 01 the Navy has implemented NEC ET 1678 by establishing the Information Systems Maintainer (ISM) COI (A-150-2300). This new NEC will eventually phase out NEC ET 1677. New ET 1678 COI is believed to adequately address prior ADMACS router and server training shortfalls. NAWCADLKE currently provides one week of ISIS pre-deployment hardware/software maintenance training. CNET to review ET-1678 and ISIS maintenance courses and provide recommendations addressing any training shortfalls.

Comments/Resolution: NAWCADLKE to provide ISIS curriculum to CNET for review NLT 15 November 2001. CNET to provide recommendations on ADMACS/ISIS, training shortfalls NLT 15 December 2001.

Status: NAWCADLKE provided a detailed outline to CNET on 27 November. CNET provided initial curriculum analysis to NAWCADLKE on 14 December and advised that further collaboration between CNET and NAWCADLKE Subject Matter Experts (SME) is required.

PART VI - ACTION ITEMS/ACTION REQUIRED

Action Item Number: NTSPC-003
Subject: ADMACS/ISIS Operator Training/Technical Support
Originator: ACCM(AW/SW) Mike Holder
Organization: NAVAIRSYSCOM PMA205-3B1

Deficiency: NTSP states that follow-on operator training for ADMACS/ISIS manual data input operators not within the AC rating will be satisfied through On-the-Job Training (OJT). This training is currently provided by (1) sending ships personnel through ISIS training at NATTC Pensacola, Florida (C-222-2012) or (2) OJT onboard ship during installation. TYCOMs have expressed concern regarding out-year plans to provide this training and technical support.

Recommended Resolution: NAWCADLKE to validate current plan of utilizing ADMACS CAFSU SME personnel to perform ADMACS/ISIS operator training and technical support. NAWCADLKE to confirm that adequate resources are identified, programmed, and budgeted for in out-year fiscal plans to address this requirement. Incorporate plan into ADMACS NTSP.

Status: Currently NAWCADLKE would like to state in the NTSP that a "NAVAIR Lakehurst SME" would perform the training. This phrase will cover both a CAFSU and an engineer. When we are able to get more information as a result of action item 002 above, we can more easily determine just how much of this training we are going to need to continue. Then we can determine exactly who (engineer or CAFSU) and the resources programmed and budgeted for this person(s).

PART VII - POINTS OF CONTACT

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PART VII - POINTS OF CONTACT

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PART VII - POINTS OF CONTACT

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

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