

NAVY TRAINING SYSTEM PLAN

FOR THE

AIRBORNE EXPENDABLE

COUNTERMEASURES

N78-NTSP-A-50-0109/D

DECEMBER 2000

AIRBORNE EXPENDABLE COUNTERMEASURES

EXECUTIVE SUMMARY

This Draft Navy Training System Plan (NTSP) has been developed by the Naval Air Systems Command to identify Manpower, Personnel, and Training requirements associated with Airborne Expendable Countermeasures. Airborne Expendable Countermeasures addressed in this NTSP are currently in the Production, Fielding, Deployment, and Operational Support phase of the Weapons System Acquisition Process. No previous NTSP exists for Airborne Expendable Countermeasures.

Airborne Expendable Countermeasures are electronic warfare devices used for preemptive or terminal protection of aircraft from Radio Frequency (RF) or Infrared (IR) guided missile attack. Countermeasures are grouped into threat categories of RF passive, RF active, or IR, and include decoy flares, chaff, and expendable RF jamming devices. Decoy flares act as decoys for diverting heat seeking missiles, chaff provides a passive jamming action against enemy radar, while expendable jamming devices transmit RF power to counter airborne and land based semi-active radar guided missiles. Countermeasure devices are deployed from fixed or rotary wing aircraft equipped with countermeasure dispensers.

There are no preventive maintenance requirements for Airborne Expendable Countermeasures devices, at organizational, intermediate, or depot maintenance levels. Limited upkeep maintenance consisting of visual inspections, loading and unloading, packaging and unpackaging, and compliance with pertinent technical directives is performed at organizational and intermediate maintenance levels. Preventative maintenance requirements for Airborne Expendable Countermeasure Systems are addressed the applicable aircraft NTSP's. These functions are within the capability of existing aircraft and ordnance Navy Enlisted Classifications and Marine Corps Military Occupational Specialties.

Airborne Expendable Countermeasures do not have any impact on existing manpower requirements for officers, flight crews, or ground crews for squadrons, weapons departments (ashore or afloat), or training activities. All existing manpower is adequate to support Airborne Expendable Countermeasures.

Training for Airborne Expendable Countermeasures is included in formal aviation ordnance training courses or is accomplished as on-the-job training. A Countermeasures and Associated Cartridges safety lesson has been incorporated into the ordnance training track to present hazards associated with handling and storage of Airborne Expendable Countermeasures. This training is conducted at Maintenance Training Units, Fleet Replacement Enlisted Skills Training activities, and specific aircraft tactical weapons training schools. Specific training on countermeasure devices applicable to a particular aircraft type is conducted at the squadron level. At this time no new training courses are required

TABLE OF CONTENTS

	Page
Executive Summary.....	i
List of Acronyms.....	iii
Preface.....	v
 PART I - TECHNICAL PROGRAM DATA	
A. Title-Nomenclature-Program.....	I-1
B. Security Classification	I-1
C. Manpower, Personnel, and Training Principals.....	I-1
D. System Description.....	I-1
E. Developmental Test and Operational Test.....	I-2
F. Aircraft and/or Equipment/System/Subsystem Replaced	I-2
G. Description of New Development	I-2
H. Concepts	I-14
I. On-Board (In-Service) Training.....	I-19
J. Logistics Support	I-20
K. Schedules	I-21
L. Government Furnished Equipment and Contractor Furnished Equipment Training Requirements.....	I-22
M. Related NTSPs and Other Applicable Documents	I-22
 PART II - BILLET AND PERSONNEL REQUIREMENTS	
II-1	
 PART III - TRAINING REQUIREMENTS.....	
III-1	
 PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS.....	
IV-1	
 PART V - MPT MILESTONES.....	
V-1	
 PART VI - DECISION ITEMS/ACTION REQUIRED	
VI-1	
 PART VII - POINTS OF CONTACT	
VII-1	

AIRBORNE EXPENDABLE COUNTERMEASURES

LIST OF ACRONYMS

AMD	Activated Metal Decoy
AMTCS	Aviation Maintenance Training Continuum System
AO	Aviation Ordnanceman
ASTE	Advanced Strategic and Tactical Expendable
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CMDS	Countermeasures Dispenser System
CNET	Chief Naval Education and Training
CNO	Chief of Naval Operations
DT	Developmental Test
ECP	Engineering Change Proposal
FREST	Fleet Replacement Enlist Skills Training
FOT&E	Follow-On Test and Evaluation
FY	Fiscal Year
GEN-X	Generic Expendable Decoy
HERO	Hazards of Electromagnetic Radiation To Ordnance
ILSP	Integrated Logistics Support Plan
IPO	International Program Office
IR	Infrared
IRCM	Infrared Countermeasure
MATMEP	Marine Training Management Evaluation Program
MCCDC	Marine Corps Combat Development Command
MOS	Military Occupational Specialty
MTIP	Maintenance Training Improvement Program
MTU	Maintenance Training Unit
NA	Not Applicable
NALC	Naval Ammunition Logistics Code
NAMTRAU	Naval Air Maintenance Training Unit
NAVAIR	Naval Air Systems Command

AIRBORNE EXPENDABLE COUNTERMEASURES

LIST OF ACRONYMS

NAVAIRSYSCOM	Naval Air Systems Command
NAVPERSCOM	Naval Personnel Command
NEC	Navy Enlisted Classification
NOMMP	Naval Ordnance Maintenance Management Program
NSWC	Naval Surface Warfare Center
NTSP	Navy Training System Plan
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	Office of the Chief of Naval Operations Principal Official
OSD	Office of the Secretary of Defense
OT	Operational Test
PEO(T)	Program Executive Officer (Tactical Aircraft Programs)
PIP	Product Improvement Program
PMA	Program Manager, Air
POET	Primed Oscillator Expendable Transponder
RF	Radio Frequency
TFS	Total Force Structure
TTE	Technical Training Equipment
TTSARB	Technology Transfer Security Assistance Review Board
USAF	United States Air Force
USN	United States Navy
WSESRB	Weapons System Explosive Safety Review Board

AIRBORNE EXPENDABLE COUNTERMEASURES

PREFACE

This Draft Navy Training System Plan (NTSP) is a new publication. There is no existing NTSP. This document has been developed by the Naval Air Systems Command (NAVAIRSYSCOM), in accordance with Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97 to identify Manpower, Personnel, and Training requirements associated with airborne expendable countermeasures. It reflects current logistics support requirements for training activities that provide instruction on maintenance and safety while using Airborne Expendable Countermeasures. It identifies training courses and training tracks affected by the Airborne Expendable Countermeasures. It identifies training course equipment, curricula materials, and technical manuals. It also identifies the points of contact.

PART I - TECHNICAL PROGRAM DATA

A. TITLE-NOMENCLATURE-PROGRAM

- 1. **Nomenclature-Title-Acronym.** Airborne Expendable Countermeasures
- 2. **Program Element.** 0204162N and 0206138M

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 (N780)
- OPO Resource Sponsor CNO (N780)
- Developing Agency (DA) PEO(T) (PMA272)
- Training Agency (TA)..... CINCLANTFLT
CINCPACFLT
CNET
MCCDC
- Training Support Agency (TSA)..... NAVAIRSYSCOM (PMA205)
- Manpower and Personnel (M&P) Mission Sponsor CNO (N12)
NAVPERSCOM (PERS-4, PERS-404)
- Director of Naval Training CNO (N79)
- Marine Corps Force Structure..... MCCDC (C53)

D. SYSTEM DESCRIPTION

1. **Operational Uses.** Airborne Expendable Countermeasures are electronic warfare devices used for preemptive or terminal protection of aircraft from Radio Frequency (RF) or Infrared (IR) guided missile attack. Countermeasures are grouped into threat categories of RF

passive, RF active, or IR, and include devices such as decoy flares, chaff, and expendable RF jammers. Countermeasure devices are launched from sonobuoy pods, LAU-10 rocket launcher pods, LAU-138A/A guided missile launcher sets, and AN/ALE-29/A, AN/ALE-37/A, AN/ALE-39, AN/ALE-41, AN/ALE-43, or AN/ALE-47 countermeasure dispensers. Airborne Expendable Countermeasures may be deployed from both fixed wing and rotary wing aircraft.

2. Foreign Military Sales. Airborne Expendable Countermeasures release and sales to foreign countries is controlled by the policy defined in Navy Technology Transfer Security Assistance Review Board (TTSARB) 97-09. No transfer or sales of Airborne Expendable Countermeasures are authorized except through the Navy International Program Office (IPO)

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST. Developmental Tests (DT) and Operational Tests (OT) have been completed on all Airborne Expendable Countermeasures now in use except for the Advanced Strategic and Tactical Expendable (ASTE). The ASTE DT was completed in December 1999. ASTE OT is expected to begin in July 2001, and be completed in December 2002.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. Certain specific Airborne Expendable Countermeasure devices will be replaced by attrition as shown in the following table:

EXISTING DEVICE	REPLACEMENT DEVICE
MK46 MOD 1C Decoy Flare	MJU-32/D Decoy Flare
MJU-8/B Decoy Flare	MJU 8A/B Decoy Flare
MJU-8A/B Decoy Flare	MJU-38/B Decoy Flare
CCU-41/B	CCU-136/A
CCU-63/B	CCU-136/A
MJU-27/B	MJU-27A/B
SM-875/ALE	SM-875A/ALE

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. Airborne Expendable Countermeasures are electronic warfare devices used for preemptive or terminal protection of aircraft from RF or IR guided missile attack. Countermeasures are grouped into threat categories of RF passive, RF active, or IR, and include decoy flares, chaff, and expendable RF jamming devices. Decoy flares act as decoys for diverting heat seeking missiles, chaff provides a passive jamming action against enemy radar, while expendable jamming devices transmit RF power to counter airborne and land based semi-active radar guided missiles. Countermeasure devices are deployed from fixed or rotary wing aircraft equipped with countermeasure dispensers.

a. Infrared Devices

(1) **MK46 MOD 1C Decoy Flare.** The MK46 MOD 1C Decoy Flare is a magnesium fueled device which provides self-protection against IR missiles for the A/UH-1, H-46, SH-60, C-130, and P-3C Aircraft. This decoy is ejected from AN/ALE-39 or AN/ALE-47 Countermeasure Dispensers with either a CCU-63/B or CCU-136/A Impulse Cartridge. The MK46 MOD 1C Decoy Flare is being replaced by the MJU-32/B through attrition.

(2) **MJU-8/B Decoy Flare.** The MJU-8B Decoy Flare was specifically designed to provide self-protection against IR missiles for Naval tactical aircraft. This decoy is ejected from the AN/ALE-39 or AN/ALE-47 Countermeasures Dispensers with either a CCU-63/B or CCU-136/A Impulse Cartridge. The MJU-8/B was replaced by the MJU-8A/B as an approved operational decoy in 1988. Current inventory assets have been restricted to training use only until depleted.

(3) **MJU-8A/B Decoy Flare.** This decoy was fielded in 1988 as a product improvement to the MJU-8B Decoy Flare. The MJU-8A/B provides self-protection against IR missiles for Naval tactical aircraft and H-53 Helicopters. This decoy is ejected from the AN/ALE-39 or AN/ALE-47 Countermeasure Dispenser with either a CCU-63/B or CCU-136/A Impulse Cartridge. The MJU-8A/B is being replaced by the MJU-38/B through attrition.

(4) **MJU-22/B Decoy Flare.** The MJU-22/B Decoy Flare is a product improvement to the MJU-8A/B Decoy Device fielded in 1988, and is similar to that flare with the exception of increased length. The MJU-22/B is used by the EA-6B aircraft and provides a greater degree of protection against IR missiles than the MJU-8A/B Decoy. The MJU-22/B is ejected from the AN/ALE-39 D-47 Extended Magazine (Ten Inch) Countermeasures Dispenser using either a CCU-63/B or CCU-136/A Impulse Cartridge.

(5) **MJU-27/B Decoy Flare.** The MJU-27/B Decoy Device is dispensed from an AN/ALE-39 or AN/ALE-47 Dispenser using either a CCU-63/B or CCU-136/A Impulse Cartridge. The MJU-27/B is still in active inventory and is being replaced by the MJU-27A/B through attrition.

(6) **Advanced Strategic and Tactical Expendable.** The ASTE solution program is a multiservice project involving the efforts of the USAF and USN NAVAIRSYSCOM with the USAF having cognizant responsibility for the expendable. ASTE is comprised of three IR decoy configurations. The flares are configured into two groups, the Fighter Group and the Covert Group. Either the Fighter or the Covert Group is dispensed from an AV-8B or F/A-18E/F aircraft utilizing the hybrid AN/ALE-47 dispensing system, under development by the F/A-18E/F program. An MJU-47/B (Kinematic), and MJU-48/B (Companion) flare combination comprises the Fighter Group. The Covert Group is an arrangement of MJU-51/B flares. The MJU-47/B (Kinematic) is a self-propelled IR flare assembly consisting of an outer case, a flare housing with fins and nozzle component and safe and interrupt assembly packaged in a MJU-10 form factor. The MJU-48/B (companion) consists of an outer case, impulse cartridge cup, a mid-spacer with hydrogen and water vapor absorber, a special material payload and an end cap. The sole purpose of the ASTE solution is to redirect incoming missile threats away from the aircraft. The ASTE

solution is composed of Non-Developmental Items as well as a redesign effort for the housing and magazines. The redesign modifies the flare casing size and changes the dispenser housing to accommodate the smaller flares. ASTE decoy flares are deployed then actuated by BBU-35/B and BBU-36/B impulse cartridges.

The ASTE solution is capable of deploying a Fighter Group and a Covert Group flare configuration. The group deployed is contingent upon the aircraft platform mission. ASTE is a flare development, not an avionics system. Current planning is for the F/A-18E/F and the AV-8B to be equipped with the ASTE solution.

Functionally the ASTE solution will be launched from an AV-8B or F/A-18E/F aircraft using a hybrid AN//ALE-47 Countermeasures Dispensing System (CMDS). When installed in the proper chamber, a corresponding impulse cartridge is installed in a cavity on the breech end of the outer case. Once the impulse cartridge has been initiated from the firing pulse, in the Fighter Group a frangible membrane ruptures and gas pressurizes the outer case. The flare housing and end cap are ejected from the outer case by gas pressure. The slider interrupter prevents the hot gas from igniting the flare assembly prior to clearing the outer case. When clear of the outer case, the slider interrupter allows ignition of the flare assembly. Following ejection, the flare assembly is stabilized by fins, and, upon exposure to the air stream, causes the nose of the flare to point into the wind on a trajectory which approximately parallels that of the aircraft. The burning pellet produces hot gases, which generate radiant IR energy (used to decoy the threat seeker), and thrust, which powers the flare on the desired trajectory. The Covert Group flare functions when the impulse cartridge is initiated by the firing pulse, a frangible membrane ruptures; and the pressure inside the canister increases. A piston drives the special material payload the length of the canister. The force of the payload pushing on the closure disk breaks the seal and propels the payload into the atmosphere where the payload reacts with the air to emit IR radiation.

(7) MJU-49/B Decoy Device. The MJU-49/B decoy device is an IR decoy, providing aircraft survivability and protection against IR guided threats. It was designed to increase the survivability of helicopters and low/slow fixed wing aircraft. It is intended as an improvement over the performance of the MJU-27A/B decoy when used either singly or in combination with other Infrared Countermeasure (IRCM) on helicopters and low/slow fixed wing aircraft. The MJU-49/B decoy device consists of a cylindrical cartridge approximately 1.4 inches in diameter and 5.8 inches in length. The decoy is used in either the ASN/ALE-39 or the AN/ALE-47 CMDS, the payload being dispensed by either a CCU-63/B or CCU-136/A impulse Cartridge. The IR payload produces significant amounts of energy to decoy threats that operate within the 2-5 micrometer wavelength portion of the spectrum. The decoy consists of an appropriate amount of a special type of IR material which, when expelled from the sealed container, performs similarly to the MJU-27A/B decoy by generating heat through a pyrophoric process.

(8) MJU-47/B Kinematic Decoy Flare. Prototype development of the Kinematic Decoy Flare began in January 1989. Currently, a joint USN and USAF Program, ASTE is underway for commercial development and production of a comparable item. The MJU-48 and MJU-51 Decoy Flares are companion devices to the MJU-47/B.

(9) MJU-49/B Decoy Device. The MJU-49/B decoy device is an IR decoy, providing aircraft survivability and protection against IR guided threats. It was designed to increase the survivability of helicopters and low/slow fixed wing aircraft. It is intended as an improvement over the performance of the MJU-27A/B decoy when used either singly or in combination with other IRCM on helicopters and low/slow fixed wing aircraft. The MJU-49/B decoy device consists of a cylindrical cartridge approximately 1.4 inches in diameter and 5.8 inches in length. The decoy is used in either the ASN/ALE-39 or the AN/ALE-47 CMDS, the payload being dispensed by either a CCU-63/B or CCU-136/A impulse Cartridge. The IR payload produces significant amounts of energy to decoy threats that operate within the 2-5 micrometer wavelength portion of the spectrum. The decoy consists of an appropriate amount of a special type of IR material which, when expelled from the sealed container, performs similarly to the MJU-27A/B decoy by generating heat through a pyrophoric process.

(10) MJU-35/B Decoy Flare. MJU-35/B decoy device is an extended length IR decoy product improvement to the MJU-27/B decoy. The decoy provides improved IR output and better protection for high IR signature aircraft. The MJU-35/B contains the same proprietary material as the MJU-27/B and is dimensionally the same except for its extended length. The MJU-35/B has a hazard classification of 4.2G (spontaneously combustible) versus a standard conventional IR decoy, which is 1.3G. The flare consists of a cylindrical aluminum case approximately 1.42 inches in diameter, 8.1 inches long (versus 5.8 Inches for the MJU-27/B). The MJU-35/B is designed for the 8.1 inch length AN/ALE-47 CMDS. The only difference between the MJU-35/B and the MJU-27A/B is the length. Based on Direction from the Office of the Secretary of Defense (OSD)/N78 all future IR countermeasures developments for all future aircraft will require joint Air Force/Navy utilization. Therefore, the MJU-35/B is being replaced with an MJU-7A/B form factor (1x2x8.1inches).

(11) MJU-36/B Decoy Device. The MJU-36/B IR decoy is an extended length IR decoy product improvement to the MJU-8A/B decoy. The MJU-36/B provides improved safety features and takes advantage of the extended length available to provide better protection for high IR signature aircraft. The only difference between the MJU-38/B and the MJU-36/B is the length. The MJU-36/B is designed for the 8.1inches Length AM/ALE-47 CMDS used on the F/A-18E/F during Operational Evaluation (OPEVAL). Based on direction from OSD/N78 all future IR countermeasure developments for future aircraft will require joint Air Force/Navy utilization. Therefore, the F/A-18E/F the MJU-36/B is being replaced with an MJU-7A/B form factor (1x2x8.1inches) magnesium based flare. The basic design and functional sequence of the MJU-36/B is similar to that of the MJU-32/B and MJU-38/B, using the sympathetically ignited, boreriding slider/initiator. The MJU-36/B was initially presented to the Weapons System Explosive Safety Review Board (WSESRB) on 23 May 1996. WSESRB approved the system Safety Plan and provided criteria for development plan approval.

(12) MJU-52/B Decoy Device. The MJU-52/B (BOL-IR) decoy is an IR decoy, providing enhanced aircraft survivability and protection against IR guided Threats. It was designed to increase the survivability of aircraft capable of carrying the LAU-138A/A Guided Missile Launcher Set BOL dispenser (or its derivatives). The dispenser's currently loaded with 160 chaff cassettes that are dispensed from the BOL by an electro-mechanical gear movement. It is intended the MJU-52/B serve as an improvement over the existing BOL-ALE-39 combination

of dispensers by allowing the aircraft commander greater flexibility in optimizing his countermeasure load-out to defeat specific mission threats. The decoy consists of a modified BOL chaff plastic cartridge that houses an IR payload. The IR payload produces a specific amount of IR energy in the 2-5 micrometer wavelength portion of the spectrum. The decoy consists of an appropriate amount of a special IR material, which when expelled from the sealed container, performs similarly to the MJU-27A/B decoy flare by generating heat through a pyrophoric process. The MJU-52/B utilizes the same flatpacks as the BOL chaff to facilitate operational use of the BOL dispenser. The difference between the RF and IR packages revolves around the different payload of the decoy devices. The BOL IR payload is pyrophoric metal (Special Material) which must be contained within an air-tight, sealed package. The operation of the dispenser and the release of the package is the same as with BOL chaff. The BOL IR payload packet seal contains an integral tear strip which is attached to the encapsulating flatback. When released into the air stream the flatpack acts as a parachute due to the relative drag between the payload packet and the flat pack. This drag force, tears open the seal of the payload packet and the pyrophoric payload is released to the air stream, dispensing aerodynamically in the same manner as the chaff.

b. Radio Frequency Devices

(1) AN/ALQ-190(V)1 Chaff Countermeasures Set. The AN/ALQ-190(V)1 is usable as a decoy target for hostile missiles, a confusion target against hostile search radars, target masking coverage, or corridor protection screening to any radar operating in the frequency bands of the AN/ALQ-190(V)1. This countermeasure set is an A-size sonobuoy chaff cartridge designed to be deployed from the SH-3 and SH-60 rotary wing aircraft, and S-3B and P-3C fixed wing aircraft using the A-size sonobuoy launch system.

(2) RR-129/AL Chaff Countermeasure (Operational). The RR-129/AL Chaff Countermeasure (Operational) is a passive countermeasure that provides self-protection against RF search track radars, RF guided missiles, and anti-aircraft batteries. This device can be used on all Naval airframes. The RR-129/AL is being replaced by the RR-129A/AL through attrition.

(3) RR-144/AL Chaff Countermeasure (Training). The RR-144/AL Chaff Countermeasure (Training) Cartridge is used for training against I-band radars. These devices are used on all Naval airframes. Chaff is dispensed from the AN/ALE-29A, AN/ALE-37A, AN/ALE-39, or AN/ALE-47 Dispenser Sets. The RR-144/AL is being replaced by the RR-144A/AL through attrition.

(4) RR-171/-172 Chaff Rolls. The RR-171/-172 Chaff Rolls are used with the AN/ALE-41 Chaff Dispenser Pod. The chaff countermeasure is prepackaged (wrapped between mylar) and the only difference in the rolls is resonant frequency.

(5) RR-179/AL Chaff Roving Bundle. The RR-179/AL Chaff Roving Bundle is used with the AN/ALE-43 Chaff Dispenser Pod. The AN/ALE-43 is equipped with a cutter head and the desired frequency(s) can be dialed in prior to flight. The AN/ALE-43 is tentatively scheduled as the replacement for the AN/ALE-41 system.

(6) RR-181/AL Chaff Countermeasure. The RR-181/AL Chaff Countermeasure is a chaff payload associated with the AN/ALQ-190(V)1 Chaff Countermeasure Set. It is launched from a LAU-133/A container on P-3C, S-3B, SH-60, and EA-6B aircraft, using a JAU-22/B Cartridge. RR-181/AL can be used as a decoy target for hostile missiles, a confusion target for unfriendly search radars, or can provide target coverage (masking), and corridor protection screening.

(7) RR-182/AL Zuni Chaff Warhead. The RR-182/AL Zuni Chaff Warhead is explosively dispersed from a LAU-10 rocket launcher pod. The RR-182/AL can be launched from P-3C, S-3B, , SH-60, and F/A-18E/F aircraft. The inventory objective has been met and the RR-182/AL is no longer in production.

(8) RR-184/AL Chaff Cartridge (Tactical). The RR-184/AL Chaff Cartridge (Tactical) is a passive countermeasure that provides self protection against RF search and track radars, and RF guided missiles and anti-aircraft batteries. The RR-184/AL is a unique chaff countermeasure used with the LAU-138/A Guided Missile Launcher Set. A total of 160 chaff packets are loaded into each LAU-138/A dispenser. Currently, the RR-184/AL is being procured in support of F-14 Aircraft.

(9) RR-189/AL Chaff Cartridge (Training). The RR-189/AL Chaff Cartridge (Training) is a training countermeasure (I band only) used with the LAU-138A/A Guided Missile Launcher Set. Currently the RR-189/AL is used in support of F-14 Aircraft.

c. Radio Frequency Active Countermeasures

(1) AM 6988 Primed Oscillator Expendable Transponder. The AM 6988 Primed Oscillator Expendable Transponder (POET) provides terminal self-defense against a specific threat. POET is no longer in production and will be used as a training device once the RT-1489/ALE Generic Expendable Decoy (GEN-X) inventory requirement is satisfied. The POET is ejected from the AN/ALE-39 or AN/ALE-47 Dispenser with a CCU-63/B or CCU-136/A Impulse Cartridge.

(2) RT-1489/ALE Generic Expendable Decoy. The GEN-X decoy is a small, one shot, expendable terminal RF threat countermeasure which receives an RF signal from a recognized threat such as airborne or land-based semi-active radar guided missiles, then transmits RF power to counter that threat. The GEN-X decoy can be launched from the AN/ALE-39 or AN/ALE-47 Countermeasure Dispensers using a CCU-63/B or CCU-136/A Impulse Cartridge. GEN-X has been designed and cleared for flight on all Navy tactical aircraft.

d. Impulse Cartridges

(1) CCU-41/B Impulse Cartridge. The CCU-41/B Impulse Cartridge provides a power source for the ejection of chaff countermeasures.

(2) CCU-63/B Impulse Cartridge. The CCU-63/B Impulse Cartridge provides a power source for the ejection of IR countermeasures, POET, and GEN-X.

(3) CCU-136/A Impulse Cartridge. The CCU-136/A Impulse Cartridge provides a power source for the ejection of countermeasures in the AN/ALE-47 and AN/ALE-39 dispensers.

(4) CCU-136A/A Hazards of Electromagnetic Radiation To Ordnance Safe Impulse Cartridge. In recognition of the safety problems associated with Hazards of Electromagnetic Radiation to Ordnance (HERO), Program Manager, Air (PMA) 272 tasked Naval Surface Warfare Center (NSWC) Indian Head with the development of a HERO-safe CCU-136/A impulse cartridge. The performance required of this impulse was, that it shall be HERO-safe, in all potential operating, handling, transporting and storage conditions, and regardless of the intensity of the defined electromagnetic radiation environment onboard ship. This Product Improvement Program (PIP) was built upon the basic design of the CCU-136/A, and is designated as the CCU-136A/A. This impulse cartridge has the same form/fit/function characteristics of the CCU-136/A impulse cartridge and is applicable to AN/ALE-39, AN/ALE-47, and AN/ALE-50 CMDS. Initial production of the CCU-136A/A began in Fiscal Year (FY) 99, with Fleet introduction and availability in FY00.

(5) JAU-22/B Impulse Cartridge. The JAU-22/B Impulse Cartridge provides a power source for ejection of countermeasures in the LAU-133/A container.

e. Dispensers

(1) AN/ALE-29A Countermeasure Dispenser Set. The AN/ALE-29A Countermeasure Dispensing Set is an internally mounted dispensing system for use with self-protection countermeasure decoys. Flexibility is provided in selection of system components to permit installation in a large number of different aircraft. The AN/ALE-29A Countermeasure Dispensing Set interfaces with and accepts command signals from the different aircraft cockpit controllers to permit dispensing countermeasures decoys at selectable intervals and quantities.

(2) AN/ALE-37A Chaff Dispensing Pod. The AN/ALE-37A is an externally mounted lightweight unit designed for use on aircraft operating from land or carrier bases. The AN/ALE-37A contains two lightweight chaff modules and has a capacity of 240 individual chaff loads. The AN/ALE-37A is designed for quick reloading using two spare loaded modules with squib boards installed. The chaff is contained in cylindrical shaped containers which are inserted into the pod modules. Each module is loaded with 120 chaff containers and each container is fired by a separate squib. The cockpit control indicator or pod control indicator is used to select the burst rate and firing sequence. All chaff can be dispensed in 30 seconds (at the 1/4 second firing in doubles setting) or spread over eight minutes (at two second firing in singles setting).

(3) AN/ALE-39 Dispenser. The AN/ALE-39 Dispenser has the capability of dispensing up to 60 chaff, flare, or jammer payloads. Payloads may be all one type or a combination of types, but all payloads loaded in each dispenser section must be the same type. All three payload types can be dispensed in either single (manual) or programmed (automatic) mode, independently or concurrently. The payloads can be ejected individually or in preset patterns. The dispenser has the capacity for 30 units in each dispenser.

(4) AN/ALE-41 Chaff Dispenser (Pod). The AN/ALE-41 is a roll type dispenser for chaff corridor seeding and has dipoles rolled between two layers of mylar film into a sandwich approximately 0.2 inches thick, twelve inches wide and 100 feet long. The rolls are unwound in a ram air pressurized external store with the two mylar films separated over a slot in a tube extending out the aft end of the store. The released dipoles are instantly drawn into the tube and continuously ejected from the tube into the boundary layer. No pyrotechnics are involved.

(5) AN/ALE-43(V) Chaff Dispenser (Pod). The AN/ALE-43(V) is a bulk chaff dispenser, which cuts chaff dipoles from fiberglass roving. This dispenser is a pod configuration and has an eight package capacity. The cutting mechanism contains a rubber platen roller and three cutter rollers which yield three in-flight selectable combinations of dipole lengths. The chaff is dispensed when the rovings are drawn simultaneously from each roving package, cut to length and discharged into the wind stream. No pyrotechnics are involved.

(6) AN/ALE-47 Dispenser. The AN/ALE-47 Dispenser is an upgrade to and eventual replacement for the AN/ALE-39 Dispenser. The AN/ALE-47 has the capability of dispensing flares, chaff, non-programmable expendable jammers, and programmable jammers. The system consists of a Cockpit Control Unit, Programmer, Sequencer Switch, and Dispenser Assembly, which will program and eject specific expendable countermeasures in response to various threats.

2. Physical Description

IR COUNTERMEASURE	LENGTH	DIAMETER	BASE FLANGE
MK 46 MOD1C Decoy Flare	5.80 in	1.42 in	1.495 in
MJU-8/B Decoy Flare	5.80 in	1.42 in	1.495 in
MJU-8A/B Decoy Flare	5.80 in	1.42 in	1.495 in
MJU-22/B Decoy Flare	10.50 in	1.42 in	1.495 in
MJU-27/B Decoy Flare	5.80 in	1.42 in	1.495 in
MJU-27A/B Decoy Device	5.80 in	1.42 in	1.495 in
MJU-32/B Decoy Flare	5.80 in	1.42 in	1.495 in
MJU-35/B Decoy Flare	8.10 in	1.42 in	1.495 in
MJU-36/B Decoy Flare	8.10 in	1.42 in	1.495 in
MJU-38/B Decoy Flare	5.80 in	1.42 in	1.495 in
SM-875/ALE Simulator Flare	5.80 in	1.42 in	1.495 in

RF COUNTERMEASURES	LENGTH	DIAMETER	WEIGHT
---------------------------	---------------	-----------------	---------------

RF COUNTERMEASURES	LENGTH	DIAMETER	WEIGHT
AN/ALQ-190(V) Chaff Countermeasure Set	39.7 in	5.40 in	34 lbs
RR-129/AL Chaff Cartridge	5.81 in	1.42 in	5.8 oz
RR-144/AL Chaff Cartridge	5.81 in	1.42 in	6.0 oz
RR-171/ -2/ Chaff Rolls	NA	6.32 in	46 lbs
RR-179/AL Roving Chaff Bundle	12.25 in	10.44 in	40 lbs
RR-181/AL Chaff Cartridge	36 in	4.9 in	32 lbs
RR-182/AL Zuni Chaff Warhead	32.25 in	5.13 in	47 lbs

RF COUNTERMEASURES	LENGTH	WIDTH	HEIGHT	WEIGHT
RR-184/AL LAU-138A/A Chaff Cartridge (Tactical)	0.38 in	2.75 in	3.16 in	38.6 g
RR-189/AL LAU-138/A/A Chaff Cartridge (Training)	0.38 in	2.75 in	3.16 in	38.6 g

RF ACTIVE COUNTERMEASURE	LENGTH	DIAMETER	WEIGHT
AM-6988/A Primed Oscillator Expendable Transponder	5.83 in	1.43 in	1.10 lbs
RT-1489 GEN-X	5.80 in	1.35 in	1.10 lbs

IMPULSE CARTRIDGES	LENGTH	DIAMETER	WEIGHT
CCI-41-B	0.77 in	0.63 in	9.0 g
CCU-63/B	0.73 in	0.63 in	9.0 g
CCU-136/A	0.77 in	0.63 in	9.0 g
JAU-22/B	3.40 in	2.00 in	0.77 lbs

CHAFF DISPENSER	LENGTH	DIAMETER	HEIGHT
AN/ALE-29A	9.75 in	8.25 in	6.35 in
AN/ALE-37/A	86.90 in	7.75 in	5.83 in

CHAFF DISPENSER	LENGTH	DIAMETER	HEIGHT
AN/ALE/39	8.5 in	6.70 in	10.6 in
AN/ALE-41	131.6 in	19.60 in	5.25 in
AN/ALE-43	166.2 in	19.58 in	19.2 in
AN/ALE-47	9.27 in	7.75 in	5.83 in

3. New Development Introduction

a. MJU-32/B Decoy Flare. A PIP associated with the MK 46 MOD 1C was initiated to improve the integrity of the outer case and provide a safer ignition system. The Engineering Change Proposal (ECP) was signed in June 1996 and production began in fourth quarter FY96. The MK 46 MOD1C will be replaced through attrition by the MJU-32/B.

b. MJU-38/B Decoy Flare. A PIP was initiated on the MJU-8/A Decoy Flare to reduce production costs and enhance safety. The grain configuration was changed for more efficient production while maintaining the existing IR time and intensity profile. The outer case, end cap, and igniter were all modified to enhance safety. The ECP was signed in June 1995 and procurement implemented in FY96. The MJU-8/A Decoy Flare will be replaced through attrition by the MJU-38/B Decoy Flare.

c. SM-875A/ALE Flare Simulator. The SM-875/ALE Flare Simulator, was reconfigured to reduce the number of internal components, enhance flare ignition, and was increased in length to make it the same as all other decoys, for better/safer visual inspection by ordnance personnel during turnaround operations. This new device, nomenclature SM-875A/ALE was procured in FY98 for replacement of the current SM-875/ALE simulator Flares.

d. MJU-35/B Decoy Flare. The MJU-35/B Decoy Flare is the nomenclature assigned to a product improvement associated with the MJU-27/B Decoy Flare. The ECP provides for additional payload material to increase the IR output and to allow compatibility with an 8.1 inch dispenser being fitted for the F/A 18 E/F Aircraft. Procurement began in FY98.

e. MJU-36/B Decoy Flare. A product improvement associated with the MJU-8A/B was initiated to provide a higher intensity decoy for the F/A 18E/F Aircraft. The flare uses conventional composition and is 8.1 inches long and 1.42 inches in diameter. Qualification tests were initiated in the fourth quarter FY95 and were completed in the second quarter FY96. Production began the third quarter FY98.

f. MJU-27A/B Decoy Device. The MJU-27A/B Decoy Device is a PIP to the MJU-27/B. This decoy is dispensed from either an AN/ALE-39 or AN/ALE-47 Dispenser using a CCU-63/B or CCU-136/A Impulse Cartridge. The MJU-27A/B is being procured and will replace the MJU-27/B through attrition.

4. Significant Interfaces. Airborne Expendable Countermeasures are launched from AN/ALE-29A, AN/ALE-37A, AN/ALE-39, AN/ALE-41, AN/ALE-43, and AN/ALE-47

Countermeasure Dispensers. With the exception of the LAU-10 and LAU-138/BOL, dispensing is initiated by the firing of an impulse cartridge. These devices are usable with fixed and rotary wing aircraft capable of employing Airborne Expendable Countermeasures. The following shows individual countermeasure devices and associated dispensers, Naval Ammunition Logistic Codes (NALCs), impulse cartridges, and aircraft applications.

INTERFACE MATRIX				
COUNTERMEASURE	DISPENSER	NALC	IMPULSE CARTRIDGE	AIRCRAFT APPLICATION
Infrared:				
MK46 MOD 1C	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	LW60	CCU-63/B, CCU-136/A	A/UH-1, , H-46, SH-60, C-130, P-3C
MJU-8/B	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	LW62	CCU-63/B, CCU-136/A	Training Asset For Tactical Aircraft
MJU-8A/B	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	2W89	CCU-63B, CCU-136/A	Training Asset for Tactical Aircraft and H-53
MJU-22/B	AN/ALE-39	LW16	CCU-63/B, CCU-136/A	EA-6B
MJU-27/B	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	2W11	CCU-63/B, CCU-136/A	H-46, SH-60, AV- 8B, F/A-18D/E/F
MJU-32/B	AN/ALE-39	LA01	CCU-63/B CCU-136A	A/UH-1, H-46, H-53, SH-60, P-3C, C-130
MJU-38/B	AN/ALE-39	LA02	CCU-63/B CCU-136/A	AV-8B, EA-6B, F-14A/B/D, F/A-18D/E/F, S-3B
SM-875/ALE	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	L540	CCU-63/B, CCU-136/A, CCU-41/B	All Naval Airframes

INTERFACE MATRIX				
COUNTERMEASURE	DISPENSER	NALC	IMPULSE CARTRIDGE	AIRCRAFT APPLICATION
Radio Frequency:				
AN/ALQ-190(V)1	LAU-133	4W60	JAU-1/B, JAU-22/B	SH-60, P-3C, S-3B
RR-129/AL	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	NW20	CCU-41/B CCU-136/A	All Naval Airframes
RR-129A/AL	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	DWCF	CCU-41/B CCU-136/A	All Naval Airframes
RR-144/AL	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	NW-33	CCU-41/B, CCU-136/A	All Naval Airframes
RR-144A/AL	AN/ALE-29A AN/ALE-37A AN/ALE-39 AN/ALE-47	DWCB	CCU-41/B CCU-136/A	All Naval Airframes
RR-181/AL	LAU-133	4W60	JAU-22/B	P-3C, S-3B, SH-60, EA-6B
RR-182/AL	LAU-10	HW96	NA	SH-60, P-3C, S-3B, F/A-18E/F
RR-184/AL	LAU-138A/A	CWCK	NA	F-14A/B/D
RR-189/AL	LAU-138A/A	CWCM	NA	F-14A/B/D
Radio Frequency Active:				
AM-6988	AN/ALE-39 AN/ALE-47	MW94	CCU-63B, CCU-136/A	Tactical Aircraft
RT-1489/ALE	AN/ALE-39 AN/ALE-47	CWCG	CCU-63B, CCU-136/A	Tactical Aircraft

5. New Features, Configurations, or Material

a. MJU-32/B Decoy Flare. The MJU-32/B Decoy Flare has an improved outer case integrity and safer ignition system.

b. MJU-38/B Decoy Flare. The MJU-38/B grain configuration was changed for easier productivity while maintaining the existing IR time and intensity profile. The outer case, end cap, and igniter were modified to enhance safety.

c. SM-875/ALE Flare Simulator. The SM-875/ALE Flare Simulator was reconfigured to reduce the number of internal components and enhance flare ignition by modification of the flare ignition material.

H. CONCEPTS

1. Operational Concept. Airborne Expendable Countermeasures are employed by aircrews in various tactical and training applications to protect aircraft from RF or IR guided missile attack.

2. Maintenance Concept. Airborne Expendable Countermeasures and the associated impulse cartridges are, by definition, expendable, having no preventive or corrective maintenance procedures or requirements. However, there are requirements for inspection prior to use, loading, handling, and repackaging at the organizational and intermediate levels of maintenance. Maintenance tasks are identified and assigned by the Naval Ordnance Maintenance Management Program (NOMMP) OPNAVINST 8000.16 Volume 2 Section 2 Procedures and inspection criteria for particular configurations are added to appropriate Weapons Assembly Manuals prior to fleet introduction of decoys and devices.

a. Organizational. Organizational maintenance on countermeasure devices involves inspecting, loading, arming, de-arming, downloading, and reporting discrepancies. Organizational Work Center 230 is manned by Navy Aviation Ordnanceman (AO) personnel with Navy Enlisted Classifications (NEC) 8319, 8819, 8332, 8335, 8342, 8842, 8345, 8845, 8347, 8847, 8377, 8378, or by Marine Corps personnel with Military Occupational Specialties (MOS) 6511 or 6531. Aviation Ordnancemen are not presently assigned to SH-60 LAMPS Detachments. In these Detachments all Group IX ratings holding NEC 8378 and assigned to LAMPS Detachments may be required to perform airborne expendable countermeasures organizational level maintenance tasks. Preflight and postflight inspections consist of performing visual examination of device cases for dents, cracks, corrosion, illegible or incorrect markings, compliance with pertinent Notices of Ammunition Reclassifications, and technical directives. Any devices failing these inspections are forwarded to the intermediate maintenance level for action.

(1) Preventive Maintenance. Not Applicable (NA)

(2) Corrective Maintenance. There are no corrective maintenance actions performed on Airborne Expendable Countermeasures at the organizational maintenance level.

b. Intermediate. There are no preventive maintenance requirements performed at the intermediate maintenance level. Intermediate Maintenance Activities' Weapons Departments (shipboard, Naval Air Station, and Marine Aviation Logistics Squadron) receive expendable countermeasure devices from the appropriate issuing activity. Maintenance is performed by Navy AO personnel with NEC 6802 and Marine Corps personnel with MOS 6541. Routine upkeep maintenance actions for intermediate level activities include:

- Receipt, handling, storage, and issue
- Packaging and unpackaging
- Visual inspection for external damage to case
- Inspection for illegible or incorrect markings
- Minor cleaning and corrosion procedures
- Compliance with pertinent technical directives

Devices requiring maintenance, which exceeds the capabilities of the fleet I-level will have the condition codes reclassified and disposed of in accordance with existing directives.

c. Depot. NA

d. Interim Maintenance. Interim maintenance is not required since the Airborne Expendable Countermeasures are fielded with full Navy organic support available.

e. Life-Cycle Maintenance Plan. Maintenance Plans are generated in support of Airborne Expendable Countermeasures. Shelf-life for Airborne Expendable Countermeasures differs depending upon the device. Chaff and countermeasure devices have an indefinite shelf-life, while RF Active devices and Impulse Cartridges have a five-year and nine-year shelf-life respectively.

3. Manning Concept. Manning concepts for Airborne Expendable Countermeasures are as follows:

a. Aircrew. Airborne Expendable Countermeasures are operated by aircraft pilots and countermeasure system operators. Airborne Expendable Countermeasure systems do not drive any change in aircrew manning.

b. Maintenance. Manpower requirements for Airborne Expendable Countermeasures are compatible with existing skill levels, therefore no new NECs or MOSs will be required. Airborne Expendable Countermeasures do not alter current manning requirements at organizational, intermediate or depot level maintenance activities.

4. Training Concept. The Airborne Expendable Countermeasure Training Program consists of training for maintenance personnel only. No new training courses are required at this time. An Airborne Countermeasures and Associated Impulse Cartridges safety lesson has been developed and will be incorporated into certain existing courses. This lesson will have no impact on course length or student throughput.

a. Initial Training. No initial training for Airborne Expendable Countermeasures is required for this NTSP.

b. Follow-on Training. An Airborne Countermeasures and Associated Impulse Cartridges safety lesson has been developed and will be incorporated into the following courses with minimal impact:

COURSE NUMBER	COURSE TITLE	TRACK NUMBER
C-646-9962	F-14A/B Armament Systems Initial Organizational Maintenance	D-646-1647
C-646-4109	Air Launched Weapons Ordnance General	D/E-646-7007
C-646-9571	P-3C Armament/Ordnance Systems Initial Organizational Maintenance	D-646-1042
C-646-3105	Aviation Ordnance Intermediate Maintenance Technician	M-646-7026
C-646-3106	Rotary Wing Armament Organizational Level Differences	NA
C-646-9361	H-1 Armament Repair Integrated Organizational Maintenance	M-646-2044
C-102-9404	SH-3H Communications/Navigation Systems Initial Organizational Maintenance	D-102-0521
Q-4E-0010	Aviation Ordnance Officer Career Progression Level 1	NA
E-646-0640	F/A-18 Conventional Weapons	D/E-646-0653
C-646-3680	S-3B Conventional Weapons Release Checks and Loading	NA
D-646-1644	F-14A/B Conventional Weapons Loading Team	NA
D-646-1646	F-14D Conventional Weapons Release Checks and Loading	NA
C-646-9409	H-60 Conventional Weapons Loading Course	NA
D-646-1143	P3C Conventional Weapons Loading and Release and Control	NA

COURSE NUMBER	COURSE TITLE	TRACK NUMBER
E-646-1842	EA-6B Aircraft AGM-88 (HARM) Loading and System	NA
A-431-0012	Explosive Ordnance Phase 2	NA

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
MOS 6531	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training
MOS 6541	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training
AO	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training ◦ C-646-2013, Aviation Ordnanceman Ships Company Strand Class A1
AO 8319	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training ◦ D-646-1042, P-3 Initial Armament Systems Organizational Maintenance
AO 8819	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training
AO 8332	<ul style="list-style-type: none"> ◦ C-646-2011, Aviation Ordnanceman Class A1 ◦ C-646-2012, Aviation Ordnanceman Navy Difference Training

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AO 8335	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training ° D-646-1647, F-14 Armament Systems Initial Organizational Maintenance
AO 8342	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training ° E-646-9973, F/A-18 Armament Systems Initial Organizational Maintenance
AO 8842	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training
AO 8345	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training ° D-646-1647, F-14 Armament Systems Initial Organizational Maintenance
AO 8845	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training
AO 8347	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training ° D-646-1746, S-3B Initial Armament Systems Organizational Maintenance
AO 8847	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training
AO 8377	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AO 8378	<ul style="list-style-type: none"> ° C-646-2011, Aviation Ordnanceman Class A1 ° C-646-2012, Aviation Ordnanceman Navy Difference Training

d. Training Pipelines. There are no new training pipelines or tracks associated with Airborne Expendable Countermeasures.

I. ON-BOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development. Airborne Expendable Countermeasures proficiency training is conducted during loading and downloading drills, and on-the-job training to maintain proficiency.

a. Maintenance Training Improvement Program. The Maintenance Training Improvement Program (MTIP) is used to establish an effective and efficient training system responsive to fleet training requirements. MTIP is a training management tool that, through diagnostic testing, identifies individual training deficiencies at the organizational and intermediate levels of maintenance. MTIP was implemented per OPNAVINST 4790.2 series. MTIP will be replaced by the Aviation Maintenance Training Continuum System (AMTCS). Current planning is for AMTCS to begin full implementation for fleet deployment in March 2001.

b. Aviation Maintenance Training Continuum System. AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS is planned to be an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. By capitalizing on technological advances and integrating systems and processes where appropriate, the right amount of training can be provided at the right time, thus meeting the CNO's mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: Interactive Multimedia Instruction (IMI) for the technicians in the Fleet in the form of Interactive Courseware (ICW) with Computer Managed Instruction (CMI) and Computer Aided Instruction (CAI) for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module (ASM) which provides testing [Test and Evaluation (TEV)], recording [Electronic Training Jacket (ETJ)], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List (MTL) data bank. These tools are procured and fielded with appropriate Commercial Off The Shelf hardware and software, i.e., Fleet

Training Devices (FTD) - Laptops, Personal Computers, Electronic Classrooms (ECR), Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS is to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs. AMTCS implementation will begin with the F-14, E-2C, and all models F/A-18 aircraft. For more information on AMTCS refer to PMA205-3D3.

2. Personnel Qualification Standards. NA

3. Other On-Board or In-service Training Packages. Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System and Maintenance Training MATMEP. This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series, maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MTIP questions coupled to MATMEP tasks will help identify training deficiencies that can be enhanced with refresher training. (MATMEP is planned to be replaced by AMTCS.)

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers. Airborne Expendable Countermeasures are competitively procured from a variety of manufacturers. For a complete list of contractors, contact Program Executive Officer (Tactical Aircraft Programs) (PEO(T)) PMA 272J3.

2. Program Documentation

NOMENCLATURE	PLAN NUMBER	DATE
Flare, Decoy, MK 46 MOD 1C	ARMP - 0118	Apr 88
Flare, Decoy, MJU-8A/B	ARMP - 0124	Apr 92
Flare, Decoy, MJU-8/B	ARMP - 0120	Apr 88
Flare, Decoy, MJU-22/B	ARMP - 0121	Apr 92
Flare, Decoy, MJU-27/B	ARMP - 0403	Aug 94
Flare, Decoy, MJU-32/B	ARMP - 0406	Aug 95
Flare, Decoy, MJU-38/B	ARMP - 0405	Aug 95
Decoy, XPNDR, RT1489/ALE	ARMP - 0232	Oct 95

NOMENCLATURE	PLAN NUMBER	DATE
Simulator, Flare, SM-875/ALE	ARMP - 0166	Apr 92
Decoy, Transponder, Countermeasures, RT-1489/ALE	ARM - 101 Revision E	Aug 96
Integrated Logistic Support Plan (ILSP) for D-46/ALE39 Dispenser, Countermeasures Chaff (RR-184/RR189)	ARM-ILSP-203	Aug 97
ILSP for Generic Expendable (GEN-X)	ARM-ILSP 101	Aug 96
IR Expendable Countermeasures	CM-ILSP-346	Sep 95
Chaff Countermeasures Set, AN/ALQ-190(V)1	ARM - 079 Revision B	Jan 90

3. Technical Data Plan. The responsibility for quality assurance of technical manuals resides at the Naval Air Technical Data and Engineering Service Command and is exercised through their Quality Assurance department Code 04. Routine technical manual changes are issued through normal update procedures

4. Test Sets, Tools, and Test Equipment. NA

5. Repair Parts. NA

6. Human Systems Integration. NA

K. SCHEDULES. Airborne Expendable Countermeasures have been delivered to all user activities.

1. Installation and Delivery Schedules. Airborne Expendable Countermeasures are already in the fleet.

2. Ready For Operational Use Schedule. All Airborne Expendable Countermeasures are considered Ready For Operational Use upon installation on the aircraft.

3. Time Required to Install at Operational Sites. Airborne Expendable Countermeasures are installed in aircraft by weapons loading teams/team-members in a matter of minutes.

4. Foreign Military Sales and Other Source Delivery Schedule. Information regarding Foreign Military Sales of Airborne Expendable Countermeasures should be directed to PEO(T) PMA272-J3.

5. Training Device and Technical Training Equipment Delivery Schedule. Technical Training Equipment (TTE) consisting of an Airborne Countermeasures Display Case and a Chaff

Countermeasures Set, Inert, AN/ALQ-190(V)1, as shown in Part IV.A.1 of this NTSP, has been delivered to various training activities and is on board. This TTE supports the Countermeasures and Associated Impulse Cartridges safety lesson being incorporated in specific ordnance training courses. No Training Devices are required for this lesson.

TECHNICAL TRAINING EQUIPMENT DELIVERY SCHEDULE	
EQUIPMENT	ACTIVITY / LOCATION
Airborne Countermeasure Display Case	Maintenance Training Unit (MTU) 1007, Naval Air Maintenance Training Unit (NAMTRAU) Oceana
Airborne Countermeasure Display Case Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	MTU-4030, NAMTRAU Mayport
Airborne Countermeasure Display Case	MTU-1012, NAMTRAU Whidbey Island
Airborne Countermeasure Display Case	FREST VMAT-203, MCAS Cherry Point
Airborne Countermeasure Display Case	FREST VMAT-303, MCAS Camp Pendleton
Airborne Countermeasure Display Case Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	MTU-1005, NAMTRAU Jacksonville
Airborne Countermeasure Display Case	MTU-4032, NAMTRAU Norfolk
Airborne Countermeasure Display Case Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	MTU-4033, NAMTRAU North Island
Airborne Countermeasure Display Case	Aviation Ordnance Officer Career Progression, NAS Pensacola
Airborne Countermeasure Display Case	Strike Fighter Weapons School, NAS Lemoore
Airborne Countermeasure Display Case Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	Strike Fighter Weapons School, NAS Oceana
Airborne Countermeasure Display Case	Strike Weapon Attack Training School Atlantic, NAS Oceana
Airborne Countermeasure Display Case	Electronic Combat Weapons School, NAS Whidbey Island
Airborne Countermeasure Display Case	NAVSCOLEOD, NSWC Indian Head

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
Pyrotechnic Screening, Marking and Countermeasure Devices	NAVAIR 11-15-7 / NAVSEA SW050-AB-MMA-10	NSWC Crane Code 40	Updated Oct 96
Decoy Flare Descriptive and Operational Instructions	NAVAIR 11-15-4 (C)	NSWC Crane Code 40	Updated Oct 97
Ordnance Data for Toxic Hazards Associated with Pyrotechnic Items	NAVAIR 11-5-8 / NAVSEA SW050-AC-ORD-010	NSWC Crane Code 40	Updated Sep 96
Expendable Countermeasure Directory	NAVAIR 16-1-539 (S)	PMA272-J3	Updated Sep 94
Airborne Weapons Assembly Manual Pyrotechnics	NAVAIR 11-140-7	PMA272-J3	Updated Dec 97
Ship Weapons Installation Manual Airborne Pyrotechnics	NAVAIR 11-120-20	NSWC Crane Code 40	Draft 1999
Technical Manual for Cartridge and Propellant Actuated Devices	NAVAIR 11-100-1.1-CD	NSWC Indian Head Code 5320G	1Mar 1999
Airborne Weapons/Stores Publications Index	NAVAIR 01-700	NAWC China Lake Code C26303	Updated Apr 00
Launcher Test Set, Guided Missile LAU-138/A/A	NAVAIR 11-75-84	PMA272-J3	Updated Jul 97
Hazards of Electromagnetic Radiation to Ordnance (HERO)	NAVAIR 16-1-529 /NAVSEA OP3565	NAVSEA Code 665	Updated Jan 92
Test Set LAU-138	NAVAIR 16-30-ULM 5-1	PMA272-J3	Updated Apr 96
Countermeasures Chaff Dispensing Set, AN/ALE-29A	NAVAIR 16-30 ALE29-3	PMA272-J1	Approved Apr 79
Countermeasures Chaff Dispensing Set, AN/ALE-37-1	NAVAIR 16-30 ALE37-1	PMA272-J1	Approved Mar 75
Countermeasures Dispensing System, AN/ALE-39	NAVAIR 16-30 ALE39-1	PMA272-J1	Approved May 94
Countermeasures Chaff Dispensing Set, AN/ALE-47-1	NAVAIR 16-30 ALE47-1	PMA272-J1	Approved

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
ILSP for IR Expendable Countermeasures (Revision C)	CM-ILSP-346	PMA272-J	Approved Sep 97
ILSP for Generic Expendable (GEN-X)	ARM-ILSP-101	PMA222	Approved Aug 96
ILSP for D-46/ALE39 Dispenser, Countermeasures Chaff (RR-184/RR189)	ARM-ILSP-203	PMA272-J3	Approved Oct 97
AN/ALQ-190 (V)	NAVAIR 11-120-63	PMA272-J1	Updated Jul 91
Generic Expendable (GEN-X)	NAVAIR 11-120-69	PMA272-J1	Issued Dec 95

PART II - BILLET AND PERSONNEL REQUIREMENTS

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

II.A. Billet Requirements

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

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

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

NOTE 1: This section of the airborne expendable countermeasures NTSP reflects intermediate-level maintenance billets and personnel requirements for the airborne expendable countermeasures. It is a compilation of one Navy NEC, (AO 6801) and one Marine Corps MOS (MOS 6541). Airborne expendable countermeasures do not require specific operator billets. Operator billets, normally pilots or aircrew-men, are programmed through the applicable aircraft NTSP, e.g., F/A-18C/D NTSP, as are the airborne expendable countermeasures organizational-level billets. Organizational-level billets will normally be filled by personnel holding a specific NEC identifying a skill level associated with an aircraft Platform. Normally this will be an Aviation Ordnance NEC/MOS such as NEC AO-8842 or MOS 6531, however it may be held by other MOS/NEC's. Most aircraft platforms in the USN/USMC inventory have an airborne expendables countermeasure capability, consequently organizational level personnel billets are identified in the aircraft NTSP. The addition of airborne expendable countermeasures to the organizational-level and intermediate-level workloads is only a small percentage of the required workload for those NEC's and MOS. The NEC/MOS are not dedicated to the airborne expendable countermeasures. Therefore, the overall training throughput for the NEC and MOS will remain the same, i.e., it accounts for the total NEC/MOS community, and not just activities receiving airborne expendable countermeasures.

NOTE 2: All billets identified in this section are programmed through other NTSP's, e.g., F/A -18 NTSP, applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Documents. The activities and associated billets are listed to assist the weapons training community in identifying and managing training requirements throughout the development, production, and deployment of the airborne expendable countermeasures.

NOTE 3: Course numbers for all known aircraft weapons loading courses are identified in Part 1 Section "G" of this NTSP. These courses should include airborne expendable countermeasure devices as part of the curriculum. NAMTRAGRUHQ, TYCOMS and Fleet Training Centers (FTC's) should ensure this curricula change has been incorporated in curricula/schoolhouses falling under their purview.

PART II - BILLET AND PERSONNEL REQUIREMENTS

II.A. BILLET REQUIREMENTS

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

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY01	FY02	FY03	FY04	FY05
OPERATIONAL	NAVY						
NAVWPNTSTRON CL	39787	1	0	0	0	0	0
NAVWPNTSTRON PM	39788	1	0	0	0	0	0
NAVSTKAIRSTRON	39783	1	0	0	0	0	0
VX-9	55646	1	0	0	0	0	0
VFA-106	09679	1	0	0	0	0	0
VFA-125	09485	1	0	0	0	0	0
VFA-15	09015	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
VFA-105	65183	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-127	08956	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-94	09295	1	0	0	0	0	0
VFA-97	63923	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-137	55142	1	0	0	0	0	0
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-27	65185	1	0	0	0	0	0
VFA-154	09678	1	0	0	0	0	0
VFA-192	55179	1	0	0	0	0	0
VFA-195	09706	1	0	0	0	0	0
VFA-203	09030	1	0	0	0	0	0
VFA-204	09032	1	0	0	0	0	0
NSAWC N7	69190	1	0	0	0	0	0
SFWSL	47084	1	0	0	0	0	0
SFWSP	35185	1	0	0	0	0	0
VFC-12	52994	1	0	0	0	0	0
VFC-13	52995	1	0	0	0	0	0
TOTAL:		37	0	0	0	0	0
OPERATIONAL	USMC						
VMFA-115	09234	1	0	0	0	0	0
VMFA-122	09407	1	0	0	0	0	0
VMFA-251	09241	1	0	0	0	0	0

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

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY01	FY02	FY03	FY04	FY05
VMFA-312	09253	1	0	0	0	0	0
VMFA (AW)-224	01224	1	0	0	0	0	0
VMFA (AW)-332	09501	1	0	0	0	0	0
VMFA (AW)-533	09193	1	0	0	0	0	0
VMFA-212	09434	1	0	0	0	0	0
VMFA-232	09242	1	0	0	0	0	0
VMFA-235	09237	1	0	0	0	0	0
VMFA-314	09230	1	0	0	0	0	0
VMFA-323	09235	1	0	0	0	0	0
VMFA (AW)-121	09257	1	0	0	0	0	0
VMFA (AW)-225	09232	1	0	0	0	0	0
VMFA-112	08954	1	0	0	0	0	0
VMFA-134	09365	1	0	0	0	0	0
VMFA-142	67243	1	0	0	0	0	0
VMFA-321	67235	1	0	0	0	0	0
MALS Aug Beaufort	67863	1	0	0	0	0	0
MALS Aug Miramar	09111	1	0	0	0	0	0
MAWTS-1	55167	1	0	0	0	0	0
VMFAT-101	09965	1	0	0	0	0	0
TOTAL:		22	0	0	0	0	0
FLEET SUPPORT	NAVY						
NAS Fallon	60495	1	0	0	0	0	0
NAS Lemoore	63042	1	0	0	0	0	0
NAS Oceana	60191	1	0	0	0	0	0
NS Roosevelt Roads	00389	1	0	0	0	0	0
COMNAVAIRLANT	57012	1	0	0	0	0	0
CV-63 USS Kitty Hawk	03363	1	0	0	0	0	0
CV-64 USS Constellation	03364	1	0	0	0	0	0
CV-67 USS Kennedy	03367	1	0	0	0	0	0
CVN-65 USS Enterprise	03365	1	0	0	0	0	0
CVN-68 USS Nimitz	03368	1	0	0	0	0	0
CVN-69 USS Eisenhower	03369	1	0	0	0	0	0
CVN-70 USS Vinson	20993	1	0	0	0	0	0
CVN-71 USS Roosevelt	21247	1	0	0	0	0	0
CVN-72 USS Lincoln	21297	1	0	0	0	0	0
CVN-73 USS Washington	21412	1	0	0	0	0	0
CVN-74 USS Stennis	21847	1	0	0	0	0	0
CVN-75 USS Truman	21853	1	0	0	0	0	0
CVN-76 USS Reagan	TBD	1	0	0	0	0	0
NAWMU-1	52821	1	0	0	0	0	0
NAWCAD Patuxent River	00421	1	0	0	0	0	0
NAWCWD Point Mugu	63126	1	0	0	0	0	0
NAWS Point Mugu	0429A	1	0	0	0	0	0
NAWS China Lake	68937	1	0	0	0	0	0
TOTAL:		23	0	0	0	0	0
FLEET SUPPORT	USMC						
MAD China Lake	67852	1	0	0	0	0	0
MAD Patuxent River	67356	1	0	0	0	0	0
MALS-11 Miramar	09111	1	0	0	0	0	0

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

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY01	FY02	FY03	FY04	FY05
MALS-12 Iwakuni	09377	1	0	0	0	0	0
MALS-13 Yuma	09041	1	0	0	0	0	0
MALS-31 Beaufort	09384	1	0	0	0	0	0
MALS-41 Fort Worth	67239	1	0	0	0	0	0
MALS-42 Marietta	67236	1	0	0	0	0	0
MALS-46 Miramar	67244	1	0	0	0	0	0
MASD Andrews	04801	1	0	0	0	0	0
TOTAL:		10	0	0	0	0	0

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

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
OPERATIONAL	NAVY					
VFA-106	09679					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VFA-125	09485					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VAQ-129	09995					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
OPERATIONAL	USMC					
VMFA-115	09234					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-122	09407					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-251	09241					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-312	09253					
USMC				3		6541
AR			0	7		6541
ACTIVITY TOTAL:			0	10		
VMFA (AW)-224	01224					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-332	09501					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-533	09193					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA-212	09434					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-232	09242					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-235	09237					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMFA-314	09230					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-323	09235					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA (AW)-121	09257					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-225	09232					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-242	09668					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA-112	08954					
USMC			0	3		6541
AR			0	7		6541
ACTIVITY TOTAL:			0	10		
VMFA-134	09365					
USMC			0	7		6541
AR			0	3		6541
ACTIVITY TOTAL:			0	10		
VMFA-142	67243					
USMC			0	3		6541
AR			0	7		6541
ACTIVITY TOTAL:			0	10		
MALS Aug Beaufort	67863					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
MALS Aug Miramar	09116					
USMC			0	4		6541
ACTIVITY TOTAL:			0	4		
MAWTS-1	55167					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
VMFAT-101	09965					
USMC			0	9		6541
ACTIVITY TOTAL:			0	9		
HMH-461	09582					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-464	53935					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-772	09490					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
HMLA-167	09898					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-269	08998					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-773	09431					
USMC			0	4		6541
AR			0	8		6541
ACTIVITY TOTAL:			0	12		
HLMA-775	55252					
USMC			0	4		
AR			0	8		6541
ACTIVITY TOTAL:			0	12		
HLMA-775 DET A	09415					
USMC			0	2		
AR			0	4		6541
ACTIVITY TOTAL:			0	6		
HMM-162	09492					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-261	09441					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-263	09445					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-264	09374					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-266	53972					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-365	53923					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-774	09430					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMT-303	55176					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
VMA-223	09438					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-231	52948					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMA-542	52847					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMAQ-1	41345					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAQ-2	42362					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAQ-3	42362					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAQ-4	67837					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAT-203	45483					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
HMH-361	09446					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-362	09495					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-363	09496					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-366	55650					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-462	09349					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-463	09010					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-465	53936					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-466	53998					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-769	09487					
AR			0	1		6541
ACTIVITY TOTAL:			0	1		
HMLA-169	09202					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
HMLA-267	09159					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-367	09079					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-369	09361					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMM-161	09440					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-163	09405					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-164	09408					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-165	09343					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-166	53973					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-262	09442					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-265	09404					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-268	52790					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-364	09793					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-764	09402					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
VMA-211	09412					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-214	09436					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-311	09416					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMA-513	09231					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMFA-124	52998					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
FLEET SUPPORT	NAVY					
COMNAVAIRLANT	57012					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
CV-63 USS Kitty Hawk	03363					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CV-64 USS Constellation	03364					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CV-67 USS Kennedy	03367					
ACDU			0	11	AO	6801
TAR			0	1	AO	6801
ACTIVITY TOTAL:			0	12		
CVN-65 USS Enterprise	03365					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-68 USS Nimitz	03368					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-69 USS Eisenhower	03369					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-70 USS Vinson	20993					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-71 USS Roosevelt	21247					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-72 USS Lincoln	21297					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-73 USS Washington	21412					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-74 USS Stennis	21847					
ACDU			0	11	AO	6801
ACTIVITY TOTAL:			0	11		
CVN-75 USS Truman	21853					
ACDU			0	10	AO	6801
ACTIVITY TOTAL:			0	10		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
CVN-76 USS Reagan	TBD					
ACDU		FY04	0	10	AO	6801
ACTIVITY TOTAL:			0	10		
AFLOATRAGRU Norfolk CSTG	49085					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
COMSTKFITWINGLANT Det Beaufort	3006A					
ACDU			0	16	AO	6801
ACTIVITY TOTAL:			0	16		
FASOTRAGRULANT	09810					
ACDU			0	2	AO	6801/ 9502
ACTIVITY TOTAL:			0	2		
LHA-2 USS Saipan	20632					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHA-4 USS Nassau	20725					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-1 USS Wasp	21560					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-3 USS Kearsarge	21700					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-5 USS Bataan	21879					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
MCS-12 USS Inchon	20009					
ACDU			0	1	AO	6801
ACTIVITY TOTAL:			0	1		
NAF Mildenhall	57032					
SELRES			0	1	AO	6801
ACTIVITY TOTAL:			0	1		
NAS Brunswick	60087					
ACDU			0	8	AO	6801
ACDU			0	1	AO	6810/ 6801
ACTIVITY TOTAL:			0	9		
NAS Keflavik	63032					
ACDU			0	3	AO	6801
ACDU			0	1	AO	6810/ 6801
ACDU			0	1	AO	0812/ 6801
ACTIVITY TOTAL:			0	5		
NAS Oceana	60191					
ACDU			0	3	AO	6801
ACTIVITY TOTAL:			0	3		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
NATMSACT Kingsville	49149					
ACDU			0	1	AO	6801
ACTIVITY TOTAL:			0	1		
NAWMU-1	52821					
ACDU			0	23	AO	6801
ACTIVITY TOTAL:			0	28		
NAVSTKAIRTESTRON	39783					
ACDU			0	12	AO	6801
ACDU			0	2	AO	6801/ 8845
ACDU			0	1	AO	6801/ 9590
ACTIVITY TOTAL:			0	15		
Ordnance DET Oceana	31279					
ACDU			0	33	AO	6801
ACTIVITY TOTAL:			0	33		
SURFLANTAVORD/MTT Norfolk	48764					
ACDU			0	5	AO	6801
ACTIVITY TOTAL:			0	5		
AIRMAINTTRSRPDET Whidbey Island	66058					
ACDU			0	5	AO	6801/ 9502
ACTIVITY TOTAL:			0	5		
COMFLTACT Okinawa	62254					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHA-1 USS Tarawa	20550					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHA-3 USS Belleau Wood	20633					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHA-5 Peleliu	20748					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-2 USS Essex	21533					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-4 USS Boxer	21808					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-6 USS Bonhomme Richard	22202					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHD-7 USS Iwo Jima	23027					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		

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

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
NAF El Centro	60042					
ACDU			0	7	AO	6801
ACTIVITY TOTAL:			0	7		
NAS Lemoore	63042					
ACDU			0	3	AO	6801
ACTIVITY TOTAL:			0	3		
NAS Point Mugu	0429A					
ACDU			0	18	AO	6801
ACDU			0	1	AO	8345/6801
ACTIVITY TOTAL:			0	19		
NAWCWD Point Mugu	63126					
ACDU			0	1	AO	6801
ACTIVITY TOTAL:			0	1		
FLEET SUPPORT	USMC					
MAD China Lake	67852					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
MALS-11 Miramar	09233					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-12 Iwakuni	09377					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-13 Yuma	09041					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-31 Beaufort	09384					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-42 Marietta	09513					
USMC			0	2		6541
AR			0	10		6541
ACTIVITY TOTAL:			0	12		
MALS-41 Fort Worth	67239					
USMC			0	5		6541
AR			0	39		6541
ACTIVITY TOTAL:			0	44		
MALS-46 Miramar	67244					
USMC			0	2		6541
AR			0	42		6541
ACTIVITY TOTAL:			0	44		
MASD Andrews	04801					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		

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

ACTIVITY	UIC	PHASING INCR.	BILLETTS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
2 nd MAW Cherry Point	00201					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
4 th MAW New Orleans	00400					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
Blount Island	38450					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
H&HS Beaufort	02031					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
H&HS Cherry Point	02002					
USMC			0	17		6541
ACTIVITY TOTAL:			0	17		
H&HS New River	02021					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
MALS-14 Cherry Point	09378					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-26 New River	09167					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-29 New River	52841					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-49 Stewart New York	55555					
USMC			0	4		6541
AR			0	8		6541
ACTIVITY TOTAL:			0	12		
1 st MAW Futenma	00101					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
3 rd MAW El Toro	00300					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
H&HS Camp Pendleton	02208					
USMC			0	9		6541
ACTIVITY TOTAL:			0	9		
H&HS El Toro	02201					
USMC			0	8		6541
ACTIVITY TOTAL:			0	8		
H&HS Futenma	02601					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		

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

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
H&HS Iwakuni	02501					
USMC			0	7		6541
ACTIVITY TOTAL:			0	7		
H&HS Yuma	02230					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
MALS-16 Tustin	09243					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-36 Futenma	09260					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-39 Camp Pendleton	09808					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALSE Kaneohe	02300					
USMC			0	4		6541
ACTIVITY TOTAL:			0	4		
MCAF Kaneohe	02303					
USMC			0	7		6541
ACTIVITY TOTAL:			0	7		

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

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
OPERATIONAL ACTIVITY – USMC													
	6541	0	492	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – AR													
	6541	0	45	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – ACDU													
	0812/6801	0	1	0	0	0	0	0	0	0	0	0	0
	6801	0	318	0	0	0	0	0	0	0	0	0	10
	6801/8845	0	2	0	0	0	0	0	0	0	0	0	0
	6801/9502	0	7	0	0	0	0	0	0	0	0	0	0
	6801/9590	0	1	0	0	0	0	0	0	0	0	0	0
	6810/6801	0	2	0	0	0	0	0	0	0	0	0	0
	8345/6801	0	1	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – TAR													
AO	6801	0	1	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - SELRES													
AO	6801	0	0	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – USMC													
	6541	0	383	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – AR													
	6541	0	99	0	0	0	0	0	0	0	0	0	0
SUMMARY TOTAL:													
OPERATIONAL ACTIVITY – ACDU													
		0	2	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – TAR													
		0	3	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – SELRES													
		0	7	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – USMC													
		0	492	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – AR													
		0	45	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – ACDU													
		0	690	0	0	0	0	0	0	0	0	0	17
FLEET SUPPORT ACTIVITY – TAR													
		0	18	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – SELRES													
		0	4	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – USMC													
		0	383	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – AR													
		0	99	0	0	0	0	0	0	0	0	0	0

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

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
GRAND TOTAL:													
	ACDU	0	692	0	0	0	0	0	0	0	0	0	17
	TAR	0	21	0	0	0	0	0	0	0	0	0	0
	SELRES	0	11	0	0	0	0	0	0	0	0	0	0
	USMC	0	875	0	0	0	0	0	0	0	0	0	0
	AR	0	144	0	0	0	0	0	0	0	0	0	0

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

INSTRUCTOR BILLETS

TRAINING ACTIVITY, LOCATION, UIC: MTU-4030 NAMTRAGRUDET NS Mayport 66069													
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4
SELRES													
AO	6801/9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:		0	5	0	5	0	5	0	5	0	5	0	5

TRAINING ACTIVITY, LOCATION, UIC: MTU-4032 NAMTRAU NAS Norfolk 66046													
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	7	0	7	0	7	0	7	0	7	0	7
SELRES													
AO	6801/9502	0	2	0	2	0	2	0	2	0	2	0	2
TOTAL:		0	9	0	9	0	9	0	9	0	9	0	9

TRAINING ACTIVITY, LOCATION, UIC: MTU-4033 NAMTRAU NAS North Island 66065													
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4

TRAINING ACTIVITY, LOCATION, UIC: MTU-4034 VMAT-203 FREST MCAS Cherry Point 66047													
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
USMC													
MOS	6541	0	21	0	21	0	21	0	21	0	21	0	21

TRAINING ACTIVITY, LOCATION, UIC: MTU-4035 NAMTRAU NAS Whidbey Island 66058													
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU 4030 NAMTRAU, NS Mayport, 66069	USN	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8
MTU 4032 NAMTRAU, NAS Norfolk, 66046	USN	0	5.1	0	5.1	0	5.1	0	5.1	0	5.1	0	5.1
MTU 4033 NAMTRAU, NAS North Island, 66065	USN	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8
MTU 4034 VMAT-203 FREST, MCAS Cherry Point, 66047	USMC	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6
MTU 4035 NAMTRAU, NAS Whidbey Island, 66058	USN	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8
SUMMARY TOTAL:													
	USN	0	10.5	0	10.5	0	10.5	0	10.5	0	10.5	0	10.5
	USMC	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6
GRAND TOTAL:		0	66.1	0	66.1	0	66.1	0	66.1	0	66.1	0	66.1

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

a. OFFICER - USN: NA

b. ENLISTED – USN:

RATING	PNEC/SNEC	BILLET BASE	CFY01		FY02		FY03		FY04		FY05	
			+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
Operational Billets ACDU and TAR												
AO		0	0	0	0	0	0	0	0	0	0	0
Fleet Support Billets ACDU and TAR												
AO	0812/6801	1	0	1	0	1	0	1	0	1	0	1
AO	6801	319	0	319	0	319	0	319	0	319	+10	329
AO	6801/8845	2	0	2	0	2	0	2	0	2	0	2
AO	6801/9502	7	0	7	0	7	0	7	0	7	0	7
AO	6801/9590	1	0	1	0	1	0	1	0	1	0	1
AO	6810/6801	2	0	2	0	2	0	2	0	2	0	2
AO	8345/6801	1	0	1	0	1	0	1	0	1	0	1
Instructor and Support (Staff) Billets ACDU and TAR												
AO	6801/9502	19	0	19	0	19	0	19	0	19	0	19
Chargeable Student Billets ACDU and TAR												
		11	0	11	0	11	0	11	0	11	0	11
TOTAL USN ENLISTED BILLETS:												
Operational		5	0	5	0	5	0	5	0	5	0	5
Fleet Support		708	0	708	0	708	0	708	0	708	+17	725
Staff		19	0	19	0	19	0	19	0	19	0	19
Student		10	1	11	0	11	0	11	0	11	0	11
SELRES		14	0	14	0	14	0	14	0	14	0	14

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

c. OFFICER - USMC: NA

b. ENLISTED - USMC:

RATING	PMOS/SMOS	BILLET BASE	CFY01		FY02		FY03		FY04		FY05	
			+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
Operational Billets USMC and AR												
	6541	537	0	537	0	537	0	537	0	537	0	537
Fleet Support Billets USMC and AR												
	6541	482	0	482	0	482	0	482	0	482	0	482
Instructor and Support (Staff) Billets USMC and AR												
	6541	21	0	21	0	21	0	21	0	21	0	21
Chargeable Student Billets USMC and AR												
		56	0	56	0	56	0	56	0	56	0	56
TOTAL USMC ENLISTED BILLETS:												
Operational		537	0	537	0	537	0	537	0	537	0	537
Fleet Support		482	0	482	0	482	0	482	0	482	0	482
Staff		21	0	21	0	21	0	21	0	21	0	21
Student		56	0	56	0	56	0	56	0	56	0	56
SMCR		0	0	0	0	0	0	0	0	0	0	0

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS¹

CIN, COURSE TITLE: D-646-7001, Strike Armament Equipment Intermediate Maintenance
COURSE LENGTH: 9.0 Weeks **SEA TOUR LENGTH:** Navy: 60 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CFY01		FY02		FY03		FY04		FY05	
			OFF	ENL	OFF	ENL	OFF	ENL	OF	ENL	OFF	ENL
F												
MTU-4032 NAMTRAU, NAS Norfolk												
	USN	ACDU-TAR	0	47	0	47	0	47	0	47	0	47
	USN	SELRES	0	0	0	0	0	0	0	0	0	0
		TOTAL	0	47	0	47	0	47	0	47	0	47

CIN, COURSE TITLE: E-646-7001, Strike Armament Equipment Intermediate Maintenance
COURSE LENGTH: 9.0 Weeks **SEA TOUR LENGTH:** Navy: 60 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CFY01		FY02		FY03		FY04		FY05	
			OFF	ENL	OFF	ENL	OFF	ENL	OF	ENL	OFF	ENL
F												
MTU-4033 NAMTRAU, NAS North Island												
	USN	ACDU-TAR	0	33	0	33	0	33	0	33	0	33
	USN	SELRES	0	0	0	0	0	0	0	0	0	0
		TOTAL	0	33	0	33	0	33	0	33	0	33

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
COURSE LENGTH: 6.0 Weeks **SEA TOUR LENGTH:** Navy: 60 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CFY01		FY02		FY03		FY04		FY05	
			OFF	ENL	OFF	ENL	OFF	ENL	OF	ENL	OFF	ENL
F												
MTU-4030 NAMTRAU, NS Mayport												
	USN	ACDU-TAR	0	32	0	32	0	32	0	32	0	32
MTU-4032 NAMTRAU, NAS Norfolk												
	USN	ACDU-TAR	0	60	0	60	0	60	0	60	0	60
	USN	SELRES	0	0	0	0	0	1	0	0	0	0
		TOTAL	0	60	0	60	0	61	0	60	0	60

Note: NITRAS data from NAMTRAGRU was used in lieu of ATIR calculations. The affected training tracks contain curricula for multiple weapon systems and have been established for a sufficient number of years to have reached a steady state value using the ATIR calculations."

¹ ATIR shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIRBORNE EXPENDABLE COUNTERMEASURES.

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS (Continued)⁶

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
COURSE LENGTH: 6.0 Weeks **SEA TOUR LENGTH:** Navy: 60 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CFY01		FY02		FY03		FY04		FY05	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 NAMTRAU, NAS North Island												
	USN	ACDU-TAR	0	45	0	45	0	45	0	45	0	45
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	46	0	46	0	46	0	46	0	46
MTU-4035 NAMTRAU, NAS Whidbey Island ⁷												
	USN	ACDU-TAR	0	45	0	45	0	45	0	45	0	45

CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance
COURSE LENGTH: 11 Weeks **SEA TOUR LENGTH:** NA
ATTRITION FACTOR: Marine: 0 % **BACKOUT FACTOR:** 0.21

TRAINING ACTIVITY	SOURCE	USMC-AR SMCR	CFY01		FY02		FY03		FY04		FY05	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4034 VMAT-203 FREST, MCAS Cherry Point												
	USMC	USMC-AR	0	285	0	285	0	285	0	285	0	285

ACTIVITY TOTAL:

MTU-4030 NAMTRAU			0	32	0	32	0	32	0	32	0	32
MTU-4032 NAMTRAU			0	107	0	107	0	108	0	107	0	107
MTU-4033 NAMTRAU			0	79	0	79	0	79	0	79	0	79
MTU-4034 VMAT-203 FREST			0	285	0	285	0	285	0	285	0	285
MTU-4035 NAMTRAU			0	45	0	45	0	45	0	45	0	45

PART III - TRAINING REQUIREMENTS

The following elements are not affected by Airborne Expendable Countermeasures and, therefore, are not included in 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. TRAINING COURSE REQUIREMENTS

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4030 NAMTRAU

LOCATION, UIC: NS Mayport, 66069

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

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

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	32.0	0	32.0	0	32.0	0	32.0	0	32.0	ATIR
0	28.8	0	28.8	0	28.8	0	28.8	0	28.8	Output
0	3.7	0	3.7	0	3.7	0	3.7	0	3.7	AOB
0	3.7	0	3.7	0	3.7	0	3.7	0	3.7	Chargeable

TRAINING ACTIVITY: MTU-4032 NAMTRAU

LOCATION, UIC: NAS Norfolk, VA, 66046

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

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

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	60.0	0	60.0	0	60.0	0	60.0	0	60.0	ATIR
0	54.0	0	54.0	0	54.0	0	54.0	0	54.0	Output
0	6.9	0	6.9	0	6.9	0	6.9	0	6.9	AOB
0	6.9	0	6.9	0	6.9	0	6.9	0	6.9	Chargeable

TRAINING ACTIVITY: MTU-4033 NAMTRAU

LOCATION, UIC: NAS North Island 66065

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

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

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	45.0	0	45.0	0	45.0	0	45.0	0	45.0	ATIR
0	40.5	0	40.5	0	40.5	0	40.5	0	40.5	Output
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	AOB
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	ATIR
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	Output
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	AOB
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	Chargeable

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST

LOCATION, UIC: MCAS Cherry Point, 45483

CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance

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

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	285	0	285	0	285	0	285	0	285	ATIR
0	257	0	257	0	257	0	257	0	257	Output
0	60.1	0	60.1	0	60.1	0	60.1	0	60.1	AOB
0	60.1	0	60.1	0	60.1	0	60.1	0	60.1	Chargeable

TRAINING ACTIVITY: MTU-4035 NAMTRAU

LOCATION, UIC: NAS Whidbey Island, 66058

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

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

CFY01		FY02		FY03		FY04		FY05		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	45.0	0	45.0	0	45.0	0	45.0	0	45.0	ATIR
0	40.5	0	40.5	0	40.5	0	40.5	0	40.5	Output
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	AOB
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	Chargeable

Note: NITRAS data from NAMTRAU was used in lieu of ATIR calculations. The affected training tracks contain curricula for multiple weapon systems and have been established for a sufficient number of years to have reached a steady state value using the ATIR calculations."

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

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

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B. Courseware Requirements

IV.B.1. Training Services

IV.C. Facility Requirements

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

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

IV.C.3. Facility Project Summary by Program

NOTE: The Airborne Expendable Counter-Measures (AECM) safety lessons taught in courses listed in this section, include safety lessons and transparencies that were previously delivered to the schoolhouses by PMA 272. No particular individual publication covers these unique devices as well as the safety lessons prepared by PMA 272. For this reason no publications pertinent to AECM's are listed in this section. All required reference manuals are currently available. Required "page changes" will be provided by Naval Air Technical Data and Engineering Services (NATEC).

IV.A. TRAINING HARDWARE

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

CIN, COURSE TITLE: C-646-9962, F-14A/B Armament Systems Initial Organizational Maintenance, as part of track D-646-1647
TRAINING ACTIVITY: MTU 1007
LOCATION, UIC: NAMTRAGRU DET Oceana, 66045

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE					
001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: C-646-4109 Air Launched Weapons Ordnance General, as part of track D/E-646-7007
TRAINING ACTIVITY: MTU 4030
LOCATION, UIC: NAMTRAU Mayport, 66069

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE					
001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
002	Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	1	2/1/98	GFE	

CIN, COURSE TITLE: C-646-9570, P-3C Armament/Ordnance Systems Initial Organizational Maintenance, as part of track D-646-1042
TRAINING ACTIVITY: MTU 1012
LOCATION, UIC: NAMTRAU Whidbey Island, 66059

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE					
001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician, as part of track M-646-7026
TRAINING ACTIVITY: FREST VMAT-203
LOCATION, UIC: MCAS Cherry Point, 31511

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE					
001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

IV.A. TRAINING HARDWARE

CIN, COURSE TITLE: C-646-3106, Rotary Wing Armament Organizational Level Differences
TRAINING ACTIVITY: FREST VMAT-303
LOCATION, UIC: MCAS Camp Pendleton, 48107

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
-------------	---	--------------	---------------	---------	--------

TTE

001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
-----	--------------------------------------	---	--------	-----	---------

CIN, COURSE TITLE: C-646-9361, H-1 Armament Repair Integrated Organizational Maintenance, as part of track M-646-2044

TRAINING ACTIVITY: FREST VMAT-303
LOCATION, UIC: MCAS Camp Pendleton, 48107

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
-------------	---	--------------	---------------	---------	--------

TTE

001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
-----	--------------------------------------	---	--------	-----	---------

CIN, COURSE TITLE: C-102-9404, SH-3H Communications/Navigation Systems Initial Organizational Maintenance, as part of track D-102-0521

TRAINING ACTIVITY: MTU 1005
LOCATION, UIC: NAMTRAGRU DET Jacksonville, 66051

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
-------------	---	--------------	---------------	---------	--------

TTE

001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
002	Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	2	2/1/98	GFE	

CIN, COURSE TITLE: C-646-4109, Air Launched Weapons Ordnance General, as part of track D-646-7007

TRAINING ACTIVITY: MTU 4032
LOCATION, UIC: NAMTRAU Norfolk, 44680

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
-------------	---	--------------	---------------	---------	--------

TTE

001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
-----	--------------------------------------	---	--------	-----	---------

CIN, COURSE TITLE: C-646-4109, Air Launched Weapons Ordnance General, as part of track D-646-7007

TRAINING ACTIVITY: MTU 4033
LOCATION, UIC: NAMTRAU North Island, 66065

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
-------------	---	--------------	---------------	---------	--------

TTE

001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
-----	--------------------------------------	---	--------	-----	---------

002	Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	1	2/1/98	GFE On Hand
-----	--	---	--------	-------------

IV.A. TRAINING HARDWARE

CIN, COURSE TITLE: Q-4E-0010, Aviation Ordnance Officer Career Progression (AOOCP)
TRAINING ACTIVITY: Ordnance University
LOCATION, UIC: NAS Pensacola, 62229

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Release and Loading, as part of track D/E-646-0653
TRAINING ACTIVITY: Strike Fighter Weapons School
LOCATION, UIC: NAS Lemoore, 66060

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Release and Loading, as part of track D/E-646-0653
TRAINING ACTIVITY: Strike Fighter Weapons School
LOCATION, UIC: NAS Oceana, 47084

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: C-646-3680, S-3B Conventional Weapons Release Checks and Loading
TRAINING ACTIVITY: Sea Control Wing Weapons Training Unit
LOCATION, UIC: NAS Jacksonville, 52955

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand
002	Inert Chaff Countermeasure Set, AN/ALQ-190(V)1	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: D-646-1644, F-14A/B Conventional Weapons Loading Team
TRAINING ACTIVITY: Strike Weapon Attack Training School Atlantic
LOCATION, UIC: NAS Oceana, 47157

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

IV.A. TRAINING HARDWARE

CIN, COURSE TITLE: D-646-1646, F-14D Conventional Weapons Release Checks and Loading
TRAINING ACTIVITY: Strike Weapon Attack Training School Atlantic
LOCATION, UIC: NAS Oceana, 47157

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: E-646-1842, EA-6B Aircraft AGM-88 (HARM) Loading and System
TRAINING ACTIVITY: Electronic Combat Weapons School
LOCATION, UIC: NAS Whidbey Island, 47445

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: A-431-0012, Explosive Ordnance Disposal Phase 2
TRAINING ACTIVITY: NAVSCOLEOD
LOCATION, UIC: NSWC Indian Head, 00174

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE 001	Airborne Countermeasure Display Case	1	2/1/98	GFE	On Hand

CIN, COURSE TITLE: C-646-9962, F-14A/B Armament Systems Initial Organizational Maintenance, as part of track D-646-1647
TRAINING ACTIVITY: MTU 1007
LOCATION, UIC: NAMTRAGRU DET Oceana, 66045

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-646-4109 Air Launched Weapons Ordnance General, as part of track D/E-646-7007
TRAINING ACTIVITY: MTU 4030
LOCATION, UIC: NAMTRAU Mayport, 66069

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-9570, P-3C Armament/Ordnance Systems Initial Organizational Maintenance, as part of track D-646-1042
TRAINING ACTIVITY: MTU 1012
LOCATION, UIC: NAMTRAU Whidbey Island, 66059

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician, as part of track M-646-7026
TRAINING ACTIVITY: FREST VMAT-203
LOCATION, UIC: MCAS Cherry Point, 31511

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-3106, Rotary Wing Armament Organizational Level Differences
TRAINING ACTIVITY: FREST HMT-303
LOCATION, UIC: MCAS Camp Pendleton, 48107

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-9361, H-1 Armament Repair Integrated Organizational Maintenance, as part of track M-646-2044
TRAINING ACTIVITY: FREST HMT-303
LOCATION, UIC: MCAS Camp Pendleton, 48107

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-102-9404, SH-3H Communications/Navigation Systems Initial Organizational Maintenance, as part of track D-102-0521

TRAINING ACTIVITY: MTU 1005

LOCATION, UIC: NAMTRAGRU DET Jacksonville, 66051

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-4109, Air Launched Weapons Ordnance General, as part of track D/E 646-7007

TRAINING ACTIVITY: MTU 4032

LOCATION, UIC: NAMTRAU Norfolk, 44680

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-4109, Air Launched Weapons Ordnance General, as part of track D/E 646-7007

TRAINING ACTIVITY: MTU 4033

LOCATION, UIC: NAMTRAU North Island, 66065

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: Q-4E-0010, Aviation Ordnance Officer Career Progression (AOOCP)

TRAINING ACTIVITY: Ordnance University

LOCATION, UIC: NAS Pensacola, 62229

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Release and Loading, as part of track D/E-646-0653
TRAINING ACTIVITY: Strike Fighter Weapons School
LOCATION, UIC: NAS Lemoore, 66060

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Release and Loading, as part of track D/E-646-0653
TRAINING ACTIVITY: Strike Fighter Weapons School
LOCATION, UIC: NAS Oceana, 47084

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: C-646-3680, S-3B Conventional Weapons Release Checks and Loading
TRAINING ACTIVITY: Sea Control Wing Weapons Training Unit
LOCATION, UIC: NAS Jacksonville, 52955

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: D-646-1644, F-14A/B Conventional Weapons Loading Team
TRAINING ACTIVITY: Strike Weapon Attack Training School Atlantic
LOCATION, UIC: NAS Oceana, 47157

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: D-646-1646, F-14D Conventional Weapons Release Checks and Loading
TRAINING ACTIVITY: Strike Weapon Attack Training School Atlantic
LOCATION, UIC: NAS Oceana, 47157

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

CIN, COURSE TITLE: E-646-1842, EA-6B Aircraft AGM-88 (HARM) Loading and System
TRAINING ACTIVITY: Electronic Combat Weapons School
LOCATION, UIC: NAS Whidbey Island, 47445

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: A-431-0012, Explosive Ordnance Disposal Phase 2

TRAINING ACTIVITY: NAVSCOLEOD

LOCATION, UIC: NSWC Indian Head, 00174

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Transparencies	13	2/98	On board
Training Material Change Package	1	2/98	On board

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
PDA	Fleet Introduction	FY96	Completed
TSA	Technical Training Equipment delivered	FY97	Completed
TSA	Curricula material delivery	12/97	Completed
TA	Commence Follow-on training	5/00	Completed
TSA	Develop Update Draft NTSP	11/00	Pending
DA	Promulgate Draft NTSP to ALCON for review and comment	11/00	Pending
PDA	Proposed NTSP submitted to OPNAV	12/00	Pending
DCNO (MPT)	Approve and promulgate NTSP	02/01	Pending

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
Add AECM training to NAMTRA Loading Courses	NAMTRAGRUHQ	Jan 01	Pending
Add AECM training to HSL Loading Courses	NAMTRAGRUHQ	Jan 01	Pending
Add AECM training to TYCOM Loading Courses	CNAL/CNAP	Jan 01	Pending
Add AECM training to FTC Loading Courses	CINCLANT/CINCPAC	Jan 01	Pending
Monitor AECM Training Course additions	NAVAIR PMA 205	Jan 01	Pending

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
CAPT Terry Merritt Head, Aviation Technical Training Branch CNO, N789H merritt.terry@hq.navy.mil	COMM: (703) 604-7730 DSN: 664-7730 FAX: (703) 604-6969
MAJ Victor Wigfall Assistant, Aviation Technical training Manager CNO N789H3 Wigfall.victor@hq.navy.mail	COMM: (703) 604-7762 DSN: 664-7762 FAX: (703) 604-6969
MAJ J.J. Stanford Common Electronic Protection Requirements CNO, N780C4 StanfordJJ@hq.navy.mil	COMM: (703) 614-2453 DSN: 224-2453 FAX: (703) 693-8823
MAJ David Stokes Aviation Ordnance Programs CNO, N781C8 stokes.david@hq.navy.mil	COMM: (703) 604-7773 DSN: 664-7773 FAX: (703) 604-6972
AZCS Gary Greenlee NTSP Manager CNO, N789H1A greenlee.gary@hq.navy.mil	COMM: (703) 604-7743 DSN: 664-7743 FAX: (703) 604-6939
Mr. Robert Zweibel Training Technology Policy CNO, N795K Zweibel.robert@hq.navy.mil	COMM: (703) 614-1344 DSN: 224-1344 FAX: (703) 695-5698
LTCOL Angela Clingman USMC Aircraft Maintenance Officer CMC, ASL-33 clingmanab@hqmc.usmc.mil	COMM: (703) 614-1187 DSN: 224-1187 FAX: (703) 697-7343
Mr. William Rock Deputy Program Manager PEO(T) PMA272-J3 RockWA@navair.navy.mil	COMM: (904) 542-2751 ext. 168 DSN: 942-2751 FAX: (904) 542-2865
Mr. Burl Phillips Airborne Expendable Countermeasures Class Desk NAVAIRSYSCOM, PMA222-5F PhillipsBF@navair.navy.mil	COMM: (904) 542-2751 ext. 163 DSN: 942-2753 ext. 163 FAX: (904) 542-2865
AOC Barry Evitts Training System Manager NAVAIRSYSCOM, PMA205-3H2 EvittsBE@navair.navy.mil	COMM: (301) 757-8101 DSN: 757-8108 FAX: 757-8079

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
<p>Mr. Bob Kresge NTSP Manager NAVAIRSYSCOM, AIR 3.4.1.1 lacey.wo@navair.navy.mil</p>	<p>COMM: (301) 757-1844 DSN: 757-1844 FAX: (301) 342-7737</p>
<p>CDR Robin Mason Aviation NTSP Manager CINCLANTFLT, N-721 masonrf@clf.navy.mil</p>	<p>COMM: (757) 836-0101 DSN: 836-0101 FAX: (757) 836-0141</p>
<p>Mr. Bob Long Deputy Director for Training CINCPACFLT, N-70 u70@cpf.navy.mil</p>	<p>COMM: (808) 471-8542 DSN: 471-8542 FAX: (808) 471-8596</p>
<p>CAPT Patricia Huiatt Deputy Assistant, Chief of Military Personnel for Distribution NAVPERSCOM, PERS-4B p4b@persnet.navy.mil</p>	<p>COMM: (901) 614-3529 DSN: 882-3529 FAX: (901) 874-2606</p>
<p>CDR Timothy Ferree Branch Head, Aviation Rating NAVPERSCOM, PERS-404 p404@persnet.navy.mil</p>	<p>COMM: (901) 874-2606 DSN: 874-2606 FAX: (901) 874-2642</p>
<p>MAJ Jon. Doering Total Force Structure Division MCCDC, C5325A Doeringjg@mccdc.usmc.mil</p>	<p>COMM: (703) 614-6241 DSN: 278-6241 FAX: (703) 784-6072</p>
<p>CDR Erich Blunt Aviation Technical Training CNET, ETE32 Cdr-erich.blunt@smtp.cnet.navy.mil</p>	<p>COMM: (850) 452-4915 DSN: 922-4915 FAX: (850) 4901</p>
<p>LCDR Kenneth Minnard Weapons Officer COMNAVAIRRESFOR, AIRN3W airn3w@cnrf.nola.mil</p>	<p>COMM: (504) 678-6846 DSN: 678-6846 FAX: (504) 678-1442</p>
<p>Mr. Steve Berk NTSP Distribution CNET, ETS-23 Stephen.berk@smtp.cnet.navy.mil</p>	<p>COMM: (850) 452-8919 DSN: 922-8919 FAX: (850) 452-4853</p>
<p>AOCM William Harrison Training Coordinator NAMTRAGRU HQ, N2412 aocm-william.c.harrison@smtp.cnet.navy.mil</p>	<p>COMM: (904) 452-9787 ext. 252 DSN: 922-9708 FAX: (850) 452-9769</p>

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

TELEPHONE NUMBERS

Ms. Brenda Baldwin

Logistics Manager for Countermeasure CADS

NSWC Indian Head, 5320P

5320P@acqlog.ih.navy.mil

COMM: (301) 743-4525 ext. 2244

DSN: 354-4525 ext. 2244

FAX: (301) 743-6699