APPROVED

NAVY TRAINING SYSTEM PLAN

FOR THE

AIM-120 ADVANCED MEDIUM RANGE

AIR-TO-AIR MISSILE

N88-NTSP-A-50-8111C/A

JUNE 1998

AIM-120 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE

EXECUTIVE SUMMARY

The Advanced Medium Range Air-to-Air Missile (AMRAAM) program was established as a result of Joint Service Operational Requirement for an Advanced Air-to-Air Tactical Missile needed in the post-1985 time frame. AMRAAM is managed as a joint Air Force and Navy program. The Air Force, as executive service, established a Joint System Program Office (JSPO) at Air Force Material Command/Aeronautical Systems Center, Eglin Air Force Base, Fort Walton Beach, Florida. The JSPO is headed by the Air Force Deputy for AMRAAM (Code ASC/YA) and the Navy AMRAAM Program Manager, Air (PMA268). AMRAAM is currently in the Production, Fielding/Deployment and Operational Support Phase of the Weapon System Acquisition Process. Air Force Initial Operating Capability (IOC) was declared in September 1991. Navy IOC was completed in September 1993.

Presently, there are three series of AMRAAM: AIM-120A, AIM-120B, and AIM-120C. The AIM-120A is a non-reprogrammable missile, while the AIM-120B/C are reprogrammable through the missile umbilical using the Common Field-Level Memory Reprogramming Equipment. The AIM-120C has smaller aerosurfaces to enable internal carriage on the Air Force F-22 aircraft.

Testing was accomplished in a combined Developmental Test and Evaluation and Initial Operational Test and Evaluation program. Successful Navy operational testing on the F/A-18C/D aircraft was conducted by Commander Operational Test and Evaluation Force during FY94 and included an evaluation of the missile system's effectiveness and suitability, maintainability, and supportability in the Navy operational environment.

The AMRAAM Training Program consists of initial training for instructors and follow-on training for operators and maintenance personnel. Initial training for All-Up-Round (AUR) loading, handling, processing and LAU-127A/A launcher operation and maintenance was provided by Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, California in fiscal year (FY) 1993 to: Strike Fighter Weapons School (SFWS), Atlantic, NAS Cecil Field, and SFWS Pacific, NAS Lemoore; Naval Air Maintenance Training Group Detachment (NAMTRAGRUDET) Maintenance Training Unit (MTU)-4030, NAS Mayport, Florida, MTU-4032, NAS Norfolk, Virginia, MTU-4033, NAS North Island, California; MTU-4034, VMAT-203 FREST, MCAS Cherry Point, North Carolina; and Naval Weapons Station (NWS) Yorktown, Virginia. Refresher training for AUR loading, handling, processing and LAU-127A/A launcher operation and maintenance was provided by NAWCWD, China Lake, California in FY 1995. Hughes Missile Systems Company provided aircrew instruction via their AMRAAM School in Tucson, Arizona through FY 1995. This responsibility was transitioned to the Naval Strike and Air Warfare Center (NSAWC) as part of their Strike Fighter Training Program (SFTP).

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LIST OF ACRONYMS

AFB	Air Force Base
AFD	Arm/Fire Device
AIMD	Aircraft Intermediate Maintenance Department
AMIST	Aviation Maintenance In-Service Training
AMRAAM	Advanced Medium Range Air-to-Air Missile
AMTCS	Aviation Maintenance Training Continuum System
AO	Aviation Ordnanceman
ASC	Aeronautical Systems Center
AT	Aviation Electronics Technician
AUR	All-Up-Round
BIT	Built-In-Test
BUPERS	Bureau of Naval Personnel
CAI	Computer Aided Instruction
CANTRAC	Catalog of Navy Training Courses
CATM	Captive Air Training Missile
CBT	Computer-Based Training
CCRV	Captive Carry Reliability Vehicle
CD-ROM	Compact Disk-Read Only Memory
CFMRE	Common Field-level Memory Reprogramming Equipment
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, U.S. Atlantic Fleet
CINCPACFLT	Commander in Chief, U.S. Pacific Fleet
CMC	Commandant of the Marine Corps
CMI	Computer Managed Instruction
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COMNAVAIRESFOR	Commander, Naval Air Reserve Force
CV/CVN	Aircraft Carrier
CWTPI	Conventional Weapon Technical Proficiency Inspection
DOP	Designated Overhaul Point
EOD	Explosive Ordnance Disposal
FMS	Foreign Military Sales

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LIST OF ACRONYMS

FREST	Fleet Replacement Enlisted Skills Training
FRS	Fleet Replacement Squadron
FY	Fiscal Year
GFE	Government Furnished Equipment
ICW	Interactive Courseware
IM	Insensitive Munitions
IMSD	Inventory Management and Systems Division
JILSP	Joint Service Integrated Logistics Support Plan
JRB	Joint Reserve Base
JSD	Joint Services Depot
JSPO	Joint System Program Office
MALS	Marine Aviation Logistics Squadron
MATMEP	Marine Aviation Training Management Evaluation Program
MCAS	Marine Corps Air Station
MCCDC	Marine Corps Combat Development Command
MOS	Military Occupational Specialty
MRL	Missile Rail Launcher
MTIP	Maintenance Training Improvement Program
MTU	Maintenance Training Unit
NA	Not Applicable
NAMTRAGRUDET	Naval Air Maintenance Training Group Detachment
NAS	Naval Air Station
NATOPS	Naval Air Training and Operating Procedures Standardization
NAVAIRSYSCOM	Naval Air Systems Command
NAVSCOLEOD	Naval Explosive Ordnance Disposal School
NAVICP	Naval Inventory Control Point
NAWCWD	Naval Air Warfare Center Weapons Division
NAWMU	Naval Airborne Weapons Maintenance Unit
NCEA	Non-Combat Expenditure Allocation
NEC	Navy Enlisted Classification
NSAWC	Naval Strike and Air Warfare Center
NTSP	Navy Training System Plan

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LIST OF ACRONYMS

NWS	Naval Weapons Station
OOLD	Out-Of-Line Device
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	OPNAV Instruction
OPO	OPNAV Principle Official
PEST	Practical Explosive Ordnance Disposal System Trainer
PICA	Primary Inventory Control Activity
PMA	Program Manager, Air
P^3I	Pre-Planned Product Improvement
RF	Radio Frequency
RFT	Ready For Training
RSP	Render Safe Procedures
SFTI	Strike Fighter Tactics Instructor
SFTP	Strike Fighter Training Program
SFTS	Strike Fighter Training System
SFWS	Strike Fighter Weapons School
SFWSL	Strike Fighter Weapons School Atlantic
SFWSP	Strike Fighter Weapons School Pacific
SFWT	Strike Fighter Weapons and Tactics
SICA	Secondary Inventory Control Activity
SIST	Serviceable-In-Service-Time
TBD	To Be Determined
TD	Training Device
TDD	Target Detection Device
TIVS	Thermally Initiated Venting System
TM	Technical Manual
T&R	Training and Readiness (matrix)
TTE	Technical Training Equipment
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
WCU	Weapons Control Unit

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LIST OF ACRONYMS

WDU	Weapons Detonation Unit
WGU	Weapons Guidance Unit
WPU	Weapons Propulsion Unit
WSO	Weapon and Sensor Officer
WTT	Weapon and Tactics Trainer

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PREFACE

This Approved Navy Training System Plan (NTSP) has been prepared to update the AIM-120 Advanced Medium Range Air-to Air Missile (AMRAAM) Navy Training Plan, A-50-8111B, dated August 1994. The update of this document was accomplished through a thorough review of the life-cycle manpower, personnel, and training requirements associated with the AMRAAM program.

The major changes and updates to this NTSP consist of:

PART I: Outdated information was deleted and all elements of this part were modified to include the Air-launched, Aerial-Intercept Guided Missile (AIM) design series AIM-120B and AIM-120C. Also, information on the Strike Fighter Training Program's AMRAAM Computer-Based Training (CBT), developed by the Naval Strike and Air Warfare Center (NSAWC), NAS Fallon, Nevada, was added.

PART II: This part was recalculated to depict current billet requirements for operational and fleet support units through FY02.

PART III: In addition to reflecting the changes above, this part has been recalculated to identify chargeable student billets through FY02.

PART IV: This part has been updated to reflect the new requirements in training and training logistics support resulting from the AIM-120B and AIM-120C.

PART V: This part has been updated to show completion of milestones and includes new milestones supporting the AIM-120B and AIM-120C.

PART VII: This part has been updated to reflect current Points of Contact.

PART I - TECHNICAL PROGRAM DATA

A. TITLE-NOMENCLATURE-PROGRAM

1. Nomenclature-Title-Acronym. AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM).

2. Program Element. 24162N and 26138M.

B. SECURITY CLASSIFICATION

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

C. NTSP PRINCIPALS

OPNAV Principal Official (OPO)
Program Sponsor..... Chief of Naval Operations (CNO) (N88)

OPO Resource Sponsor..... CNO (N880C7)

Functional Mission Sponsor ..... CNO (N880C7)

Marine Corps Mission Sponsor.....Commandant of the Marine Corps (CMC) (APW-31)

Developing Agency..... Naval Air Systems Command (NAVAIRSYSCOM) (PMA268)

Training Agency ..... Commander in Chief Atlantic Fleet (CINCLANTFLT)
Commander in Chief Pacific Fleet (CINCPACFLT)
Chief of Naval Education and Training (CNET)
Commander, Naval Air Reserve Force (COMNAVAIRESFOR)
Marine Corps Combat Development Command (MCCDC) (C463)
Naval Strike and Air Warfare Center (NSAWC) (N7)

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

Manpower and Personnel Mission Sponsor..... CNO (N1)
BUPERS (PERS-4, -40, -512E)

Director of Naval Training ..... CNO (N7)

CMC Manpower Management..... TFS Division

D. SYSTEM DESCRIPTION

1. Operational Uses. Presently, there are three series of the AMRAAM mission design: AIM-120A, AIM-120B, and AIM-120C. Hereafter, AMRAAM will be used when referring collectively to all AMRAAM configurations, and the mission-design-series will be used when referring to specific AMRAAM configurations. AMRAAM is an all weather, radar guided, all-environment missile used on the F-15, F-16, F/A-18C/D, and in the future, the F/A-18E/F and F-22 aircraft. It incorporates active radar with an inertial reference unit and micro-computer system which makes the missile less dependent upon the fire control system of the host aircraft. The missile offers far greater lethality than most series of the AIM-7 Sparrow and significantly improves operational capability while reducing the missile's weight and drag on aircraft performance. The AMRAAM program is a joint United States Air Force (USAF) and United States Navy (USN) procurement, with the USAF designated as the executive service.

2. Foreign Military Sales. The USAF established a Joint System Program Office (JSPO) at Air Force Material Command/Aeronautical Systems Center (ASC), Eglin Air Force Base (AFB), Florida, to manage the AMRAAM program. The JSPO is headed by the USAF Deputy for AMRAAM, code ASC/YA, and the USN AMRAAM Program Manager, Air (PMA268). The USAF, as the executive service, is responsible for Foreign Military Sales (FMS). AMRAAM is sold to approved FMS customers.

E. DEVELOPMENTAL TEST (DT) AND OPERATIONAL TEST (OT).

All AMRAAM testing is coordinated by the AMRAAM JSPO. Navy-specific testing is relegated to PMA268.

1. DT and OT Not Completed. Not Applicable (NA).

2. DT and OT Completed. Testing was accomplished in a combined Developmental Test and Evaluation and Initial Operational Test and Evaluation program. Successful USN OT on the F/A-18C/D aircraft was conducted by Commander, Operational Test and Evaluation Force during FY94. Maintainability and supportability demonstrations on the F/A-18C/D aircraft were also performed. Ground test, loading and unloading, and captive flights were also completed successfully.

3. Follow-on Test and Evaluation. The United States Marine Corps (USMC) are considering integration of AMRAAM with their AV-8BC1 aircraft. Successful integration, procurement, and introduction will impact USMC AV-8BC1 aircrew and Organizational-level maintenance personnel training curriculum.

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

The AMRAAM system does not replace any existing missile system in the Navy or Marine Corps inventory, although it does share the medium-range, air-to-air missile mission with the AIM-7 Sparrow.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description

a. Missile. AMRAAM is a supersonic, air launched, aerial intercept, guided missile employing active radar target tracking, proportional navigation guidance, and active Radio Frequency (RF) target detection. It employs active, semi-active, and inertial navigational methods of guidance to provide an autonomous launch and leave capability against single and multiple targets in all environments.

The AIM-120A is a non-reprogrammable missile (requires a hardware change to upgrade the missile software). The AIM-120B/C is reprogrammable through the missile umbilical using Common Field-level Memory Reprogramming Equipment (CFMRE). The USAF All-Up-Round (AUR) container houses an internal cable which enables up to four missiles to be reprogrammed while in the container. USN containers are not equipped with the cable and must be opened to reprogram the missile. All three AMRAAM variants are currently approved for use on the F-15C/D/E, F-16C/D, and F/A-18C/D aircraft.

AMRAAM consists of the following major sections: Guidance, Armament, Propulsion, and Control. Other components include a wiring harness, harness cover, Thermally Initiated Venting System (TIVS), and wing and fin assemblies. A functional description of the launcher is also provided.

(1) Guidance Section, Weapons Guidance Unit. The Weapons Guidance Unit (WGU) consists of the radome, seeker, servo, transmitter-receiver, electronics unit, Inertial Reference Unit, Target Detection Device (TDD), the harnesses, and frame structure. All units except the TDD are contained within a sealed structure composed of the pyroceramic radome, titanium skin sections, and aluminum aft bulkhead. The TDD, RF and video processor, and the antennas are attached to the aft skin section as a complete testable assembly. Electronics group functions include radar signal processing, seeker servo control, and all of the computations performed in the central data processor. The WGU-16B is used on AIM-120A missiles, the WGU-41/B is used on AIM-120B missiles, and the WGU-44/B is used on AIM-120C missiles. Guidance sections on AIM-120B and AIM-120C missiles contain Electronic Erasable Programmable Read Only Memory which allow reprogramming of the missile software. Missile software versions are denoted by Tape and Revision Numbers, e.g., Tape 4 Revision 16.

(2) Armament Section, Weapons Detonation Unit. The Weapons Detonation Unit (WDU)-33/B forms an integral part of the tactical missile airframe and includes the warhead, the FZU-49/B (modified Mk 3 Mod 5) safe-arm fuze device, and the Mk 44 Mod 1 booster. The armament section also includes the forward missile hook and hanger. The WDU-33/B warhead meets the Insensitive Munitions (IM) program requirements.

(3) Propulsion Section, Weapons Propulsion Unit. The Weapons Propulsion Unit (WPU)-6/B consists of an airframe, integral rocket motor, a blast tube and exit cone, and an Arm/Fire Device (AFD) with a visible safe-arm indicator. The high performance rocket motor utilizes a reduced smoke, hydroxyl terminated, polybutadiene propellant in a boost sustain configuration, an asbestos-free insulated case (an integral part of the airframe), and an integral aft closure, blast tube, and nozzle assembly with a removable exit cone to facilitate control section installation/removal. Wings are attached in wing sockets at the forward end of the propulsion section. Provisions are included within this section for mounting the filter rectifier assembly.

(4) Control Section, Weapons Control Unit. The Weapons Control Unit (WCU)-11/B consists of four independently controlled electro-mechanical servo actuators, four lithium-aluminum batteries connected in parallel, and a steel fuselage section that is bolted to the propulsion section aft skirt. Each actuator consists of a brushless DC motor ballscrew, an infinite resolution potentiometer directly coupled to the output shaft, and pulse width modulated control electronics. The output shaft is engaged directly to a squib actuated lock so that it does not interfere with the fin (control surface) installation and removal.

(5) Wiring Harness, Harness Cover, and Thermally Initiated Venting System. The wiring harness cover extends from the aft end of the guidance section to the forward end of the control section. Its primary purpose is to provide protection for the wiring harness. The main wiring harness electrically connects the umbilical connector, guidance section, and control section. The wiring harness cover also houses the TIVS. The TIVS is designed to vent rocket motor pressure in the event the missile is exposed to a fuel fire. The TIVS consists of an external thermal cord which, when ignited, triggers an Out-Of-Line Device (OOLD) that ignites a Linear Shape Charge that weakens the rocket motor, allowing the rocket motor to vent without exploding. The OOLD prevents the shaped charge from detonating should the booster in the OOLD inadvertently detonate due to causes such as high impact. The unit has an additional safety feature that causes it to “reset” within nine to thirteen units of gravity, such as the acceleration experienced during missile launch. This feature prevents the system from functioning during missile free flight so that the associated aerodynamic pressures do not inadvertently enable the TIVS and thereby degrade missile performance. An indicator is on the wiring harness cover showing the condition of the TIVS, either “ENABLE” or “DISABLE”. Only TIVS equipped missiles are deployed aboard Aircraft Carriers (CV/CVN).

The WPU-6/B Propulsion Section (with TIVS) meets the fast cook-off and sympathetic detonation requirements of the IM program and the policy delineated in OPNAV Instruction (OPNAVINST) 8010.13B. The other requirements (bullet impact, fragment impact, and slow cook-off) have not been met with the current configuration. However, the WPU-6/B has been granted the appropriate waivers for shipboard use.

(6) Wing and Fin Assemblies. Wing and fin assemblies provide for flight control of the missile. The four wings are detachable, stationary flight surfaces with ball fasteners

to facilitate quick installation and removal. The four fins provide the movable control surfaces. The AIM-120C has "clipped" wings and fins which are not interchangeable with AIM-120A and AIM-120B missiles. The AIM-120C utilizes "clipped" wings and fins in order to meet the internal carriage requirements of the F-22.

b. Launchers. The AMRAAM system includes three new Missile Rail Launchers (MRLs): the LAU-127A/A, in conjunction with the LAU-115, used on the F/A-18C/D aircraft; the LAU-128A/A, and the LAU-129A/A, used on the F-15 and F-16 aircraft, respectively. Additional interface cables are not required between the aircraft and the launcher. The MRL can be installed and operated at all current AIM-9 Sidewinder positions on all candidate aircraft, except F/A-18C/D wing tip stations; and is also capable of launching AIM-9 Sidewinder missiles. The MRL supplements the Sidewinder launchers (except F/A-18C/D wing tip) on AMRAAM capable aircraft.

2. Physical Description. AMRAAM has the physical properties listed below. Four wings, four fins (control surfaces), and the wiring harness cover are mounted externally, providing additional distinguishing features from other similar missiles, such as AIM-7 Sparrow. The AIM-120C utilizes "clipped" wings and fins in order to meet the internal carriage requirements of the F-22.

Tactical Missile:

Length	144.0	inches
Diameter	7.0	inches
Wing Span	21.0	inches*
Wing Span	19.0	inches**
Fin Span.....	25	inches*
Fin Span.....	19	inches**
Weight	348.1	pounds

* AIM-120A and AIM-120B
** AIM-120C

3. New Development Introduction. AMRAAM was introduced through new production. The Navy began receiving AIM-120A deliveries in 1991, but delayed Fleet introduction until integration with the F/A-18 aircraft was completed in 1993. Fleet introduction coincided with F/A-18 IOC when CV/CVN load-outs began to include AIM-120A. AIM-120B deliveries began in FY 94, and AIM-120C deliveries began in FY 96. AMRAAM Pre-Planned Product Improvement (P^3I) missile deliveries are anticipated to begin in FY 00 and continue through FY 12.

4. Significant Interfaces. Power for Built-In-Test (BIT) of the pre-launch dormant missile is provided by converting aircraft power in the AMRAAM Electronic Control Unit. The

filter rectifier assembly is mounted at the forward end of the missile propulsion section and provides the conversion of aircraft power required by the missile. Prior to launch, signal and data transfer between missile and aircraft is accomplished through a buffer connector that is in-line between the launcher cable and the missile umbilical connector. Similarly, the CFMRE interfaces with AMRAAM using the buffer connector and the missile umbilical connector, and supplies the power in lieu of the aircraft for off-aircraft BIT and reprogramming operations.

H. CONCEPTS

1. Operational Concept. AMRAAM is employed by the aircrew of F-15, F-16, F/A-18C/D aircraft, and in the future, will be employed by the aircrew of F/A-18E/F and F-22 aircraft, against threat aircraft and cruise missiles. The host aircraft radar, missile radar, and data link are used to acquire and track single or multiple targets.

2. Maintenance Concept. Maintenance of AMRAAM employed on various aircraft is accomplished using the basic maintenance philosophy outlined in OPNAVINST 4790.2 (series), and specific weapons maintenance instructions outlined in OPNAVINST 8600.2 (series).

a. Organizational-level. Organizational-level maintenance units receive AMRAAM as an AUR, four per container. Organizational-level maintenance is performed by Work Center 230 USN Aviation Ordnanceman (AO) with Navy Enlisted Classification (NEC) codes 8342 and 8842, and USMC personnel with Military Occupational Specialty (MOS) 6531. The AN/AWM-54 Aircraft Firing Circuit Test Set is used to test for stray voltage in aircraft weapons circuits prior to loading ordnance. The AN/AWM-96 Aircraft Weapons Control Test Set is used primarily by Aviation Electronics Technicians (ATs) to test the functionality of the aircraft weapons circuit prior to loading AMRAAM, but is also used by AOs in squadrons employing the Integrated Weapons Team concept. On-aircraft testing is accomplished using the BIT capability of the missile. Organizational-level maintenance tasks include:

- Visual inspection for damage and corrosion
- Visual inspection of missile launcher assembly interface
- Cleaning of external surface and corrosion control
- Attaching wings and fins
- Aircraft Weapons Control System Check
- Uploading and downloading on aircraft
- Returning launcher to Aircraft Intermediate Maintenance Department (AIMD) or Marine Aviation Logistics Squadron (MALS)

b. Intermediate-level. Intermediate-level maintenance is performed on AURs and LAU-127 launchers. AIMD Weapons Departments, both shipboard and NAS, and MALS Ordnance Departments, Work Centers 710, perform intermediate-level maintenance on AMRAAM AURs. AIMD Weapons Departments, both shipboard and NAS, and MALS

Ordnance Departments, Work Centers 71B, perform intermediate-level maintenance on LAU-127 launchers.

(1) AURs. AIMD Weapons Departments, both shipboard and NAS, and MALS Ordnance Departments, Work Centers 710, receive AURs from the NWS, MCAS, or Naval Airborne Weapons Maintenance Unit (NAWMU). Missile maintenance is performed by Weapons Department USN AO personnel with NEC 6801 and USMC personnel with MOS 6541. Weapons/Ordnance Department AUR intermediate-level maintenance tasks include:

- Storing and handling
- Unpackaging Inspection
- Visual inspection for damage and corrosion
- Performing corrosion control procedures
- Performing ready service inspection
- Lubricating missile hook
- De-canning and canning of AUR
- Delivering missile to organizational-level
- Returning AUR to NWS, NAWMU, or MCAS
- Technical Direction Compliance actions, when appropriate

(2) LAU-127. AIMD Weapons Departments, both shipboard and NAS, and MALS Ordnance Departments, Work Centers 71B, receive launchers from the supply system or AIMD. Launcher maintenance is performed by Weapons Department USN AO personnel with NEC 6802 and USMC personnel with MOS 6541. USN AO 6802 and USMC MOS 6541 functionally test the LAU-127 using the AN/AWM-90 series Intermediate Maintenance Guided Missile Launcher Test Set. Weapons/Ordnance Department launcher intermediate-level maintenance tasks include:

- Storing and handling
- Visual inspection for damage and corrosion
- Performing corrosion control procedures
- Performing ready service inspection
- Delivering launcher assembly to organizational-level
- Returning launcher to NWS, NAWMU, or MCAS
- Technical Direction Compliance actions, when appropriate
- Launcher testing using the AN/AWM-90 series Intermediate Maintenance Guided Missile Launcher Test Set

c. All-Up-Round Depot-level. NWS Yorktown, Virginia, and NWS Fallbrook, California, are the AUR depot-level maintenance activities. Launchers are not processed through the NWSs or NAWMU. Depot-level AUR maintenance tasks include:

- Receipt inspection
- Visual inspection for damage and corrosion
- Cleaning of external surfaces
- Touch-up painting on external surfaces
- Lubricating missile hook
- De-canning and canning of AUR
- Repairing minor structural damage
- Fault isolation by AUR test to faulty section
- Recertification of AUR by retest
- Reprogramming missile software using CFMRE
- Technical Direction Compliance actions, when appropriate
- Sending faulty section to Designated Overhaul Point (DOP)

d. Component Depot-level. Component depot-level maintenance is performed by several DOPs. The DOP is responsible for maintenance required to restore defective sections and repairable Shop Replaceable Assemblies to original acceptance standards. This includes test, fault isolation, repair of repairables, removal and replacement of defective components and non-repairable assemblies, corrective action verifications testing, and providing maintenance data to the cognizant surveillance program activity. The guidance section and control section DOP is Raytheon Missile System Company. The armament section DOP is the Naval Surface Warfare Center (NSWC) Crane, Indiana, and the propulsion section DOP is NSWC Indian Head, Maryland.

e. Interim Maintenance. Not Applicable (NA).

f. Life-Cycle Maintenance Plan. Serviceable-In-Service-Time (SIST) applies to USN missiles. SIST is the period of time an air launched guided missile may remain in operational use and or storage before its internal electronic and mechanical components require mandatory tests or maintenance actions to validate suitability for further operational use. Each USN AUR has a maintenance due date consisting of the calendar month and year that the SIST expires. SIST for USN assets is published in OPNAVINST 8600.2 (series), Appendix B.

3. Manning Concept. AMRAAM had no direct impact on existing manpower requirements at organizational, intermediate, or depot-level activities. F/A-18 pilot and Weapons and Sensor Officer (WSO) manpower is driven by seat factor and crew ratio. Manning for USN and USMC fleet squadrons, USMC Training Squadrons, USN Fleet Replacement Squadrons (FRS), and intermediate maintenance activities is based on the total assigned workload, not only on specific AMRAAM requirements. Maintenance skills required to support AMRAAM are considered to be within the capability of personnel holding existing NEC codes and MOS.

Indirectly, AMRAAM did impact organizational and intermediate level workloads. Pilots and WSOs now have an additional weapon system for qualification. Specifically, the Navy Squadron Training Matrices of the combined instruction COMNAVAIRPACINST 3500.67C and

COMNAVAIRLANTINST 3500.63C for the F/A-18 aircraft and the Marine Corps Aviation Training and Readiness Manual (MCO P3500.15B) for the F/A-18 aircraft were used to estimate peacetime manpower requirements for AMRAAM. These instructions/orders provide annual aircrew training requirements, which include events that involve captive carry and live fire of ordnance. The F/A-18 community relies heavily on the embedded training provided by the aircraft electronics. The training events that involve AMRAAM are event numbers 18 and 21, AIM-120 Valid Shot and A/A Radar Live Shot, respectively. The AIM-120 valid shot is required five times every thirty days, using the embedded training capability of the aircraft's electronics. The air-to-air radar missile live shot is required once every three years per aircrewman, and can be satisfied by shooting AMRAAM or AIM-7 Sparrow. These AMRAAM qualification requirements are additive to other aircraft and weapon qualification events, and thus increase the workload for F/A-18 aircrewman. The increasing list of mission areas and associated weapons for the F/A-18 aircraft poses a challenge to aircrew personnel, who not only must be properly trained in theses areas, but also must retain those knowledge and skills.

Similarly, F/A-18 aviation ordnancemen must remain qualified to handle and load AMRAAM. Conventional Weapons Technical Proficiency Inspection (CWTPI) are required regularly for squadron AOs. AMRAAM is additive to the list of other ordnance/stores that are part of the CWTPI, and thus increases the workload for F/A-18 AOs. Additionally, the fleet introduction of AMRAAM included a new launcher, the LAU-127. The addition of another launcher to the USN and USMC inventory added to the intermediate-level maintenance workload because of the inevitable preventative/corrective maintenance actions associated with the LAU-127. The increasing list of ordnance and associated launchers and support equipment poses a challenge to AO personnel, who not only must be properly trained in theses areas, but also must retain those knowledge and skills. Refer to Part II for existing USN and USMC maintenance manpower requirements.

4. Training Concept. The AMRAAM training concept is divided into organizational- and intermediate-level maintenance, based on OPNAVINST 8600.2 (series). Organizational-level training is provided to operator and maintenance personnel. Operator training is provided for F/A-18 pilot and WSO personnel. Organizational-level maintenance training is provided to AO personnel in the F/A-18 community with NEC codes 8342 and 8842 and MOSs 6511 and 6531. Intermediate-level training is provided to USN maintenance personnel with NECs 6801 and 6802 and to USMC personnel with MOS 6541.

a. Initial Training. Initial training for the AIM-120A and AIM-120B was conducted in FY93 and FY95, respectively. Initial training for the AIM-120C was deemed unnecessary, because the only significant change was the smaller wings and fins. The smaller fins still attach with locking nuts, however, the locking nuts tighten in a counter-clockwise direction, which is the opposite direction of the locking nuts on the AIM-120A/B fins. These differences are addressed in the applicable technical manuals and checklists.

b. Follow-on Training. Follow-on training for AMRAAM is available as part of courses taught at the FRS, Strike Fighter Weapons School (SFWS) Atlantic and Pacific, Naval Strike and Air Warfare Center (NSAWC), and Naval Aviation Maintenance Training Group Detachment (NAMTRAGRUDET) Maintenance Training Units (MTUs). The addition of AMRAAM into existing training tracks caused no change in student throughput or chargeable student billets. Follow-on training courses have been modified to include AMRAAM and are currently available.

(1) Operator Training. Pilots and WSOs are trained at the appropriate FRS for specific aircraft operation and weapons. Pilot and WSO skills in tactics and ordnance delivery are further enhanced at the SFWS, NSAWC, and through on-board proficiency training.

(a) Training Devices (TDs). The TDs required for follow-on and proficiency operator training include the Weapon and Tactics Trainer (WTT), TD number 2E7, and the JAIM-120 (series). The JAIM-120 (series) assets are required for live-fire exercises, which are part of the annual Non-Combat Expenditure Allocation (NCEA). Additionally, the F/A-18 aircraft includes embedded training capability within its onboard computers, permitting simulated weapon firings without tactical or training stores loaded. This embedded training permits the pilots to perform AMRAAM re-qualification every thirty days.

- **Weapons Tactics Trainer, 2E7.** The WTT is a computer-based weapon system training device developed for use by F/A-18C/D aircrews, which is commonly referred to as the “dome trainer”. The WTT provides familiarization in F/A-18 operational procedures and all F/A-18 approved stores and missiles, as well as proficiency training in launch and control techniques.

- **Special Test, Air-launched, Aerial Intercept Guided Missile (JAIM).** JAIM-120A, JAIM-120B, and JAIM-120C are telemetry-configured missiles that provide the Services the ability to evaluate the capabilities of the operational forces using inventory weapons and weapons systems in a realistic environment. In these configurations, the armament section is replaced with a telemetry section that measures/records missile performance data and relays it (encrypted) to ground stations via a data link. The telemetry section also contains a tracking transponder and a flight termination system. Currently, live fire shots are being limited to eleven per year.

(b) Training Aids. The AMRAAM Interactive Courseware (ICW) will be a component of the Strike Fighter Weapons and Tactics (SFWT) curricula, and will be hosted on the Strike Fighter Training System (SFTS). SFWT and SFTS are two of three components of NSAWC’s Strike Fighter Training Program (SFTP), which is primarily targeted at providing post-FRS training to Strike Fighter aircrew. The SFTS will be a high-speed, wide area network, linking schools and squadrons together with standardized, Computer-Based Training (CBT) and ICW. Strike Fighter Tactics Instructors (SFTIs), the third component of the SFTP, will be trained by NSAWC N7 (Topgun) and will administer the SFWT curricula within the

squadrons. AMRAAM ICW is being developed for the SFTS by NSAWC and NAVAIRSYSCOM PMA205 and PMA268. Initial release of the AMRAAM ICW is scheduled for August 1998, and will be distributed via Compact Disk-Read Only Memory (CD-ROM) as the SFTS is not yet in place for operational squadrons. For detailed information on AMRAAM ICW (training aid) refer to element IV.B.2.

(c) Courses. The following table lists the applicable operator training courses. AMRAAM source material has been incorporated, which caused no change in student throughput or chargeable student billets. These courses are listed for reference only and, therefore, will not appear in Parts II and III of this document. See NTP A-50-7703 for course details.

Table I- 1. Operator Courses

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AMRAAM
D/E-2A-0601	F/A-18 Fleet Replacement Pilot Category 1	On-line
D/E-2A-0602	F/A-18 Fleet Replacement Pilot Category 2A	On-line
D/E-2A-0604	F/A-18 Fleet Replacement Pilot Category 3A	On-line
D/E-2A-0606	F/A-18 Fleet Replacement Pilot Category 4	On-line
None	F/A-18 Strike Fighter Advanced Readiness Program	On-line
None	F/A-18 Strike Fighter Weapons Employment	On-line
M13P4B3	F/A-18D Fleet Replacement Pilot Basic and Transition	On-line
M13P3V3	F/A-18D Fleet Replacement Pilot Refresher	On-line
M13P3W3	F/A-18D Fleet Replacement Pilot Modified Refresher	On-line
M13P4C3	F/A-18D WSO Basic and Transition	On-line
M13P3R3	F/A-18D WSO Refresher	On-line
M13P3S3	F/A-18D WSO Modified Refresher	On-line

(2) Initial Skills - Maintenance. AMRAAM initial skills training for the AO rating are provided by the "A" School at NAS Pensacola, Florida. A new training concept for most aviation maintenance training has been established. This concept entails dividing "A" School courses into two or more segments called core and strand. "A" School core courses include general knowledge and skills training for the particular rating, while "A" School strand courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. Strand training immediately follows core training and is part of the "A" School. Upon completion of core and strand "A" School courses, graduates should attend the appropriate initial "C" School for additional specific training. However, this chain of events is dependent upon BUPERS and the personnel detailers writing order appropriately.

(a) TDs. The CATM-120 series is the TD required for AMRAAM initial skills maintenance training. For detailed information on the CATM-120 series, refer to element IV.A.2.

- **Captive Air Training Missile.** The CATM-120 (series) are inert TDs that provide realistic handling characteristics when loaded in place of tactical AMRAAM; however, these training missiles have not been cleared nor certified for flight. Current F/A-18 Operational Flight Programs do not recognize the CATM-120 series and register a "LOAD X" condition.

(b) Courses. AMRAAM source material has been incorporated into the following courses with minimal impact. The AMRAAM caused no change in student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III.

Table I- 2 Initial Skills - Maintenance Courses

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AMRAAM
C-646-2011	Aviation Ordnanceman Common Core Class A1	On-line
C-646-2012	Aviation Ordnanceman Airwing Strand Class A1	On-line
C-646-2013	Aviation Ordnanceman Weapon Department Strand Class A1	On-line

(3) Organizational-level Maintenance. Organizational-level maintenance personnel are trained at the appropriate MTU for specific aircraft/weapon loading and maintenance. Weapon loading skills are further enhanced at SFWS, and through on-board proficiency training. A new training concept for most aviation maintenance training has been established. This concept entails dividing C1 courses into separate initial and career training courses. Initial "C" School training is intended for students with a paygrade of E-4 and below. Career "C" School training is provided to personnel E-5 and above to enhance their skills and knowledge within their field.

(a) TDs. TDs required for follow-on and proficiency training include the CATM-120 series and the AMRAAM Captive Carry Reliability Vehicle (CCRV).

- **CATM-120 (series).** See I.H.4.(2)(a) for description. For detailed information on the CATM-120 series, refer to element IV.A.2.

- **AMRAAM CCRV.** The AMRAAM CCRV is a tactical missile with inert armament and propulsion sections. It is used at SFWSL and SFWSP for the AMRAAM CWTPI because it allows post-load BIT to complete the AMRAAM loading checklist. For detailed information on the AMRAAM CCRV, refer to element IV.A.2.

(b) Courses. AMRAAM is taught in the following organizational-level maintenance training courses. AMRAAM source material was incorporated in these courses with minimal impact, and caused no change in student throughput or chargeable student billets,

and, therefore, these courses will not appear in Parts II and III. See NTP A-50-7703 for organizational-level maintenance training course details.

Table I- 3. Organizational-level Maintenance Courses.

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AMRAAM
C-646-9973	F/A-18 Stores Management System (Initial) Organizational Maintenance	On-line
C-646-9974	F/A-18 Stores Management System (Career) Organizational Maintenance	On-line
D/E-646-0640	F/A-18 Conventional Weapons Loading	On-line
D/E-646-0647	F/A-18 Conventional Release System Test	On-line

(4) Intermediate-level Maintenance. Intermediate-level maintenance training is available for USN and USMC AOs through the appropriate MTU.

(a) TDs. The TD required for follow-on and proficiency training is the CATM-120 series. See I.H.4.(2)(a) for description. For detailed information on the CATM-120 series, refer to element IV.A.2.

(b) Courses. The following table lists intermediate-level maintenance training courses that had AMRAAM source material incorporated with minimal impact. These updates caused no changes in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II, III and IV.

Table I- 4. Intermediate-level Maintenance Courses with Minimal AMRAAM Impact.

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AMRAAM
C-646-3104	CV/CVN Air Launched Weapons General	On-line
C-646-4103	NAS Weapons Department Aviation Ordnance General	On-line
C-646-4108	Air Launched Weapons Ordnance Supervisor	On-line
C-646-4109	Weapons Department General Ordnance	On-line

The following courses have been updated to include data for the AIM-120A, AIM-120B, and AIM-120C missiles. AMRAAM caused no change in student throughput or chargeable student billets. These courses appear in Parts II, III, and IV as part of their respective tracks. For detailed information refer to element IV.A.2.

Title ……..	**Air Launched Guided Missiles Intermediate Maintenance**
CIN ……..……	C-122-3111A (part of D/E-646-7007)
Model Manager….	MTU-4030, NAMTRAGRU DET Naval Station (NS) Mayport
Description ……..…	From Catalog of Navy Training Courses (CANTRAC): Upon completion of this course, Aviation Ordnancemen, Gunner's Mates and Torpedoman's Mates will have sufficient knowledge/ theory of the Sparrow, Phoenix, Sidewinder, Sidearm, AMRAAM, Maverick, Harpoon, SLAM, HARM, Tow, Hellfire, Penguin All Up Round (AUR) Air Launched Guided Missiles, Walleye Weapon System, Tactical Air Launched Decoy (TALD) and Air Nitrogen Purifier Units, including basic theory, safety precautions, technical publications, and missile reporting procedures, to perform, under close supervision, Intermediate Maintenance in the CV/CVN, LPH/LHA, NAS/MCAS working environment.
Locations ……..….	MTU-4030, NAMTRAGRU DET, NS Mayport MTU-4032, NAMTRAGRU DET, NAS Norfolk MTU-4033, NAMTRAGRU DET, NAS North Island MTU-4035, NAMTRAGRU DET, NAS Whidbey Island[1]
Length ……..……	11 days
RFT date ……..……	Currently available
Skill identifier …….	AO 6801
TD ……..…….	CATM-120 series
Prerequisite ……..…	AO, GMG, TM, or Graduate of AO (ClassA1) School or equivalent or designated striker, or C-646-2013 Aviation Ordnanceman Weapons Department Strand Class A1

[1] MTU-4035 will be stood-up and ready for training in FY 99.

Title ……..	**Strike Armament Intermediate Maintenance Repair**
CIN ……..……	C-646-3118 (part of D/E-646-7001)
Model Manager….	MTU-4030, NAMTRAGRU DET Naval Station (NS) Mayport
Description ……..…	From CANTRAC: Upon completion of this course, Aviation Ordnance Technicians will have sufficient knowledge/skills of aircraft armament equipment to include operational checkout procedures, corrosion control, troubleshooting procedures, periodic maintenance procedures, component removal, repair, replacement procedures, use of special tools and test equipment, use of publications, and use of safety and administrative procedures applicable to aircraft armament equipment items, to be performed under limited supervision, in the Aircraft Intermediate Maintenance Department environment.
Locations ……..….	MTU-4030, NAMTRAGRU DET, NS Mayport MTU-4032, NAMTRAGRU DET, NAS Norfolk MTU-4033, NAMTRAGRU DET, NAS North Island
Length ……..….	61 days
RFT date ……..….	Currently available
Skill identifier ……	AO 6802
TD ……..……..	NA
Prerequisite ……..…	AO and Graduate of AO (ClassA1) School Airwing Strand or equivalent or equivalent fleet experience

Title ……..	**Aviation Ordnance Intermediate Maintenance Technician**
CIN ……..	C-646-3105 (part of M-646-7026)
Model Manager…	MTU-4034, VMAT-203 FREST, MCAS Cherry Point, North Carolina
Description ….....	To provide USMC ordnance personnel with knowledge and skills to work on ordnance/armament in the MALS environment.
Location …….....	MTU-4034, VMAT-203 FREST, MCAS Cherry Point, North Carolina
Length ……....	75 days
RFT date …….....	Currently available
Skill identifier …..	MOS 6541
TD ……..	CATM-120 series
Prerequisites …….	C-646-2011 Aviation Ordnanceman Common Core Class A1 C-646-2012 Aviation Ordnanceman Airwing Strand Class A1

(5) Explosive Ordnance Disposal Training. EOD training is presently conducted the NAVSCOLEOD at Naval Surface Warfare Center (NAVSURFWARCEN), Indian Head, Maryland, but will transition to the NAVSCOLEOD Detachment at Eglin Air Force Base, Fort Walton Beach, Florida. Additional advanced and specialized EOD training is provided by EOD Technical Evaluation Units (EODTEUs) at Fort Story, Virginia and NAS Barbers Point, Hawaii.

(a) TDs. TDs required for EOD training are the Practical Explosive Ordnance Disposal System Trainer (PEST).

- **Practical Explosive Ordnance Disposal System Trainer.**

The AMRAAM PEST is a full-scale model of the tactical AMRAAM, containing inert versions of explosive train components. The AIM-9X PEST possesses the same weight and center of gravity characteristics as the tactical missile. The AIM-9X PEST is used to practice the AMRAAM Render Safe Procedures (RSPs). For further details on TDs see element IV.A.2.

(b) Courses. The following EOD courses have been modified to include the AIM-120A, AIM-120B, and AIM-120C AMRAAM. AMRAAM caused no change in student throughput or chargeable student billets, and, therefore, these courses do not appear in Parts II and III.

Table I- 5. EOD Courses

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AMRAAM
A-431-0011	Explosive Ordnance Disposal (EOD) Phase II (Navy)	On-line
A-431-0012	Explosive Ordnance Disposal (EOD) Phase II	On-line
G-431-0001	EOD Pre-deployment Team Training	On-line

c. Student Profiles. The following table lists the enlisted manpower and personnel classifications required that support AMRAAM. In many instances, AO personnel who support AMRAAM do not possess the component NEC because they attained their primary NEC prior to the recent A School and C School changes.

Table I- 6. AMRAAM Student Profiles.

RATING and NEC or MOS	TITLE	COMPONENT NEC or MOS
AO 8842	F/A-18 Armament System Organizational Apprentice Maintenance Technician	AO 0000
AO 8342	F/A-18 System Organizational Maintenance Technician	AO 8842
AO 6531	Aircraft Ordnance Technician (F/A-18)	AO 6511
AO 6541	Aviation Ordnance Intermediate Maintenance Technician	AO 6511
AO 6801	Air Launched Weapons Technician	AO 0000
AO 6802	Strike Intermediate Armament Maintenanceman	AO 0000

d. Training Pipelines. New training tracks were not required for AMRAAM. The following training pipelines and tracks correspond to student profiles listed above. These pipelines and tracks are based on the training system that is in place today, and may not reflect actual progressions for personnel who completed formal training prior to the recent “A” School and “C” School changes. Shaded courses were affected by the introduction of AMRAAM. Training tracks and associated courses are available in the OPNAV Aviation Training

Management System (OATMS). The following training tracks apply and are available in the OATMS.

AO 0000	→	AO 8842	→	AO 8342
Aviation Ordnanceman Class A1		F/A-18 Armament Systems Organizational Apprentice Maintenance Technician		F/A-18 Systems Organizational Maintenance Technician
Air Wing Strand		TRACK D/E-646-0654		TRACK D/E-646-0641
C-646-2011		C-600-3601		C-600-3601
C-646-2012		C-646-9973 D/E-646-0640		C-646-9974

Figure I-1 F/A-18 Systems Organizational Maintenance Technician Career Progression

AO 6511	→	AO 6531
Aviation Ordnanceman Class A1		Aircraft Ordnance Technician (F/A-18)
Air Wing Strand		TRACK M-646-0653
C-646-2011		C-600-3601
C-646-2012		C-646-9973 D/E-646-0640 D/E-646-0647

Figure I-2 F/A-18 Aircraft Ordnance Technician Career Progression

AO 6511	→	AO 6541
Aviation Ordnanceman Class A1		Aviation Ordnance Intermediate Maintenance Technician
Air Wing Strand		TRACK M-646-7026
C-646-2011		C-600-3601
C-646-2012		C-646-3105 C-646-3890

Figure I-3 Aviation Ordnance Intermediate Maintenance Technician Career Progression

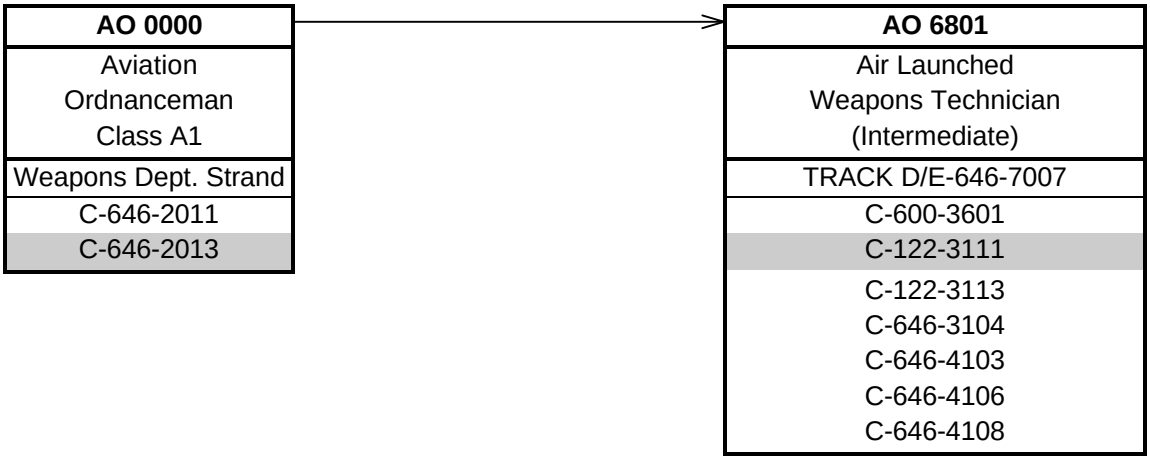

Figure I-4 Air Launched Weapons Technician Career Progression

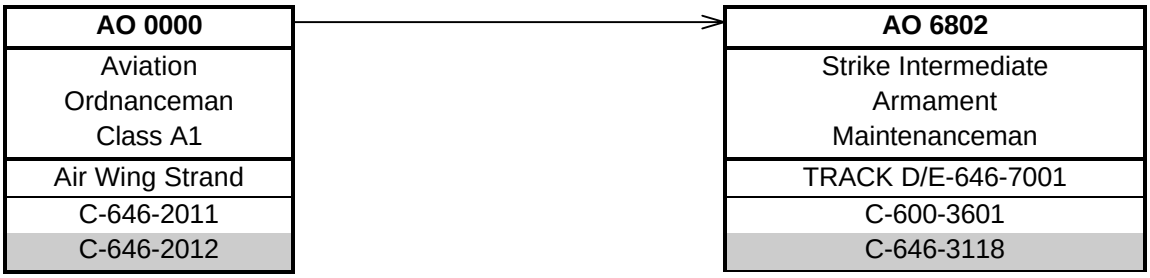

Figure I-5 Strike Intermediate Armament Maintenanceman Career Progression

I. ON-BOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development.

a. Maintenance Training Improvement Program. The Maintenance Training Improvement Program (MTIP) is used to establish an effective and efficient training system that is responsive to fleet training requirements. It consists of a bank of test questions that are managed through automated data processing. The Deputy Chief of Staff for Training assists in the development of MTIP by providing those question banks (software) already developed by the Navy. MTIP is implemented per OPNAVINST 4790.2 (series). MTIP is a training management tool that, through diagnostic testing, identifies individual training deficiencies at both the organizational and intermediate levels of maintenance. MTIP allows increased effectiveness in the application of training resources through identification of skill and knowledge deficiencies at the activity, work center, or individual technician level. Refresher training is concentrated where needed to combat identified skill and knowledge shortfalls.

b. Aviation Maintenance In-Service Training. Aviation Maintenance In-Service Training (AMIST) is intended to support Fleet training requirements now satisfied by

MTIP, and in that sense is the planned replacement. However, it is structured very differently, and will function as an integral part of the new Aviation Maintenance Training Continuum System (AMTCS) that will replace the existing aviation maintenance training structure. AMIST will provide standardized instruction to bridge the training gaps between initial and career training. With the implementation of AMIST, the technician will be provided the training required to maintain a level of proficiency necessary to perform effectively the required tasks to reflect a career progression. AMTCS redesigns the aviation training process (training continuum), and introduces CBT throughout the Navy technical training process. The application and adoption of recent advances in computer hardware and software technology have enabled CBT with its basic elements of Computer Managed Instruction (CMI), Computer Aided Instruction (CAI), and Interactive Courseware ICW to be integrated into the training continuum and provide essential support for standardizing technical training.

c. Strike Fighter Training Program. NSAWC, which includes Topgun (N7), SFWS Atlantic, SFWS Pacific, and the Strike Weapons and Tactics School Atlantic (SWATSLANT), is developing post-FRS training at the squadron level for Navy Strike Fighter aircraft (F-14 and F/A-18). This post-FRS training continuum is known as the SFTP, and is composed of three equally critical elements: the SFWT curricula, the SFTI, and the SFTS. The SFWT curricula will be taught by each squadron's SFTI, who will be supported by the SFTS, a multimedia computer-based training system that will host CMI, CAI, CBT and ICW. Aircrew weapons proficiency training will continue to be accomplished using existing methods: Academic, Simulator (WTT/WST), Captive Carry and NCEA (JAIM-120); but capability ratings will be performance-based rather than completion-based, i.e., it will not be based simply upon completing the training events, but upon how well they are completed. Training events will be measured using defined metrics, and collectively these events will be evaluated to determine actual combat readiness, quantitatively (objectively) rather than qualitatively (subjectively).

2. Personnel Qualification Standards. NA.

3. Other On-Board or In-service Training Packages.

a. Marine Aviation Training Management Evaluation Program (MATMEP). Marine Corps on-board training is based on the current series of MCO P4790.12, Individual Training Standards System and Marine Aviation Training Management Evaluation Program (MATMEP). This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 (series), maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MTIP questions coupled to MATMEP tasks will help identify training deficiencies that can be addressed with remedial training.

b. Conventional Weapon Technical Proficiency Inspection (CWTPI). The CWTPI is a graded inspection administered by either Strike Fighter Weapons School Pacific or

Atlantic. The CWTPI covers all areas of conventional weapon load and release and control systems checks. The inspection evaluates the squadron's ability to wire-check, upload and download conventional ordnance, use applicable publications, and place ordnance on its designated target. The squadron inspection is conducted annually, six months prior to deployment, or at the request of the squadron's Commanding Officer. A written examination is required by all personnel, including squadron pilots, directly involved in the inspection. A 72 hour time limit is granted for the completion of the entire evolution. The final grade is an average score derived from the written exams, ordnance loads, wire checks, and the pilots proficiency to deliver weapons on target. Pre-inspection training is provided by the appropriate SFWS followed by the CWTPI. The CWTPI determines the need for further conventional weapons load training of squadron AO and AT personnel at the appropriate SFWS.

c. Marine Corps Combat Readiness Evaluation. The USMC fighter and attack wings are scheduled by Headquarters, Marine Corps for a yearly Combat Readiness Evaluation. This is part of the Marine Corps Combat Readiness Evaluation System. An entire Marine Corps activity is moved to another location to participate in war exercises and be evaluated. Training is an on-going Marine Corps evolution that culminates with the Combat Readiness Evaluation. The evaluation determines the need for further conventional weapons load training of squadron personnel.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers. The following production contract numbers apply to the AIM-120C missiles.

Table I- 7. Contract Numbers.

CONTRACT NUMBER	MANUFACTURER	ADDRESS
F08626-94-C-0029	Raytheon Missile Systems Company	PO Box 113377 Tucson, AZ 85734
F08626-94-C-0030	Raytheon Missile Systems Company	PO Box 113377 Tucson, AZ 85734

2. Program Documentation. The AMRAAM Joint Service Integrated Logistics Support Plan (JILSP) was developed by the JSPO and is updated by periodic revisions. The JILSP provides the latest maintenance and related logistics support planning data for all systems components. The latest version, MS-001 Revision 13, is dated June 1997.

3. Technical Data Plan. A joint USAF and USN Technical Management Review Board has been established and meets when deemed necessary or when requested by the Assistant Program Manager, Logistics (APML) or JSPO to determine Technical Manuals (TM)

requirements. Naval Air Technical Services Facility is the data manager for the F/A-18 TMs, as well as the AIM-120 Fleet Intermediate Maintenance TM.

4. Test Sets, Tools, and Test Equipment. The AMRAAM program has placed special emphasis on the use of existing support equipment. The following is a list of test sets, tools, and equipment that are new and peculiar to the AMRAAM program.

Table I- 8. Test Sets, Tools & Equipment.

NOMENCLATURE	PART NUMBER	ACTIVITY
Tool, Fin Installation and Removal	SP548005-103	CV, NAS, MCAS, NWS
Adapter Insert, Wing and Transport, ADU-628/E	1700AS103	CV, NAS, MCAS
CFMRE, AN/GYQ-75A(v)	3187555	NWS
Tool, Exit Cone, Rocket Motor, TLU-507/E	1700AS270	NWS
Tool Connector, INSTL/RMV (SAF)	075-80048	NWS
Adapter, Torque Wrench, Spanner (W1P2)	075-80131	NWS
Adapter, Torque Wrench, Spanner (W1P1)	G464450	NWS
Adapter, Torque Wrench, Spanner (W1P6)	075-80036	NWS
Adapter, Torque Wrench, Spanner (W1P7)	G464451	NWS
Fixture Assembly (Umbilical)	075-40212	NWS
Wrench, Data Link (Coaxial)	PA6541-2	NWS
Adapter, Torque Wrench Spanner (Fin Nut)	9018546	NWS
Dummy Connector, Plug-Safe, Guidance Section	3824454-2	NWS
Dummy Connector, Plug-Safe, Control Section	3824453-2	NWS
Test Set, GM Circuitry, T/S-4108/G	1028100-1	NWS
Test Set, Squib, Rocket Motor (A/E-24M-2)	588AS2100	NWS
Power Monitor Adapter	1700AS52355	NWS
Adapter, Guidance/Control Squib Interface	1715AS4139	NWS
Adapter, Restraint Stand (ADU-749/E)	1700AS25	NWS

5. Repair Parts. The USAF is Executive Service for development, production, operation, and disposal of the AMRAAM weapon system. Warner Robins Air Logistics Center, Warner Robins AFB, Georgia, is assigned as the Primary Inventory Control Activity (PICA) for all common service multi-service AMRAAM items. The Naval Ordnance Center Inventory Management Systems Division, Naval Inventory Control Point (NAVICP), and NAVAIRSYSCOM are designated as the Secondary Inventory Control Activity (SICA). The SICA will stock and issue all necessary spare and repair parts for the missile and the launcher respectfully. NAVICP is the PICA for LAU-127 USN unique parts.

6. Human Systems Integration. No Human Systems Integration Plan was written for the AMRAAM. Future requirements for integration with the Joint Helmet Mounted Cueing System, being developed for the F/A-18 aircraft, may warrant human systems integration analysis.

K. SCHEDULES

1. Schedule of Events

a. Delivery Schedules. Final delivery of fleet AIM-120A and AIM-120B missiles is completed. The Material Support Date was attained in December 1996. The Navy Support Date is planned to be attained in FY98. Delivery of AIM-120C missiles and P^3I missiles is planned through FY12.

b. Ready For Operational Use Schedule. The AIM-120A , AIM-120B, and AIM-120C Missiles are currently in use and considered operational upon delivery.

c. Time Required to Install at Operational Sites. NA.

d. Foreign Military Sales and Other Source Delivery Schedule. The USAF, as the executive service, is responsible for FMS. The AMRAAM is compatible with weapons systems currently being operated by several North Atlantic Treaty Organization allies and is included in the FMS program.

e. Training Device and Delivery Schedule. A total of 52 CATM-120Cs have been procured and delivered. A total of 156 CATM-120Bs have been procured and delivered.

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

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT TITLE	DOCUMENT NUMBER	PDA CODE	STATUS
F/A-18 Weapons System NTSP	A-50-7703G/D	PMA265	Draft Sep 96
Consolidated Automated Support System NTSP	A-50-8515C/D	PMA260	Preliminary Draft June 1998
Joint Service ILSP, AMRAAM	MS-001 Revision 13	PMA268	Approved Jun 97

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the AIM-120 Advanced Medium Range Air-to-Air Missile 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

II.B. Personnel Requirements

- II.B.3. Foreign, Other Service, and Non-Military Personnel Annual Training Input Requirement

NOTE 1: This section of the AIM-120 Advanced Medium Range Air-to-Air Missile NTSP reflects maintenance billet and personnel requirements for the AIM-120. It is a compilation of one organizational and two intermediate level NECs (AO 8342, AO 6801 and AO 6802, respectively) and one organizational and one intermediate level MOS (6531 and 6541, respectively) with associated billets. The addition of the AIM-120 to the organizational and intermediate level workloads is only a small percentage of the required workload for those NECs and MOS. The NECs and MOS are not dedicated to the AIM-120 and, therefore, the overall training throughput for the NEC and MOS will remain the same, i.e., account for the total NEC/MOS community, and not just activities receiving AIM-120.

NOTE 2: All billets identified in this section are programmed through other NTSPs, 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 AIM-120.

PART II - BILLET AND PERSONNEL REQUIREMENTS

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

SOURCE: NAVAIRSYSCOM PMA268/PMA205 **DATE:** 6/98

ACTIVITY	UIC	PFYs	CFY98	FY99	FY00	FY01	FY02
OPERATIONAL	**NAVY**						
NAVWPNTESTRON CL	39787	1	0	0	0	0	0
NAVWPNTESTRON PM	39788	1	0	0	0	0	0
NAVSTKAIRTESTRON	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	0	0	0	1	0	0
VFA-204	09032	0	0	0	1	0	0
NSAWC N7	69190	1	0	0	0	0	0
SFWS Atlantic	47084	1	0	0	0	0	0
SFWS Pacific	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	2	0	0

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

SOURCE: NAVAIRSYSCOM PMA268/PMA205 **DATE:** 6/98

ACTIVITY	UIC	PFYs	CFY98	FY99	FY00	FY01	FY02
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
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	0	0	0	1	0	0
VMFA-134	09365	0	0	0	1	0	0
VMFA-142	67243	0	0	0	1	0	0
VMFA-321	67235	0	0	0	1	0	0
MAWTS-1	55167	1	0	0	0	0	0
VMFAT-101	09965	1	0	0	0	0	0
TOTAL:		16	0	0	4	0	0
FLEET SUPPORT	**NAVY**						
AIMD Cecil Field	60200	1	0	0	0	0	0
AIMD Fallon	60495	1	0	0	0	0	0
AIMD Lemoore	63042	1	0	0	0	0	0
AIMD Oceana	60191	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
CVN-65 USS Enterprise	03365	1	0	0	0	0	0
CV-67 USS Kennedy	03367	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
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:		21	0	0	0	0	0

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

SOURCE: NAVAIRSYSCOM PMA268/PMA205 **DATE:** 6/98

ACTIVITY	UIC	PFYs	CFY98	FY99	FY00	FY01	FY02
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
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	0	0	0	1	0	0
MALS-42 Marietta	67236	0	0	0	1	0	0
MALS-46 Miramar	67244	1	0	0	0	0	0
MASD Andrews	04801	0	0	0	1	0	0
TOTAL:		7	0	0	3	0	0

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
OPERATIONAL	**NAVY**					
NAVWPNTESTRON CL	39787					
ACDU			0	5	AO	8342
NAVWPNTESTRON PM	39788					
ACDU			0	5	AO	8342
NAVSTKAIRTESTRON	39783					
ACDU			0	5	AO	8342
VX-9	55646					
ACDU			0	3	AO	6801
ACDU			0	5	AO	8342
ACTIVITY TOTAL:			0	8		
VFA-106	09679					
ACDU			0	5	AO	8342
VFA-125	09485					
ACDU			0	5	AO	8342
VFA-15	09015					
ACDU			0	5	AO	8342
VFA-34	09070					
ACDU			0	5	AO	8342
VFA-37	09478					
ACDU			0	5	AO	8342
VFA-81	09221					
ACDU			0	5	AO	8342
VFA-82	09122					
ACDU			0	5	AO	8342
VFA-83	09223					
ACDU			0	5	AO	8342
VFA-86	09943					
ACDU			0	5	AO	8342
VFA-87	63922					
ACDU			0	5	AO	8342
VFA-105	65183					
ACDU			0	5	AO	8342
VFA-131	63934					
ACDU			0	5	AO	8342
VFA-136	55141					
ACDU			0	5	AO	8342
VFA-127	08956					
ACDU			0	5	AO	8342
VFA-22	09561					
ACDU			0	5	AO	8342
VFA-25	09637					
ACDU			0	5	AO	8342
VFA-94	09295					
ACDU			0	5	AO	8342

[2] All billet requirements shown are programmed in either the F/A-18 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document.

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY		UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VFA-97		63923					
	ACDU			0	5	AO	8342
VFA-113		09092					
	ACDU			0	5	AO	8342
VFA-115		09604					
	ACDU			0	5	AO	8342
VFA-137		55142					
	ACDU			0	5	AO	8342
VFA-146		09063					
	ACDU			0	5	AO	8342
VFA-147		63925					
	ACDU			0	5	AO	8342
VFA-151		09558					
	ACDU			0	5	AO	8342
VFA-27		65185					
	ACDU			0	5	AO	8342
VFA-192		55179					
	ACDU			0	5	AO	8342
VFA-195		09706					
	ACDU			0	5	AO	8342
VFA-203		09030					
	TAR		FY00	0	5	AO	8342
VFA-204		09032					
	TAR		FY00	0	5	AO	8342
NSAWC N7		69190					
	ACDU			0	5	AO	8342
SFWS Atlantic		47084					
	ACDU			0	5	AO	8342
SFWS Pacific		35185					
	ACDU			0	5	AO	8342
VFC-12		52994					
	TAR			0	5	AO	8342
VFC-13		52995					
	TAR			0	5	AO	8342
OPERATIONAL		**USMC**					
VMFA-115		09234					
	AD			0	5		6531
VMFA-122		09407					
	AD			0	5		6531
VMFA-251		09241					
	AD			0	5		6531
VMFA-312		09253					
	AD			0	5		6531
VMFA (AW)-224		01224					
	AD			0	5		6531
VMFA (AW)-332		09501					
	AD			0	5		6531

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY		UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMFA (AW)-533		09193					
	AD			0	5		6531
VMFA-212		09434					
	AD			0	5		6531
VMFA-232		09242					
	AD			0	5		6531
VMFA-235		09237					
	AD			0	5		6531
VMFA-314		09230					
	AD			0	5		6531
VMFA-323		09235					
	AD			0	5		6531
VMFA (AW)-121		09257					
	AD			0	5		6531
VMFA (AW)-225		09232					
	AD			0	5		6531
VMFA (AW)-242		09668					
	AD			0	5		6531
VMFA-112		08954					
	AR		FY00	0	5		6531
VMFA-134		09365					
	AR		FY00	0	5		6531
VMFA-142		67243					
	AR		FY00	0	5		6531
VMFA-321		67235					
	AR		FY00	0	5		6531
MAWTS-1		55167					
	AD			0	5		6531
VMFAT-101		09965					
	AD			0	5		6531
FLEET SUPPORT		**NAVY**					
AIMD Cecil Field		60200					
	ACDU			0	3	AO	6801
	ACDU			0	2	AO	6802
ACTIVITY TOTAL:				0	5		
AIMD Fallon		60495					
	ACDU			0	3	AO	6801
	ACDU			0	2	AO	6802
ACTIVITY TOTAL:				0	5		
AIMD Lemoore		63042					
	ACDU			0	3	AO	6801
	ACDU			0	2	AO	6802
ACTIVITY TOTAL:				0	5		
AIMD Oceana		60191					
	ACDU			0	3	AO	6801
	ACDU			0	2	AO	6802
ACTIVITY TOTAL:				0	5		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
CV-63 USS Kitty Hawk	03363					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CV-64 USS Constellation	03364					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-65 USS Enterprise	03365					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-67 USS Kennedy	03367					
ACDU			0	3	AO	6801
SELRES			0	3	AO	6801
ACDU			0	2	AO	6802
SELRES			0	2	AO	6802
ACTIVITY TOTAL:			0	10		
CVN-68 USS Nimitz	03368					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-69 USS Eisenhower	03369					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-70 USS Vinson	20993					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-71 USS Roosevelt	21247					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-72 USS Lincoln	21297					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-73 USS Washington	21412					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
CVN-74 USS Stennis	21847					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
CVN-75 USS Truman	21853					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
NAWMU-1	52821					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
NAWCAD Patuxent River	00421					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
NAWCWD Point Mugu	63126					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
NAWS Point Mugu	0429A					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
NAWS China Lake	68937					
ACDU			0	3	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	5		
FLEET SUPPORT	**USMC**					
MAD China Lake	67852					
AD			0	5		6541
MAD Patuxent River	67356					
AD			0	5		6541
MALS-11 Miramar	09111					
AD			0	5		6541
MALS-12 Iwakuni	09377					
AD			0	5		6541
MALS-13 Yuma	09041					
AD			0	5		6541
MALS-31 Beaufort	09384					
AD			0	5		6541
MALS-41 Fort Worth	67239					
AR		FY00	0	3		6541
AD		FY00	0	3		6541
ACTIVITY TOTAL:			0	6		
MALS-42 Marietta	67236					
AR		FY00	0	3		6541
AD		FY00	0	3		6541
ACTIVITY TOTAL:			0	6		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[2]

ACTIVITY		UIC	PHASING INCR.	BILLETS OFF	BILLETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
MALS-46 Miramar		67244					
	AR			0	5		6541
MASD Andrews		04801					
	AD		FY00	0	3		6541

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[3]

DESIGN	PNEC/SNEC	PFYs		CFY98		FY99		FY00		FY01		FY02	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
OPERATIONAL ACTIVITY - ACDU													
AO	6801	0	3	0	0	0	0	0	0	0	0	0	0
AO	8342	0	170	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY - TAR													
AO	8342	0	10	0	0	0	0	0	10	0	0	0	0
OPERATIONAL ACTIVITY - AD													
	6531	0	90	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY - AR													
	6531	0	0	0	0	0	0	0	20	0	0	0	0
FLEET SUPPORT ACTIVITY - ACDU													
AO	6801	0	60	0	0	0	0	0	0	0	0	0	0
AO	6802	0	40	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - SELRES													
AO	6801	0	3	0	0	0	0	0	0	0	0	0	0
AO	6802	0	2	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - AD													
	6541	0	30	0	0	0	0	0	9	0	0	0	0
FLEET SUPPORT ACTIVITY - AR													
	6541	0	5	0	0	0	0	0	6	0	0	0	0
SUMMARY TOTAL:													
OPERATIONAL ACTIVITY - ACDU													
		0	173	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY - TAR													
		0	10	0	0	0	0	0	10	0	0	0	0
OPERATIONAL ACTIVITY - AD													
		0	90	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY - AR													
		0	0	0	0	0	0	0	20	0	0	0	0
FLEET SUPPORT ACTIVITY - ACDU													
		0	100	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - SELRES													
		0	5	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - AD													
		0	30	0	0	0	0	0	9	0	0	0	0
FLEET SUPPORT ACTIVITY - AR													
		0	5	0	0	0	0	0	6	0	0	0	0

[3] All billet requirements shown are programmed in either the F/A-18 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document.

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES[3]

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY98 OFF	CFY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
GRAND TOTAL:													
	ACDU	0	273	0	0	0	0	0	0	0	0	0	0
	TAR	0	10	0	0	0	0	0	10	0	0	0	0
	SELRES	0	5	0	0	0	0	0	0	0	0	0	0
	AD	0	120	0	0	0	0	0	9	0	0	0	0
	AR	0	5	0	0	0	0	0	26	0	0	0	0

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS [4]

INSTRUCTOR BILLETS

TRAINING ACTIVITY, LOCATION, UIC: MTU-4030 NAMTRAGRUDET NS Mayport 66069

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
ACDU													
AO	6801/9502	0	4	0	2	0	2	0	2	0	2	0	2
AO	6802/9502	0	3	0	0	0	0	0	0	0	0	0	0
TOTAL:		0	7	0	2	0	2	0	2	0	2	0	2

TRAINING ACTIVITY, LOCATION, UIC: MTU-4032 NAMTRAGRUDET NAS Norfolk 66046

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
ACDU													
AO	6801/9502	0	2	0	4	0	4	0	4	0	4	0	4
AO	6802/9502	0	0	0	3	0	3	0	3	0	3	0	3
TOTAL:		0	2	0	7	0	7	0	7	0	7	0	7

TRAINING ACTIVITY, LOCATION, UIC: MTU-4033 NAMTRAGRUDET NAS North Island 66065

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
ACDU													
AO	6801/9502	0	4	0	4	0	2	0	2	0	2	0	2
AO	6802/9502	0	3	0	3	0	3	0	3	0	3	0	3
TOTAL:		0	7	0	7	0	5	0	5	0	5	0	5

TRAINING ACTIVITY, LOCATION, UIC: MTU-4034 VMAT-203 FREST MCAS Cherry Point 66047

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
AD													
	6541	0	21	0	21	0	21	0	21	0	21	0	21

TRAINING ACTIVITY, LOCATION, UIC: MTU-4035 NAMTRAGRUDET NAS Whidbey Island 66058

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
ACDU													
AO	6801/9502	0	0	0	0	0	2	0	2	0	2	0	2

[4] Instructor billet requirements shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-120.

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS [5]

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	CY98 OFF	CY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
MTU-4030 NAMTRAGRUDET, NS Mayport, 66069	USN	0	2.3	0	2.3	0	3.3	0	3.3	0	3.3	0	3.3
MTU-4032 NAMTRAGRUDET, NAS Norfolk, 66046	USN	0	9.9	0	9.8	0	11.9	0	11.9	0	11.9	0	11.9
MTU-4033 NAMTRAGRUDET, NAS North Island, 66065	USN	0	11.6	0	11.6	0	7.8	0	7.8	0	7.8	0	7.8
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 NAMTRAGRUDET, NAS Whidbey Island, 66058	USMC	0	0.0	0	0.0	0	2.3	0	2.3	0	2.3	0	2.3
SUMMARY TOTAL:													
	USN	0	23.8	0	23.8	0	25.3	0	25.3	0	25.3	0	25.3
	USMC	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6
GRAND TOTAL:		0	79.4	0	79.4	0	80.9	0	80.9	0	80.9	0	80.9

[5] Chargeable student billet requirements shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-120.

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS[6]

a. OFFICER - USN: NA

b. ENLISTED - USN:

		BILLET	CFY98		FY99		FY00		FY01		FY02	
RATING	**PNEC/SNEC**	**BASE**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**
Operational Billets ACDU and TAR												
AO	6801	3	0	3	0	3	0	3	0	3	0	3
AO	8342	180	0	180	0	180	10	190	0	190	0	190
Fleet Support Billets ACDU and TAR												
AO	6801	60	0	60	0	60	0	60	0	60	0	60
AO	6802	40	0	40	0	40	0	40	0	40	0	40
Instructor and Support (Staff) Billets ACDU and TAR												
AO	6801/9502	10	0	10	0	10	0	10	0	10	0	10
AO	6802/9502	6	0	6	0	6	0	6	0	6	0	6
Chargeable Student Billets ACDU and TAR												
		24	0	24	1	25	0	25	0	25	0	25
TOTAL USN ENLISTED BILLETS:												
Operational		183	0	183	0	183	10	193	0	193	0	193
Fleet Support		100	0	100	0	100	0	100	0	100	0	100
Staff		16	0	16	0	16	0	16	0	16	0	16
Student		24	0	24	1	25	0	25	0	25	0	25
SELRES		5	0	5	0	5	0	5	0	5	0	5

c. OFFICER - USMC: NA

b. ENLISTED - USMC:

		BILLET	CFY98		FY99		FY00		FY01		FY02	
RATING	**PMOS/SMOS**	**BASE**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**
Operational Billets AD and AR												
	6531	90	0	90	0	90	20	110	0	110	0	110
Fleet Support Billets AD and AR												
	6541	35	0	35	0	35	15	50	0	50	0	50
Instructor and Support (Staff) Billets AD and AR												
	6541	21	0	21	0	21	0	21	0	21	0	21
Chargeable Student Billets AD and AR												
		56	0	56	0	56	0	56	0	56	0	56

[6] Billet base identified is only a portion of the total applicable NEC/MOS billet base, which is allocated for all air-launched weapons and ordnance maintenance. Billets are programmed through applicable Aircraft NTSP, CV/CVN Class Total Ship NTSPs and Shore Activity Manning Documents.

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS[6]

a. OFFICER - USN: NA

b. ENLISTED - USN:

		BILLET	CFY98		FY99		FY00		FY01		FY02	
RATING	**PNEC/SNEC**	**BASE**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**	**+/-**	**CUM**
TOTAL USMC ENLISTED BILLETS:												
Operational		90	0	90	0	90	20	110	0	110	0	110
Fleet Support		35	0	35	0	35	15	50	0	50	0	50
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 REQUIREMENTS[7]

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
COURSE LENGTH: 6.0 Weeks **SEA TOUR LENGTH:** Navy: 36 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY98		FY99		FY00		FY01		FY02	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4030 NAMTRAGRUDET, NS Mayport[8]												
	USN	ACDU-TAR	0	22	0	32	0	32	0	32	0	32
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	23	0	33	0	33	0	33	0	33
MTU-4032 NAMTRAGRU DET, NAS Norfolk[8]												
	USN	ACDU-TAR	0	40	0	60	0	60	0	60	0	60
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	41	0	61	0	61	0	61	0	61

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
COURSE LENGTH: 6.0 Weeks **SEA TOUR LENGTH:** Navy: 36 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY98		FY99		FY00		FY01		FY02	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 NAMTRAGRU DET, NAS North Island												
	USN	ACDU-TAR	0	60	0	23	0	23	0	23	0	23
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	61	0	24	0	24	0	24	0	24
MTU-4035 NAMTRAGRU DET, NAS Whidbey Island[8]												
	USN	ACDU-TAR	0	0	0	22	0	22	0	22	0	22

CIN, COURSE TITLE: D-646-7001, Strike Armament Systems Intermediate Maintenance
COURSE LENGTH: 9.8 Weeks **SEA TOUR LENGTH:** Navy: 36 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.20

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY98		FY99		FY00		FY01		FY02	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4032 NAMTRAGRU DET, NAS Norfolk[8]												
	USN	ACDU-TAR	0	35	0	35	0	35	0	35	0	35
	USN	SELRES	0	2	0	2	0	2	0	2	0	2
		TOTAL	0	37	0	37	0	37	0	37	0	37

[7] ATIR shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-120.
[8] NAMTRAGRUDET MTU-4030 transfers some training to NAMTRAGRUDET MTU-4032 in FY98 and MTU-4035 in FY99.

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS[7]

CIN, COURSE TITLE: E-646-7001, Strike Armament Systems Intermediate Maintenance
COURSE LENGTH: 9.8 Weeks **SEA TOUR LENGTH:** Navy: 36 Months
ATTRITION FACTOR: Navy: 10 % **BACKOUT FACTOR:** 0.20

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY98		FY99		FY00		FY01		FY02	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 NAMTRAGRUDET, NAS North Island												
	USN	ACDU-TAR	0	33	0	33	0	33	0	33	0	33
	USN	SELRES	0	2	0	2	0	2	0	2	0	2
		TOTAL	0	35	0	35	0	35	0	35	0	35

CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance
COURSE LENGTH: 10.6 Weeks **SEA TOUR LENGTH:** NA
ATTRITION FACTOR: Marine: 0 % **BACKOUT FACTOR:** 0.21

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY98		FY99		FY00		FY01		FY02	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4034 VMAT-203 FREST, MCAS Cherry Point												
	USMC	AD-AR	0	257	0	257	0	257	0	257	0	257

ACTIVITY TOTAL:

	CY98		FY99		FY00		FY01		FY02	
	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4030 NAMTRAGRU DET	0	23	0	33	0	33	0	33	0	33
MTU-4032 NAMTRAGRU DET	0	78	0	98	0	98	0	98	0	98
MTU-4033 NAMTRAGRU DET	0	96	0	59	0	59	0	59	0	59
MTU-4034 VMAT-203 FREST	0	257	0	257	0	257	0	257	0	257
MTU-4035 NAMTRAGRU DET	0	0	0	22	0	22	0	22	0	22

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the AIM-120 Advanced Medium Range Air-to-Air Missile and, therefore, are not included in Part III of this NTSP:

III.A.1. Initial Training Requirements

NOTE: Initial training was completed in FY 93 for the AIM-120A and in FY 95 for the AIM-120B. No initial training was required for the AIM-120C.

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.B. Total Ship Training Course Summary

III.C. Inactive Duty Training Travel and Annual Training Summary

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET[9]
LOCATION, UIC: NS Mayport, 66069

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

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

CY98		FY99		FY00		FY01		FY02		
OFF	**ENL**	**OFF**	**ENL**	**OFF**	**ENL**	**OFF**	**ENL**	**OFF**	**ENL**	
0	22.0	0	32.0	0	32.0	0	32.0	0	32.0	ATIR
0	19.8	0	28.8	0	28.8	0	28.8	0	28.8	Output
0	2.3	0	3.3	0	3.3	0	3.3	0	3.3	AOB
0	2.3	0	3.3	0	3.3	0	3.3	0	3.3	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY98		FY99		FY00		FY01		FY02		
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	0.0	0	0.0	0	0.0	0	0.0	0	0.0	Chargeable

[9] NAMTRAGRUDET MTU-4030 transfers some training to NAMTRAGRUDET MTU-4032 in FY98 and MTU-4035 in FY99.

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET[9]
LOCATION, UIC: NAS Norfolk, 66046

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

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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	40.0	0	60.0	0	60.0	0	60.0	0	60.0	ATIR
0	36.0	0	54.0	0	54.0	0	54.0	0	54.0	Output
0	4.1	0	6.2	0	6.2	0	6.2	0	6.2	AOB
0	4.1	0	6.2	0	6.2	0	6.2	0	6.2	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY98		FY99		FY00		FY01		FY02		
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	0.0	0	0.0	0	0.0	0	0.0	0	0.0	Chargeable

CIN, COURSE TITLE: D-646-7001, Strike Armament Systems Intermediate Maintenance

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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	35.0	0	35.0	0	35.0	0	35.0	0	35.0	ATIR
0	31.5	0	31.5	0	31.5	0	31.5	0	31.5	Output
0	5.7	0	5.7	0	5.7	0	5.7	0	5.7	AOB
0	5.7	0	5.7	0	5.7	0	5.7	0	5.7	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	2.0	0	2.0	0	2.0	0	2.0	0	2.0	ATIR
0	2.0	0	2.0	0	2.0	0	2.0	0	2.0	Output
0	0.4	0	0.4	0	0.4	0	0.4	0	0.4	AOB
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	Chargeable

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4033 NAMTRAGRU DET
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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	60.0	0	23.0	0	23.0	0	23.0	0	23.0	ATIR
0	54.0	0	20.7	0	20.7	0	20.7	0	20.7	Output
0	6.2	0	2.4	0	2.4	0	2.4	0	2.4	AOB
0	6.2	0	2.4	0	2.4	0	2.4	0	2.4	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY98		FY99		FY00		FY01		FY02		
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	0.0	0	0.0	0	0.0	0	0.0	0	0.0	Chargeable

CIN, COURSE TITLE: E-646-7001, Strike Armament Systems Intermediate Maintenance

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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	33.0	0	33.0	0	33.0	0	33.0	0	33.0	ATIR
0	29.7	0	29.7	0	29.7	0	29.7	0	29.7	Output
0	5.4	0	5.4	0	5.4	0	5.4	0	5.4	AOB
0	5.4	0	5.4	0	5.4	0	5.4	0	5.4	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY98		FY99		FY00		FY01		FY02		
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	0.2	0	0.2	0	0.2	0	0.2	0	0.2	AOB
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	Chargeable

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047

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

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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	257	0	257	0	257	0	257	0	257	ATIR
0	257	0	257	0	257	0	257	0	257	Output
0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	AOB
0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	Chargeable

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4035 NAMTRAGRU DET[9]
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

CY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	0	0	22.0	0	22.0	0	22.0	0	22.0	ATIR
0	0	0	19.8	0	19.8	0	19.8	0	19.8	Output
0	0	0	2.3	0	2.3	0	2.3	0	2.3	AOB
0	0	0	2.3	0	2.3	0	2.3	0	2.3	Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the AIM-120 Advanced Medium Range Air-to-Air Missile and, therefore, are not included in Part IV of this NTSP:

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: No new or modified training facilities are required for the AIM-120A/B/C.

IV.A. TRAINING HARDWARE

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

TRAINING ACTIVITY: NATTC, AO "A" School
LOCATION, UIC: NAS Pensacola, 63082
CIN, COURSE TITLE: C-646-2011, Aviation Ordnanceman Common Core Class A1
C-646-2012, Aviation Ordnanceman Airwing Strand Class A1
C-646-2013, Aviation Ordnanceman Weapons Department Strand Class A1

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
004	ADU-629/E N_2 receiver insert adapter		1	NA	GFE	On board
005	ADU-729/E N_2 receiver transport adapter		1	NA	GFE	On board
SPTE						
001	AN/AWM-54		1	NA	GFE	On board
002	AN/AWM-96		1	NA	GFE	On board
003	AN/AWM-90C		1	NA	GFE	On board
004	Launcher Detent Test Set		1	NA	GFE	On board
005	Detent Test Adapter Block		1	NA	GFE	On board
006	Umbilical Mechanism Adjustment Tool		1	NA	GFE	On board
007	Dampener/Striker Point Gauge Set		1	NA	GFE	On board

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Cecil Field, 47084
CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Loading
D-646-0647 F/A-18 Conventional Release System Test

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-415A/E container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
SPTE						
001	AN/AWM-54		1	NA	GFE	On board
002	AN/AWM-96		1	NA	GFE	On board

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

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Loading
E-646-0647 F/A-18 Conventional Release System Test

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-415A/E container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
SPTE						
001	AN/AWM-54		1	NA	GFE	On board
002	AN/AWM-96		1	NA	GFE	On board

TRAINING ACTIVITY: MTU-1038 NAMTRAGRU DET
LOCATION, UIC: NAS Lemoore, 66060
CIN, COURSE TITLE: C-646-9973 F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974 F/A-18 Stores Management System Organizational Maintenance (Career)

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
SPTE						
001	AN/AWM-54		1	NA	GFE	On board
002	AN/AWM-96		1	NA	GFE	On board

TRAINING ACTIVITY: MTU-1039 NAMTRAGRU DET
LOCATION, UIC: NAS Cecil Field, 66050
CIN, COURSE TITLE: C-646-9973 F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974 F/A-18 Stores Management System Organizational Maintenance (Career)

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
SPTE						
001	AN/AWM-54		1	NA	GFE	On board
002	AN/AWM-96		1	NA	GFE	On board

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

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
D-646-7001, Strike Armament Systems Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
004	ADU-629/E N_2 receiver insert adapter		1	NA	GFE	On board
005	ADU-729/E N_2 receiver transport adapter		1	NA	GFE	On board
SPTE						
003	AN/AWM-90C		1	NA	GFE	On board
004	Launcher Detent Test Set		1	NA	GFE	On board
005	Detent Test Adapter Block		1	NA	GFE	On board
006	Umbilical Mechanism Adjustment Tool		1	NA	GFE	On board
007	Dampener/Striker Point Gauge Set		1	NA	GFE	On board

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

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
E-646-7001, Strike Armament Systems Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
004	ADU-629/E N_2 receiver insert adapter		1	NA	GFE	On board
005	ADU-729/E N_2 receiver transport adapter		1	NA	GFE	On board
SPTE						
003	AN/AWM-90C		1	NA	GFE	On board
004	Launcher Detent Test Set		1	NA	GFE	On board
005	Detent Test Adapter Block		1	NA	GFE	On board
006	Umbilical Mechanism Adjustment Tool		1	NA	GFE	On board
007	Dampener/Striker Point Gauge Set		1	NA	GFE	On board

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047
CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	On board
002	Buffer Connector		2	NA	GFE	On board
003	LAU-127A/A launcher		2	NA	GFE	On board
004	ADU-629/E N_2 receiver insert adapter		1	NA	GFE	On board
005	ADU-729/E N_2 receiver transport adapter		1	NA	GFE	On board
SPTE						
003	AN/AWM-90C		1	NA	GFE	On board
004	Launcher Detent Test Set		1	NA	GFE	On board
005	Detent Test Adapter Block		1	NA	GFE	On board
006	Umbilical Mechanism Adjustment Tool		1	NA	GFE	On board
007	Dampener/Striker Point Gauge Set		1	NA	GFE	On board

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

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-555 container		1	NA	GFE	Available
002	Buffer Connector		2	NA	GFE	Available

TRAINING ACTIVITY: NAVSCOLEOD/ NAVSCOLEOD DET
LOCATION, UIC: NSWC Indian Head, 30446/Eglin AFB, 46207
CIN, COURSE TITLE: A-431-0011 EOD Phase II Navy
A-431-0012 EOD Phase II

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
003	LAU-127A/A launcher		1	NA	GFE	On board

TRAINING ACTIVITY: EODTEU ONE
LOCATION, UIC: NAS Barbers Point, 30302
CIN, COURSE TITLE: G-431-0001 Navy EOD Team Training

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
003	LAU-127A/A launcher		1	NA	GFE	On board

TRAINING ACTIVITY: EODTEU TWO
LOCATION, UIC: Fort Story, 43505
CIN, COURSE TITLE: G-431-0001 Navy EOD Team Training

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
003	LAU-127A/A launcher		1	NA	GFE	On board

IV.A.2. TRAINING DEVICES

DEVICE:	Captive Air Training Missile (CATM)
DESCRIPTION OF DEVICE:	CATM is a replica of the AMRAAM, not currently flight-certified, ballasted to replicate the actual size, weight, and center of gravity of the tactical missile.
MANUFACTURER:	Marvin Engineering
CONTRACT NUMBER:	FO826-92-0011
TEE STATUS:	NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
AO "A1" School					C-646-2011
NATTC NAS Pensacola, 63093					C-646-2012
CATM-120B	2			On board	C-646-2013
CATM-120C	2			On board	
SFWS Atlantic					D-646-0640
NAS Cecil Field, 47084					D-646-0647
CATM-120B	4			On board	
CATM-120C	4			On board	
SFWS Pacific					E-646-0640
NAS Lemoore, 35185					E-646-0647
CATM-120B	4			On board	
CATM-120C	4			On board	
MTU-1038 NAMTRAGRU DET					C-646-9973
NAS Lemoore, 66060					C-646-9974
CATM-120B	2			On board	
CATM-120C	2			On board	
MTU-1039 NAMTRAGRU DET					C-646-9973
NAS Cecil Field, 66050					C-646-9974
CATM-120B	2			On board	
CATM-120C	2			On board	
MTU-4030 NAMTRAGRU DET					C-122-3111A
NS Mayport, 66069					
CATM-120B	2			On board	
CATM-120C	2			On board	
MTU-4032 NAMTRAGRU DET					C-122-3111A
NAS Norfolk, 66046					
CATM-120B	2			On board	
CATM-120C	2			On board	
MTU-4033 NAMTRAGRU DET					C-122-3111A
NAS North Island, 66065					
CATM-120B	2			On board	
CATM-120C	2			On board	
MTU-4034 VMAT-203 FREST					C-646-3105
MCAS Cherry Point, 66047					
CATM-120B	2			On board	
CATM-120C	2			On board	

IV.A.2. TRAINING DEVICES

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
MTU-4035 NAMTRAGRU DET NAS Whidbey Island, 66058					C-122-3111A
CATM-120B	2	FY99	FY00	Available	
CATM-120C	2	FY99	FY00	Available	
NAF Washington Andrews AFB, Maryland, 00166					F/A-18 Conventional Weapons Loading
CATM-120B	2			On board	
CATM-120C	2			On board	
NAS Atlanta Marietta, Georgia, 00196					F/A-18 Conventional Weapons Loading
CATM-120B	2			On board	
CATM-120C	2			On board	
Joint Reserve Base (JRB) New Orleans New Orleans, Louisiana, 00206					F/A-18 Conventional Weapons Loading
CATM-120B	2			On board	
CATM-120C	2			On board	
JRB Fort Worth Fort Worth, Texas, 00215					F/A-18 Conventional Weapons Loading
CATM-120B	2			On board	
CATM-120C	2			On board	
TOTAL:	60				

DEVICE: AMRAAM Captive Carriage Reliability Vehicle (CCRV)

DESCRIPTION OF DEVICE: The AMRAAM CCRV is a tactical missile with inert armament and propulsion sections. It is used at SFWSL and SFWSP for the AMRAAM CWTPI because it allows post-load BIT to complete the AMRAAM loading checklist.

MANUFACTURER: Raytheon Missile Systems Company (formerly Hughes Missile Systems Company)

CONTRACT NUMBER: NA.

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
SFWS Atlantic NAS Cecil Field, 47084	2			On board	D-646-0640 D-646-0647
SFWS Pacific NAS Lemoore, 35185	2			On board	D-646-0640 D-646-0647

IV.A.2. TRAINING DEVICES

DEVICE:	Practical Explosive Ordnance Disposal System Trainer (PEST)
DESCRIPTION OF DEVICE:	The AIM-120 PEST is a full scale model of the AIM-120A, having approximately the same weight and center of gravity as the tactical missile. The AIM-120 PEST is used in the field for hands-on training and practice of rendering safe procedures. The AIM-120 PEST has easily replaceable parts that are built into the missile where EOD procedures indicate destructive type work for EOD training. Electrical parts not required for EOD procedures are identical in external configuration, weight, and center of gravity but are not functional.
MANUFACTURER:	Chamberline Manufacturing Corporation
CONTRACT NUMBER:	FO8635-82-0001
TEE STATUS:	NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
NAVSCOLEOD/ NAVSCOLEOD DET NSWC Indian Head, 30446/Eglin AFB, 46207	1			On board	A-431-0011 A-431-0012
EODTEU ONE NAS Barbers Point, 30202	1			On board	G-431-0001
EODTEU TWO Fort Story, 43505	1			On board	G-431-0001

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: VFA-106
LOCATION, UIC: NAS Cecil Field, 09679
CIN, COURSE TITLE: D-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
D-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
D-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
D-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: VFA-125
LOCATION, UIC: NAS Lemoore, 09485
CIN, COURSE TITLE: E-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
E-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
E-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
E-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: VMFAT-101
LOCATION, UIC: MCAS Miramar, 45526
CIN, COURSE TITLE: M13P4B3, F/A-18 Fleet Replacement Pilot Basic and Transition
M13P3V3, F/A-18 Fleet Replacement Pilot Refresher
M13P3W3, F/A-18 Fleet Replacement Pilot Modified Refresher
M13P4C3, F/A-18 WSO Basic and Transition
M13P3R3, F/A-18 WSO Refresher
M13P3S3, F/A-18 WSO Modified Refresher

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Cecil Field, 40784
CIN, COURSE TITLE: Strike Fighter Advanced Readiness Program (SFARP)
Strike Fighter Weapons Employment (SFWE)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: SFARP
SFWE

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: NSAWC N7 (Topgun)
LOCATION, UIC: NAS Fallon, 69190
CIN, COURSE TITLE: Strike Fighter Training Program (SFTP)
Strike Fighter Tactics Instructor (SFTI)
Strike Fighter Weapons and Tactics (SFWT) Curricula

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: MAWTS 1
LOCATION, UIC: MCAS Yuma, 55167
CIN, COURSE TITLE: Air Combat Maneuvering Instructor (ACMI)
Air Combat Tactics Instructor (ACTI)
Defensive Tactics Instructor (DEFTACI)
Weapons and Tactics Instructor (WTI)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AMRAAM ICW	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: F/A-18 Squadrons
LOCATION, UIC: **See Below**

CIN, COURSE TITLE: SFTP and Training & Readiness (T&R)

TYPES OF MATERIAL OR AID: SFTS AMRAAM ICW	QUANT REQD	DATE REQD	STATUS
VFA-22, NAS Lemoore, 09561	1 Set	FY98	In Beta Testing
VFA-25, NAS Lemoore, 09637	1 Set	FY98	In Beta Testing
VFA-94, NAS Lemoore, 09295	1 Set	FY98	In Beta Testing
VFA-97, NAS Lemoore, 63923	1 Set	FY98	In Beta Testing
VFA-113, NAS Lemoore, 09092	1 Set	FY98	In Beta Testing
VFA-115, NAS Lemoore, 09604	1 Set	FY98	In Beta Testing
VFA-137, NAS Lemoore, 55142	1 Set	FY98	In Beta Testing
VFA-146, NAS Lemoore, 09063	1 Set	FY98	In Beta Testing
VFA-147, NAS Lemoore, 63925	1 Set	FY98	In Beta Testing
VFA-151, NAS Lemoore, 09558	1 Set	FY98	In Beta Testing
VFA-27, NAS Yokosuka, 65185	1 Set	FY98	In Beta Testing
VFA-154, NAS Yokosuka, 09678	1 Set	FY98	In Beta Testing
VFA-192, NAS Yokosuka, 55179	1 Set	FY98	In Beta Testing
VFA-195, NAS Yokosuka, 09706	1 Set	FY98	In Beta Testing
VFA-127, NAS Fallon, 08956	1 Set	FY98	In Beta Testing
VFC-13 (TAR), NAS Fallon, 52995	1 Set	FY98	In Beta Testing
VFA-15, NAS Cecil Field, 09015	1 Set	FY98	In Beta Testing
VFA-34, NAS Cecil Field, 09070	1 Set	FY98	In Beta Testing
VFA-37, NAS Cecil Field, 09478	1 Set	FY98	In Beta Testing
VFA-81, NAS Cecil Field, 09221	1 Set	FY98	In Beta Testing
VFA-82, NAS Cecil Field, 09122	1 Set	FY98	In Beta Testing

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TYPES OF MATERIAL OR AID: SFTS AMRAAM ICW	**QUANT REQD**	**DATE REQD**	**STATUS**
VFA-83, NAS Cecil Field, 09223	1 Set	FY98	In Beta Testing
VFA-86, NAS Cecil Field, 09943	1 Set	FY98	In Beta Testing
VFA-87, NAS Cecil Field, 63922	1 Set	FY98	In Beta Testing
VFA-105, NAS Cecil Field, 65183	1 Set	FY98	In Beta Testing
VFA-131, NAS Cecil Field, 63934	1 Set	FY98	In Beta Testing
VFA-136, NAS Cecil Field, 55141	1 Set	FY98	In Beta Testing
VFC-12 (TAR), NAS Oceana, 52994	1 Set	FY98	In Beta Testing
VFA-203 (TAR), NAS Atlanta, 09030	1 Set	FY98	In Beta Testing
VFA-204 (TAR), NAS JRB New Orleans, 09032	1 Set	FY98	In Beta Testing
VX-1, NAS Patuxent River, 55600	1 Set	FY98	In Beta Testing
VX-9, NAWCWD China Lake, 55646	1 Set	FY98	In Beta Testing
VX-9 Det, NAWCWD Point Mugu, 09830	1 Set	FY98	In Beta Testing

TRAINING ACTIVITY: F/A-18 Squadrons
LOCATION, UIC: **See Below**

CIN, COURSE TITLE: Squadron Training (T&R)

TYPES OF MATERIAL OR AID: SFTS AMRAAM ICW	**QUANT REQD**	**DATE REQD**	**STATUS**
VMFA-115, MCAS Beaufort, 09234	1 Set	FY98	In Beta Testing
VMFA-122, MCAS Beaufort, 09407	1 Set	FY98	In Beta Testing
VMFA-251, MCAS Beaufort, 09241	1 Set	FY98	In Beta Testing
VMFA-312, MCAS Beaufort, 09253	1 Set	FY98	In Beta Testing
VMFAAW-224, MCAS Beaufort, 01224	1 Set	FY98	In Beta Testing
VMFAAW-332, MCAS Beaufort, 09501	1 Set	FY98	In Beta Testing
VMFAAW-533, MCAS Beaufort, 09193	1 Set	FY98	In Beta Testing
VMFA-212, MCAS Miramar, 09434	1 Set	FY98	In Beta Testing
VMFA-232, MCAS Miramar, 09242	1 Set	FY98	In Beta Testing
VMFA-235, , MCAS Miramar, 09237	1 Set	FY98	In Beta Testing
VMFA-314, MCAS Miramar, 09230	1 Set	FY98	In Beta Testing
VMFA-323, MCAS Miramar, 09235	1 Set	FY98	In Beta Testing
VMFAAW-121, MCAS Miramar,	1 Set	FY98	In Beta Testing
VMFAAW-225, MCAS Miramar, 09232	1 Set	FY98	In Beta Testing
VMFA-112 (AR), 08954	1 Set	FY98	In Beta Testing
VMFA-134 (AR), 09365	1 Set	FY98	In Beta Testing
VMFA-142 (AR), 67243	1 Set	FY98	In Beta Testing
VMFA-321 (AR), 67235	1 Set	FY98	In Beta Testing

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: NATTC AO "A" School
LOCATION, UIC: NAS Pensacola, 63082
CIN, COURSE TITLE: C-646-2011, Aviation Ordnance Common Core Class A1
C-646-2012, Aviation Ordnance Airwing Strand Class A1
C-646-2013, Aviation Ordnance Weapons Department Strand Class A1

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-1039 NAMTRAGRUDET
LOCATION, UIC: NAS Cecil Field, 66050
CIN, COURSE TITLE: C-646-9973, F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974, F/A-18 Stores Management System Organizational Maintenance (Career)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-1038 NAMTRAGRUDET
LOCATION, UIC: NAS Lemoore, 66060
CIN, COURSE TITLE: C-646-9973, F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974, F/A-18 Stores Management System Organizational Maintenance (Career)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Cecil Field, 47084
CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Loading
D-646-0647, F/A-18 Conventional Release System Test

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Loading
E-646-0647, F/A-18 Conventional Release System Test

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047
CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set	FY99	Available

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: NAVSCOLEOD/NAVSCOLEOD DET
LOCATION, UIC: NSWC Indian Head, 30446/Eglin AFB, 46207
CIN, COURSE TITLE: A-431-0011, EOD Phase II (Navy)
A-431-0012, EOD Phase II

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: EODTEU ONE
LOCATION, UIC: NAS Barbers Point, 30202
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

TRAINING ACTIVITY: EODTEU TWO
LOCATION, UIC: Fort Story, 43505
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
Source Data for AIM-120C	1 Set		On board
Source Data for LAU-127	1 Set		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: VFA-106
LOCATION, UIC: NAS Cecil Field, 09679
CIN, COURSE TITLE: D-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
D-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
D-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
D-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	6		On board

TRAINING ACTIVITY: VFA-125
LOCATION, UIC: NAS Lemoore, 09485
CIN, COURSE TITLE: E-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
E-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
E-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
E-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	6		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Cecil Field, 40784
CIN, COURSE TITLE: SFARP
SFWE

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	6		On board

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: SFARP
SFWE

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	6		On board

TRAINING ACTIVITY: VMFAT-101
LOCATION, UIC: MCAS Miramar, 45526
CIN, COURSE TITLE: M13P4B3, F/A-18 Fleet Replacement Pilot Basic and Transition
M13P3V3, F/A-18 Fleet Replacement Pilot Refresher
M13P3W3, F/A-18 Fleet Replacement Pilot Modified Refresher
M13P4C3, F/A-18 WSO Basic and Transition
M13P3R3, F/A-18 WSO Refresher
M13P3S3, F/A-18 WSO Modified Refresher

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide,	Hard copy	6		On board

IV.B.3. TECHNICAL MANUALS

A1-F18AC-TAC-300

TRAINING ACTIVITY: MAWTS 1
LOCATION, UIC: MCAS Yuma, 55167
CIN, COURSE TITLE: Air Combat Maneuvering Instructor (ACMI)
Air Combat Tactics Instructor (ACTI)
Defensive Tactics Instructor (DEFTACI)
Weapons and Tactics Instructor (WTI)

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18C/D, A1-F18AC-NFM-000	Hard copy	6		On board
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Hard copy	6		On board
Tactical Manual, A1-F18AE-TAC-000	Hard copy	6		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	6		On board

TRAINING ACTIVITY: AO "A1" School
LOCATION, UIC: NATTC , NAS Pensacola, 30459
CIN, COURSE TITLE: C-646-2011, Aviation Ordnance Common Core Class A1
C-646-2012, Aviation Ordnance Airwing Strand Class A1
C-646-2013, Aviation Ordnance Weapons Department Strand Class A1

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
LAU-127A/A Aircraft Guided Missile Launcher, Intermediate Maintenance with IPB NA 11-75A-514	Hard copy	8		On board
AN/AWM-90 Series Intermediate Maintenance Instructions with IPB	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

NA 16-30-AWM90-1

TRAINING ACTIVITY: MTU-1039 NAMTRAGRUDET
LOCATION, UIC: NAS Cecil Field, 66050
CIN, COURSE TITLE: C-646-9973, F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974, F/A-18 Stores Management System Organizational Maintenance (Career)

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board

TRAINING ACTIVITY: MTU-1038 NAMTRAGRUDET
LOCATION, UIC: NAS Lemoore, 66060
CIN, COURSE TITLE: C-646-9973, F/A-18 Stores Management System (Initial) Organizational Maintenance
C-646-9974, F/A-18 Stores Management System Organizational Maintenance (Career)

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Cecil Field, 47084
CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Loading
D-646-0647, F/A-18 Conventional Release System Test

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Loading
E-646-0647, F/A-18 Conventional Release System Test

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A				

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board
Maintenance Instructions with IPB, AIM-120A, AIM-120B, AIM-120C, CATM-120A, CATM-120B, and CATM-120C NA 01-AIM-120-2-1	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
AMRAAM AIM-120A Ship Weapons Installation Manual NA 11-120-64	Hard copy	8		On board
Armament Weapons Support Equipment Configuration Manual NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Intermediate Maintenance with IPB, Armament Weapons Support Equipment NA 19-100-3	Hard copy	8		On board
Intermediate and Depot maintenance Manual with IPB, AMRAAM Containers NA 11-75-65	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
LAU-127A/A Aircraft Guided Missile Launcher, Intermediate Maintenance with IPB NA 11-75A-514	Hard copy	8		On board
Intermediate/Maintenance Instructions with IPB, AN/AWM-90 Series NA 16-30-AWM90-1	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board
Maintenance Instructions with IPB, AIM-120A, AIM-120B, AIM-120C, CATM-120A, CATM-120B, and CATM-120C NA 01-AIM-120-2-1	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
AMRAAM AIM-120A Ship Weapons Installation Manual NA 11-120-64	Hard copy	8		On board
Armament Weapons Support Equipment Configuration Manual NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Intermediate Maintenance with IPB, Armament Weapons Support Equipment NA 19-100-3	Hard copy	8		On board
Intermediate and Depot maintenance Manual with IPB, AMRAAM Containers NA 11-75-65	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
LAU-127A/A Aircraft Guided Missile Launcher, Intermediate Maintenance with IPB NA 11-75A-514	Hard copy	8		On board
Intermediate/Maintenance Instructions with IPB, AN/AWM-90 Series NA 16-30-AWM90-1	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Intermediate Maintenance Repair

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board
Maintenance Instructions with IPB, AIM-120A, AIM-120B, AIM-120C, CATM-120A, CATM-120B, and CATM-120C NA 01-AIM-120-2-1	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
AMRAAM AIM-120A Ship Weapons Installation Manual NA 11-120-64	Hard copy	8		On board
Armament Weapons Support Equipment Configuration Manual NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Intermediate Maintenance with IPB, Armament Weapons Support Equipment NA 19-100-3	Hard copy	8		On board
Intermediate and Depot maintenance Manual with IPB, AMRAAM Containers NA 11-75-65	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
LAU-127A/A Aircraft Guided Missile Launcher, Intermediate Maintenance with IPB NA 11-75A-514	Hard copy	8		On board
Intermediate/Maintenance Instructions with IPB, AN/AWM-90 Series NA 16-30-AWM90-1	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047
CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board
Maintenance Instructions with IPB, AIM-120A, AIM-120B, AIM-120C, CATM-120A, CATM-120B, and CATM-120C NA 01-AIM-120-2-1	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		On board
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
AMRAAM AIM-120 Ship Weapons Installation Manual NA 11-120-64	Hard copy	8		On board
Armament Weapons Support Equipment Configuration Manual NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Intermediate Maintenance with IPB, Armament Weapons Support Equipment NA 19-100-3	Hard copy	8		On board
Expeditionary Airfield Tactical Weapons Support Equipment AG-000AO-MEB-000	Hard copy	8		On board
Intermediate and Depot maintenance Manual with IPB, AMRAAM Containers NA 11-75-65	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
LAU-127A/A Aircraft Guided Missile Launcher, Intermediate Maintenance with IPB NA 11-75A-514	Hard copy	8		On board
Intermediate/Maintenance Instructions with IPB, AN/AWM-90 Series NA 16-30-AWM90-1	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		Available
Maintenance Instructions with IPB, AIM-120A, AIM-120B, AIM-120C, CATM-120A, CATM-120B, and CATM-120C NA 01-AIM-120-2-1	Hard copy	8		Available
Airborne Weapons Assembly Manual, Vol. I, AIM-120 (AMRAAM) NA 11-140-6.1-5	Hard copy	8		Available
Airborne Weapons Assembly Manual, Vol. III, NA 11-140-6.3	Hard copy	8		Available
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		Available
AMRAAM AIM-120A Ship Weapons Installation Manual NA 11-120-64	Hard copy	8		Available
Armament Weapons Support Equipment Configuration Manual NA 11-140-25	Hard copy	8		Available
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		Available
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		Available
Intermediate Maintenance with IPB, Armament Weapons Support Equipment NA 19-100-3	Hard copy	8		Available
Intermediate and Depot maintenance Manual with IPB, AMRAAM Containers NA 11-75-65	Hard copy	8		Available

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: NAVSCOLEOD/NAVSCOLEOD DET
LOCATION, UIC: NSWC Indian Head, 30446/Eglin AFB, 46207
CIN, COURSE TITLE: A-431-0011, EOD Phase II (Navy)
A-431-0012, EOD Phase II

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	150		On board
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board

TRAINING ACTIVITY: EODTEU ONE
LOCATION, UIC: NAS Barbers Point, 30202
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	4		On board
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: EODTEU TWO
LOCATION, UIC: Fort Story, 43505
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	4		On board
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board
Fleet Intermediate Maintenance Instructions with IPB, AIM-120 and CATM-120 NA 01-AIM-120-2	Hard copy	8		On board

TRAINING ACTIVITY: NAS Atlanta
LOCATION, UIC: Marietta, Georgia, 00196
CIN, COURSE TITLE: F/A-18 Conventional Weapons Loading

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: NAF Washington
LOCATION, UIC: Andrews AFB, Maryland 00166
CIN, COURSE TITLE: F/A-18 Conventional Weapons Loading

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: NAS, JRB New Orleans
LOCATION, UIC: New Orleans, Louisiana, 00206
CIN, COURSE TITLE: F/A-18 Conventional Weapons Loading

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: NAS, JRB Fort Worth
LOCATION, UIC: Fort Worth, Texas, 00215
CIN, COURSE TITLE: F/A-18 Conventional Weapons Loading

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, F/A-18A/B/C/D Aircraft A1-F18AE-LWS-000	Hard copy	8		On board
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Hard copy	8		On board
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	8		On board
Checklist - AIM-120 (AMRAAM) A1-F18AE-LWS-510	Hard copy	8		On board
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual NA A1-AIM AA-WUC-800	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Airborne Weapons Handling Equipment NA 19-100-2 (Shipboard)	Hard copy	8		On board
Armament Weapons Support Equipment NA 11-140-25	Hard copy	8		On board
Organizational and Intermediate Manual with IPB, LAU-127A/A NA 11-75A-51A	Hard copy	8		On board

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
OPNAV N889H/PMA205	Approve and promulgate NTP	9/88	Completed
PMA205/NAWCWD	Commence Initial Training (AIM-120A)	8/93	Completed
PMA268	Achieve Navy Intial Operational Capability(AMRAAM)	9/93	Completed
OPNAV N889H/PMA205	Approve and promulgate NTP	8/94	Completed
PMA205/NAWCWD	Commence Initial Training (AIM-120B)	8/95	Completed
AIR-3.1.1L	Achieve Material Support Date (AIM-120A/B/C)	12/96	Completed
CNET/MCCDC/SFWS	Commence follow-on/replacement training (AIM-120C included)	1/97	Completed
PMA205	Incorporate Fleet Comments into Draft NTSP	5/98	Completed
OPNAV N889H/PMA205	Approve and promulgate NTSP	6/98	Completed

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
Review the requirement for continued factory operator training for AMRAAM. Determined to be no longer required, TOPGUN can provide this training.	PMA268	Feb 96	Closed
Operator training for the AMRAAM is inadequate. The AMRAAM steering committee has requested additional training development.	PMA205	Aug 98	Open - ICW in Development at NSAWC N7/PMA205
Training Equipment Shortfalls for C-646-3105 include LAU-127	PMA268/AIR-3.1.1L	Jul 97	Closed

PART VII - POINTS OF CONTACT

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PART VII - POINTS OF CONTACT

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LCDR D. Law COMOPTEVFOR 513	COMOPTEVFOR NTSP Coordinator	(804) 444-5087, DSN 564
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