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

Subj: REVIEW OF PROPOSED NAVY TRAINING SYSTEMS PLAN (NTSP)  
FOR THE AN/UPX-34(V)/AN/UPX-34A(V) RADAR TRACK  
DISCRIMINATOR SYSTEMS (RTDS), N86-NTSP-S-30-9408A/P

Ref: (a) COMNAVAIRSYSCOM ltr 3502 Ser PMA205-3B1/0599025  
of 25 Jun 99  
(b) CNO (N12) ltr 1500 Ser N121 of 6 Dec 99

1. In response to reference (a) and in concurrence with  
reference (b), the subject NTSP has been reviewed and approved.

2. My point of contact is CDR P. Kessler (N869T2), Commercial  
(703) 604-7635, DSN 664-7635, and FAX (703) 604-6934.

L. F. K. Swift  
By direction

Copy to:  
CNO (N12)  
COMNAVSEASYS COM (PEO-MIW-L, PEO-MIW-T, PMS-303, SEA-03T3)  
CNET (ETS)  
NAVMAC (00)

**APPROVED**

**NAVY TRAINING SYSTEM PLAN**

**FOR THE**

**RADAR TRACK DISCRIMINATOR SYSTEMS**

**AN/UPX-34(V) and AN/UPX-34A(V)**

**N86-NTSP-S-30-9408A/A**

**APRIL 2000**

**RADAR TRACK DISCRIMINATOR SYSTEMS  
AN/UPX-34(V) AND AN/UPX-34A(V)**

**EXECUTIVE SUMMARY**

This Navy Training System Plan (NTSP) identifies manpower, personnel, and training requirements for the Radar Track Discriminator System (RTDS) AN/UPX-34(V) and the AN/UPX-34A(V). The RTDS has been designed and developed to provide positive identification of radar tracks beyond visual range. When enabled by the AEGIS Weapon System, the RTDS samples radio frequency signals obtained from host radar system echoes. Using echo characteristics, the RTDS discriminates between aircraft types, classifies the echo source, and identifies the aircraft types to the ship's display system.

The AN/UPX-34(V) is an Acquisition Category (ACAT) III program. The program successfully passed Operational Evaluation and Milestone III. Operational systems are deployed on five AEGIS cruisers, and at ATC Dahlgren, ACC Dahlgren, and ACSC Wallops Island. The production phase was terminated by a NAVCOMPT decision before contract award.

The AN/UPX-34A(V) is an ACAT III program that is a restart of the program, but is a Commercial-Off-The-Shelf (COTS) Non-Developmental Item (NDI) version of the AN/UPX-34(V). It will be procured to outfit and support the remaining 22 AEGIS cruisers and three land sites.

Naval Air Warfare Center Aircraft Division (NAWCAD) St. Inigoes will install the AN/UPX-34A(V) onboard ships and at shore sites and will provide technical assistance and initial training. All hardware and software Navy Engineering Technical Services will be accomplished by the NAWCAD Patuxent River at St. Inigoes In-Service Engineering Activity. The Navy Support Date (NSD) for the AN/UPX-34A(V) is to be determined. The NSD for the AN/UPX-34(V) was January 1997.

The introductions of the AN/UPX-34A(V) and the AN/UPX-34(V) have no impact on the current manning requirements of the AEGIS class cruisers. Electronic Warfare Technicians (EW) and Fire Controlman (FC) operate the RTDS in conjunction with their normal duties on an as-required basis. FCs with Navy Enlisted Classification (NEC) 1106 or 1143 who currently maintain AEGIS Weapon System equipment maintain the RTDS. No new billets are required for activities designated to receive the RTDS.

The maintenance concept for the RTDS includes organizational and depot level maintenance. Organizational level maintenance consists of preventive and corrective maintenance. Depot level maintenance consists of screening failed components for trends and return of the components to the vendor for repair, overhaul, or replacement.

**RADAR TRACK DISCRIMINATOR SYSTEMS**  
**AN/UPX-34(V) AND AN/UPX-34A(V)**

Initial training for the AN/UPX-34(V) has been completed. Initial training for the AN/UPX-34A(V) will be accomplished by NAWCAD St. Inigoes for instructors, fleet maintainers, and operators as the equipment is installed onboard the ship and at shore sites.

Follow-on training for the AN/UPX-34(V) was incorporated into existing courses for maintenance, team training, and officer briefs. The AN/UPX-34A(V) will be integrated into these same courses in FY00. It is anticipated that the impact will be minimal and will be determined following the curriculum development for the AN/UPX-34A(V).

Maintenance training will be provided as part of current AEGIS FC training held at AEGIS Training Center (ATC) Dahlgren, Virginia. Team operator training is provided for EWs, FCs, and selected Combat Information Center (CIC) officers. These courses are taught by the AEGIS Training and Readiness Center Detachments (ATRCD) on request from the individual command. Proposed Personnel Qualification Standards have been developed by NAWCAD St. Inigoes and will be utilized by EWs and FCs in operator training. Officer briefs for the RTDS are conducted at ATC Dahlgren and are included in the courses taught for Combat System Officers, and prospective Commanding Officers and Executive Officers.

**RADAR TRACK DISCRIMINATOR SYSTEMS  
AN/UPX-34(V) AND AN/UPX-34A(V)**

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**RADAR TRACK DISCRIMINATOR SYSTEMS  
AN/UPX-34(V) AND AN/UPX-34A(V)**

**LIST OF ACRONYMS**

|              |  |
|--------------|--|
| ACSC         | AEGIS Combat Systems Center                      |
| ALSP         | Acquisition Logistics Support Plan               |
| ATC          | AEGIS Training Center                            |
| ATRCD        | AEGIS Training and Readiness Center Detachment   |
| AWS          | AEGIS Weapon System                              |
| BIT          | Built-In Test                                    |
| CIC          | Combat Information Center                        |
| COMOPTEVFOR  | Commander, Operational Test and Evaluation Force |
| COTS         | Commercial Off-The-Shelf                         |
| CSO          | Combat Systems Officer                           |
| EW           | Electronic Warfare Technician                    |
| FC           | Fire Controlman                                  |
| FCS          | Fire Control System                              |
| GPETE        | General Purpose Electronic Test Equipment        |
| IOC          | Initial Operating Capability                     |
| ISEA         | In-Service Engineering Activity                  |
| LRU          | Line Replaceable Unit                            |
| MAM          | Maintenance Assist Module                        |
| MSD          | Material Support Date                            |
| NA           | Not Applicable                                   |
| NAVAIRSYSCOM | Naval Air Systems Command                        |
| NAVICP       | Navy Inventory Control Point                     |
| NAVSEA       | Naval Sea Systems Command                        |
| NAWCAD       | Naval Air Warfare Center Aircraft Division       |
| NEC          | Navy Enlisted Classification                     |
| NSD          | Navy Support Date                                |
| NTDS         | Naval Tactical Data System                       |

**RADAR TRACK DISCRIMINATOR SYSTEMS  
AN/UPX-34(V) AND AN/UPX-34A(V)**

**LIST OF ACRONYMS**

|          |   |
|----------|---|
| NTSP     | Navy Training System Plan                               |
| OPEVAL   | Operational Evaluation                                  |
| OPTEVFOR | Operational Test and Evaluation Force                   |
| PCO      | Prospective Commanding Officer                          |
| PQS      | Personnel Qualification Standards                       |
| PXO      | Prospective Executive Officer                           |
| RFT      | Ready For Training                                      |
| RTD      | Radar Track Discriminator                               |
| RTDS     | Radar Track Discriminator System                        |
| SARTIS   | Ships Advanced Radar Tracking and Identification System |
| TD       | Training Device   |
| TECHEVAL | Technical Evaluation                                    |
| TTE      | Technical Training Equipment                            |

**N86-NTSP-S-30-9408A/A**  
**April 2000**

**RADAR TRACK DISCRIMINATOR SYSTEMS**  
**AN/UPX-34(V) AND AN/UPX-34A(V)**

**PREFACE**

This Approved Navy Training System Plan (NTSP) was developed to update the Radar Track Discriminator Systems (RTDS) Draft NTSP dated January 1999. The RTDS NTSP update complies with guidelines set forth in the Navy Training Requirements Documentation Manual, OPNAV Publication P-751-1-9-97 and incorporates comments from NAWCAD, St. Inigoes and Program Manager, Air (PMA)205.

**PART I - TECHNICAL PROGRAM DATA**

**A. NOMENCLATURE-TITLE-PROGRAM**

**1. Nomenclature-Title-Acronym.** AN/UPX-34(V) and AN/UPX-34A(V) Radar Track Discriminator Systems (RTDS)

**2. Program Element.** 64211N

**B. SECURITY CLASSIFICATION**

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

**C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS**

- OPNAV Principal Official (OPO) Program Sponsor..... CNO (N865E)
- OPO Resource Sponsor ..... CNO (N865E)
- Developing Agency..... NAVAIRSYSCOM (PMA213)
- Training Agency ..... CINCLANTFLT  
CINCPACFLT  
CNET
- Training Support Agency ..... NAVAIRSYSCOM (PMA205)
- Manpower and Personnel Mission Sponsor ..... CNO (N12)  
NAVPERSCOM (PERS-4, PERS-406C)
- Director of Naval Training ..... CNO (N7)

**D. SYSTEM DESCRIPTION.** The AN/UPX-34(V) and the AN/UPX-34A(V) are two independent systems that are encompassed by the RTDS program. The AN/UPX-34(V) is an established system, and the AN/UPX-34A(V) system is a new Commercial Off-The-Shelf (COTS) acquisition that will complete the outfitting of AEGIS Cruisers with a RTDS. Throughout this document, information specific to each individual program will be identified by the system nomenclature. "RTDS" will identify information common to both systems.

**1. Operational Uses.** The RTDS has been designed and developed to provide positive identification of radar tracks beyond visual range. When enabled by the AEGIS Weapon System, the RTDS samples radio frequency signals obtained from host radar system echoes. Using echo characteristics, the RTDS discriminates between aircraft types, classifies the echo source, and provides aircraft types to the ship's display system.

The AN/UPX-34(V) was installed on five AEGIS Cruisers and two shore facilities. The AN/UPX-34A(V) will be installed on 22 AEGIS cruisers; a test bed at the In-Service Engineering Activity (ISEA) St. Inigoes, Maryland; at the AEGIS Combat Systems Center (ACSC) Wallops Island, Virginia; and one training unit at the AEGIS Training Center (ATC), Dahlgren, Virginia.

**2. Foreign Military Sales.** Not Applicable (NA)

**E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** The AN/UPX-34(V) successfully completed a Technical Evaluation (TECHEVAL) at Wallops Island in October 1993. Operational Test and Evaluation Force (OPTEVFOR) conducted Operational Evaluation (OPEVAL) in June 1994. Commander, Operational Test and Evaluation Force (COMOPTEVFOR) will participate in the Acceptance Test and Evaluation of the COTS version of the AN/UPX-34A(V). COMOPTEVFOR will perform a Technical Assessment (DT-III A) during baseline testing of the production contractor's prototype. COMOPTEVFOR will also perform an Operational Assessment (DT-III A/DT-III B) during acceptance testing of the first article production unit.

**F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.** The RTDS presents a new capability; it does not replace current equipment. On current AEGIS applications, a conjunctive Ship Alteration/Ordnance Alteration installation will allow shipboard Fire Control System Mk 99 to interface with the RTDS.

## **G. DESCRIPTION OF NEW DEVELOPMENT**

**1. Functional Description.** When enabled by the AEGIS Weapon System, the Radar Track Discriminator (RTD) samples Radio Frequency (RF) signals obtained from host radar system echoes. Each set of signals is associated with a unique display track number. Using echo characteristics, the RTDS discriminates between possible sources (aircraft types), classifies the echo source, and provides the aircraft types to the ship's display system, associating the identity with the assigned track number.

**2. Physical Description.** The AN/UPX-34(V) includes the RTD, a remote display, an electrical rack, and associated waveguides and cabling. The Radar Receiver R-2919/UPX-34(V) is combined with the RTDS as part of AEGIS Element 27.

| COMPONENT                         | DEPTH<br>(INCHES) | WIDTH<br>(INCHES) | HEIGHT<br>(INCHES) | WEIGHT<br>(POUNDS) |
|-----------------------------------|-------------------|-------------------|--------------------|--------------------|
| MX-11504/UPX-34(V) RTD            | 25.50             | 19.0              | 10.5               | 115.0              |
| ID-2501/UPX-34(V) RTD Display     | 3.15              | 11.6              | 10.6               | 13.4               |
| MT-6871/UPX-34(V) Electrical Rack | 36.00             | 23.6              | 48.0               | 400.0<br>(loaded)  |
| R-2919/UPX-34(V)                  | 6.00              | 30.0              | 32.0               | 115.0              |

The AN/UPX-34A(V) will consist of:

- Radar Track Discriminator Processor (1)
- Remote Display (1)
- Radar Receiver (2)

**3. New Development Introduction.** The AN/UPX-34(V) was introduced as new production equipment. The AN/UPX-34A(V) will also be introduced as new production equipment and be installed on CG-52 through CG-73 class ships during Routine Overhaul, Selected Restricted Availability, or other periods of planned availability.

**4. Significant Interfaces.** RTDS has digital and analog interfaces with AEGIS Fire Control System (FCS) Mk 99. The RTDS receives analog radar target data from FCS via the Radar Receiver (R-2919/UPX-34(V)) and digital data from FCS via an AN/UYK-20 or AN/UYK-44 computer. This data is processed, forwarded back to FCS, and then sent on to the AEGIS Weapon System. RTDS has the following AEGIS interfaces:

- Two fire control system interfaces; both are MIL-STD-1397 Type A (Naval Tactical Data System (NTDS) slow), sixteen-bit word width
- AN/UPX-34(V) Radar Interface Unit (RIU), located in the RTD, with two analog RF inputs, 9.7 MHz frequency
- AN/UPX-34A(V) uses a combination of COTS boards to perform the function of the RIU

**5. New Features, Configurations, or Material.** The AN/UPX-34(V) contains core processing boards, a custom interface board, power supplies, and two radar interface units. The RTD operates on radar returns from two R-2919/UPX-34(V) radar receivers.

The AN/UPX-34A(V) contains a core processing board, a digital receiver board, an A/D converter board, two NTDS boards, a digital signal processing board, and power supplies. The AN/UPX-34A(V) has Built-In Test (BIT) function that will assist in troubleshooting.

## H. CONCEPTS

**1. Operational Concept.** Dedicated manning of the RTDS is not required under any condition of readiness. Electronic Warfare technicians (EW) and Fire Controlman (FC), on an as-required basis, control operation of the system.

**2. Maintenance Concept.** The maintenance concept for the RTDS includes two levels of maintenance, organizational and depot.

**a. Organizational.** Organization level maintenance consists of fault isolation to the printed circuit board using systematic fault isolation procedures. FCs with Navy Enlisted Classification (NEC) 1106 or 1143 use Maintenance Assist Modules (MAM) (AN/UPX-34(V) only), General Purpose Electronic Test Equipment (GPETE), and equipment technical manuals to isolate faults and replace failed plug-in modules or chassis-mounted components such as fuses, switches, and lamps. The AN/UPX-34A(V) will not have MAMs.

**(1) Preventive Maintenance.** Organizational level preventive maintenance actions include periodic cleaning and replacement of air blower filters for the AN/UPX-34(V). Currently, there are six separate scheduled maintenance actions required (1-monthly, 3-quarterly, 1-semi-annually, and 1-as required) which total approximately 20 maintenance hours yearly. Organizational level preventive maintenance actions for the AN/UPX-34A(V) are to be determined and will be included in future updates to this NTSP.

**(2) Corrective Maintenance.** The corrective maintenance approach consists of identification of failed Line Replaceable Units (LRU) using BIT. Failed LRUs are removed and replaced by utilizing onboard spares. Unavailable LRUs may be requisitioned from the designated Navy Inventory Control Point (NAVICP). Organizational level maintenance actions are primarily limited to performance monitoring, fault isolation, and the removal and replacement of failed LRUs. Certain LRUs are returned to the designated ISEA for test, evaluation, and disposal. These LRUs have Source, Maintainability, and Recoverability (SM&R) code PAODD in equipment Allowance Parts Lists. It is estimated that approximately three maintenance hours per instance for troubleshooting, repair, and repair verification are needed for the AN/UPX-34(V). Projected corrective maintenance hours for the AN/UPX-34A(V) are to be determined and will be included in future updates to this NTSP.

**b. Intermediate.** NA

**c. Depot.** Depot level maintenance includes the screening of failed components to detect failure trends and to screen for active warranties, followed by the return of repairable components to COTS vendors for repair, overhaul, or replacement.

**d. Interim Maintenance.** Naval Air Warfare Center Aircraft Division (NAWCAD) St. Inigoes will install the AN/UPX-34A(V) onboard ships and at shore sites and will provide technical assistance and initial training. All Navy Engineering Technical Services supporting both hardware and software will be accomplished by NAWCAD St. Inigoes, ISEA. The Navy Support Date (NSD) for the AN/UPX-34A(V) is to be determined. NSD for the AN/UPX-34(V) was January 1997.

**e. Life-Cycle Maintenance Plan.** NA

**3. Manning Concept.** The introduction of the AN/UPX-34(V) and the AN/UPX-34A(V) to the fleet will have no impact on the current manpower requirements of the AEGIS class cruisers as outlined in the AEGIS Combat Systems Navy Training Plan, S-30-8512E/A.

**a. Operators.** EWs and FCs operate the RTDS in conjunction with their normal duties. RTDS operator duties consist of energizing, de-energizing, enabling via variable action buttons, and using target recognition data with existing FCS radar or NTDS displays. The AEGIS Display System provides RTDS data for Combat Information Center (CIC) users such as Anti-Air Warfare coordinators. No new operator billets (officer or enlisted) are or will be required.

**b. Maintainers.** FCs who currently maintain AEGIS Weapons System (AWS) equipment also maintain the RTDS. Their maintenance duties include system energizing and de-energizing plus corrective and preventive maintenance. Troubleshooting actions employ the use of a MAM to determine defective LRUs, which may be replaced with spares drawn from supply. No new billets (officer or enlisted) are or will be required.

**4. Training Concept**

**a. Initial Training.** Initial training for the AN/UPX-34(V) has been completed. Initial training for the AN/UPX-34A(V) will be accomplished by NAWCAD, St. Inigoes for instructors starting third quarter FY00. Initial training for fleet maintainers and operators will be accomplished as equipment is installed onboard the ship and at shore sites.

|                            |   |
|----------------------------|---|
| <b>Title .....</b>         | <b>AN/UPX-34A(V) Operator Training</b>  |
| <b>Description .....</b>   | Operator familiarization and training on the AN/UPX-34A(V) system and interfaces. |
| <b>Location .....</b>      | At the installation site  |
| <b>Length .....</b>        | 2 days (estimated)  |
| <b>RFT date .....</b>      | FY00  |
| <b>TTE/TD .....</b>        | TTE: AN/UPX-34A(V)  |
| <b>Prerequisites .....</b> | EW, FC, Combat Systems Officer (CSO)  |

**Title .....** AN/UPX-34A(V) Maintenance Training

Description ..... Maintenance familiarization and training on the AN/UPX-34A(V) system and interfaces.

Location ..... At the installation site

Length ..... 2 days (estimated)

RFT date ..... FY00

TTE/TD ..... TTE: AN/UPX-34A(V)

Prerequisites ..... FC, NEC 1106 or 1143

**b. Follow-on Training.** No new training courses will be required for the RTDS. The AN/UPX-34(V) has been incorporated into the following existing courses for Maintenance, Team training, and Officer briefs. The AN/UPX-34A(V) will be included into these same courses starting fourth quarter FY00. The impact is expected to be extremely minimal and will be determined following the curriculum development for the AN/UPX-34A(V). For additional information regarding these courses, refer to the billet and personnel requirements element of the AEGIS Combat Systems Navy Training Plan, S-30-8512E/A.

**(1) Maintenance**

**Title .....** AEGIS FCS/ORTS Operation and Maintenance TRK 1

CIN ..... S-104-0192

Model Manager ... ATC Dahlgren

Description ..... Provides the knowledge and skills required to perform the operation and the organizational level maintenance on the Mk 99 Fire Control System, the Mk 1 Operational Readiness Test System, and the Mk 84 400Hz Power Generation System.

Location ..... ATC Dahlgren

Length ..... 187 days

RFT date ..... Currently available

Skill identifier..... FC, NEC 1106

TTE/TD ..... TTE: AN/UPX-34(V), AN/UPX-34A(V) in FY00

Prerequisites ..... A-100-0139, Advanced Electronics Technical Core A-100-0141, Fire Controlman Class A School Strand Secret Clearance

**Title .....** **AEGIS FCS/ORTS Operation and Maintenance TRK 2**

CIN ..... S-104-0211

Model Manager ... ATC Dahlgren

Description ..... Provides the knowledge and skills required to perform the operation and organizational level maintenance on the Mk 99 Fire Control System, the Mk 7 Operational Readiness Test System, and the 400Hz Power Generation System.

Location ..... ATC Dahlgren

Length ..... 166 days

RFT date ..... Currently available

Skill identifier ..... FC, NEC 1143

TTE/TD ..... TTE: AN/UPX-34(V), AN/UPX-34A(V) in FY00

Prerequisites ..... A-100-0139, Advanced Electronics Technical Core  
A-100-0141, Fire Controlman Class A School Strand  
Secret Clearance

**(2) Team Training.** Team training is provided for EWs, FCs, and selected officers. These courses are taught by the AEGIS Training and Readiness Center Detachments (ATRCD) on request from the individual commands. The RTDS will have a minimum impact on the following courses:

**Title .....** **AEGIS CIC Team (Precommissioning)**

CIN ..... S-221-0023

Model Manager ... ATC Dahlgren

Description ..... Provides the knowledge and skills required to enable all members of the CIC team to efficiently perform the duties and responsibilities of their assigned stations while operating in a multi-threat environment.

Locations ..... ATC Dahlgren  
ATRCD Moorestown, New Jersey  
ATRCD Wallops Island

Length ..... 12 days

RFT date ..... Currently available

Skill identifier ..... None

TTE/TD ..... NA

Prerequisites ..... 1. Graduate of one of the following courses:

- a. S-2F-4607, S-2F-4639 or S-2F-4310, AEGIS PCO/PXO
- b. S-2E-4608, S-2E-4632 or S-2E-1000, AEGIS Combat System Officer
- c. AEGIS CIC Supervisor
- d. Radar System AN/SYP-1 O&M
- e. S-104-0192 or S-104-211, AEGIS FCS/ORTS O&M
- f. S-221-0037 or S-221-0036, AEGIS Console Operator
- g. S-221-0031, AEGIS Training Supervisor
- h. AEGIS Weapons System Supervisor

2. Secret Clearance

**Title ..... AEGIS CIC Team (Shipboard)**

CIN ..... S-221-0028

Model Manager ... ATC Dahlgren

Description ..... Provides the knowledge and skills required to enable all members of the CIC team to efficiently perform the duties and responsibilities of their assigned stations while operating in a multi-threat environment.

Locations..... The AEGIS CIC Team (Shipboard) is conducted on-board the ship. This training is provided, upon request, from the following sites:

- ATRCD San Diego, California
- ATRCD Mayport, Florida
- ATC Dahlgren
- ATRCD Wallops Island
- ATRCD Pearl Harbor, Hawaii
- ATRCD Yokosuka, Japan
- ATRCD Norfolk, Virginia

Length ..... 5 days

RFT date ..... Currently available

Skill identifier ..... None

TTE/TD ..... NA

- Prerequisites ..... 1. Officer and enlisted personnel assigned to CG-47 class ships; this course is open to all rates.
2. Graduate of one of the following courses:
- a. S-2F-4607, S-2F-4639 or S-2F-4310, AEGIS PCO/PXO
  - b. S-2E-4608, S-2E-4632 or S-2E-1000, AEGIS Combat System Officer
  - c. AEGIS CIC Supervisor
  - d. Radar System AN/SYP-1 O&M
  - e. S-104-0192 or S-104-211, AEGIS FCS/ORTS O&M
  - f. S-221-0037 or S-221-0036, AEGIS Console Operator
  - g. S-221-0031, AEGIS Training Supervisor
  - h. AEGIS Weapon System Supervisor
3. Secret Clearance

**Title ..... AEGIS Training Supervisor**

CIN ..... S-221-0031

Model Manager ... ATC Dahlgren

Description ..... Provides the trainee with a detailed description of the AEGIS Combat Training System, physical and functional operation, support programs, and interfaces.

Locations..... This training is provided, upon request, from the following sites:

- ATRCD San Diego
- ATRCD Mayport
- ATC Dahlgren
- ATRCD Wallops Island
- ATRCD Pearl Harbor
- ATRCD Yokosuka
- ATRCD Norfolk
- ATRCD Moorestown

Length ..... 5 days

RFT date ..... Currently available

Skill identifier ..... None

TTE/TD ..... NA

- Prerequisites ..... 1. Officer and enlisted personnel (E-5 to E-9) assigned to CG-47 class ships; various combat systems related ratings.  
 2. S-221-0037, AEGIS Console Operator TRK 2 or S-221-0036, AEGIS Console Operator TRK 1  
 3. Secret Clearance

**(3) Officer Training.** Follow-on training operational briefs for the RTDS will be conducted at ATC Dahlgren for CSO, Prospective Commanding Officer (PCO), and Prospective Executive Officer (PXO). The RTDS will have a minimal impact on the following courses:

**Title ..... AEGIS Combat System Officer (TRK 1)**  
 CIN ..... S-2F-4607  
 Model Manager ... ATC Dahlgren  
 Description ..... Provides the knowledge and skill to perform the duties of the Combat System Officer, Operations Officer, Weapons Officer, CIC Officer, or Fire Control Officer on a Track I AEGIS ship.  
 Location ..... ATC Dahlgren  
 Length ..... 40 days  
 RFT date ..... Currently available  
 Skill identifier..... NOBC 9258 Weapons Officer (General)  
 TTE/TD ..... TTE: AN/UPX-34(V), AN/UPX-34A(V) in FY00  
 Prerequisites ..... 1. Personnel assigned to a Track I AEGIS ship as Combat System Officer, Operations Officer, Weapons Officer, CIC Officer, Fire Control Officer, Systems Test Officer, and Electronic Material Officer.  
 2. Graduate of the Surface Warfare Department Head course or Surface Warfare Officer Basic course  
 3. Secret Clearance

**Title ..... AEGIS Combat System Officer (TRK 2)**  
 CIN ..... S-2F-4639  
 Model Manager ... ATC Dahlgren

Description ..... Provides the knowledge and skill to perform the duties of the Combat System Officer, Operations Officer, Weapons Officer, CIC Officer, or Fire Control Officer on a Track II AEGIS ship.

Location ..... ATC Dahlgren

Length ..... 40 days

RFT date ..... Currently available

Skill identifier..... NOBC 9258 Weapons Officer (General)

TTE/TD ..... TTE: AN/UPX-34(V), AN/UPX-34A(V) in FY00

Prerequisites ..... 
 

1. Personnel assigned to a Track II AEGIS ship as Combat System Officer, Operations Officer, Weapons Officer, CIC Officer, Fire Control Officer, Systems Test Officer, or Electronic Material Officer
2. Graduate of the Surface Warfare Department Head course or Surface Warfare Officer Basic course
3. Secret Clearance

**Title ..... AEGIS PCO / PXO (TRK 1)**

CIN ..... S-2E-4608

Model Manager ... ATC Dahlgren

Description ..... Provides prospective Commanding Officers and Executive Officers with a common level understanding of the operational characteristics, capabilities, limitations, and administrative requirements of a Track I AEGIS Ship Combat System.

Location ..... ATC Dahlgren

Length ..... 33 days

RFT date ..... Currently available

Skill identifier..... None

TTE/TD ..... TTE: AN/UPX-34(V), AN/UPX-34A(V) in FY00

Prerequisites ..... 
 

1. Prospective Commanding Officer or Executive Officer destined for assignment to a Track I AEGIS Ship.
2. Secret Clearance

**Title .....** AEGIS PCO / PXO (TRK 2)  
**CIN .....** S-2E-4632  
**Model Manager ...** ATC Dahlgren  
**Description .....** Provides prospective Commanding Officers and Executive Officers with a common level understanding of the operational characteristics, capabilities, limitations, and administrative requirements of a Track II AEGIS Ship Combat System.  
**Location .....** ATC Dahlgren  
**Length .....** 33 days  
**RFT date .....** Currently available  
**Skill identifier.....** None  
**TTE/TD .....** TTE: AN/UPX-34(V), AN/UPX-34A(V)  
**Prerequisites .....** 1. Prospective Commanding Officer or Executive Officer destined for assignment to a Track II AEGIS Ship.  
 2. Secret Clearance

**c. Student Profiles**

| <b>SKILL IDENTIFIER</b> | <b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>  |
|-------------------------|---|
| FC                      | A-100-0139, Advanced Electronics Technical Core<br>A-100-0141, Fire Controlman Class (A) School S<br>Secret Clearance |

**d. Training Pipelines.** No new training tracks will be required for the AN/UPX-34A(V). Information will be included in the courses listed above. Increases in course length will be determined following the development of the curricula required. This information will be included in future updates to this NTSP.

**I. ON-BOARD (IN-SERVICE) TRAINING**

**1. Personnel Qualification Standards.** Proposed Personnel Qualification Standards (PQS) have been developed by NAWCAD St. Inigoes and are in review. Electronic Warfare Supervisor Console Ships Advanced Radar Systems Operator PQS will be utilized by EWs and FCs in operator training.

## J. LOGISTICS SUPPORT

### 1. Manufacturer and Contract Numbers

| CONTRACT NUMBER                 | MANUFACTURER   | ADDRESS      |
|---------------------------------|----------------|--------------|
| N00140-90-C-0821, AN/UPX-34(V)  | Scope Inc.     | Reston, VA   |
| N00019-98-C-0059, AN/UPX-34A(V) | Condor Systems | Sterling, VA |

### 2. Program Documentation

| TECHNICAL DOCUMENT                 | DOCUMENT NUMBER | STATUS             |
|------------------------------------|-----------------|--------------------|
| Acquisition Logistics Support Plan | ALSP-ATC-003    | Approved, Dec 1997 |

**3. Technical Data Plan.** NAWCAD St. Inigoes completed formal development of the MX-11504/UPX-34(V) technical manuals. Naval Surface Warfare Center (NSWC) Point Hueneme developed a Radar Receiver R-2919/UPX-34(V) technical manual. NSWC Dahlgren is developing a system technical manual.

| TITLE  | PUBLICATION NO.                 | DATE      |
|--|---------------------------------|-----------|
| Organizational Level Maintenance, MX-11504/UPX-34(V) Discriminator, Radar Track                          | NAVAIR 16-65MX11504-1           | 15 Apr 92 |
| Operational Supplement NCTR Processing(U) MX-11504/UPX-34(V) Discriminator, Radar Track                  | NAVAIR 16-65MX11504-1S          | 24 Jul 92 |
| Operations and Organizational Level Maintenance, Radar Track Discriminator Rack MT-6871/UPX-34(V)        | NAVAIR 16-65MT6871-1            | 15 Feb 92 |
| Radar Receiver R-2919/UPX-34(V) Operation, Description, and Maintenance                                  | SE200-AF-MMO-010                | 1 Jan 92  |
| System Manual, Ships Advanced Radar Target Identification System Description, Operation, and Maintenance | SW272-AG-AEG-010-<br>/SARTIS SY | 1 Oct 92  |

The production contractor will integrate COTS technical manuals into an AN/UPX-34A(V) and an R-2919/UPX-34A(V) technical manual. NAWCAD St. Inigoes ISEA will develop organizational level technical manuals for the AN/UPX-34A(V). In addition, the production contractor will provide an Operational and Maintenance Procedures manual for any non-COTS components. The manual will have a classified section that includes and updates information in the classified portion of the MX-11504/UPX-34(V) technical manual. NAWCAD St. Inigoes will develop a depot level technical manual if required. NAWCAD St. Inigoes will accomplish technical manual verification during the production contract first article acceptance.

**4. Test Sets, Tools, and Test Equipment.** The AN/UPX-34(V) requires special tools consisting of MAMs with module extender cards. The following General Purpose Electronic Test Equipment (GPETE) is required: AN/USM-425(V) Oscilloscope, 8000A Digital Multimeter, AN/USM-207A Electronic Counter, SG-132 Sweep Generator, and 280-6XLP Multimeter.

The AN/UPX-34A(V) will be designed to preclude requirements for Special Purpose Electronic Test Equipment, Automatic Test Equipment, and Test Program Sets. NAWCAD St. Inigoes has identified one potential item of GPETE for use with the AN/UPX-34A(V). This item, a general shipboard use multimeter, may be used to check voltage and resistance.

**5. Repair Parts.** Interim repair parts kits have been procured from equipment manufacturers to support the AN/UPX-34(V) installation and will be converted to onboard repair parts. A rotatable pool of spares will be maintained at ISEA, St. Inigoes. Onboard repair parts for the AN/UPX-34A(V) will be computed during the development of the APL from Provisioning Technical Documentation provided by the contractor. Once the Material Support Date (MSD) is reached, NAVICP will assume full responsibility for budgeting, procurement, receipt, issuance, stocking, repair, and modification of parts, publication of allowance lists, pipeline support, and replenishment of spare and repair parts. The MSD for the AN/UPX-34A(V) is scheduled for August 2000. The MSD for the AN/UPX-34(V) was in January 1997.

**6. Human Systems Integration.** Human systems engineering for the AN/UPX-34A(V) will be per the Human System Integration Plan developed by NAWCAD St. Inigoes for the AN/UPX-34(V).

## **K. SCHEDULES**

**1. Installation and Delivery Schedules.** The AN/UPX-34(V) has been installed at the following two shore sites and five ships.

- ACSC Wallops Island
- ATC Dahlgren
- CG-47 USS Ticonderoga
- CG-48 USS Yorktown
- CG-49 USS Vincennes

- CG-50 USS Valley Forge
- CG-51 USS Thomas S. Gates

The AN/UPX-34A(V) will be installed at the following three shore sites and 22 ships by NAWCAD St. Inigoes. During the first six months of the installation schedule, the cables, connectors, and changes to the ship required in the ShipAlt for AN/UPX-34A(V) will be installed. Upon receipt of the equipment from the production contractor, NAWCAD St. Inigoes will complete installation of hardware and conduct training. Installation of the equipment on the ships will take approximately three weeks. Operational testing of the equipment is expected to take two days and then approximately two days will be required for initial ship training.

#### **AN/UPX-34A(V) INSTALLATION SCHEDULE**

| <b>ACTIVITY</b>            | <b>INSTALLATION START DATE</b> |
|----------------------------|--------------------------------|
| CG-59 USS Princetown       | October 1999                   |
| CG-58 USS Philippine Sea   | November 1999                  |
| CG-64 USS Gettysburg       | December 1999                  |
| CG-55 USS Leyte Gulf       | January 2000                   |
| CG-72 USS Vella Gulf       | January 2000                   |
| CG-62 USS Chancellorsville | February 2000                  |
| CG-65 USS Chosin           | February 2000                  |
| CG-70 USS Lake Erie        | March 2000                     |
| ACSC Wallops Island        | March 2000                     |
| ATC Dahlgren               | March 2000                     |
| NAWCAD St. Inigoes         | March 2000                     |
| CG-66 USS Hue City         | June 2000                      |
| CG-69 USS Vicksburg        | June 2000                      |
| CG-57 USS Lake Champlain   | September 2000                 |
| CG-61 USS Monterey         | October 2000                   |
| CG-73 USS Port Royal       | October 2000                   |
| CG-53 USS Mobile Bay       | November 2000                  |
| CG-54 USS Antietam         | November 2000                  |
| CG-60 USS Normandy         | November 2000                  |

| <b>ACTIVITY</b>           | <b>INSTALLATION START DATE</b> |
|---------------------------|--------------------------------|
| CG-52 USS Bunker Hill     | April 2001                     |
| CG-63 USS Cowpens         | April 2001                     |
| CG-67 USS Shiloh          | April 2001                     |
| CG-56 USS San Jacinto     | June 2001                      |
| CG-68 USS Anzio           | June 2001                      |
| CG-71 USS Cape St. George | September 2001                 |

**2. Ready For Operational Use Schedule.** The AN/UPX-34A(V) will be ready for operational use following the installation, verification, and initial training by NAWCAD St. Inigoes.

**3. Time Required to Install at Operational Sites.** The AN/UPX-34A(V) is expected to take approximately three weeks to install.

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

**5. Training Device and Technical Training Equipment Delivery Schedule.** The AN/UPX-34(V) has been installed at ATC Dahlgren and ACSC Wallops Island. The AN/UPX-34A(V) is scheduled for installation at the following training sites:

| <b>TECHNICAL TRAINING EQUIPMENT</b> | <b>ACTIVITY</b>     | <b>DATE</b> | <b>TIME REQUIRED TO INSTALL</b> |
|-------------------------------------|---------------------|-------------|---------------------------------|
| AN/UPX-34A(V)                       | ATC Dahlgren        | FY00        | 3 weeks                         |
| AN/UPX-34A(V)                       | ACSC Wallops Island | FY00        | 3 weeks                         |

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

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

| <b>DOCUMENT<br/>OR NTSP TITLE</b>                     | <b>DOCUMENT<br/>OR NTSP NUMBER</b> | <b>PDA<br/>CODE</b> | <b>STATUS</b>      |
|---|------------------------------------|---------------------|--------------------|
| CG-47 Class Guided Missile Cruiser Navy Training Plan | S-30-7707F                         |                     | Approved<br>Jan 92 |
| AEGIS Combat Systems Navy Training Plan               | S-30-8512E/A                       |                     | Approved<br>Jul 97 |

## PART II - BILLET AND PERSONNEL REQUIREMENTS

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

**II.A. BILLET REQUIREMENTS.** No new billets are required, nor will any billets be phased out, so there is no net increase or decrease. Existing FCs and EWs will maintain and operate the RTDS system in addition to their current duties. There will be no equipment phase out.

**II.B. PERSONNEL REQUIREMENTS.** There are no changes to the Annual Training Input Requirements. The impact on the RTDS courses will be determined following completion of the curriculum development for the AN/UPX-34A(V) and will be included in future updates to this NTSP.

**PART III - TRAINING REQUIREMENTS**

**III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** AN/UPX-34A(V) Maintenance Training  
**COURSE DEVELOPER:** ISEA St. Inigoes  
**COURSE INSTRUCTOR:** ISEA St. Inigoes  
**COURSE LENGTH:** 2 Days

| LOCATION, UIC               | BEGIN DATE | STUDENTS |     |     |
|-----------------------------|------------|----------|-----|-----|
|                             |            | OFF      | ENL | CIV |
| At installation site, 00000 | Sep 00     | 2        | 2   |     |

Input  
AOB  
Chargeable

- ACTIVITY**  
**DESTINATIONS**  
 ATC Dahlgren  
 USS Antietam  
 USS Anzio  
 USS Bunker Hill  
 USS Cape St. George  
 USS Chancellorsville  
 USS Chosin  
 USS Cowpens  
 USS Gettysburg  
 USS Hue City  
 USS Lake Champlain  
 USS Lake Erie  
 USS Leyte Gulf  
 USS Mobile Bay  
 USS Monterey  
 USS Normandy  
 USS Philippine Sea  
 USS Port Royal  
 USS Princetown  
 USS San Jacinto  
 USS Shiloh  
 USS Vella Gulf  
 USS Vicksburg

**COURSE TITLE:** AN/UPX-34A(V) Operator Training  
**COURSE DEVELOPER:** ISEA St. Inigoes  
**COURSE INSTRUCTOR:** ISEA St. Inigoes  
**COURSE LENGTH:** 2 Days

| LOCATION, UIC                   | BEGIN DATE | STUDENTS |     |     |
|---------------------------------|------------|----------|-----|-----|
|                                 |            | OFF      | ENL | CIV |
| At the installation site, 00000 | Sep 00     | 2        | 2   |     |

Input  
AOB  
Chargeable

- ACTIVITY**  
**DESTINATIONS**  
 ACSC Wallops Island  
 USS Antietam  
 USS Anzio  
 USS Bunker Hill  
 USS Chancellorsville  
 USS Cape St. George  
 USS Chosin  
 USS Cowpens

**III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** AN/UPX-34A(V) Operator Training

**COURSE DEVELOPER:** ISEA St. Inigoes

**COURSE INSTRUCTOR:** ISEA St. Inigoes

**COURSE LENGTH:** 2 Days

**ACTIVITY  
DESTINATIONS**

USS Gettysburg  
USS Hue City  
USS Lake Champlain  
USS Lake Erie  
USS Leyte Gulf  
USS Mobile Bay  
USS Monterey  
USS Normandy  
USS Philippine Sea  
USS Port Royal  
USS Princetown  
USS San Jacinto  
USS Shiloh  
USS Vella Gulf  
USS Vicksburg

### **III.A.2. FOLLOW-ON TRAINING**

AN/UPX-34(V) maintenance training has been incorporated into the courses taught at ATC Dahlgren.

Follow-On training for the AN/UPX-34A(V) will be incorporated into the courses following curricula development and will be included in future updates to this NTSP.

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following NTSP elements are not affected by the RTDS and are not included:

IV.A.2 Training Devices

IV.C Facility Requirements

**Note:** Training Logistics Support Requirements for the AN/UPX-34A(V) will be included in future updates to this NTSP when the information becomes available.

**PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

**IV.A. TRAINING HARDWARE**

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

**CIN, COURSE TITLE:** S-104-0192, AEGIS FCS / ORTS Operation And Maintenance TRK 1

**TRAINING ACTIVITY:** AEGIS Training and Readiness Center

**LOCATION, UIC:** Dahlgren, Virginia, 45541

| <b>ITEM NUMBER</b> | <b>EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS</b> | <b>QTY REQD</b> | <b>DATE REQD</b> | <b>GFE CFE</b> | <b>STATUS</b> |
|--------------------|--|-----------------|------------------|----------------|---------------|
| <b>TTE</b>         |  |                 |                  |                |               |
| 1                  | FCS Computer                                     | 1               | Oct 92           | GFE            | Onboard       |
| 2                  | C & D Computer                                   | 1               | Oct 92           | GFE            | Onboard       |
| 3                  | WCS Computer                                     | 1               | Oct 92           | GFE            | Onboard       |
| 4                  | R-2919/U Radar Receiver                          | 1               | Oct 92           | GFE            | Onboard       |
| 5                  | MT-11504/UPX-34(V) RTD                           | 1               | Jan 94           | GFE            | Onboard       |
| 6                  | MT-6871/UPX-34 Rack                              | 1               | Jan 94           | GFE            | Onboard       |
| 7                  | MK 99 Illuminator                                | 1               | Oct 92           | GFE            | Onboard       |
| 8                  | ID-2501/UPX-34 Display                           | 1               | Jan 94           | GFE            | Onboard       |
| <b>GPETE</b>       |  |                 |                  |                |               |
| 9                  | AN/USM-425(V) Oscilloscope                       | 8               | Jan 94           | GFE            | Onboard       |
| 10                 | 8000A Digital Multimeter                         | 8               | Jan 94           | GFE            | Onboard       |
| 11                 | AN/USM-207A Elec Counter                         | 8               | Jan 94           | CFE            | Onboard       |
| 12                 | SG-132 Sweep Generator                           | 8               | Jan 94           | GFE            | Onboard       |
| 13                 | 280-6XLP Multimeter                              | 8               | Jan 94           | GFE            | Onboard       |

#### IV.B. COURSEWARE REQUIREMENTS

##### IV.B.1. TRAINING SERVICES

| <b>COURSE / TYPE OF TRAINING</b>   | <b>SCHOOL<br/>LOCATION, UIC</b> | <b>DATE<br/>BEGIN</b> | <b>NO. OF<br/>PERSONNEL</b> | <b>MAN WEEKS<br/>REQUIRED</b> |
|------------------------------------|---------------------------------|-----------------------|-----------------------------|-------------------------------|
| AN/UPX-34A(V) Maintenance Training | At installation site,<br>00000  | Jan 00                | 1                           | 0.4 per installation          |
| AN/UPX-34A(V) Operator Training    | At installation site,<br>00000  | Jan 00                | 1                           | 0.4 per installation          |

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

**CIN, COURSE TITLE:** S-104-0192, AEGIS FCS / ORTS Operation And Maintenance TRK 1

**TRAINING ACTIVITY:** AEGIS Training and Readiness Center

**LOCATION, UIC:** Dahlgren, Virginia, 45541

| <b>TYPES OF MATERIAL OR AID</b>             | <b>QTY<br/>REQD</b> | <b>DATE<br/>REQD</b> | <b>STATUS</b> |
|---|---------------------|----------------------|---------------|
| Instructor Guide                            | 2                   | May 93               | Onboard       |
| Personnel Performance Profile Training Path | 2                   | May 93               | Onboard       |
| System Matrix                               | 2                   | May 93               | Onboard       |
| Tests for Measure of Student Achievement    | 2                   | May 93               | Onboard       |
| Topic Learning Objectives                   | 2                   | May 93               | Onboard       |
| Topic Outline                               | 2                   | May 93               | Onboard       |
| Trainee Guide                               | 10                  | May 93               | Onboard       |

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

**CIN, COURSE TITLE:** S-104-0192, AEGIS FCS / ORTS Operation And Maintenance TRK 1

**TRAINING ACTIVITY:** AEGIS Training and Readiness Center

**LOCATION, UIC:** Dahlgren, Virginia, 45541

| <b>TECHNICAL MANUAL NUMBER / TITLE</b>  | <b>MEDIUM</b> | <b>QTY<br/>REQD</b> | <b>DATE<br/>REQD</b> | <b>STATUS</b> |
|---|---------------|---------------------|----------------------|---------------|
| NAVAIR 16-65MT6871-1<br>Operations and Organizational Level Maintenance,<br>Discriminator, Radar Track      | Hard copy     | 20                  | May 93               | Onboard       |
| NAVAIR 16-65MX11504-1<br>Organizational Level Maintenance, MX-11504/UPX-34(V)<br>Discriminator, Radar Track | Hard copy     | 20                  | May 93               | Onboard       |
| NAVAIR 16-65MX11504-1S<br>Operational Supplement NCTR Processing Discriminator, Radar<br>Track              | Hard copy     | 20                  | May 93               | Onboard       |
| SE200-AFMMO-010<br>Radar Receiver R-2919/U Operation, Description, and<br>Maintenance                       | Hard copy     | 20                  | May 93               | Onboard       |

**PART V - MPT MILESTONES**

| <b>COG CODE</b> | <b>MPT MILESTONES</b>   | <b>DATE</b> | <b>STATUS</b> |
|-----------------|---|-------------|---------------|
| PDA             | Awarded Production Contract for the AN/UPX-34(V)  | Mar 90      | Completed     |
| DA              | Conducted analysis of manpower, personnel, and training requirements for the AN/UPX-34(V) | Apr 90      | Completed     |
| TSA             | Awarded factory training and curriculum material contract for the AN/UPX-34(V)            | Sep 92      | Completed     |
| TSA             | Conducted Initial Training for the AN/UPX-34(V)   | Dec 92      | Completed     |
| TSA             | Delivered Technical Training Equipment for the AN/UPX-34(V)                               | Jan 93      | Completed     |
| DA              | Distributed Draft NTP for the AN/UPX-34(V)  | Feb 93      | Completed     |
| PDA             | Fleet introduction for the AN/UPX-34(V)   | Mar 93      | Completed     |
| TSA             | Began Follow-on Training for the AN/UPX-34(V)   | Mar 93      | Completed     |
| TSA             | Delivered curricula materials for the AN/UPX-34(V)  | Mar 93      | Completed     |
| OPTEVFOR        | Conducted OPEVAL for the AN/UPX-34(V)   | May 94      | Completed     |
| DCNO            | Approved and Promulgated NTP for the AN/UPX-34(V)   | Jun 94      | Completed     |
| PDA             | Achieved NSD for AN/UPX-34(V)   | Jan 97      | Completed     |
| DA              | Distributed Draft NTSP, including the AN/UPX-34A(V)                                       | Jan 99      | Completed     |
| TSA             | Promulgate NTSP to ALCON  | Apr 00      | Completed     |
| TSA             | Begin Initial training for the AN/UPX-34A(V)  | Sep 00      |               |
| TSA             | Deliver curricula material for the AN/UPX-34A(V)  | Sep 00      |               |
| TSA             | Deliver Technical Training Equipment for the AN/UPX-34A(V)                                | Sep 00      |               |
| PDA             | Fleet Introduction for the AN/UPX-34A(V)  | Oct 00      |               |
| PDA             | Achieve NSD for AN/UPX-34A(V)   | Oct 00      |               |

PART VI - ACTION ITEMS / ACTION REQUIRED

ACTION ITEM OR  
ACTION REQUIRED

COMMAND ACTION    DUE DATE    STATUS

None

PART VII - POINTS OF CONTACT

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL  | TELEPHONE NUMBERS   |
|--|---|
| <b>CAPT Mark Kosnik</b><br>Combat Systems Integration<br>CNO, N865E<br>kosnik.mark@hq.navy.mil   | <b>COMM:</b> (703) 695-2079<br><b>DSN:</b> 225-2079<br><b>FAX:</b> (703) 693-4259           |
| <b>CDR Phillip Kessler</b><br>Surface Warfare Training Requirements<br>CNO, N869T2<br>kessler.phillip@hq.navy.mil                          | <b>COMM:</b> (703) 604-7635<br><b>DSN:</b> 664-7635<br><b>FAX:</b> (703) 604-6934           |
| <b>LCDR Mike Belcher</b><br>NTSP Manager<br>CNO, N889H1<br>belcher.michael@hq.navy.mil   | <b>COMM:</b> (703) 604-7765<br><b>DSN:</b> 664-7765<br><b>FAX:</b> (703) 604-6939           |
| <b>MGYSGT Ken Gravatt</b><br>NTSP Manager<br>CNO, N889H6<br>gravatt.kenneth@hq.navy.mil  | <b>COMM:</b> (703) 604-7722<br><b>DSN:</b> 664-7722<br><b>FAX:</b> (703) 604-6939           |
| <b>AZC Scott Dean</b><br>NTSP Manager<br>CNO, N889H7<br>dean.scott@hq.navy.mil   | <b>COMM:</b> (703) 604-7714<br><b>DSN:</b> 664-7714<br><b>FAX:</b> (703) 604-6939           |
| <b>Mr. Robert Zweibel</b><br>Training Technology Policy<br>CNO, N75B<br>zweibel.robert@hq.navy.mil   | <b>COMM:</b> (703) 614-1344<br><b>DSN:</b> 224-1344<br><b>FAX:</b> (703) 695-5698           |
| <b>LCDR Gail Bovy</b><br>Battle Forces Manpower<br>CNO, N122C<br>n122c@bupers.navy.mil   | <b>COMM:</b> (703) 695-3113<br><b>DSN:</b> 225-3113<br><b>FAX:</b> (703) 614-5308           |
| <b>CDR Irving (I. V.) Velez</b><br>ATC/LC Deputy Program Manager for Combat ID Systems<br>NAVAIRSYSCOM, PMA2133<br>veleziv@navair.navy.mil | <b>COMM:</b> (301) 862-6303<br><b>DSN:</b> 342-3512 ext. 6303<br><b>FAX:</b> (301) 862-6328 |
| <b>Mr. Ron Smith</b><br>Assistant Program Manager Logistics<br>NAVAIRSYSCOM, AIR 3.1.4B<br>smithrl3@navair.navy.mil                        | <b>COMM:</b> (301) 862-6310<br><b>DSN:</b> 342-3512 ext. 6310<br><b>FAX:</b> (301) 862-6328 |
| <b>ACCM Howard McGrath</b><br>Assistant Program Manager, Training Systems<br>NAVAIRSYSCOM, PMA205-3B1<br>mcgrathhj@navair.navy.mil         | <b>COMM:</b> (301) 757-8126<br><b>DSN:</b> 757-8126<br><b>FAX:</b> (301) 757-6945           |

**NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL****TELEPHONE NUMBERS****CDR Robin Mason**

Aviation NTSP Point of Contact  
CINCLANTFLT, N721  
masonrf@clf.navy.mil

**COMM:** (757) 836-0101  
**DSN:** 836-0101  
**FAX:** (757) 836-0141

**LCDR Jim Ybarra**

Tactical Training Officer  
CINCPACFLT, N72  
ybarrajs@cpf.navy.mil

**COMM:** (808) 471-8593  
**DSN:** 315-471-8593  
**FAX:** (808) 471-8601

**ATC Matthew Brennan**

PQS Development  
NETPDTC Pensacola, N34  
atc-matthew.brennan@smtp.cnet.navy.mil

**COMM:** (850) 452-1035  
**DSN:** 922-1035  
**FAX:** (850) 452-1764

**CAPT Patricia Huiatt**

Deputy Assistant, Chief of Naval Personnel for Distribution  
NAVPERSCOM, PERS-4B  
p4b@persnet.navy.mil

**COMM:** (901) 874-3529  
**DSN:** 882-3529  
**FAX:** (901) 874-2606

**LT Cabot Aycock**

Ratings Assignment Officer  
NAVPERSCOM, PERS-406C  
p406c@persnet.navy.mil

**COMM:** (901) 874-3777  
**DSN:** 882-3777  
**FAX:** (901) 874-2643

**Mr. Fuad Bouhoussein**

Section Head for Combat ID Systems  
NAWCAD St. Inigoes  
bouhousseinf@navair.navy.mil

**COMM:** (301) 862-8213  
**DSN:** 342-3512 ext. 8213  
**FAX:** (301) 862-6006

**Mr. Thuy Le**

SARTIS Project Engineer  
NAWCAD St. Inigoes  
thuy.le@mx.iff.navy.mil

**COMM:** (301) 862-6104  
**DSN:** 342-3512 ext. 6104  
**FAX:** (301) 862-8718

**Mr. Denny Mai**

SARTIS Project Engineer  
NAWCAD St. Inigoes  
denny.mai@mx.iff.navy.mil

**COMM:** (301) 862-6117  
**DSN:** 342-3512 ext. 6117  
**FAX:** (301) 862-8718

**Mr. Phil Szczyglowski**

Competency Manager  
NAVAIRSYSCOM, AIR 3.4.1.1  
szczyglowspr@navair.navy.mil

**COMM:** (301) 757-9182  
**DSN:** 757-9182  
**FAX:** (301) 342-4723

**ATCS David Morris**

NTSP Coordinator  
NAVAIRSYSCOM, AIR 3.4.1.1  
morrism@navair.navy.mil

**COMM:** (301) 757-9173  
**DSN:** 757-9173  
**FAX:** (301) 342-4723