



NAVY TRAINING SYSTEM PLAN
FOR THE
INTEGRATED MECHANICAL DIAGNOSTICS
SYSTEM

N88-NTSP-A-50-0105/A

APRIL 2003

INTEGRATED MECHANICAL DIAGNOSTICS SYSTEM

EXECUTIVE SUMMARY

This Navy Training System Plan (NTSP) has been developed to identify the life cycle manpower, personnel, and training requirements associated with the Integrated Mechanical Diagnostics System (IMDS). The IMDS is an Acquisition Category IVT program developed under the Commercial Operations and Support Savings Initiative and is in the Limited Rate Initial Production Phase of the Defense Acquisition System. Current plans are to install the IMDS aboard Navy SH-60B Aircraft and Marine Corps CH-53E Aircraft. However, it is envisioned that all Navy and Marine Corps rotary wing aircraft will be provided with IMDS capabilities in the future. IMDS Initial Operating Capability is scheduled for October 2003 in the CH-53E and May 2004 in the SH-60B. The Navy Support Date and Material Support Date have not been established.

The IMDS performs diagnostic, health, and usage monitoring functions on individual rotary wing aircraft through the use of computer processors, sensors, and diagnostic software. An associated ground-based analysis and diagnostic system interfaces with a Naval Aviation Logistics Command Management Information System (NALCOMIS) equipped Optimized-Organizational Maintenance Activity (OOMA).

The IMDS will be operated by Marine Corps CH-53E Rotary Wing Pilots with Military Occupational Specialty (MOS) 7566, Navy SH-60B Rotary Wing Pilots with 1311 and 1312 Designator Codes, Marine Corps CH-53E Enlisted Aircrew personnel with MOS 6173, and Navy Enlisted SH-60B Aircrew personnel with Navy Enlisted Classification (NEC) 7873.

Maintenance of IMDS will be conducted at two levels, organizational and depot. Organizational level maintenance will be performed on the CH-53E by Marine Corps Communication/Electrical System Technicians with MOS 6323, Airframe Mechanics with MOS 6153, and Engine Mechanics with MOS 6113. SH-60B maintenance will be performed by Navy Aviation Electronics Technicians with NECs 8376 or 8876 and Electrician's Mates, Structural Mechanics, and Machinist's Mates with NECs 8378 or 8878. The manufacturer will perform all depot level maintenance.

The manufacturer is providing initial operator and maintainer training. Follow-on operator training will be conducted by CH-53E and SH-60B Fleet Readiness Squadrons. Existing aircrew courses will be updated with IMDS information. Follow-on maintainer training will be provided by the Naval Air Maintenance Training Marine Units and Naval Air Maintenance Training Units supporting the CH-53E and SH-60B aircraft. Existing organizational level maintenance courses will be updated with IMDS information. A Ready for Training date for follow-on operator and maintainer training is to be determined.

Current manpower requirements, identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization are projected to be sufficient to support IMDS without change. However, a change in course length or training throughput has the potential to increase

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manpower and/or instructor requirements; this potential issue will continue to be evaluated as courses are modified.

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LIST OF ACRONYMS

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LIST OF ACRONYMS

AD	Aviation Machinist's Mate
AE	Aviation Electrician's Mate
AFCS	Automatic Flight Control System
ALSP	Acquisition Logistics Support Plan
AM	Aviation Structural Mechanic
AMT	Avionics Maintenance Trainer
AMTCS	Aviation Maintenance Training Continuum System
AOB	Average Onboard
APT	Aircrew Procedures Trainer
AT	Aviation Electronics Technician
AW	Aviation Antisubmarine Warfare Operator
BIM	Blade Inspection and Maintenance
BMP	Bearing Monitoring Panel
BUNO	Bureau Number
CANTRAC	Catalog of Navy Training Courses
CDU	Cockpit Display Unit
CFE	Contractor-Furnished Equipment
COMLANFLT	Commander, Atlantic Fleet
COMPACFLT	Commander, Pacific Fleet
CMT	Composite Maintenance Trainer
CNO	Chief of Naval Operations
COMNAVAIRESFOR	Commander Naval Air Reserve Force
COMOPTEVFOR	Commander, Operational Test and Evaluation Force
DT	Development Test
DTU	Data Transfer Unit
FRS	Fleet Readiness Squadron
FY	Fiscal Year
GBS	Ground-Based Station
GFE	Government-Furnished Equipment
GPS	Global Positioning System
GPWS	Ground Proximity Warning System
HMT	Helicopter Marine Training Squadron

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LIST OF ACRONYMS

IMDS	Integrated Mechanical Diagnostics System
IOC	Initial Operational Capability
IPB	Illustrated Parts Breakdown
LAMPS	Light Airborne Multi-Purpose System
LRIP	Limited Rate Initial Production
LRU	Line Replaceable Unit
MATMEP	Maintenance Training Management and Evaluation Program
MCAS	Marine Corps Air Station
MOS	Military Occupational Specialty
MPU	Main Processor Unit
MPULV	Main Processing Unit Loader Verifier
MRC	Maintenance Requirements Card
MSD	Material Support Date
MTU	Maintenance Training Unit
NA	Not Applicable
NALCOMIS	Naval Aviation Logistics Command Management Information System
NAMP	Naval Aviation Maintenance Program
NAMTRA MARUNIT	Naval Air Maintenance Training Marine Unit
NAMTRAGRU DET	Naval Air Maintenance Training Group Detachment
NAMTRAU	Naval Air Maintenance Training Unit
NAS	Naval Air Station
NATOPS	Naval Air Training and Operating Procedures Standardization
NAVAIR	Naval Air Systems Command
NAVPERSCOM	Naval Personnel Command
NEC	Navy Enlisted Classification
NETC	Navy Education and Training Command
NS	Naval Station
NSD	Navy Support Date
NTSP	Navy Training System Plan
OATMS	OPNAV Aviation Training Management System
OBS	Onboard System
OFT	Operational Flight Trainer
OOMA	Optimized Organizational Maintenance Activity
OPNAV	Office of the Chief of Naval Operations

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LIST OF ACRONYMS

OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	OPNAV Principal Official
ORD	Operational Requirements Document
OT	Operational Test
PCMCIA	Personal Computer Memory Card International Association
PEO(A)	Program Executive Office (Air ASW, Assault, and Special Mission Programs)
PMA	Program Manager, Air
RAST	Recovery Assist Securing and Traversing
RDC	Remote Data Concentrator
RFT	Ready For Training
ST	Special Tool
TA	Training Agency
TBD	To Be Determined
TD	Training Device
TEE	Training Effectiveness Evaluation
TEMP	Test and Evaluation Master Plan
TSA	Training Support Agency
TTE	Technical Training Equipment
ULSS	User Logistics Support Summary
VIDS/MAF	Visual Item Display System/Maintenance Action Form
WST	Weapon System Trainer
WTT	Weapon Tactics Trainer

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PREFACE

This Approved Navy Training System Plan (NTSP) for the Integrated Mechanical Diagnostics System (IMDS) updates the Draft IMDS NTSP, A-50-0105/D, dated August 2002, in accordance with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97.

This Approved NTSP incorporates comments resulting from the review of the Draft NTSP, N88-NTSP-A-50-0105/D, of August 2002. Comments were received from the Naval Education and Training Command (NETC), Naval Education and Training Professional Development and Technology Center (NETPDTC), Naval Air Maintenance Training Group Headquarters (NAMTRAGRU HQ), Naval Air Maintenance Training Marine Unit (NAMTRA MARUNIT) New River, and Naval Air Maintenance Training Unit (NAMTRAU) North Island. The comments are general in nature, making several corrections to course information, and clarifying program information and potential issues.

aboard Navy SH-60B and Marine Corps CH-53E aircraft. However, it is envisioned that all Navy and Marine Corps rotary wing aircraft will be provided with IMDS capabilities in the future.

2. Foreign Military Sales. No Foreign Military Sales are planned for the IMDS. However, the IMDS has potential applicability for all Department of Defense rotary wing aircraft.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST

1. Developmental Test and Evaluation. All Developmental Test (DT) evolutions are being conducted under the cognizance of NAVAIR Patuxent River, Maryland.

a. CH-53E IMDS

(1) Developmental Test-IIA. DT-IIA was performed on a prototype IMDS installed on a CH-53E Aircraft, Bureau Number (BUNO) 163086, at NAWCAD Patuxent River from September 1999 to September 2000. DT-IIA substantiated the basic system functional performance and hardware configuration stability sufficient to support a Limited Rate Initial Production (LRIP) decision in August 2000.

(2) Developmental Test-IIB. DT-IIB was performed on an enhanced prototype IMDS installed on the same CH-53E Aircraft used for DT-IIA. Data collection flights were conducted by Helicopter Marine Training Squadron (HMT) 302 at New River, North Carolina from February 2002 through March 2002.

(3) Developmental Test-IIC. DT-IIC began at NAVAIR Patuxent River in April 2002 using an IMDS, which had been updated to a production representative configuration, installed on the same CH-53E Aircraft used for DT-IIA and DT-IIB. DT-IIC is scheduled for completion in late December 2002.

(4) Developmental Test-IIIA. DT-IIIA will be performed using the prototype IMDS from DT-IIC that will be updated to reflect the latest production configuration. DT-IIIA is scheduled to begin in May 2003 and conclude in January 2004.

(5) Developmental Test-IIIB. DT-IIIB will be performed using the prototype IMDS from DT-IIIA. DT-IIIB is scheduled to begin in February 2004 and conclude in July 2004.

b. SH-60B IMDS

(1) Developmental Test-IIA. DT-IIA was successfully performed on a prototype IMDS installed on a SH-60B Aircraft, BUNO 164176, at NAVAIR Patuxent River from September 1999 to December 2001. DT-IIA substantiated the basic system functional performance and hardware configuration stability sufficient to support an LRIP decision in April 2001.

(2) Developmental Test-IIB. DT-IIB was performed on an enhanced prototype IMDS installed on the same SH-60B Aircraft used for DT-IIA at NAVAIR Patuxent River from January 2002 to July 2002.

(3) Developmental Test-IIC. DT-IIC will be performed using the same prototype IMDS from DT-IIA and is scheduled to begin in January 2003 and conclude in May 2003.

(4) Developmental Test-IIIA. DT-IIIA will be performed using the prototype IMDS from DT-IIC, updated to reflect the latest production configuration and is scheduled to begin in October 2003 and conclude in August 2004.

(5) Developmental Test-IIIB. DT-IIIB will be performed using the prototype IMDS from DT-IIIA and is scheduled to begin in August 2004 and conclude in December 2004.

2. Operational Test and Evaluation. All Operational Test (OT) evolutions will be conducted under the cognizance of the Commander Operational Test and Evaluation Force (COMOPTEVFOR) Norfolk, Virginia.

a. CH-53E IMDS

(1) Operational Test-IIA. OT-IIA will be conducted using production representative IMDS hardware and software installed in three CH-53E Aircraft. Successful completion of OT-IIA will support a recommendation regarding fleet introduction of IMDS in CH-53E Aircraft. OT-IIA began in November 2002 and will conclude in April 2003.

(2) Operational Test-IIIA. OT-IIIA will be conducted using production representative IMDS hardware and software installed in three CH-53E Aircraft and is scheduled to begin in September 2004 and conclude in March 2005.

b. SH-60B IMDS

(1) Operational Test-IIA. OT-IIA will be conducted using production representative IMDS hardware and software installed in three SH-60B Aircraft. Successful completion of OT-IIA will support a recommendation regarding fleet introduction of IMDS in SH-60B Aircraft. OT-IIA is scheduled to begin in February 2003 and conclude in August 2003.

(2) Operational Test-IIIA. OT-IIIA will be conducted using production representative IMDS hardware and software installed in three SH-60B Aircraft and is scheduled to begin in February 2005 and conclude in September 2005.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. The A/E-37T-32 Vibration Analysis Test Set (VATS) used on existing platforms will be phased out after IMDS has reached Full Operational Capability.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. The IMDS will provide timely and accurate information to enhance aircraft maintenance and safety by identifying and precluding premature failure of aircraft systems. Prior to flight, a Personal Computer Memory Card International Association (PCMCIA) memory card (“Credit Card” memory) is loaded with relevant aircraft BUNO data that resides in the IMDS Ground-Based Station (GBS), which is then downloaded into the IMDS Onboard System (OBS). During flight, information such as vibration data, diagnostic results, and aircraft status information is recorded onto the PCMCIA memory card. After each flight, the PCMCIA is removed from the aircraft and the information downloaded into NALCOMIS OOMA. The IMDS will use this post-flight data to generate any required Visual Item Display System/Maintenance Action Forms (VIDS/MAF), make logbook entries, and perform configuration and maintenance management. The IMDS will provide the maintenance manager with Rotor and Tail Balance adjustment trend data, engine diagnostic and trend data, Scheduled and Periodic Maintenance interval adjustments with trend data, life limited component usage data, fatigue life data, exceedance tracking, and parts tracking.

a. Onboard System. The OBS is comprised of the following major components:

(1) Cockpit Display Unit. The Cockpit Display Unit (CDU) advises the aircrew of the IMDS OBS status, aircraft component health, and recommended track and balance adjustments. The CDU is also designed to allow the aircrew to trigger system data acquisition during flight.

(2) Data Transfer Unit. The Data Transfer Unit (DTU) records all data received from the Main Processor Unit (MPU) onto a PCMCIA memory card. The DTU is also designed to allow transfer of information such as maintenance performed since last flight and changes to the system’s configuration tables from the GBS via the PCMCIA.

(3) Remote Data Concentrator. Two Remote Data Concentrators (RDC) collect aircraft status data. Each RDC converts the data it receives to a data stream that is sent to the MPU through a single line cable bus interface.

(4) Main Processor Unit. The MPU controls the IMDS by performing the following functions: acting as the communications link between all of the system’s main components, calculating flight regimes, calculating track and balance solutions, monitoring drive train health status, and processing all accelerometer, tachometer, and tracker raw data. Additionally, the MPU receives information from the RDCs, the drive train and Rotor Trim And Balance System (ROBATS) accelerometers, the Ground Proximity Warning System (GPWS), Air Data Computer, the Automatic Flight Control System (AFCS), the Global Positioning System (GPS), and the Bearing Monitoring Panel (BMP) when installed.

(5) Optical Rotor Blade Tracker. The Optical Rotor Blade Tracker provides blade track height and lead and lag data by timing pulses of blade passages from which the measurements are derived. This timing data is then converted to distance data by use of a sensitivity constant based on the blade sensor installation geometry.

(6) Junction Boxes. Junction Boxes are used to collect data from a multitude of aircraft signals. Aircraft wiring that carry signals of interest are routed to the Junction Boxes where the signals are split and routed back to the aircraft source and to the RDC.

(7) Remote Charge Converters. One Remote Charge Converter (RCC) is mounted near each engine location. The RCC converts the incoming resistance value from the engine accelerometers to a workable voltage signal. This signal is routed directly to the MPU for processing.

(8) Accelerometers. IMDS employs 32 drive train and gearbox accelerometers, six engine accelerometers, and four track and balance accelerometers. Signals from the accelerometers are fed into the MPU via the RDC as raw data signals where they are digitized and processed through Fast Fourier Transforms (FFT) and other diagnostics techniques. The results from these checks will normally be discarded. However, the raw data will be saved if prompted by the Pilot or if a fault is suspected.

(9) Tachometers. IMDS employs three tachometers, one each for the tail gearbox, main gearbox, and main rotor. Signals from the tachometers are fed into the MPU via the RDC as raw data signals where they will be digitized and processed through FFTs and other diagnostics techniques. The results from these checks will normally be discarded. However, the raw data will be saved if prompted by the Pilot or if a fault is suspected.

b. Ground-Based System. The GBS is a software module consisting of a Master Software Disk, Flight Software Data Disk, and a Configuration Data Disk that resides within an optimized NALCOMIS ground station. The GBS also includes a Main Processing Unit Loader Verifier (MPULV) that is used to transfer data to the PCMCIA prior to flight and to load data collected during flight from the PCMCIA memory card into the GBS.

2. Physical Description

ITEM NOMENCLATURE	HEIGHT	DEPTH	WIDTH	WEIGHT
CDU	3.18 in.	8.93 in.	3.37 in.	4.7 lbs
DTU	1.50 in.	6.50 in.	5.75 in.	2.1 lbs.
RDC	2.30 in.	7.70 in.	6.72 in.	3.2 lbs.
MPU	7.60 in.	12.60 in.	4.90 in.	15.5 lbs.
Optical Rotor Blade Tracker	5.10 in.	5.10 in.	3.60 in.	1.1 lbs.
Junction Box	Sizes and weights vary depending on the application			
RCC	100 mm	95 mm	107 mm	620 g
Drive Train Accelerometer	0.56 in.	0.55 in.	0.75 in.	26 g

ITEM NOMENCLATURE	HEIGHT	DEPTH	WIDTH	WEIGHT
Engine High Temperature Accelerometer	25 mm	356 mm	15 mm	8 oz.
Engine Accelerometer	1.36 in.	1.81 in.	1.50 in.	8 oz.
Uniaxial Rotor Blade Accelerometer	1.40 in.	1.87 in.	1.14 in.	80 g
Biaxial Rotor Blade Accelerometer	1.40 in.	1.87 in.	1.14 in.	80 g
Triaxial Rotor Blade Accelerometer	1.14 in.	1.87 in.	1.40 in.	90 g
Tail Gearbox Tachometer	2.45 in.	2.70 in.	1.50 in.	105 g
Main Gearbox Tachometer	2.45 in.	2.70 in.	1.50 in.	105 g
Main Rotor Tachometer	2.45 in.	2.70 in.	1.50 in.	105 g
MPULV	2.00 in.	4.00 in.	6.00 in.	1.5 lb
PCMCIA Memory Card	5 mm	85.6 mm	54 mm	33 g

3. New Development Introduction. The IMDS will be retrofitted into existing aircraft and delivered as installed equipment on new aircraft.

4. Significant Interfaces. The IMDS receives information from the GPWS Air Data Computer, AFCS, GPS, and the BMP. Additionally, the GDS software resides on an optimized NALCOMIS ground station. The IMDS technology is generic and can be applied to other platforms.

5. New Features, Configurations, or Material. Not Applicable (NA)

H. CONCEPTS

1. Operational Concept. The IMDS OBS will be operated by Marine Corps CH-53E Rotary Wing Pilots with Military Occupational Specialty (MOS) 7566, Navy SH-60B Rotary Wing Pilots with 1311 or 1312 Designator Codes, Marine Corps CH-53E Enlisted Aircrew personnel with MOS 6173, and Navy SH-60B Aviation Warfare Systems Operators (AW) with Navy Enlisted Classification (NEC) 7873.

2. Maintenance Concept. The IMDS maintenance concept is based on organizational and depot level maintenance in accordance with the guidelines established in the Naval Aviation Maintenance Program (NAMP), Office of the Chief of Naval Aviation Instruction (OPNAVINST) 4790.2H.

a. Organizational. The IMDS will be maintained at the organizational level by Marine Corps CH-53E Communication/Electrical System Technicians with MOS 6323, Marine Corps CH-53E Airframe Mechanics with MOS 6153, Marine Corps CH-53E Aircraft Mechanics with MOS 6113, Navy Aviation Electronics Technicians (AT) with NECs 8376 or 8876, and Navy Aviation Electrician's Mates (AE), Navy Aviation Structural Mechanics (AM) and Navy Aviation Machinist's Mates (AD) with NECs 8378 or 8878.

(1) Preventive Maintenance. Preventive maintenance will consist of performing a daily confidence test and scheduled maintenance tasks at prescribed calendar or operating time intervals.

(2) Corrective Maintenance. Corrective maintenance is built around the self-test program that automatically indicates the operational condition of the system. The self-test program fault-isolates to a defective Line Replaceable Unit (LRU). When the fault is verified, the defective LRU is removed and replaced.

b. Intermediate. NA

c. Depot. The contractor, B.F. Goodrich Aerospace, will perform repair, calibration, and overhaul of all IMDS components.

d. Interim Maintenance. B.F. Goodrich Aerospace will perform interim maintenance support for the IMDS until full Navy organic support is achieved. The Navy Support Date is planned for first quarter FY06.

e. Life Cycle Maintenance Plan. NA

3. Manning Concept. Current manpower requirements identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization are projected to be sufficient to support IMDS without change. However, a change in course length or training throughput has the potential to increase manpower or instructor requirements, and will continue to be under evaluation as courses are modified.

4. Training Concept. The IMDS training program will consist of initial and follow-on training for operators and maintenance personnel. IMDS follow-on maintenance training will be provided through existing courses and tracks modified with IMDS data.

a. Initial Training. Initial training will be conducted in four phases. Phase one initial training for DT personnel has been completed. Phase two initial training will be for OT personnel. Phase three initial training will be for initial cadre personnel including Fleet Readiness Squadron (FRS), Naval Aviation Maintenance Marine Unit (NAMTRA MARUNIT), Naval Aviation Maintenance Training Group Detachment (NAMTRAGRU DET), and Naval Air Maintenance Training Unit (NAMTRAU) Instructors. Phase four initial training will be for personnel assigned to squadrons receiving the IMDS and will be conducted at each squadron as part of fleet introduction. Initial training is divided into four modules as follows:

Title **H-53E/H-60 IMDS Familiarization Module One**

Description..... Module One will provide a basic overview of the IMDS System. This module includes instructions on the capabilities of the system, the OBS, and the GBS. The instructional setting will be group-paced and Interactive Multimedia Instruction without testing.

Locations ° HMT 302, Marine Corps Air Station (MCAS) New River
 ° HSL-40, Naval Station (NS) Mayport
 ° HSL-41, Naval Air Station (NAS) North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as Technical Training Equipment (TTE). Training Devices (TD) are NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, NATEC personnel, or aircrew or maintenance personnel assigned to a squadron during IMDS fleet introduction.

Title **H-53E/H-60 IMDS Familiarization Module Two**

Description..... Module Two will provide training to aircrew and designated maintenance personnel to initialize the system, operate selected functions during flight, and perform post-flight functions of data download and debrief. This module includes instruction on pre-flight and post-flight procedures and on selected in-flight functions. The instructional setting will be group-paced and Interactive Multimedia Instruction, with “open-book” testing.

Locations ° HMT 302, MCAS New River
 ° HSL-40, NS Mayport
 ° HSL-41, NAS North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as TTE. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, or aircrew or Quality Assurance personnel assigned to a squadron during IMDS fleet introduction.

Title H-53E/H-60 IMDS Familiarization Module Three

Description..... Module Three will provide training to designated aircrew personnel and Quality Assurance personnel to perform all of the OBS functions, to access the GBS, to identify and print out required reports, to assign relevant maintenance procedures, and to carry out all associated administrative procedures. This module consists of instruction covering the full onboard system and the operation of the GBS and associated maintenance functions. The instructional setting will be group-paced and Interactive Multimedia Instruction, with “open-book” testing.

Locations ° HMT 302, MCAS New River
 ° HSL-40, NS Mayport
 ° HSL-41, NAS North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as TTE. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, NATEC personnel, or aircrew or maintenance personnel assigned to a squadron during IMDS fleet introduction.

Title H-53E/H-60 IMDS Familiarization Module Four

Description..... Module Four will provide training to maintenance personnel to support the IMDS onboard system. This module consists of eight hours of instruction covering the full OBS and the operation of the GBS and associated maintenance functions. The instructional setting will be group-paced and Interactive Multimedia Instruction.

Locations ° HMT 302, MCAS New River
° HSL-40, NS Mayport
° HSL-41, NAS North Island

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
° 30 days prior to OT for SH-60B OT personnel
° February 2005 for CH-53E cadre personnel
° 45 days after OT for SH-60B cadre personnel
° Estimated early 2005 for CH-53E squadron personnel
° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as Technical Training Equipment. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, or aircrew and maintenance personnel assigned to a squadron during IMDS fleet introduction.

b. Follow-on Training

(1) Operator Training

Title CH-53 Basic Pilot Training
CIN MC-1 (See Note)
Model Manager.... HMT 302
Description..... This course provides training to the Fleet Replacement Pilot, including:
 ° CH-53 and Weapons Systems Employment
 ° Flight Training Crew Tactics and Safety
 ° Communications and Navigation
 ° Naval Air Training and Operational Procedure Standardization (NATOPS)
Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.
Location HMT 302, MCAS New River
Length..... 131 days
RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.
Skill identifier ° MOS 7566
TTE/TD..... ° Device 2F121, Aircrew Procedures Trainer (APT)
 ° Device 2F174, Weapons System Trainer (WST)
Prerequisite ° Q-2A-0001, Primary Flight Training
 ° Q-2A-0010, Joint T-34C Intermediate Flight Training
 ° Q-2A-0013, V-4 Undergraduate Flight Training-Helo
 ° Q-2A-0015, Undergraduate Helicopter Pilot Training
 ° Designated Marine Helicopter Pilot
 ° Security Clearance - Secret

Note: The CH-53 Basic Pilot Training course is not listed in either the OPNAV Aviation Training Management System (OATMS) or the Catalog of Navy Training Courses (CANTRAC).

Title **CH-53 Transition Pilot Training**

CIN MC-2 (See note)

Model Manager.... HMT 302

Description..... This course provides training to the Transition Fleet Replacement Pilot, including:

- ° CH-53 and Weapon Systems Employment
- ° Flight Training Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 96 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.

Skill identifier ° MOS 7564
° MOS 7566

TTE/TD..... ° Device 2F121, APT
° Device 2F174, WST

Prerequisite ° Q-2A-0001, Primary Flight Training
° Q-2A-0010, Joint T-34C Intermediate Flight Training
° Q-2A-0013, V-4 Undergraduate Flight Training-Helo
° Q-2A-0015, Undergraduate Helicopter Pilot Training
° Designated Marine Helicopter Pilot
° CH-53 Basic Pilot Training
° Security Clearance - Secret

Note: The CH-53 Transition Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53 Conversion Pilot Training**

CIN MC-3 (See Note)

Model Manager.... HMT 302

Description..... This course provides training to the Conversion Fleet Replacement Pilot, including:

- ° CH-53 and Weapon Systems Employment
- ° Flight Training Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 68 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005..

Skill identifier ° MOS 7564
° MOS 7566

TTE/TD..... ° Device 2F121, APT
° Device 2F174, WST

Prerequisite ° Q-2A-0001, Primary Flight Training
° Q-2A-0010, Joint T-34C Intermediate Flight Training
° Q-2A-0013, V-4 Undergraduate Flight Training - Helo
° Q-2A-0015, Undergraduate Helicopter Pilot Training
° Designated Marine Helicopter Pilot
° CH-53 Basic Pilot Training
° Security Clearance - Secret

Note: The CH-53 Conversion Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53 Refresher Pilot Training**

CIN MC-4 (See Note)

Model Manager.... HMT 302

Description..... This course provides refresher training to the Fleet Replacement Pilot, including:

- Weapon Systems Employment
- Flight Training Crew Tactics and Safety
- Communications and Navigation
- NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 47 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.

Skill identifier ◦ MOS 7564
◦ MOS 7566

TTE/TD..... ◦ Device 2F121, APT
◦ Device 2F174, WST

Prerequisite ◦ Q-2A-0001, Primary Flight Training
◦ Q-2A-0010, Joint T-34C Intermediate Flight Training
◦ Q-2A-0013, V-4 Undergraduate Flight Training-Helo
◦ Q-2A-0015, Undergraduate Helicopter Pilot Training
◦ Designated Marine Helicopter Pilot
◦ CH-53 Basic Pilot Training
◦ Security Clearance - Secret

Note: The CH-53 Refresher Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53E Crew Chief Training Syllabus**

CIN M-601-2722

Model Manager.... HMT 302

Description..... This course provides training to the Aircraft Crew Chief, including:

- Duties of the CH-53E Aircraft Crew Chief
- Helicopter Maintenance
- Flight Line Procedures
- Aircraft Taxi and Servicing
- Pre-flight and Post-flight Inspections
- NATOPS

Upon completion, the student will be able to perform as a CH-53E Crew Chief in a squadron environment under limited supervision.

Location HMT 302, MCAS New River

Length..... 234 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005..

Skill identifier MOS 6173

TTE/TD..... ◦ Device 2F121, APT
◦ Device 2F174, WST

Prerequisite ◦ C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance
◦ E-2D-0039, Survival, Evasion, Resistance, and Escape
◦ Q-050-1500, Naval Aircrewman Candidate School

Title **SH-60B Category I Fleet Replacement Pilot**

CIN D/E-2C-2501

Model Manager.... HSL-40

Description..... This course provides training to the first tour SH-60B Replacement Pilot, including:

- Flight Training
- Crew Tactics and Safety
- Communications and Navigation
- NATOPS

Upon completion, the student will be able to perform as an SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 150 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311

TTE/TD ° Operational Flight Trainer (OFT) 2F135
 ° Weapons Tactics Trainer (WTT) 14B51

Prerequisites..... ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title SH-60B Category II Fleet Replacement Pilot

CIN D/E-2C-2502

Model Manager.... HSL-40

Description..... This course provides training to the second tour SH-60B Pilot, including:
 ° Flight Training
 ° Armament Control
 ° Crew Tactics and Safety
 ° Communications and Navigation
 ° NATOPS
 Upon completion, the student will be able to perform as an SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 110 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311

TTE/TD..... ° OFT 2F135
 ° WTT 14B51

Prerequisites..... ° D/E-2C-2501, SH-60B Category I Fleet Replacement Pilot
 ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title SH-60B Category III Fleet Replacement Pilot

CIN D/E-2C-2503

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Pilot, including:

- ° Advanced Flight Training
- ° Armament System Capabilities
- ° Advanced Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 75 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311, 1312

TTE/TD..... ° OFT 2F135
 ° WTT 14B51

Prerequisites..... ° D/E- 2C-2501, SH-60B Category I Fleet Replacement Pilot
 ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title **SH-60B Category IV Fleet Replacement Pilot**

CIN D/E-2C-2504

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Senior Pilot, including:

- Armament System Capabilities
- Flight Training
- Advanced Crew Tactics and Safety
- Communications and Navigation
- NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Pilot in a squadron environment.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 85 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311, 1312

TTE/TD..... ◦ OFT 2F135
◦ WTT 14B51

Prerequisites..... ◦ D/E-2C-2501, SH-60B Category I Fleet Replacement Pilot
◦ E-2D-0039, Survival, Evasion, Resistance, and Escape
◦ E-7C-0039, Basic Officer Leadership Course
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ Security Clearance - Secret

Title **SH-60B Fleet Replacement Aircrew Instructor Under Training**

CIN D/E-050-2505

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Replacement Aircrewman, including:

- SH-60B Systems Advanced Theory and Operation
- Normal and Emergency Procedures
- Advanced Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as an Instructor for SH-60B Aircrewmen in a training squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 21 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ J-495-0413, Shipboard Aircraft Fire Fighting
◦ D-050-2510, SH-60B Cat 1 Fleet Replacement Aircrewman (FRAC) Pipeline

Title **SH-60B Category I Fleet Replacement Aircrewman (FRAC) Pipeline**

CIN D/E-050-2510

Model Manager.... HSL-40

Description..... This course provides training to the first tour SH-60B Replacement Aircrewman, including:

- SH-60B Systems Theory and Operation
- Normal and Emergency Procedures
- Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as a SH-60B Aircrewman in a squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 197 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ C-210-2010, Aviation Warfare Systems Operator Class A1
◦ C-210-2011, Airborne Acoustic Mission
◦ Q-050-0600, Aviation Rescue Swimmer School CAT 1
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ Q-050-1500, Naval Aircrewman Candidate School
◦ J-495-0413, Shipboard Aircraft Fire Fighting

Title **SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline**

CIN D/E-050-2511

Model Manager.... HSL-40

Description..... This course provides training to the senior SH-60B Replacement Aircrewman, including:

- SH-60B Systems Theory and Operation
- Normal and Emergency Procedures
- Advanced Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Aircrewman in a squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 71 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ Security Clearance - Secret
◦ D/E-050-2510, SH-60B Category I Fleet Replacement Aircrewman Training
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training

(2) Maintenance Training

Title	CH-53E Communications/Electrical System O-Level Maintenance
CIN	M-102-2731
Model Manager....	NAMTRA MARUNIT New River
Description.....	This course provides training to the newly assigned technician, including: <ul style="list-style-type: none">° Communications Systems, Navigation, Identification° Electrical Theory of Operation and Operational Procedures° Component Location and Characteristics° Automatic Flight Control Systems° Troubleshooting Procedures° Safety Upon completion, the student will be able to perform organization level maintenance on the CH-53E communications and electrical systems in a squadron environment under limited supervision.
Location	NAMTRA MARUNIT, New River
Length.....	107 days (An increase in course length is anticipated and is under evaluation)
RFT date	Currently available. Estimated RFT date with IMDS is early 2005.
Skill identifier	MOS 6323
TTE/TD.....	<ul style="list-style-type: none">° CH-53E Composite Maintenance Trainer (CMT)° CH-53E AFCS Maintenance Trainer° CH-53E Communications, Navigation, and Identification (CNI) Trainer
Prerequisite	C-100-2018, Avionics Technician O-Level Class A1

Title **CH-53 Power Plant and Related Systems Maintenance**

CIN M-601-2720

Model Manager.... NAMTRA MARUNIT New River

Description..... This course provides training to the Mechanical Technician, including:

- Basic Helicopter and General Safety
- Troubleshooting
- Publications
- Power Plants, Auxiliary Power Plant, and Fuel Systems
- Transmission and Rotor Systems
- Flight Control System
- Blade/Pylon Fold, and Cargo Handling Systems

Upon completion, the student will be able to perform CH-53E power plants and related systems organizational level maintenance in a squadron environment under limited supervision.

Location NAMTRA MARUNIT, New River

Length..... 92 days (An increase in course length is anticipated and is under evaluation)

RFT date Currently available. Estimated RFT date with IMDS is early 2005.

Skill identifier MOS 6113

TTE/TD.....

- CH-53E CMT
- CH-53E Fuel Systems Trainer
- Auxiliary Power Plant Trainer
- Rotor Head Trainer

Prerequisite C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance

Title **CH-53 Helicopter Airframe Mechanic**

CIN M-602-2781

Model Manager.... NAMTRA MARUNIT New River

Description..... This course provides training to the Airframes Mechanic, including:

- ° Theory of Operation
- ° Troubleshooting
- ° Basis for Diagnosis
- ° Organizational Level Maintenance Procedures
- ° Safety

Upon completion, the student will be able to perform organizational level maintenance on the CH-53 structures, hydraulics, and related systems in a squadron environment under limited supervision.

Location NAMTRA MARUNIT, New River

Length..... 100 days (An increase in course length is anticipated and is under evaluation)

RFT date Currently available. Estimated RFT date with IMDS is early 2005.

Skill identifier MOS 6153

TTE/TD..... ° CH-53E CMT
° Rotor Head Trainer

Prerequisite ° C-603-0175, Aviation Structural Mechanic (Structures and Hydraulic) Common Core Class A1
° C-603-0176, Aviation Structural Mechanic (Structures and Hydraulic) O-Level Strand Class A1

Title **SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance**

CIN D/E-102-0820

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Electronics Technician, including:

- Familiarization and Safety Precautions
- Publications
- Component Location
- System Characteristics
- Basic Testing, Servicing, and Troubleshooting
- NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B avionics systems in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 78 days currently (82 days with IMDS included)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AT 8876

TTE/TD..... Avionics Maintenance Trainer (AMT)

Prerequisite ◦ C-100-2020, Avionics Common Core Class A1
◦ C-100-2018, Avionics Technician Organizational Level Class A1

Title **SH-60B LAMPS MK III Weapon Systems Technician (Career) Organizational Maintenance**

CIN D/E-102-0825

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Electronics Technician, including:

- Systems Analysis and Configuration
- Systems Operation
- Advanced Troubleshooting Techniques
- Safety Precautions
- Light Airborne Multi-Purpose System (LAMPS) Helicopter and Ship Integration

Upon completion, the student will be able to perform organizational maintenance on the SH-60B avionics systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 16 days currently (17 days with incorporation of IMDS principals of operation, lab, and maintenance)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AT 8376

TTE/TD..... AMT

Prerequisite ◦ C-100-2020, Avionics Common Core Class A1
◦ C-100-2018, Avionics Technician Organizational Level Class A1
◦ D/E-102-0820, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance

Title	H-60 Power Plants and Related Systems (Initial) Organizational Maintenance
CIN	D/E-602-0810
Model Manager....	MTU 1022 NAMTRAU North Island
Description.....	This course provides training to the first tour Aviation Machinist's Mate, including: <ul style="list-style-type: none"> ° H-60 Introduction ° Component Location and Purpose ° Publications ° Systems Familiarization and Description ° Theory of Operation ° Safety Procedures ° Troubleshooting ° Introduction to the NAMP <p>Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B power plants and related systems in a squadron environment under close supervision.</p>
Locations	° MTU 1066 NAMTRAGRU DET Mayport ° MTU 1022 NAMTRAU North Island
Length.....	38 days (Course length will be affected by the addition of IMDS, currently under evaluation)
RFT date	Currently available. Estimated RFT date with IMDS is late 2005.
Skill identifier	AD 8878
TTE/TD.....	° Composite Maintenance Trainer ° Landing Gear/Wheel Brake Trainer ° Quick Engine Change (QEC) Maintenance Trainer ° Blade Inspection Maintenance (BIM) Trainer ° SH-60B Aircraft
Prerequisite	° C-601-2011, Aviation Machinist's Mate Common Core Class A1 ° C-601-2012, Aviation Machinist's Mate Fundamentals Strand Class A1

Title **H-60 Power Plants and Related Systems (Career) Organizational Maintenance**

CIN D/E-601-0813

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Machinist's Mate, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Advanced Troubleshooting Techniques
- Vibration Analysis and Borescoping
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B power plants and related systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 16 days (Course length will be affected by the addition of IMDS, currently under evaluation)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AD 8378

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear/Wheel Brake Trainer
◦ QEC Maintenance Trainer
◦ BIM Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1
◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1
◦ D/E-602-0810, H-60 Power Plants and Related Systems (Initial) Organizational Maintenance

Title **H-60 Electrical/Instruments and Automatic Flight Control Systems (Initial) Organizational Maintenance**

CIN D/E-602-0855

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Electrician's Mate, including:

- Component Location and Purpose
- Testing and Troubleshooting Procedures
- Publications
- Systems Familiarization and Description
- Theory of Operation
- Safety Procedures
- Introduction to the NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B electrical/instruments and AFCS in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 86 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AE 8878

TTE/TD..... ◦ AMT
◦ AFCS Maintenance Trainer
◦ Composite Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C100-2020, Avionics Common Core Class A1
◦ C-602-2039, Aviation Electrician's Mate Strand Class A1

Title **H-60 Electrical/Instruments and Automatic Flight Control System (Career) Organizational Maintenance**

CIN D/E-602-0854

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Electrician's Mate, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Theoretical Troubleshooting Techniques
- Flight Control and Fuel Systems
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B electrical/ instrument and AFCS in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 16 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AE 8378

TTE/TD..... ◦ AMT
◦ AFCS Maintenance Trainer
◦ Composite Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C100-2020, Avionics Common Core Class A1
◦ C-602-2039, Aviation Electrician's Mate Strand Class A1
◦ D/E-602-0855, H-60 Electrical/Instruments and Automatic Flight Control Systems (Initial) Organizational Maintenance

Title **H-60 Airframes and Related Systems (Initial)
Organizational Maintenance**

CIN D/E-602-0883

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Structural Mechanic, including:

- Component Location and Purpose
- Publications
- Systems Familiarization, Description, and Theory of Operation
- Troubleshooting and Safety Procedures
- Introduction to the NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B airframes and related systems in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 36 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AM 8878

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear Flotation Systems Maintenance Trainer
◦ Recovery Assist Securing and Traversing (RAST)/Tail Hoist Systems Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite C-603-0176, Aviation Structural Mechanic (Structures and Hydraulics) Class A1

Title **H-60 Airframes and Related Systems (Career)
Organizational Maintenance**

CIN D/E-602-0882

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Structural Mechanic, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Theoretical Troubleshooting Techniques
- Vibration Analysis and Landing Gear
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B airframes and related systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 15 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AM 8378

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear Flotation Systems Maintenance Trainer
◦ RAST Tail Hoist Systems Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1
◦ D/E-602-0883, H-60 Airframes and Related Systems (Initial) Organizational Maintenance

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
1311, 1312	<ul style="list-style-type: none"> ◦ E-2D-0039, Survival, Evasion, Resistance, and Escape ◦ E-7C-0039, Basic Officer Leadership Course ◦ B-9E-1226, Naval Aviation Water Survival Program R-3 ◦ Security Clearance - Secret
MOS 7566	<ul style="list-style-type: none"> ◦ Q-2A-0001, Primary Flight Training ◦ Q-2A-0010, Joint T-34C Intermediate Flight Training ◦ Q-2A-0013, V-4 Undergraduate Flight Training-Helo
AD 8378	<ul style="list-style-type: none"> ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1 ◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1 ◦ D/E-601-0810, H-60 Power Plants and Related Systems (Initial) Organizational Maintenance
AD 8878	<ul style="list-style-type: none"> ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1 ◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1
AE 8378	<ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-602-2039, Aviation Electrician's Mate Strand Class A1 ◦ D/E-602-0855, H-60 Electrical/Instrument and Automatic Flight Control System (Initial) Organizational Maintenance
AE 8878	<ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-602-2039, Aviation Electrician's Mate Strand Class A1
AM 8378	<ul style="list-style-type: none"> ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1 ◦ D/E-602-0883, H-60 Airframes and Related Systems (Initial) Organizational Maintenance
AM 8878	<ul style="list-style-type: none"> ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1
AT 8376	<ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-100-2018, Avionics Technician Organizational Level Class A1 ◦ D/E-102-0820, SH-60B LAMPS MK III System Organizational (Initial) Maintenance Technician

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AT 8876	<ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-100-2018, Avionics Technician Organizational Level Class A1
AW 7873	<ul style="list-style-type: none"> ◦ E-2D-0039, Survival Evasion Resistance, and Escape ◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training ◦ B-9E-1226, Naval Aviation Water Survival Program R-3 ◦ C-495-0413, Shipboard Aircraft Fire Fighting ◦ Q-050-0600, Aviation Rescue Swimmer School CAT 1 ◦ Q-050-1500, Naval Aircrewman Candidate School ◦ C-210-2010, Aviation Warfare Systems Operator Class A1 ◦ C-210-2011, Airborne Acoustic Mission ◦ Security Clearance – Secret
MOS 6113	<ul style="list-style-type: none"> ◦ C-600-3601, Command Indoctrination ◦ C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance
MOS 6153	<ul style="list-style-type: none"> ◦ C-600-3601, Command Indoctrination ◦ C-603-9444, CH-53 Airframes Integrated O-Level Maintenance ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Common Core Class A1
MOS 6173	<ul style="list-style-type: none"> ◦ C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance ◦ Q-050-1500, Naval Aircrewman Candidate School ◦ E-2D-0039, Survival Evasion Resistance, and Escape
MOS 6323	<ul style="list-style-type: none"> ◦ C-100-2018, Avionics Technician O-Level Class A1 ◦ C-102-9945, CH-53 A/D/E Communications/Navigation Systems Integrated O-Level Maintenance ◦ C-602-9451, CH-53E Dual Digital Automatic Flight Control System Integrated O-Level Maintenance ◦ C-602-9441, CH-53E Electrical Systems Integrated O-Level Maintenance ◦ C-600-3601, Command Indoctrination

d. Training Pipelines. CH-53E and SH-60B Pilot and Aircrewman pipelines are established. Organizational level maintenance training tracks are established and will be revised to incorporate the IMDS. No additional training tracks are required.

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development. Current SH-60B organizational level maintenance courses are being integrated into Computer-Based Training with its basic elements of Computer-Managed Instruction, Computer-Aided Instruction, Interactive Courseware, and will be part of the Aviation Maintenance Training Continuum System (AMTCS).

a. Maintenance Training Improvement Program. Current planning is to adopt the Aviation Maintenance Training Continuum System (AMTCS) concepts to replace Maintenance Training Improvement Program (MTIP). AMTCS is scheduled to begin full implementation for fleet deployment in November 2003.

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

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

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

Hardware, and software, i.e., Fleet Training Devices - Laptops, PCs, Electronic Classrooms, Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS concepts are to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs.

2. Personnel Qualification Standards. NA

3. Other Onboard or In-Service Training Packages. Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System and 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. MATMEP is planned to be replaced by AMTCS.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N00019-97-H-0152	B.F. Goodrich Aerospace	100 Panton Road Vergennes, VT 05491

2. Program Documentation. The following documentation supports the IMDS program:

- Mission Need Statement for the IMDS System, serial number M0-53-88-94, dated June 1994.
- CH-53E IMDS Project Test Plan, CH-53E-T-1-99, dated June 1999.
- SH-60B IMDS Project Test Plan, SH-60B-T-4-99, dated June 1999.
- Draft Acquisition Logistics Support Plan (ALSP) for the H-53 and H-60 IMDS, dated May 2000.
- Operational Requirements Document (ORD) for the IMDS, Serial Number 560-88-00, approved May 2000.
- Draft SH-60B IMDS User’s Logistics Support Summary (ULSS), dated November 2001.
- Draft CH-53E IMDS ULSS, dated August 2002.
- Acquisition Decision Memorandum, Program Executive Office Air (PEO(A)) letter, PEO(A)/001-02, dated January 2002.
- Test and Evaluation Master Plan (TEMP), Plan Number 1619, dated May 2002

3. Technical Data Plan. Technical publications such as maintenance manuals, Illustrated Parts Breakdowns (IPB), NATOPS manuals and checklists, and Maintenance Requirements Cards (MRC) will be produced, distributed, and supported in an Integrated Electronic Technical Manuals (IETM) format, including software and hardware support where required. The management of technical manuals is under the cognizance of the Naval Air

Technical Data and Engineering Service Command. B.F. Goodrich will supply all required technical documentation for support of the CH-53E and SH-60B IMDS program. Technical manual validation and verification was completed in August 2002 at MCAS New River, NAS North Island, and NAVAIR Patuxent River. Refer to element IV.B.3 for an overview of technical publications at training sites that require revision to include IMDS data.

4. Test Sets, Tools, and Test Equipment. A special tool kit is required to support maintenance of the CH-53E IMDS. The special tool kit consists of an optical scanner, jumper cables, test information cards, two allen wrenches, and eight templates. Two items have been identified to support maintenance of the IMDS installed in SH-60B Aircraft. These items are a high-speed blade balancing kit and a special tool kit consisting of templates, jumper cables, optical tracker, test information cards, and an allen wrench. Additional support equipment requirements may be identified as DT and OT continue.

5. Repair Parts. Repair parts to support IMDS maintenance will be under the control of the Navy Inventory Control Point Mechanicsburg, Pennsylvania. Prior to the Material Support Date (MSD), B.F. Goodrich will provide interim supply support by positioning a spares package at each operating site. The MSD is To Be Determined (TBD).

6. Human Systems Integration. IMDS adapts a BFGoodrich Aerospace commercial mechanical diagnostic system for military use, and integrates and tests the system on the H-53 and H-60 helicopters. This health and usage monitoring system will reduce operational and support costs, improve operational readiness, and increase flight safety through the early identification and correction of degraded components in the engine, drive train, and rotor systems of the helicopter. IMDS provides continuous onboard monitoring and diagnostics of engine health, gearbox and drive train vibrations, oil debris, and rotor track and balance.

A majority of the human factors testing will be accomplished by inspection using procedural checklists and flight data cards. In addition, human factors engineers will attend briefs and debriefs, conduct operator interviews and prepare operator questionnaires to identify problems arising during flight test. Post flight debriefs will emphasize the discussion and analysis of data. The hardware testing will include a qualitative and quantitative evaluation for control and display integration, functionality, arrangement, and labeling. The hardware testing for the IMDS will be performed as a ground event along with laboratory testing. A checklist based on MIL-STD-1472D will be used to systematically assess the system's compliance with human engineering principles. The data collected during all tests will be used to validate aircrew comments made during flight operations.

All new design systems and software address the human-machine interface for operators, maintainers, and support personnel. The design processes conformed to standard human engineering practices as defined in existing human factors engineering design standards. All new hardware and software will minimize the requirement for special cognitive, physical, or sensory requirements of the operators, maintainers, or support personnel beyond those available in current Navy personnel resources.

This system has no habitability impact. Manpower issues are covered in part II and III of this document. Environmental and Occupational Safety and Health requirements meet federal, state, and local standards, regulations, and directives and are enforced by respective agencies, as applicable. The IMDS is not considered mission essential for any host aircraft installation and under normal operating conditions, the system shall include the necessary isolation to ensure aircraft systems are not degraded. For use in combat, the system shall have the ability to selectively disable flight data recording and any optical beams associated with rotor tracking.

K. SCHEDULES

1. Installation and Delivery Schedules

a. CH-53E IMDS. Installation and delivery schedule information was extracted from the draft CH-53E IMDS ULSS, dated August 2002. Installation of the IMDS system aboard CH-53E Aircraft will be completed in two phases.

(1) Phase I. Five prototype IMDS were delivered to HMT 302 in Fiscal Year (FY) 01. Three of the IMDS were installed in HMT 302 aircraft in FY02. The two remaining IMDS will be used as spares for DT and OT. Additionally, 11 LRIP IMDS were delivered to HMT 302 in FY02.

PHASE I CH-53E IMDS DELIVERY AND INSTALLATION SCHEDULE				
ACTIVITY	FY99	FY00	FY01	FY02
Patuxent River Prototype (Delivered/Installed)	1/1	0/0	0/0	0/0
HMT 302 Prototype (Delivered/Installed)	0/0	0/0	5/0	0/3
HMT 302 LRIP (Delivered/Installed)	0/0	0/0	0/0	11/11

(2) Phase II. Phase II installation will be accomplished using production assets under IMDS Technical Directive Airframes Change-519. B.F. Goodrich has been contracted to conduct three IMDS installation for CH-53E utilizing a field modification team. Blue-Grass Army Depot Lexington, Kentucky, will be the installers for LRIP and production aircraft. Installers will utilize the government provided hangar space and will be responsible for the physical installation and integration of IMDS equipment into the aircraft. B.F. Goodrich will provide engineering and logistics support during installation.

	PFY	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Procured	20	2	11	16	18	22	25	25	15	0
Delivered	0	10	12	11	16	18	22	25	25	15
Installed	0	10	12	11	16	18	22	25	25	15

b. SH-60B IMDS. Installation and delivery schedule information was extracted from the SH-60B IMDS ULSS, dated November 2001. Installation of the IMDS system aboard SH-60B Aircraft will be completed in two phases.

(1) Phase I. Five prototype IMDS were delivered to HSL-41 in FY01. Three of the IMDS were installed in HSL-41 aircraft in FY02. The two remaining IMDS will be used as spares for DT and OT. Additionally, 11 LRIP IMDS will be delivered to HSL-41 in FY02.

PHASE I SH-60B IMDS DELIVERY AND INSTALLATION SCHEDULE				
ACTIVITY	FY99	FY00	FY01	FY02
Patuxent River Prototype (Delivered/Installed)	1/1	0/0	0/0	0/0
HSL-41 Prototype (Delivered/Installed)	0/0	0/0	5/0	0/3
HSL-41 LRIP (Delivered/Installed)	0/0	0/0	0/0	11/11

(2) Phase II. Phase II installation will be accomplished using production assets under IMDS Technical Directive AFC/AVC-IMDS-001. B.F. Goodrich has been contracted to conduct IMDS installation for SH-60B utilizing a field modification team. B.F. Goodrich will utilize the government provided hangar space and will be responsible for the physical installation and integration of IMDS equipment into the aircraft. B.F. Goodrich will provide engineering and logistics support during installation.

	PFY	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Procured	20	2	11	16	18	22	25	25	15	0

Delivered	0	10	12	11	16	18	22	25	25	15
Installed	0	10	12	11	16	18	22	25	25	15

2. Ready For Operational Use Schedule. The IMDS will be ready for operational use upon completion of installation.

3. Time Required to Install at Operational Sites. Installation will require three months.

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

5. Training Device and Technical Training Equipment Delivery Schedule. All TDs required to support CH-53E and SH-60B operator and maintainer training are in place. These TDs require IMDS modification; the installation schedule is not currently available. Refer to element IV.A.2 for an overview of the TDs that require modification. TTE required to support IMDS training is identified in element IV.A.1. A delivery schedule for the IMDS TTE is not currently available.

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

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
ALSP for the IMDS	Not assigned	PMA261 PMA299	Draft May 00
ORD for IMDS	560-88-00	PMA261 AIR 3.1.2E	Approved May 00
TEMP for the IMDS	1619	PMA261 PMA 299	May 02
Mission Needs Statement for the IMD system	53-88-94	CNO	Jun 94
CH-53E IMDS Project Test Plan	CH-53E-T-1-99	PMA261	Jun 99
SH-60B IMDS Project Test Plan	SH-60B-T-4-99	PMA299	Jun 99

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
ULSS for the H-53 IMDS	Not Assigned	PMA261	Draft Aug 02
ULSS for the H-60 IMDS	Not assigned	PMA299	Draft Nov 01
Acquisition Decision Memorandum	PEO(A)/001-02	PEO(A)	Jan 02
NTSP for the CH-53E Aircraft	A-50-7604G/A	PMA261	Approved Mar 01
NTSP for the Light Airborne Multipurpose System	A-50-7702C/D	PMA299	Draft Aug 01

PART II - BILLET AND PERSONNEL REQUIREMENTS

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

II.A. Billet Requirements

- II.A.1.a. Operational and Fleet Support Activity Activation Schedule
- II.A.1.b. Billets Required for Operational and Fleet Support Activities
- II.A.1.c. Total Billets Required for Operational and Fleet Support Activities
- 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.A.3. Training Activities Instructor and Support Billet Requirements
- II.A.4. Chargeable Student Billet Requirements
- II.A.5. Annual Incremental and Cumulative Billets

II.B. Personnel Requirements

- II.B.1. Annual Training Input Requirements

Note: The IMDS represents only a very small portion of the overall CH-53E and SH-60B operator and maintainer workload. The introduction of IMDS will have no effect on any existing Operational Activity Requirements, Fleet Support Activity Requirements, Billet Requirements, Training Activity Instructor Requirements, Chargeable Student Billet Requirements, or Annual Training Input Requirements. No Operational Activities or Fleet Support Activities will be deactivated or any billets added or deleted as a result of the IMDS. Current manpower requirements, identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization, are projected to be sufficient to support IMDS without change. However, a significant change in course length or training throughput has the potential to increase manpower or instructor requirements and is under evaluation. Billet and Personnel Requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001 and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001, and therefore, will not be duplicated in this NTSP.

PART III - TRAINING REQUIREMENTS

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

III.A.2. Follow-on Training

III.A.2.a. Existing Courses

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

Note: The IMDS represents only a very small portion of the overall CH-53E and SH-60B operator and maintainer training requirements. Initial training requirements associated with the IMDS are identified in element III.A.1 of this NTSP. No new follow-on courses will be developed to support the IMDS and no existing training courses will be phased out as a result of the IMDS introduction. Existing follow-on operator and maintainer training courses will have IMDS information incorporated, as applicable, with minor changes projected in course length. The only change to existing follow-on courses will be to individual lesson content. Follow-on operator and maintainer training requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001 and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001, and therefore, will not be duplicated in this NTSP.

PART III - TRAINING REQUIREMENTS

III.A.1. INITIAL TRAINING

Note: Many factors concerning initial training are TBD. When this information becomes available, it will be included in updates to this NTSP.

COURSE TITLE: Initial Training for CH-53E OT Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: COMOPTEVFOR, HMT-302, NAWCAD Patuxent River

LOCATION	UIC	DATE BEGIN	STUDENTS		CIV	
			OFF	ENL		
MCAS New River	55203	Sep 02	10	10	5	INPUT
			0.33	0.33		AOB
			0	0		CHARGEABLE

COURSE TITLE: Initial Training for SH-60B OT Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: COMOPTEVFOR, HSL-41, NAWCAD Patuxent River

LOCATION	UIC	DATE BEGIN	STUDENTS		CIV	
			OFF	ENL		
NAS North Island	55138	Note 1	10	10	5	INPUT
			0	0		AOB
			0	0		CHARGEABLE

COURSE TITLE: Initial Training for CH-53E Cadre Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: HMT 302

LOCATION	UIC	DATE BEGIN	STUDENTS		CIV	
			OFF	ENL		
MCAS New River	55203	Feb 05	TBD	TBD	TBD	INPUT
			0	0		AOB
			0	0		CHARGEABLE

III.A.1. INITIAL TRAINING

COURSE TITLE: Initial Training for SH-60B Cadre Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: HSL-40, HSL-41, MTU 1066 NAMTRAGRU DET Mayport, MTU 1022 NAMTRAU North Island

LOCATION	UIC	DATE	STUDENTS			CIV
		BEGIN	OFF	ENL		
NAS North Island	55138	(Note 2)	TBD	TBD	TBD	INPUT
			0	0		AOB
			0	0		CHARGEABLE

COURSE TITLE: Initial Training for CH-53E Squadron Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: CH-53E Squadrons

LOCATION	UIC	DATE	STUDENTS			CIV
		BEGIN	OFF	ENL		
CH-53E Squadrons (Note 4)	00000	Mar 05	TBD	TBD	TBD	INPUT
			0	0		AOB
			0	0		CHARGEABLE

COURSE TITLE: Initial Training for SH-60B Squadron Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: SH-60B Squadrons

LOCATION	UIC	DATE	STUDENTS			CIV
		BEGIN	OFF	ENL		
SH-60B Squadrons (Note 4)	00000	(Note 3)	TBD	TBD	TBD	INPUT
			0	0		AOB
			0	0		CHARGEABLE

Note 1. Initial training will be conducted 30 days prior to OT.

Note 2. Initial training will be conducted 45 days after OT.

Note 3. Initial training will be conducted 30 days prior to aircraft installation.

Note 4. Initial training for CH-53 and SH-60B squadron personnel will be conducted at each activity in conjunction with fleet introduction.

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

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

IV.C. Facility Requirements

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

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

IV.C.3. Facility Project Summary by Program

Note: The IMDS will not delete any existing training hardware or courseware requirements and will not generate any additional facility requirements. The IMDS represents only a very small portion of the overall CH-53E and SH-60B Training Logistics Support Requirements. Training Logistics Support Requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001, and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001. Therefore, only additions to existing training hardware and courseware requirements created as a result of the introduction of the IMDS are addressed in this NTSP.

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

CIN, COURSE TITLE: C-102-9945, CH-53A/D/E Communication/Navigation/Identification/Electronic Countermeasures Systems
(Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jan 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jan 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

001	CH-53E IMDS Special Tool Kit	1	Jan 05	CFE	Pending
-----	------------------------------	---	--------	-----	---------

CIN, COURSE TITLE: C-602-9441, CH-53E Electrical Systems Integrated Organizational Maintenance (Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jan 05	CFE	Pending
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011	IMDS GBS Software	1	Jan 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

001	CH-53E IMDS Special Tool Kit	1	Jan 05	CFE	Pending
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CIN, COURSE TITLE: C-602-9456, CH-53E Helicopter Mechanic Organizational Maintenance (Track M-601-2720)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jan 05	CFE	Pending
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011	IMDS GBS Software	1	Jan 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

001	CH-53E IMDS Special Tool Kit	1	Jan 05	CFE	Pending
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IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-603-9444, CH-53E Airframes Integrated Organizational Maintenance (Track M-602-2781)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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010	IMDS OBS Components (Individual Components are TBD)	1	Jan 05	CFE	Pending
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011	IMDS GBS Software	1	Jan 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

001	CH-53E IMDS Special Tool Kit	1	Jan 05	CFE	Pending
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CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track D-601-0813)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
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ST

015	High Speed Blade Balancing Kit	1	Jul 05	CFE	Pending
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CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track E-601-0813)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

015	High Speed Blade Balancing Kit	1	Jul 05	CFE	Pending
-----	--------------------------------	---	--------	-----	---------

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

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance
(Track D-102-0825)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
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011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance
(Track E-102-0825)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance
(Track D-602-0854)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance
(Track E-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance
(Track D-602-0882)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
-----	---	---	--------	-----	---------

011	IMDS GBS Software	1	Jul 05	CFE	Pending
-----	-------------------	---	--------	-----	---------

ST

002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance
(Track E-602-0882)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
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TTE

010	IMDS OBS Components (Individual Components are TBD)	1	Jul 05	CFE	Pending
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011	IMDS GBS Software	1	Jul 05	CFE	Pending
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002	SH-60B IMDS Special Tool Kit	1	Jul 05	CFE	Pending
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IV.A.2. TRAINING DEVICES

Note: The following CH-53E and SH-60B Training Devices will require modification to include components of the IMDS:

DEVICE: 2F171, CH-53 Aircrew Procedures Trainer (APT)
DESCRIPTION: The CH-53E APT provides the capability for procedure and proficiency training of Pilots and Copilots under both normal and emergency conditions in the operation, navigation, and communications of the CH-53E Helicopter in fulfillment of their designated missions. This device only provides training in a stationary environment.

MANUFACTURER: NAWCAD
CONTRACT NUMBER: N0001999WXBS92A
TEE STATUS: NA

TRAINING ACTIVITY: HMT 302
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	FY01	FY01	Pending	MC-1 MC-2 MC-3 MC-4 M-601-2722

DEVICE: 2F174, CH-53 Weapons System Trainer (WST)
DESCRIPTION: The CH-53E WST is used to train crewmembers in all modes of the operational aircraft's mission. The device simulates the response of the CH-53E controls, instruments, and systems, to include the aural, motion, and force-feel sensations. The device provides the capability for procedure and proficiency training of Pilots and Copilots under both normal and emergency conditions in the operation, navigation, and communications of the CH-53E Helicopter in fulfillment of the designated missions.

MANUFACTURER: Sperry Rand Corporation (Now Unisys Corporation)
CONTRACT NUMBER: N61339-79-C-0079
TEE STATUS: NA

TRAINING ACTIVITY: HMT 302
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	May 94	May 94	Onboard	MC-1 MC-2 MC-3 MC-4 M-601-2722

IV.A.2. TRAINING DEVICES

DEVICE: 2F135, SH-60B Operational Flight Trainer
DESCRIPTION: Device description is classified Secret.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: HSL-40
LOCATION, UIC: NS Mayport, 53913

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
2	Jan 86	Jan 86	Onboard	D-2C-2501 D-2C-2502 D-2C-2503 D-2C-2504

TRAINING ACTIVITY: HSL-41
LOCATION, UIC: NAS North Island, 55138

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
2	Jan 86	Jan 86	Onboard	E-2C-2501 E-2C-2502 E-2C-2503 E-2C-2504

IV.A.2. TRAINING DEVICES

DEVICE: 14B51, SH-60B Weapons Tactics Trainer
DESCRIPTION: Device description is classified Secret.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-84-C-0025
TEE STATUS: NA

TRAINING ACTIVITY: HSL-40
LOCATION, UIC: NS Mayport, 53913

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
3	Jan 85	Jan 85	Onboard	D-2C-2501 D-2C-2502 D-2C-2503 D-2C-2504 D-050-2505 D-050-2510 D-050-2511

TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: NAS North Island, 55138

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
2	Jan 85	Jan 85	Onboard	E-2C-2501 E-2C-2502 E-2C-2503 E-2C-2504 E-050-2505 E-050-2510 E-050-2511

IV.A.2. TRAINING DEVICES

DEVICE: 980531-1002-01, CH-53E Composite Maintenance Trainer
DESCRIPTION: The CH-53E Composite Maintenance Trainer provides practical training for the power plant, power train, flight control, hydraulic, and miscellaneous systems.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N0600-91-D-0419
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Oct 91	Oct 91	Onboard	C-602-9441, as part of Track M-102-2731 C-602-9456, as part of Track M-601-2720

DEVICE: 985031-5707-01, CH-53E AFCS Maintenance Trainer
DESCRIPTION: The CH-53E AFCS Maintenance Trainer is utilized to simulate the AFCS system and allow the maintenance technicians to learn proper troubleshooting procedures, component location, installation, removal, and system operation.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-014
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Mar 86	Mar 86	Onboard	C-602-9451, as part of Track M-102-2731

DEVICE: 980531-2401-01, CH-53E Auxiliary Power Plant Trainer
DESCRIPTION: The CH-53E Auxiliary Power Plant Trainer provides the equipment necessary for training technicians to maintain the CH-53E auxiliary power plant.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-047
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Sep 82	Sep 82	Onboard	C-602-9456, as part of Track M-601-2720

IV.A.2. TRAINING DEVICES

DEVICE: 980531-1502-01, CH-53 Rotor Head Trainer
DESCRIPTION: The Rotor Head Trainer is used to provide hands on training to Power Plants and Airframe Technicians for the removal, replacement, and alignment of Components on the rotor head.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-78-C-041
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 94	Jan 94	Onboard	C-602-9456, as part of Track M-601-2720 C-603-9444, as part of Track M-602-2781

DEVICE: 980531-7103-01, CH-53E Communication, Navigation, and Identification Systems Trainer
DESCRIPTION: The CH-53E Communication, Navigation, and Identification Systems Trainer provides Avionics Technicians training on the avionics systems used in the CH-53E Helicopter including system testing, troubleshooting, component removal, and replacement.
MANUFACTURER: EER Systems
CONTRACT NUMBER: Not Available
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Sep 96	Sep 96	Onboard	C-602-9441, as part of Track M-102-2731

DEVICE: 980531-4202-01, CH-53A/D Electrical Systems Trainer
DESCRIPTION: The CH-53E Electrical Systems Trainer provides Avionics Technicians training on the electrical systems of the helicopter including system testing, troubleshooting, component removal, and replacement.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-047
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Sep 85	Sep 85	Onboard	C-602-9441, as part of Track M-102-2731

IV.A.2. TRAINING DEVICES

DEVICE: CH-53D Practical Job Trainer
DESCRIPTION: The CH-53D Practical Job Trainer provides practical training for the power plant, power train, flight control, hydraulic, and miscellaneous systems.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: Not Available
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 94	Jan 94	Onboard	C-602-9456, as part of Track M-601-2720 C-603-9444, as part of Track M-602-2781

DEVICE: SH-60B AFCS Trainer
DESCRIPTION: The AFCS Trainer provides training on the stabilator system, analog stability augmentation system, and the electronic flight control system. Trainer applications include: demonstrations of principles of operation, practical application of testing, troubleshooting, servicing, removal and installation procedures, and student performance testing.

MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-102-9409 (Track D-102-0825) C-602-9409 (Track D-602-0855) C-602-9407 (Track D-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-102-9409 (Track D-102-0825) C-602-9409 (Track E-602-0855) C-602-9407 (Track D-602-0854)

IV.A.2. TRAINING DEVICES

DEVICE: SH-60B Avionics Maintenance Trainer
DESCRIPTION: The AMT provides training in the checkout, troubleshooting, and repair techniques essential to restore the SH-60B Avionics System to an operational readiness condition.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
1	Jan 84	Jan 84	Onboard	C-102-9406 (Track D-102-0820) C-102-9409 (Track D-102-0825) C-602-9407 (Track D-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
1	Jan 84	Jan 84	Onboard	C-102-9406 (Track E-102-0820) C-102-9409 (Track E-102-0825) C-602-9407 (Track E-602-0854)

DEVICE: SH-60 Composite Maintenance Trainer
DESCRIPTION: The CMT provides training for airframe, power plants, power train, hydraulics, flight controls, and instrument/indicating systems. Trainer applications include demonstrations of principles of operation, practical application of testing, troubleshooting, servicing, removal and installation procedures, and student performance testing.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

QTY	DATE	RFT	STATUS	COURSES
REQD	REQD	DATE		SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-603-9408 (Track D-602-0883) C-603-9407 (Track D-602-0882)

IV.A.2. TRAINING DEVICES

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-603-9408 (Track E-602-0883) C-603-9407 (Track E-602-0882)

DEVICE: SH-60 Main Blade/BIM Trainer
DESCRIPTION: The Main Blade/BIM Trainer provides training on the main blade and BIM systems. Trainer applications include: removal, installation, and servicing of the main rotor blade and BIM servicing.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-602-9407 (Track D-602-0854) C-603-9407 (Track D-602-0882)

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-602-9407 (Track E-602-0854) C-603-9407 (Track E-602-0882)

IV.A.2. TRAINING DEVICES

DEVICE: SH-60 Starboard Engine Part Task Trainer
DESCRIPTION: The Starboard Engine Part Task Trainer provides training on maintenance of the Engine Systems. Trainer applications include: demonstrations of starboard engine installation, interface, and control system adjustments, principles of operation, practical application of testing, and troubleshooting, servicing, removal and installation procedures, and student performance testing.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-602-9409 (Track D-602-0855) C-602-9407 (Track D-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
1	Jan 84	Jan 84	Onboard	C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-602-9409 (Track E-602-0855) C-602-9407 (Track E-602-0854)

IV.B. COURSEWARE REQUIREMENTS

IV.B.1. TRAINING SERVICES

COURSE/TYPE OF TRAINING	SCHOOL LOCATION, UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
Initial training for CH-53E OT personnel	HMT 302 MCAS New River 31493	4	8	Sep 02 (Complete)
Initial training for SH-60B OT personnel	HSL-41 FRS North Island 55138	25	1	See Note 1
Initial training for CH-53E cadre personnel	HMT 302 MCAS New River 55203	TBD	TBD	Feb 05
Initial training for SH-60B cadre personnel	HSL-41 FRS North Island 55138	25	1	See Note 2
Initial training for CH-53E squadron personnel	Fleet Squadron See Note 4	TBD	TBD	Mar 05
Initial training for SH-60B squadron personnel	Fleet Squadron See Note 4	25	1	See Note 3

Note 1: Initial training will be conducted 30 days prior to OT.

Note 2: Initial training will be conducted 45 days after OT.

Note 3: Initial training will be conducted 30 days prior to aircraft installation.

Note 4: Initial training for squadron personnel will be conducted at individual activities in conjunction with fleet introduction.

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

Note: Additional training materials will be required to support IMDS in the form of Lesson Plans (LP), Training Course Control Documents, Trainee Guide Book (TGB), tests with test plan, and possibly graphics and/or Interactive Multi Media Instruction (IMI). These materials are contracted for by the Program Manager, with inputs from NAMTRAGRU and provided to NAMTRAGRU. The IMDS will also create a requirement for training aids. All other curricula materials requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001, and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001 and, therefore, will not be duplicated in this NTSP.

IV.B.3. TECHNICAL MANUALS

Note: No new technical manuals will be developed to support the IMDS. No existing technical manuals will be deleted as a result of the IMDS. IMDS data will be incorporated into existing technical manuals. The following CH-53E and SH-60B technical manuals will require revision to include IMDS information.

CIN, COURSE TITLE: MC-1, CH-53 Basic Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter	Hard copy	14	Jun 99	Onboard
A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter	Hard copy	14	Jun 99	Onboard

CIN, COURSE TITLE: MC-2, CH-53 Transition Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter	Hard copy	12	Jun 99	Onboard
A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter	Hard copy	12	Jun 99	Onboard

CIN, COURSE TITLE: MC-3, CH-53 Conversion Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter	Hard copy	3	Jun 99	Onboard
A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter	Hard copy	3	Jun 99	Onboard

CIN, COURSE TITLE: MC-4, CH-53 Refresher Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter	Hard copy	3	Jun 99	Onboard
A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter	Hard copy	3	Jun 99	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: M-601-2722, CH-53E Crew Chief Training Syllabus
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53CE-MRC-100 CH-53E/MH-53E Turnaround Checklist, Organizational Maintenance instruction	Hard copy	40	Jun 99	Onboard
A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter	Hard copy	40	Jun 99	Onboard
A1-H53BE-NFM-900 NATOPS Aircrew Pocket Checklist, CH-53E Helicopter	Hard copy	40	Jun 99	Onboard

CIN, COURSE TITLE: D-2C-2501, SH-60B Category I Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: E-2C-2501, SH-60B Category I Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500	Hard copy	20	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

NATOPS Pilot's Pocket Checklist

A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
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A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard
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CIN, COURSE TITLE: D-2C-2502, SH-60B Category III Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: E-2C-2502, SH-60B Category III Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: D-2C-2503, SH-60B Category II Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: E-2C-2503, SH-60B Category II Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: D-2C-2504, SH-60B Category IV Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: E-2C-2504, SH-60B Category IV Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement)	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard
A1-H60BB-TAC-000 Weapon System Tactical Manual	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: D-050-2505, SH-60B Fleet Replacement Aircrewman Instructor Under Training
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: D-050-2505, SH-60B Fleet Replacement Aircrew Instructor Under Training

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard

IN, COURSE TITLE: D-050-2510, SH-60B Category I Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: D-050-2511, SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-700 NATOPS Functional Checklist	Hard copy	20	Jan 84	Onboard

CIN, COURSE TITLE: E-050-2511, SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-NFM-000 NATOPS Flight Manual	Hard copy	20	Jan 84	Onboard
A1-H60BB-NFM-010 Weapon System Manual	Hard copy	20	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H60BB-NFM-700 Hard copy 20 Jan 84 Onboard
 NATOPS Functional Checklist

CIN, COURSE TITLE: C-102-9945, CH-53A/D/E Communication/Navigation/Identification/Electronic Countermeasures Systems Organizational Maintenance, as part of Track M-102-2731

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53CE-570-000 Automatic Flight Control Systems	Hard copy	40	Oct 91	Onboard
A1-H53CE-570-200 Automatic Flight Control Systems	Hard copy	40	Oct 91	Onboard
A1-H53CE-570-400 Automatic Flight Control Systems	Hard copy	40	Oct 91	Onboard
A1-H53CE-600-000 Communication Systems	Hard copy	40	Oct 91	Onboard
A1-H53CE-600-400 Communication Systems (IPB)	Hard copy	40	Oct 91	Onboard
A1-H53CE-700-000 Navigation Systems	Hard copy	40	Oct 91	Onboard
A1-H53CE-700-400 Navigation Systems	Hard copy	40	Oct 91	Onboard

CIN, COURSE TITLE: C-602-9441, CH-53E Electrical Systems Integrated Organizational Maintenance, as part of Track M-102-2731

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53CE-220-000 Propulsion Systems Organizational Maintenance	Hard copy	40	Oct 91	Onboard
A1-H53CE-AML-000 Technical Manual	Hard copy	40	Oct 91	Onboard
A1-H53CE-420-000 Electrical Systems Organizational Maintenance	Hard copy	40	Oct 91	Onboard
A1-H53CE-420-100 Electrical Systems Principal of Operation	Hard copy	40	Oct 91	Onboard
A1-H53CE-420-200 Electrical Systems Testing and Troubleshooting	Hard copy	40	Oct 91	Onboard
A1-H53CE-420-400 Electrical System IPB	Hard copy	40	Oct 91	Onboard
A1-H53CE-500-000	Hard copy	40	Oct 91	Onboard

IV.B.3. TECHNICAL MANUALS

Instrument Systems Maintenance

A1-H53CE-500-400 Instrument System IPB	Hard copy	40	Oct 91	Onboard
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CIN, COURSE TITLE: C-602-9451, CH-53E Dual Digital Automatic Flight Control System Integrated Organizational Maintenance (Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53CE-570-000 Automatic Flight Control Systems Organizational Maintenance	Hard copy	40	Oct 91	Onboard
A1-H53BE-NFM-000 NATOPS Flight Manual	Hard copy	40	Oct 91	Onboard
A1-H53CE-140-000 Flight Control Systems Organizational Maintenance	Hard copy	40	Oct 91	Onboard
A1-H53CE-140-400 Flight Control Systems IPB	Hard copy	40	Oct 91	Onboard

CIN, COURSE TITLE: C-602-9456, CH-53E Helicopter Mechanic Organizational Maintenance (Track M-601-2720)

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53AD-140-000 Flight Control Systems Manual with IPB	Hard copy	30	Sep 93	Onboard
A1-H53AD-150-000 Rotor systems Manual with IPB	Hard copy	30	Sep 93	Onboard
A1-H53AD-260-000 Transmission Systems Manual with IPB	Hard copy	30	Sep 93	Onboard
A1-H53AD-GAI-000 General Aircraft Information	Hard copy	30	Sep 93	Onboard
A1-H53AD-IPB-450 Organizational and Intermediate Illustrated Parts Breakdown	Hard copy	30	Sep 93	Onboard
A1-H53CE-MRC-000 Periodic Maintenance Information Cards	Hard copy	30	Sep 93	Onboard
A1-H53CE-MRC-100 Turnaround Checklist	Hard copy	30	Sep 93	Onboard
A1-H53CE-MRC-300 Special/Conditional/Preservation/ASPA Maintenance Requirement Cards	Hard copy	30	Sep 93	Onboard
A1-H53CE-110-000 Airframe Systems Maintenance	Hard copy	30	Sep 93	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H53CE-140-000 Flight Control systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-140-100 Flight Control Systems POM	Hard copy	30	Sep 93	Onboard
A1-H53CE-140-400 Flight Control Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53CE-150-000 Rotor Systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-150-400 Rotor Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53CE-220-400 Propulsion Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53CE-260-000 Transmission Systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-260-400 Transmission Systems IPB	Hard copy	30	Sep 93	Onboard

CIN, COURSE TITLE: C-603-9444, CH-53E Airframes Integrated Organizational Maintenance (Track M-602-2781)
TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H53AD-110-000 Airframe System Maintenance with IPB	Hard copy	30	Jan 94	Onboard
A1-H53AD-140-000 Flight Control Systems Maintenance with IPB	Hard copy	30	Jan 94	Onboard
A1-H53CE-150-000 Rotor Systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-150-400 Rotor Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53CE-260-000 Transmission Systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-260-400 Transmission Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53CE-000-000 Utility Systems Maintenance	Hard copy	30	Sep 93	Onboard
A1-H53CE-400-400 Utility Systems IPB	Hard copy	30	Sep 93	Onboard
A1-H53AD-GAI-000 General Information Manual	Hard copy	30	Jan 94	Onboard
A1-H53CE-110-000 Airframe Maintenance Organizational Maintenance	Hard copy	30	Jan 94	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H53CE-140-000 Manual Flight Control Systems Organizational Maintenance	Hard copy	30	Jan 94	Onboard
A1-H53CE-150-000 Rotor Systems Organizational Maintenance	Hard copy	30	Jan 94	Onboard
A1-H53CE-220-000 Propulsion Systems Organizational Maintenance	Hard copy	30	Jan 94	Onboard
A1-H53CE-260-000 Transmission Systems Organizational Maintenance	Hard copy	30	Jan 94	Onboard
A1-H53CE-GAI-000 General Aircraft Information Manual Organizational Maintenance	Hard copy	30	Jan 94	Onboard
A1-H53CE-IPB-450 Numerical Index and Reference Designation Index Organizational Maintenance IPB	Hard copy	30	Jan 94	Onboard
A1-H53CE-SRM-000 Structural Repair Manual, Model CH53E	Hard copy	30	Jan 94	Onboard

CIN, COURSE TITLE: C-102-9406, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance (Track D-102-0820)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-690-400 Illustrated Parts Breakdown, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-400 Illustrated Parts Breakdown, Mission Equipment Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-400 Illustrated Parts Breakdown, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-400 Illustrated Parts Breakdown, Weapons Delivery Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-000 Periodic Maintenance Information Cards, Navy Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-100 Turnaround Checklist, Navy Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-300 Daily Maintenance Requirements Cards, Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-350 Special/Preservation/ASPA Maintenance Requirement Cards, Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual	Hard copy	8	Jan 84	Onboard
A1-H60BB-WDM-000 Wiring Data Manual, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-102-9406, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance (Track E-102-0820)
TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-690-400 Illustrated Parts Breakdown, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

A1-H60BB-720-400 Illustrated Parts Breakdown, Mission Equipment Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-400 Illustrated Parts Breakdown, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-400 Illustrated Parts Breakdown, Weapons Delivery Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-000 Periodic Maintenance Information Cards, Navy Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-100 Turnaround Checklist, Navy Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-300 Daily Maintenance Requirements Cards, Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60CA-MRC-350 Special/Preservation/ASPA Maintenance Requirement Cards, Model SH-60B	Hard Copy	8	Jan 84	Onboard
A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual	Hard copy	8	Jan 84	Onboard
A1-H60BB-WDM-000 Wiring Data Manual, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance (Track D-102-0825)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

IV.B.3. TECHNICAL MANUALS

LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-ATM-010 Avionics Test Manual Checklist, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual	Hard copy	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance (Track E-102-0825)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

A1-H60BB-ATM-010 Avionics Test Manual Checklist, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual	Hard copy	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-601-9408, SH-60F/HH-60H Power Plants and Related Systems (Initial) Organizational Maintenance (Track D-602-0810)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-510-100 Principles of Operation, Instrument Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index, Navy Model SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-690-100 Principles of Operation, Communications Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60CA-710-100 Principles of Operation, Navigation Systems, Navy Models	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

SH-60B, SH-60F, HH-60H, and HH-60J

A1-H60CA-740-100 Principles of Operation, Tactical Data Management Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-100 Turnaround Checklist, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-MRC-300 Daily Maintenance Requirements, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-601-9408, SH-60F/HH-60H Power Plants and Related Systems (Initial) Organizational Maintenance
(Track E-602-0810)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-510-100 Principles of Operation, Instrument Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index, Navy Model SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H60CA-690-100 Principles of Operation, Communications Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60CA-710-100 Principles of Operation, Navigation Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60CA-740-100 Principles of Operation, Tactical Data Management Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-100 Turnaround Checklist, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-MRC-300 Daily Maintenance Requirements, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track D-601-0813)
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-400 Phased Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, HH-60J	Hard copy	8	Jan 84	Onboard

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track E-601-0813)
TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

A1-H60CA-MRC-400 Hard copy 8 Jan 84 Onboard
 Phased Maintenance Requirements Cards, Navy Models SH-60B,
 SH-60F, HH-60H, HH-60J

CIN, COURSE TITLE: C-602-9409, H-60 Electrical/Instrument and Flight Control Systems (Initial) Organizational Maintenance
 (Track D-602-0855)
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60FB-420-100 Principles of Operation, Electrical Power and Aircraft Lighting Systems	IETM Format	8	Jan 84	Onboard
A1-H60FB-460-100 Principles of Operation, Fuel System	IETM Format	8	Jan 84	Onboard
A1-H60FB-510-100 Principles of Operation, Instrument Systems	IETM Format	8	Jan 84	Onboard
A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard
A1-H60FB-720-100 Principles of Operation, Mission Sensor Systems	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-602-9409, H-60 Electrical/Instrument and Flight Control Systems (Initial) Organizational Maintenance (Track E-602-0855)
TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B	Hard copy	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	IETM Format	8	Jan 84	Onboard
A1-H60FB-420-100 Principles of Operation, Electrical Power and Aircraft Lighting Systems	IETM Format	8	Jan 84	Onboard
A1-H60FB-460-100 Principles of Operation, Fuel System	IETM Format	8	Jan 84	Onboard
A1-H60FB-510-100 Principles of Operation, Instrument Systems	IETM Format	8	Jan 84	Onboard
A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard
A1-H60FB-720-100 Principles of Operation, Mission Sensor Systems	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance (Track D-602-0854)
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

and SH-60F

A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
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A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
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A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard
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CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance (Track E-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard

A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
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A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
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A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard
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CIN, COURSE TITLE: C-603-9408, H-60 Airframes and Related Systems (Initial) Organizational Maintenance (Track D-602-0883)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-110-100 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard

A1-H60BB-410-100 Principles of Operation, Environmental Control System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
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A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
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A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy	IETM Format	8	Jan 84	Onboard
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IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

A1-H60BB-SRM-400 Organizational and Intermediate Structural Repair, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60FB-410-100 Principles of Operation, Environmental Control Systems	IETM Format	8	Jan 84	Onboard
A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard

CIN, COURSE TITLE: C-603-9408, H-60 Airframes and Related Systems (Initial) Organizational Maintenance (Track E-602-0883)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-110-100 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-410-100 Principles of Operation, Environmental Control System, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-SRM-400 Organizational and Intermediate Structural Repair, Navy Model SH-60B	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard
A1-H60FB-410-100	IETM Format	8	Jan 84	Onboard

IV.B.3. TECHNICAL MANUALS

Principles of Operation, Environmental Control Systems

A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS	IETM Format	8	Jan 84	Onboard
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CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance (Track D-602-0882)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-110-000 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard

CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance (Track E-602-0882)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE:	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-H60BB-110-000 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F	IETM Format	8	Jan 84	Onboard
A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60	IETM Format	8	Jan 84	Onboard
A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J	Hard copy	8	Jan 84	Onboard



PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
CNO	Approved Mission Needs Statement for IMD	Jun 94	Completed
PDA	Conducted Initial Training for CH-53E and SH-60B IMDS DT	Sep 99	Completed
PDA	Began CH-53E and SH-60B IMDS DT	Sep 99	Completed
PEO(A)	Reached LRIP Decision for CH-53E IMDS	Aug 00	Completed
TSA	Developed Initial NTSP	Feb 01	Completed
PEO(A)	Reached LRIP Decision for SH-60B IMDS	Apr 01	Completed
TSA	Developed Draft NTSP	Aug 02	Completed
PDA	Conducted Technical Publication Validation and Verification	Aug 02	Completed
PDA	Achieve CH-53E IMDS IOC	Oct 02	Completed
PDA	Conduct Initial Training for CH-53E IMDS OT Personnel	Oct 02	Completed
TSA	Developed Proposed NTSP	Dec 02	Completed
PDA	Conduct Initial Training for SH-60B IMDS OT Personnel	Oct 03	Pending
PDA	Begin SH-60B IMDS OT	Oct 03	Pending
PDA	Conduct Initial Training for CH-53E IMDS Cadre Personnel	Sep 03	Pending
PDA	Conduct Initial Training for SH-60B IMDS Cadre Personnel	Sep 03	Pending
PDA	Achieve SH-60B IMDS IOC	May 04	Pending
PDA	Complete CH-53E IMDS DT	Jul 04	Pending
PDA	Begin CH-53E IMDS initial Fleet Introduction Training for Squadron Personnel	Feb 05	Pending
TA	Achieve RFT Date for CH-53E IMDS Follow-On Training	Mar 05	Pending
PDA	Complete CH-53E IMDS OT	Mar 05	Pending
PDA	Begin SH-60B IMDS Initial Fleet Introduction Training for Squadron Personnel	Aug 05	Pending
PDA	Complete SH-60B IMDS OT	Sep 05	Pending
TA	Achieve RFT Date for SH-60B IMDS Follow-On Training	Sep 05	Pending
PDA	Achieve IMDS NSD	FY06	Pending
PDA	Achieve IMDS MSD	TBD	Pending
TSA	Begin Modification of TDs at IMDS Training Sites	TBD	Pending
TSA	Deliver IMDS TTE to Follow-On Training Sites	TBD	Pending
TSA	Deliver STs to IMDS Follow-On Training Sites	TBD	Pending
TSA	Deliver Updated Technical Publications to Follow-On Training Sites	TBD	Pending



PART VI - DECISION ITEMS / ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
No Decision Items or Action required at this time.			



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PART VII - POINTS OF CONTACT

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