APPROVED

NAVY TRAINING SYSTEM PLAN

FOR THE

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE

AND THE

A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

N88-NTSP-A-50-8110C/A

JUNE 1998

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE AND THE A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

EXECUTIVE SUMMARY

The A/S 32A-35 Aircraft Carrier Crash Crane (CVCC) and A/S 32A-36 Amphibious Assault Crash Crane (AACC) are self-propelled, four-wheel drive, diesel-electric powered, shipboard, aircraft salvage cranes. The A/S 32A-35 CVCC and A/S 32A-36 AACC, referred to as the CVCC and AACC respectively, replaced the NS-60/50 and HCC-30/50 cranes, respectively. Initial Operating Capability (IOC) for the AACC was achieved in April 1989 and the CVCC in January 1993. The CVCC and AACC are in Phase III, the Production, Fielding and Deployment, and Operational Support Phase of the Weapon System Acquisition Process.

The CVCC and AACC will be upgraded with an Engineering Change Proposal (ECP) to modify the motor drive system and related systems. The Developmental Test (DT) for the modifications began in March 1996 at Naval Air Warfare Center Aircraft Division, Patuxent River, Maryland, and was completed in June 1997. After installation of ECP-11, approved for fleet introduction on 5 July 1996, the crash cranes' designators will change to A/S 32A-35A CVCC and A/S 32A-36A AACC.

The CVCC and AACC are operated and maintained at the organizational maintenance level by Aviation Boatswain's Mate (Aircraft Handling) personnel. Intermediate level maintenance is performed by Aviation Support Equipment Technicians at Aircraft Intermediate Maintenance Departments (AIMDs). Depot level maintenance is performed by DynCorp at NAS North Island, California. The introduction of the CVCC and AACC or ECP-11 does not drive any change to operator and maintenance manpower for their exclusive support. Because CVCC and AACC are similar in design to their predecessor units, no change to shipboard manpower is required.

Initial training for the CVCC and the AACC was provided by the manufacturer and has been completed. Initial training for the ECP-11 Crash Crane Motor Drive System Modifications was provided by Lake Shore, Inc., in January 1998 at NAS North Island, and at NAS Jacksonville in September 1997. The Naval Aviation Engineering Service Unit (NAESU) representatives provide operator and basic maintenance site activation training for fleet activities receiving the crash cranes. Depot level personnel will receive initial training from NAESU upon request. Follow-on training is on-line and consists of an operator and organizational maintenance course for each crane, and an intermediate level maintenance course for both cranes.

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE AND THE A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

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LIST OF ACRONYMS

AACC	Amphibious Assault Crash Crane
ABH	Aviation Boatswain's Mate (Aircraft Handling)
ACDU	Active Duty
AIMD	Aircraft Intermediate Maintenance Department
AMIST	Aviation Maintenance In-Service Training
AMTCS	Aviation Maintenance Training Continuum System
AOB	Average On Board
ATIR	Annual Training Input Requirements
AS	Aviation Support Equipment Technician
BUPERS	Bureau of Naval Personnel
CBT	Computer-Based Training
CFE	Contractor Furnished Equipment
CIN	Course Identification Number
CINCLANTFLT	Commander-In-Chief, Atlantic Fleet
CINCPACFLT	Commander-In-Chief, Pacific Fleet
CNET	Commander Naval Education and Training
CNO	Chief of Naval Operations
COMNAVAIRESFOR	Commander Naval Air Reserve Force
CV	Aircraft Carrier
CVCC	Aircraft Carrier Crash Crane
CVN	Aircraft Carrier, Nuclear
DT	Developmental Test
ECP	Engineering Change Proposal
GFE	Government Furnished Equipment
GPTE	General Purpose Test Equipment
GPETE	General Purpose Electronic Test Equipment
HFC	Hydro-Florid Carbons
ILSP	Integrated Logistics Support Plan
IOC	Initial Operational Capability

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE AND THE A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

LIST OF ACRONYMS

IPB	Illustrated Parts Breakdown
LHA	Amphibious Assault Ship (General Purpose)
LHD	Amphibious Assault Ship (Multi-Purpose)
MPT	Manpower, Personnel, and Training
MSD	Material Support Date
MTIP	Maintenance Training Improvement Program
MTU	Maintenance Training Unit
NA	Not Applicable
NAESU	Naval Aviation Engineering Services Unit
NAMTRAGRU DET	Naval Air Maintenance Training Group Detachment
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAWCAD	Naval Air Warfare Center Aircraft Division
NEC	Navy Enlisted Classification
NSD	Navy Support Date
NTSP	Navy Training System Plan
OPNAV	Office of the Chief of Naval Operations
OPO	OPNAV Principal Official
PFY	Previous Fiscal Year
PMA	Program Manager, Air
PMOS	Primary Military Occupational Specialty
PNEC	Primary Navy Enlisted Classification Code
PQS	Personnel Qualification Standards
RFT	Ready For Training
ROR	Repair of Repairables
SMOS	Secondary Military Occupational Specialty
SPETE	Special Purpose Electronic Test Equipment
SPTE	Special Purpose Test Equipment
ST	Standard Test

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE AND THE A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

LIST OF ACRONYMS

TD	Technical Device
TTE	Technical Training Equipment
UIC	Unit Identification Code
USS	United States Ship
WPNSTA	Weapon Station

A/S 32A-35 AIRCRAFT CARRIER CRASH CRANE
AND THE
A/S 32A-36 AMPHIBIOUS ASSAULT CRASH CRANE

PREFACE

This Approved Navy Training System Plan (NTSP) updates the A/S 32A-35 Aircraft Carrier Crash Crane (CVCC) and A/S 32A-36 Amphibious Assault Crash Crane (AACC) Draft Navy Training System Plan, A-50-8110C/D, dated December 1997. This version updates the equipment delivery schedule, Initial Operational Capability (IOC) date, Navy Support Date (NSD), and the manpower and training required to support the crash cranes and course requirements. This version also reflects the current points of contact.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE- PROGRAM

1. Nomenclature-Title- Acronym. A/S 32A-35 Aircraft Carrier Crash Crane (CVCC) and A/S 32A-36 Amphibious Assault Crash Crane (AACC)

2. Program Element. 24161N

B. SECURITY CLASSIFICATION

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

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor ..... CNO (N881C)

OPO Resource Sponsor ..... CNO (N881C)

Developing Agency (DA) ..... NAVAIRSYSCOM (PMA260)

Training Agency (TA) ..... CINCLANTFLT
CINCPACFLT
CNET

Training Support Agency (TSA) ..... NAVAIRSYSCOM (PMA205)
NAWCAD Lakehurst (3.4.1)

Manpower and Personnel (MP) Mission Sponsor ..... CNO (N12)BUPERS
(PERS-4, PERS-04)

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

D. SYSTEM DESCRIPTION

1. Operational Uses. The purpose of the A/S 32A-35 CVCC and A/S 32A-36 AACC, from here on referred to as CVCC and AACC respectively, is to remove crash damaged aircraft from the flight deck to allow other aircraft to land safely. This task must be performed quickly with minimal damage to the ship or aircraft.

The CVCC is used to remove damaged or disabled aircraft from the flight deck of aircraft carriers. The AACC removes damaged or disabled aircraft aboard the Navy's Amphibious Assault Ship "General Purpose" (LHA) and Amphibious Assault Ship "Multi-Purpose" (LHD) class ships. Additionally, the AACC is to be used to lower and recover liberty launches, assault boats, and vehicle ramps, as well as perform a variety of over-the-side handling tasks aboard LHA and LHD ships.

The CVCC and AACC will be upgraded with Engineering Change Proposal (ECP)-11, Crash Crane Motor Drive System Modifications approved for fleet introduction on 5 July 1996. After installation of this ECP the crash cranes designators will change to A/S 32A-35A and A/S 32A-36A.

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

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST. Naval Air Warfare Center Aircraft Division (NAWCAD) Patuxent River conducted Developmental Test (DT) and fleet compatibility testing for both cranes. The DT for the AACC began in March 1987 and was completed in March 1989. The initial DT for the CVCC began in July 1987 and was halted in July 1988 due to design revisions and upgrades. The CVCC DT resumed in June 1990 and was completed in May 1992. An Operational Test was not scheduled.

The DT for ECP-11 Crash Crane Motor Drive System Modifications began in March 1996 and was completed in June 1997. The DT was conducted at NAWCAD Patuxent River, Maryland. Refer to Part III.A.1 of this NTSP for initial training requirements.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. The CVCC replaced the NS-60/50 on board aircraft carriers. The AACC replaced the HCC-30/50 on board amphibious assault ships. ECP-11 replaces the motor drive control system, including the motor drive cabinets and their contents, as well as replacement or modification of related components and the Luff Hoist Motor.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. The CVCC and AACC are self-propelled, four-wheel drive, diesel-electric powered vehicles mounted on pneumatic rubber tires. They are capable of operating aboard ship in inclement weather. They are required to lift crashed or damaged aircraft from various locations and attitudes on a pitching and rolling deck to a designated area within a safe parking zone. These cranes are capable of operating without degradation during moderate sea conditions.

2. Physical Description. The CVCC has a 65,000 pound maximum dynamic lift and roll capacity at a clear outreach of 17.5 feet with a 25 foot minimum hook lifting height. It is located aft of the island with the boom hanging outboard of the ship.

The AACC has a 50,000 pound maximum dynamic lift and roll capacity at a clear outreach of 20 feet with a 25-foot minimum hook lifting height. It has a 70,000 pound capacity at a clear outreach of 13.5 feet with a minimum 25-foot hook lifting height. The hoist drum is sized to provide a vertical hook movement of 97 feet. It is located aft of the island with the boom hanging outboard of the ship.

PHYSICAL CHARACTERISTICS OF THE A/S 32A-35 AND A/S 32A-36

CHARACTERISTICS	**A/S 32A-35**	**A/S 32A-36**
Length, Less Boom (max.)	34 ft.	30 ft.
Width (max.)	15 ft.	15 ft.
Height at Rated Outreach (max.)	33.5 ft.	33 ft.
Ground Clearance (min.)	9 in.	12 in.
Turning Radius (max.)	30 ft.	30 ft.
Max. Operating Weight (no load)	132,500 lb.	90,000 lb.
Travel Speed Range (no load)	0-5 mph	0-5 mph
Travel Speed Range (max. load)	0-3 mph	0-3 mph
Hook Lifting Speed Range (max. load)	20 fpm	20 fpm
Power Load Lowering Capability	0-10±1 fpm	0-10+1 fpm
Fuel Type	JP5 and VVF-800DF	JP5 and VVF-800DF
Maximum Lift Capacity with Rear Anchored (Boom Hook)	105,000 lb.	105,000 lb.
Engine	Detroit Diesel 6V-92-TAB	Detroit Diesel 6V-92-TAB

3. New Development Introduction. The CVCC and AACC are new production cranes. The ECP-11 Crash Crane Motor Drive System Modifications will be retrofitted by the production contractor, Lake Shore, Inc., and the commercial depot facility, DynCorp, North Island, California, with the completion of all cranes in FY99.

4. Significant Interfaces. NA.

5. New Features, Configurations, or Material. ECP-11 is being introduced to both CVCC and AACC due to frequent break downs of systems. The ECP-11 Crash Crane Motor Drive System Modifications for both crash cranes consists of the removal and replacement of the motor drive control system, including the motor drive cabinets and their contents, as well as the replacement or modification of related components and the Luff Hoist Motor on the AACC. Due

to high humidity and excessive operating temperatures, the motor drive cabinets will be equipped with a cooling system upgraded to HFC-134 refrigerant and a dehumidifier. To increase reliability, the existing hydro-mechanically actuated load cell will be replaced with a solid state strain gage load pin. The AACC will also be equipped with a load-on-hook display which provides the operator with safety information.

H. CONCEPTS

1. Operational Concept. The CVCC and AACC are operated by personnel from the Aviation Boatswain's Mate (Aircraft Handling) (ABH) rating. While afloat, each crane requires one operator and one director during operation. Emergencies that necessitate the removal of crash, fire, or mishap damaged aircraft require four additional personnel from the V-1 Division.

2. Maintenance Concept. The CVCC and AACC are maintained at the three levels of maintenance outlined in the Naval Aviation Maintenance Program, OPNAVINST 4790.2G.

a. Organizational. ABH personnel perform organizational level maintenance.

(1) Preventive Maintenance. Preventive maintenance consists of preoperational inspections, cleaning, preservation, minor corrosion control, and required servicing and maintenance per the Periodic Maintenance Requirement Cards and the NAVAIR-01-1A-509 Aircraft Weapons Systems Cleaning and Corrosion Control Manual.

(2) Corrective Maintenance. NA.

b. Intermediate. Intermediate level maintenance is performed by personnel from the Aviation Support Equipment Technician (AS) rating assigned to the Aircraft Intermediate Maintenance Department (AIMD) Work Center 900 and consists of preventive and corrective maintenance including removal, replacement, and repair of defective components, as well as corrosion control.

c. Depot. Depot level maintenance consists of the repair of items beyond the intermediate maintenance capability including unit overhaul. Depot level maintenance on the CVCC and AACC is performed by a commercial depot facility, DynCorp, North Island. The Navy Support Date (NSD) for the CVCC and AACC was January 1998. The NSD for the ECP-11 Crash Crane Motor Drive System Modifications modified A/S 32A-35A and A/S 32A-36A is May 2000.

d. Interim Maintenance. Interim Maintenance will be provided through the Interim Contract Support warehouse until a Material Support Date (MSD) is reached. No MSD date has been determined at this time.

e. Life-Cycle Maintenance Plan. The CVCC and AACC will be overhauled at the discretion of the individual activity. There is no scheduled overhaul plan for these cranes.

3. Manning Concept. The CVCC and AACC do not drive operator and maintenance manpower for their exclusive support. Because the CVCC and AACC are similar in design to their predecessor units, no increase to current shipboard manpower is required.

The CVCC and AACC do not require dedicated watchstation manning around the clock as in readiness condition III, but will be in standby or active standby during flight operations. The minimum manpower required to operate the CVCC and AACC is shown below. There is no specific Navy Enlisted Classification (NEC) for the CVCC or AACC operation. Crash crane maintenance is performed by a minimum of two AS personnel with the NEC 7617, Crash and Material Handling Technician (Sea). Operator and maintainer billets are currently in place aboard aircraft carriers and amphibious assault ships.

MINIMUM MANNING REQUIRED TO OPERATE CVCC AND AACC UNITS

RATING	POSITION	QUANTITY
ABH	Operator	1
ABH	Director	1
ABH	Safety Observer	2
ABH	Line Handler	2

4. Training Concept. Initial training for the CVCC and the AACC was provided by the manufacturer and has been completed. Initial training for the ECP-11 Crash Crane Motor Drive System Modifications was provided by Lake Shore, Inc., in January 1998 at NAS North Island, and at NAS Jacksonville in September 1997. The Naval Aviation Engineering Service Unit (NAESU) representatives provide operator and basic maintenance site activation training for fleet activities receiving the crash cranes. Follow-on training is on-line and consists of an operator and organizational maintenance course for each crane, and an intermediate level maintenance course for both cranes.

a. Initial Training. Several initial training courses for the CVCC and the AACC were conducted by Lake Shore, Inc., between April 1987 and August 1993. Operation and maintenance training for one or both crash cranes was provided to DT personnel, NAESU representatives, Naval Air Maintenance Training Unit Detachment (NAMTRAGRU DET) instructors, and aircraft firefighting school instructors. Initial training for depot level maintenance of both crash cranes was provided to Weapon Station (WPNSTA) Concord, California, personnel. (Depot level maintenance is now performed by DynCorp, North Island.) In addition, a special course for the Motor Drive Cabinet maintenance training was conducted for NAMTRAGRU DET instructors, as well as NAESU and intermediate maintenance personnel.

Initial training for the ECP-11 Crash Crane Motor Drive System Modifications was provided to DT and NAESU personnel by Lake Shore, Inc., in December 1995. A second initial training course was conducted for NAMTRAGRU DET instructors, and NAESU personnel

in January 1998 at Maintenance Training Unit (MTU) 3033 NAMTRAGRU DET, North Island, California, and at MTU 3032 NAMTRAGRU DET, Jacksonville, Florida in September 1997. A third and final initial training course was conduct for NAMTRAGRU DET instructors, and NAESU personnel in March 1998 at MTU 3033 NAMTRAGRU DET, North Island. Initial training to depot personnel will be conducted by NAESU upon request.

Title	**Crash Crane Modifications Intermediate Maintenance**
Description	This course provides NAMTRAGRU DET instructors and NAESU personnel with the Crash Crane Motor Drive System Modifications information needed to teach intermediate maintenance on the modified A/S 32A-35A CVCC and the A/S 32A-36A AACC.
Locations	MTU 3033, NAMTRAGRU DET North Island MTU 3032, NAMTRAGRU DET Jacksonville
Length	5 days
RFT dates	Jan 98 at MTU 3033 (complete) Sep 97 at MTU 3032 (complete)
TTE/TD	A/S 32A-35A CVCC (with modifications) A/S 32A-36A AACC (with modifications)
Prerequisite	AS 7617/9502

b. Follow-on Training. Local AIMDs provide operator and organizational level maintenance training for fleet personnel using ship's assets. Two courses, C-600-3330 and C-600-3219, were developed by NAMTRAGRU Headquarters and distributed to user activities.

Follow-on intermediate level maintenance training is currently taught at MTU 3033, NAMTRAGRU DET North Island, and MTU 3032, NAMTRAGRU DET Jacksonville. A new training track, D/E-602-7060 will be established which contains a new course, C-602-3307A, for intermediate level maintenance on both crash cranes and a new course, C-602-3263, for aviation support equipment electrical systems. The crash crane intermediate maintenance course, C-602-3307A, will also be updated with ECP-11 Crash Crane Motor Drive System Modifications information prior to fleet installations of the A/S 32A-35A and A/S 32A-36A. These courses are currently on hold pending publication rewrite, followed by course rewrite. RFT dates will be incorporated into future updates to this NTSP. While these courses are awaiting rewrite, MTU 3033 and MTU 3032 will continue to administer the intermediate level maintenance course, C-602-3280, for the AACC and the intermediate level maintenance course, C-602-3289, for the CVCC. In addition to these formal training courses, NAESU personnel conduct on-site operator and Motor Drive Cabinet training when requested.

(1) Operator

Title	**A/S 32A-35 CVCC Operator Training**
CIN	C-600-3219
Model Manager ...	NAMTRAGRU Headquarters
Description	This course provides the skills and knowledge to operate the CVCC Crash Handling and Salvage Crane.
Locations	Local AIMDs
Length	5 days
RFT date	On-line
Skill identifier	ABH
TTE/TD	CVCC (local assets)
Prerequisites.....	C-822-2010, Aviation Boatswain's Mate Aircraft Handling ABH Class A1, and rated ABH3 and above

Title	**A/S 32A-36 AACC Operator Training**
CIN	C-600-3330
Model Manager ...	NAMTRAGRU Headquarters
Description	This course provides fleet personnel with the skills and knowledge to operate the AACC Crash Handling and Salvage Crane.
Locations.....	Local AIMDs
.	
Length	5 days
RFT date	On-line
Skill identifier	ABH
TTE/TD	AACC (local assets)
Prerequisites.....	C-822-2010, Aviation Boatswain's Mate Aircraft Handling ABH Class A1,and rated ABH3 and above

(2) Maintenance

Title	**(Afloat) Crash and Material Handling Equipment Intermediate Maintenance**
CIN	D/E-602-7060
Model Manager ...	NAMTRAGRU DET Jacksonville

Description	This track defines the minimum required courses to assignment of (afloat) crash and material handling equipment intermediate maintenance NEC-7617
Locations	MTU 3033, NAMTRAGRU DET North Island
	MTU 3032, NAMTRAGRU DET Jacksonville
Length	37 days
RFT date	RFT
Skill identifier	AS NEC 7617
TTE/TD	AACC and CVCC (local assets)
Prerequisites.....	C-602-2026, Aviation Support Equipment Technician Class A1 or equivalent fleet experience

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
ABH	C-822-2010, Aviation Boatswain's Mate Aircraft Handling ABH Class A1, or ABH3 and above
AS 7617	C-602-2026, Aviation Support Equipment Technician Class A1 D/E-602-7060 (Afloat) Crash and Material Handling Equipment Intermediate Maintenance

d. Training Pipelines. In March 1994, a Maintenance Training Requirements Review was convened and a decision was made to combine two separate courses, C-602-3289 and C-602-3280, into a single course for intermediate level maintenance. Training track, D/E-602-7060, has been established and is currently RFT, utilizing courses C-602-3289 and C-602-3280 until the A/S-32A/35 and A/S-32A/36 Crash Crane Intermediate Maintenance, C-602-3307A, and Aviation Support Equipment Technician Electrical, C-602-3263, courses are rewritten.

I. ON-BOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development

a. Maintenance Training Improvement Program. NA.

b. Aviation Maintenance In-Service Training. The Aviation Maintenance In-Service Training (AMIST) is intended to support the Fleet training requirements now satisfied by Maintenance Training Improvement Program (MTIP), and in that sense is the planned

replacement. However, it is structured very differently, and will function as an integral part of the new Aviation Maintenance Training Continuum System (AMTCS) that will replace the existing aviation maintenance training structure. AMIST will provide standardized instruction to bridge gaps between initial and career training. With the implementation of AMIST, technicians will be provided the training required to maintain a level of proficiency necessary to effectively perform the required tasks to reflect career progression.

The AMTCS redesigns the aviation training process (training continuum), and introduces Computer-Based Training (CBT), projected in FY02 for crash cranes, throughout the Navy technical training process. The application and adoption of recent advances in computer hardware and software technology have enabled CBT, with its basic elements of Computer Managed Instruction, Computer Aided Instruction, and Interactive Courseware, to be integrated into the training continuum and provide essential support for standardizing technical training.

2. Personnel Qualification Standards. The Personnel Qualification Standards (PQS) for Air Department Handling requirements have been updated to reflect the CVCC and AACC requirements for operators. The PQS is managed by the PQS Development Group of the Naval Education and Training Professional Development Technology Center, Pensacola, Florida.

3. Other On-Board or In-Service Training Packages. The designated Aircraft Fire Fighting and Salvage Specialist, NEC 7011, provides training to members of the crash and rescue crews through use of drills and informal training, per the Naval Air Training and Operating Procedures Standardization Manual NAVAIR-00-80R-14 and local command instructions. Refer to the Aircraft Rescue Fire Fighting Training Program NTSP, A-50-8704B/A.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N00019-86-C-0028	Lake Shore, Inc.	Iron Mountain, Michigan

2. Program Documentation. The latest Integrated Logistics Support Plan (ILSP) for the CVCC and AACC, ILSP-CSE-0377, Revision B, was updated and approved in May 1988.

3. Technical Data Plan. Technical manuals covering operation and intermediate maintenance instructions with Illustrated Parts Breakdown (IPB) have been validated and verified for the CVCC and the AACC. These manuals are available through the Naval Air Technical Services Facility. Technical manuals will be updated with the ECP-11 Crash Crane Motor Drive System Modifications information and distributed with each kit.

4. Test Sets, Tools, and Test Equipment. Preventive and corrective maintenance for the CVCC and the AACC are performed with common hand tools and special tools. Special tools are currently available through normal supply channels.

5. Repair Parts. Repair parts may be obtained from the Naval Inventory Control Point. A ROR contract is available through the contractor until MSD date is met. Augmented support is provided through the Support Material List. The MSD was established January 1998.

6. Human Systems Integration. NA.

K. SCHEDULES

1. Schedule of Events

a. Installation and Delivery Schedules. The AACC was first delivered in April 1989 for installation on LHD ships. Delivery of the CVCC began in January 1993 for carrier installations. Delivery of the AACC for LHA ships to began in February 1998 and should be completed by the end of March 1999. However, ship alterations must be completed prior to installation of the AACC on LHAs. The ECP-11 Crash Crane Motor Drive System Modifications kits were delivered in September 1997 to NAMTRAGRU DET Jacksonville, and began installation in November 1997 at a rate of two kits per month. In January 1998, NAMTRAGRU DET North Island received and installed ECP-11 Crash Crane Motor Drive System Modifications. DynCorp, North Island, will install ECP-11 at each crane location.

One CVCC and one AACC were delivered to NAWCAD Patuxent River in February 1987 for DT testing. Initial Operational Capability (IOC) was successfully completed in March 1998. The Crash Crane Motor Drive System Modifications will be completed 18 months after IOC.

AIRCRAFT CARRIERS	DATE
CV-62 USS INDEPENDENCE	FY96
CV-63 USS KITTY HAWK	FY94
CV-64 USS CONSTELLATION	FY94
CVN-65 USS ENTERPRISE	FY95
CV-67 USS JOHN. F. KENNEDY	FY96
CVN-68 USS NIMITZ	FY95
CVN-69 USS DWIGHT D. EISENHOWER	FY94
CVN-70 USS CARL VINSON	FY94
CVN-71 USS THEODORE ROOSEVELT	FY94
CVN-72 USS ABRAHAM LINCOLN	FY94
CVN-73 USS GEORGE WASHINGTON	FY94
CVN-74 USS JOHN C. STENNIS	FY95

AIRCRAFT CARRIERS	DATE
CVN-75 USS HARRY S. TRUMAN	FY98

AMPHIBIOUS ASSAULT SHIPS	DATE
LHD-1 USS WASP	FY92
LHD-2 USS ESSEX	FY93
LHD-3 USS KEARSARGE	FY94
LHD-4 USS BOXER	FY95
LHD-5 USS BATAAN	FY97
LHD-6 USS BONHOMME RICHARD	FY99
LHA-1 USS TARAWA	FY99
LHA-2 USS SAIPAN	FY99
LHA-3 USS BELLEAU WOOD	FY99
LHA-4 USS NASSAU	FY99
LHA-5 USS PELELIU	FY99

b. Ready For Operational Use Schedule. The CVCC and AACC are Ready For Operational Use upon assembly and delivery to the ship as scheduled above.

c. Time Required to Install at Operational Sites. The ECP-11 Crash Crane Motor Drive System Modifications kits will take approximately one month to install.

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

e. Training Device and Delivery Schedule. One A/S 32A-35 and one A/S 32A-36 are used as TTE at MTU 3032 and MTU 3033. One A/S 32A-35A was delivered in September 1997 to MTU 3032 and one A/S 32A-36A was delivered in March 1998 to MTU 3033. An additional A/S 32A-35A and A/S 32A-36A will be delivered to the MTUs in FY98 as depicted in the table below. This will allow students to train on both crane models and series. The remaining A/S 32A-35 and A/S 32A-36 used as TTE will be modified with ECP-11 after all other deliveries have been completed.

ACTIVITY	EQUIPMENT	DATE	STATUS
NATTC Pensacola	A/S 32A-36 A/S 32A-35 A/S 32A-36A A/S 32A-35A	Oct 89 Oct 96 FY98 FY98	Delivered Delivered
MTU 3032, NAMTRAGRU DET Jacksonville	A/S 32A-36 A/S 32A-35 A/S 32A-36A A/S 32A-35A	Nov 89 Nov 93 Mar 98 Sep 97	Delivered Delivered Delivered Delivered
MTU 3033, NAMTRAGRU DET North Island	A/S 32A-36 A/S 32A-35 A/S 32A-36A A/S 32A-35A	Sep 89 Dec 93 FY98 FY98	Delivered Delivered

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
ILSP for the Aircraft Crash Handling and Salvage Cranes	ILSP-CSE-0377:RB	PMA251	Approved May 88
A/S 32P-25 Shipboard Fire Fighting Vehicle	N88-NTSP-A-50-9302A/D	PMA251	Draft Feb 98
Aircraft Rescue Fire Fighting Training Program	N88-NTSP-A-50-8704B/A	PMA251	Approved Feb 98

PART II - BILLET AND PERSONNEL REQUIREMENTS

II.A. BILLET REQUIREMENTS

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

SOURCE: NAWCADLKE **DATE:** 1/1/98

ACTIVITY, UIC		PFYs	FY98	FY99	FY00	FY01	FY02
FLEET SUPPORT ACTIVITIES	NAVY						
CV 67 USS John F. Kennedy	03367	1	0	0	0	0	0
CVN 65 USS Enterprise	03365	1	0	0	0	0	0
CVN 69 USS Eisenhower	03369	1	0	0	0	0	0
CVN 71 USS Roosevelt	21247	1	0	0	0	0	0
CVN 73 USS George Washington	21412	1	0	0	0	0	0
CVN 74 USS John C. Stennis	21847	1	0	0	0	0	0
CVN 75 USS Harry S. Truman	21853	1	0	0	0	0	0
LHA 2 USS Saipan	20632	1	0	0	0	0	0
LHA 4 USS Nassau	20725	1	0	0	0	0	0
LHD 1 USS Wasp	21560	1	0	0	0	0	0
LHD 3 USS Kearsarge	21700	1	0	0	0	0	0
LHD 5 USS Bataan	21879	1	0	0	0	0	0
LHD 6 USS Bonhomme Richard	22202	0	1	0	0	0	0
NAS Key West	44320	1	0	0	0	0	0
CV 62 USS Independence	03362	1	0	0	0	0	0
CV 63 USS Kitty Hawk	03363	1	0	0	0	0	0
CV 64 USS Constellation	03364	1	0	0	0	0	0
CVN 68 USS Nimitz	03368	1	0	0	0	0	0
CVN 70 USS Carl Vinson	20993	1	0	0	0	0	0
CVN 72 USS Abraham Lincoln	21297	1	0	0	0	0	0
LHA 1 USS Tarawa	20550	1	0	0	0	0	0
LHA 3 USS Belleau Wood	20633	1	0	0	0	0	0
LHA 5 USS Pelleiu	20748	1	0	0	0	0	0
LHD 2 USS Essex	21533	1	0	0	0	0	0
LHD 4 USS Boxer	21808	1	0	0	0	0	0
TOTAL:		24	1	0	0	0	0

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

ACTIVITY, UIC, PHASING INCREMENT		BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES	NAVY					
CV 67 USS John F. Kennedy, 03367						
ACDU		0	1	AS1	7617	
		0	1	AS3	7615	7617
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	4			
CVN 65 USS Enterprise, 03365						
ACDU		0	1	AS1	7617	
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	3			
CVN 69 USS Eisenhower, 03369						
ACDU		0	1	AS1	7617	
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	3			
CVN 71 USS Roosevelt, 21247						
ACDU		0	1	AS1	7617	
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	3			
CVN 73 USS George Washington, 21412						
ACDU		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	2			
CVN 74 USS John C. Stennis, 21847						
ACDU		0	1	AS1	7617	
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	3			
CVN 75 USS Harry S. Truman, 21853						
ACDU		0	1	AS1	7617	
		0	2	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	4			

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
LHA 2 USS Saipan, 20632					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHA 4 USS Nassau, 20725					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHD 1 USS Wasp, 21560					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	5			
LHD 3 USS Kearsarge, 21700					
ACDU	0	1	AS1	7617	
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHD 5 USS Bataan, 21879					
ACDU	0	1	AS1	7617	
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHD 6 USS Bonhomme Richard, 22202, FY98 Increment					
ACDU	0	1	AS1	7617	
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
NAS Key West, 44320					
ACDU	0	1	AS3	7617	
TOTAL:	0	1			

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
CV 62 USS Independence, 03362					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
CV 63 USS Kitty Hawk, 03363					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
CV 64 USS Constellation, 03364					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
CVN 68 USS Nimitz, 03368					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
CVN 70 USS Carl Vinson, 20993					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
CVN 72 USS Abraham Lincoln, 21297					
ACDU	0	1	AS1	7617	
	0	1	AS3	7617	
	0	1	ASAN	7617	
TOTAL:	0	3			
LHA 1 USS Tarawa, 20550					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHA 3 USS Belleau Wood, 20633					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			

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

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
LHA 5 USS Pelleiu, 20748					
ACDU	0	1	AS1	7617	
	0	1	AS2	7615	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHD 2 USS Essex, 21533					
ACDU	0	1	AS1	7617	
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			
LHD 4 USS Boxer, 21808					
ACDU	0	1	AS1	7617	
	0	1	AS3	7612	7617
	0	1	AS3	7615	7617
	0	1	ASAN	7617	
TOTAL:	0	4			

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	FY98 OFF	FY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
FLEET SUPPORT NAVY ACTIVITIES - ACDU													
AS1	7617		22		22		22		22		22		22
AS2	7615 7617		6		6		6		6		6		6
AS3	7612 7617		5		6		6		6		6		6
AS3	7615 7617		11		12		12		12		12		12
AS3	7617		15		14		14		14		14		14
ASAN	7617		23		23		23		23		23		23
SUMMARY TOTALS:													
FLEET SUPPORT NAVY ACTIVITIES - ACDU			82		83		83		83		83		83
GRAND TOTAL:													
NAVY ACTIVITIES - ACDU			82		83		83		83		83		83

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

SOURCE: NAWCADLKE **DATE:** 1/1/98

ACTIVITY, UIC		**PFYs**	**FY98**	**FY99**	**FY00**	**FY01**	**FY02**
FLEET SUPPORT ACTIVITIES	NAVY						
CV 62 USS Independence	03362	0	1	0	0	0	0
TOTAL:		0	1	0	0	0	0

II.A.2.b. BILLETS TO BE DELETED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT		BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES	NAVY					
CV 62 USS Independence, 03362, FY98 Increment						
ACDU		0	1	AS1	7617	
		0	1	AS3	7617	
		0	1	ASAN	7617	
TOTAL:		0	3			

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

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	FY98 OFF	FY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
FLEET SUPPORT NAVY ACTIVITIES - ACDU													
AS1	7617		0		-1		0		0		0		0
AS3	7617		0		-1		0		0		0		0
ASAN	7617		0		-1		0		0		0		0

SUMMARY TOTALS:

FLEET SUPPORT NAVY ACTIVITIES - ACDU													
			0		-3		0		0		0		0

GRAND TOTAL:

NAVY ACTIVITIES - ACDU													
			0		-3		0		0		0		0

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

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	FY98 OFF	FY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
INSTRUCTOR BILLETS														
TRAINING ACTIVITY, LOCATION, UIC: NAMTRAGRU DET MTU 3032, NAS Jacksonville, 66051														
ACDU														
AS1	7617	9502	0	2	0	0	0	0	0	0	0	0	0	0
TOTAL ACTIVITY:			0	2	0	0	0	0	0	0	0	0	0	0
TRAINING ACTIVITY, LOCATION, UIC: NAMTRAGRU DET MTU 3033, NAS North Island, 66065														
ACDU														
AS1	7617	9502	0	1	0	0	0	0	0	0	0	0	0	0
AS2	7617	9502	0	1	0	0	0	0	0	0	0	0	0	0
TOTAL ACTIVITY:			0	2	0	0	0	0	0	0	0	0	0	0

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	FY98 OFF	FY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
NAMTRAGRU DET MTU 3032, NAS Jacksonville, 66051													
	Navy		5.8		2.7		2.4		2.4		2.4		2.4
NAMTRAGRU DET MTU 3033, NAS North Island, 66065													
	Navy		5.0		1.9		1.7		1.7		1.7		1.7
SUMMARY TOTAL:													
	Navy		10.9		4.5		4.1		4.1		4.1		4.1
GRAND TOTAL:													
			10.9		4.5		4.1		4.1		4.1		4.1

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC / SNEC		BILLET BASE	FY98 +/-	FY98 CUM	FY99 +/-	FY99 CUM	FY00 +/-	FY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM
a. OFFICER - USN	**NA.**												
b. ENLISTED - USN													
Fleet Support Billets ACDU and TAR													
AS1	7617		22	0	22	0	22	0	22	0	22	0	22
AS2	7615	7617	6	0	6	0	6	0	6	0	6	0	6
AS3	7612	7617	5	1	6	0	6	0	6	0	6	0	6
AS3	7615	7617	11	1	12	0	12	0	12	0	12	0	12
AS3	7617		15	-1	14	0	14	0	14	0	14	0	14
ASAN	7617		23	0	23	0	23	0	23	0	23	0	23
Staff Billets ACDU and TAR													
AS1	7617	9502	3	0	3	0	3	0	3	0	3	0	3
AS2	7617	9502	1	0	1	0	1	0	1	0	1	0	1
Chargeable Student Billets ACDU and TAR													
			11	-6	5	-1	4	0	4	0	4	0	4
TOTAL USN ENLISTED BILLETS:													
Fleet Support			82	1	83	0	83	0	83	0	83	0	83
Staff			4	0	4	0	4	0	4	0	4	0	4
Chargeable Student			11	-6	5	-1	4	0	4	0	4	0	4
c. OFFICER - USMC	**NA.**												
d. ENLISTED - USMC	**NA.**												

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: D-602-7060, (Afloat) Crash Cranes and Material Handling Equipment Intermediate Maintenance

COURSE LENGTH: 7.4 Weeks **TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% **BACKOUT FACTOR:** 0.15

TRAINING ACTIVITY	SOURCE	ACDU/TAR SELRES	FY98 OFF	FY98 ENL	FY99 OFF	FY99 ENL	FY00 OFF	FY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL
NAMTRAGRU DET MTU 3032, NAS Jacksonville												
	Navy	ACDU		20		18		18		18		18
NAMTRAGRU DET MTU 3033, NAS North Island												
	Navy	ACDU		14		13		13		13		13
COURSE TOTAL:				34		31		31		31		31

PART III - TRAINING REQUIREMENTS

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: Crash Cranes Modifications Intermediate Maintenance
COURSE DEVELOPER: Lake Shore, Inc.
COURSE INSTRUCTOR: Lake Shore, Inc.
COURSE LENGTH: 5 Days

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV		ACTIVITY DESTINATIONS
MTU 3032, 66051	Sep 97	0	4	8	Input	MTU 3032, NAESU
	(Completed)	0	0.1		AOB	
		0	0		Chargeable	

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV		ACTIVITY DESTINATIONS
MTU 3033, 66065	Jan 98	0	4	8	Input	MTU 3033, NAESU
	(Completed)	0	0.1		AOB	
		0	0		Chargeable	

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: D-602-7060, (Afloat) Crash Cranes and Material Handling Equipment Intermediate Maintenance

TRAINING ACTIVITY: NAMTRAGRU DET MTU 3032
LOCATION, UIC: NAS Jacksonville, 66051

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

FY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	20		18		18		18		18	ATIR
	18		16		16		16		16	Output
	2.7		2.4		2.4		2.4		2.4	AOB
	2.7		2.4		2.4		2.4		2.4	Chargeable

TRAINING ACTIVITY: NAMTRAGRU DET MTU 3033
LOCATION, UIC: NAS North Island, 66065

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

FY98		FY99		FY00		FY01		FY02		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	14		13		13		13		13	ATIR
	13		12		12		12		12	Output
	1.9		1.7		1.7		1.7		1.7	AOB
	1.9		1.7		1.7		1.7		1.7	Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

IV.A. TRAINING HARDWARE

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

CIN, COURSE TITLE: C-602-3307, A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance and C-602-3263, Aviation Support Equipment Technician Electrical

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC: NAMTRAGRU DET Jacksonville, 66051

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
GPTE					
001	Digital Multimeter	2	Jan 91	GFE	On board
002	H3670 Pressure Gage	2	Dec 93	GFE	On board
ST					
003	AS-1675 Inflator Assembly	1	Jan 91	GFE	On board
004	5396T31 Grounding Straps	8	Jan 91	GFE	On board
005	A-A-1274 Ft. lb. Torque Wrench	1	Jan 91	GFE	On board
006	GGG-W-00 Torque Wrench	1	Jan 91	GFE	On board
007	A-A-12749 Torque Wrench	1	Jan 91	GFE	On board
008	ST 1000 134 Freon Recovery Unit	1	FY 98	GFE	Pending
009	Photo Tach NSN 6680-01-179-3205	1	FY 98	GFE	Pending
010	Fluke Model 87 with frequency counter NSN 6625-01-312-2930	1	FY 98	GFE	Pending
TTE					
011	A/S 32A-35 Crane	1	Nov 93	GFE	On board
012	A/S 32A-36 Crane	1	Nov 89	GFE	On board
013	A/S 32A-36A Crane	1	FY98	GFE	Pending
014	A/S 32A-35A Crane	1	Jul 97	GFE	Pending

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC: NAMTRAGRU DET North Island, 66065

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
GPTE					
001	Digital Multimeter	2	Jan 91	GFE	On board
002	H3670 Pressure Gage	2	Dec 93	GFE	On board
ST					
003	AS-1675 Inflator Assembly	1	Jan 91	GFE	On board
004	5396T31 Grounding Straps	8	Jan 91	GFE	On board
005	A-A-1274 Ft. lb. Torque Wrench	1	Jan 91	GFE	On board
006	GGG-W-00 Torque Wrench	1	Jan 91	GFE	On board
007	A-A-12749 Torque Wrench	1	Jan 91	GFE	On board
008	ST 1000 134 Freon Recovery Unit	1	FY 98	GFE	Pending
009	Photo Tach NSN 6680-01-179-3205	1	FY 98	GFE	Pending
010	Fluke Model 87 with frequency counter NSN 6625-01-312-2930	1	FY 98	GFE	Pending

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

TTE

011	A/S 32A-35 Crane	1	Nov 93	GFE	On board
012	A/S 32A-36 Crane	1	Nov 89	GFE	On board

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC: NAMTRAGRU DET North Island, 66065

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
013	A/S 32A-36A Crane	1	FY98	GFE	Pending
014	A/S 32A-35A Crane	1	Jul 97	GFE	Pending

CIN, COURSE TITLE: C-780-2013, Aviation Boatswain's Mate Handling Advance

TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola 35348

ITEM NUMBER	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
011	A/S 32A-35 Crane	1	Oct 96	GFE	On board
012	A/S 32A-36 Crane	1	Oct 89	GFE	On board
013	A/S 32A-36A Crane	1	FY98	GFE	Pending
014	A/S 32A-35A Crane	1	FY98	GFE	Pending

IV.B. COURSEWARE REQUIREMENTS

IV.B.1. TRAINING SERVICES

COURSE TITLE	SCHOOL LOCATION, UIC	BEGIN DATE	NO. OF PERSONNEL	MAN WEEKS REQUIRED
Crash Cranes Modifications Intermediate Maintenance	MTU 3032, 66051	Sep 97	1	1
Crash Cranes Modifications Intermediate Maintenance	MTU 3033, 66065	Jan 98	1	1

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-602-3263, Aviation Support Equipment Technician Electrical

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Curricula Materials	2	Jul 89	On board

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	2	Jul 89	On board

CIN, COURSE TITLE: C-602-3307A, A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	2	Oct 95	On board
Curricula Materials	1	Oct 95	On board

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	2	Oct 95	On board
Curricula Materials	1	Oct 95	On board

CIN, COURSE TITLE: C-600-3219, A/S 32A-35 CVCC Operator Training

TRAINING ACTIVITY: Local AIMDs
LOCATION, UIC : Local AIMDs, 00000

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	2	Dec 95	On board
Curricula Materials	1	Dec 95	On board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-600-3330, A/S 32A-36 AACC Operator Training
TRAINING ACTIVITY: Local AIMDs
LOCATION, UIC : Local AIMDs, 00000

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	2	Nov 90	On board
Curricula Materials	1	Nov 90	On board

CIN, COURSE TITLE: C-780-2013, Aviation Boatswain's Mate Aircraft Handling Advance

TRAINING ACTIVITY: NATTC
LOCATION, UIC : Pensacola, 35348

TYPE OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Audiovisual Aids	1	Jul 90	On board
Curricula Materials	1	Jul 90	On board

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-602-3263, Aviation Support Equipment Technician Electrical

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA17-1-125 Ground Support Equipment Cleaning and Corrosion Control Manual	Hard copy	10	Nov 90	On board

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA17-1-125 Ground Support Equipment Cleaning and Corrosion Control Manual	Hard copy	10	Nov 90	On board

CIN, COURSE TITLE: C-602-3289, A/S32A-35 Carrier Vessel Crash Crane (CVCC) Intermediate Maintenance

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA 19-25-E-15 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Operation/Intermediate Maintenance Manual with IPB	Hard copy	10	Nov 93	On board

CIN, COURSE TITLE: C-602-3307A, A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA 00-80T-96 Support Equipment Basic Handling and Safety Manual	Hard copy	10	Nov 90	On board
NA 00-80T-117 Electromagnetic Compatibility Theory and Practice Manual	Hard copy	12	Nov 90	On board
NA 00-80T-119 Weight Handling Support Equipment Manual	Hard copy	12	Nov 90	On board
NA 16-1-8.1 Aeronautical Support equipment Work Unit Code Manual	Hard copy	4	Nov 90	On board

IV.B.3. TECHNICAL MANUALS

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA 19-300-277-6-1 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Preoperational Checklist	Hard copy	10	Oct 93	On board
NA 19-300-277-6-2 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Periodic Maintenance Requirements Manual	Hard copy	10	Oct 93	On board
NA AG-31-ODO-OMM-000 A/S 32A-36 Operation and Intermediate MIMs	Hard copy	10	Nov 90	On board
NA AG-31ODO-010 A/S 32A-36 Aircraft Crash Handling and Salvage Crane Periodic Maintenance Requirements Manual	Hard copy	10	Nov 90	On board
NA AG-31ODO-MRC-000 A/S 32A-36 Aircraft Crash Handling and Salvage Crane Preoperational Checklist	Hard copy	10	Nov 90	On board
NA17-1-125 Ground Support Equipment Cleaning and Corrosion Control Manual	Hard copy	10	Nov 90	On board
NAVFAC P-306 Testing and Licensing of Weight Handling and Construction Equipment Operators	Hard copy	10	Nov 90	On board

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA 00-80T-96 Support Equipment Basic Handling and Safety Manual	Hard copy	2	Nov 90	On board
NA 00-80T-117 Electromagnetic Compatibility Theory and Practice Manual	Hard copy	12	Nov 90	On board
NA 00-80T-119 Weight Handling Support Equipment Manual	Hard copy	12	Nov 90	On board
NA 16-1-8.1 Aeronautical Support equipment Work Unit Code Manual	Hard copy	4	Nov 90	On board
NA 19-300-277-6-1 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Preoperational Checklist	Hard copy	10	Oct 93	On board
NA 19-300-277-6-2 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Periodic Maintenance Requirements Manual	Hard copy	10	Oct 93	On board

IV.B.3. TECHNICAL MANUALS

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA AG-31-ODO-OMM-000 A/S 32A-36 Operation and Intermediate MIMs	Hard copy	2	Nov 90	On board
NA AG-31ODO-010 A/S 32A-36 Aircraft Crash Handling and Salvage Crane Periodic Maintenance Requirements Manual	Hard copy	2	Nov 90	On board
NA AG-31ODO-MRC-000 A/S 32A-36 Aircraft Crash Handling and Salvage Crane Preoperational Checklist	Hard copy	2	Nov 90	On board
NA17-1-125 Ground Support Equipment Cleaning and Corrosion Control Manual	Hard copy	12	Nov 90	On board
NAVFAC P-306 Testing and Licensing of Weight Handling and Construction Equipment Operators	Hard copy	2	Nov 90	On board

CIN, COURSE TITLE: C-600-3219, A/S 32A-35 CVCC Operator Training

TRAINING ACTIVITY: Local AIMDs
LOCATION, UIC : Local AIMDs, 00000

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA 19-25-E-15 A/S 32A-35 Aircraft Crash Handling and Salvage Crane Operation/Intermediate Maintenance Manual with IPB	Hard copy	2	Nov 93	On board
NA AG-31-ODO-OMM-000 A/S 32A-36 Operation and Intermediate MIMs	Hard copy	2	Dec 95	On board
No Manual Number Aircraft Service Procedures Manual	Hard copy	2	Dec 95	On board

CIN, COURSE TITLE: C-600-3330, A/S 32A-36 AACC Operator Training

TRAINING ACTIVITY: Local AIMDs
LOCATION, UIC : Local AIMDs, 00000

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA AG-31-ODO-OMM-000 A/S 32A-36 Operation and Intermediate MIMs	Hard copy	2	Dec 95	On board
No Manual Number Aircraft Service Procedures Manual	Hard copy	2	Nov 90	On board

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-780-2013, Aviation Boatswain's Mate Aircraft Handling Advance

TRAINING ACTIVITY: NATTC
LOCATION, UIC : Pensacola, 35348

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
NA AG-31-ODO-OMM-000 A/S 32A-36 Operation and Intermediate MIMs	Hard copy	2	Nov 90	On board
NA AG-31ODO-MRC-000 A/S 32A-36 Aircraft Crash Handling and Salvage Crane Preoperational Checklist	Hard copy	2	Nov 90	On board
No Manual Number Aircraft Service Procedures Manual	Hard copy	2	Nov 90	On board

IV.C. FACILITY REQUIREMENTS

IV.C.1. FACILITY REQUIREMENTS SUMMARY (SPACE/SUPPORT) BY ACTIVITY

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

REQUIRED RFT DATE: Jan 91

SQUARE FEET SPACE REQUIREMENTS			MAJOR EFR REQUIREMENTS			SPACE AVAILABLE	FACILITIES SUPPORT AVAILABILITY		
Academic Class	Lab	Approved Class/Lab	(KW) Power	A/C Tons	Other Critical		(KW) Power	A/C Tons	Other Critical
0	0	30625	0	0	0	Available	0	0	0

CIN	COURSE TITLE
C-602-3307A	A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

REQUIRED RFT DATE: Jan 91

SQUARE FEET SPACE REQUIREMENTS			MAJOR EFR REQUIREMENTS			SPACE AVAILABLE	FACILITIES SUPPORT AVAILABILITY		
Academic Class	Lab	Approved Class/Lab	(KW) Power	A/C Tons	Other Critical		(KW) Power	A/C Tons	Other Critical
0	0	30625	0	0	0	Available	0	0	0

CIN	COURSE TITLE
C-602-3307A	A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

IV.C.2. FACILITY REQUIREMENTS DETAILED BY ACTIVITY AND COURSE

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

BLDG / ROOM NO	TYPE OF PROJECT	PROJECT NO	REQD AWARD	REQD UCD	REQD RFT	STATUS
702/3C	MILCON	C6-89	Oct 1990	Jan 1991	Jan 1991	Completed

CIN	COURSE TITLE
C-602-3307A	A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

BLDG / ROOM NO	TYPE OF PROJECT	PROJECT NO	REQD AWARD	REQD UCD	REQD RFT	STATUS
285/210	Alteration	NA	Jan 1995		Jan 1991	Completed

CIN	COURSE TITLE
C-602-3307A	A/S-32A/35 and A/S-32A/36 Crash Cranes Intermediate Maintenance

IV.C.3. FACILITY PROJECT SUMMARY BY PROGRAM

TRAINING ACTIVITY: MTU 3032
LOCATION, UIC : NAMTRAGRU DET Jacksonville, 66051

PROJECT NUMBER	TOTAL SCOPE	PROJECTED AWARD	PROJECTED UCD	STATUS
C6-89		Oct 1990	Jan 1991	Completed

TRAINING ACTIVITY: MTU 3033
LOCATION, UIC : NAMTRAGRU DET North Island, 66065

PROJECT NUMBER	TOTAL SCOPE	PROJECTED AWARD	PROJECTED UCD	STATUS
NA.				Completed

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
DA	Production Contract Awarded	2/86	Completed
OPO	Program Manpower and Training Resource Requirement	3/86	Completed
TSA	Factory Training Contract Awarded	11/86	Completed
DA	Begin Analysis of MPT Requirements	1/87	Completed
TSA	Begin Initial Training	4/87	Completed
DA	Promulgate Draft NTSP for Review and Comment	3/88	Completed
DA	Proposed NTP Submitted to OPNAV	1/89	Completed
TSA	Curriculum Material Contract Awarded	1/89	Completed
DA	Fleet Introduction of A/S 32A-36	2/89	Completed
TSA	Technical Training Equipment Delivered A/S 32A-36	9/89	Completed
TSA	Allocate Training, Support, and Student Billets	1/90	Completed
MP Sponsor	Order Instructors and Support Personnel	2/90	Completed
OPO	Approve and Promulgate NTSP	6/90	Completed
OPO	Promulgate OPNAV Form 1000/2	6/90	Completed
TA	Begin Follow-On Training A/S 32A-36	1/91	Completed
DA	Fleet Introduction of A/S 32A-35	1/93	Completed
DA	Technical Training Equipment Delivered A/S 32A-35	11/93	Completed
TA	Begin Follow-On Training A/S 32A-35	2/94	Completed
DA	Begin ECP-11 Crash Crane Motor Drive System Modifications	9/97	Completed
DA	Promulgate Updated Draft NTSP for Review	12/97	Completed
ASO	Achieve NSD and MSD for A/S 32A-35 and A/S 32A-36	1/98	Completed
ASO	Achieve IOC for A/S 32A-35A and A/S 32A-36A	3/98	Completed
ASO	Complete ECP-11 installations	9/99	
ASO	Achieve NSD for ECP-11	5/00	

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
None			

PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	TELEPHONE NUMBERS COMMERCIAL, DSN, FAX INTERNET ADDRESS
CAPT A. Steigelman CNO N881B	Head, Plans, Policy, and Fleet Maintenance Support	(703) 604-7747 DSN 664 (703) 604-6972 or 604-6994 (fax) steigelman.anthony@hq.navy.mil
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MSGT D. Anderson CNO N889H6	Assistant Aviation Officer / NTSP Coordinator	(703) 604-7722, DSN 664 (703) 604-6939 (fax) anderson.david@hq.navy.mil
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CDR(Sel) L. Gingery NAVMAC 30	Aviation Manpower	(901) 874-6218, DSN 882 (901) 874-6471 (fax)

PART VII - POINTS OF CONTACT

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