

9090-1500

PAFOS MANUAL

CHAPTER 9

INSTALLATION AND CHECK-OUT (INCO) MATERIAL

TABLE OF CONTENTS

9.0	Introduction.	1
9.1	Definition.	1
9.2	Planning and Budgeting.	2
9.3	Requirements Determination.	2
9.4	Acquisition and Ordering Requirements.	3
9.5	Management and Control.	3
9.6	Replenishment.	4
9.7	Disposition of Residual Material.	5
9.8	Responsibilities.	5
9.8.1	Ship Program Manager (SPM).	5
9.8.2	System, Equipment or Modification Manager.	6
9.8.3	In-Service Engineering Agent (ISEA).	6
9.8.4	Installing Activity.	7
9.9	Headquarters Point of Contact.	8

CHAPTER 9**INSTALLATION AND CHECK-OUT (INCO) MATERIAL****9.0 INTRODUCTION**

Installation and Check-Out (INCO) material is required during installation of new system or equipments or field modification of existing systems or equipments on board ship. These installations or modifications may occur during original ship construction, during shipyard industrial availabilities, and at other times in the ship operational cycle

9.1 DEFINITION

INCO material is collectively defined as any item required for the installation, testing, and check-out of a system or equipment. There are three types of INCO material:

- 1) Installation material is normally consumed as the system or equipment is installed. These items include prefabricated hardware foundations and fittings, cables, cable connectors, pins, junction boxes, seals, templates, and gaskets.
- 2) Special tools and test equipment are items that assist in testing or isolating faults in the system or equipment being installed.
- 3) INCO spares refer to spare and repair parts, required to operate and maintain a system during its testing period.

9.2 PLANNING AND BUDGETING

INCO spares are planned, programmed, budgeted, and documented on Program Support Data (PSD) sheets (see Programming and Budgeting, PAFOS Chapter 3). This occurs at the same time as the planning and budgeting performed on the system or equipment, supported by the INCO spares.

9.3 REQUIREMENTS DETERMINATION

One aspect of Integrated Logistics Support (ILS) planning is the determination of requirements. INCO material requirements are based on the characteristics of the system or equipment supported by the material. During the planning phase for system, equipment or modification installations the Program Manager will determine how INCO material will be provided. Determinations will be made as to what installation material will be Supplied With Equipment (SWE) or Not Supplied With Equipment (NSWE), whether special tools and test equipment should be procured from the manufacturer or provided by the installing activity and whether INCO spares should be provided with each system, equipment or modification kit or held at a central site for issue as needed.

A. Installation Material

This material is determined by reviewing Installation Control Drawings (ICDs). These drawings contain listings of material that is SWE and that is NSWE. Material listed as SWE is procured, packaged and shipped with the system, equipment or modification being installed. Material listed as NSWE is procured by the installing activity.

B. Special Tools and Test Equipment

These are determined by reviewing test procedures and installation drawings and instructions. Requirements are based on the type of equipment and the specific installation site. The special tools and test equipment required for I&C may be procured, packaged and shipped with the system, equipment or modification being installed; or may be provided by the installing activity or In-Service Engineering Agent (ISEA).

C. INCO Spares

These items are based on recommendations of the system or equipment manufacturer or Navy ISEA. INCO spares may include Lowest Replacement Unit (LRU) items and certain common items such as lamps and fuses.

9.4 ACQUISITION AND ORDERING REQUIREMENTS

Installation material, special tools and test equipment, and INCO spares are generally obtained from the system or equipment manufacturer by including them as a separate line item in the hardware contract. INCO spares may also be obtained by ordering the items from the Federal Supply System by the ISEA responsible for the installation. Installation material that is listed as NSWE on ICDs is provided by the installing activity

9.5 MANAGEMENT AND CONTROL

The is a single Naval Activity charged with the oversight responsibility of work being accomplished on US Navy Ships during any type of availability. Custody, inventory control, and management of INCO material is normally under the control of the installation activity. INCO spares may be in the custody of a central INCO depot at either a government or private sector site.

On completion of each installation residual installation material should be disposed of per the instructions provided in the installation instructions and as specified by the ISEA.

A. Installation Material

Installation material listed on ICDs as SWE is packaged with the system, equipment or modification; clearly marked and shipped to the installation site. Installation material listed on ICDs as NSWE is procured, controlled and managed by the installation activity.

B. Special Tools and Special Test Equipment

Special tools and test equipment required for INCO may be procured, packaged and shipped with the system, equipment or modification being installed; or may be provided by the installing activity or ISEA. In either case the installing activity is responsible for management and control of these items once received. Installing activities are responsible for any required calibration utilizing calibration specifications and requirements provided by the ISEA.

C. Check-out Spares

Management and control of INCO spares that are present at the installation site are the responsibility of the installation activity. INCO spares may be in the custody of a central INCO depot at either a government or private sector site.

D. Wrap Up and Post Installation

The ISEA will insure 1149's are submitted for all equipments added and removed onboard the ship.

E. ILS

The ISEA is responsible for the physical configuration validation at the completion of the installation.

9.6 REPLENISHMENT

A. Installation Material:

Installation material does not normally need to be replenished since it is intended to be consumed during the system, equipment or modification installation phase. However, if required, standard items are ordered from the Federal Supply System and non-standard items are requested from the ISEA. Failed non-standard items are reported to the ISEA and PM for warranty investigation.

B. Special Tools and Special Test Equipment:

Replenishment of these tools and equipment is not normally required. If a special tool or piece of special test equipment must be replaced, the replacement item is requested through the ISEA.

C. INCO Spares:

Installation activity requirements for replenishment of INCO spares are forwarded to the ISEA. The ISEA replenishes these spares by requisitioning standard items from the Federal Supply System by citing Project Code "Z02" and Advice Code "2J" for consumables and Advice Code "57" for "7" cognizance material. Non-standard items are obtained from the manufacturer by exercising the option in the hardware contract. Failed repairables are sent to the designated overhaul point, repaired, and returned to the ISEA.

9.7 DISPOSITION OF RESIDUAL MATERIAL

Installation instructions for systems, equipments or modification kits should contain disposition instructions for residual material. In the event that this is not the case the ISEA should be requested to provide disposition instructions prior to disposal. Special tools and special test equipment are returned to the ISEA upon completion of installation at a given installation site or at the completion of ship new construction/overhaul at that site. The ISEA uses the residuals to outfit Intermediate and Depot level maintenance activities designated to perform maintenance on the applicable system or equipment. Special tools and test equipment used for installation and check-out at training sites are retained and utilized by that training activity to maintain the system or equipment. Items not required by maintenance activities or training facilities are turned in using MTIS procedures.

9.8 RESPONSIBILITIES**9.8.1 Ship Program Manager (SPM)**

The responsibilities of the Ship Program Manager are to:

- Provide funding for INCO spares, through the ship project directives.
- Provide required delivery dates for INCO material

9.8.2 System, Equipment or Modification Manager

The responsibilities of the System, Equipment or Modification Program Manager are to:

- Plan, program, and budget for INCO spares. The resulting requirements are included on PSD sheets.
- Determine requirements for installation materials, special tools, special test equipment and INCO spares.
- Assign an ISEA to control and manage INCO material.

9.8.3 In-Service Engineering Agent (ISEA)

The responsibilities of the ISEA are to:

- Review and approve INCO material listings.
- Provide disposition instructions for residual material to installation activities.
- Develop plans and procedures for management of an INCO spares depot (if required).

- Requisition check-out spares. Submit requisitions citing Project Code 'Z02' and Advice Code '2J' for consumables and Advice Code '57' for '7' cognizance items directly to the Federal Supply System. Material managed by the Defense Logistics Agency (DLA) will be submitted "fill or kill." Copies of all requisitions and purchase orders will be maintained by the ISEA for parts control purposes.

9.8.4 Installing Activity

The responsibilities of the Installing Activity are to:

- Receive, maintain, and manage INCO material during the installation period.
- Determine NSWE installation material from system, equipment or modification ICDs and procure, receive and control the necessary material.
- Maintain special tools and test equipment kits in a ready for issue condition during the installation period.
- Using the disposition instructions provided with the system, equipment or modification dispose of residual material.
- Wrap Up and Post Installation Work. DD-1149s are the official forms that are used for all equipments added and removed onboard the ship. It is used as a tracking document within the logistical world of supplies. On this form the model, make, s/n, quantity, manufacture, etc. will be noted
- As part of the Integrated Logistics Support (ILS) installation package, the ISEA is responsible for conducting a physical configuration validation at the completion of the installation. The complete configuration validation will be recorded in the Weapon System File (WSF). The ISEA is responsible to ensure ILS is delivered to the Supply Officer with the red lines delivered to the Equipment Management Office (EMO). This includes OPNAV 4790.CKs, Valaids, APL's, MIP's or Maintenance Requirement Cards, Spare Parts, electronic replacement cards and software packages.
- Establish procedures to receive, inventory, control, and issue all INCO material for each system, equipment or modification installation."

9.9 HEADQUARTERS POINT OF CONTACT

The NAVSEA point of contact for INCO material policy is the Fleet Logistics Support Directorate, Outfitting & Material Support Division (NAVSEA 04L).