



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
WASHINGTON, DC 20362-5101

IN REPLY REFER TO

NAVSEAINST 4490.1

OPR 91L/32

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NAVSEA INSTRUCTION 4490.1

From: Commander, Naval Sea Systems Command

Subj: SURFACE SHIP ADVANCED EQUIPMENT REPAIR PROGRAM (AERP (SURFACE))

Encl: (1) AERP (Surface) Equipment Candidate Nomination Form
(2) AERP (Surface) Requisition Data Field Entries
(3) Sample AERP (Surface) Message Requisition

1. Purpose. To assign responsibilities and prescribe procedures for an Advanced Equipment Repair Program.
2. Background. The combination of: (a) an increase of highly sophisticated combat systems; (b) a decrease in ship overhaul duration to increase ship availability; (c) an increase in the number of ships in a phased maintenance program; and (d) the large number of ships with overlapping availability schedules are making equipment refurbishment the critical path of many ship availabilities. AERP (Surface) plans to identify, budget, procure, and have available selected Hardware Systems Command (HSC) and Ships Parts Control Center (SPCC) managed equipments for use during Selected Restricted Availabilities (SRAs) or Phased Maintenance Availabilities (PMAs) as replacements for equipment requiring Class "B" overhaul or refurbishment. This equipment will permit exchange during an availability followed by off-ship, nonconcurrent equipment overhaul.
3. Scope. This instruction covers surface ship Hull, Mechanical and Electrical (HM&E) and Weapons System and Electronic depot level repairable equipment that historically experiences overhaul or refurbishment difficulties during SRAs or PMAs.
4. Exceptions. This instruction does not apply to: (a) reactor plant components in nuclear powered ships under the cognizance of Naval Sea Systems Command (SEA 08); (b) material procured for the Insurance Item Management Program (SEA 931).
5. Policy. The use of specifically identified components provided by AERP (Surface) is mandatory for accomplishing scheduled maintenance availabilities when equipment is identified as requiring overhaul or refurbishment. NAVSEA 91, after coordination with the applicable Type Commander (TYCOM), may approve exceptions when it is established that significant cost or schedule benefits will be achieved without compromising material readiness. Changeout equipment will always be of the same configuration as the equipment being offloaded, reducing both shipboard alterations and the need for Integrated Logistics Support (ILS) element modifications (see paragraph 6g).

6. Discussion

a. To increase ship operational availability, many ship classes experience a shorter overhaul duration than in the past. Required depot maintenance is accomplished in a series of short, intense, restricted availabilities. The short duration of these maintenance availabilities does not always provide adequate time to properly conduct concurrent Class "B" overhauls of HM&E equipment or refurbishments of Weapons System and Electronic equipment. Class "B" repair standards have been found to be essential to provide the quality of repair that will ensure reliability of operation of the equipment over time.

b. The AERP (Surface) program is primarily designed to support the equipment where proper technical equipment overhaul or refurbishment (including off-loading, packing, transportation, and on-loading) approaches or exceeds the duration of the SRA or PMA.

c. AERP (Surface) contains both maintenance and material support procedural elements. As such, it is intended to complement (not substitute for) existing ship maintenance strategies, such as Engineered Operating Cycle (EOC), LOMIX, and Phased Maintenance Program (PMP) and AEGIS Changeout Equipment (ACE) program. From the maintenance standpoint, AERP (Surface) will enhance the ship maintenance strategies by allowing immediate changeouts instead of concurrent HM&E Class "B" overhauls or Weapons System and Electronic equipment refurbishments. From the material support standpoint, AERP (Surface) will provide additional historical demand data and funding justification for the stocking of the equipment to be used instead of concurrent overhaul.

d. When the need for a Class "B" overhaul or refurbishment of an installed AERP (Surface) supported equipment is indicated following a Material Condition Assessment (MCA) or other inspection technique, changeout of the equipment is required unless ready-for-issue (RFI) AERP (Surface) assets are not available. The material inspection will normally occur during the planning shipcheck prior to the availability. After it is determined that the equipment is in need of a Class "B" overhaul or refurbishment, the cognizant Planning and Engineering for Repairs and Alterations (PERA) will determine if the equipment is supported by AERP (Surface) and if there is RFI equipment within the supply system. If AERP (Surface) assets are available, the changeout will be specified in the proposed SRA or PMA work package. This proposed work package becomes the subject of the Work Definition Conference (WDC). If the changeout task is approved at the WDC, it will become a part of the authorized availability work package. An approved AERP (Surface) changeout task will fully identify the material to be requisitioned.

e. AERP (Surface) assets are requisitioned by the ship overhaul activity or the planning yard or agent, and are furnished as Government Furnished Equipment (GFE) to Navy and private activities performing overhaul and maintenance of surface ships. Equipment assets include both HSC 2/4/6-Cog items and SPCC 7-Cog items. Removed items are subsequently refurbished for installation in another

ship during a later maintenance availability. This method of overhaul and maintenance, besides minimizing off-line overhaul and maintenance items, allows refurbishment of complex components under optimum conditions, thus providing higher quality assurance levels. AERP (Surface) provides the flexibility and speed-of-response required to ensure timely logistic support and engineering direction for complex maintenance planning.

f. AERP (Surface) will use existing maintenance procedures and facilities to accomplish equipment overhaul or refurbishment. Equipment assets will remain under the cognizance of the existing supply system equipment managers.

g. Equipment installed during changeout under AERP (Surface) will be of the same general configuration as the removed equipment. Upgraded equipment may be installed if the upgrade is included under a special alteration program, such as Ordnance Alteration (ORDALT), Machinery Alteration (MACHALT), or field change. Ship Alteration (SHIPALT) equipment will not be changed out under AERP (Surface). Equipment in the repair pipeline or in the RFI condition may require alterations to incorporate the equipment upgrade.

h. AERP (Surface) is applicable, where appropriate, to the policies and procedures which are employed by NAVSEA in support of shipboard equipment utilized as technical training equipment (TTE).

7. Criteria for Selection of Components of AERP (Surface). The AERP (Surface) program is primarily designed to support the equipment where proper technical equipment overhaul or refurbishment (including off-loading, packing, transportation and on-loading) approaches or exceeds the duration of the PMA or SRA. Following are the general criteria to be considered when selecting an AERP (Surface) candidate. Paragraphs 7a through 7e must apply; criteria in paragraphs 7f through 7i are not critical (i.e., an item not meeting all the criteria contained in paragraphs 7f through 7i will not be automatically excluded from AERP (Surface)).

- a. The equipment must be a depot level repairable.
- b. The equipment must not be supported by another material management program to the level required to fulfill changeout requirements.
- c. The equipment is not scheduled for general (fleetwide) removal from service.
- d. The original equipment is still in production, or technical documentation exists to ensure procured equipment has the same general configuration as the equipment.
- e. An equipment overhaul contract vehicle would be available to support the material pipeline.

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f. Changeout of the equipment would be economical, relative to the practice of overhaul-in-place or concurrent overhaul.

g. The equipment is not carried in standard stock to the level required to fulfill changeout requirements.

h. The equipment is used on many or all ships of a ship class and together with other classes has a significant total fleet population, with a desired population of at least 20 pieces of equipment.

i. In past SRAs or PMAs, the equipment has exhibited problems related to either the "quality of repair" or the timely availability of required repair material.

8. Procedure for Selection of Components for AERP (Surface)

a. Various activities may recommend additional components in AERP (Surface) to support surface ship maintenance availability requirements; e.g. Equipment Life Cycle Managers (LCMs), Ships Logistics Managers (SLMs), TYCOMs, PERAs, Shipyards, Ships Force, etc. Such action may stem from independent study or the recognition of a fleet requirement. NAVSEA 91 will make the final decision regarding inclusion of an item in AERP (Surface).

b. Activities initiating a recommendation for AERP (Surface) equipment will submit the recommendation to NAVSEA 91, using the format of enclosure (1). Paragraph 7 above provides the selection criteria for AERP (Surface) components.

c. NAVSEA 91 will coordinate the determination if the proposed item meets the selection criteria for including the item in AERP (Surface). The determination to include an item in AERP (Surface) will be made following input from the appropriate TYCOM and equipment LCM, at a minimum. SPCC will review all proposed SPCC managed AERP (Surface) candidates prior to final NAVSEA 91 selection. The analysis, and the conclusions and recommendations drawn from that analysis, will be sent to all concerned. Each item will fall into one of these categories:

(1) Include in AERP (Surface). NAVSEA 91, along with the equipment LCMs and SPCC Code 0341 (for 7-Cog equipment), will identify quantities of new components required, per paragraph 9 below, along with procurement plans and estimated costs by fiscal year.

(2) Do not include in AERP (Surface). However, the equipment should be monitored continually, so that any change in its status may be recognized, and if required to support the goals of AERP (Surface), the equipment may be included in AERP (Surface).

d. Subsequent to final approval, NAVSEA 91 will take the indicated action; i.e.:

(1) For items approved for AERP (Surface). Identify and provide new component quantities and costs by fiscal year for funding. Implement component into program when funding is available.

(2) For items not approved for AERP (Surface). NAVSEA 91 will return recommendation to requesting activity so stating.

9. AERP (Surface) Equipment Inventory Objective

a. An Inventory Objective (IO) will be determined for each selected item. The IO is that quantity of equipment assets that will provide an adequate repair cycle pipeline for ensuring RFI assets are available to meet anticipated changeouts. This IO quantity is that amount of material that will be managed under AERP (Surface).

$$\text{Inventory Objective (IO)} = \frac{\text{Equipment Population}}{\text{Mean Calendar Time Between Overhaul (MCTBO)}} \times \text{Equipment Turnaround Time (TAT)}$$

The components of the IO equation are:

(1) Equipment Population is the total quantity of a specific AERP (Surface) supported equipment installed on one or more ship classes; plus the quantity of TTE, if appropriate.

(2) MCTBO is the element which expresses, in months, the known or estimated average calendar time between condition-directed equipment changeouts or overhauls.

(3) TAT is the elapsed time, in months, from shipment of a not-ready-for-issue (NRFI) item from a removing or reporting activity to a Designated Overhaul Point (DOP) or Original Equipment Manufacturer (OEM) until its return in RFI condition to the supply system or reinstalling activity.

b. The IO will be computed by the equipment LCM annually after inclusion into AERP (Surface).

10. Requisitioning Procedures

a. All AERP (Surface) items will be requisitioned by the ship overhaul activity or the planning yard or agent immediately following approval of the SRA or PMA work package. The requisition will be prepared per Military Standard Requisitioning and Issue Procedures (MILSTRIP) using a message format containing the exception data necessary to ensure the exact item required is provided. See enclosure (2) for a description of data field entries.

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b. The requisition will be submitted to the nearest Naval Supply Center (NSC). The subject line of the requisition should read "AERP MILSTRIP REQN". NAVSUP 0321A1, SPCC 0341, NAVSEA 91L, and the cognizant TYCOM, PERA, and-NAVSEA SLM (SEA 912/913/914/931/PMS 400F) should be information addressees. The exception data must be presented so that it stresses the exact equipment configuration required. Requisitioning solely by National Stock Number (NSN) does not guarantee that the required material will be provided. See enclosure (3) for an example of an AERP (Surface) message requisition.

c. Specific entries required on AERP (Surface) requisitions are:

(1) The document identifier (cc 1-3) will be "AOE", signifying that the requisition contains exception data.

(2) The demand code (cc 44) will be "R" reflecting recurring demand.

(3) The project code (cc 57-59) will be "6*P", with the "*" in column 58 being a character provided by requisitioning activity. It is to be the same for all requisitions of material for work on the same ship.

(4) The Required Delivery Date (RDD) (cc 62-64) will be blank ("BLNK" on the requisition message) unless the standard delivery date (SDD) for the assigned priority designator (PD) is not satisfactory. If the SDD is not satisfactory, a standard MILSTRIP entry will be utilized.

(5) The advice code (CC 65 and 66) will be "5G" indicating the requested item is a mandatory turn-in repairable for which an NRFI unit will be turned in on an exchange basis under the same document number.

d. Requisitioners of AERP (Surface) items will comply with the Uniform Material Movement and Issue Priority System (UMMIPS) in assignment of priority designators to the requisitions.

e. If an RFI asset cannot be provided to the requisitioner by the start of the SRA or PMA, the requisitioning activity must notify the TYCOM, so that a decision can be made as to the correct course of action.

11. Procedures for Funding AERP (Surface)

a. To provide the RFI assets required under AERP (Surface), financial resources must be identified to effect procurement of new equipment or refurbishment of NRFI assets. Financial resources required for AERP (Surface) can be divided into three categories:

(1) Material Procurement Funds. (OPN/WPN) These funds are used for the procurement of new AERP (Surface) HSC 2/4/6-cog assets. They are collectively identified as Appropriation Purchases Account (APA) funds. These funds are budgeted and managed by HSC equipment LCMs. NAVSEA 91 will coordinate budget inputs to most effectively achieve the goals of AERP (Surface).

(2) Material Refurbishment Funds. (O&MN) These funds finance the refurbishment of NRFI HSC 2/4/6-Cog AERP (Surface) assets. HSC Inventory Managers will initially budget funds for repair of their respective equipment.

(3) Navy Stock Fund. (NSF) This revolving fund is utilized by SPCC to procure new equipment and to repair NRFI equipment. After material procurement or repair, the fund is "reimbursed" by funded requisitions drawing down the material.

b. When an acceptable quantity of an equipment is available for changeout under AERP (Surface), NAVSEA 91 will inform the cognizant PERAs and TYCOMs. The TYCOMs will begin to authorize changeout tasks in Ship Alteration and Repair Packages (SARPs) or work packages. For 7-Cog material, material refurbishment funding will be provided through the buy-out of the NSF item at the net price, and for 2/4/6-Cog material, the HSC Inventory Managers will provide the budgeted funds to refurbish the removed NRFI asset in preparation for its eventual reinstallation on another ship. There will be no charge to the requisitioner when requisitioning 2/4/6-Cog material.

c. Note that the funding responsibility for removal, shipment, reinstallation and any required testing by the overhauling activity shall be borne by the activity (the customer) authorizing the work.

12. Responsibilities. The functions, assignments, and responsibilities assigned to all activities concerned with AERP (Surface) are identified below:

a. NAVSEA 91

(1) Program management, including program development, implementation, performance evaluation and coordination.

(2) AERP (Surface) procedures.

(3) POM/FYDP/Budget input coordination.

(4) Release approval for HSC 2/4/6-Cog items.

(5) Approve AERP (Surface) candidate recommendations, and approve removal of an item from AERP (Surface) if support is no longer required.

(6) Establish ship class priorities to achieve early full implementation on a small number of ship classes.

(7) Determine equipment funding priorities.

(8) Notify concerned activities that AERP (Surface) assets are available.

(9) Coordinate decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only). The cognizant Ships Logistics Manager (SLM) will provide approval.

b. TYCOMs

(1) Authorize changeout tasks, vice concurrent overhaul tasks, in SARPs/work packages for AERP (Surface) items. The decision to authorize or not authorize changeout will be based on the condition of the installed equipment and the time interval to the next scheduled depot-level availability.

(2) Finance AERP (Surface) changeout tasks by providing the requisitioning activity with funds to procure SPCC 7-Cog equipment at the net price.

(3) Initiate AERP (Surface) candidate recommendations if a need exists for an equipment to support a maintenance availability, and recommend removal of an item from AERP (Surface) if support is no longer required.

(4) Review 7-Cog equipment candidates recommended by other activities to ensure that the candidate would be economically changed-out under AERP (Surface).

(5) Participate in decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).

(6) Determine course of action to be taken if AERP (Surface) changeout material will not be delivered prior to the start of the SRA or PMA.

c. PERAs

(1) Provide for condition-directed AERP (Surface) changeout actions in the applicable CMPs.

(2) Include AERP (Surface) changeout tasks in proposed work packages submitted for TYCOM authorization, based on condition of the installed equipment as determined by utilizing equipment inspections/testing, changeout philosophy, and material availability.

(3) When including an AERP (Surface) changeout task in the work package, perform a verification of AERP (Surface) items to ensure nameplate data and determinable field change/ORDALT/MACHALT information obtained guarantees work package changeout equipment is identical to supply system assets. If a shipcheck is not possible, send a message to the ship requesting the required information.

(4) Provide to the cognizant SLM and SEA 91L a material usage forecast based on CMP tasks to quantify changeout requirements.

(5) Initiate AERP (Surface) candidate recommendations if equipment is needed to support a maintenance availability, and recommend removal of an item from AERP (Surface) if support is no longer required.

d. NAVSUP

(1) Coordinate Inventory Control Point (ICP) and stocking activity participation in the AERP (Surface) program.

(2) Support NSF AERP (Surface) budget requirements.

e. SEA 07 is responsible for coordinating industrial activity participation in the AERP (Surface) program.

f. Naval Shipyards (NAVSHIPYDs) and Supervisors of Shipbuilding, Conversion and Repair (SUPSHIPs)

(1) When a changeout is tasked in the SRA or PMA work package, requisition AERP (Surface) material per paragraph 10 of this instruction.

(2) Receive, store, and utilize the AERP (Surface) material as GFE for the scheduled SRA or PMA.

(3) Ensure AERP (Surface) material is inspected as soon as possible after receipt to verify the configuration.

(4) Provide equipment requisition status to the TYCOM, so a decision can be made if the equipment will not be available prior to the start of the SRA or PMA. Notify NAVSEA 91L and the associated PERA of the requisition status.

g. Hardware Systems Command Program Managers for Depot Maintenance (SEA 0715 and COMSPAWARSYSCOM) are responsible for coordinating DOP participation in the AERP (Surface) program including:

(1) Certification and designation of interim and permanent DOPs for all AERP (Surface) items.

(2) Requiring DOPs to report the "as found" condition of AERP (Surface) items undergoing overhaul.

h. Ship Logistics Managers (SLMs) (SEA 931/912/913/914/PMS 400F)

(1) Initiate AERP (Surface) candidate recommendations if equipment is needed to support a maintenance availability, and recommend removal of an item from AERP (Surface) if support is no longer required.

(2) Provide platform (Ship Class) engineering coordination, configuration control and liaison with HSC and ICP inventory managers for 2/4/6-Cog and 7-Cog items, respectively.

(3) Coordinate with PERAs to include AERP (Surface) changeouts in SRA and PMA task statements and planning documents.

(4) Approve decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).

i. SEA 05

(1) Equipment Life Cycle Managers (LCMs):

(a) Review AERP (Surface) candidates to preclude investment in components that are scheduled for removal or modernization.

(b) Equipment engineering coordination with HSC and ICP inventory managers in developing design specifications to ensure newly procured AERP (Surface) assets reflect the same configuration as installed equipment.

(c) Approve procurement specifications and repair specifications for AERP (Surface) items.

(d) Ensure all ILS elements are applied to AERP (Surface) equipments when procured.

(e) Item candidate recommendations, including item-by-item cost tradeoff analyses, assembly or next higher assembly tradeoff analyses, and criticality validation analyses.

(f) MCTBO determinations and updates.

(g) IO computations.

(h) Maintain an AERP (Surface) Changeout History, including "As Found" Condition Reports From DOPs.

(i) Reserve AERP (Surface) material for use only during maintenance availabilities when equipment refurbishment TAT approaches or exceeds the scheduled ship availability duration.

(j) Participate in decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).

(k) Monitor the budget line for SEA 05 cognizance AERP (Surface) equipment to detect changes to the funding level. Tell SEA 91L of changes.

(2) Inventory Managers (IMs):

(a) Material support and configuration control liaison with LCMs and SLMs.

(b) Maintain the equipment configuration of AERP (Surface) assets to reflect the configuration of shipboard assets.

(c) Ensure that AERP (Surface) equipment shipped in response to a requisition matches both the requisition data and the configuration of the installed equipment.

(d) Repair management of assets to ensure correctly-configured RFI equipment is available for changeout. Equipment overhaul or refurbishment will be in accordance with applicable repair specifications. Monitor the quality of the repairs.

(e) Budget APA funds for AERP (Surface) procurement of 2/4/6-Cog items.

(f) Budget available O&MN funds to maintain the optimal amount of AERP (Surface) equipment in RFI condition.

(g) Provide material availability, identification, and configuration data to PERAs for inclusion in SARP work package material availability notifications.

(h) Initiate action to catalog, recatalog and technical code all AERP (Surface) designated items as necessary; also obtain NSNs for new AERP (Surface) material.

(i) Notify SEA 91 when a requisition for a 2/4/6-Cog AERP (Surface) asset is received.

(j) Timely notification of material availability to requisitioning activity.

j. SEA 06

(1) Equipment Life Cycle Managers (LCMs):

(a) Review AERP (Surface) candidates to preclude investment in components that are scheduled for general removal from service.

(b) Equipment engineering coordination with HSC and ICP inventory managers in developing design specifications to ensure newly procured AERP (Surface) assets reflect the same configuration as installed equipment.

(c) Approve procurement specifications and design specifications for AERP (Surface) items.

(d) Ensure all ILS elements are applied to AERP (Surface) equipment when procured.

(e) Item candidate recommendations, including item-by-item cost tradeoff analyses, assembly or next higher assembly tradeoff analyses, and criticality validation analyses.

(f) MCTBO and TAT determinations and updates.

(g) IO computations.

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(h) Maintain an AERP (Surface) Changeout History, including "As Found" Condition Reports from DOPs.

(i) Reserve AERP (Surface) material for use only during maintenance availabilities when equipment refurbishment TAT approaches or exceeds the scheduled ship availability duration.

(j) Participate in decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).

(k) Monitor the budget line for SEA 06 cognizance AERP (Surface) equipment to detect changes to the funding level. Tell SEA 91L of changes.

(2) Inventory Managers (IMs):

(a) Material support and configuration control liaison with LCMs and SLMs.

(b) Maintain the equipment configuration of AERP (Surface) assets to reflect the configuration of shipboard assets.

(c) Ensure that AERP (Surface) equipment shipped in response to a requisition matches both the requisition data and the configuration of the installed equipment.

(d) Repair management of assets to ensure correctly-configured RFI equipment is available for changeout. Equipment overhaul or refurbishment will be in accordance with applicable repair specifications. Monitor the quality of repairs.

(e) Budget APA funds for AERP (Surface) procurement of 2/4/6-Cog items.

(f) Budget available O&MN funds to maintain the optimal amount of AERP (Surface) equipment in RFI condition.

(g) Provide material availability, identification, and configuration data to PERAs for inclusion in SARP work package material availability notifications.

(h) Initiate action to catalog, recatalog and technical code all AERP (Surface) designated items as necessary; also obtain NSNs for new AERP (Surface) material.

(i) Notify SEA 91 when a requisition for a 2/4/6-Cog AERP (Surface) assets is received.

(j) Timely notification of material availability to requisitioning activity.

k. COMSPAWARSYSCOM (SPAWAR)

(1) Equipment Life Cycle Managers (LCMs):

- (a) Review AERP (Surface) candidates to preclude investment in components that are scheduled for general removal from service.
- (b) Equipment engineering coordination with HSC and ICP inventory managers in the development of design specifications to ensure newly procured AERP (Surface) assets reflect the same configuration as installed equipment.
- (c) Approve procurement specifications and repair specifications for AERP (Surface) items.
- (d) Ensure all ILS elements are applied to AERP (Surface) change-out equipment.
- (e) Item candidate recommendations, including item-by-item cost tradeoff analyses, assembly or next higher assembly tradeoff analyses, and criticality validation analyses.
- (f) MCTBO and TAT determinations and updates.
- (g) IO computations.
- (h) Maintain an AERP (Surface) Changeout History, including "As Found" Condition Reports from DOPs.
- (i) Reserve AERP (Surface) material for use only during maintenance availabilities when equipment refurbishment TAT approaches or exceeds the scheduled ship availability duration.
- (j) Participate in decision to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).
- (k) Monitor the budget line for SPAWAR cognizance AERP (Surface) equipment to detect changes to the funding level. Tell SEA 91L of changes.

(2) Inventory Managers (IMs):

- (a) Material support and configuration control liaison with LCMs and SLMs.
- (b) Maintain the equipment configuration of AERP (Surface) assets to reflect the configuration for shipboard assets.
- (c) Ensure that AERP (Surface) equipment shipped in response to a requisition matches both the requisition data and the configuration of the installed equipment.

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(d) Repair management of assets to ensure correctly-configured RFI equipment is available for changeout. Equipment overhaul or refurbishment will be in accordance with applicable repair specifications. Monitor the quality of repairs.

(e) Budget APA funds for AERP (Surface) procurement of 2/4/6-Cog items.

(f) Budget available O&MN funds to maintain the optimal amount of AERP (Surface) equipment in RFI condition.

(g) Provide material availability, identification, and configuration data to PERAs for inclusion in SARP work package material availability notifications.

(h) Initiate action to catalog, recatalog and technical code all AERP (Surface) designated items as necessary; also obtain NSNs for new AERP (Surface) material.

(i) Notify SEA 91 when a requisition for a 2/4/6/-Cog AERP (Surface) asset is received.

(j) Timely notification of material availability to requisitioning activity.

1. SPCC

(1) The AERP (Surface) Coordinator:

(a) Upon 7-Cog equipment candidate approval, establish a Numeric Stockage Object (NSO) equal to the IO. The NSO will be compared to the item's recurring demand based Reorder Level (ROL), and when the NSO quantity exceeds the ROL, the required buy or repair action will be undertaken.

(b) Provide monthly status of 7-Cog AERP (Surface) equipment and forecasted usage, including a listing of all filled and unfilled requisitions, to SEA 91L, with a copy to the cognizant TYCOM and PERA.

(c) Monitor all AERP (Surface) asset requisitions and update demand history records to improve material forecasts.

(d) Provide data used in decision making process to divert AERP (Surface) assets from a scheduled availability to correct a CASREP (C-3 or C-4 only).

(e) Coordinate review and approval or non-approval of NAVSEA recommendations on SPCC managed AERP (Surface) candidates.

(f) NSF budgeting for AERP (Surface) procurement of 7-Cog items.

(g) Budget NSF funds to maintain the optimal amount of AERP (Surface) equipment in RFI condition.

(h) Ensure procurement specifications for 7-Cog items are sufficient to maintain existing equipment configuration, through liaison with the cognizant inventory manager.

(2) Inventory Managers (IMs):

(a) Material support and configuration control liaison with LCMs and SLMs, including assisting the LCMs with the development of design specifications to ensure newly procured equipment has the same configuration as the installed equipment.

(b) Maintain the equipment configuration of AERP (Surface) assets to reflect the configuration of shipboard assets.

(c) Ensure that AERP (Surface) equipment shipped in response to a requisition matches both the requisition data and the configuration of the installed equipment.

(d) Repair management of assets to ensure correctly-configured RFI equipment is available for changeout. Equipment overhaul or refurbishment will be in accordance with applicable repair specifications. Monitor the quality of repairs.

(e) Provide material availability, identification, and configuration data to PERAs for inclusion in SARP work package material availability notifications.

(f) Initiate action to catalog, recatalog and technical code all AERP (Surface) designated items as necessary, including obtaining NSNs for new AERP (Surface) material.

(g) Notify SPCC 0341 when a requisition for a 7-Cog AERP (Surface) asset is received.

(h) Timely notification of material availability to requisitioning activity.

(i) Notify SPCC 0341 when there is a procurement of an AERP (Surface) asset pending.

m. Ship's Force is responsible for the identification or verification of configuration of on-board equipment (including field changes/ORDALTS/MACHALTS), when required. See paragraph 12c(3).

13. Action

a. Activities involved will comply with the contents of this instruction for the administration and operation of the Surface Ship AERP.

b. Identify valid AERP (Surface) equipment candidates according to guidelines in paragraph 7 and provide recommendations following the format of enclosure (1).


H. L. YOUNG
Vice Commander

Distribution: (2 copies each)

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AERP (SURFACE) EQUIPMENT CANDIDATE NOMINATION FORM

From: _____
To: Commander, Naval Sea Systems Command (SEA 91L)
Subj: AERP (SURFACE) EQUIPMENT CANDIDATE NOMINATION
Ref: (a) NAVSEAINST 4490.1 of 24 October 1986

1. The following information is provided for the analysis of the listed equipment. This equipment is considered a valid AERP (Surface) candidate for the reasons listed, and in accordance with paragraph 7 of reference (a).

2. Equipment Data

Nomenclature: _____

Equipment Allowance Parts List (APL) Number: _____

Service Application or Next Higher Assembly Name: _____

Manufacturer (with Federal Supply Code for Manufacturers (FSCM)): _____

COG/NSN: _____ Part Number: _____

Source, Maintenance and Recoverability (SM&R) Code: _____

DOP (Interim/Final): _____ TAT: _____ (mos.) MCTBO: _____ (mos.)

Unit Price (\$): _____ Net Price (\$): _____

Replace Price (\$): _____ Repair Price (\$): _____

Technical Repair Standard (TRS): _____ Tech Manual #: _____

3. Overhaul Data

Ship Class: _____ Qty Hulls: _____ Equip/Ship: _____

SRA or PMA Cycle: _____ SRA or PMA Duration: _____

Allowed Off-ship Time: _____ (mos.) Overhaul-in-place comparison: _____ (mos.)

4. Comments (Use reverse if necessary)

NAVSEAINST 4490.1
24 OCT 1986

AERP (SURFACE) REQUISITION DATA FIELD ENTRIES

Mandatory Data Field Entries are Denoted by a "*"

<u>FIELD</u>	<u>CC</u>	<u>ENTRY</u>	<u>COMMENTS</u>
Document Identifier	1-3	* AOE	Requisition with exception data
Routing Identifier	4-6	NNZ	Routing identifier of nearest NSC
Media & Status Code	7	S	"S" provides "100% supply status plus shipment status to requisitioner by AUTODIN." If the requisitioning activity is not equipped with AUTODIN gear, the activity's "normal" requisitioning Media & Status code will be used
NSN	8-22	4320010261871	NSN of AERP (Surface) item (spelled out in message)
Unit of Issue	23-24	EA	Unit of Issue of item
Quantity	25-29	00001	Quantity required (spelled out in message)
Document Number			
Service Code	30	N	"N" for shore activities
Requisitioner's UIC	31-35	00151	UIC of Planning activity/ Requisitioner
Julian Date	36-39	6147	Date of requisition
Serial Number	40-43	0001	Never duplicated on the same day
Demand Code	44	* R	"R" for recurring demand
Supplementary Address	45-50	YF1084	"Y" in CC45 indicates that the supp. add. is for local use - To be assigned by requisitioner per local guidelines

ENCLOSURE (2)

<u>FIELD</u>	<u>CC</u>	<u>ENTRY</u>	<u>COMMENTS</u>
Signal Code	51	A	Material to be shipped to requisitioner
Fund Code	52-53	K9	Provided by requisitioner
Distribution	54-56	BLNK7H	"BLNK" followed by the material cog symbol
Project Code	57-59	* 6 <u>P</u>	Second character of Project Code to be determined by requisitioning activity - To be the same for all requisitions of material for work on the same ship
Priority	60-61	15	Based on established UMMIPS criteria
RDD	62-64	BLNK	Blank ("BLNK" in the requisition message) unless the SDD for the assigned priority designator is not satisfactory. If the SDD is not satisfactory, a standard MILSTRIP entry will be used
Advice Code	65-66	* 5G	To indicate that the item is a turn-in repairable
Extended Price	74-80	19600.00	Total Price (decimal is included in message for clarity)

Sample Exception Data:

ALTHOUGH MATERIAL HAS AN ASSIGNED NSN, REQUIRED MATERIAL MUST MATCH IDENTIFICATION DATA. IDENTIFICATION DATA: APL: 0162103525; FSCM: 10613; PART NUMBER 99D5D-BZ ADDITIONAL ADVICE CODE: 2B; "REQUESTED ITEM ONLY WILL SUFFICE. DO NOT SUBSTITUTE OR INTERCHANGE."

SAMPLE AERP (SURFACE) MESSAGE REQUISITION

JOINT MESSAGEFORM				SECURITY CLASSIFICATION																											
				UNCLASSIFIED																											
PAGE	DTG/RELEASED TIME			PRECEDENCE		CLASS	SPECAT	IMP	CHK	ORIG/MSG IDENT																					
	DATE-TIME	MONTH	YR	ACT	INFO																										
01 of 01				RR		UUUU		TT	ZYUU																						
<p>1004. ADMIN MESSAGE HANDLING INSTRUCTIONS</p> <p>FROM: NAVSHIPYD PHILADELPHIA PA</p> <p>TO: NSC NORFOLK VA</p> <p>INFO COMNAVSURFLANT NORFOLK VA</p> <p>COMNAVSUPSYSCOM WASHINGTON DC</p> <p>COMNAVSEASYSYSCOM WASHINGTON DC</p> <p>SPCC MECHANICSBURG PA</p> <p>PERA PHILADELPHIA PA</p> <p>UNCLAS //N04235//</p> <p>SUBJ: AERP MILSTRIP REQD</p> <p>1. SURFLANT FOR N43A, NAVSUP FOR 0321A1, SPCC FOR 0341, PERA FOR 1820, NAVSEA FOR 911, 913 } *</p> <p>2. AOE/NNZ/S/FOUR THREE TWO ZERO ZERO ONE ZERO TWO SIX ONE EIGHT SEVEN ONE/EA/ZERO ZERO ZERO ONE/N00151/6147/0001/R/YF1084 A/K7/BLNK7H/6XP/15/DLNK/SG/19600.00</p> <p>ALTHOUGH MATERIAL HAS AN ASSIGNED NSN, REQUIRED MATERIAL MUST MATCH IDENTIFICATION DATA. IDENTIFICATION DATA: APL: 016210325; FSCM: 10613; PART NO: 99D5D-BZ ADDITIONAL ADVICE CODE: 2B, "REQUESTED ITEM ONLY WILL SUFFICE. DO NOT SUBSTITUTE/INTERCHANGE."</p> <p>* Note - Only one of the NAVSEA SLM codes will be listed as an information addressee on the requisition message. They are identified as:</p> <p>SEA 912 - Aircraft Carriers SEA 913 - Surface Combatants (except gas turbine ships) SEA 914 - Surface Combatants (gas turbine ships) SEA 931 - Amphibious and Combat Support ships PMS 400F - AEGIS ships</p> <p>The appropriate information addressee codes for the TYCOMS and PERAS are:</p> <table border="1"> <thead> <tr> <th></th> <th>ACTIVITY</th> <th>INFORMATION ADDRESSEE CODE</th> </tr> </thead> <tbody> <tr> <td rowspan="4">TYCOMs</td> <td>COMNAVSURFLANT NORFOLK VA</td> <td>SURFLANT FOR N43A</td> </tr> <tr> <td>COMNAVSURFPAC SAN DIEGO CA</td> <td>SURFPAC FOR N42</td> </tr> <tr> <td>COMNAVAIRPAC SAN DIEGO CA</td> <td>AIRPAC FOR 732</td> </tr> <tr> <td>COMNAVAIRLANT NORFOLK VA</td> <td>AIRLANT FOR 513.1</td> </tr> <tr> <td rowspan="4">PERAs</td> <td>PERA PHILADELPHIA PA</td> <td>PERA FOR 1820</td> </tr> <tr> <td>PERA SAN FRANCISCO CA</td> <td>PERA FOR 1840.1</td> </tr> <tr> <td>PERA NORFOLK VA</td> <td>PERA FOR 1863</td> </tr> <tr> <td>PERA BREMERTON WA</td> <td>PERA FOR 1842</td> </tr> </tbody> </table>												ACTIVITY	INFORMATION ADDRESSEE CODE	TYCOMs	COMNAVSURFLANT NORFOLK VA	SURFLANT FOR N43A	COMNAVSURFPAC SAN DIEGO CA	SURFPAC FOR N42	COMNAVAIRPAC SAN DIEGO CA	AIRPAC FOR 732	COMNAVAIRLANT NORFOLK VA	AIRLANT FOR 513.1	PERAs	PERA PHILADELPHIA PA	PERA FOR 1820	PERA SAN FRANCISCO CA	PERA FOR 1840.1	PERA NORFOLK VA	PERA FOR 1863	PERA BREMERTON WA	PERA FOR 1842
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