



DEPARTMENT OF THE NAVY
COMMANDER MILITARY SEALIFT COMMAND
914 CHARLES MORRIS CT SE
WASHINGTON NAVY YARD DC 20398-5540

REFER TO:

COMSCINST 4700.2G
N7
21 January 2003

COMSC INSTRUCTION 4700.2G

Subj: ALTERATION MANAGEMENT FOR MSC SHIPS

- Ref:
- (a) MSC Drawing 803-7373401, TRANSALT Process Guide for the Naval Fleet Auxiliary Force (NFAF) Program
 - (b) MSC Drawing 803-7488124, TRANSALT Process Guide for the Special Mission Ships (SMS) Program
 - (c) MSC Drawing 803-7488125, TRANSALT Process Guide for the Prepositioning Program
 - (d) MSC Drawing 803-7488126, TRANSALT Process Guide for the Sealift Program
 - (e) C-3 Logistics Support Requirements
 - (f) COMSCINST 4790.3B, Equipment Configuration Data Management and Logistics Support for Ships of the Military Sealift Command

1. Purpose. To establish Commander, Military Sealift Command (COMSC) policy and responsibility for alteration management. This instruction is a complete revision and should be read in its entirety.

2. Cancellation. COMSCINST 4700.2F.

3. Applicability. The requirements of this instruction apply to all Military Sealift Command (MSC) owned, bareboat chartered ships and long-term chartered ships whether civilian mariner (CIVMAR) manned or contractor operated, except as specifically noted in this instruction. Compliance with this instruction shall be required in all applicable ship operating contracts awarded after the issue date of this instruction.

4. Definitions. This instruction provides MSC policy for the alteration management of MSC ships. For determining compliance with this instruction, the following definitions apply:

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a. Alteration. An alteration is any change in hull, machinery, equipment, arrangement or allowance that involves a change in design, material, quantity or location of equipment and components in a ship. This change includes replacement of machinery or equipment that has the same operating characteristics as the replaced machinery or equipment, but is of a different manufacturer or model than the replaced equipment. This requirement also includes changes and upgrades to electronic and communications gear. This requirement generally does not include substitution of equipment or machinery hardware components available through off the shelf stock procurement when substitution of such components will not alter the operation of the supported equipment and will not affect the provisioning of spare parts or technical documentation. An alteration request may result from a Voyage Repair Request, Casualty Report (CASREP), Ship Material Assessment and Readiness Testing (SMART) and Material Readiness Evaluation (MRE) deficiencies, Sponsor Request, shipcheck, Fleet Modernization Program (FMP) Alteration, ship's force suggestions or other means.

b. TRANSALT. The term "TRANSALT" (Transportation Alteration) is used interchangeably with the term "alteration". It is similar to a U. S. Navy "SHIPALT" and refers to the former name of MSC, Military Sea Transportation Service. The term "TRANSALT" was assigned to distinguish USNS alterations from the SHIPALTs of the USN fleet.

c. Alteration Management. Alteration management is the process by which TRANSALTs are proposed, evaluated (for technical sufficiency, economy, cross program and class wide applicability, logistics support requirements and maintenance requirements), approved, completed and tracked.

d. Baseline Item. A Baseline Item is an alteration that has been approved for accomplishment on ships of a class during a ship's construction or conversion period through the fund limiting date. These required work items are identified and accomplished on later ships of a class, and the initial ships delivered under the same construction or conversion program are delivered without the alteration accomplished. For those ships outside of the fund limiting date, accomplishment of Baseline Items shall be tracked using the TRANSALT process outlined in references (a) through (d).

e. Technical Support Data (TSD). TSD is required to establish and maintain life cycle support for equipment procured by the Government or contractors and installed on Government owned ships. TSD requirements for alterations are identified in reference (e) and include technical manuals, drawings, equipment configuration and parts data, preventive maintenance material requirements and parts usage data associated with equipment repairs performed by contractors. TSD requirements must be included in all equipment procurements. The Logistics Directorate (COMSC N4) is designated as the technical office for all issues relating to logistics requirements.

f. Alteration Equivalent to Repair (AER). Alterations shall be designated as AERs when the replacement of machinery or equipment is determined to be more economical than its repair. If the proposed new equipment or machinery has the same form, fit and function, and nameplate data as the replaced equipment or machinery, then no alteration action is required because the logistics and maintenance support requirements will not be changed. If the proposed new equipment or machinery has the same form, fit and function but different nameplate data from the replaced equipment or machinery, then the action shall be designated as an AER type TRANSALT, provided equipment equivalency can be demonstrated. Designation of this type of repair action as an AER will ensure proper future maintenance and logistics support for that item. If equipment equivalency is properly documented as an AER type TRANSALT, review can usually be expedited. The Program Manager still must approve AER type TRANSALTs.

g. Fleet Modernization Program (FMP). The FMP, as it applies to the MSC fleet, is the process by which the combatant Navy supports the interoperability modernization of MSC ships (T-Ships). Interoperability alterations are those modernizations that affect the ability of MSC ships to operate effectively with other U. S. ships, units or allied forces. In addition, non-interoperability alterations may also be processed under FMP if such improvements are desirable on MSC ships that have identical or similar fleet compatible systems as those on combatant ships. Alterations under the FMP umbrella include, but are not limited to, the following:

(1) Naval Sea Systems Command (NAVSEA) Ship Alteration Record (SAR) for Title K/KP/D/F & AER alterations.

(2) Space and Naval Warfare Systems Command (SPAWAR) Command, Control, Communication, and Computer Systems (C4S) alterations, SAR for Title K/KP/D/F & AER alterations, and SPAWAR Field Changes.

(3) Machinery Alterations (MACHALTs)

(4) Boat Alterations for small craft; e.g., LSU (BOATALT).

(5) Naval Air Systems Command (NAVAIR) Service Changes for Air Capable Ships (ACS). This includes, but may not be limited to, the following:

(a) Visual Landing Aids (VLA)

(b) Aircraft Launch and Recovery Equipment (ALRE)

(c) Identification Friend or Foe (IFF) and Tactical Air Navigation (TACAN) system

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5. Policy

a. Each Program Manager shall serve as the configuration manager for ships within his/her program. In this role, the Program Manager shall manage alterations that apply to assigned ships and shall maintain the master list of approved TRANSALTs and their completion for each ship and each class of ship. At a minimum, this list will contain the TRANSALT number, date approved, title, description, estimated cost, scheduled fiscal year accomplishment, applicable ships, and status (not applicable, open, cancelled, date completed). Once the TRANSALT is complete, the list shall also indicate the name and location of the installing activity for the TRANSALT, total cost (including associated Requests for Proposal), manufacturer and model of installed equipment or machinery, all other additional nameplate information, and the status of required logistics support and TSD.

b. Alterations shall be accomplished on MSC ships only if they are approved according to the applicable process established in references (a) through (d). Reference (e) shall be used as a guide for identifying logistics requirements for all new or modified equipment or systems resulting from completed alterations. MSC 4700/15, TRANSALT Request, MSC 4720/9, TRANSALT Worksheet, MSC 4720/2, TRANSALT Approval & Completion Form, and MSC 4700/16, Equipment Equivalency Form shall be used to request, describe, evaluate, approve and document to completion of alterations. Reference (f) shall be used to demonstrate equipment equivalency for AERs.

c. MSC and contractor personnel, ashore and afloat, shall ensure that only approved alterations are accomplished on MSC ships.

d. The Director, Engineering Directorate (COMSC N7) shall:

(1) Evaluate all TRANSALT Requests (including those for Baseline Items and AERs) for cross program applicability. If the alteration is approved for application across several ships, or classes of ships, COMSC N7 shall coordinate with COMSC N4 and the respective Project Offices, the practicality and advisability of bulk purchase of associated equipment and material for the alteration.

(2) Evaluate all TRANSALT Requests (including those for Baseline Items and AERs) for impact on preventive maintenance requirements.

(3) Technically evaluate those TRANSALT Requests (including those for Baseline Items) which have not been previously accomplished and operationally proven on ships of the respective class.

(4) Serve as the repository for all Baseline Items and in concert with the Program Manager determine applicability of specific Baseline Items including those for previously delivered ships of the class. If determined to be applicable, COMSC N7 shall prepare the TRANSALT Request (MSC 4700/15), TRANSALT Worksheet (MSC 4720/9), TRANSALT Approval and Completion Form (MSC 4720/2) and Equipment Equivalency Form (MSC 4700/16), as required and submit it to the Program Manager to track the accomplishment of these Baseline Items.

(5) Develop work items and drawings as required to accomplish alterations.

(6) Submit drawings and supporting technical documentation to regulatory agencies for approval.

(7) Technically evaluate substitution of hardware components for equipment or machinery available through off the shelf stock procurement only when these components require logistics or maintenance support.

e. The Director, Command, Control, Communication, and Computer Systems (C4S) Directorate (COMSC N6) is responsible for integration of all C4S systems including afloat systems to meet all regulatory body, Navy and MSC unique requirements. These systems include: LANs, Radio Communications Systems (RCS), integrated communications and Command and Control Systems. To this end, COMSC N6 shall evaluate all TRANSALT Requests for C4S alterations (including those for Baseline Items) for cross program applicability, for impact on preventive maintenance requirements and for impact to the C4S integrated systems/shipboard architecture.

f. Per reference (f), COMSC N4 is the Configuration Data Manager for MSC government owned ships and equipment. COMSC N4 shall provide procedures and technical assistance support to develop logistics support and maintain MSC configuration records. COMSC N4 shall process TSD and develop allowance documents and changes in accordance with reference (f), and as required by the Program Manager. In addition, COMSC N4 shall advise the Program Managers on bulk purchase requirements for cross program applicable TRANSALTs.

g. A FMP alteration that is required to be completed on an MSC ship shall be managed using the applicable TRANSALT process outlined in references (a) through (d).

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6. Forms. Electronic versions of MSC 4700/15, MSC 4720/2, MSC 4720/9 and MSC 4700/16 are available on the MSC Intranet/Publications/Forms and the MSC CD Library. Other addressees may obtain electronic versions by forwarding a request to cheryl.miller@msc.navy.mil or nancy.barr@msc.navy.mil.

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Distribution:

COMSCINST 5215.5

List I (Case A, B, C)

SNDL 41B (MSC Area Commanders)
41C (NFAF East/West)
41D (MSC Offices)
41M (TAGOS Project Office)
T-100 (Masters, civil service manned ships)
T-102 (Masters & operators, contract-operated FSS)
T-103 (Masters & operators, contract-operated TAGOS)
T-104 (Masters & operators, contract-operated MPS)
T-105 (Masters & operators, contract-operated LMSRs)
T-106 (Masters & operators, contract-operated MPF(E))
T-107 (Masters, civil service manned Fast Combat Support Ships)
T-108 (Masters & operators, contract-operated T5 Tankers)