



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
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OPNAVINST 9640.1B
N43
20 SEP 2012

OPNAV INSTRUCTION 9640.1B

From: Chief of Naval Operations

Subj: SHIPBOARD HABITABILITY PROGRAM

Ref: (a) T9640-AB-DDT-010/HAB, Shipboard Habitability Design Criteria Manual, 1 Dec 1995 (NOTAL)
(b) T05U3-085, NAVSEA Design Practices and Criteria Manual for Submarine General Arrangements Design, 19 Aug 2012
(c) SECNAVINST 5000.2E
(d) SL720-AA-MAN-030, Alterations to Ships Accomplished by Alteration Installation Teams, Apr 2009

1. Purpose

- a. To provide Chief of Naval Operations (CNO) policy regarding U.S. Navy shipboard habitability.
- b. To establish procedures which enhance conformance with, and approve deviations from, established design criteria.
- c. To assign responsibility for shipboard habitability program implementation and designate Office of the Chief of Naval Operations (OPNAV) Director, Fleet Readiness (OPNAV (N43)) as shipboard habitability manager.
- d. This instruction makes minor modifications and updates the references from the previous version.

2. Cancellation. OPNAVINST 9640.1A.

3. Discussion

- a. The Navy's primary mission is to be prepared to conduct prompt and sustained combat operations at sea in support of U.S. national interests and the national military strategy. The Navy is dependent upon shipboard personnel to accomplish this mission and, therefore, must provide living and working conditions which result in levels of personnel morale, safety, health and

comfort, adequate to sustain maximum personnel effectiveness and support optimum personnel retention. Habitability is that military characteristic of U.S. Navy ships directed toward satisfying personnel needs which are dependent upon physical environment.

b. The objective of this instruction is to ensure shipboard facilities and spaces support the needs of shipboard personnel by: supporting established habitability criteria for ship design and modernization programs, while reflecting the capabilities and needs of a modern U.S. Navy; establishing procedures to compensate for potential impacts upon shipboard habitability incurred through the addition of new systems, equipment, and personnel; and, providing a base for habitability improvements by limiting billet growth to the level of physical accommodations.

4. Policy

a. General. Habitability is one of several important factors included in the overall consideration of unit mission readiness. A warship cannot be designed around optimum habitability factors alone, but conversely, habitability factors cannot be progressively sacrificed to other readiness elements without eventual degradation of mission readiness. Maintaining the appropriate shipboard quality of life (QOL) within established habitability criteria supports positive morale and peak mission readiness.

b. Specific Criteria. References (a) and (b) contain detailed habitability criteria for developing the specifications required for directing both new ship construction and modifications to existing ships. In the event of a conflict between references (a) and (b), as it pertains to submarines, reference (b) takes precedence.

c. Definitions

(1) "New ship designs" refers to ship and submarine designs sufficiently early in the design process where changes can reasonably be made to the capability development document (CDD), or which have not completed preliminary design.

(2) "Existing ships" refers to ships and submarines that do not meet the new ship definition, as well as those accepted and commissioned.

(3) "Accommodations" denotes the number of personnel permanently supported in a given ship by habitability spaces, systems, fixtures and equipment. Accommodations are provided for ship's company plus any of the following embarked personnel: troops, air wing, staffs, detachments, short-term assignments, indoctrination personnel, civilian technical representatives and official visitors or guests. Accommodations for some personnel can be categorized as "surge" or "transient" depending on their function.

(a) "Surge" refers to personnel embarked for short durations for special operations, exercises or mobilizations. Surge personnel accommodations require provisions for berths. When unqualified reference to "troops" is made, it excludes surge troops.

(b) "Transients" refers to personnel embarked for short durations who do not contribute to the host ship's operational capability. Transients normally are awaiting transfer to, or arrival at, another destination. Ships receiving a steady influx of transients require support for them so that habitability for permanently assigned personnel is not compromised.

(4) "Ships company" refers to all officers, chief petty officers (CPO), and enlisted crew members assigned to the ship.

(a) CPO and senior non-commissioned officer (SNCO) refer to E-7 through E-9 personnel.

(b) Crew and troop refer to E-1 through E-6 personnel.

(c) Enlisted personnel refers to CPO, SNCO, crew and troop.

(5) "Hot bunking" refers to the practice of assigning more than one person to a single berth.

(6) "CNO warfare sponsors" refers to the Directors for Air, Surface, Expeditionary and Undersea Warfare Divisions.

d. Applicability. This instruction applies to U.S. Navy ship designs and commissioned ships over 150 feet in length or manned by 100 or more persons. Smaller ships will be treated on a case-by-case basis, with established criteria providing a foundation for habitability design, recognizing that design constraints may preclude reasonable attainment of all larger ship standards.

e. Accommodation Limits. Increasing the population of a ship beyond the capability of existing environmental control systems, habitability space and facilities (physical habitability elements) degrades habitability. In new ship designs, physical habitability elements are provided for the number of accommodations derived from the CDD. The CDD shall include a service life allowance for officer and enlisted personnel which provides for a growth of 10 percent at ship delivery (this applies to ship's company only). For existing ships, permanent accommodation limits (peacetime) shall be established for each class and ship, as appropriate, from which plans may be developed for meeting habitability criteria in references (a) and (b). The ultimate objective is the elimination of "hot bunking" and other habitability degradations caused by overpopulation. Recognizing exceptions which may occur due to fluctuations inherent in shipboard manning, the following policy shall apply:

(1) Surface Ships

(a) Officers, CPOs, crew and embarked personnel shall not be assigned more than 60 days in numbers greater than that of installed berths, except in cases of operational necessity as determined by fleet commanders.

(b) Billeets shall not be added in numbers greater than that of installed berths, except in cases of operational necessity as determined by the appropriate CNO warfare sponsor.

(c) Where possible, transient personnel shall be provided support equivalent to permanently assigned personnel. Where dedicated compartments are provided for transients, they shall follow the guidelines in reference (a).

(d) Troop lift capacity is to be maintained per ship design specifications except as modified by authorized ship alterations. Ship alterations reducing troop accommodations are to be submitted to the Commandant of the Marine Corps, Plans, Policies and Operations (Code PPO) for comment prior to being authorized for accomplishment. Ships designed with surge troop living spaces that have alternative peacetime functions shall be capable of restoring surge capacity by ship's force within 48 hours.

(e) Where possible, civilian technical representatives shall be provided support based on their equivalent military rank. Where dedicated compartments are provided, they shall follow reference (a).

(2) Submarines are exempt from the policy in subparagraph 4e(1) by virtue of their unique constraints. However, the philosophy of eliminating "hot bunking," and providing transient and civilian technical representatives equivalent support to that of permanently assigned personnel where feasible, based on their military or equivalent military rank, remains valid, and all reasonable effort shall be made towards this end.

f. Deviations

(1) For new ships, cognizant CNO warfare sponsor approval is required for deviations which do not meet the criteria in references (a) and (b).

(2) For existing ships, fleet commander approval is required for deviations from criteria in references (a) and (b). Copies of such waivers shall be provided to the CNO warfare sponsor and OPNAV (N43).

(3) All waiver requests shall be submitted via the normal chain of command. CNO waiver requests shall be addressed to the appropriate CNO warfare sponsor, copy to OPNAV (N43).

g. Improvement Beyond Established Criteria. The basic goal is to enhance shipboard habitability within the unique constraints of a warship. Attainment of references (a) and (b) criteria has the highest priority within the habitability program. Improvements beyond these criteria must consider cost,

QOL, accessibility, location, rank, gender and redundancy. Expenditure of funds for shipboard habitability improvement must support fundamental elements of standard quality and design and under no circumstance be for decoration or rehabilitation solely for reasons of personal taste. Habitability improvements are to be guided by reason and responsibility of public trust.

h. Wartime or National Emergency Waiver. Criteria issued here and in references (a) and (b) are for peacetime. In time of war or other national emergency, these criteria may be set aside to meet other mission essential requirements. Specific deviation approval is not required. However, either the criteria shall be restored or an approved deviation shall be obtained per subparagraph 4f, once peacetime is restored or the emergency passes.

i. Procedures

(1) New Ship Designs. Criteria established in references (a) and (b) shall be used in developing the CDD. The OPNAV shipboard habitability manager and warfare sponsors shall be actively involved in the development of the CDD and functional baseline documents, and will make recommendations on habitability factors per reference (c).

(2) Existing Ships

(a) Attainment of criteria established in references (a) and (b) shall be accomplished primarily through the Navy Modernization Process (NMP) by means of ship alterations and assistance provided by the Commander, Naval Sea Systems Command (COMNAVSEASYS COM) Habitability Self-Help Program.

(b) Prioritization of habitability alterations will follow reference (d), with emphasis on:

1. Improvement to the established criteria for climate control in berthing, messing and sanitary spaces.

2. Provision of a permanent berth and personal stowage space for each officer, enlisted person, and embarked personnel.

3. Other habitability elements where problems exist to the extent that the negative effects upon morale and or personal effectiveness are great enough to create a detriment to the unit's ability to perform its mission.

5. Responsibilities

a. OPNAV (N43) is designated as OPNAV shipboard habitability manager and will provide overall policy guidance and review for the program. They shall:

(1) Ensure that criteria in references (a) and (b) are included in the CDD and monitor the refinement of these provisions in the baseline development process of reference (c).

(2) Coordinate with the CNO warfare sponsors the inclusion of habitability improvements in the NMP.

(3) Sponsor ad hoc habitability working groups to resolve emergent issues and provide a representative as chair.

b. The CNO warfare sponsors shall:

(1) Prioritize and incorporate into the NMP applicable habitability improvements per reference (d).

(2) Monitor ships manning document development and modification to prevent billet increases beyond habitability limitations, except in cases of operational necessity.

(3) Review habitability features of new ship designs under their cognizance, when establishing CDDs, to best conform to the criteria established in references (a) and (b) and inform the OPNAV shipboard habitability manager of potential deviations.

(4) Grant waivers as authorized in subparagraph 4f for new ships.

(5) Provide representation to OPNAV ad hoc habitability working groups.

c. The fleet commanders shall:

- (1) Support references (a) and (b) requirements.
- (2) Prepare an annual budget for accomplishment of title "D" and "F" alterations and self-help projects in support of class habitability improvement plans.
- (3) Recommend prioritization of title "K" habitability alterations during fleet modernization conferences, per reference (d), supporting habitability improvement plans.
- (4) Monitor self-help habitability projects to ensure approved methods and materials are employed. Ensure impacts of proposed improvements upon existing habitability and other systems are considered prior to implementation.
- (5) Coordinate with appropriate commands to maintain shipboard personnel allowances and manning limits at or below the levels specified in subparagraph 4e or as otherwise established by OPNAV.
- (6) Grant waivers as authorized in subparagraph 4f for existing ships.

d. COMNAVSEASYSKOM shall:

- (1) Ensure U.S. Navy ships are designed, constructed and modernized per this instruction and as otherwise authorized.
- (2) For habitability deficiencies identified on active ships (e.g., from Board of Inspection and Survey, pre-availability inspection, etc.), with respect to criteria in references (a) and (b):
 - (a) Record deficiencies from criteria.
 - (b) Forward requests for deviation waivers to fleet commanders.
 - (c) Initiate alteration development for deficiencies not addressed.

(3) Develop a habitability improvement plan for each class or ship directed toward attainment of habitability criteria not specifically waived.

(4) Support fleet habitability improvement efforts by:

(a) Developing appropriate ship alterations.

(b) Providing technical guidance to the COMNAVSEASYS COM Habitability Self-Help Program sufficient to support the efforts of the fleet commanders.

(c) Providing the fleet current information on approved habitability improvement methods and materials.

(5) Ensure alteration and work package development includes determination of impact on existing habitability facilities and plans to concurrently minimize such impact.

(6) Ensure changes to references (a) and (b) are coordinated with CNO warfare sponsors and OPNAV (N43), and that applicable COMNAVSEASYS COM documents and instructions are updated to reflect those changes.

(7) Provide manpower and material costs for title "D" and "K" ship alterations to fleet commanders and OPNAV (N43).

(8) Ensure analyses of personnel and attendant habitability requirements are provided to CNO warfare sponsors sufficiently early in the development and acquisition of systems and equipment destined for shipboard use, or requiring shipboard support and handling, to allow concurrent development of shipboard equipment tradeoff and habitability modification plans.

(9) Coordinate proposed ship alterations that affect troop lift capacity with the Commandant of the Marine Corps (Code POR) and refer unresolved issues to OPNAV (N43).

(10) In coordination with the appropriate type commander, ensure that accurate determinations of installed berthing accommodations are made, published and updated.

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(11) Provide appropriate representation for OPNAV ad hoc shipboard habitability working groups.

6. Records Management. Records created as a result of this instruction, regardless of media or format, shall be managed per Secretary of the Navy Manual 5210.1 of January 2012.



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