



The Board of Inspection and Survey  
**INSURV**



**HABITABILITY INSCAT MASTER CHECK LIST**  
(Latest Revision 13 January 2004)

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**Athletic gear:** (.05)

The ship did not have an ample supply of sporting equipment in selection or numbers.				
There was no designated athletic gear storeroom				
Athletic gear storeroom was dirty and disorganized.				
<b>Score:</b>				

**Berthing, CMC:**

Command Master Chief/Sergeant Major was not provided with single (one person) staterooms adjacent to their respective CPO and SNCO living spaces.				
<b>Score:</b>				

**Berthing, Enlisted: (GSO 643C, 640C, 602J; HDCM PARA. 3.2.7)** (-.05)

<b>Bunk/locker numbering</b>				
Berth tiers, except for surge berths, were not a maximum of three berths per tier. (-.10)				
<b>Irons/Boards (GSO 640G / GSO 655 OPNAVINST 9640.1A)</b>				
Ironing boards were damaged/missing. (Collapsible, metal, commercial type, about 15 inches wide and 54 inches long, with thick pads and asbestos-free fireproof covers.) (-.10)				
Each berthing space did not have one iron and ironing board for every 50 accommodations or fraction thereof. (-.10)				
Stowage was inadequate/not provided.				

**Lockers (OPNAVINST 9640.1A TABLE 3 GSO 640C, 642)** (-.05)

One wardrobe locker was not installed for each pan style berth in crew/troop berthing. (-.10)				
One 10-inch wide hanging locker was not installed for each crew berth. (-.10)				
Soiled clothes locker with ¾ cubic foot volume per accommodation (divided into "white" and "blue", or separate lockers) was missing/of insufficient size.				
Lockers were broken/warped/damaged/not secured.				
Lockers were not installed 6 inches above the deck (2				

inch watertight coaming minimum).				
CPO wardrobe locker was not installed for each CPO accommodation. (-.10)				
<b>Partition (GSO 621, 640D OPNAVINST 9640.1A HDCM 3.2.6.5)</b> (-.05)				
Berth partitions were not installed between all double tier berths.				
Partitions on berths adjacent to passageways, hatches, ladders, and doors were not provided for the full length of the berth, extending from the deck to the overhead.				
Main ship passageways bisected berthing spaces without isolation by joiner bulkheads. (-.10)				
<b>Type/Location (GSO 643, 640C; OPNAVINST 9640.1A; HDCM PARA. 3.2.6.5)</b> (-.05)				
Berthing was not isolated from primary passages by bulkhead. (-.20)				
Berths were not pan, locker bottom or sit-up type. (Surge berthing excepted) (-.10)				
<b>Bedding (NSTM 9332.51 / GSO 640 NAVMED P-5010, HDCM PARA. 3.2.7.1.3)</b> (-.05)				
Insufficient Crew/CPO/Officer bed linen (sheets, pillow cases, blankets, bedspreads) to allow for laundry and exchange (once per week) was onboard.				
Mattresses were the wrong size for the berths. (Minimum 76 inches)				
Mattresses and covers were deteriorated/of insufficient quantity/unduly soiled.				
Bed linen was unduly soiled/torn.				
Pillows/pillow ticking were deteriorated/unduly soiled/ of insufficient quantity.				

**Cleanliness: (NAVSEA T9040-AA-HBK-010 FMS; NAVMED P-5010)**

Spaces were inadequately/improperly cleaned. (Typified by debris buildup, scale buildup, lint accumulation, food spills, litter from poor storage, etc.) (-.25)				
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**Berthing, Enlisted (cont'd)** (-.05)

<b>Bunk Items (GSO 640C,E &amp; G; MILSPEC DOD-C-24556; OPNAVINST 9640.1A; HDCM 3.2.6 HDCM PARA. 3.2.7)</b>							
Individually operated bunk lights were not/improperly installed (not above the approx. Location of occupants chin)/inoperative.							
Individually controlled heating, ventilating and air conditioning (HVAC) terminals were not installed/damaged/inoperative. (Or an HVAC terminal shall be provided within each berth cubicle where an individually modular fan unit shall be provided within each berth for ventilation) (-.10)							
Towel bars were missing/damaged.							
Tricing straps/legs were missing/broken for lower bunks so designed. (-.10)							
Bunk supports were missing/broken.							
Excessive personal gear adrift.							
Curtains were not installed/missing.							
Curtains were worn/damaged.							
Track structure was not capable of supporting 250 lbs.							
A privacy cover was not provided for each top berth.							
Bunks were not equipped with bunk straps (lee Straps) or lee rails.							
Grab rods of aluminum or zinc-coated steel were missing/damaged over two and three high berth tiers.							
Steps for multiple tier berths were missing/damaged.							
<b>Count/Type (OPNAVINST 9640.1A / GSO 643C, 640C; HDCM PARA. 3.2.5.4)</b>							
There was not one berth per crew assigned. (-.75)							
There were insufficient berths as specified:							
Personnel		# Sailors	# Berths				
Berths Inst		Onboard					
Officers							
CPO's							
Enlisted							
Troop Officers							
Troop SNCO's							
Troop Enlisted							

Staff/Det Off							
Staff/Det CPO							
Staff/Det Enlisted							
<b>Crew Clearances (OPNAVINST 9640.1A;GSO 640C)</b> (-.05)							
Minimum vertical unobstructed clearance above the top of crew mattresses (E6 and below) of 20 inches was not met.							
Minimum vertical unobstructed clearance above the top of crew mattresses (Officer/CPO) of 23 inches was not met.							
Unobstructed passage width at berth tier ends of 36 inches was not met.							
Unobstructed passage width along the access sides of berths of 27 inches was not met.							
<b>Escape Routes (OPNAV INSTRUCTION 5100.19(SERIES); GSO 602J, 071B/C)</b>							
Escape scuttle warning labels with 1" red letters reading "warning escape scuttle, do not obstruct or block" were missing/damaged. (-.50)							
Alternate escape routes were not provided for spaces (new or modified spaces) with 21 or more accommodations. (-.50)							
Escape routes were blocked/obstructed/opened into locked spaces. (-.50)							
<b>Flammability/Habitability (OPNAV INSTRUCTION 5100.19(SERIES) OPNAVINST 9640.1A/9880.2; Habitability Design Criteria Manual; GSO 640D / Shipboard Furniture Catalog)</b>							
Materials (furniture, equipment, curtains, carpet/rugs, sheathing, bedding, decorations, etc.) did not meet fire retardancy, smoke and toxicity criteria (MILSPEC-1623). (-.25)							
<b>Locker, Linen (GSO 640G)</b>							
Linen lockers were not installed in living areas. (-.10)							

<b>Mattress/Pillow (OPNAVINST 5100.19D; NAVMED P5010; NSTM 9332.65; NAVSUPINST 4235.4B; NAVSEA 0933-LP-005-5050)</b>				
Mattresses were not neoprene (Polychloroprene) foam rubber, MIL-M-18351F. (Recognized by dark gray or black color; also by the tag) (-.25)				
Bulk stowage of shipboard mattresses was not protected by a fire sprinkler system.				
Pillows were not NAVMED approved Feather (FED-SPEC V-P-356D). (-.25)				
<b>Mirrors (GSO 643, 640E &amp; G) (-.05)</b>				
One full-length laminated mirror was not installed per berthing space (CPO, Crew, SNCO, Troop).				
One lighted mirror with an electrical outlet was not installed for every 15 accommodations or fractions thereof in crew/troop berthing.				
Mirrors were damaged/not laminated. (-.10)				
<b>Rack Clearances (GSO 640D) (-.05)</b>				
Where berth tiers were installed over manholes or other deck fittings, the bottom berth was not omitted or was not made easily removable.				
Berth tier partitions installed in the way of valves, operating gear or test fittings were not provided with cutouts or quick-acting access panels.				
Label plates were not mounted where readily visible to indicate hidden fittings.				
<b>Score:</b>				

**Berthing, Marine 1<sup>st</sup> Sgt: (GSO 642E) (-.05)**

First sergeant of the marines berthing space was not provided/not outfitted as follows:				
<b>Item</b>	<b>Quantity</b>			
Berth, Single	1			
Bookrack, Type C	1			
Wardrobe Unit 5	1			
Locker, Type A	1			
Locker, Type A	1			

Desk, Log, Drop Leaf	1			
<b>Score:</b>				

**Berthing, Marine Requirements: (GSO 622C, 640C, 642D, 643D & E) (-.03)**

Inclined ladders in the normal route for troops in battle gear were not at least 30 inches wide. (-.10)				
Soiled laundry stowage was not at least 0.56 cubic feet per accommodation.				
Multi-purpose compartments were missing coordinated conversion label plates.				
Multi-purpose compartments could not be converted to/from surge berthing by ship's force within 48 hours.				

**Berthing, Marine Stowage: (OPNAVINST 9640.1A; GSO 643D & E) (-.03)**

Secure stowage for troop hand-carried weapons was not provided. (Not necessarily in or immediately adjacent to the berthing space).				
Field pack stowage was not provided.				
Helmet stowage was not provided.				
Overcoat lockers were not provided with at least 3 inches of jack rod per accommodation.				
Locker section was not installed for each surge NCO accommodation.				
<b>Score:</b>				

**Berthing, Officer (-.05)**

<b>Bunks (OPNAVINST 5100.19(SERIES); OPNAVINST 9640.1A;GSO 641B)</b>				
Lee rails were missing/damaged. (-.25)				
A 5" x 12" shelf was not installed adjacent to the head of each berth.				
Individually operated bunk lights were not installed.				
Ladder/steps for upper berths were missing.				

**Berthing, Officer Furniture (GSO 640D, 641) (-.05)**

Stateroom furniture was generally deteriorated, of poor aesthetics, broken, dented, soiled, dilapidated, etc.				
Personal stowage space was inadequate.				
Canvas was not provided between the top of the spring unit and the bottom of the mattress.				

**Berthing, Officer Lavatory (OPNAVINST 9640.1A; GSO 644F) (-.05)**

One lavatory unit with built-in toilet case, mirror, light and receptacle was not provided in officer staterooms and bunkrooms on a one per four basis (1 to 5 troops).				
Soap dishes and tumbler/toothbrush holders were not installed adjacent to each lavatory				
Towel bar was not installed for each accommodation in staterooms and bunkrooms.				

**Berthing, Officer Staterooms (OPNAVINST 9640.1A; GSO 641B /GSO 621B; HDCM par. 3.2.7.2) (-.05)**

Officers were not accommodated in one or two-man staterooms. (-.25)				
Bunkrooms had more than six berths per space. (-.25)				
Bunkrooms were not arranged with the sleeping areas screened by partitions or stowage.				
Metal cardholder was not installed adjacent to the door				
Bulkheads forming boundaries of staterooms were not constructed so as to exclude light.				
Excessive personal gear adrift. (-.03)				

**Berthing, Officer, Stowage Coaming/Rail: (GSO 640D)**

To provide additional stowage area in Officer, CPO and SNCO berthing spaces, a one-inch coaming and a lee rail 6 inches high were not fitted on the upper edge of lockers or modular furniture where there was 15 inches or more clearance. (-.10)				
<b>Score:</b>				

**Brig: (GSO 654E/432/555/624/331) (-.05)**

(For ships with 500 or more personnel)				
Brig was not provided. (-.75)				
Sentry vestibule.				
Cell lobby.				
Community cell (3 berth/1 <sup>st</sup> 500 + 1 berth/each additional 500).				
Two single security cells.				
Sanitary facilities in the lobby.				
Cells/lobby constructed to minimize harm/damage.				
Cells free of pipes/cable/valves.				
Brig/cell alarms and electrical locks installed.				
Water cooler provided in lobby/vestibule.				
CO2 bottle provided in lobby.				
"J" dial telephone provided at sentry station.				
Lights controlled by switches in sentry station.				
Cell doors opening outward.				
Brig arrangement did not allow complete/unobstructed visibility of all cells from the sentry vestibule.				
<b>Score:</b>				

**Bulkhead, Insulation: (GSO 635C)**

Bulkhead insulation in sanitary spaces, berthing spaces, offices, passageways, etc. was damaged/missing.				

**Bulkhead, Nonstructural OPNAVINST 5100.19(SERIES) GSO 621B, 640D)**

Screws and bolts did not have "acorn" or "cap" nuts in areas where exposed threads subjected personnel to injury. (-.25)				
Were not stiffened locally for articles supported from or attached to bulkheads. (Furniture, lavatories, urinals, water closets, doorstops, clothes hooks, etc.) (-.10)				
Hooks, racks, etc. were attached to panels of aluminum furniture without backing plates to provide rigidity and prevent distortion of the furniture. (-.10)				
<b>Score:</b>				

**Bulletin Boards: (GSO 640G; NAVSHIPS NO S3209-638101) (-.03)**

Were damaged/not provided in the following locations:				
- Ship's office				
- Post office				
- CMAA office				
- Each berthing area				
- Wardroom				
- Library				
- Lounge				
Glass was broken/not laminated/not heat-treated.				
<b>Score:</b>				

**CO2 Fire Extinguishers: (OPNAVINST 5100.19(SERIES); OPNAVINST 9640.1A; GSO 555B1)**

Portable CO2 fire extinguishers were missing from required locations. (Within 30 ft of, and in the same transverse watertight, fire zone and collective protection system boundary as: energized electrical equipment such as motor controllers, distribution panels, connection boxes, transformers and bus transformer devices.)				
<b>Score:</b>				

**Deck Drains, Living Space (GSO 528) (-.05)**

Deck drains were missing components. Examples included:				
Decks surrounding the drains were not properly sloped to prevent accumulation of water.				
Deck drains were dirty/missing covers.				
<b>Score:</b>				

**Deck, Carpet: (NSTM 634-3.18; HDCM PARA. 2.5; GSO 634C,E) (-.05)**

Was not of approved material.				
Was installed with a pad.				
Not installed over a primed deck.				
Clean, bright aluminum or cres strip was missing/				

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damaged on edges of carpet in high traffic areas. Abutted other deck covering.				
Deck was not faired with underlay Mil-D-3135, (applied over the primer) in way of rivet heads, welded seams and depressions, and sanded smooth, to prevent irregularities from showing through the carpet and promoting premature wear.				
Welds were not ground down to 1/16 inch or less.				
Carpet did not cover the deck completely.				
There was no evidence that carpets were treated with a soil retardant (such as 3M-brand carpet protector).				
Was not protected by protective pads or mats in heavy wear areas such as chair/desk positions.				
Walk-off mats were damaged/missing from areas where carpeting adjoined other deck coverings.				
Carpets were heavily soiled/stained/burned/damaged.				
<b>Score:</b>				

**Deck, Covering: (GSO 634E) (-.05)**

Deck covering was <b>not</b> of approved material for the space: <ul style="list-style-type: none"> <li>- Bath (Outside Shower) - Deck Tile</li> <li>- Captains Cabin/Stateroom/Sea Cabin - Carpet</li> <li>- Chief Of Staff Cabin/Stateroom - Carpet</li> <li>- CPO Lounge - Carpet</li> <li>- Crew Library - Deck Tile or Carpet</li> <li>- Crew Recreation Room - Deck Tile</li> <li>- Executive Officer Cabin/Stateroom - Carpet</li> <li>- Flag Cabin/Stateroom/Sea Cabin - Carpet</li> <li>- Ladies Room - Deck Tile</li> <li>- Living Spaces - Deck Tile</li> <li>- Crew Lounges - Deck Tile</li> <li>- Squadron CO Cabin/Stateroom - Deck Tile</li> <li>- Tactical Command Cabin/Stateroom - Deck Tile</li> <li>- Troop CO Cabin/Stateroom - Deck Tile</li> <li>- Wardroom Lounge - Carpet</li> <li>- Offices - Deck Tile</li> <li>- Sanitary Spaces - Terrazzo/Ceramic Tile/PRC</li> </ul>				
<b>Score:</b>				

**Deck, Terrazzo/PRC: (NSTM 634-3.10; GSO 634C) (-.05)**

Decks were cracked/gouged/buckled/poorly sealed.				
A 2-inch to 4-inch high cove (coaming) was not installed.				
Steel decks under deck covering showed evidence of corrosion.				
<b>Score:</b>				

**Deck, Tile: (NSTM 634-3.6; GSO 634C) (-.05)**

Tile was missing, worn or damaged.				
Deck tile was installed more than two layers thick (increases potential fire hazard).				
Steel deck under the deck tile showed evidence of corrosion.				
Underlayment was uneven/deteriorated.				
<b>Score:</b>				

**Door, Joiner: (GSO 624C) (-.05)**

<u>Closure devices were damaged/misadjusted/missing. (Required on doors to sanitary spaces, officer living areas, wardrooms, and A/C boundaries)</u>				
<u>Hold open devices with rubber bumpers were damaged/missing/mounted improperly.</u>				
<u>Doors/frames were missing/missing hardware and/or damaged.</u>				
<b>Score:</b>				

**Door, Safe Latch: (OPNAVINST 5100.19D)**

Safe or vault doors (>24 inch diagonal measure and/or heavy) were not equipped with permanently installed hold open devices designed to hold the door open reliably under extremes of ship inclination. (-.25)				
<b>Score:</b>				

**Drains/traps: GSO 644, 528 (-.05)**

A water-seal trap was not installed for each plumbing fixture, or for a battery of not more than three fixtures.				
Fixture traps did not have a readily accessible means for cleaning.				
Traps were not installed in a fore-and-aft direction.				
Protection of trap seals from siphoning or backpressure was not accomplished by use of drain vents.				

**EEBD, condition:**

Aluminum EEBD stowage containers (drawing no. 803-5751208 Rev A) were missing/not installed. (-.75)				
Were missing from installed containers in berthing/watch/work/GQ stations. (-.75)				
Were not installed convenient to berths/work stations/GQ stations. (-.50)				
Containers were not painted international orange. (-.50)				

**Furniture condition:**

Seats, chairs, tables and other furniture in offices, lounges and other operating spaces were worn, ripped, cut or otherwise damaged/defective. (-.50)				
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**Furniture secure:**

On destroyer types and smaller, portable articles and furniture including chairs and stools were not secured with "d" rings or other appropriate securing device. (-.25)				
Means were not provided for securing all portable furniture in the designated service and stowage locations. (-.25)				
Numerous loose and unsecured lockers, tables, filing cabinets, desks, lounge furniture, etc, were present. (-.25)				
Furniture/equipment blocked access to Damage Control fittings or to HM&E systems that required periodic inspection/maintenance. (-.25)				
<b>Score:</b>				

**Habitability general: OPNAVINST 9640.1**

The ship had numerous shortfalls in habitability; such as: clear headroom, passageway width, privacy provisions, clearances, stowage space, writing spaces, lounge and recreation areas, ventilation, air conditioning, lighting, noise levels, and facilities. Basic design and configuration of the ship inhibited significant improvement.				
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**Hooks, coat/hat:**

Were not located to preclude personnel injury. (6'5" high minimum) (-.25)				
Were not provided in sufficient quantity to accommodate normal occupancy in working spaces, CPO and Wardroom lounges, and in crew and troop berthing spaces. (-.10)				

**Lagging:**

Pipe lagging (to prevent burns) and ventilation duct insulation in berthing spaces, sanitary spaces, offices, passageways, etc. was damaged/missing. (-.10)				
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**Library:** (-.05)

(< 300 sailors) Central stowage for books, plus bookshelf or locker in the Wardroom, CPO lounge and crew lounge/dining facility was not provided. (-.10)				
Combined book stowage was less than one linear foot of shelving per five accommodations.				
(> 300 sailors) separate library with shelving, tables and chairs was not provided. (-.10)				

**Lighting:** (-.05)

Fixtures in berthing spaces were not located above passages between berths.				
Individual control was not provided for each overhead light between berths (excluding passageways).				
Fixtures were not arranged to provide uniform illumination.				
Fixtures were not located to suit the deck arrangement of machinery or furniture. (Centered over work surface)				

Fixtures were inoperative. (-.25)				
Fixture lens/globe was broken/missing.				

**Locker, cleaning gear:** (-.05)

Not provided as required. (CIC, living spaces, pilot house, sanitary spaces)				
Missing louvered joiner door.				
Missing swab and broom rack.				
Missing shelving.				
Missing bucket stowage.				
Missing strainer over sinks.				
Hot/cold water faucet was inop/not installed. (-.25)				
Excessive storage.				

**Locks/keys:** (-.05)

Key cabinets, safes, and safe lockers were not permanently installed.				
Locks were not provided for Furnishings (desks, cabinets, lockers, etc).				

**Lounge/Recreation Room:**

Were inadequate/not provided as required. (-.50)				
Were modified for other use (no alteration approval from NAVSEA) (-.50)				
Sufficient space, exclusive of dining facility space, was not provided for at least 1/3 of the crew (including troops) to simultaneously participate in recreation, lounge and welfare activities. (Approx. 5 sq ft per accommodation including 1.5 sq ft for writing/seating space.) (-.50)				
Personal writing and seating space was not provided IAW table below: (-.50)				
<b>Space</b>	<b>Seating</b>	<b>Writing</b>		
WR lounge	1 per 5	<50 no reqmt (2)		
CPO/SNCO	1 per 2 (1)	1 per 5 (1)		
Crew/Troop	3 per 10 (1)	1 per 10 (1)		
Notes: (1) Add additional seat/writing space for every fraction thereof.				

(2) For more than 50 officer accommodations, 10 seats plus additional seats for 15 percent of accommodations in excess of 50 should be provided.				

**Office spaces:**

Portable equipment was improperly/inadequately secured. (-.25)				
Roller chairs were on board. (-.10)				

**Passageway clearances:** (-.05)

Overhead obstructions and/or weight handling equipment were not painted brilliant yellow.				
Padding/guards were damaged/not provided where minimum clearances were not achieved.				
Unobstructed headroom in walking areas and passageways was less than 6 ft 3 in minimum.				
Width of main (heavy personnel traffic) passageways was less than 36 inches.				
Passageways used for moving pallets were not at least 5 feet wide.				

**Physical fitness room: OPNAVINST 5100.19D; GSO 640D / GSO 645D, 672; OPNAVINST 9640.1A; HDCM PARA. 3.6.3) (-.05)**

Equipment was not/could not be properly secured to prevent personnel injury. (-.50)				
Was not provided. (>200 accommodations) (-.50)				
(When not provided) sit-up board, multi-exercise machines and ancillary equipment such as jump rope, dumb bells, isometric resistance devices, hand grippers, and tensioning device were not provided. (-.25)				
An open area adjacent to the fitness room and free from obstruction was not provided for warm-up exercises.				
Metal frames were not cre steel or baked enamel.				
Drinking fountain was not provided.				
Deck matting was missing.				
Storage locker for ancillary equipment was not provided.				
A full length, laminated mirror was missing/not provided.				

**Receptacles: GSO 320 TABLE II (-.05)**

Receptacles were not provided one at each desk and table located adjacent to a bulkhead, or one for each 12 feet of bulkhead or fraction thereof.				
Less than two receptacles were provided per space.				
Receptacles were not provided to permit use of portable tools without requiring more than 50 feet of extension cord.				
Receptacles were not provided within 5 feet of office machines.				

**Red lighting: OPNAVINST 5100.19D; NSTM 330-1.10 (-.05)**

Deck level red lighting was not installed/broken/inop.				
Was insufficient/not installed in living spaces that accommodated four or more persons and in sanitary spaces within or near the living areas to permit personnel to move from berths to access routes.				
Was not installed along routes from staterooms and berthing areas to weather deck stations involved in ship control evolutions.				
Globe or lens was not shielded to prevent the light from shining directly into the eyes.				
Illumination was not directed at doorsills, hatch coamings, ladders, and obstacles.				
Additional red lighting was not provided/inoperative in troop spaces for assembling gear.				

**Relay lanterns: (OPNAV Instruction 5100.19D; NSTM 330-1.9.3; GSO 332.G)**

Were inoperative.				
Were not installed to direct illumination towards the base of ladders, doors, hatches, etc. to direct personnel entering or exiting the space.				
Were not installed/insufficient to illuminate the following locations:				
Aisles between berths in living areas. (One lantern per 900 sq ft)				
Escape passages and companionways leading from compartments where personnel are stationed/quartered.				
Long passageways at each watertight division or every 40 feet.				
Dead end passageways exceeding 20 feet in length, or				

areas that may be a hazard to the flow of traffic in an emergency.				
Spaces containing hazards to personnel. (Such as rotating machinery)				
Safes/cabinets installed for stowage of classified material. (Stateroom safes do not qualify.)				

**Religious facilities: (OPNAVINST 9640.1A) (-.05)**

Space was insufficient/not provided for services.				
Equipment stowage was insufficient/not provided.				
Ships with over 1,000 accommodations did not have a separate chapel, which would accommodate at least 30 people/45 people. (-.50)				

**Sanitary space, access/configuration: OPNAVINST 9640.1A; GSO 644G; HDCM PARA. 3.4 (-.05)**

Access from berthing areas required transiting public areas.				
Access to washroom facilities required transiting a water closet area.				
Washroom and water closet facilities were not separate spaces when more than four water closets were required.				
Fixtures were not arranged to allow for one section to be cleaned while the other section remains in use.				
Separate facilities were not available for male and female crewmembers. (-.50)				
Water heaters were not located outside of sanitary and berthing spaces with adequate insulation.				
Lavatories, urinals and water closets were not located so that personnel would face forward or aft.				
Clothes lockers were located in sanitary spaces.				

**Sanitary space, Bridge head: OPNAVINST 9640.1A**

Water closet and washbasin were not provided in the vicinity of watch stations. (-.10)				
Water closet and washbasin were poorly designed. (Required near the bridge, combat information center, communications spaces, adjacent to the accesses to fire rooms, engine rooms, and other normally manned machinery spaces; an enclosed water closet should be				

provided when female accommodations or watch standers are anticipated.) (-.25)				
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**Bulkhead: GSO 621 / GSO 637; OPNAVINST 9640.1A**

Bulkheads around washrooms and water closet spaces were not closed joiner type with openings located as required for ventilation purposes. (-.25)				
Sanitary space non-insulated sheet metal bulkheads and integral enclosures for showers and water closets were not constructed of stainless steel. (-.10)				

**Fixture ratio: GSO 644 / OPNAVINST 9640.1A; HDCM (TABLE 8) (-.05)**

Sanitary fixtures were not provided IAW table below:							
Fixtures	Officer (4)	CPO/SNCO	Crew				
Washbasins (2)	30	7	10				
Urinals (1,3)	20	25	33				
Commode (male with urinals)	8	10	15				
Commode (male w/o urinals)	5	7	10				
Commodes (females)	5	7	10				
Showers	10	10	15				

**Notes:**

- (1) If urinals are installed, they shall only be installed in male sanitary spaces serving berthing spaces with six or more accommodations.
- (2) At least one washbasin per water closet space.
- (3) At least one urinal per washroom and shower space.
- (4) One lavatory per stateroom; one per 4 berths in bunkrooms.

**Lavatory configuration: OPNAVINST 9640.1A; GSO 644 / GSO 332 HDCM PARA. 3.4.3 (-.05)**

At least one lavatory was not provided in each water closet space.				
Lavatories in washrooms and washroom areas were not spaced 24 inches center to center and were not of the continuous counter top type.				

Lighted mirrors centered 64 in. above the deck with two electrical outlets were not provided for each lavatory.				
Mirrors did not extend the full length of the counter top installation, segmented to facilitate replacement.				
Complete, easy access to lavatory plumbing for cleaning, maintenance, and damage control, was not provided.				
The switch controlling the overhead lights did not control mirror lights.				
<b>Lavatory fixtures: GSO 644; HDCM PARA. 3.4.3 (-.05)</b>				
CRES shelf was missing/damaged over each lavatory except where a toilet case was provided. Each shelf should be 4 inches wide, 15 inches long, with the sides flanged up about 1/2 inch, and a drain hole at each end.				
Towel hook or ring was missing/damaged adjacent to each lavatory in sanitary spaces.				
Stopper missing/damaged at each lavatory.				
Paper towel dispensers were missing/damaged. (One per ten washbasins)				
Hot air hand dryers were damaged/inoperative. (Electric hand dryers may augment but not replace paper towel holders.)				
Bulkhead mounted trash receptacles were missing/damaged.				
Soap dispenser was missing/damaged/inoperative. (One per three lavatories)				
A soap dish was not installed for each lavatory.				
Fixtures were cracked/broken/leaking.				
Fixture drains were clogged.				
<b>Shower config: OPNAVINST 9640.1A; GSO 621B/C; GSO 644B (-.05)</b>				
Not located to prevent splashing other personnel.				
Located against exterior bulkheads.				
Not individual stall type, 30 by 30 inches, with doors or curtains.				
Doors/curtains missing/damaged/dirty.				
Stalls not made with watertight joints/not lapped in to inside of high coamings at bottom.				
Were not grouped around a common shower drying area and separated from washroom and water closets.				

<b>Shower fixtures: GSO 644F, 622E; HDCM PARA. 3.4.3 (-.05)</b>				
Soap dish missing.				
Double hook/towel rack missing.				
Grab rod missing.				
Mixing valve missing/leaking/not mounted properly.				
Shut off valve missing/damaged/leaking.				
Drains were clogged.				
<b>Urinals: (-.05)</b>				
Were not provided with flushing valves. (-.10)				
Were not spaced 27 inches center to center with privacy partitions on either side.				
Fixtures were cracked/broken/leaking.				
Flushometers were misadjusted/leaking/inop/missing.				
Shock isolation mounts were installed inverted, creating a collection area for dirt/debris/extraneous matter.				
Urinal drains were clogged.				
<b>Toilets/Commodes: GSO 644, OPNAVINST 9640.1A NAVSHIPS 810-1385868, 1385772; HDCM PARA. 3.4.3 (-.05)</b>				
Were not controlled by flushing valves.				
Batteries of water closets were not mounted on a common drain header installed above the deck to necessitate only one deck penetration.				
Toilet paper holder was broken/not installed at each water closet.				
An open front (men)/closed front (women) toilet seat was broken or not installed.				
Were not enclosed in cubicles with privacy doors.				
Stall doors were damaged/missing/missing hardware.				
Cubicle size was not 30 inches by 30 inches, minimum.				
Fixtures were cracked/broken/leaking.				
Flushometers were misadjusted/leaking/inop/missing.				
Drains were clogged.				
<b>Wet spaces: GSO 6311 (-.05)</b>				
Wet space (washrooms, water closets, and shower stalls) aluminum or steel bulkheads and overheads (except where sheathing was specified) were not properly treated/preserved.				

**Sea bag stowage: OPNAVINST 9640.1A (TABLE 3)  
HDCM (TABLE-7) (-.05)**

Sea bag stowage was not at least three cubic feet per accommodation for officers.				
Sea bag stowage was not at least two cubic feet per accommodation for CPO's.				
Sea bag stowage was not at least one cubic feet per accommodation for E-6 and below.				

**Sheathing, Bulkhead: GSO 637 HDCM PARA. 2.5 (-.05)**

Was installed in unauthorized spaces. (Authorized in quarters of Flag, Commanding and Executive Officers, officers of equivalent rank, chapels.				
Wardrooms and CPO Mess/Lounges.				
Was not designed to permit spraying insecticides behind the sheathing.				
Was damaged/poorly installed/missing.				
<b>Concealed Damage Control fittings. (-.10)</b>				
Accesses to Damage Control fittings were not labeled.				
Accesses were damaged/could not be opened by one person within 5 seconds.				
Did not cover general distributive systems such as wiring, piping, etc.				

**Sheathing, Overhead: OPNAVINST 9640.1A / GSO 637 HDCM PARA. 2.5**

Was installed in unauthorized spaces. (Authorized in quarters of flag, commanding and executive officers, officers of equivalent rank, chapels, wardrooms, CPO mess/lounge and for health and sanitary purposes)				
Was damaged/missing.				
Concealed shoddy workmanship.				
<b>Concealed Damage Control fittings. (-.10)</b>				
Damage Control fittings and other systems or equipment were not labeled.				
Was lower than 6 ft 5 in, or had protrusions lower than 6 ft 3 in.				
Accesses were damaged/could not be opened by one person in 5 seconds.				
Panels could not be readily removed.				
Did not cover general distributive systems such as				

piping, wiring, etc.				
Accesses for routine cleaning of ventilation system were not installed/missing.				

**Sink, service: GSO 644; NSTM 533-2.14 (-.05)**

Service sink was not installed in each washroom and water closet space. (Located as remotely as possible)				
Sanitary spaces in which no service sink was installed did not have two faucets, (hot and cold potable water) installed not less than 24 inches above the deck.				
Drain screens were missing/broken.				
Service sinks for washing decks were not installed in living areas inside built-in cleaning gear lockers where such facilities were not readily available in adjacent sanitary spaces.				
Fixtures were cracked/broken/leaking.				

**Standard Air Conditioning: OPNAVINST 9640.1A / NSTM 510; Habitability Design Criteria Manual (-.50)**

The ship did not maintain as a maximum 80 degrees Fahrenheit dry bulb temperature and 55 percent relative humidity in all berthing, electronics, lounge, office and control spaces, under ambient conditions up to 90 degrees Fahrenheit (dry bulb) and a sea water temperature of 85 degrees Fahrenheit, with the crew onboard and normal machinery operating.				
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**Standard heat: OPNAVINST 9640.1A; NSTM 510; Habitability Design Criteria Manual (-.50)**

The ship did not sustain a space temperature of at least 65 degrees Fahrenheit (dry bulb) in all living, sanitary, control spaces, and normal working stations, in ambient external conditions as low as 10 degrees Fahrenheit (dry bulb) and a sea water temperature of 28 degrees Fahrenheit, with the crew onboard and during normal machinery operation.				
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**Swab racks: NAVMED-P-5010 (-.05)**

Open deck swab drying racks were missing, damaged or not used.				
Wet swabs were consequently stowed inside the ship.				

**Ventilation, General: (OPNAVINST 9640.1A; NSTM 510; HDCM PARA. 2.2.3)**

Ventilation was inadequate due to damaged, misrouted or missing ductwork, dirty vent ducts, inoperative heating, ventilation and air conditioning systems (HVAC) or an inadequate rate of air exchange (in surface ships, minimum replenishment with outside air should be five cubic feet per minute per man). (-.25)				

**Ventilation, Sanitary Space: OPNAVINST 9640.1A; NAVMED P-5010; HDCM 2.2.3 (Stoplight Formula Calculates Score)**

Ventilation airflow was inadequate in __ of __ spaces to minimize high temperature, humidity, condensation and odor persistence. (Spaces shall be designed with a minimum air exchange rate of 15 changes per hour)				

**Ventilation, Terminal: (GSO 512F; HDCM 2.2) (-.05)**

Vent terminals were missing.				
Exhaust vent terminals mesh screens were missing.				
Quick operating access covers were not provided and/or were not connected with an 8-inch wire.				
Mesh screen size was inadequate. (Minimum 1/2" in dia. With 9" in dia. Openings).				
Vent diffusers were damaged/missing.				
Vent terminals were dirty/clogged.				

**Water cooler: (GSO 644E, 516, 644D; HDCM 2.7.2.1 (TABLE 4)) (-.05)**

Drinking water coolers or bubblers were damaged, missing or inoperative.				
<u>Pay grade</u> <u>max # per cooler</u>				
Officers            40				
CPO                40				
Crew                50				

**Inspector Notes:**

1. (Mar 2003) On DDG-51 Class ships, inspect the self-service dryer lint filter discharge.  
 It vents into the space, or is re-circulated inside the hull.  
 It vents overboard
2. Recently (Jul 2003) the Life Cycle Manager (Mr. Joe Bowen: [BowenJJ@NSWCCD.Navy.Mil](mailto:BowenJJ@NSWCCD.Navy.Mil)) recommended a commercial MAYTAG stacked washer/dryer model # MLE19PNAYW. This model replaces household type Frigidaire models initially installed onboard ships. Any commercial grade unit similar to the Maytag would be considered for approval if a request from the ships were submitted. The low-end apartment style units with the cantilever dryer mounting are NOT authorized.