

MIL-STD-1682(SH)
27 October 1976

MILITARY STANDARD

SHIPYARD INSPECTION AND CLEANING
PROCEDURES FOR SUBMARINES



FSC 1905

MIL-STD-1682(SH)
27 October 1976

DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
WASHINGTON, D.C. 20362

Shipyard Inspection and Cleaning
Procedures for Submarines

MIL-STD-1682(SH)

1. This Military Standard is approved for use by Naval shipyards during overhaul and conversion periods for submarines.

2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Ship Engineering Center, Center Building, SEC 6124, Prince George's Center, Hyattsville, Maryland 20782 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

MIL-STD-1682(SH)
27 October 1976

FOREWORD

1. To ensure that deployed ships do not experience excessive downtime and equipment failures caused by contamination by foreign material such as dirt, grease, and oil, it is necessary to implement a cleaning maintenance plan to reduce this contamination. This maintenance plan, to be effective, must start when the equipment is first landed on the ship during overhaul or conversion and continue through the ship's deployment cycle. This standard establishes the cleaning procedures and protective measures to be accomplished while the submarine is in the shipyard for overhaul or conversion. Separate documentation will establish the maintenance plan to cover the time from turnover of equipment to Ship's Force through deployment.

2. This standard is effective for all SSBN 598, 608, 616, 627, and 640 Class submarines undergoing overhaul or conversion. The period covered is from date of first equipment landed to date of system turnover to Ship's Force.

3. Shipyard personnel shall perform work detailed in the parts of this standard when invoked and funded by the cognizant customer, e.g., by NAVSEA for conversions and the Type Commander for overhauls.

4. MIL-STD-1682(SH) consists of the basic document and supporting parts, each addressed to a specific class submarine and center or compartment (see section 5. - "Organization"). Individual parts will be issued as they are prepared. These parts, in their specific areas, will be self-sufficient in technical coverage. However, they must be considered in conjunction with the policy and procedures of the basic document to be applied effectively. To ensure full support to the program during its developmental stages, adherence to the policy and procedures of the basic document is necessary so that problems concerning interface areas not yet covered are recognized and resolved in a timely manner.

MIL-STD-1682(SH)
27 October 1976

CONTENTS

	<u>Page</u>
1. SCOPE	1
2. REFERENCED DOCUMENTS	1
3. DEFINITIONS	1
3.1 Clean	1
3.2 Cleaning solvent	1
3.3 Dewpoint	1
3.4 Landing or landed	2
4. REQUIREMENTS	2
5. ORGANIZATION	2
5.1 Arrangement	2

MIL-STD-1682(SH)
27 October 1976

1. SCOPE

1.1 This standard, and its supporting parts, provides inspection and cleaning procedures along with maintenance and protective measures for SSBN 598, 608, 616, 627, and 640 Class submarines.

1.2 These procedures ensure that FBM Weapon Systems equipment is being protected from damage when production work is being accomplished and that the equipment is isolated from adverse environmental conditions such as dirt, oil, and grease.

2. REFERENCED DOCUMENTS

2.1 The issues of the following documents in effect on the date of invitation for bids form a part of this standard to the extent specified herein.

GOVERNMENTAL

SPECIFICATION

MIL-D-16791 - Detergents, General Purpose (Liquid, Nonionic)

PUBLICATION

NAVSEA Technical Manual, Chapter 9140

(Copies of specifications, standards, drawings, and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. DEFINITIONS

3.1 Clean. Clean is being free of all loose scale, rust, grit, filings, and other foreign substances; and free of oil, grease, and other organic materials.

3.2 Cleaning solvent. Cleaning solvents as used in this standard refer to water-soluble (Type I) liquid detergent conforming to specification MIL-D-16791.

3.3 Dewpoint. The temperature at which condensation first occurs when a vapor is cooled.

MIL-STD-1682(SH)
27 October 1976

3.4 Landing or landed. Physical placement of equipment in specified location.

4. REQUIREMENTS

4.1 This standard provides inspection and cleaning procedures for the Navigation Center, Missile Control Center, Missile Compartment, and associated Ventilation Systems for SSBN 598, 608, 616, 627, and 640 Class submarines.

4.2 The procedures shall be conducted by shipyard personnel during overhaul and conversion periods. The specific time period covered is from date of first equipment landed to date of system turnover to Ship's Force.

4.3 Inspections and maintenance functions should be performed at various intervals, which are specified in each of the applicable parts listed with subtitles in 5.

4.4 Personnel involved with the inspection and cleaning procedures shall become familiar with the applicable safety precautions and regulations listed in each part.

5. ORGANIZATION

5.1 Arrangement. This standard is arranged in parts which address inspection and cleaning procedures for a particular class submarine and center or compartment. The various parts and subtitles indicating the concerned area and submarine class are specified below (additional parts will be issued as required):

- Part 1 - Navigation Center SSBN 598 Class
- Part 2 - Missile Control Center SSBN 598 Class
- Part 3 - Missile Compartment SSBN 598 Class
- Part 4 - Navigation Center SSBN 616 Class
- Part 5 - Missile Control Center SSBN 616 and 640 Classes
- Part 6 - Missile Compartment SSBN 616 and 640 Classes
- Part 7 - Navigation Center SSBN 627 Class
- Part 8 - Missile Control Center SSBN 627 Class
- Part 9 - Missile Compartment SSBN 627 Class
- Part 10 - Navigation Center SSBN 640 Class

MIL-STD-1682(SH)
27 October 1976

Part 11 - Navigation Center SSBN 608 Class
Part 12 - Missile Control Center SSBN 608 Class
Part 13 - Missile Compartment SSBN 608 Class

Preparing activity:
Navy - SH
(Project 1905-N006)

FIGURE 7. BASIC ELEMENTS, AUXILIARY STEAM SYSTEM.

FOLD

COMMANDER
NAVAL SHIP ENGINEERING CENTER
CENTER BUILDING - SEC 6124
PRINCE GEORGES CENTER
HYATTSVILLE, MARYLAND 20782

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID
DEPARTMENT OF NAVY

DOD 316



COMMANDER
NAVAL SHIP ENGINEERING CENTER
CENTER BUILDING - SEC 6124
PRINCE GEORGES CENTER
HYATTSVILLE, MARYLAND 20782

FOLD