NAVSEA
STANDARD ITEM

FY-09 (CH-3)

ITEM NO: 009-32
DATE: ***09 MAR 2009***
CATEGORY: II

1. SCOPE:

1.1 Title: Cleaning and Painting Requirements; accomplish

2. REFERENCES:

2.1 Standard Items

2.2 S9086-VD-STM-010/020/030/CH-631, Preservation of Ships in Service

2.3 29 CFR 1915, Occupational Safety and Health Standards for Shipyard Employment, Subparts C and Z

2.4 Systems and Specifications, SSPC Painting Manual, Volume 2

2.5 NACE Book of Standards

2.6 S6360-AG-MAN-010, Camouflage Manual, Surface Ship Concealment

2.7 ASTM D 4417, Standard Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel

2.8 ISO 8502-3, Assessment of Dust on Steel Surfaces Prepared for Painting (Pressure Sensitive Tape Method)

2.9 S9086-CN-STM-020/CH-079, Damage Control - Practical Damage Control

2.10 S9086-VG-STM-010/CH-634, Deck Coverings

2.11 S9086-RK-STM-010/CH-505, Piping Systems

2.12 MS6310-081-015, Submarine Preservation

3. REQUIREMENTS:

3.1 General Preservation Requirements:

3.1.1 Consider marine coatings to contain heavy metals (e.g., lead, cadmium, or chromium), hexavalent chromium, crystalline silica and/or other toxic or hazardous substances.

3.1.2 Accomplish safety precautions as specified in 2.2, 2.3, and the Work Item/task order during surface preparation and the application or removal of marine coatings.

3.1.3 Blast Media:

3.1.3.1 ***Maintain a current copy of*** material certification of abrasive blast media conforming to MIL-A-22262 or A-A-1722 ***for reference by the SUPERVISOR. Copy shall be available starting*** 7 working days prior to blasting. MIL-A-22262 abrasives must be listed on the Qualified Products List (QPL), or the ***repair activity*** shall have written notification from NAVSEA indicating pending listing on the QPL. ***Submit one legible copy, in hard copy or electronic media, to the SUPERVISOR upon request***. For A-A-1722 abrasives, a complete data package demonstrating compliance with the requirements must be provided by the supplier to the procuring activity. Exceptions are listed in 3.1.3.2 and 3.1.3.3.

3.1.3.2 Spongejet may be used as an alternative to obtain SSPC-SP 10 or SSPC-SP 11 cleanliness. ***Abrasive sponge media shall be procured from the sponge-media blasting equipment manufacturer or their authorized licensee.***

3.1.3.3 Recyclable ferrous metallic abrasive materials conforming to AB-3 of 2.4 may be used as an abrasive blast media for steel substrates. Cleanliness of recyclable ferrous metallic abrasive materials shall be measured and maintained in accordance with the requirements of AB-2 of 2.4.

3.1.3.4 For requirements specified in 3.1.3.3, ***maintain a current copy of*** the results of the quality control requirements of Paragraph 6 of AB-2 and quality assurance test required by Paragraph 5 of AB-3 of 2.4 ***for reference by the SUPERVISOR. Submit one legible copy, in hard copy or electronic media, to the SUPERVISOR upon request.***

3.1.4 Abrasive blast steel and aluminum plates, shapes, and ferrous piping, equal to NACE 2/SSPC-SP 10 of 2.4 and 2.5, establishing a surface profile that meets the requirements of 3.10.6, and coat, prior to shipboard installations except in the areas where weld joints remain to be accomplished, or unless specified otherwise in the invoking Work Item or task order. ***Except for potable water tanks, feedwater tanks, and freshwater drain collecting tanks, the requirements of Notes (26) and (29A) do not apply to these materials.***

3.1.4.1 Non-ferrous piping, which is to be preserved shipboard, shall be hand tool (non-impact tools only) cleaned in accordance with SSPC-SP 2 of 2.4. Preservation of non-ferrous piping one inch in diameter or less does not require surface preparation.

3.1.5 For touch-up, disturbed, and/or inaccessible areas (terms are clarified in 3.6), the minimum surface preparation shall be that shown in Tables One through 9, except that an SSPC-SP 11 is acceptable for areas

originally requiring a NACE 2/SSPC-SP 10 or NACE 5/SSPC-SP 12. For submarines this shall be determined by inspection and agreed to by the SUPERVISOR.

3.1.6 Feather edges of well-adhered paint remaining after cleaning for all surface preparation methods. Feathering is explained in more detail in 3.6.5.

3.1.7 Clean insulation and lagging prior to painting; ensure such areas are free of foreign matter and contaminants that would prevent adherence of paint.

3.1.8 Clean and dry all prepared and previously painted surfaces; ensure such surfaces are free of foreign matter that will affect adherence of paint coatings. Inclusions such as dust and debris in the paint film shall be removed prior to the application of the next coat.

3.1.9 Record and restore existing painted labels, compartment designations, hull markings, and other painted information which will be removed or covered during cleaning and painting operations.

3.1.10 Install masking material for protection of equipment and items not to be painted during preservation. Shipboard items not to be painted are listed in 2.2 and 2.12. Remove masking material upon completion of final coating.

3.1.11 Unless otherwise specified, all paints and coatings that are qualified to performance specifications (MIL-PRF) are to be applied in accordance with the manufacturer's NAVSEA-approved ASTM F718 product data sheet. The dry film thickness (DFT)***, temperature, relative humidity, and surface preparation*** requirements stated herein take precedence over the NAVSEA-approved ASTM F718 data sheets if there is a conflict. The NAVSEA-approved ASTM F718 data sheets shall supersede any other manufacturer's ASTM F718 data sheets for that product, even if it is newer (more recent) than the NAVSEA-approved ASTM F718 data sheets. Copies of the NAVSEA-approved ASTM F718 data sheets are available from the National Surface Treatment Center (NST Center) website: http://www.nstcenter.com.

3.1.12 Intentionally left blank.

3.1.13 ***Store paint and nonskid system components in a cool, dry place. Do not expose to freezing temperatures or direct sunlight. For both paint and nonskid, storage ambient temperature shall be maintained between 65 and 85 degrees Fahrenheit. Low temperature nonskid systems (non-skid and primer) shall be stored between 65 and 85 degrees Fahrenheit with the optimal storage temperature being 70 and 80 degrees Fahrenheit.***

3.1.13.1 ***Monitor the storage temperature over the 24-hour period prior to initiation of the application process and document the minimum and maximum temperatures. If recorded manually, temperature shall be recorded once per shift during the 24-hour period. Manual readings are not***

necessary if monitoring equipment is used that tracks minimum and maximum temperature for the 24-hour period.

3.1.13.2 ***As an alternative to the storage monitoring requirement for paint and nonskid in 3.1.13.1, a maximum of 1 hour before application of products, measure individual components (after each is mixed, but before components are combined together) with a paint thermometer to confirm that each component of the system is within the required range.***

3.1.14 When applying paint, multiple coats shall be of contrasting colors, unless specifically stated otherwise in Tables One through 9.

3.1.15 When using multiple component (such as 2-part) coating systems (e.g. epoxies and polyurethanes), use of "partial kits" is prohibited unless using verified proportioning equipment or other verified measuring equipment (gravimetric).

3.1.16 For surface ships, for commercial underwater hull coating systems including anti-corrosive paints and anti-fouling paints, the manufacturer's primer must be used with its anti-fouling coating. No substitution is allowed. Successive coats of anti-corrosive paints shall be of a contrasting color. Coats of anti-fouling paints shall be of the colors stated in Tables One through 5.

3.1.16.1 For all ships, anti-fouling coatings may be repaired, touched-up, and/or overcoated as defined in 4.3 with any other approved ablative anti-fouling system, and approved anti-fouling paints may be applied over any approved exterior anti-corrosive system. Anti-fouling coatings must be of the same "Type".

3.1.17 Apply the first coat of MIL-PRF-24647 anti-fouling paint when the last coat of epoxy paint is still slightly tacky (as defined in 3.6.4) (approximately 4 to 6 hours after paint application) and in accordance with applicable NAVSEA-approved ASTM F718. If the maximum recoat time for the epoxy is exceeded, ***accomplish the overcoat window requirements of 3.5, then*** apply a tack coat (explained in 3.6.1) of epoxy paint one to 2 mils wet film thickness (WFT) over previously painted surfaces. The tack coat shall be allowed to cure until tacky, ***and then*** the next full coat of the system shall be applied.

3.1.18 Mix and apply all coatings in accordance with the product’s NAVSEA-approved ASTM F718, except for invoked requirements for surface preparation and Dry Film Thickness (DFT) as specified in Tables One through 9.

3.1.19 Boats and small craft that are embarked on surface ships or otherwise deployed should meet the camouflage requirements of 2.6.

3.1.20 Utilize water-based latex fire retardant paints in preference to chlorinated alkyd-based fire retardant paints in areas where condensation,

high humidity, and temperatures below 50 degrees Fahrenheit are not expected during application and cure. Such paints are available under MIL-PRF-24596.

3.1.21 Mix and apply the Navy Polyamide Epoxy MIL-DTL-24441 coatings in accordance with the following, except the DFT shall be as specified in Tables One through 9. The MIL-DTL-24441 coatings' mixing ratio is one-to-one by volume. The components of the various formulas are not interchangeable. Blend each component thoroughly prior to mixing the components. After mixing equal volumes of the 2 components, the mixture must be thoroughly stirred. For Type III only, the stand-in times listed below must be observed. There is no induction time for Type IV.

3.1.21.1 Stand-in time (induction time) for MIL-DTL-24441, Type III, is considered to be the time immediately following the mixing of the components A and B during which the critical reaction period of these components is initiated and is essential to the complete curing of the coating. During stand-in time, the mixture must be thoroughly stirred at least once every 20 minutes to avoid hot spots caused by localized overheating from the chemical reaction.

Surface Temperature at Job Site (Degrees Fahrenheit)	Stand-In Time in Hours
35 to 50	2 hours at 70 degrees Fahrenheit (paint temperature)
50 to 60	2 hours at job site temperature
60 to 70	One hour to 1-1/2 hours at job site temperature
70 to 90	1/2 to one hour at job site temperature

3.1.22 For proper curing, the maximum application and cure temperature for MIL-DTL-24441 products shall be 90 degrees Fahrenheit (ambient and surface temperature).

3.1.23 Powder coating application may be used if approved by the TYCOM; otherwise use applicable Lines in Tables One through 9. TYCOM approval shall denote specific items or classes of items and applications. Powder coatings may match the color of the surrounding area or, if needed, may be overcoated with liquid paints. Powder coated items require near white metal blast, NACE 2/SSPC-SP 10, as minimum surface preparation. Any use of a chemical pretreatment (e.g., phosphate conversion coatings) requires approval by NAVSEA. QA checkpoints are still required for items that are powder coated.

3.1.23.1 For exterior applications and interior dry applications of removable parts, powder coating shall conform to MIL-PRF-24712.

3.1.23.2 For interior wet or immersion areas, powder coating shall conform to MIL-PRF-23236, Type VIII.

3.1.23.3 Powder coatings are not practical for use on large components or ship structure. Any large-scale applications to ship structure require approval by NAVSEA.

3.1.23.4 Powder coating is not authorized for use on components, covers, or any parts to be installed in potable or reserve feed water tanks aboard nuclear powered ships.

3.1.24 Peel and stick nonskid has been approved for use in limited areas on surface ships.

3.1.25 Coatings used on interior spaces of submarines are approved under the Submarine Atmosphere Control Program and listed on the Submarine Material Control List (SMCL). For interior use on submarines, only those MIL-PRF-23236, Type VII, coatings listed in Note (***8***A) may be used. For use in tanks, voids and freefloods on submarines, only those MIL-PRF-23236, Type VII, coatings listed in Note (26A) may be used.

3.1.26 For submarines, ensure that identified structural repair sites are not contaminated with paint overspray until repairs have been completed. Upon completion of structural repairs, the affected areas will be abrasive blasted to SSPC-SP 10 prior to paint application unless otherwise specified.

3.1.27 Restrictions on ***repair activity*** personnel ***(which includes Contractors)*** working in propulsion plant spaces aboard nuclear powered ships shall be in accordance with NAVSEAINST 4350.2 ***(Series)*** (Contract Work Onboard ***Nuclear***-Powered Ships).

3.2 Stripe Coat Requirements:

3.2.1 For all areas where stripe coating is required, as denoted in Tables One through 9, apply stripe coat in accordance with applicable NAVSEA-approved ASTM F718 data sheet to edges, weld seams, welds of attachments and appendages, cutouts, corners, butts, foot/handholds (including inaccessible areas such as back side of piping, underside of I-beams), and other mounting hardware (non-flat surface). Stripe coat these areas after the previous full coat has dried. The stripe coat shall encompass all edges as well as at least a one-inch border outside each edge and weld. For submarines, solvent-based coatings shall have the stripe coat applied by brush; ultra high solids coatings (e.g. MIL-PRF-23236, Type VII) may have the stripe coat applied by brush or spray.

3.2.1.1 Each stripe coat shall be of the specified paint system and shall be a different color from both the paint over which it is being applied and the next coat in the system (if a product only comes in 2 colors, the stripe coat shall contrast with the color of the previous coat). Full coat inspection shall be conducted prior to stripe coat application.

3.2.1.2 MIL-PRF-23236, Type VII coatings may have the stripe coat waived; however, in lieu of a stripe coat, additional DFT readings are required in accordance with Attachment A.

3.3 Cure time is dependent on temperature; products applied at lower temperature will need more time to cure. This includes low temperature coatings. Cure time of each coat shall be IAW NAVSEA-approved ASTM F718 unless otherwise specified in the following requirements:

3.3.1 Drying time between coats of a specified coating for potable and feedwater tanks shall be a minimum of 48 hours at a minimum temperature of 70 degrees Fahrenheit (substrate and ambient), using heated air if necessary to maintain temperature. Ventilation shall be sufficient to ensure continuous flow of air through the tanks with at least one complete air change every 4 hours.

3.3.2 Following coating applications, potable and feedwater tanks shall be continuously ventilated with a minimum of one complete air change every 4 hours for at least 7 consecutive days prior to filling with water. During the ventilation period, maintain a minimum tank temperature of 70 degrees Fahrenheit (substrate and ambient). Verify and document daily that ventilation is properly installed and running. ***For potable water tanks coated with MIL-PRF-23236 Type VII, Class 9 paints, see Note (55) for surface ships and Note (39A) for submarines.***

3.3.2.1 Freshly painted potable water tanks shall be filled with potable water and emptied at least twice to ensure tank cleanliness.

3.3.3 Prior to application of any solvent-based alkyd coating, such as MIL-PRF-24635, over an epoxy coating, allow the epoxy to dry until it is no longer tacky (as defined in 3.6.4). It shall be dry to the touch but not fully cured before overcoating with any solvent-based alkyd coating.

3.3.4 Prior to application of any water-based coating, such as MIL-PRF-24596, over an epoxy coating, allow the epoxy to dry for at least 16 hours.

3.4 Overcoating of MIL-DTL-24441 with MIL-DTL-24441:

3.4.1 If less than 7 days has elapsed since the application of the prior coat, the next coat may be applied after visual inspection to confirm the absence of grease, dirt, salts, or other surface contaminants. If surface contamination is suspected as a result of visual inspection or for other reasons, the entire surface shall be cleaned in accordance with SSPC-SP 1 of 2.4. The next coat of MIL-DTL-24441 shall be applied after surfaces are completely dried.

3.4.2 If more than 7 days but less than 30 days has elapsed since the application of the prior coat, the entire surface shall be cleaned in accordance with SSPC-SP 1 of 2.4. Ensure the surface has fully dried, ***and***

then apply a tack coat (one to 2 mils WFT) of the last coat applied or Formula 150. The tack coat (as defined in 3.6.1) shall be allowed to cure (dry) until tacky (as defined in 3.6.4); then apply the next full coat of the system. This condition can only be met one time during the painting system application.

3.4.3 If more than 30 days has elapsed since the application of the prior coat, the entire surface shall be cleaned in accordance with SSPC-SP 1 of 2.4. After allowing the surface to dry, the surface shall be lightly abraded to degloss the epoxy, using a brush-off abrasive blast (preferred), power sanding, or hand sanding using 80-120 grit, then apply the next full coat of the system.

3.5 Overcoating of Non-MIL-DTL-24441 Epoxy Coatings:

3.5.1 Follow the manufacturer's instructions for the allowable overcoat window, not to exceed 30 days. The 30-day maximum may be extended beyond 30 days if specifically approved in writing by NAVSEA. Where the base coat and topcoat are provided from different manufacturers, the term "manufacturer" refers to the manufacturer of the base coat. Application of a tack coat shall not restart the 30-day window.

3.5.1.1 If either the manufacturer's instructions or the 30-day window (or a specific extension approved by NAVSEA) has been exceeded, the coating shall be reactivated by following the manufacturer's instructions for reactivating the surface.

3.6 Clarification of Terms:

3.6.1 A tack coat is defined as a layer of paint with a reduced film thickness (e.g., 1-2 mils vice 5 mils); this does not imply that adding thinner is acceptable.

3.6.2 Touch-up is defined differently within this Standard Item between surface ships and submarines.

3.6.2.1 Touch-up is defined within this Standard Item for surface ships as preservation operations on cumulative surface areas less than one percent of the total area (e.g., bilge, tank, space, etc.) being preserved, with no individual area greater than 10 square feet. Included under touch-up operations are new and disturbed surfaces of less than 10 square feet. The documentation requirements of 3.7 and 3.8 are waived for these touch-up areas. The requirements of 3.10.2, 3.10.6, 3.10.7, 3.10.8, | and 3.10.10 shall be verified by the accomplishing activity as (I) inspections prior to coating applications. This waiver does not apply to potable or | feedwater tanks.

3.6.2.2 Touch-up is defined within this Standard Item for submarines as preservation operations on cumulative surface areas less than one percent of the total area (e.g., bilge, tank, space, etc.) being preserved, with no individual area greater than 4 square feet. Included under

touch-up operations are new and disturbed surfaces of less than 4 square feet. The documentation requirements of 3.7 and 3.8.1 are replaced with Appendix 9 for these touch-up areas (3.8.2 is still required). The requirements of 3.10.2, 3.10.6, 3.10.7, 3.10.8, and 3.10.10 shall be verified by the accomplishing activity as (I) inspections prior to coating applications. | This waiver does not apply to potable or feedwater tanks.

3.6.2.3 For submarines, touch-up of MIL-PRF-23236, Type VII, coating systems ***and existing MIL-DTL-24441 and MIL-PRF-23236 coating systems*** with solvent-based coating systems qualified to MIL-DTL-24441, Type IV or MIL-PRF-23236, ***Type V or VI*** is acceptable. |

3.6.2.4 On surface ships and submarines, for new and disturbed areas of individual areas 2 sq ft or less totaling less than 0.03 percent of the total surface area, the requirements to perform and document the following paragraphs are waived: 3.10.1, 3.10.2, 3.10.6, 3.10.7, 3.10.8, and 3.10.10. The documentation requirements of 3.7 and 3.8 are also waived. The requirement of 3.10.1.1 shall be accomplished, but not documented. For coating application, apply coatings in accordance with Tables One through 9 with the following exception: apply only one coat of primer on prepared substrate, followed by topcoat product applied to overlap intact coating by a minimum of 1 inch around primer. This waiver does not apply to potable or feedwater tanks.

3.6.3 Disturbed surfaces are defined as any surface that requires cleaning and/or painting due to existing paint finish being damaged in the accomplishment of work specified by the Work Item or task order.

3.6.3.1 Exterior surfaces of underwater hull closure plates/hull accesses and their associated welds will not be considered disturbed surfaces and shall be cleaned, prepared, painted, and documented in accordance with the applicable area. Deviations from the requirements may be authorized by the SUPERVISOR based on size, location, application, or severity of condition of the coating system being applied. For submarines, this shall be determined by inspection and agreed to by the SUPERVISOR.

3.6.3.2 Interior surfaces of underwater hull closure plates/hull access-associated welds shall ***have surface preparation*** in accordance with 3.1.5.

3.6.3.3 The word "new" in "new and disturbed surfaces" refers to all material installed on the ship by the ***repair activity*** regardless of source.

3.6.4 Tacky is defined as that curing (drying) stage when a fingertip pressed lightly against the film leaves only a slight impression and none of the film sticks to the finger.

3.6.5 Feathering is used for transition of applying a fresh coating system to an area with an intact coating system that is not removed. To do this, visible areas of defective old paint shall be removed until an area of

completely intact and adhering paint is attained around the defective area by feathering (tapering) the edges of tightly adhering old paint at an approximate 30 degree slope into the newly prepared bare metal surface thus preventing application of new paint over loose or cracked paint.

3.6.6 Solvent wipe is defined as cleaning a surface by pouring solvent on a clean rag and subsequently wiping the surface.

3.6.7 Initiation of the application process is defined as that time when coating is removed from storage for staging at the work site.

3.7 The following ship structural surfaces are defined as critical coated areas:

SURFACES	TYPE OF SUBSTRATE
MK41 VLS launcher top and base	All
Underwater hull***, including appendages and*** surfaces ***below the waterline up to and including the boottopping***	All
Cofferdams	Steel and aluminum
Hangar, flight, catapult, and vertical replenishment decks	Steel and aluminum
CV and CVN flight deck landing areas	Steel and aluminum
RAST track trough	Steel and aluminum
Well deck overheads	Steel and aluminum
Surface ship bilges	Steel and aluminum
Interior surfaces of intake vent plenums, defined as combustion air intakes (gas turbine, diesel, and steam) and other vent system intake plenums with openings greater than 7 square feet	Steel and aluminum
Uptake spaces	Steel and aluminum
Tanks ***and floodable voids*** (including sumps and covers)	Steel and aluminum
Non-floodable voids ***(at waterline or below)***	Steel and aluminum
All recesses on submarines	Steel
Interior surfaces of submarine sail and superstructure (fairwater) when SSPC-SP 10 accomplished	Steel
Aircraft Launch and Recovery Equipment (ALRE) system areas addressed in Table Notes (8) and (35)	Steel
Arresting gear sheave foundations	***Steel***

3.7.1 Record and maintain in-process records in QA Tools Paperless QA program or on QA Checklist Form Appendices as blasting, painting, nonskid, inspections, and tests are being accomplished. QA Tools Paperless QA program and installation setup are available upon request from U.S. Fleet Forces Command N434, Attn. Dale.Hirschman@navy.mil, (757) 836-3455.

3.7.1.1 QA Checklist Form Appendices are available at http://www.nstcenter.com/NavyResources.aspx. QA documentation shall include 3.7.1.3 through 3.7.1.12.

3.7.1.2 Intentionally left blank.

3.7.1.3 Ambient and substrate surface temperatures, relative humidity, and dew point during preservation process (QA Checklist Form Appendix 1);

3.7.1.4 Cleaning/degreasing prior to surface preparation inspection results (QA Checklist Form Appendix 2);

3.7.1.5 Surface profile readings and surface preparation method, including name of abrasive and QPL 22262 revision number from which the product was purchased, or copy of NAVSEA product approval letter. (QA Checklist Form Appendix 3);

3.7.1.6 Surface conductivity or chloride test results (QA Checklist Form Appendix 4);

3.7.1.7 Surface cleanliness test results for dust (QA Checklist Form Appendix 5);

3.7.1.8 Name of paint/nonskid, manufacturer, batch number, and date of manufacture and expiration (QA Checklist Form Appendix 6);

3.7.1.9 Name and type of spray equipment utilized (QA Checklist Form Appendix 6);

3.7.1.10 Elapsed time between coats (QA Checklist Form Appendix 6);

3.7.1.11 Dry film thickness (DFT) measurements (QA Checklist Form Appendix 7) and/or wet film thickness (WFT) measurements (QA Checklist Form Appendix 7A);

3.7.1.12 Minimum and maximum storage temperatures of paint and nonskid over the 24-hour period prior to use (QA Checklist Form Appendix 1).

3.7.2 If using QA Appendices, submit one legible copy, in hard copy or electronic media, of recorded in-process information on QA Checklist Forms to the SUPERVISOR within 72 hours of completion of preservation of each separate location listed in the invoking work item or task order.

3.8 Determine the type of surface preparation required and coating system options that are available for use in accomplishing the work.

3.8.1 For areas listed in 3.7, submit one legible copy, in hard copy or electronic media of Coatings Application Product Summary (CAPS) SHEET (QA Checklist Form Appendix 8), to the SUPERVISOR 7 working days prior to starting the preservation process. The submittal shall include all the information identified in QA Checklist Form Appendix 8. The CAPSHEET shall be at the worksite throughout the preservation process.

3.8.2 For areas listed in 3.7, maintain on file the original manufacturer's certificate of compliance and material conformance test data in accordance with Section 11 of 2.2. Documents shall be readily available to the SUPERVISOR upon request.

3.9 Maintain the following certifications for accomplishing preservation operations to areas as listed in 3.7. Information for these certifications can be found at www.sspc.org.

3.9.1 Coating inspectors shall be certified in accordance with the NAVSEA Basic Paint Inspector (NBPI) course or NACE Coating Inspector Program (CIP) Level 1, or higher.

3.9.2 Organizations performing blasting operations (abrasive and waterjetting) or coating application shall be certified in accordance with QP 1 of 2.4 ***or NAVSEA-approved equivalent***.

3.9.3 Spray painters shall be certified in accordance with SSPC C-12 or SSPC C-14 or NAVSEA-approved equivalent. For equivalent certifications, a copy of the NAVSEA approval letter shall be maintained by the ***repair activity.***

3.9.4 Plural Component Pump Tenders and Applicators shall be certified in accordance with SSPC C-14 or NAVSEA-approved equivalent certifications. For equivalent certifications, a copy of the NAVSEA approval letter shall be maintained by the ***repair activity***.

3.9.5 Blasters shall be certified in accordance with SSPC C-7 or NAVSEA-approved equivalent. For equivalent certifications, a copy of the NAVSEA approval letter shall be maintained by the ***repair activity***.

3.9.6 Blasters performing Ultra-High Pressure waterjetting shall be certified in accordance with SSPC C-13 or NAVSEA-approved equivalent. For equivalent certifications, a copy of the NAVSEA approval letter shall be maintained by the ***repair activity***.

3.10 For all coating systems except surface ship nonskid, accomplish preservation operations in accordance with the following. For surface ship nonskid system application, refer to 3.11.

(V) "ENVIRONMENTAL READINGS"

3.10.1 For coatings, record ambient and substrate surface temperatures, relative humidity, and dew point from conditions on-site, in close proximity to the structure being coated, for all areas listed in Tables One through 9.

3.10.1.1 ***Unless otherwise stated within the Notes of Tables One through 9, and as noted in 3.10.1.2 and 3.10.1.3, coatings shall be applied only when the temperature of the prepared substrate is 50 degrees***

Fahrenheit or greater and a minimum of 5 degrees Fahrenheit above the dew point. The maximum relative humidity shall be 85 percent. For areas listed in 3.7, readings shall be documented on QA checklist Form Appendix 1.

3.10.1.2 MIL-PRF-23236, Type VII, Class 17 products are exempt from dew point and relative humidity requirements. For these products, dew point and relative humidity do not need to be recorded on QA Checklist Forms.

3.10.1.3 The only products that may be applied below 50 degrees Fahrenheit are those specified in the Tables and Notes for use below 50 degrees Fahrenheit.

3.10.1.4 These environmental readings shall be taken from ***4*** hours prior to, to 48 hours after, the application of a coat of paint. | If a product fully cures in less than 48 hours, as defined on its NAVSEA-approved ASTM F718, environmental readings for that coat shall be taken until the product's final cure time is reached. For potable and feedwater tanks, environmental readings shall be taken from the start of surface preparation to 7 days after application of the final coat. For areas preserved under 3.6.2.1, environmental readings shall be taken from immediately prior to start of application to 24 hours after application of a coat of paint.

3.10.1.5 The preferred method of measurement is using a data logger (Veriteq Instruments, Inc., Model No. KT-2000-NEI or equivalent). If a data logger is used, it shall collect data at a minimum of every 5 minutes. Manual readings shall be taken once every 12 hours and at every evolution involving (G)-points. For areas listed in 3.7, manual readings shall be documented on QA Checklist Form Appendix 1.

3.10.1.***6*** If a data logger is not used, environmental readings shall be manually taken every 4 hours and at every evolution involving (G)-points. For areas listed in 3.7, readings shall be documented on QA Checklist Form Appendix 1.

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(I) or (I)(G) "CLEANLINESS" (See 4.4)

3.10.2 Accomplish degreasing/cleaning prior to surface preparation to ensure that the surface is free of contaminants, such as sea salts, mud, marine growth, grease, oil, and other petroleum products, in accordance with SSPC-SP 1 of 2.4. ***For areas prepared to SSPC-SP 12 of 2.4 with vacuum self-contained UHP waterjetting equipment, the checkpoint of initial degreasing is waived.*** For areas listed in 3.7, document on QA Checklist Form Appendix 2.

3.10.2.1 Inspect the surface a maximum of 4 hours prior to start of coating removal to ensure accomplishment of SSPC-SP 1. For areas listed in 3.7, document on QA Checklist Form Appendix 2.

3.10.3 Except for tanks, surface preparation by abrasive blasting is prohibited on submarine interior surfaces, with the exception that self-

contained sponge jet surface preparation is permissible in submarine machinery spaces.

3.10.4 Intentionally left blank.

3.10.5 Limit the square footage of surfaces being prepared for preservation to an area that can be coated prior to the occurrence of flash rusting and/or oxidation. Remove any flash rust prior to painting, except as follows:

3.10.5.1 Surfaces cleaned by waterjetting shall meet the applicable NACE/SSPC Standard for flash rust. For submarines, the first coat of epoxy primer shall be applied within 24 hours of paint removal by waterjetting.

3.10.5.2 The water used in waterjetting shall not include detergents or inhibitors without written approval from the coating manufacturer and the SUPERVISOR.

(I) or (I)(G) "SURFACE PROFILE" (See 4.4)

3.10.6 One profile reading shall be taken for every 200 square feet for the first 1,000 square feet; for each additional 1,000 square feet, 2 profile readings shall be taken. Profile readings shall be taken in accordance with Method B or Method C of 2.7. For profile readings taken in accordance with Method C of 2.7, use profile tape suitable to read subject profile (i.e., coarse to extra-coarse plus***). One profile reading shall be the average (mean) of 3 individual tapes.*** If areas are found to be greater than 5 mils, use Method B of 2.7 in those areas to determine existing profile. The retention of Testex tape is not required. For areas listed in 3.7, document surface profile on QA Checklist Form Appendix 3.

3.10.6.1 Following blasting or waterjetting operations, surface peak-to-valley profile must be checked. For Method B of 2.7, each profile reading shall be between 2 and 4 mils. For Method C of 2.7, each profile reading shall be between 2 and 4 mils, with no individual tape reading less than one mil or ***greater*** than 5 mils. If such profile is not present, ***repair activity*** shall establish the proper profile.

3.10.6.2 Following power tool cleaning to SSPC-SP 11 of 2.4, surface profile shall be checked. For submarines, one mil minimum profile is acceptable for all areas. For surface ships, profile readings shall be 2 mils minimum for areas listed in 3.7 and one mil minimum for all other areas where accessible (inaccessible areas must be determined by inspection and agreed to by the SUPERVISOR).

3.10.6.3 When surface profile requirements of the NAVSEA-approved ASTM F718s are greater (higher in value) than that specified in this item, the NAVSEA-approved ASTM F718 surface profile requirements shall supersede this item. For products without a NAVSEA-approved F718, manufacturer’s instructions may be substituted.

3.10.6.4 Avoid excessive power wire brushing or excessive grinding/sanding which results in a polished surface.

3.10.6.5 Conversely, excessive use of mechanical tools (grinders, sanders, chippers, etc.) must be minimized to avoid metal loss. Overly aggressive blasting which causes metal thickness loss over the amount required for surface profile shall also be avoided. Excessive depth of profile can cause problems with poor coating performance. A greater than recommended surface profile requires a paint film be applied to totally cover the profile to prevent pinpoint or flash rust. The increase in paint film thickness also increases the susceptibility of solvent entrapment, causing blistering and premature failure of the coating.

3.10.6.6 Due to the potential for excessive metal loss, for SSN-21 and SSN-774 Class submarines, only the following power tools may be used to obtain an SSPC-SP 11 surface: needle guns and rotopeens. On submarines, any areas of potential metal loss by corrosion or mechanical means shall be documented and reported to the SUPERVISOR.

3.10.6.7 Spongejet may not establish a sufficient surface profile. If this method is employed and the profile is insufficient to meet the requirements, the ***repair activity*** shall establish a sufficient surface profile.

3.10.6.8 Waterjetting will not establish a surface profile. If this method is selected by the ***repair activity*** and a surface profile does not exist or is insufficient to meet the requirements, the ***repair activity*** shall establish a sufficient surface profile.

(I)(G) "CONDUCTIVITY OR CHLORIDE MEASUREMENT"

3.10.7 For surfaces listed in 3.7, accomplish the requirements for conductivity or chloride measurements as follows:

3.10.7.1 Following coating removal, accomplish conductivity or chloride measurements in accordance with the requirements of 3.10.7.3.

3.10.7.2 Additionally, accomplish a visual inspection within 4 hours prior to application of each coat of paint. If evidence of contamination of the surface exists, accomplish the requirements of 3.10.7.3.

3.10.7.3 Accomplish surface conductivity or chloride checks using available field or laboratory test equipment on the freshly prepared surface. One reading shall be taken for every 200 square feet for the first 1,000 square feet. ***Two*** determinations shall be conducted for every additional 1,000 square feet. For immersed applications, such as tanks and bilges, chloride measurements shall not exceed 3 ug/cm2 (30 mg/m2); conductivity measurements shall not exceed 30 micro siemens/cm. For non-immersed applications, chloride measurements shall not exceed 5 ug/cm2 (50 mg/m2); conductivity measurements shall not exceed 70 micro siemens/cm.

Conductivity samples shall be collected using the Soluble Salt Conductivity Measurement according to Bresle Method***, ARP Soluble Salt Meter model RPCT-07-001,*** or approved equivalent. Document on QA Checklist Form Appendix 4.

3.10.7.4 Because conductivity testing measures more than just chlorides, for any conductivity check that fails, a confirmatory chloride check may be conducted to confirm chloride levels. If the chloride levels do not exceed the requirements in 3.10.7.3, the measurement passes the conductivity/chloride check.

3.10.7.5 If a conductivity check fails and the confirmatory chloride check is not conducted, or if chloride measurements exceed the respective values, water wash (3000–5000 PSI) the affected areas with ***potable*** water. Dry the affected areas and remove all standing water. Accomplish | surface conductivity or chloride checks on affected areas in accordance with 3.10.7.3. Repeat step until satisfactory levels are obtained.

(I) or (I)(G) "SURFACE PREPARATION" (See 4.4)

3.10.8 Verify surface preparation for the coating systems specified in the Work Item/task order and Tables One through 9 are in accordance with 2.4 and 2.5. For areas listed in 3.7, document on QA Checklist Form Appendix 3.

3.10.8.1 For surface ships, surface cleanliness for dust shall be accomplished for the underwater hull and documented on QA Checklist Form Appendix 5. Surface cleanliness for dust shall meet Rating 2, Class 2, of 2.8. One dust tape reading shall be taken for every 200 square feet for the first 1,000 square feet; for each additional 1,000 square feet, 2 tape readings shall be taken. The tape reading requirement is waived if the ***final stage of*** surface ***preparation for the entire surface is*** ultra high pressure ***(UHP)*** waterjetting and the primer is applied within 6 hours of completion of surface preparation. |

3.10.8.2 The checkpoints of 3.10.6, 3.10.7, and 3.10.8 can be accomplished concurrently.

3.10.9 Coating systems shall be applied ***and cured*** in accordance with this NAVSEA Standard Item and applicable NAVSEA-approved ASTM F718s as defined in 3.1.11.

3.10.9.1 For surface ship preservation of areas not listed in Tables One through 5, see the Tables in ***Section*** 1 of 2.2. For submarine preservation of areas not listed in Tables 6 through 9, see the Tables in 2.12.

3.10.9.2 Paints shall not be thinned.

(I) or (I)(G) "COATING INSPECTION FOR EACH PAINT COAT" (Consists of Dry Film Thickness, Holidays, and Cleanliness) (See 4.4)

3.10.10 Inspect each Prime, Intermediate, Stripe, Tack, and Top Coat as follows:

3.10.10.1 Accomplish DFT measurements of each coat applied for the coating systems listed in Tables One through 9. This excludes any stripe coats. For areas listed in 3.7, document on QA Checklist Form Appendix 7.

3.10.10.2 Accomplish a visual holiday check on each coat of the system for areas listed in 3.7 and document on QA Checklist Form Appendix 7. Any holiday found shall be identified and touched up. These touched-up holidays do not constitute a new coat of paint. ***Paint containing Optically Active Pigment (OAP) shall be visually inspected using violet light; when this occurs the inspector shall use a violet-light flashlight conforming to ASTM E2501 to enhance the normal visual inspection process. An ASTM E2501 flashlight produces violet light that activates the fluorescent OAP. The inspector shall wear yellow-tinted glasses that block ultraviolet and violet light to accomplish the inspection. Guidance regarding OAP inspection practices is available in SSPC TU-11.***

3.10.10.3 Accomplish a visual inspection for surface cleanliness. If evidence of contamination exists, accomplish degreasing/cleaning a maximum of 4 hours prior to application of next coat of paint to ensure removal of surface contaminants. For areas listed in 3.7, document on QA Checklist Form Appendix 7 or 7A. If condition is UNSAT, then also use Appendix 2.

3.10.10.4 Accomplish a visual inspection for chloride contamination for areas listed in 3.7. If evidence of chloride contamination exists, accomplish requirement of 3.10.7.2 a maximum of 4 hours prior to application of next coat of paint to ensure removal of surface contaminants. Document on QA Checklist Form Appendix 7 or 7A. If condition is UNSAT, then also use Appendix 4 as required in 3.10.7.3.

3.10.11 For Dry Film Thickness (DFT) readings required in 3.10.10.1, DFT readings for each coat shall be taken in accordance with Method PA 2 of 2.4. When measuring full coats to determine total system thicknesses denoted in Tables One through 9, DFT readings shall not be taken in areas where stripe coatings have been applied.

3.10.11.1 WFT readings are required in lieu of DFT readings for any coat that must be in a tacky state (as defined in 3.6.4) when the next coat is applied and for non-metallic surfaces. For metallic surfaces, the number of WFT spot readings shall be 2 readings per 1,000 sq ft. For non-metallic surfaces, the number of WFT spot readings shall equal the number of DFT readings that would have been taken. WFT equals DFT divided by percent solids by volume (when percent solids by volume is expressed as a

decimal, i.e., 60 percent equals 0.60). For areas listed in 3.7, document on QA Checklist Form Appendix 7A.

3.10.11.2 Apply an additional coat of any single coat of a multiple coat system when that coat measures less than its specified DFT. DFT of each coat, including an additional coat if applied, shall not exceed the specified maximum thickness for each coat as specified in Tables One through 9. If an additional coat is required, ***accomplish a cleanliness checkpoint in accordance with 3.10.10.3 prior to application of*** the additional coat.

3.10.11.3 During paint application, a WFT gage shall be used to verify the application of proper paint thickness for the primer coat of all coating systems listed in Tables One through 9. WFT readings shall be taken to confirm this, but need not be recorded.

3.11 Accomplish preservation operations for surface ship nonskid systems in accordance with the following:

(V) "ENVIRONMENTAL READINGS"

3.11.1 Accomplish the requirements of 3.10.1 (environmental) with the following additions:

3.11.1.1 Record ambient and substrate surface temperatures, relative humidity, and dew point readings at one-hour intervals during actual surface preparation and nonskid system application.

3.11.1.2 Do not apply sprayed components of nonskid systems when sustained winds exceed 15 MPH.

3.11.1.3 Unless the applicable NAVSEA-approved ASTM F718 is more stringent, ambient air temperature shall be 55-100 degrees Fahrenheit, deck temperature for primer application shall be 40-120 degrees Fahrenheit, and deck temperature for nonskid application shall be 40-110 degrees Fahrenheit. Deck temperature shall be a minimum of 5 degrees Fahrenheit above the dew point for nonskid system application.

3.11.2 Accomplish the requirements of 3.10.2 through 3.10.4 with the following additions:

3.11.2.1 If cleaning is performed via solvent wiping, after solvent wiping, the deck shall be allowed to dry before application of any | ***coating***. No ***visible*** solvent shall be present on deck surfaces prior to proceeding with the next process step. ***Solvent wiping is defined in 3.6.6.***

3.11.2.2 When a solvent wipe is performed, annotate Appendix 2 with type of solvent and time allowed to dry.

(I) or (I)(G) “SURFACE PROFILE” (See 4.4)

3.11.3 Following blasting or waterjetting operations, surface peak-to-valley profile shall be checked. For each area of preparation, one profile reading shall be taken every 100 sq ft for the first 500 sq ft. If the profile readings are consistent, only one profile reading shall be taken for every 1,000 sq ft remaining. Profile readings shall be taken in accordance with Method B or Method C of 2.7. For profile readings taken in accordance with Method C of 2.7, use profile tape suitable to read subject profile (i.e., coarse to extra-coarse plus). ***One profile reading shall be the average (mean) of*** three (3) individual tapes. ***Each profile reading shall be 3 to 4.5 mils, with no individual tape reading less than 2.5 mils or greater than 5 mils. If such profile is not present, repair activity shall establish proper profile.*** The retention of Testex tape is not required. For areas listed in 3.7, document on QA Checklist Form Appendix 3.

3.11.3.1 For nonskid areas that abrasive blast equipment or waterjet equipment cannot access, substrate shall be prepared to SSPC-SP 11, except that minimum profile shall be 2 mils where accessible. ***Inaccessible areas of tiedowns shall be prepared to SSPC-SP 3 of 2.4.***

3.11.4 Accomplish the requirements of 3.10.7 for conductivity/ chloride measurements.

3.11.5 Accomplish the requirements of 3.10.8 for surface preparation.

3.11.5.1 Surface cleanliness for dust shall be accomplished for nonskid flight decks and documented on QA Checklist Form Appendix 5. Surface cleanliness for dust shall meet Rating 2, Class 2, of 2.8. Three individual readings shall be taken every 100 sq ft for the first 500 sq ft. If the tape readings are consistent, only one tape reading shall be taken for every 1,000 sq ft remaining. The tape reading requirement is waived if the ***final stage of*** surface ***preparation for the entire surface is*** ultra high pressure ***(UHP)*** waterjetting and the primer is applied within 6 hours of completion of surface preparation.

3.11.6 Nonskid systems shall be applied in accordance with the applicable Tables.

3.11.7 Accomplish the requirements of 3.2 for stripe coat with the exception that stripe coat may precede prime coat.

3.11.7.1 For overcoating of stripe coat or stripe coating of the primer coat, refer to the applicable NAVSEA-approved ASTM F718.

3.11.8 Nonskid application shall occur within 36 hours of primer application.

3.11.8.1 If nonskid application occurs within 36 to 72 hours after primer application, the primer coat shall be solvent wiped with a manufacturer's approved solvent.

3.11.8.2 If nonskid application occurs within 3 to 7 days after primer application, the primer coat shall be solvent wiped with a manufacturer's approved solvent, then lightly abraded, solvent wiped again, and a tack coat (one to 2 mils) of primer shall be applied.

3.11.8.3 If the primer coat is not overcoated with nonskid within 7 days of primer application, the primer shall be removed and the surface preparation repeated. ***For zone tie-in areas where the primer is to be overcoated with itself (up to 12 inches of overlap), the recoat window shall be in accordance with the NAVSEA-approved ASTM F718; the primer shall be solvent wiped with a manufacturer's approved solvent, then lightly abraded, then solvent wiped again.***

3.11.8.4 Aircraft carrier landing areas not overcoated with nonskid within 72 hours of primer application shall have surface preparation repeated.

3.11.9 Accomplish the requirements of 3.10.10 and 3.10.11 for coating inspection of nonskid primer (full and stripe coats).

(I) or (I) (G) “NONSKID SPREAD RATE AND HOLIDAY INSPECTION” (See 4.4)

3.11.10 Accomplish the requirements of 634-3.35.6 Paragraph 5 of 2.10 for spread rate and visual holiday inspection of nonskid and document on QA Checklist Form Appendix 7.

3.11.11 Inspect the location and color of required visual landing aid (VLA) markings in accordance with Naval Air Warfare Center Aircraft Division (NAWCAD) Class Guidance Drawings, Air Capable Ship Aviation Facilities Bulletin, Amphibious Assault Ship Aviation Facilities Bulletin, Shipboard Aviation Resume (NAEC-ENG-7576), VLA General Service Bulletin No. 8 (latest revision) or by contacting the local NAWC (CAFSU/ASIR) Field Office.

4. NOTES:

4.1 Wet space decks include sanitary spaces (washrooms, water closets, and showers), food service spaces (galley, scullery, butcher shop, bakery, meat prep rooms, and food service line), and trash compactor rooms.

4.2 Total DFT encountered during removal may exceed specified Table thicknesses.

4.3 Total removal of ablative coating is not required. An ablative copper AF coating system shall not be removed by blasting prior to its specified service life unless it is blistered, peeling, or otherwise damaged beyond repair. Stable and intact ablative AF coatings shall be retained and over-coated. The total film thickness of the combined retained and freshly

applied paint shall comply with Table 1/Table 6. When the work specification calls for over-coating of retained intact ablative copper AF coating, AF surfaces shall be washed down with fresh water at 2000 psi as the vessel comes out of the water, in order to prevent slime and oxidized paint from drying on the hull and inhibiting leaching of the paint when the ship is returned to the water. The surface shall be cleaned and dried before new paint is applied. Apply any AC paint to areas in need of repairs and then overcoat with the identical AF system. The Work Item or task order will specify the degree of removal.

4.4 The paragraphs referencing this note are considered an (I)(G) if the inspection/test is on a critical surface as listed in 3.7. If the inspection/test is not on a surface listed in 3.7, then the paragraph is considered an (I). These inspection point requirements also apply to build-up coats to obtain proper ***coating thickness***.

4.5 Refer to 009-03 of 2.1 as appropriate for requirements concerning potential exposure to toxic or hazardous substances and hazardous operations.

4.***6*** The repair activity may use environmental enclosures to control environmental conditions.

4.***7*** Preservation Process Instructions (PPIs) provide detailed instructions and procedures for specific ship preservation evolutions to include safety precautions, surface preparation, selection of appropriate coating systems, and third-party quality assurance check points. See new Section 12 of 2.2 for details.

4.***8*** Preservation system repairs are an Unrestricted Operations (URO) Maintenance Requirement Cards (MRC) program attribute.

4.***8***.1 The Unrestricted Operations (URO) Maintenance Requirement Cards (MRC) program was developed by NAVSEA to monitor specific areas of interest to determine if the conditions of these areas are suitable for continued unrestricted operations. Maintaining the protective capability of the coating system is critical to maintaining structural integrity during the periods between inspections. For this reason, complying with requirements for coating system application for all aspects of the preservation process is essential. Other systems that impact the URO MRC program are Special Hull Treatment (SHT) application process, including Mold-In-Place (MIP), maintenance of cathodic protection systems (Impressed Current Cathodic Protection (ICCP) and anodes) and installation of various types of tiles (acoustic, damping, etc).

4.***8***.1.1 Substrate preparation is not authorized/covered in this Standard Item for damping tile, acoustic tile, vertical launch system (VLS) bathtub area, thin line towed array (TLTA), interior, and retractable bow plane recesses on submarines.

4.***8***.2 Preservation work in submarine tanks and enclosed spaces is usually scheduled to occur when the tanks and spaces are opened and entered

to perform URO MRC structural inspections. Any time a tank or other enclosed space is entered, if a URO MRC 003 structural inspection is not authorized, the government will be performing a structural visual examination.

4.***8***.3 Any URO MRC item being blasted and painted will have a URO MRC hull survey inspection performed by the government prior to blasting and again prior to repainting.

4.***9*** Painting of rubber piece parts of pipe hangers is permitted in the following areas: Main Ballast Tanks (MBTs), freeflood areas, and internal tanks which are normally painted. The rubber piece parts include the liners, grommets, and inserts found in steel strap and steel block type pipe hangers; also included is the block rubber type pipe hangers. This allowance does not include internal tanks under nuclear cognizance, nuclear piping which traverses other non-Nuclear tanks, or potable water tanks.

4.***10*** Table One is for surface ship underwater hull areas. Table 2 is for surface ship exterior areas. Table 3 is for surface ship interior spaces. Table 4 is for surface ship tanks and voids. Table 5 is for surface ship miscellaneous areas. Table 6 is for submarine exterior hull areas. Table 7 is for submarine interior areas. Table 8 is for submarine tanks and voids. Table 9 is for submarine miscellaneous areas.

Attachment A

Edge DFT Measurement

In addition to the required DFTs per SSPC PA-2, a separate set of "edge" DFT readings shall be taken in close proximity to corners and edges of area structural elements including, but not limited to stiffeners, "rat holes," cut-outs, and frames. This data shall be taken in accordance with SSPC PA-2, with the following modifications:

1) The "edge" gage readings shall be taken approximately ¼ inch (i.e., 0.5 cm) from edges using micro-probe gages with a probe less than or equal to ½-inch in diameter (such as Elcometer 456 with T456FM3R90A probe or DeFelsko Positector 6000 series gauge with mini probe F90S or F0S). For "edge" readings taken on substrates less than ½-inch thick, readings shall be taken from the "middle" of the substrate. Microprobe gages shall be calibrated, in accordance with manufacturer's direction, to measure coating thicknesses expected during application.

2) Welds, not associated with corners or edges (i.e., a butt weld joining two flat plates), shall be inspected using standard visual techniques. The inherent roughness of the weld precludes the collection of reproducible data from these areas. Inspectors may, if they choose, take a spot reading within ¼ inch (i.e., 0.5 cm) from a butt weld. Such a reading would be included in the normal, flat surface data set, not the edge or corner data set.

3) In accordance with the SSPC terminology for a spot measurement, an "edge" spot measurement shall consist of 3 gage readings taken within a 1.5 inch (i.e., 4 cm) length as shown in Figure (1). Type "A" spot measurements will be taken around the thin section of the structure; Type "B" spot measurements will be taken on the front side of the structure; Type "C" spot measurements will be taken on the back side of the structure.

4) Within each 100 ft^2 area, as defined by PA-2, the inspector shall randomly select a combination of five of the edge spot measurement types shown in Figure (1). The selection of "edge" spot measurement types shall be at the inspector's discretion provided a minimum of one Type "A," one Type "B," and one Type "C" measurement shall be taken with within a 100 square foot (10 square meter) area. If the structure within the 100 square foot area does not contain Type "A," Type "B," and Type "C" configurations, the inspector shall take five spot measurements of the type(s) available.

Paint thickness in close proximity to "edges" will be documented, evaluated, and corrective action taken to satisfy coating application thickness requirements. Coatings thicknesses measured on the flat portions of the area in accordance with PA-2 and coating thicknesses measured on "edges" shall be used to accept the area. The "flat portion" DFTs and "edge" DFTs shall be documented separately to ensure corrective actions (if necessary) target the appropriate area. Stripe coat area DFTs up to 50 mils are acceptable. Stripe coat area DFTs in excess of 50 mils will be assessed by the local engineering code to ensure higher coating thickness is not apt to result in edge coating failure due to chipping.

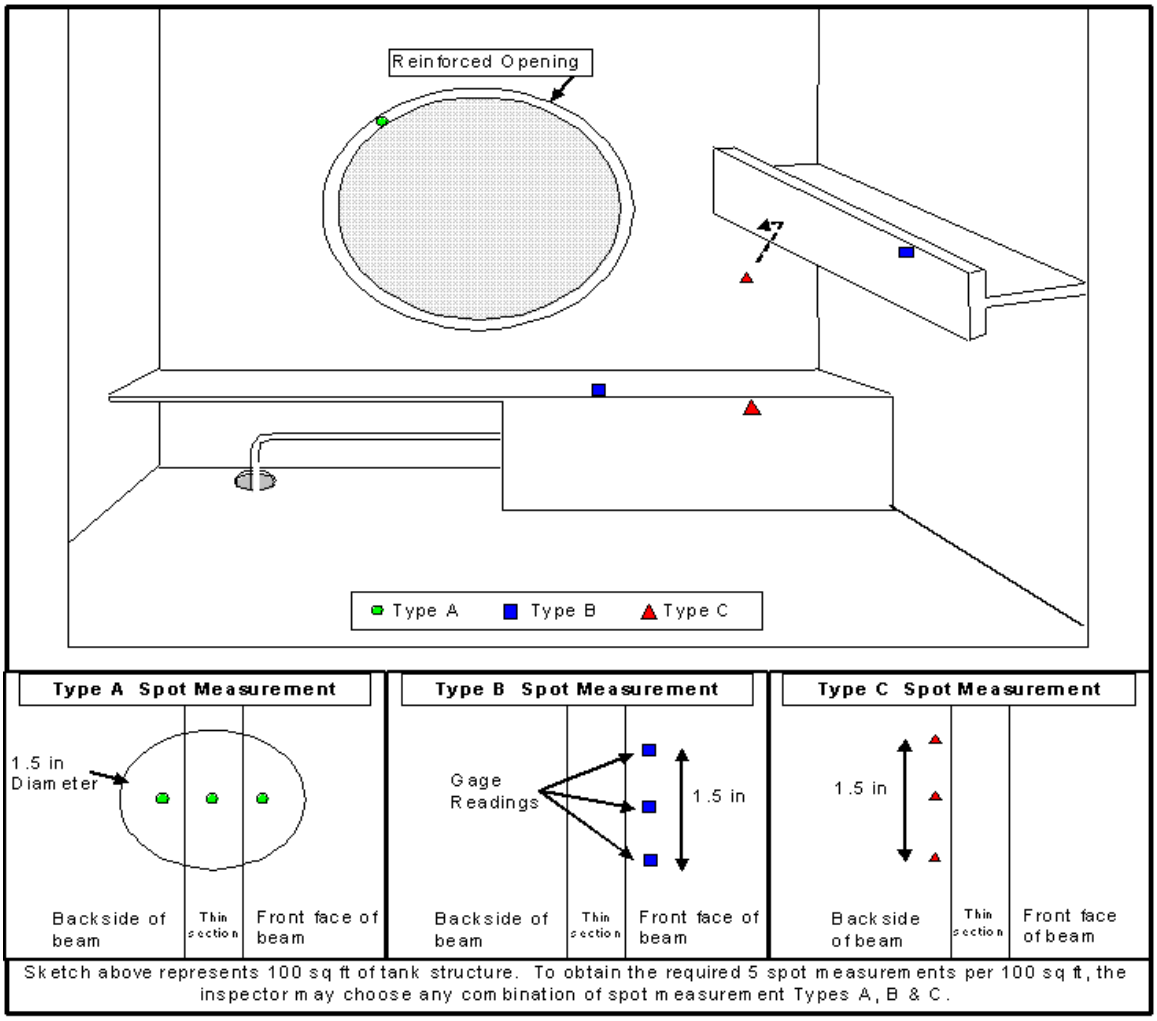
Reinforced Opening
Type A
Type B
Type C
Type A Spot Measurement
1.5 in Diameter
Backside of beam
Thin section
Front face of beam
Type B Spot Measurement
Gage Readings
1.5 in
Backside of beam
Thin section
Front face of beam
Type C Spot Measurement
1.5 in
Backside of beam
Thin section
Front face of beam
Sketch above represents 100 sq ft of tank structure. To obtain the required 5 spot measurements per 100 sq ft, the inspector may choose any combination of spot measurement Types A, B & C.

Figure 1

NOTES OF TABLES ONE THROUGH 5 FOR SURFACE SHIPS

(1) Use Sherwin-Williams P23RQ62/P23VQ80 in lieu of P23RQ82/P23VQ80 and use P23AQ61/P23VQ80 in lieu of P23AQ81/P23VQ80 for cold weather applications below 50 degrees Fahrenheit. Do not apply coating below 35 degrees Fahrenheit without approval of the SUPERVISOR.

(2) Boottop - The boottopping is defined as the black area from minimum load waterline at which the ship is expected to operate to 12 inches above the maximum load waterline. The black paint is an anti-fouling paint conforming to MIL-PRF-24647. Haze gray shall be carried to the black anti-fouling paint that marks the upper boottop paint. Do not apply the black anti-fouling paint over haze gray MIL-PRF-24635.

(3) Ameron Amercoat 235 can be used for cold weather application below 40 degrees Fahrenheit. Apply at 5 mils DFT (minimum) per coat. Do not apply coating below 35 degrees Fahrenheit without approval of the SUPERVISOR.

(4) Use International FCA 321 in lieu of FPA 327, or KHA414 in lieu of KHA062, for cold weather application below 50 degrees Fahrenheit. Do not apply coating below 35 degrees Fahrenheit without approval of the SUPERVISOR.

(5) Use Hempel Hempadur 4514U in lieu of 45150 for cold weather applications below 50 degrees Fahrenheit. Do not apply coating below 35 degrees Fahrenheit without approval of the SUPERVISOR.

(6) A minimum of 24 hours drying time shall be allowed after last coat prior to undocking.

(7) To ensure a continuous primer base, areas adjacent to those being coated with proprietary primer and nonskid listed on QPLs for MIL-PRF-24667 shall be coated with the same primer and compatible topcoat.

(8) These systems shall also be invoked for catapult wing voids and catapult exhaust blowdown trunks.

(9) DOD-E-24607, chlorinated alkyd, may also be used. MIL-PRF-24596, Type I, Grade C, Classes 1 and 2, or DOD-E-24607 must be used if surface and ambient temperature are less than 50 degrees Fahrenheit.

(10) The "inner shield" is defined as the portion of the dielectric shield that extends 3 ft. from the anode in all directions. The "outer shield" is defined as the portion of the dielectric shield from the inner shield to a distance of 6 ft. from the anode. Repair of the inner shield area is required when total deteriorated inner shield surface area is from 0 to 2 percent, and no single spot is greater than one square foot. Repair of the outer shield area is required when total deteriorated outer shield surface area is from 0 to 10 percent, and

no single spot is greater than one square foot. Replacement (new installation) of the entire dielectric shield is required when either of the above criteria is exceeded (damage to the inner shield is greater than 2 percent, OR damage to the outer shield is greater than 10 percent, OR any single spot damage is greater than one square foot).

(11) The following steps shall be used for repair/replacement of dielectric shields. Ensure QA checkpoints are conducted in accordance with 3.7.

a. Protect surrounding area from damage. Mask anode surfaces with heavy cardboard or plywood.

b. Abrasive blast.

c. For repair, areas of undamaged dielectric shield shall be roughened and feathered into the bare metal areas to provide a profile for adhesion of the new dielectric shield. Feather edges at least one inch using power tools or hand sanding. To prevent fracturing of shield, do not feather using abrasive blasting.

d. The dielectric shield material shall be mixed, applied, and cured in accordance with manufacturer’s instructions.

e. The dielectric shield material should be faired in and made smooth from the anode for a distance of at least 10 inches to minimize hull turbulence.

f. The anti-corrosive shall be applied when the dielectric shield material is in a tack-free state. If the dielectric shield material has cured, sanding shall be accomplished to smooth any rough areas and to degloss the surface for the anti-corrosive to be applied over it.

g. During visual inspection, ensure anode surfaces are undamaged and free of paint and dielectric shield material.

h. The anode should remain covered with heavy cardboard or plywood to prevent damage or contamination by the ship’s underwater hull coating system until just before undocking.

(12) These systems may also be invoked for preservation of decks in spaces that are prone to wear and do not receive deck covering.

(13) Anchors below lower boottopping limit shall be painted in accordance with normal underwater hull anti-corrosion/anti-fouling system.

NOTES OF TABLES ONE THROUGH 5 FOR SURFACE SHIPS
(Con't)

(14) For MCM and MHC ships, use black walnut shells for abrasive blast media.

(15) Anchor chain and detachable links shall be marked and color-coded in accordance with NSTM Chapter 581 unless otherwise directed by the Work Item or task order.

(16) Apply one mist coat (1-2 mils) after blast and prior to remaining coats where invoking Work Item or task order requires anchor chain inspections prior to preservation.

(17) Colors shown in Tables 631-8-***10*** and 631-8-***11*** of 2.2 shall be specified by TYCOM or ship's Commanding Officer in accordance with Paragraph 631-8.***18.3.2*** of 2.2.

(18) Restore each compartment marking in accordance with 2.9 and 2.11.

(19) MIL-PRF-24667 nonskid systems shall be applied as complete systems (primer, intermediate coat when MIL-PRF-24667, Type III, coatings are invoked, nonskid, and color topping) from the same manufacturer except for the color topping. When a manufacturer does not have approved color topping, use another compatible manufacturer's color topping. MIL-PRF-24667, Type I, when required, shall be specified in the invoking Work Item or task order. Boundaries of areas receiving nonskid not specified by specific ship's drawings shall be in accordance with 2.10.

(20) Prior to accomplishing painting of wooden underwater hulls, allow the hull to dry to a moisture content of 15 percent. Readings shall be taken with an electronic moisture meter, Sovereign Moisture Master or equal. Cover grounding plates and zincs prior to painting.

(21) Blasted surface metal must be degreased following walnut shell blasting. Even traces of residual oil will degrade coating adhesion. Appropriate safety precautions for working with flammable solvents must be enforced. Alternate procedure is a vigorous soap and water wash followed by pressurized fresh water rinse. Do not use a detergent and fresh water washdown when using aluminum oxide as an abrasive blast medium.

(22) Peripheral deck edging and areas not receiving nonskid may substitute the manufacturer's color topping for MIL-PRF-24635.

(23) ***For MIL-PRF-23236, Type VII coatings, the stripe coat may be waived if additional DFT readings are taken in accordance with Attachment A and recorded on Appendix 7.***

(24) ***This product shall be spray applied where possible. All references to "brush coat" or "brush application" may be accomplished using a paint brush or a paint roller or cartridge unit. Two coats applied by brush/roller/cartridge unit at 10-15 mils per coat shall be substituted for one coat of the spray-applied product at 20-30 mils per coat in areas where plural-component spray application is not feasible or for coating touch-up. Where 2 full coats are applied by brush application, the stripe coat shall be applied over the 2 full coats rather than between them. For brush application the spray version of each product may be brush-applied or the brush coat version of the product may be used. The brush coat version of Sherwin-Williams Fast Clad ER is Fast Clad Brush Grade. The brush coat version of Interline 783 is Interline 624.***

For application of the spray-applied "single coat" products, the product shall be applied all at one time, meaning during a continuous spray operation. Specifically, a "single-coat" system involves one color of paint, applied during one work evolution (i.e., no time is required to wait for the paint to dry), with a single pass or double pass, then a stripe coat is applied over the edges and welds to build adequate coating thickness in these failure-prone areas. Because the spray application is one work evolution, coating inspection QA checkpoint 3.10.10 need only be conducted after completion of application of the full coat with the stripe coat. If application is accomplished during numerous work evolutions (non-continuous application), each work evolution shall constitute a separate coat of paint for QA purposes.

Where application is performed using 2 full coats by brush application at 10-15 mils/coat, QA requirements will occur after each brush coat is applied if using the brush coat version of the product. If the brush application is performed using the spray version of the product, and it is performed in one work evolution, then coating inspection QA checkpoint 3.10.10 need only be conducted after completion of application of the full coat with the stripe coat.

(25) Power impact tool cleaning using power-driven needle guns, chipping or scaling hammers, rotary scalers, single or multiple-piston scalers, or other similar impact cleaning tools shall not be utilized in the cleaning methods.

(26) Maintain the relative humidity in the tank or void space at a maximum of 50 percent from the start of surface preparation to cure of the topcoat.

(27) Finish coats for boats and craft shall be as specified in Paragraph 631-9.3.***2*** through 631-9.3.***3*** of 2.2 unless otherwise specified in the invoking Work Item or task order.

(28) Thermal insulation shall be soap and water cleaned and hand sanded.

(29) Three coats of MIL-DTL-24441, Type III, at 3-4 mils per coat can be substituted for 2 coats of MIL-DTL-24441, Type IV, at 4-6 mils per coat, for total system DFT of 8-12 mils. Three full coats and 2 stripe coats of MIL-DTL-24441, Type III, at 3-4 mils per coat can be substituted for 2 full coats and one stripe coat of MIL-DTL-24441, Type IV, at 4-6 mils per coat, for total system DFT of 8-12 mils.

(30) Grit blasting to near white metal is the preferred method of surface preparation. Only where grit blasting is not possible should power tool cleaning be used with prior authorization by the SUPERVISOR. Power tool cleaning should not be used for well deck areas frequently exposed to LCAC exhaust.

(31) A low-pressure (3,000 to 5,000 psi) fresh water washdown of the well deck area shall be performed before either grit blasting or power tool cleaning to remove dirt, oil, grease, salts, and loosely adherent coatings.

(32) Upon completion of surface preparation, pH measurements must be taken. The pH must be in the range of 6.5 to 7.5. If the pH is not within this range, the surface must be washed with fresh water until the required pH is obtained.

(33) Runs, sags, and drips may appear in the coating due to its solvent-free nature and application properties. In the normal application of this product, the appearance of runs, sags, and drips is only superficial and is not detrimental to the coating system. In these cases, no action shall be taken. In cases where the conditions are determined to be detrimental (coating in excess of 50 mils DFT) to the effectiveness of the coating system, immediate action shall be taken to correct the coating system. If the wet run, sag, or drip occurs on a dry surface, brush out the run, sag, or drip and reapply the prime coat directly over the brushed out area. If the run, sag, or drip has dried, then the affected area shall be scraped or mechanically removed and the prime coat shall be reapplied.

(34) These systems may also be invoked for preservation of well deck bulkheads and decks.

(35) These systems shall also be invoked for barricade stanchions and wells, catapult jet blast deflector pits, and associated void spaces.

(36) SSPC-SP 11 shall be the surface preparation standard used, even if the applicable NAVSEA-approved ASTM F718 has a more stringent requirement.

(37) Total DFT specified for potable water tanks shall not be exceeded except in isolated areas adjacent to shapes and stiffeners. In no case shall the maximum DFT be exceeded by 2 mils. The isolated areas shall be less than 2 percent of the total area.

(38) Maintain the relative humidity in the tank at a maximum of 85 percent from the start of abrasive blasting to cure of the topcoat. By allowing 85 percent vice 50 percent relative humidity, this will reduce the service life of the tank from 15-20 years to 10-12 years.

(39) Ameron Amercoat 892HS shall not be used for surfaces that exceed 700 degrees Fahrenheit.

(40) Do not stripe coat inside surfaces of the Sonar Trunk Guide Rail angles.

(41) Apply 3 coats of a vapor barrier-coating compound, MIL-PRF-19565, in contrasting colors (white-orange-white), to insulation within laundries, sculleries, galleys, drying rooms, and to insulation on the warm side of refrigerated stores spaces.

(42) High temperature areas of exhaust pipe exteriors include BLISS caps, air eductors, and exhaust stacks.

(43) In lieu of white, use Light Gray, Color No. 26373 (Low Solar Absorption only). In lieu of black, use Ocean Gray, Color No. 26173 (Low Solar Absorption only).

(44) These systems shall also be invoked for Aircraft Electrical Servicing Stations (AESS) trunks.

(45) PCMS tile on the bow flares shall be painted with the same topcoat as the freeboard.

(46) For struts, rudders, and other erosion-prone areas, add one coat 3M Co. No. EC-2216, 4-5 mils, and 3 coats, 5-6 mils/coat over the ***first coat of*** AC prior to application ***of the second coat of AC,*** if authorized by the TYCOM.

(47) The topcoats for ordnance/non-ordnance pyrotechnic locker sun shields shall be painted white (FED STD 595, Color No. 17875) or as directed by NAVSEA.

(48) All of the AC and AF coats in the product system must be from the same manufacturer.

NOTES OF TABLES ONE THROUGH 5 FOR SURFACE SHIPS
(Con't)

(49) For touch-up of Sherwin-Williams Duraplate or Novaplate, Brushplate may be used. For touch-up of Sherwin-Williams Fast Clad ER, Fast Clad Brush Grade may be used. Brushplate and Fast Clad Brush Grade are applied at 8-10 mils/coat.

(50) "Cosmetic" color topping is not to be applied on top of nonskid on vertical replenishment or aviation decks.

(51) A second full coat of proprietary nonskid primer listed on the QPL for MIL-PRF-24667 may be applied if requested by the TYCOM.

(52) Do not blast fin stabilizers to near white metal. As-received fin stabilizers shall be brush-off blasted to NACE 4/SSPC-SP 7 (Brush-Off Blast Cleaning) in lieu of near white metal blast to ensure polymer fairing compound is not removed prior to application of coatings. Blank, wrap, cover, or mask equipment, shafts and openings to preclude damage and prevent entry of contaminants prior to cleaning operation. Remove protective covering upon completion of preservation operations.

(53) “Total System” value is only listed when it is more stringent than the sum of the individual coats of the system.

(54) This does not apply to propulsion plant water tanks aboard nuclear-powered ships.

(55) For MIL-PRF-23236, Type VII, Class 9, coatings, follow the NAVSEA-approved ASTM F718 for cure and recoat times. This supersedes the 48-hour/7 day requirement.

(56) Do not nonskid a 7-inch wide strip of deck surface in way of the helo hangar door seal interface on DDG-51 Class Flight II-A ships.

(57) If using Fast Clad ER system, the primer shall be applied at 8-10 mils instead of 4-8 mils.

(58) Products used for the full coat shall contain Optically Active Pigment (OAP).

NOTES OF TABLES 6 THROUGH 9 FOR SUBMARINES

(1A) Hull inserts shall be coated with the preservation system applied to adjacent surfaces. Extend coating system a minimum 1/2-inch on to non-ferrous liner or cladding.

(2A) Alternating AF colors may be used. Final coat can be red or black.

(3A) For all surfaces above max beam that are to receive AF, all coats shall be black. The final coat of all exterior coating systems above the waterline shall also be black.

(4A) When applying a MIL-PRF-24647 system, the cure to immersion time for the anti-corrosive system may be different than the cure to immersion time for the anti-fouling paint. The longer cure to immersion time shall be used. Tack coats are not included when determining cure to immersion times.

(5A) Draft marks are applied directly to the AC coat; do not apply AF beneath draft marks.

(6A) Blasting is not allowed in machinery spaces.

(7A) Topcoat color shall match surrounding paint on visible surfaces.

(8A) MIL-PRF-23236, Type VII, ***NAVSEA approved*** coatings for ***interior*** submarine use under the Submarine Atmosphere Control Manual are listed in Table 10 of 2.12 as ***"Internal Atmospheric"***.

(9A) To minimize premature yellowing, chlorinated alkyd-based paints (DOD-E-24607) shall not be applied within 4 weeks before and after the application of amine-cured epoxy paints formulated to MIL-PRF-23236.

(10A) When using paints qualified to DOD-E-24607, use Table 631-8-***10*** of 2.2 to select approved colors.

(11A) MIL-PRF-24596 Type I, Class 2, Grade A, and Formula 25A may be substituted for DOD-E-24607 chlorinated alkyd enamels. Color shall match the existing surroundings.

(12A) The SSBN-726 Class logistics escape trunk (LET) bubble skirt knife edge in way of gaskets and fasteners for LET upper hatch fairings are to be left painted.

(13A) The Environmental Protection Agency (EPA) has found that samples of vermiculite ore contain asbestos fibers. Vermiculite ***was*** used as an anti-sweat treatment ***on the upper hatch covers on*** submarines. All facilities and workers shall assume vermiculite contains asbestos fibers until it has been tested. All facilities are to test new vermiculite or vermiculite in use prior to working with the material.

Workers who are doing work with or near vermiculite should be aware that it may contain asbestos and proper precautions shall be used.

(14A) For Ensolite hull insulation (MIL-P-15280), DOD-E-24607 shall be used. For polyimide hull insulation either DOD-E-24607 or MIL-PRF-24596 may be used.

(15A) Motor generators require protection from paints conforming to MIL-DTL-24441 or MIL-PRF-23236 during application and curing of the paint. When these paints are being applied or cured while venting in a space containing motor generators, the motor generators shall be protected using a NAVSEA-approved procedure. For 300 kW and 500 kW motor generators, a positive pressure unit according to Appendix A of the motor generator technical manual shall be used. Maintenance on motor generators shall not be performed for a minimum of 5 days after painting with MIL-DTL-24441 and MIL-PRF-23236 paints or any application of silicones (e.g., TT-P-28, MIL-PRF-24635 silicone enamels) in the engine room.

(16A) When lead is removed from lead bins, the structure shall be blasted to SSPC-SP 10 and preserved with an ultra high solids coating, (even if the surrounding structure is being touch-up painted) prior to installing lead. Lead pockets, lead bins, and adjacent bulkhead and hull plating which will be in contact with lead ballast shall be covered with either one layer of 1/8-inch thick rubber conforming to MIL-PRF-1149, or with 2 layers of 1/16-inch thick rubber conforming to MIL-PRF-2912, Type II. The rubber linings shall be installed using adhesive conforming to MIL-A-24456. Before installing the rubber sheeting, all repairs and painting work in the tank shall be completed.

(17A) Immersed non-ferrous and corrosion-resistant steel piping shall be completely coated with the specified tank or bilge coating system with the following exceptions: piping in reactor and propulsion plants in nuclear powered ships shall not be painted; non-ferrous and corrosion-resistant steel piping and CRES torpedo system components in torpedo impulse tanks shall not be painted; non-ferrous and CRES piping above residual waterline in MBTs is not required to be painted; in all tanks, closed system piping one-inch diameter and less is to be protected from blast and is not required to be painted.

(18A) Final coat shall be light colored.

(19A) CRES fasteners (studs, nuts, washers) used to secure Type II vibration damping and acoustic tiles may be left unpainted.

(20A) Unpainted NFO, hydraulic oil, hydrophone, and CFO tanks shall remain unpainted. Lube oil sludge tanks on SSBN/SSGN-726 Class submarines are not painted.

NOTES OF TABLES 6 THROUGH 9 FOR SUBMARINES
(Con't)

(21A) Reduced touch-up paint curing procedures of Section 7 of 2.2 do not apply to these surfaces. Also, note accelerated touch-up times authorized by Section 631-8.***5.5.1*** of 2.2 are for non-reactor potable water tanks only, and therefore are not to be used for potable water and reserve feedwater tanks unless specifically approved by NAVSEA.

(22A) Total DFT specified in Table 8 for potable water tanks shall not be exceeded except in isolated areas adjacent to shapes and stiffeners. In no case shall the maximum DFT be exceeded by more than 2 mils. The isolated areas shall be less than 2 percent of the total area. For touch-up or overcoating intact aged paint in good condition, the same requirements for each coat apply, and the total film thickness maximum requirement may be corrected to allow for thickness of underlying aged paint.

(23A) Prior to surface preparation, flasks must be depressurized. Barrier protection shall be in accordance with NAVSEA SO400-AD-URM-010, Tag Out Users Manual (TUM), Appendix G.

(24A) Tek-Haz coating system will extend to a line even with the underside of the ventilation plenum welds, but not including the welds. Welds and area above welds will be coated with MIL-DTL-24441 primer (at 4-6 mils/coat) and 2 coats MIL-PRF-24635 (at 4-6 mils/coat).

(25A) Bilge and Drain Collection Tanks includes the following: Bilge Collecting Tanks, Bilge Collecting Sump Tanks, Non-Oily Drain Collecting Tanks (other than Fresh Water), Oily Drain Collecting Tanks, Bilge Water Processing Tank, Drain Water Collecting Tanks, VLS Drain Collecting Tank, Oil Collection Tanks.

(26A) MIL-PRF-23236, Type VII, coatings approved for submarines are listed in Table 10 of 2.12 as approved by NAVSEA.

(27A) Conduct low voltage holiday detection on 100 percent of potable water tanks. Holiday detection shall also be performed on any repaired (touchup) areas of an existing coating system. The holiday checks are to be performed after application of the topcoat using a low voltage wet sponge holiday detector. Any holidays (defects to bare metal) found shall be marked by the inspector and the area touched up. Holiday checks shall be performed again on these areas after repair.

(28A) All painting with organic solvent-based paints (alkyd, epoxy, oil based) that exceeds 1 quart per day for the entire ship shall be completed 5 days prior to the date of departure as determined by the Commanding Officer. Date of departure, as it relates to painting, is the date of first dive after departure for a period of operation.

NOTES OF TABLES 6 THROUGH 9 FOR SUBMARINES
(Con't)

(29A) Maintain the relative humidity in the tank or void space at a maximum of 50 percent from the start of surface preparation to cure of the topcoat.

(30A) Steam clean to remove excess oil.

(31A) Tank manhole covers are critical coated areas. Solvent-based coating systems may be used to paint manhole covers of tanks painted with high solids coating systems due to fit-up issues associated with high solids coating systems. ***Powder coatings shall not be applied to reserve feedwater, potable water, freshwater drain collecting, and steam surge tank manhole covers.***

(32A) Areas visible from above shall be topcoated either gray or black.

(33A) Total number of coats and total DFT specified in Table 7 for all interior spaces shall not be exceeded. Maximum system total DFT shall not exceed 17 mils for surfaces topcoated with DOD-E-24607, 21 mils for surfaces topcoated with MIL-PRF-24596, or 24 mils for surfaces topcoated with Formula 25A.

(34A) Naval Shipyards and NAVSEA Note 5000 activities only are allowed to perform work in this area in accordance with guidance provided in reference 2.12.

(35A) The David Taylor Research Center coating system (DTRC 2844-1110 and 2844-1109) may be used on other exterior hull areas. This is to allow areas adjacent to areas covered by MIP or SHT to be re-preserved the same as MIP or SHT areas and improve the painting process.

(36A) If using Fast Clad ER system, the primer shall be applied at 8-10 mils instead of 4-8 mils.

(37A) For MIL-PRF-23236, Type VII coatings, the stripe coat may be waived if additional DFT readings are taken in accordance with Attachment A and recorded on Appendix 7.

(38A) Final grooming of bow domes must be performed by qualified shipyard personnel. Final surface finish of bow domes must be 180 microinches Ra or smoother. Measure and record surface roughness in accordance with ANSI B46.1 "Surface Roughness, Waviness, and Lay". If necessary, groom the surface of the dome to attain a maximum surface roughness of 180 microinches Ra. This additional grooming can be accomplished by wet sanding the surface by hand using 120 grit paper and fresh water. Refer to the appropriate bow dome manual for the class for more specific guidance on surface roughness, grooming and paint application.

NOTES OF TABLES 6 THROUGH 9 FOR SUBMARINES
(Con't)

(39A) For MIL-PRF-23236, Type VII, Class 9 coatings, follow the NAVSEA-approved ASTM F718 for cure and recoat times. This supersedes the 48-hour/7-day requirement.

(40A) This product shall be spray applied where possible. All references to "brush coat" or "brush application" may be accomplished using a paint brush or a paint roller or cartridge unit. Two coats applied by brush/roller/cartridge unit at 10-15 mils per coat shall be substituted for one coat of the spray-applied product at 20-30 mils per coat in areas where plural-component spray application is not feasible or for coating touch-up. Where 2 full coats are applied by brush application, the stripe coat shall be applied over the 2 full coats rather than between them. For brush application the spray version of each product may be brush-applied or the brush coat version of the product may be used. The brush coat version of Sherwin-Williams Fast Clad ER is Fast Clad Brush Grade. The brush coat version of Interline 783 is Interline 624.

For application of the spray-applied "single coat" products, the product shall be applied all at one time, meaning during a continuous spray operation. Specifically, a "single-coat" system involves one color of paint, applied during one work evolution (i.e., no time is required to wait for the paint to dry), with a single pass or double pass, then a stripe coat is applied over the edges and welds to build adequate coating thickness in these failure-prone areas. Because the spray application is one work evolution, coating inspection QA checkpoint 3.10.10 need only be conducted after completion of application of the full coat with the stripe coat. If application is accomplished during numerous work evolutions (non-continuous application), each work evolution shall constitute a separate coat of paint for QA purposes.

Where application is performed using 2 full coats by brush application at 10-15 mils/coat, QA requirements will occur after each brush coat is applied if using the brush coat version of the product. If the brush application is performed using the spray version of the product, and it is performed in one work evolution, then coating inspection QA checkpoint 3.10.10 need only be conducted after completion of application of the full coat with the stripe coat.

(41A) Work shall be in accordance with the requirements of the following:

688 Class - Technical Handbook for Special Hull Treatment Maintenance and Repair for Submarines: NAVSEA S6360-AD-HBK-010. For Fairing Compound use NAVSEA Drawing 605-6160358.

NOTES OF TABLES 6 THROUGH 9 FOR SUBMARINES
(Con't)

21 Class - Submarine Mold-in Place Special Hull Treatment Maintenance and Repair Manual: NAVSEA S6360-AN-MMA-010/SHT

774 Class - Maintenance and Repair Manual for Virginia Class Submarine Mild-in-Place Special Hull Treatment: NAVSEA S6360-AV-MMA-010

(42A) Low Pressure Water Clean (LP WC) with a fan spray starting at a pressure of 1,000 psi. Keep the cleaning lance nozzle tip perpendicular to and at least 4" from the surface. Increase pressure, if needed, in increments of 500 psi up to a maximum of 5,000 psi. Remove all paints down to sound grey or green anti-corrosive paint (F-151 or F-150) or bare GRP. Remove any remaining barnacle particles or other foreign objects with wood or plastic scrapers, or by sanding. Do not use wire brushes or other abrasive instruments.

(43A) Remove all marine growth and existing paint from the boot surface by Low Pressure Water Cleaning (LP WC) or sanding with soft back dual action or soft back random orbital sanders and 60 grit paper. Observe extreme caution when water jetting (LP WC). Measure stand-off distance and control nozzle pressure to assure that the boot is not damaged during the cleaning process. Low Pressure Water Cleaning must be performed using fresh water with a starting pressure of 1000 psi. Pressure must be increased in 500 psi increments until the desired results are obtained. Scuff the entire boot surface using 60 grit paper or equivalent coarseness Scotchbrite pad to remove any remaining paint and provide an adequately prepared surface for paint application. Clean the bare boot surface with PF-145HP degreaser (NSN 6850-01-378-0044) or mineral spirits per Commercial Item Description A-A-2904 Grade 1.

(44A) Do not apply nonskid to Fairwater Planes or Retractable Bow Planes.

(45A) Navy Formula 187 is not required to be applied to SHT tiles under towed array fairing covers. These tiles are to be left unpainted above the waterline or be painted with anti-fouling paint below the waterline.

(46A) Navy Formula F-187 cannot be applied over F-184.

(47A) If performing touchup of coating in Steam Plant Surge Tanks, 1 coat Dampney Company ENDCOR 450 (no DFT required) shall be applied prior to application of the coats of Apexior No. 1.

(48A) Powder coatings approved for use on submarines are listed in 2.12 Table 19.

(49A) For touch-up of MIL-PRF-23236, Type VII coating systems, MIL-DTL-24441, Type IV, or MIL-PRF-23236 coating systems are acceptable.

TABLE ONE STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO BOTTOM OF BOOTTOP	F BOOTTOP	G DRAFT MARKS
UNDERWATER HULL (KEEL TO ***TOP OF*** BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) UP TO 3 YEARS SERVICE LIFE FOR SMALL BOATS AND SERVICE CRAFT ONLY	1	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2/L	ONE AC COAT MIL-PRF-24647, TYPE I OR II, RED -- & -- ONE AC COAT MIL-PRF-24647, TYPE I OR II, GRAY, 4 - 6 MILS/COAT, 10 MILS MIN SEE NOTES (1), (3), (4), (5) & (48)			ONE AF COAT MIL-PRF-24647, TYPE I OR II, 4-6 MILS SEE NOTES (2), (6), (27) & (48)	ONE AF COAT MIL-PRF-24647, TYPE I OR II, 4-6 MILS SEE NOTES (2), (6), (27) & (48)	ONE COAT MIL-PRF-24635 LT GRAY, COLOR NO. 26373 (LOW SOLAR ABSORPTION ONLY) TO BOOTTOPPING & BELOW, 2 - 3 MILS ***--OR--*** ***COMMERCIAL GRADE WHITE AF*** ONE COAT COLOR NO. 26173 (FED STD 595) MIL-PRF-24635 OCEAN GRAY (LOW SOLAR ABSORPTION ONLY) ABOVE BOOTTOPPING, 2 - 3 MILS
	2	SAME AS LINE ONE	***ONE AC COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, RED, 4 - 6 MILS*** ***-- & --*** ***ONE AC COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, GRAY, 4 - 6 MILS, 10 MILS MINIMUM*** SEE NOTE (4)			***ONE AF TIE COAT 3-5 MILS*** ***-- & --*** ***ONE AF FULL COAT 5-7 MILS MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A*** SEE NOTES (2) & (6)	***ONE AF TIE COAT 3-5 MILS*** ***-- & --*** ***ONE AF FULL COAT 5-7 MILS MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A*** SEE NOTES (2) & (6)	SAME AS LINE ONE
UNDERWATER HULL (KEEL TO ***TOP OF*** BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) UP TO 7 YEARS SERVICE LIFE SEE NOTE (46)	3	SAME AS LINE ONE	SAME AS LINE ONE			ONE AF COAT MIL-PRF-24647, TYPE I OR II, BLACK -- & -- ONE AF COAT MIL-PRF-24647, TYPE I OR II, RED, 4 - 6 MILS/COAT, 10 MILS MIN SEE NOTES (2), (6) & (48)	2 AF COATS MIL-PRF-24647, TYPE I OR II, BLACK, 4 - 6 MILS/COAT, 10 MILS MIN SEE NOTES (2), (6) & (48)	SAME AS LINE ONE
	4	***INTENTIONALLY LEFT BLANK***						
UNDERWATER HULL (KEEL TO ***TOP OF*** BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) UP TO 12 YEARS SERVICE LIFE SEE NOTE (46)	5	SAME AS LINE ONE	SAME AS LINE ONE			ONE AF COAT MIL-PRF-24647, TYPE I OR II, RED -- & -- ONE AF COAT MIL-PRF-24647, TYPE I OR II, BLACK -- & -- ONE AF COAT MIL-PRF-24647, TYPE I OR II, RED, 4 - 6 MILS/COAT, 15 MILS MIN SEE NOTES (2), (6) & (48)	3 AF COATS MIL-PRF-24647, TYPE I OR II, BLACK, 4 - 6 MILS/COAT, 15 MILS MIN SEE NOTES (2), (6) & (48)	SAME AS LINE ONE
EXISTING FIN STABILIZERS SEE NOTES (48) & (52)	6	BRUSH-OFF BLAST TO NACE 4/SSPC-SP 7	SAME AS LINE ONE			SAME AS LINE ***5***		
REFURBISHED FIN STABILIZERS SEE NOTE (48)	7	HAND TOOL CLEAN SSPC-SP 2	SAME AS LINE ONE			SAME AS LINE ***5***		

TABLE ONE STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO BOTTOM OF BOOTTOP	F BOOTTOP	G DRAFT MARKS
UNDERWATER HULL (DIELECTRIC SHIELDS) SEE NOTES (10) & (11)	8	WHITE METAL BLAST, NACE 1/SSPC-SP 5	INNER SHIELD: ONE COAT US FILTER, ELECTROCATALYTIC, CAPASTIC™, PART NO. 35524, 100 MILS MIN OUTER SHIELD: ONE COAT US FILTER, ELECTROCATALYTIC, CAPASTIC™, PART NO. 35524, 22 MILS MIN	ANTICORROSIVE PAINT SAME AS SURROUNDING HULL EXCEPT ONE COAT		ANTIFOULING PAINT SAME AS SURROUNDING HULL SEE NOTES (2) & (6)		
EXPOSED AREAS OF OUTBOARD SHAFTING COVERED BY GRP	9	SAME AS LINE ***7***	ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (1), (3), (4), (5) & (48)			ANTIFOULING PAINT SAME AS SURROUNDING HULL SEE NOTES (2) & (6)		

TABLE ONE ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO BOTTOM OF BOOTTOP	F BOOTTOP	G DRAFT MARKS
UNDERWATER HULL (KEEL TO ***TOP OF*** BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) SEE NOTE (46)	10	NEAR WHITE METAL BLAST USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS - OR - WATERJETTING TO NACE 5/ SSPC-SP12 CONDITION WJ-2	***ONE AC COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, RED, 4 - 6 MILS, WITHIN 4 HOURS AFTER SURFACE PREPARATION*** ***SEE NOTE (4)***	***ONE AC COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, GRAY, 4 - 6 MILS, 10 MILS MIN*** ***SEE NOTE (4)***	***ONE AF TIE COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, 3-5 MILS***	***ONE AF FULL COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, 5-7 MILS, HAZE GRAY*** ***SEE NOTES (2) & (6)***	***ONE AF FULL COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, 5-7 MILS, HAZE GRAY*** ***SEE NOTES (2) & (6)***	***ONE AF FULL COAT MIL-PRF-24647, TYPE III, CLASSES 1, 2, AND 3, GRADE A, 5-7 MILS, BLACK***
UNDERWATER HULL APPLIES TO EMBARKED BOATS AND CRAFT ONLY	11	SAME AS LINE ***10***	ONE COAT E-PAINT EP PRIMER 1000, 4 - 6 MILS	ONE COAT E-PAINT EP PRIMER 1000, 4 - 6 MILS	ONE COAT E-PAINT SN-1, 5 - 7 MILS WFT/COAT (3 - 4 MILS DFT/COAT) GRAY -- & -- ONE COAT E-PAINT SN-1, 5 - 7 MILS WFT/COAT (3 - 4 MILS DFT/COAT) BLACK	ONE COAT E-PAINT SN-1, 5 - 7 MILS WFT/COAT (3 - 4 MILS DFT/COAT) GRAY SEE NOTES (2) & (6)	ONE COAT E-PAINT SN-1, 5 - 7 MILS WFT/COAT (3 - 4 MILS DFT/COAT) GRAY SEE NOTES (2) & (6)	ONE COAT E-PAINT SN-1, 5 - 7 MILS WFT/COAT (3 - 4 MILS DFT/COAT) BLACK

TABLE ONE GRP FIBERGLASS SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO BOTTOM OF BOOTTOP	F BOOTTOP	G DRAFT MARKS
UNDERWATER HULL (KEEL TO TOP OF BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) UP TO 7 YEARS SERVICE LIFE SEE NOTE (46)	12	HIGH PRESSURE WASH TO REMOVE MARINE GROWTH & LOOSE PAINT - OR - TOUCH-UP OR REMOVAL OF PAINT SYSTEM TO SOUND PRIMER BY LIGHT ABRASIVE BLASTING WITH BLACK WALNUT SHELLS -- & -- SPOT CLEAN, CHAP 631, PARA 631-5.2.6 SEE NOTE (21)	ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (1), (3), (4), (5) & (48)			ONE AF COAT MIL-PRF-24647, TYPE I OR II, BLACK -- & -- ONE AF COAT MIL-PRF-24647, TYPE I OR II, RED, 4 - 6 MILS/COAT, 10 MILS MIN SEE NOTES (2), (6) & (48)	2 AF COATS MIL-PRF-24647, TYPE I OR II, BLACK, 4 - 6 MILS/COAT, 10 MILS MIN SEE NOTES (2), (6) & (48)	ONE COAT MIL-PRF-24635 LT GRAY, COLOR NO. 26373 (LOW SOLAR ABSORPTION ONLY) TO BOOTTOPPING & BELOW, 2 - 3 MILS ONE COAT COLOR NO. 26173 (FED STD 595) MIL-PRF-24635 OCEAN GRAY (LOW SOLAR ABSORPTION ONLY) ABOVE BOOTTOPPING, 2 - 3 MILS
UNDERWATER HULL (KEEL TO TOP OF BOOTTOP, INCLUDING PROPULSION SHAFT OUTBOARD BEARING VOIDS) UP TO 12 YEARS SERVICE LIFE SEE NOTE (46)	13	SAME AS LINE ***12***	ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (1), (3), (4), (5) & (48)			ONE AF COAT MIL-PRF-24647, TYPE I OR II, RED -- & -- ONE AF COAT MIL-PRF-24647, TYPE I OR II, BLACK -- & -- ONE COAT MIL-PRF-24647, TYPE I OR II, RED, 4 - 6 MILS/COAT, 15 MILS MIN SEE NOTES (2), (6) & (48)	3 AF COATS MIL-PRF-24647, TYPE I OR II, BLACK, 4 - 6 MILS/COAT, 15 MILS MIN SEE NOTES (2), (6) & (48)	SAME AS LINE 11
UNDERWATER HULL APPENDAGES ON MINESWEEPERS ONLY	14	NEAR WHITE METAL BLAST USING GARNET OR ALUMINUM OXIDE - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2	ONE FULL COAT AMERON 3258 GREEN, 3 - 5 MILS --- & --- ONE STRIPE COAT AMERON 3258 BLACK, 3 - 5 MILS --- & --- ONE FULL COAT AMERON 3258 HAZE GRAY, 3 - 5 MILS --- & --- ONE STRIPE COAT AMERON 3258 GREEN, 3 - 5 MILS --- & --- ONE FULL COAT AMERON 3258 BLACK, 3 - 5 MILS SEE NOTE (40)	ANTI-FOULING PAINT SAME AS SURROUNDING HULL				
SONAR TRANSDUCER TR-192B/UQN-1 ON MINESWEEPERS ONLY	15	POWER TOOL CLEANING TO BARE METAL PER SSPC-SP 11	SAME AS LINE 14	SAME AS LINE 14				

TABLE ONE WOOD SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO BOTTOM OF BOOTTOP	F BOOTTOP	G DRAFT MARKS
UNDERWATER HULL	16	BRUSH-OFF BLAST TO REMOVE LOOSE & DETERIORATED COATINGS - OR - HIGH-PRESSURE WASH TO REMOVE MARINE GROWTH & LOOSE PAINT SEE NOTE (20)	KEEL TO 6 INCHES ABOVE UPPER BOOTTOP LIMIT ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (1), (3), (4), (5) & (48)			ONE AF COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (2), (6), (27) & (48)	ONE AF COAT MIL-PRF-24647, TYPE I OR II, 4 - 6 MILS SEE NOTES (2), (6), (27) & (48)	ONE COAT NO. 26373 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY) LT GRAY, TO BOOTTOPPING & BELOW, 2 - 3 MILS ONE COAT NO. 26173 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY) OCEAN GRAY, ABOVE BOOTTOPPING, 2 - 3 MILS SEE NOTE (6)

TABLE 2 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
EXTERIOR SURFACES ABOVE BOOTTOP WITH EXCEPTION OF AREAS RECEIVING NONSKID & WELL DECK OVERHEAD AREAS SEE NOTE (2)	1	NEAR WHITE METAL BLAST NACE 2/SSPC-SP-10 - OR - WATERJETTING TO NACE 5/SSPC-SP-12 CONDITION WJ-2/L	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS	ONE STRIPE COAT -- & -- ONE FULL COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS/COAT		ONE COAT DECK GRAY NO.26008 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763, TYPE II, CLASS 2, 2 - 4 MILS SEE NOTE (42)	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763, TYPE II, CLASS 2, 2 - 4 MILS PAINT DESIGNATIONS & MARKINGS MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS SEE NOTES (43) & (47)
	2	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, 4 - 8 MILS SEE NOTE (57)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, 6 - 10 MILS -- & -- ONE FULL COAT MIL-PRF-23236, TYPE VII, 10 - 12 MILS SEE NOTE (23)		SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE
	3	SAME AS LINE ONE	ONE COAT MIL-PRF-24647 APPROVED PRODUCT FROM TABLE ONE, LINE 4	ONE STRIPE COAT -- & -- ONE FULL COAT MIL-PRF-24647 APPROVED PRODUCT FROM TABLE ONE, LINE 4		SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE
	4	SAME AS LINE ONE	***ONE COAT MIL-PRF-23236, 4 - 8 MILS --OR-- ONE COAT MIL-PRF-24647, APPROVED PRODUCT FROM TABLE ONE, LINE 4***			***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS, DECK GRAY***	***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS, HAZE GRAY***	***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS HAZE GRAY***
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS UP TO 3 YEARS SERVICE LIFE	***5***	***SAME AS LINE ONE***	***PROPRIETARY NONSKID LISTED ON THE QPL FOR MIL-PRF-24667 SEE NOTE (7)***	***STRIPE COAT OF PROPRIETARY NONSKID PRIMER LISTED ON THE QPL FOR MIL-PRF-24667 SEE NOTES (7) & (51)***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE V, COMP G OR L SEE NOTES (19), (22), (50), & (56)***		
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS UP TO 12 MONTHS SERVICE LIFE	***6***	***SAME AS LINE ONE***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE I, VI, OR VIII, COMP G OR L SEE NOTES (19), (22), (50), & (56)***		
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS UP TO 6 MONTHS SERVICE LIFE	***7***	***SAME AS LINE ONE***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT DARKGRAY, MIL-PRF-24667, TYPE II, COMP G SEE NOTES (19), (22), (50), & (56)***		

TABLE 2 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
HANGAR DECKS, FLIGHT DECKS, VERTICAL REPLENISHMENT DECK AREAS, CV AND CVN FLIGHT DECK LANDING AREAS, WALK AREAS AND ALL OTHER DECK AREAS	***8***	***POWER TOOL CLEANING TO BARE METAL SSPC-SP-11***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE VII, COMP G OR L*** ***SEE NOTES (19), (22), (50) & (56)***		
UP TO 30 DAYS SERVICE LIFE	***9***	***SAME AS LINE 8***				***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE VII, COMP G OR L*** ***SEE NOTES (19), (22), (50) & (56)***		
CV AND CVN FLIGHT DECK LANDING AREAS ***SERVICE LIFE UP TO 15,000 LANDINGS***	***10***	***SAME AS LINE ONE***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE V, COMP L*** ***SEE NOTES (19), (22) & (50)***		
CV AND CVN FLIGHT DECK LANDING AREAS ***SERVICE LIFE UP TO 12,000 LANDINGS***	***11***	***SAME AS LINE ONE***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE I, VI, OR VIII COMP L*** ***SEE NOTES (19), (22) & (50)***		
WALK AREAS (ALL DECK AREAS OTHER THAN HANGAR DECK, FLIGHT DECK, & VERTICAL REPLENISNMENT DECK AREAS)	***12***	***SAME AS LINE ONE***	***SAME AS LINE 5***	***SAME AS LINE 5***		***ONE COAT MIL-PRF-24667, TYPE I, V, VI, OR VIII, COMP G OR L*** ***-OR-*** ***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE II, III, IV, COMP G*** ***SEE NOTES (19) & (22)***		
	13	***SAME AS LINE ONE***	***SAME AS LINE ONE***	***SAME AS LINE ONE***		***ONE COAT DECK GRAY NO. 26008 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS*** ***-- & --*** ***APPLICATION OF MIL-PRF-24667, TYPE XI, COMP PS***		
	14	***SAME AS LINE ONE***	***ONE COAT MIL-PRF-32171, TYPE III***			***ONE COAT MIL-PRF-32171, TYPE III***		

TABLE 2 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
RAST TRACK TROUGHS WHERE PAINTED (WHERE NONSKID NOT APPLIED)	***15***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS ***SEE NOTE (23)***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS			
WELL DECK OVERHEADS, BOTH EXPOSED & NON-EXPOSED TO LCAC EXHAUST SEE NOTE (34)	***16***	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTES (30) & (31)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 19, 4 - 8 MILS SEE NOTES (33) & (49)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 19, 6 - 10 MILS SEE NOTES ***(23),*** (33) & (49)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 19, 10 - 12 MILS SEE NOTES (33) & (49)			
EXTERIOR PORTABLE/BOLTED LOUVERS FOR INTAKES AND UPTAKES	***17***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 4 - 8 MILS SEE NOTES (33), (49) ***& (57)***	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 6 - 10 MILS SEE NOTES ***(23),*** (33) & (49)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 10 - 12 MILS SEE NOTES (33) & (49)		SAME AS LINE ONE	SAME AS LINE ONE
	18	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (24) & (33)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (23) & (33)***			***SAME AS LINE ONE***	***SAME AS LINE ONE***

TABLE 2 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
EXTERIOR SURFACES ABOVE BOOTTOP, WITH EXCEPTION OF AREAS RECEIVING NONSKID SEE NOTE (2)	19	NEAR WHITE METAL BLAST, USING GARNET, ALUMINUM OXIDE, BLACK WALNUT SHELLS, OR STAINLESS STEEL SHOT -- & -- SPOT CLEANING, CHAP 631, PARA 631-5.2.4.3 - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2 SEE NOTE (21)	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS -- OR -- ONE COAT MIL-PRF-23236, TYPE VII, 4 - 8 MILS ***SEE NOTE (57)***	ONE STRIPE COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS -- OR -- ONE STRIPE COAT MIL-PRF-23236, TYPE VII, 6 - 10 MILS ***SEE NOTE (23)***	ONE FULL COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS -- OR -- ONE FULL COAT MIL-PRF-23236, TYPE VII, 10 - 12 MILS	ONE COAT DECK GRAY NO. 26008 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS SEE NOTE (47)	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763 TYPE II, CLASS 2, 2 - 4 MILS SEE NOTE (42)	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 ***TYPE II OR III*** (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763 TYPE II, CLASS 2, 2 - 4 MILS PAINT DESIGNATIONS & MARKINGS MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS SEE NOTES (43) & (47)
	20	SAME AS LINE ***19***		2 COATS F-84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS/COAT		SAME AS LINE 19	SAME AS LINE 19	SAME AS LINE 19
	21	***SAME AS LINE 19***				***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS DECK GRAY***	***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS, HAZE GRAY***	***ONE COAT MIL-PRF-24635, TYPE V OR VI, CLASS 2, 5-6 MILS, HAZE GRAY***
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS ***UP TO 3 YEARS SERVICE LIFE***	***22***	***SAME AS LINE 19***	***PROPRIETARY NONSKID LISTED ON THE QPL FOR MIL-PRF-24667*** ***SEE NOTE (7)***	***STRIPE COAT OF PROPRIETARY NONSKID PRIMER LISTED ON THE QPL FOR MIL-PRF-24667*** ***SEE NOTES (7) & (51)***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE V, COMP G OR L*** ***SEE NOTES (19), (22), (50), & (56)***		
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS ***UP TO 12 MONTHS SERVICE LIFE***	***23***	***SAME AS LINE 19***	***SAME AS LINE 22***	***SAME AS LINE 22***		***ONE COAT DARK GRAY MIL-PRF-24667, TYPE I, VI, OR VIII, COMP G OR L*** ***SEE NOTES (19), (22), (50), & (56)***		
HANGAR DECKS, FLIGHT DECKS & VERTICAL REPLENISHMENT DECK AREAS ***UP TO 6 MONTHS SERVICE LIFE***	***24***	***SAME AS LINE 19***	***SAME AS LINE 22***	***SAME AS LINE 22***		***ONE COAT DARK GRAY MIL-PRF-24667 TYPE II, COMP G*** ***SEE NOTES (19), (22), (50), & (56)***		
HANGAR DECKS, FLIGHT DECKS, VERTICAL REPLENISHMENT DECK AREAS, CV AND CVN FLIGHT DECK LANDING AREAS, WALK AREAS AND ALL OTHER DECK AREAS ***UP TO 30 DAYS SERVICE LIFE***	***25***	***POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11***	***SAME AS LINE 22***	***SAME AS LINE 22***		***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE VII, COMP G OR L*** ***SEE NOTES (19), (22), (50) & (56)***		
	26	***SAME AS LINE 25***				***ONE COAT DARK GRAY, MIL-PRF-24667, TYPE VII, COMP G OR L*** ***SEE NOTES (19), (22), (50) & (56)***		

TABLE 2 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
WALK AREAS (ALL DECK AREAS OTHER THAN HANGAR DECK, FLIGHT DECK, & VERTICAL REPLENISNMENT DECK AREAS)	***27***	***SAME AS LINE 19***	***SAME AS LINE 22***	***SAME AS LINE 22***		***ONE COAT MIL-PRF-24667, TYPE I, V, VI, OR VIII, COMP G OR L -OR- ONE COAT DARK GRAY, MIL-PRF-24667, TYPE II, III, IV, COMP G SEE NOTES (19) & (22)***		
	28	***SAME AS LINE 19***	***SAME AS LINE 19***	***SAME AS LINE 19***		***ONE COAT DECK GRAY NO. 26008 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS -- & -- APPLICATION OF MIL-PRF-24667, TYPE XI, COMP PS***		
	29	***SAME AS LINE ONE***	***ONE COAT MIL-PRF-32171 TYPE III***			***ONE COAT MIL-PRF-32171, TYPE III***		
RAST TRACK TROUGHS WHERE PAINTED (WHERE NONSKID NOT APPLIED	30	SAME AS LINE ***19***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS ***SEE NOTE (23)***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS			
EXTERIOR PORTABLE/BOLTED LOUVERS FOR INTAKES AND UPTAKES	31	SAME AS LINE ***19***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 4 - 8 MILS SEE NOTES (33), (49) ***& (57)***	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 6 - 10 MILS SEE NOTES ***(23),*** (33) & (49)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 10 - 12 MILS SEE NOTES (33) & (49)		SAME AS LINE ***19***	SAME AS LINE ***19***
	32	***SAME AS LINE 19***	***"SINGLE COAT" ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS SEE NOTES (24) & (33)***	***"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS SEE NOTES (23) & (33)***			***SAME AS LINE 19***	***SAME AS LINE 19***

TABLE 2 GRP FIBERGLASS SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
EXTERIOR SURFACES ABOVE BOOTTOP SEE NOTE (2)	***33***	HIGH PRESSURE WASH TO REMOVE MARINE GROWTH & LOOSE PAINT - OR - TOUCH-UP OR REMOVAL OF PAINT SYSTEM TO SOUND PRIMER BY LIGHT ABRASIVE BLASTING WITH BLACK WALNUT SHELLS -- & -- SPOT CLEAN, CHAP 631, PARA 631-5.2.6 SEE NOTE (21)	ONE COAT F-150, MIL-DTL-24441, TYPE IV, 4 - 6 MILS SEE NOTE (29)		ONE STRIPE COAT F-152, MIL-DTL-24441, TYPE IV, 4 - 6 MILS -- & -- ONE COAT F-151, MIL-DTL-24441, TYPE IV, 4 - 6 MILS SEE NOTE (29)	ONE COAT DECK GRAY NO. 26008 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763, TYPE II, CLASS 2, 2 - 4 MILS SEE NOTE (42)	ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - MIL-***E***-24763, TYPE II, CLASS 2, 2 - 4 MILS SEE NOTE (43)
EXTERIOR WALK AREAS ALL EXTERIOR DECK AREAS	***34***	POWER TOOL CLEAN TO CLEAN FIBERGLASS (DISC SANDER, ETC.) - OR - POWER TOOL CLEAN TO POLYURETHANE OVERLAY SUBSTRATE (DISC SANDER, ETC.) - OR - HYDROBLAST TO CLEAN FIBERGLASS SEE NOTE (25)	PROPRIETARY NONSKID PRIMER LISTED ON THE QPL FOR MIL-PRF-24667 SEE NOTE (7)			ONE COAT MIL-PRF-24667, TYPE I, II, OR III, COMP G - OR - MIL-PRF-24667 TYPE IV SEE NOTES (19) & (22)		

TABLE 2 WOOD SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E HORIZONTAL SURFACES DECKS & FITTINGS	F MASTS & STACKS EXPOSED TO GASES	G VERTICAL SURFACES
EXTERIOR ABOVE BOOTTOPPING	35	HAND TOOL CLEAN - OR - POWER TOOL CLEAN TO REMOVE DETERIORATED COATINGS	ONE COAT F-150, MIL-DTL-24441, TYPE IV, 4 - 6 MILS	DECKS, MASTS & SPARS: ONE COAT NO. 26008 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS - OR - ONE COAT NO. 37038 (FED STD 595), MIL-PRF-24635, 2 - 3 MILS	ALL OTHER SURFACES: ONE COAT HAZE GRAY NO. 26270 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS			IDENTIFICATION MARKINGS: PAINT DESIGNATIONS & MARKINGS MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS SEE NOTE (43)

TABLE 3 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
INTERIOR COMPARTMENTS COLORS TO BE SPECIFIED BY TYCOM OR SHIP'S COMMANDING OFFICER PER CHAP 631, PARA 631-8.18.3.2	1	HAND TOOL CLEANING, SSPC-SP 2 SEE NOTES (17) & (28)	2 COATS FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS/COAT - OR - ONE COAT MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS ***--OR--*** ***ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2***		2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT - OR - 2 COATS DOD-E-24607, 1.5 - 3 MILS/COAT SEE NOTE (9)	TO DECKS NOT RECEIVING COVERING: ONE COAT DECK GRAY (OR TERRACOTTA RED) (FED STD 595) MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS - OR - MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS	HULL, VENTILATION & PIPING INSULATION 2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT SEE NOTES (9), (28) & (41)	FOR COMPARTMENT PIPING & VENTILATION SEE NOTE (18)
INTERIOR COMPARTMENTS (OVERCOAT)	2	HAND TOOL CLEANING, SSPC-SP 2 SEE NOTE (28)	SAME AS LINE ONE FOR BARE METAL AREAS		SAME AS LINE ONE EXCEPT ONE COAT	SAME AS LINE ONE	SAME AS LINE ONE EXCEPT ONE COAT	SAME AS LINE ONE EXCEPT ONE COAT
WELDING BAYS AND LIGHT TRAPS	3	SAME AS LINE ONE	SAME AS LINE ONE		ONE COAT BLACK, LOW GLOSS (FED STD 595), MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS	ONE COAT BLACK, SEMI-GLOSS (FED STD 595): MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS - OR - MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS		
WET SPACES (WASH ROOMS, WATER CLOSETS, SHOWER STALLS, GALLEYS, SCULLERIES & STOREROOMS WHERE HEAVY CONDENSATION IS COMMON)	4	POWER TOOL CLEANING TO BARE METAL, SSPC-SP 11 SEE NOTE (28)	ONE COAT SIGMAGLAZE 5492, WHITE ONLY, 8-10 MILS		ONE STRIPE COAT SIGMAGLAZE 5492, 8-10 MILS, -- & -- ONE FULL COAT, 8-10 MILS, WHITE ONLY SEE NOTE (23)		SAME AS LINE ONE	SAME AS LINE ONE
	5	SAME AS LINE 4	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS		ONE STRIPE COAT SHERWIN WILLIAMS DURA-PLATE UHS, 6 - 10 MILS -- & -- ONE FULL COAT, 10 - 12 MILS SEE NOTE (23)		SAME AS LINE ONE	SAME AS LINE ONE
	6	SAME AS LINE 4	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS*** ***--OR--*** ***ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2***		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE FULL COAT 6 - 8 MILS SEE NOTE (23)		SAME AS LINE ONE	SAME AS LINE ONE
INTERIOR COMPARTMENTS COLORS TO BE SPECIFIED BY TYCOM OR SHIP'S COMMANDING OFFICER PER CHAP 631, PARA 631-8.***18.3.2***	7	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11 SEE NOTES (17) & (28)	2 COATS FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS/COAT - OR - ONE COAT MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS ***--OR--*** ***ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2***		2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT - OR - 2 COATS DOD-E-24607, 1.5 - 3 MILS/COAT SEE NOTE (9)	TO DECKS NOT RECEIVING COVERING: ONE COAT DECK GRAY (OR TERRACOTTA RED) (FED STD 595) MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS - OR - MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS	SAME AS LINE ONE	SAME AS LINE ONE
INTERIOR COMPARTMENTS (OVERCOAT)	8	POWER TOOL CLEANING, SSPC-SP 3 SEE NOTE (28)	SAME AS LINE ONE FOR BARE METAL AREAS		SAME AS LINE ONE EXCEPT ONE COAT	SAME AS LINE ONE	SAME AS LINE ONE EXCEPT ONE COAT	SAME AS LINE ONE EXCEPT ONE COAT

TABLE 3 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
WELDING BAYS AND LIGHT TRAPS	9	SAME AS LINE 7	SAME AS LINE 7		SAME AS LINE 3	SAME AS LINE 3		
MACHINERY SPACES & BILGES SEE NOTE (44)	10	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11 - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2/L - OR - NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTE (28)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS		ABOVE BILGE AREA: 2 COATS F-124, DOD-E-24607, 1.5 - 3 MILS/COAT	BILGE AREA: ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (23)	SAME AS LINE ONE	
	11	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTE (28)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTE (49)		SAME AS LINE 10	BILGE AREA: ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23) & (49)	SAME AS LINE ONE	
INTAKE VENT PLENUMS BETWEEN SKIN OF SHIP & MOISTURE SEPARATORS (CON'T)	12	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (33) & (49)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)	ONE STRIPE COAT MI-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)		
	13	WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2/L -OR- NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (33)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (23) & (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (23) & (33)		
CLEAN AND DIRTY SIDE OF COMBUSTION AIR INTAKES/UPTAKES/ EXHAUST TRUNKS	14	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 4 - 8 MILS SEE NOTES (33) & ***(57)***		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 6 - 10 MILS -- & -- ONE FULL COAT MIL-PRF-23236, TYPE VII, CLASS 7, 10 - 12 MILS SEE NOTES (23) & (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 7,6 - 10 MILS -- & -- ONE FULL COAT MIL-PRF-23236, TYPE VII, CLASS 7,10 - 12 MILS SEE NOTES (23) & (33)		
	15	WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2/L - OR - NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 ***- OR -*** ***POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (33)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (23) & (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (23) & (33)		

TABLE 3 STEEL SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
FAN ROOMS	***16***	SAME AS LINE 10	SAME AS LINE 1***5***		SAME AS LINE 1***5***	SAME AS LINE 1***5***		
MIXING ROOM/UPTAKE SPACES WITH VENTS OR LOUVERS TO THE OUTSIDE ATMOSPHERE (BULKHEADS & DECKS)	***17***	NEAR WHITE METAL BLAST NACE 2/SSPC-SP 10	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (33) & (49)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)		
UNDER AFFF PROPORTIONING UNITS (INSIDE THE COAMING), OR BILGE DRAIN WELLS	***18***	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11 SEE NOTES (32) & (36)	ONE COAT MIL-PRF-32171, TYPE IV, CLASS 1 OR 2, 12 - 18 MILS			ONE COAT MIL-PRF-32171, TYPE IV, CLASS 1 OR 2, 12 - 18 MILS		
INTERIOR DECK PASSAGEWAYS NOT RECEIVING DECK COVERINGS (HIGH DURABILITY DECK PAINT)	***19***	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 - OR - POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11	ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS			ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS		
SEE NOTE (12)	***20***	SAME AS LINE ***19***	SAME AS LINE ***18***			SAME AS LINE ***18***		
INTERIOR STEEL SURFACES	***21***	SAME AS LINE 12	SAME AS LINE ONE		SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE
	22	SAME AS LINE 13	SAME AS LINE ONE		SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE	SAME AS LINE ONE
	23	***SAME AS LINE 19***	***SAME AS LINE ONE***		***SAME AS LINE ONE***	***SAME AS LINE ONE***	***SAME AS LINE ONE***	***SAME AS LINE ONE***

TABLE 3 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
INTERIOR COMPARTMENTS	***24***	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11, USING STAINLESS STEEL WIRE BRUSHES, STAINLESS STEEL PADS, OR ABRASIVE SANDING DISCS (ANSI/BHMA B74.18) SEE NOTES (17) & (28)	2 COATS FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS/COAT - OR - ONE COAT MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS ***--OR--*** ***ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2***		2 COATS DOD-E-24607, 1.5 - 3 MILS/COAT - OR - 2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT SEE NOTE (9)	TO DECKS NOT RECEIVING COVERING: ONE COAT DECK GRAY (OR TERRACOTTA RED) (FED STD 595), MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS - OR - MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS	HULL, VENTILATION & PIPING INSULATION 2 COATS DOD-E-24607, 1.5 - 3 MILS/COAT - OR - 2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT SEE NOTES (9), (28) & (41)	FOR COMPARTMENT PIPING & VENTILATION SEE NOTE (18)
	25	HAND TOOL CLEANING, SSPC-SP 2 SEE NOTES (17) & (28)	SAME AS LINE ***24***		SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***
INTERIOR COMPARTMENTS (OVERCOAT)	***26***	HAND TOOL CLEANING, SSPC-SP 2 SEE NOTE (28)	SAME AS LINE ***24*** FOR BARE METAL AREAS		SAME AS LINE ***24*** EXCEPT ONE COAT	SAME AS LINE ***24***	SAME AS LINE ***24*** EXCEPT ONE COAT	SAME AS LINE ***24***
	27	POWER TOOL CLEANING, SSPC-SP 3 SEE NOTE (28)	SAME AS LINE ***24*** FOR BARE METAL AREAS		SAME AS LINE ***24*** EXCEPT ONE COAT	SAME AS LINE ***24***	SAME AS LINE ***24*** EXCEPT ONE COAT	SAME AS LINE ***24***
WELDING BAYS AND LIGHT TRAPS	***28***	SAME AS LINE ***24***	SAME AS LINE ***24***		ONE COAT BLACK, LOW GLOSS (FED STD 595), MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS	ONE COAT BLACK, SEMI-GLOSS (FED STD 595): MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS - OR - MIL-PRF-32171, TYPE I, CLASS 1 OR 2, 10 - 12 MILS		
	29	SAME AS LINE ***25***	SAME AS LINE ***24***		SAME AS LINE ***28***	SAME AS LINE ***28***		
WET SPACES (WASH ROOMS, WATER CLOSETS, SHOWER STALLS, GALLEYS, SCULLERIES & STOREROOMS WHERE HEAVY CONDENSATION IS COMMON)	***30***	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11 SEE NOTE (28)	ONE COAT SIGMA GLAZE 5492, 8-10 MILS, WHITE ONLY		ONE STRIPE COAT SIGMA 5492, 8-10 MILS -- & -- ONE FULL COAT, 8-10 MILS, WHITE ONLY ***SEE NOTE (23)***		SAME AS LINE ***24***	SAME AS LINE ***24***
	31	SAME AS LINE ***30***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS		ONE STRIPE COAT SHERWIN WILLIAMS DURA-PLATE UHS, 6 - 10 MILS -- & -- ONE FINAL COAT, 10 - 12 MILS ***SEE NOTE (23)***		SAME AS LINE ***24***	SAME AS LINE ***24***
	32	SAME AS LINE ***30***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS*** ***--OR--*** ***ONE COAT MIL-PRF-32171, TYPE I, CLASS 1 OR 2***		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE FULL COAT 6 - 8 MILS ***SEE NOTE (23)***		SAME AS LINE ***24***	SAME AS LINE ***24***

TABLE 3 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
MACHINERY SPACES & BILGES	***33***	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11 - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2 - OR - NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS SEE NOTE (28)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS		ABOVE BILGE AREA: 2 COATS F-124, DOD-E-24607, 1.5 - 3MILS/COAT	BILGE AREA: ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS ***SEE NOTE (23)***	SAME AS LINE ***24***	
	34	NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS SEE NOTE (28)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTE (49)		SAME AS LINE 33	BILGE AREA: ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23) ***&*** (49)	SAME AS LINE ***24***	
INTAKE VENT PLENUMS, BETWEEN SKIN OF SHIP & MOISTURE SEPARATORS	***35***	NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (33) & (49)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (23), (33) & (49)		
	36	WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2 - OR - NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (33)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (***23***) & (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES (***23***) & (33)		

TABLE 3 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
CLEAN AND DIRTY SIDE OF COMBUSTION AIR INTAKES/UPTAKES/ EXHAUST TRUNKS	***37***	NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 4 - 8 MILS SEE NOTES (33) & (57)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 10 - 12 MILS SEE NOTES ***(23) &*** (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 10 - 12 MILS SEE NOTES ***(23) &*** (33)		
	38	WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2 - OR - NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (33)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES ***(23) &*** (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES ***(23) &*** (33)		
	39	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTE (33)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES ***(23) &*** (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 6 - 8 MILS SEE NOTES ***(23) &*** (33)		
MIXING ROOM/UPTAKE SPACES WITH VENTS OR LOUVERS TO THE OUTSIDE ATMOSPHERE (BULKHEADS & DECKS)	***40***	NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (33) & (49)		ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES ***(23)***, (33), & (49)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS -- & -- ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES ***(23),*** (33), & (49)		
INTERIOR ALUMINUM SURFACES	***41***	SAME AS LINE ***24***	SAME AS LINE ***24***		SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***
	42	SAME AS LINE ***35***	SAME AS LINE ***24***		SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***
	43	SAME AS LINE ***36***	SAME AS LINE ***24***		SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***	SAME AS LINE ***24***

TABLE 3 GRP FIBERGLASS SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C WELDING BAYS & LIGHT TRAPS	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
INTERIOR FIBROUS GLASS BOARDS	***44***	SOAP & WATER CLEAN & HAND SAND AS NECESSARY	ONE COAT FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS		2 COATS WATER-BASED INTERIOR LATEX, MIL-PRF-24596, 2 - 4 MILS/COAT			
	45	SAME AS LINE ***44***	ONE COAT FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS		2 COATS OF FINISH COAT DOD-E-24607, 1.5 - 3 MILS/COAT, F-124, 125, OR 126 (COLOR TO BE DESIGNATED)			

TABLE 3 WOOD SURFACES	LINE	A SURFACE PREPARATION	B PRIMER	C WELDING BAYS & LIGHT TRAPS	D BULKHEADS & OVERHEADS	E DECKS	F THERMAL INSULATION	G MARKINGS
INTERIOR COMPARTMENTS	***46***	HAND TOOL CLEAN -- & -- POWER TOOL CLEAN TO BARE WOOD OR TIGHTLY ADHERING INTACT PAINT	2 COATS FORMULA 84, ALKYD ZINC MOLYBDATE, TT-P-645, 1.5 - 3 MILS/COAT		2 COATS MIL-PRF-24596, WATER-BASED INTERIOR LATEX, 2 - 4 MILS/COAT SEE NOTES (9) & (17)			FOR COMPARTMENT PIPING & VENTILATION SEE NOTE (18)
	47	SAME AS LINE ***46***	2 COATS FORMULA 84, ALKYD ZINC MOLYBDATE, TT-P-645, 1.5 - 3 MILS/COAT		2 COATS DOD-E-24607, 1.5 - 3 MILS/COAT SEE NOTE (17)			SAME AS LINE ***46***

TABLE 4 STEEL SURFACES	LINE	A SURFACE PREPARATION	B	C	D	E	F	G TOTAL SYSTEM SEE NOTE (53)
AIRCRAFT CARRIER POTABLE WATER TANKS	***1***	***NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10*** ***SEE NOTE (26)***	***ONE COAT F-150, MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS AT ADEQUATE THICKNESS TO MEET COATING RANGE***	***TOTAL SYSTEM 8 MILS MIN, 12 MILS MAX (AREAS WITHOUT STRIPE COAT)*** ***SEE NOTE (37)***
	1A	***SAME AS LINE ONE***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 4 - 8 MILS*** ***SEE NOTES (33) & (55)***	***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 6 - 10 MILS*** ***SEE NOTES (23), (33) & (55)***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 10 - 12 MILS*** ***SEE NOTES (33) & (55)***			
POTABLE WATER TANKS ***SEE NOTE (54)***	***2***	**SAME AS LINE ONE**	**ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 4 - 8 MILS** **SEE NOTES (33) *& (55)***	**ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 6 - 10 MILS** **SEE NOTES *(23),* (33) *& (55)***	**ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 10 - 12 MILS** **SEE NOTES (33) *& (55)***			
AIRCRAFT CARRIER RESERVE FEEDWATER TANKS AND FRESH WATER DRAIN COLLECTING TANKS	***3***	***SAME AS LINE ONE***	***ONE COAT F-150, MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS*** ***SEE NOTE (23)***	***ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS***	***ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS AT ADEQUATE THICKNESS TO MEET COATING RANGE***	***TOTAL SYSTEM 8 MILS MIN, 12 MILS MAX (AREAS WITHOUT STRIPE COAT)***
FEEDWATER TANKS SEE NOTE (54)	4	SAME AS LINE ONE	ONE COAT F-150, MIL-DTL-24441, TYPE III, 2 - 4 MILS	ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS	ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS	ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS	ONE COAT MIL-DTL-24441, TYPE III, 2 - 4 MILS AT ADEQUATE THICKNESS TO MEET COATING RANGE	TOTAL SYSTEM 8 MILS MIN, 12 MILS MAX (AREAS WITHOUT STRIPE COAT)
	5	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VI OR VII, CLASS 11, 4 - 8 MILS	ONE STRIPE COAT MIL-PRF-23236, TYPE VI OR VII, CLASS 11, 4 - 8 MILS ***SEE NOTE (23)***	ONE COAT MIL-PRF-23236, TYPE VI OR VII, CLASS 11, 4 - 8 MILS			
JP-5 TANKS, MOGAS TANKS, FUEL OIL SERVICE TANKS, DIESEL SERVICE TANKS, CONTAMINATED FUEL TANKS, FUEL COMP TANKS, FUEL STORAGE TANKS, SUMPS 15-20 YEARS SERVICE LIFE SEE NOTE (35)	6	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (33) & (49)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS SEE NOTES ***(23),*** (33), & (49)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (33) & (49)			

TABLE 4 STEEL SURFACES	LINE	A SURFACE PREPARATION	B	C	D	E	F	G TOTAL SYSTEM SEE NOTE (53)
JP-5 TANKS, MOGAS TANKS, FUEL OIL SERVICE TANKS, DIESEL SERVICE TANKS, CONTAMINATED FUEL TANKS, FUEL COMP TANKS, FUEL STORAGE TANKS, SUMPS 10-12 YEARS SERVICE LIFE SEE NOTE (35)	7	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTE (38)	SAME AS LINE 6	SAME AS LINE 6	SAME AS LINE 6			
	7A	***SAME AS LINE ONE***	***"SINGLE COAT" ONE COAT MIL-PRF-23236 TYPE VII CLASS 18/5, 20-30 MILS SEE NOTES (24)& (33)***	***"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236 TYPE VII CLASS 18/5, 10-15 MILS SEE NOTES (23) & (33)***				
CHT/MSD TANKS	8	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 13, 4 - 8 MILS SEE NOTE (33)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 13, 6 - 10 MILS SEE NOTE***S (23) &*** (33)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 13, 10 - 12 MILS SEE NOTE (33)			
BALLAST TANKS, FLOODABLE VOIDS (SUBSTRATE TEMPERATURE 50 DEGREES FAHRENHEIT & ABOVE) EDGE RETENTIVE-EXTENDED SERVICE LIFE 15-20 YEARS ***(MORE STRINGENT HUMIDITY REQUIREMENTS)*** SEE NOTE (8)	9	SAME AS LINE ONE	***"SINGLE COAT" ONE COAT MIL-PRF-23236 TYPE VII CLASS 18/7, 20-30 MILS SEE NOTES (24), (33), & (58)***	***"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236 TYPE VII CLASS 18/7, 10-15 MILS SEE NOTES (23) & (33)***				
BALLAST TANKS, FLOODABLE VOIDS (SUBSTRATE TEMPERATURE 50 DEGREES FAHRENHEIT & ABOVE) EDGE RETENTIVE SERVICE LIFE 10 - 12 YEARS (LESS STRINGENT HUMIDITY REQUIREMENTS) SEE NOTE (8)	10	SAME AS LINE 7	***"SINGLE COAT" ONE COAT MIL-PRF-23236 TYPE VII CLASS 18/7, 20-30 MILS SEE NOTES (24) & (33)***	***"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236 TYPE VII CLASS 18/7, 10-15 MILS SEE NOTES (23) & (33)***				
TOUCH-UP ONLY: BALLAST TANKS, FLOODABLE VOIDS (SUBSTRATE TEMPERATURE 50 DEGREES FAHRENHEIT & ABOVE) SEE NOTE (8)	11	***SAME AS LINE 7***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 4 - 8 MILS SEE NOTES (33), (49), & (57)***	***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 6 - 10 MILS SEE NOTES (23), (33), & (49)***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 10 - 12 MILS SEE NOTES (33) & (49)***			
BALLAST TANKS, FLOODABLE VOIDS (USE ONLY WHEN SUBSTRATE TEMPERATURE CANNOT BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT) NORMAL 5 - 7 YEARS SERVICE LIFE	12	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10	ONE COAT MIL-PRF-23236, GRADE A OR B, 4 - 8 MILS	ONE STRIPE COAT MIL-PRF-23236, GRADE A OR B, 4 - 8 MILS	ONE COAT MIL-PRF-23236, GRADE A OR B, 4 - 8 MILS			

TABLE 4 STEEL SURFACES	LINE	A SURFACE PREPARATION	B	C	D	E	F	G TOTAL SYSTEM SEE NOTE (53)
CHAIN LOCKERS	13	***INTENTIONALLY LEFT BLANK***						
	14	***NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (24) & (33)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (23) & (33)***				
NON-FLOODABLE VOIDS	***15***	***SAME AS LINE 14***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (24) & (33)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (23) & (33)***				
TOUCH-UP ONLY: NON-FLOODABLE VOIDS	***16***	SAME AS LINE ***14***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 4 - 8 MILS*** ***SEE NOTES (33), (49), & (57)***	***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 6 - 10 MILS*** ***SEE NOTES (23), (33), & (49)***	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5 OR 7, 10 - 12 MILS SEE NOTES (33) & (49)			

TABLE 4 ALUMINUM SURFACES	LINE	A SURFACE PREPARATION	B	C	D	E	F	G TOTAL SYSTEM SEE NOTE (53)
TANKS AND VOIDS	***17***	NEAR WHITE METAL BLAST, USING GARNET OR ALUMINUM OXIDE OR BLACK WALNUT SHELLS	SAME AS FOR STEEL	SAME AS FOR STEEL	SAME AS FOR STEEL	SAME AS FOR STEEL	SAME AS FOR STEEL	SAME AS FOR STEEL

TABLE 5 VARIOUS LOCATIONS	LINE	A SURFACE PREPARATION	B	C	D	E	F TOTAL SYSTEM SEE NOTE (53)	G DESIGNATIONS & MARKINGS
UNHEATED PIPING, FITTINGS, VALVES	1	HAND TOOL CLEAN, SSPC-SP 2	ONE COAT F-84, ALKYD ZINC MOLYBDATE, TT-P-645, 1.5 - 3 MILS	ONE COAT F-84, ALKYD ZINC MOLYBDATE, TT-P-645, 1.5 - 3 MILS	2 COATS OF BILGE FINISH COAT TO MATCH SURROUNDING SURFACES, INCLUDING LAGGED SURFACES			ONE COAT MIL-PRF-24635, 2 - 3 MILS, FOR COLOR CODED SYSTEMS
UNHEATED FERROUS MACHINERY EXTERNAL SURFACES	2	POWER TOOL CLEAN, SSPC-SP 3	SAME AS LINE ONE	ONE COAT F-111, MIL-DTL-15090, 1.5 - 3 MILS - OR - ONE COAT NO. 26307 (FED STD 595), MIL-PRF-24635, 2 - 3 MILS	IF REQUIRED FOR HIDING, ONE ADDITIONAL COAT: F-111, MIL-DTL-15090, 1.5 - 3 MILS - OR - NO. 26307 (FED STD 595), MIL-PRF-24635, 2 - 3 MILS			
MACHINERY, GAGEBOARDS	3	SAME AS LINE 2	SAME AS LINE ONE	ONE COAT F-111, MIL-DTL-15090, 1.5 - 3 MILS - OR - ONE COAT NO. 26307 (FED STD 595), MIL-PRF-24635, 2 - 3 MILS	IF REQUIRED FOR HIDING, ONE ADDITIONAL COAT: F-111, MIL-DTL-15090, 1.5 - 3 MILS - OR - NO. 26307 (FED STD 595), MIL-PRF-24635, 2 - 3 MILS			
UNINSULATED SIDE OF BULKHEAD OR SHELL ADJACENT TO SEA OR AC BOUNDARY (FOR INTERIOR COMPARTMENTS ONLY)	4	POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11	ONE COAT HEMPEL HEMPADUR 45150-50630, 4 - 6 MILS	ONE COAT HEMPEL ANTI-CONDENS 617US-10000, 50 - 60 MILS				
	5	SAME AS LINE 4	ONE COAT F-84, ALKYD ZINC MOLYBDATE, TT-P-645, 1.5 - 3 MILS - OR - ONE COAT MIL-PRF-23236, TYPE IV, V, VI, OR VII, 4 - 8 MILS	ONE COAT TEMP-COAT 101, 20 - 22 MILS	ONE COAT TEMP-COAT 101, 20 - 22 MILS	ONE COAT TEMP-COAT 101, 20 - 22 MILS		
	6	SAME AS LINE 4	SAME AS LINE 5	ONE COAT MASCOAT DELTA-T MARINE, 20-22 MILS	ONE COAT MASCOAT DELTA-T MARINE, 20-22 MILS	ONE COAT MASCOAT DELTA-T MARINE, 20-22 MILS		
	7	SAME AS LINE 4	SAME AS LINE 5	ONE COAT KEFA AIRLESS 8125, 50 - 60 MILS				
BOILERS & ECONOMIZERS (EXCEPT PARTS USED FOR HEAT TRANSFER), MACHINERY CASINGS, FERROUS SHEET METAL	8	SAME AS LINE 4	ONE COAT AMERON AMERCOAT 892HS, 2 - 3 MILS SEE NOTE (39)					
	9	SAME AS LINE 4	2 COATS OF TT-P-28 SUFFICIENT TO COVER THE PROFILE					
STEAM, FEEDWATER, BOTTOM/ SURFACE BLOW & BOILER PRESSURE VESSEL PIPING IN PREPARATION FOR ULTRASONIC MEASUREMENTS	***10***	***POWER TOOL CLEAN TO BARE METAL, SSPC-SP-11, USING STAINLESS STEEL WIRE BRUSHES, STAINLESS STEEL PADS, OR ABRASIVE SANDING DISCS (ANSI/BHMA B74.18)***						
ELECTRICAL EQUIPMENT, ELECTRONIC EQUIPMENT & CABLES	***11***	SAME AS LINE ONE	ONE COAT F-84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS	2 COATS F-111, MIL-DTL-15090, 1.5 - 3 MILS/COAT - OR - ONE COAT NO. 26307 FED STD 595), MIL-PRF-24635, 2 - 3 MILS				
CABLE, INTERIOR (OTHER THAN PVC, LOW SMOKE)	***12***	SAME AS LINE ONE	2 COATS FORMULA 84, TT-P-645, ALKYD ZINC MOLYBDATE, 1.5 - 3 MILS/COAT	2 COATS WATER-BASED LATEX PER MIL-PRF-24596, 2 - 4 MILS/COAT	2 COATS DOD-E-24607 CHLORINATED ALKYD 1.5 - 3 MILS/COAT (FOR COLOR MATCH IF REQUIRED)			

TABLE 5 VARIOUS LOCATIONS	LINE	A SURFACE PREPARATION	B	C	D	E	F TOTAL SYSTEM SEE NOTE (53)	G DESIGNATIONS & MARKINGS
CABLE, EXTERIOR (OTHER THAN PVC, LOW SMOKE)	***13***	SAME AS LINE ONE	SAME AS LINE ***11***	ONE COAT MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY) TO MATCH SURROUNDING AREA, 2 - 3 MILS				
ANCHOR (SURFACE SHIP BOW ANCHORS) FOR ANCHORS BELOW LOWER BOOTTOPPING LIMIT, SEE NOTE (13)	***14***	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTE (14)	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS - OR - ONE COAT MIL-PRF-23236, TYPE VII, 4 - 8 MILS	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, 4 - 8 MILS - OR - ONE COAT MIL-PRF-23236, TYPE VII, 10 - 12 MILS	ONE COAT HAZE GRAY, NO. 26270 (FED STD 595), MIL-PRF-24635 (LOW SOLAR ABSORPTION ONLY), 2 - 3 MILS			
ANCHOR CHAIN	***15***	COMMERCIAL BLAST CLEAN, SSPC-SP 6 SEE NOTE (14)	ONE COAT AMERON PSX 700 TO HOLD BLAST, 1 - 2 MILS SEE NOTE (16)	ONE COAT AMERON PSX 700, 4 - 5 MILS	ONE COAT AMERON PSX 700, 4 - 5 MILS		10 MILS MIN, 12 MILS MAX	AMERON PSX 700 SEE NOTE (15)
	16	SAME AS LINE ***15***	ONE COAT INTERNATIONAL INTERGARD 264 TO HOLD BLAST, 1-2 MILS SEE NOTE (16)	ONE COAT INTERNATIONAL INTERGARD 264, 4-6 MILS	ONE COAT INTERNATIONAL INTERFINE 979, 4-6 MILS		SAME AS LINE ***15***	INTERNATIONAL INTERFINE 979 SEE NOTE (15)
	17	SAME AS LINE ***15***	ONE COAT SHERWIN WILLIAMS SEAGUARD 5000 HS TO HOLD BLAST, 1-2 MILS SEE NOTE (16)	ONE COAT SHERWIN WILLIAMS SEAGUARD 5000 HS, 4-6 MILS	ONE COAT SHERWIN WILLIAMS PXLE-80 ***HAPS FREE***, 4-6 MILS		SAME AS LINE ***15***	SHERWIN WILLIAMS PXLE-80 ***HAPS FREE*** SEE NOTE (15)
	18	SAME AS LINE ***15***	ONE COAT MIL-PRF-24635, ***TYPE*** 5 OR 6, TO HOLD BLAST, 1-2 MILS SEE NOTE (16)	ONE COAT MIL-PRF-24635 ***TYPE*** 5 OR 6, 4-6 MILS	ONE COAT MIL-PRF-24635, ***TYPE*** 5 OR 6, 4-6 MILS		SAME AS LINE ***15***	MIL-PRF-24635, ***TYPE*** 5 OR 6 SEE NOTE (15)
INTERIOR GALVANIZED SURFACES	***19***	BRUSH-OFF BLAST, SSPC-SP 7 - OR - POWER TOOL CLEAN, SSPC-SP 3		ONE COAT WATER-BASED INTERIOR LATEX, MIL-PRF-24596, 2 - 4 MILS	TOPCOAT TO MATCH SURROUNDING AREA			
EXTERIOR GALVANIZED SURFACES	20	SAME AS LINE ***19***		ONE COAT MIL-***E***-24763, 2 - 4 MILS	TOPCOAT TO MATCH SURROUNDING AREA			
EXHAUST PIPE EXTERIOR	***21***	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10	ONE COAT AMERCOAT 892HS, HAZE GRAY #26270, 2 - 3 MILS - OR - 2 COATS OF TT-P-28 SUFFICIENT TO COVER THE PROFILE SEE NOTES (39) & (42)					

TABLE 5 VARIOUS LOCATIONS	LINE	A SURFACE PREPARATION	B	C	D	E	F TOTAL SYSTEM SEE NOTE (53)	G DESIGNATIONS & MARKINGS
PCMS (REPAIRS)	22	STRIP PAINT, USING "PEEL-AWAY-7" - OR - PLASTIC MEDIA BLASTER - OR - SODIUM BICARBONATE MEDIA BLASTER SEE REPAIR & INSTALLATION METHODS, RIM 05T1-99			ONE COAT HAZE GRAY, MIL-E-24763 (LOW SOLAR ABSORPTION ONLY), 2 - 4 MILS (TOP COAT OF PCMS) SEE NOTE (45)			
PCMS (NEW INSTALLATION)	***23***	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 - OR - POWER TOOL CLEAN TO BARE METAL, SSPC-SP 11	ONE COAT MIL-PRF-23236 TYPE IV, V, or VI 4 - 8 MILS SEE NOTE (29)	ONE COAT MIL-PRF-23236, TYPE IV, V, or VI 4 - 8 MILS SEE NOTES (29)	SAME AS LINE ***22***			
ARRESTING GEAR SHEAVE FOUNDATIONS	***24***	***SSPC-SP 1*** ***-- & --*** ***SPONGEJET TO NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10*** ***-- & --*** ***SSPC-SP 1 (STEAM CLEAN)*** ***-- & --*** ***SPONGEJET TO NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS (BRUSH APPLY ONLY)*** ***SEE NOTES (33) & (49)***	***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS*** ***SEE NOTES (33) & (49)***	***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS*** ***SEE NOTES (33) & (49)***			

TABLE 6 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO MAX BEAM	F MAX BEAM TO UPPER BOOTTOP	G DRAFT MARKS
UNDERWATER HULL (KEEL TO UPPER BOOTTOP; RUDDERS; STRUTS; DVING PLANES) (NON-SHT SURFACES BELOW WATERLINE)	1	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 - OR - WATERJETTING TO NACE 5/SSPC-SP 12 CONDITION WJ-2/L	***2 COATS MIL- PRF-23236, TYPE IV, V, OR VI CLASS 5 OR 7, 4-8 MILS/COAT*** ***--OR—*** 2 AC COATS MIL-PRF-24647 TYPE I OR II, 4 – 6 MILS/COAT ***--OR—*** ***2 COATS MIL-DTL-24441 TYPE IV, F-150, 4-6 MILS/COAT*** SEE NOTES (1A), (4A), ***& (35A)***			2 AF COATS MIL-PRF-24647, TYPE I OR II, 4 – 6 MILS/COAT SEE NOTES (2A) & (4A)	2 AF COATS MIL-PRF-24647, TYPE I OR II BLACK, 4 – 6 MILS/COAT SEE NOTES (3A) & (4A)	ONE COAT MIL-DTL-24631 F-186 --OR-- ONE COAT MIL-DTL-24441 TYPE IV, F-152 --OR-- ONE AC COAT MIL-PRF-***23236***, WHITE, 3-4 MILS SEE NOTE (5A)
NON-SHT, EXTERIOR SURFACES ABOVE THE WATERLINE (INCLUDES DSRV/SRC SEATING SURFACES)	2	SAME AS LINE ONE	TWO COATS MIL- PRF-23236, TYPE IV, V, OR VI CLASS 5 OR 7, 4-8 MILS/COAT --OR-- 2 COATS AC MIL-PRF-24647, TYPE I OR II, 4-6 MILS/COAT FINAL COAT TO BE BLACK SEE NOTES (1A), (32A), ***& (35A)***					
	3	SAME AS LINE ONE	ONE COAT MIL-DTL-24441 TYPE IV, F-150, 4-6 MILS -- & -- ONE COAT MIL-DTL-24441 TYPE IV, F-153, 4-6 MILS SEE NOTES (1A), (32A), ***& (35A)***					
FOR MOORED TRAINING SHIPS ONLY; EXTERIOR SURFACES ABOVE THE WATERLINE (NON-IMMERSION SURFACES ONLY)	4	SAME AS LINE ONE	2 COATS MIL-PRF-23236, TYPE IV, V, OR VI CLASS 5 OR 7, 4-8 MILS/COAT --OR-- 2 COATS MIL-DTL-24441, TYPE IV 4-6 MILS/COAT SEE NOTES (1A) & (32A)		ONE COAT, MIL-PRF-24635 NO. 27038, 2-4 MILS			
UNTILED (NON-SHT COVERED) FOOT TRAFFIC AREAS TO BE COVERED WITH NONSKID PAINT (ALL CLASSES OF SUBMARINES)	5	SAME AS LINE ONE	ONE COAT MIL-DTL-24441 TYPE IV F-150, 4-6 MILS --- & --- ONE COAT MIL-DTL-24441 TYPE IV F-153, 4-6 MILS SEE NOTE (32A)		NONSKID: MIL-PRF-24667, TYPE I OR X, COMP G ***SEE NOTE (44A)***			
	6	SAME AS LINE ONE	TWO COATS MIL- PRF-23236, TYPE IV, V, OR V I CLASS 5 OR 7, 4-8 MILS/COAT --OR— 2 COATS AC MIL-PRF-24647, TYPE I OR II, 4-6 MILS / COAT FINAL COAT TO BE BLACK SEE NOTES (3A) & (32A)		SAME AS LINE 5			
SURFACES TO BE COVERED BY MIP OR MIP-SHT ***SEE NOTE (34A)***	***7***	***SEE NOTE (41A) FOR DETAILS ON SURFACE PREPARATION***	***ONE COAT DTRC 2844-1110 (YELLOW PRIMER), 4-5 MILS*** ***SEE NOTES (1A) & (35A)***	***ONE COAT DTRC 2844-1109 (BLACK TOPCOAT), 4-5 MILS*** ***SEE NOTES (1A) & (35A)***				

TABLE 6 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO MAX BEAM	F MAX BEAM TO UPPER BOOTTOP	G DRAFT MARKS
SHT TILES (688 CLASS ONLY) (KEEL TO UPPER BOOTTOP) SEE NOTE (34A)	***8***	***SEE NOTE (41A) FOR DETAILS ON SURFACE PREPARATION***				***TWO COATS AF MIL-PRF-24647, TYPE I, CLASS 3, 4-6 MILS/COAT SEE NOTE (2A)***	***TWO COATS AF MIL-PRF-24647, TYPE I, CLASS 3, 4-6 MILS/COAT SEE NOTES (3A) & (45A)***	***SAME AS LINE ONE***
SHT/MIP-SHT (SSN 21 AND 774CLASS) (KEEL TO UPPER BOOTTOP) SEE NOTE (34A)	***9***	***SAME AS LINE 8***	***ONE COAT MIL-DTL-24631A, 3-4 MILS --OR-- ONE COAT AMERCOAT 3273, 2-3 MILS***			***SAME AS LINE 8***	***SAME AS LINE 8***	***SAME AS LINE ONE***
SHT/MIP-SHT AREAS ABOVE UPPER BOOTTOP LIMIT (EXCEPT TRAFFIC AREAS) SEE NOTE (34A)	***10***	***SAME AS LINE 8***	***ONE COAT MIL-DTL-24631A (F-187 POLYURETHANE), 3-4 MILS SEE NOTES (45A) & (46A)***					***SAME AS LINE ONE***
SURFACES TO BE COVERED BY A FAIRING COMPOUND SEE NOTE (34A)	***11***	***SEE NOTE (41A) FOR DETAILS ON SURFACE PREPATION***	***ONE COAT DTRC 2844-1110 (YELLOW PRIMER), 4-5 MILS SEE NOTES (1A) & (35A)***	***ONE COAT DTRC 2844-1109, 4-5 MILS --OR-- ONE COAT MIL-DTL-24441 TYPE IV, 4-6 MILS SEE NOTES (1A), (32A) & (35A)***				
SHT OR MIP-SHT AREAS TO BE COVERED WITH NONSKID (688 CLASS ONLY) SEE NOTE (34A)	***12***	***SAME AS LINE 8***	***ONE COAT MIL-DTL-24631A F-184 OR AMERCOAT 3273, 3-4 MILS -- & -- 18LBS/250 SQ FT GRIT PER MIL-A-22262 CAST UNIFORMLY ON FRESHLY APPLIED PAINT***	***ONE COAT MIL-DTL-24631A, F-184 --OR-- AMERCOAT 3273, 3-4 MILS***	***ONE COAT MIL-DTL-24631A, F-187, 3-4 MILS SEE NOTE (32A)***			
SHT OR MIP-SHT AREAS TO BE COVERED WITH NONSKID (21 AND 774 CLASS ONLY) SEE NOTE (34A)	***13***	***SAME AS LINE 8***	***SAME AS LINE 12***		***SAME AS LINE 12***			

TABLE 6 GRP FIBERGLASS SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E KEEL TO MAX BEAM	F MAX BEAM TO UPPER BOOTTOP	G DRAFT MARKS
UNBOOTED GRP BOW DOMES ABOVE UPPER BOOTTOP ***SEE NOTE (34A)***	***14***	***LOW PRESSURE WATER CLEAN (LP WC)*** ***SEE NOTE (42A)***	***ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS*** ***-- & --*** ***ONE COAT MIL-DTL-24441 TYPE IV, F-153 OR F-154, 4-6 MILS*** ***--OR--*** ***TWO COATS MIL-PRF-24647 4-6 MIL/COAT*** ***--OR--*** ***OR, 2 COATS MIL-PRF-23236 TYPE IV, V, OR VI, CLASS 5 OR 7, 4-6 MILS/COAT*** ***SEE NOTES (32A) & (38A)***					
UNBOOTED GRP BOW DOMES BELOW UPPER BOOTTOP ***SEE NOTE (34A)***	***15***	***SAME AS LINE 14***	***ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS*** ***--OR--*** ***TWO COATS MIL-PRF-24647 4-6 MIL/COAT*** ***SEE NOTE (4A)***			***TWO COATS AF MIL-PRF-24647, TYPE I, CLASS 3, 4-6 MIL/COAT*** ***SEE NOTES (2A), (4A), & (38A)***	***TWO COATS AF MIL-PRF-24647, TYPE I, CLASS 3, 4-6 MIL/COAT*** ***SEE NOTES (3A), (4A), & (38A)***	
BOOTED GRP BOW DOMES ABOVE UPPER BOOTTOP ***SEE NOTE (34A)***	***16***	***LOW PRESSURE WATER CLEAN (LP WC)*** ***SEE NOTE (43A)***	***PRIOR TO INSTALLING THE BOOT -*** ***ONE COAT MIL-DTL-24441, TYPE IV, F-150, 2-4 MILS*** ***AFTER BOOT INSTALLATION*** ***ONE COAT NAVY FORMULA 187, 2-3 MILS*** ***SEE NOTES (38A) & (46A)***					
BOOTED GRP BOW DOMES BELOW UPPER BOOTTOP ***SEE NOTE (34A)***	***17***	***SAME AS LINE 16***	***PRIOR TO INSTALLING THE BOOT -*** ***ONE COAT MIL-DTL-24441, TYPE IV, F-150, 2-4 MILS*** ***AFTER BOOT INSTALLATION*** ***ONE COAT NAVY FORMULA 184, 2-3 MIL/COAT***			***SAME AS LINE 15***	***SAME AS LINE 15***	

TABLE 7 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E BULKHEADS AND OVERHEADS	F THERMAL INSULATION	G
BILGE AND TRUNK INTERIOR AREAS BELOW THE LOWER WALKING FLAT	1	POWER TOOL CLEAN TO BARE METAL SSPC-SP 11 SEE NOTE (6A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 5-7 MILS SEE NOTES ***(8A),*** (15A), & (28A)	ONE STRIPE COAT AND ONE FULL COAT MIL-PRF-23236, TYPE VII, CLASS 17, 5-7 MILS/COAT SEE NOTE (7A), ***(8A)***, (9A), (15A), (28A), (33A) & (37A)				
	2	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS SEE NOTES (15A) & (28A)	ONE STRIPE COAT AND ONE FULL COAT MIL-DTL-24441, TYPE IV, F-151 OR F-157, 4-6 MILS/COAT SEE NOTES (7A), (15A), (28A), & (33A)				
	3	SAME AS LINE ONE	ONE COAT MIL- PRF-23236, TYPE IV, V, OR VI, CLASS 5 OR 7, 4-8 MILS SEE NOTES (15A) & (28A)	ONE STRIPE COAT AND ONE FULL COAT MIL-PRF-23236, TYPE V, CLASS 5 OR 7, 4-8 MILS/COAT SEE NOTES (7A), (9A), (15A), (28A), & (33A)				
	4	***INTENTIONALLY LEFT BLANK***						
WET SPACES (EXCEPT BILGES AND TRUNKS)	5	SAME AS LINE ONE	SAME AS LINE 2	SAME AS LINE 2				
	6	SAME AS LINE ONE	SAME AS LINE 3	SAME AS LINE 3				
VRLA BATTERY COMPARTMENT	7	SAME AS LINE ONE	SAME AS LINE 2	SAME AS LINE 2				
VA CLASS BATTERY COMPARTMENT (DECK AND BHDS UP TO 62" ABOVE TOP STEP OF DECK)	8	SAME AS LINE ONE	TEK-HAZ RED PRIME COAT, 16-20 MILS SEE NOTES (24A) & (28A)	TEK-HAZ GRAY TOPCOAT, 16-20 MILS SEE NOTES (24A), (28A, & (33A)				
VA CLASS BATTERY COMPARTMENT (OVHD AND BHDS ABOVE 62" ABOVE TOP STEP OF DECK)	9	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS SEE NOTES (24A) & (28A)			2 COATS MIL-PRF-24635, TYPE II, CLASS 1, 4-6 MILS/ COAT SEE NOTES (24A), (28A), & (33A)		

TABLE 7 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E BULKHEADS AND OVERHEADS	F THERMAL INSULATION	G
TRUNK INTERIORS, UNINSULATED AREA ABOVE THE LOWER FLAT ***(INCLUDING UPPER HATCH COVER)***	10	***POWER TOOL CLEAN TO BARE METAL SSPC-SP 11*** ***SEE NOTES (6A) & (13A)***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 17, 5-7 MILS/COAT SEE NOTE (7A), ***(8A)***, (9A), (15A), (28A), (33A), & ***(37A)***				
	11	SAME AS LINE ***10***	SAME AS LINE ***2***	ONE COAT MIL-DTL-24441, TYPE IV, F-151 OR F-157, 4-6 MILS/COAT SEE NOTES (7A), (15A), & (28A)		ONE COAT DOD-E-24607, 1-2 MILS SEE NOTES (7A), (9A), (10A), (11A), (12A), (28A) & (33A)		
	12	SAME AS LINE ***10***	SAME AS LINE 3	ONE COAT MIL-PRF-23236, TYPE V, CLASS 5 OR 7, 4-8 MILS/COAT SEE NOTES (7A), (9A), (15A), & (28A)		SAME AS LINE 11		
TRUNK INTERIORS UNDER INSULATION ABOVE THE LOWER FLAT	13	SAME AS LINE ONE	SAME AS LINE 2	ONE COAT MIL-DTL-24441, TYPE IV, CONTRASTING COLOR, 4-6 MILS SEE NOTES (7A), (15A), (28A), & (33A)				
	14	SAME AS LINE ONE	SAME AS LINE 3	ONE FULL COAT MIL-PRF-23236, TYPE V, CLASS 5 OR 7, 4-8 MILS/COAT SEE NOTES (7A), (15A), (28A), & (33A)				
MACHINERY SPACES (ENGINE ROOMS AND AUXILIARY MACHINERY ROOMS) UNINSULATED PRESSURE HULL	15	SAME AS LINE ONE	SAME AS LINE 2	SAME AS LINE 11	2 COATS DOD-E-24607, 1-2 MILS/COAT SEE NOTES (7A), (9A), (10A), (11A), (28A) & (33A)			
	16	SAME AS LINE ONE	SAME AS LINE 3	SAME AS LINE 12	SAME AS LINE 15			
MACHINERY SPACES (ENGINE ROOMS AND AUXILIARY MACHINERY ROOMS) PRESSURE HULL TO BE COVERED BY INSULATION	17	SAME AS LINE ONE	SAME AS LINE 2	SAME AS LINE 2				
	18	SAME AS LINE ONE	SAME AS LINE 3	SAME AS LINE 3				
DECKS WITHOUT COVERINGS	19	SAME AS LINE ONE	***ONE COAT MIL-DTL-24441, TYPE IV, 2-4 MILS***	***ONE COAT MIL-DTL-24441, TYPE IV, 2-4 MILS***				
	20	SAME AS LINE ONE	SAME AS LINE 3	SAME AS LINE 14				
	21	SAME AS LINE ONE	ONE COAT TT-P-645, F-84, 1-2 MILS SEE NOTES (28A) & (33A)	2 COATS MIL-PRF-24635, 1-2 MILS/COAT SEE NOTES (7A), (28A), & (33A)				

TABLE 7 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E BULKHEADS AND OVERHEADS	F THERMAL INSULATION	G
DECKS WITH COVERINGS	22	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 2-4 MILS					
	23	SAME AS LINE ONE	SAME AS LINE 21					
ENSOLITE INSULATION (OVERCOAT)	24	DETERGENT WASH AND RINSE				2 COATS DOD-E-24607, 1-2 MILS/COAT SEE NOTES (9A), (10A), (11A), (14A), (28A) & (33A)		
POLYIMIDE INSULATION (OVERCOAT)	25	SAME AS LINE 24				SAME AS LINE 24		
	26	SAME AS LINE 24				2 COATS MIL-PRF-24596, 1-2 MILS/COAT -OR- 2 COATS F-25A, 1-2 MILS/COAT SEE NOTES (28A) & (33A)		
DRY VOIDS	27	SAME AS LINE ONE	SAME AS LINE 3	SAME AS LINE 14				
	28	***SAME AS LINE ONE***	***SAME AS LINE 19***	***SAME AS LINE 19***				

TABLE 8 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E	F	G TOTAL
POTABLE WATER TANKS ***SEE NOTES (31A) & (34A)***	1	NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10 SEE NOTE (29A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 4-8 MILS SEE NOTES (15A), (17A), (26A), & (39A)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 6-10 MILS SEE NOTES (15A), (26A), (37A), & (39A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 9, 10-12 MILS SEE NOTES (15A), (26A), (27A), & (39A)			
	2	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE III, F-150, 2-4 MILS SEE NOTES (15A), (17A), & (21A)	ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2-4 MILS SEE NOTES (15A), & (21A)	ONE COAT MIL-DTL-24441, TYPE III, 2-4 MILS SEE NOTES (15A) & (21A)	ONE STRIPE COAT MIL-DTL-24441, TYPE III, 2-4 MILS SEE NOTES (15A) & (21A)	ONE COAT MIL-DTL-24441, TYPE III, F-152, 2-4 MILS DFT AT ADEQUATE THICKNESS TO MEET COATING RANGE SEE NOTES (15A), (21A), & (27A)	TOTAL SYSTEM 8 -12 MILS (ON AREAS WITHOUT STRIPE COAT) SEE NOTE (22A)
RESERVE FEEDWATER TANKS ***SEE NOTES (31A) & (34A)***	3	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE III, F-150, 2 - 4 MILS SEE NOTES (15A), (17A), & (21A)	ONE STRIPE COAT MIL-DTL-24441 TYPE III F-152, 2 - 4 MILS SEE NOTES (15A) & (21A)	ONE COAT MIL-DTL-24441, TYPE III F-151, 2 - 4 MILS SEE NOTES (15A) & (21A)	ONE STRIPE COAT MIL-DTL-24441, TYPE III, F-150, 2 - 4 MILS SEE NOTES (15A) & (21A)	ONE COAT MIL-DTL-24441 TYPE III F-152, 2 - 4 MILS SEE NOTES (15A) & (21A)	TOTAL SYSTEM 8 MILS MIN
	4					***INTENTIONALLY LEFT BLANK***		
AUXILIARY TANKS, ACR HOLDING TANKS (MTS), DEPTH CONTROL TANKS, FORWARD TRIM/WRT TANKS, NFO EXPANSION TANK, SEAWATER EXPANSION TANK, SECONDARY SHIELD WATER OVERFLOW TANK (MTS), TRIM TANKS, UNHEATED WATER STORAGE TANK (MTS), WRT TANKS	5	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (15A), (16A), (17A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (15A), (26A), (37A), & (49A)***				
BILGE AND DRAIN COLLECTION TANKS SEE NOTE (25A)	***6***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (15A), (17A), & (26A)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS SEE NOTES (15A), (26A), & (37A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (15A) & (26A)			
	7	***INTENTIONALLY LEFT BLANK***						
BOW TANK, BOW SONAR TANK, SONAR DOME AREA STEEL STRUCTURE (INCLUDES SONAR SPHERE, ITS SUPPORT STRUCTURE, AND FORWARD SIDE OF MBT BULKHEAD)	***8***	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (17A), (18A), (19A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (18A), (26A), (37A), & (49A)***				

TABLE 8 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E	F	G TOTAL
FUEL OIL OVERFLOW/COLLECTING TANK, FUEL OIL FILTER SUMP DRAIN TANK, ES DIESEL FUEL OIL TANK (MTS)	***9***	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4 - 6 MILS SEE NOTES (17A) & (19A)	ONE STRIPE COAT MIL-DTL-24441, TYPE IV, 4 - 6 MILS	ONE COAT MIL-DTL-24441, TYPE IV, F-152 OR F-151, 4 - 6 MILS			
	10	SAME AS LINE ONE	ONE COAT MIL-PRF-23236 TYPE VI, CLASS 5, 4-8 MILS SEE NOTES (17A) & (19A)	ONE STRIPE COAT MIL-PRF-23236 TYPE VI, CLASS 5, 4-8 MILS	ONE COAT MIL-PRF-23236 TYPE VI, CLASS 5, 4-8 MILS			
	11	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/5, 20-30 MILS*** ***SEE NOTES (17A), (19A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/5, 10-15 MILS*** ***SEE NOTES (26A), (37A), & (49A)***				
MAIN BALLAST TANKS ABOVE RESIDUAL WATER LINE; HIGH PRESSURE AIR FLASKS IN MBT'S, EMBT AIR FLASKS IN MBT'S	12	***NEAR WHITE METAL BLAST, NACE 2/SSPC-SP 10*** ***SEE NOTE (23A) & (29A)***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (16A), (17A), (18A), (19A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (18A), (26A), (37A), & (49A)***				
MAIN BALLAST TANKS BELOW RESIDUAL WATER LINE	13	SAME AS LINE ***12***	SAME AS LINE ***12***	SAME AS LINE ***12***		2 COATS AF MIL-PRF-24647, 4-6 MILS/COAT, FROM BOTTOM CENTERLINE TO APPROXIMATELY 2' VERTICALLY ABOVE HEIGHT OF HIGHEST FLOOD LOUVER OVER A TACK COAT (1-2 MILS) MIL-DTL-24441 TYPE IV ***OR (4-6 MILS) MIL-PRF-24647 PRIMER*** SEE NOTE (4A)		
	14	***INTENTIONALLY LEFT BLANK***						
	15	***INTENTIONALLY LEFT BLANK***						
MAIN INDUCTION SUMP TANK, MISSILE COMPENSATING TANKS, AUXILIARY VARIABLE BALLAST TANKS, AND VARIABLE BALLAST TANKS	16	SAME AS LINE ONE	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (15A), (17A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (15A), (26A),(37A), & (49A)***				
TORPEDO IMPULSE TANKS	***17***	***SAME AS LINE ONE***	***ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS*** ***SEE NOTES (15A) & (17A),***	***ONE STRIPE COAT MIL-DTL-24441, TYPE IV, 4-6 MILS*** ***SEE NOTES (15A) & (17A),***	***ONE COAT MIL-DTL-24441, TYPE IV, F-152 OR F-151, 4-6 MILS*** ***SEE NOTES (15A) & (17A)***			

TABLE 8 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E	F	G TOTAL
	18	***SAME AS LINE ONE***	***ONE COAT MIL-PRF-23236, TYPE VI, CLASS 7, GRADE B OR C, 4-8 MILS*** ***SEE NOTES (15A) & (17A)***	***ONE STRIPE COAT MIL-PRF-23236, TYPE VI, CLASS 7, GRADE B OR C, 4-8 MILS*** ***SEE NOTES (15A) & (17A)***	***ONE COAT MIL-PRF-23236, TYPE VI, CLASS 7, GRADE B OR C, 4-8 MILS*** ***SEE NOTES (15A) & (17A)***			
	19	***INTENTIONALLY LEFT BLANK***						
TORPEDO IMPULSE TANKS	***20***	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (15A), (17A), (19A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (15A), (26A),(37A), & (49A)***				
SANITARY TANKS SANITARY FLUSHING TANKS	***21***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 13, 4-8 MILS SEE NOTES (15A), (17A), & (26A)	STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 13 6-10 MILS SEE NOTES (15A), (26A), & (37A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 13, 10-12 MILS SEE NOTES (15A) & (26A)			
STEAM PLANT SURGE TANKS (MTS)	***22***	SAME AS LINE ONE	ONE COAT OF APEXIOR NO. 1 (DAMPNEY CO.). 2 - 4 MILS SEE NOTE (47A)	ONE COAT OF APEXIOR NO. 1 (DAMPNEY CO.), 2 - 4 MILS SEE NOTE (47A)				
WASTE OIL COLLECTING TANKS, WASTE OIL OVERFLOW TANKS, ENGINE ROOM OIL COLLECTION TANKS	***23***	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 4 - 8 MILS SEE NOTES (15A), (17A), & (26A)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 6 - 10 MILS SEE NOTES (15A), (26A), & (37A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 5, 10 - 12 MILS SEE NOTES (15A) & (26A)			
	24	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/5, 20-30 MILS*** ***SEE NOTES (15A), (17A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/5, 10-15 MILS*** ***SEE NOTES (15A), (26A), (37A), & (49A)***				

TABLE 8 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E	F	G TOTAL
FREE FLOOD AREAS AND RECESSES: INSIDE SURFACES OF FAIRWATER, UNDERSIDE OF SUPERSTRUCTURE, CHAIN LOCKERS (EXCEPT 726 CLASS), INTERIOR SURFACES OF STEEL DOMES, SHAFT TUBE INTERIOR SURFACES (WHEN SHAFT IS REMOVED), BOW DOME ACCESS FREE FLOOD AREA, BSY-1 RECESS (FR 29-30 STBD), 726 CLASS ACCESS SONAR DOME RECESS (FR 6-7 PORT), 726 CLASS SONAR SPHERE EXTERNAL SURFACES, 726 CLASS SONAR TRUNK EXTERNAL SURFACES, 726 CLASS SONAR DOME BHD (FR 4), 726 CLASS SONAR CAVITY (FR 6-8), 726 CLASS SONAR DOME ACCESS TRUNK (FR 6-7), CAPSTAN RECESS, SONAR PENETRATION SPLICE TRUNK RECESSES (PORT AND STBD), SONAR CABLE TRUNK, EMERGENCY TOWING PENDANT, BETWEEN BLADES COVER PLATES (BBCP) RECESS, 726 CLASS MSS RECESS AT BHD 4	25	SAME AS LINE ONE	"SINGLE COAT" ONE COAT MIL-PRF-23236, TYPE VII, CLASS ***18/***7, 20-30 MILS SEE NOTES (1A), (26A), (32A), (40A)***, & (49A)***	"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS ***18/***7, 10-15 MILS SEE NOTES (26A), (32A), (37A)***, & (49A)***				
FREE FLOOD AREAS AND RECESSES: TORPEDO TUBE RECESS, AFT FREE FLOOD AREA (MUD TANK), EJECTION PUMP RECESS, SECONDARY PROPULSION MOTOR (SPM) RECESS, 726 CLASS CHAIN LOCKER, SSN688 CLASS BQN-17, BSY-1 OR AN/BBQ-10/V(1) RECESS (FR 14-15 PORT BOTTOM), 726 CLASS ANCHOR RECESS	26	SAME AS LINE ONE	SAME AS LINE ***25***	SAME AS LINE ***25***		2 AF COATS MIL-PRF-24647 TYPE I OR II 4 – 6 MILS PER COAT SEE NOTE (4A)		
	27	***INTENTIONALLY LEFT BLANK***						
ALL OTHER FREE FLOOD AREAS, RECESSES ***BELOW*** WATERLINE (APPLIES TO FREE FLOOD AREAS, RECESSES, AND VOIDS NOT LISTED ELSEWHERE IN THIS TABLE)	28	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 4 - 8 MILS SEE NOTES (16A), (17A), (26A), & (36A)	ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 6 - 10 MILS SEE NOTES (26A) & (37A)	ONE COAT MIL-PRF-23236, TYPE VII, CLASS 7, 10 - 12 MILS SEE NOTES (26A) & (32A)	***SAME AS LINE 26***		
ALL OTHER FREE FLOOD AREAS, RECESSES ABOVE WATERLINE (APPLIES TO FREE FLOOD AREAS, RECESSES, AND VOIDS NOT LISTED ELSEWHERE IN THIS TABLE)	29	SAME AS LINE ONE	"SINGLE COAT" ONE COAT MIL-PRF-23236, TYPE VII, CLASS ***18/***7, 20-30 MILS SEE NOTES (16A), (17A), (26A), (32A), (40A)***, & (49A)***	"SINGLE COAT" ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS ***18/***7, 10-15 MILS SEE NOTES (26A), (32A), (37A)***, & (49A)***				
	30	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, CLASS 5 OR 7, 4 - 8 MILS -OR- ONE COAT MIL-DTL-24441 TYPE IV, F-150, 4-6 MILS -OR- ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4-6 MILS SEE NOTES (16A) & (17A)	ONE STRIPE COAT MIL-PRF-23236, TYPE IV, V, OR VI, CLASS 5 OR 7, 4 - 8 MILS -OR- ONE STRIPE COAT MIL-DTL-24441 TYPE IV, F-153, 4-6 MILS -OR- ONE AC STRIPE COAT MIL-PRF-24647, TYPE I OR II, 4-6 MILS	ONE COAT MIL-PRF-23236, TYPE IV, V, OR VI, CLASS 5 OR 7, 4 - 8 MILS -OR- ONE COAT MIL-DTL-24441 TYPE IV, 4-6 MILS -OR- ONE AC COAT MIL-PRF-24647, TYPE I OR II, 4-6 MILS SEE NOTE (32A)			

TABLE 8 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E	F	G TOTAL
	31	***INTENTIONALLY LEFT BLANK***						
CLEAN FUEL OIL, HYDRAULIC OIL, LUBE OIL SLUDGE AND HYDROPHONE TANKS	32	POWER TOOL CLEAN, SSPC-SP 3 SEE NOTE (29A)	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS SEE NOTES (15A), (17A), & (20A)	MIL-DTL-24441, TYPE IV, F-152 OR F-151, 4-6 MILS SEE NOTE (15A)				
	33	COMMERCIAL BLAST, SSPC-SP 6 OR POWER TOOL CLEAN TO BARE METAL SSPC-SP 11 SEE NOTES (20A) & (29A)						
NORMAL FUEL OIL (688 CLASS ONLY; FROM BASELINE TO 4 FEET ABOVE BASELINE)	34	COMMERCIAL BLAST, SSPC-SP 6 OR POWER TOOL CLEAN TO BARE METAL SSPC-SP 11 SEE NOTES (20A), (29A) & (30A)						
PAINTED NORMAL FUEL OIL	***34A***	***SAME AS LINE ONE***	***"SINGLE COAT"*** ***ONE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 20-30 MILS*** ***SEE NOTES (15A), (16A), (17A), (26A), (40A), & (49A)***	***"SINGLE COAT"*** ***ONE STRIPE COAT MIL-PRF-23236, TYPE VII, CLASS 18/7, 10-15 MILS*** ***SEE NOTES (15A), (26A), (37A), & (49A)***				
TANK MANHOLE COVERS	35	SAME AS LINE ONE	ONE COAT MIL-PRF-23236, TYPE VIII --OR-- USE APPROVED COATING SYSTEM SPECIFIED FOR TANK OR FREEFLOOD SEE NOTES (15A), (21A), (26A), (31A), & (48A)					
FREEFLOOD ACCESS COVERS	36	SAME AS LINE ONE	2 COATS AC MIL-PRF-24647, TYPE I OR II, 4-6 MILS/COAT SEE NOTE (32A)			2 AF COATS MIL-PRF-24647, TYPE I OR II, 4–6 MILS PER COAT SEE NOTES (2A), (3A), (4A), (7A), & (32A)		
	37	SAME AS LINE ONE	TWO COATS MIL- PRF-23236, TYPE IV, V, OR VI CLASS 5 OR 7, 4-8 MILS/COAT SEE NOTE (32A)			SAME AS LINE 36		
	38	SAME AS LINE ONE	ONE COAT MIL-DTL-24441, TYPE IV, F-150, 4-6 MILS --- & --- ONE COAT MIL-DTL-24441, TYPE IV, F-151 OR F-152, 4-6 MILS SEE NOTE (32A)			SAME AS LINE 36		

TABLE 9 STEEL SURFACES SUBMARINES	LINE	A SURFACE PREPARATION	B PRIMER	C	D	E BULKHEADS AND OVERHEADS	F THERMAL INSULATION	G
INTERIOR SURFACES OF RUDDERS, PLANES, STABILIZERS (SYNTACTIC FILLED VOIDS)	1	HAND TOOL CLEAN, SSPC-SP 2	2 COATS TT-P-645 F-84 (PRIMER), 1-2 MILS / COAT	ONE COAT MIL-DTL-24441, TYPE IV, 4-6 MILS				
	2	SAME AS LINE ONE	SAME AS LINE ONE	ONE COAT PRIMER MIL-PRF-23236, TYPE IV, V, OR VI, 4-***6*** MILS				