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DEPARTMENT OF DEFENSE STANDARD PRACTICE

FINISHES, COATINGS, AND SEALANTS, FOR THE PROTECTION OF AEROSPACE WEAPONS SYSTEMS

AMSC N7264 FSC MFFP

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

FOREWORD

1. This standard is approved for use by all Departments and Agencies of the Department of Defense (DoD).

2. This standard covers minimum requirements for methods to be used for protective surface treatments of aerospace weapons systems.

3. This standard identifies the material specifications that are required for use as finishes, protective coatings, and sealants in aerospace weapons systems. When an alternate material or process is desired, the approval of the procuring activity is required.

4. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Air Warfare Center Aircraft Division, Code 414100B120-3, Highway 547, Lakehurst, NJ 08733-5100 by using the Standardization Document Improvement Proposal (DD Form 1426), appearing at the end, of this document or by letter.

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1. SCOPE

1.1 Scope. This standard establishes the minimum requirements to be considered for finishes, protective coatings, and sealants used in the protection of aerospace weapons systems (see 6.1).

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this standard. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this standard, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

A-A-58054	-	Abrasive Mats, Non-Woven, Non-Metallic
TT-L-190	-	Linseed Oil, Boiled, (For Use in Organic Coating)
TT-P-28	-	Paint, Aluminum, Heat Resisting (1200°F)
TT-P-1757	-	Primer Coating, Alkyd, One Component
TT-P-2756	-	Polyurethane Coating: Self-priming Topcoat, Low Volatile Organic Compounds (VOC) Content
TT-P-2760	-	Primer Coating: Polyurethane, Elastomeric, High Solids
VV-L-800	-	Lubricating Oil, General Purpose, Preservative, (Water-Displacing, Low Temperature)

DEPARTMENT OF DEFENSE

MIL-R-3043	-	Resin-Coating, Unpigmented, For Engine Components and Metal Parts
MIL-S-5002	-	Surface Treatments and Inorganic Coatings for Metal Surfaces of Weapons Systems
MIL-C-5056	-	Coating, Permanent Resin; Process For Application of, to Aircraft Parts

MIL-C-5541	-	Chemical Conversion Coatings on Aluminum and Aluminum Alloys
MIL-C-6529	-	Corrosion Preventive, Aircraft Engine
MIL-C-8514	-	Coating Compound, Metal Pretreatment, Resin-Acid
MIL-A-8625	-	Anodic Coatings, For Aluminum and Aluminum Alloys
MIL-C-8779	-	Colors, Interior, Aircraft, Requirements for
MIL-S-8802	-	Sealing Compound, Temperature Resistant, Integral Fuel Tanks and Fuel Cell Cavities, High-Adhesion
MIL-C-11796	-	Corrosion Preventive Compound, Petrolatum, Hot Application
MIL-PRF-16173	-	Corrosion Preventive Compound, Solvent Cutback, Cold-Application
MIL-F-18264	-	Finishes, Organic, Weapons Systems, Application and Control of
MIL-PRF-22750	-	Coating, Epoxy, High Solids
MIL-PRF-23377	-	Primer Coatings: Epoxy, High Solids
MIL-L-23398	-	Lubricant, Solid Film, Air-Cured, Corrosion Inhibiting, NATO Code Number S-749
MIL-C-27725	-	Coatings, Corrosion Preventive, For Aircraft Integral Fuel Tanks
MIL-S-29574	-	Sealing Compound, Polythioether, For Aircraft Structures, Fuel and High Temperature Resistant, Fast Curing at Ambient and Low Temperature
MIL-L-46010	-	Lubricant, Solid Film, Heat Cured, Corrosion Inhibiting
MIL-PRF-46081	-	Coating Compound, Thermal Insulating (Intumescent)
MIL-A-46146	-	Adhesive-Sealants, Silicone, RTV, Non-Corrosive (For Use With Sensitive Metals and Equipment)
MIL-C-46168	-	Coating, Aliphatic Polyurethane, Chemical Agent Resistant
MIL-P-53022	-	Primer, Epoxy Coating, Corrosion Inhibiting, Lead and Chromate Free
MIL-P-53030	-	Primer Coating, Epoxy, Water Reducible, Lead and Chromate Free
MIL-C-53039	-	Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant
MIL-C-53072	-	Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection
MIL-PRF-63460	-	Lubricant, Cleaner And Preservative For Weapons And Weapons Systems (Metric)
MIL-C-81309	-	Corrosion Preventive Compounds, Water Displacing, Ultra-Thin Film
MIL-S-81733	-	Sealing and Coating Compound, Corrosion Inhibitive
MIL-C-83231	-	Coatings, Polyurethane, Rain Erosion Resistant For Exterior Aircraft And Missile Plastic Parts
MIL-A-83377	-	Adhesive Bonding (Structural) For Aerospace and Other Systems, Requirements for

MIL-C-83445	-	Coating System, Polyurethane, Non-Yellowing, White, Rain Erosion Resistant, Thermally Reflective
MIL-T-83483	-	Thread Compound, Antiseize, Molybdenum Disulfide-Petrolatum
MIL-C-85054	-	Corrosion Preventive Compound, Water Displacing, Clear (Amlguard)
MIL-PRF-85285	-	Coating: Polyurethane, High-Solids
MIL-PRF-85322	-	Coating, Elastomeric, Polyurethane, Rain-Erosion
MIL-PRF-85582	-	Primer coatings: Epoxy, Waterborne

STANDARDS

FEDERAL

FED-STD-595	-	Colors Used in Government Procurement

DEPARTMENT OF DEFENSE

MIL-STD-171	-	Finishing of Metal and Wood Surfaces
MIL-STD-464	-	Electromagnetic Environmental Effects, Requirements for Systems
MIL-STD-889	-	Dissimilar Metals
MIL-STD-2161	-	Paint Schemes and Exterior Markings for U.S. Navy and Marine Corps Aircraft

(Copies of the above specifications and standards are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)
AEROSPACE MATERIAL SPECIFICATIONS (AMS)

SAE-AMS3276	-	Sealing Compound, Integral Fuel Tanks And General Purpose, Intermittent Use To 360 °F (182 °C)
SAE-AMS3138	-	Materials, Coating, Fluorocarbon (FKM), Elastomeric
SAE-AMS3374	-	Aircraft Firewall, Sealing Compound, One-Part Silicone

(Application for copies should be addressed to SAE, 400 Commonwealth Drive, Warrendale, PA 15096.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. DEFINITIONS

3.1 Exterior surfaces. All surfaces of a weapons system normally exposed to an external environment during flight or on the ground, and all interior surfaces that may become regularly wetted with water or other corrosive fluid are considered exterior surfaces. These surfaces include, but are not limited to wheels and landing gear, wheel wells and their fairings, dive brakes, wing flaps, wing-fold areas, battery compartments, and bilge area on aircraft with latrines.

3.2 Extreme conditions. Extreme conditions include, but are not limited to exhaust trails, gun-blast surfaces, rocket-blast areas, hull bottoms, leading edges, areas that may trap or be exposed to fumes from exhaust, guns or rockets, or surfaces subjected to temperatures above 250°F (121°C) as the result of thermal radiation, aerodynamic heating, or other sources of heat.

3.3 Fayed surface. The term "fayed surface" means two or more surfaces are joined or fitted closely or tightly together.

3.4 Hull bottom. The "hull bottom" is that surface area of a seaplane fuselage below a line 12 in. (0.31 m) above the full-load water line.

3.5 Seaplanes. All aircraft operating wholly, or in part, from water, such as flying boats, airplanes with float-type alighting gear, aircraft with hydro-skis, amphibians, or convertibles are considered to be "seaplanes."

3.6 Weapons system. All types of aircraft and missiles are considered weapons systems.

4. GENERAL REQUIREMENTS

4.1 General. This section establishes the methods of corrosion prevention required to ensure that aerospace weapons systems (see 3.6) exposed to extreme conditions (see 3.2) are protected by coatings and finishes proven suitable for the intended environment.

4.2 Exceptions. Unless specifically prescribed by a particular item and/or accessory specification or drawing, this standard is not applicable to propellers, power plants, instruments, electronic enclosures or chassis, or contractor purchased accessories, such as electric motors, generators, switches, hydraulic valves, and similar parts. Contractors are not normally required to refinish such equipment or accessories, provided the color and finish systems thereon are acceptable to the procuring activity or its agent.

4.3 Contractor-prepared finish specification. The contractor shall develop a specification defining the protective finish system, including cleaning and surface treatments of the item being purchased. Any deviations from the requirements specified herein shall be identified and supported with technical data and information. When the use of wire brushes on sections of equipment is intended, it must be stated in the contractor-prepared finish specification (see 4.4.2.3). In areas where the coating thickness requirement cannot be met (see 5.1.5), the contractor shall indicate in the finish specification the specific areas of variation.

4.3.1 Special treatments. A detailed parts list of the weapons system is not required in the finish specification, however, sufficient examples shall be included so that any part of the weapon system may be properly classified as to its detailed protective treatment. All parts for which the exact treatment may be in doubt, all of the areas identified in 4.1 requiring special treatment, and all parts or assemblies with design features noted in their specifications to require maximum corrosion preventive treatment shall be included in the finish specification.

4.3.2 Cross references. When the contractor-prepared finish specification references manufacturer's material, and or other finish process specifications, or other documents, the contractor shall prepare a cross reference as part of the specification indicating their equivalence to existing Government and non-Government specifications and standards. The contractor will be required to submit copies of any contractor-originated referenced documents with the proposed finish specification.

4.3.3 Alternate materials. Where there is a choice of coatings and/or finish materials or processes herein, the finish specification shall be tailored to identify only those intended to be used. Alternate materials shall not be used without the written approval of the procuring activity.

4.3.4 Non-standard coatings and finishes. The contractor prepared finish specification (see 4.3) shall identify any proposed deviations from, or additions to the requirements specified herein by marking with an asterisk. These shall be considered non-standard. The affected materials or processes shall be replaced with coating or finishing systems that have been proven suitable for the intended environment.

4.4 General precautions.

4.4.1 Metal particles. Fabrication and assembly procedures shall be established such that the retention of metal particles or pieces, such as chips, slivers, and filings, or other foreign objects, in structure(s) is precluded. A vacuum cleaner with strong suction may be used for frequent cleaning operations in inaccessible areas. Metal cutting or filing is not permitted on an assembly after it has been accepted, except upon specific approval by the local government representative. When such action has been approved, those areas shall be retouched in accordance with the detailed paint schedule for the part.

4.4.2 Use of abrasive materials. The selection of the correct abrasive material and size is dependent upon the material/surface to be treated and the purpose for which the abrasive

material(s) is to be used. In areas where control or removal of generated debris will cause failure of the weapons system, the abrasive shall not be used. Applicable technical orders, bulletins, and manuals shall be consulted prior to selection of any abrasive material. Any abrasive material that may produce a surface finish that would degrade the fatigue life of the part shall not be used. Abrasives used on one metal or alloy shall not be used on different metals or alloys unless it can be proven to the procuring activity that the media recycling process eliminates damaging contaminants.

4.4.2.1 Metallic wool. Metallic wool selected for use on a particular material/surface shall be galvanically compatible with the material or surface. Steel wool may be used on low-alloy steel. Aluminum wool may be used on aluminum, aluminum alloys, magnesium, and magnesium alloys. Copper wool may be used on copper alloys, bronze, and brass. Stainless steel wool may be used on stainless steel. After using a metallic wool on a material or surface, all residue must be removed from that material or surface. Any residue not removed is a potential source for galvanic corrosion.

4.4.2.2 Wire brushes. Wire brushes shall not be used on those parts where the resultant surface finish would degrade the fatigue life of the part. Wire brushes selected for use on a particular material shall be galvanically compatible with the material. Only austenitic stainless steel brushes may be used on austenitic stainless steel surfaces. When an austenitic stainless steel brush is used, it shall be used on only one given material to avoid cross-contamination. Use of brushes with bristle wire diameters greater than 0.01 in. (0.25 mm) is prohibited. After use of a wire brush on soft metals, such as aluminum or magnesium, the surface must be polished with fine abrasive paper or abrasive mat conforming to A-A-58054, Type I, Grade A or B.

4.4.2.3 General wire brush selection. Table I may be used as a general compatibility guide in selecting wire brushes for use on selected metal alloys. This listing is not all-inclusive and does not give blanket authorization for the use of wire brushes on equipment and materials

TABLE I. Brush compatibility guide.

Alloy construction	Wire brush construction			
	Stainless Steel	Aluminum	Carbon steel	Brass
Aluminum	X	X		
Magnesium	X	X		
Ferrous (non-stainless)	X		X	
Stainless steel and nickel	X			
Copper				X
Titanium	X			
Chromium-, nickel-, tin-or copper-plated	X			
Cadmium- or zinc-plated 1/				

1/ The use of wire brushes on cadmium-plated and zinc-plated alloys is not recommended.

4.4.3 Welding, brazing, and soldering. When welding, brazing, or soldering is permitted on an assembly after it has been finished, inspected, and accepted, the surface shall be refinished. Any pre- or post-cleaning processes associated with welding, brazing, or soldering operations shall be compatible with subsequent finish processes and shall be compatible with the joining materials (filler materials, solder, fluxes, or brazing alloys). Any surface refinishing shall cover a large enough area to ensure correction of any damage resulting from the joining operation. The finish requirements in the joined area shall be equivalent to the basic part finish requirements.

5. DETAILED REQUIREMENTS

5.1 Protective finish system requirements.

5.1.1 Surface treatment. All metal surfaces, regardless of whether they are to be painted or are specifically excluded from painting, shall be surface treated in accordance with MIL-S-5002, except as modified by 5.2.1.1c.

5.1.2 Application of organic finishes. The application of organic coatings and finish systems prescribed herein shall be in accordance with MIL-F-18264 or MIL-C-53072, as applicable.

5.1.3 Interior surfaces. Primer coating and topcoat, where applicable, as specified in tables II and III, shall be applied to the interior surfaces of items in accordance with MIL-F-18264 or MIL-C-53072, as applicable. The primer coating shall be applied such that the dry-film thickness is in accordance with 5.1.5 and tables II and III, with the exception that the topcoat may be applied after final assembly, subject to the requirements of 5.2.1. When a topcoat is required for interior surfaces, such as to prevent fluid intrusion or to enhance visibility, and those surfaces are primed and topcoated prior to assembly, a finish coat shall be applied after final assembly. The interior color of the aerospace weapons system shall be in accordance with MIL-C-8779.

5.1.4 Exterior surfaces. Primer coatings and topcoats shall be applied to the exterior surfaces of items as specified in 5.1.5 and tables I and II, and in accordance with MIL-F-18264 or MIL-C-53072, as applicable. The exterior color of the aerospace weapons system shall be as specified by the procuring activity. The exterior color of Department of the Navy aircraft shall be in accordance with MIL-STD-2161.

5.1.5 Coating thickness. The maximum applied dry-film thickness of the coatings in table II shall be as specified in table IV. The minimum applied dry-film thickness of the coatings in table II shall be as specified in table III. On interior surfaces of all materials and on the exterior surfaces of magnesium, the applied dry-film thickness of the coatings shall be not greater than 150 percent of that specified in table III.

5.2 Specific parts requirements. In applying the requirements of this section, the groupings of the more commonly used aircraft metals shall be selected in accordance with MIL-STD-889, with the exception that the protection requirements specified for attaching parts and fasteners (see 5.2.12) shall take precedence, where applicable.

TABLE II. Primer-topcoat system compatibility.

SPECIFICATION	MIL-PRF-22750 6/	MIL-C-46168 2/ 7/	MIL-C-53039 2/ 7/	MIL-PRF-85285 6/ 7/	TT-P-2756 4/ 7/
MIL-PRF-23377 4/ 6/	X	X	X	X	1/
MIL-P-53022 2/ 5/ 7/	X	X	X	X	1/
MIL-P-53030 2/ 5/ 6/ 8/	X	X	X	X	1/
MIL-PRF-85582 4/ 6/ 8/	X	X	X	X	1/
TT-P-2760 3/ 4/ 6/	-	-	-	X	1/

1/ TT-P-2756 is a self-priming topcoat. Application of a primer coating is not required, with the exception of FED-STD-595, color number 36495. For infrared reflectance protection, TT-P-2756 requires the use of a primer coating conforming to TT-P-2760, type II MIL-PRF-23377, type II, or MIL-PRF-85582, type II. TT-P-2756 is authorized for use on aluminum, aluminum alloy, and polymer matrix composite structures only. TT-P-2756 is compatible with all of the primer coatings listed above. If the item to be coated with TT-P-2756 has been preprimed, removal of the primer coating prior to application of TT-P-2756 is not necessary. TT-P-2756 is to be applied to a dry film thickness of 2.0 to 2.6 mils (51 to 66 μm).

2/ MIL-C-46168, MIL-P-53022, MIL-P-53030, and MIL-C-53039 are not approved for use on U.S. Air Force airborne weapons systems.

3/ TT-P-2760 is primarily intended for use on aircraft in areas where there is a high degree of structural flexing. TT-P-2760 is to be applied to a dry film thickness of 1.5 to 2.0 mils (38 to 51 μm).

4/ These coatings are best suited for aluminum and polymer matrix composite substrates.

5/ These coatings are best suited for ferrous and magnesium substrates.

6/ Contains at least one type or class with a VOC of less than or equal to 340 grams/liter (2.8 pounds/gallon).

7/ Contains at least one type or class with a VOC of less than or equal to 420 grams/liter (3.5 pounds/gallon).

8/ This material may cause flash rusting on bare steel. Do not use on bare steel unless proven satisfactory for the intended purpose.

TABLE III. Protective finish system requirements.

Item	Material	Minimum applied dry film thickness, mil (μm)			
		Primer 3/		Topcoat	
		Exterior	Interior	Exterior	Interior
1	All aluminum alloys (except bottoms and interior trailing edge control surfaces, for which item 7 applies). 4/	0.6 (15)	1.2 (30)	1.7 (43)	-
2	Sacrificial metal coatings and nonsacrificial coatings applied to non-corrosion-resistant metals	0.6 (15)	1.2 (30)	1.7 (43)	-
3	Titanium alloys 1/	-	-	-	-
4	Magnesium alloys	1.2 (30)	1.2 (30)	1.7 (43)	1.7 (43)
5	Armor plate - ferrous	0.6 (15)	1.2 (30)	1.7 (43)	-
6	Corrosion resistant alloys	0.6 (15)	0.6 (15)	1.7 (43)	-
7	All metals not covered above	0.9 (23)	1.5 (38)	1.7 (43)	-
8	Polymer matrix composites 4/	0.6 (15)	1.2 (30) 2/	1.7 (43)	-

1/ These metals do not require primer coating or topcoats for corrosion protection except for faying surfaces as noted in 5.2.1. Primer coatings and topcoats may be applied to blend with adjacent areas (use item 2 requirements).

2/ Application of primer on interior surfaces is only required at dissimilar metal interfaces (see 5.2.1.2c).

3/ See table II, footnote 3/.

4/ TT-P-2756 may be used; see table II, footnote 1/.

TABLE IV. Maximum applied dry film thickness.

Coating	Maximum applied dry film thickness mils (μm)
MIL-PRF-23377	0.9 (23)
MIL-P-53022	1.5 (38)
MIL-P-53030	1.5 (38)
MIL-PRF-85582	0.9 (23)
TT-P-2760	2.0 (51)
MIL-PRF-22750	2.3 (58)
MIL-C-46168	1/
MIL-C-53039	1/
MIL-PRF-85285	2.3 (58)
TT-P-2756	2.6 (66)

1/ See MIL-C-53072

5.2.1 Fayed surfaces, joints, and seams.

5.2.1.1 Surfaces of similar metals. Seams and joints that possess fayed surfaces (see 3.3) of similar metals, as defined by MIL-STD-889, shall be protected, at a minimum, by the application of primer coating to each surface, in accordance with 5.2.1 and tables II and III. The dry film thickness of the primer coating shall be as prescribed for interior surfaces (see 5.1.3, 5.1.5 and tables II and III). Exceptions to the above are as follows:

a. Where 5.1.5 and tables II and III specify application of a specific thickness of primer coating to fayed surfaces, one-half of the required thickness of primer coating may be applied to each surface being joined.
b. Primer coating shall not be applied to resistance-welded fayed surfaces. Only weld-through sealants approved by the procuring activity shall be used prior to assembly. Primer coating shall be applied to fayed surfaces after spot-welding. All exterior edges shall be sealed.
c. Fayed surfaces that are to be adhesively bonded shall be surface cleaned, treated, and processed as specified in the procuring activity approved bonding procedures document(s) for the assemblies concerned, or in accordance with MIL-A-83377, as applicable.
d. Titanium to titanium and corrosion resistant steel to corrosion resistant steel constructions shall be protected by application of primer coating (see 5.1.5 and tables II and III) or sealant, conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276, to the fayed surfaces. Where protection against fretting is required for these constructions, the contractor shall propose a method of protection for approval by the procuring activity.
e. In addition to any required primer coating, all exterior fayed surfaces, seams, and edges shall be sealed with a sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276. A minimum gap of 0.02 in. (0.5 mm) is required at exterior surface (see 3.1) butt joints to allow for effective sealing.

5.2.1.1.1 Defect filling. The use of filling material for the purpose of sealing and concealing nicks, dents, gouges, and poor joints is prohibited.

5.2.1.2 Surfaces of dissimilar metals. Surfaces of dissimilar metals, as defined in MIL-STD-889, shall each receive a minimum of 0.0006 inch (15 microns [μm]) of primer coating in accordance with table II, except as specified in 5.2.1.1c. When fayed surfaces are of dissimilar metals, they shall be sealed with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276, and the thickness of the primer coating applied to each surface shall be in accordance with 5.1.5 and table III. In addition, the following precautions shall be taken:

a. Where magnesium is part of a dissimilar metal fayed surface, sealant conforming to MIL-S-29574, type II, or MIL-S-81733 shall be applied between the surfaces and squeezed out of all boundaries. The excess shall be removed in a manner that will

ensure a fillet on all edges. Except for bushing installations, the fillet width shall be a minimum of 0.25 in. (6.4 mm). For bushings, the fillet shall be the largest practicable. Joint areas that may retain water shall be filled with sealing compound.

b. Butt joints in exterior locations consisting of dissimilar metals shall be protected by grooving a seam to a width of 0.09 ±0.03 in. (2.3 ±0.76 mm) and filling with sealing compound. The depth of the groove shall be capable of retaining hardening type sealing compound, which shall be subsequently applied and smoothed flush with the surfaces of adjacent dissimilar metals.

c. In joints constructed of a carbon-fiber reinforced composite and aluminum, or other dissimilar metal as defined by MIL-STD-889, there shall be a final ply of material composed of the same resin matrix but reinforced with a material galvanically compatible with the aluminum. The final ply shall extend a minimum of 0.25 in. (6.4 mm) beyond the metal member. Primer coating shall be applied to a dry-film thickness of 1.2 to 1.8 mil (30 to 46 μm) to each of the interface surfaces. The surfaces of permanent joints shall be fayed and sealed with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276. Joints that require separation as part of normal maintenance may have formed-in-place seals substituted for fayed surface sealing.

5.2.2 Sealing. For exterior locations (see 3.1), openings (with the exception of drain holes at low points) which are not required for aircraft operations shall be sealed to prevent fluid intrusion from external sources. Sealing around access plates shall be accomplished by the application of sealant to the structure in a manner such that the access plates can be removed without damaging the formed-in-place sealant or the surrounding metal. The minimum thickness of sealant for formed-in-place seals shall be 0.030 in. (0.76 mm).

5.2.3 Slip fits. The sealing of slip fits shall be accomplished with wet primer coating conforming to MIL-PRF-23377, type I or II, class C or N, TT-P-1757, or wet sealant conforming to MIL-S-29574, type II, or MIL-S-81733. If design requires disassembly, primer coating conforming to MIL-PRF-23377, type I or II, class C or N, or TT-P-1757 shall be applied and permitted to dry thoroughly prior to assembly. In instances where the above materials are incompatible with the function of the part or assembly, corrosion preventive compound conforming to MIL-PRF-16173, grade 3 or 4, shall be used.

5.2.4 Press fits. The sealing of press fit component assemblies, with the exception of assemblies permanently housed in grease or oil, shall be accomplished with either wet primer coating conforming to MIL-PRF-23377, types I or II, classes C or N, TT-P-1757, or wet sealant conforming to MIL-S-81733 or MIL-S-29574, type II. Exterior edges of the press fit component shall be sealed with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276, with the exception that sealing with primer coatings (see 5.1.5 and table II) may be used for bushings with walls of 0.094 in. (2.4 μm) or less. The completed assembly shall then be finished as specified in 5.1.5 and table II. Parts permanently housed in grease or oil shall be assembled with the grease or oil to be used in the housing.

5.2.5 Cut edges. The edges of all metals shall be rounded to permit adhesion of an adequate thickness of applied paint coatings or sealants. After rounding of the edges, and prior to the application of paint or sealant, chemical surface treatments shall be applied.

5.2.6 Functional surfaces. Paint-type coatings shall not be applied to functional, working, or wearing surfaces; to lubricated surfaces; to adjustable screw threads; to lubrication or drain holes; to bearing or sliding surfaces; to areas where they could be rubbed or scraped onto surfaces that must be clean and bare to function properly; or to any other surface where the application of the coating may cause malfunction of the part or system. The interior walls of drain holes shall be coated with paint-type coatings for corrosion protection.

5.2.7 Control cables and control chains. Control cables and control chains shall not be painted. However, prior to installation, control cables shall be protected with a dip-coating of corrosion preventive material conforming to MIL-PRF-16173, grade 4, with the exception of those surfaces requiring lubrication for functional purposes. Those surfaces requiring lubrication shall be cleaned and coated with the required lubricant in lieu of corrosion preventive material. After installation, the control cables and control chains shall be inspected. If touch-up of the corrosion preventive compound is necessary, touch up shall be accomplished with the same material used prior to installation. Nylon jacketed cables do not require treatment, with the exception of exposed end fittings.

5.2.8 Closely coiled springs. Springs that are closely coiled, preventing the application of plating to internal surfaces, or springs not plated for other reasons, shall receive a minimum of 0.0012 inch (31 μm) of primer coating conforming to MIL-PRF-23377 or MIL-PRF-85582, or shall be coated with corrosion preventive compound conforming to MIL-PRF-16173, grade 4, or MIL-C-11796, class 2.

5.2.9 Parts in oil or grease. Parts that are housed in lubricating oil, hydraulic oil, or grease shall be finished with a baked resin coating conforming to MIL-R-3043, applied in accordance with MIL-C-5056. Parts constructed of corrosion-resistant metals need not be coated, unless they contact dissimilar metals. Functional surfaces, such as bearing surfaces, shall not be coated.

5.2.10 Metal tanks.

5.2.10.1 Temporary and auxiliary fuel tanks. The inside surfaces of aluminum alloy tanks shall be surface treated in accordance with MIL-C-5541, class 1A, or MIL-A-8625, type II, but shall not be painted. The interior of steel tanks shall be finished with baked resin coating conforming to MIL-R-3043, applied in accordance with MIL-C-5056. Sealant conforming to SAE-AMS3276 or MIL-S-29574, type II, may be used in lieu of MIL-R-3043 when authorized by the procuring activity.

5.2.10.2 Welded fuel tanks (including external auxiliary fuel tanks). The interior surfaces of aluminum tanks shall be thoroughly cleaned and surface treated in accordance with MIL-C-5541, class 1A, sloshed with corrosion preventive compound conforming to MIL-C-6529, type II, and drained, but shall not be painted. Droppable steel tanks shall be finished on the interior with a baked resin finish conforming to MIL-R-3043, applied in accordance with MIL-C-5056, or sealant conforming to SAE-AMS3276 or MIL-S-29574, type II.

5.2.10.3 Integral and riveted fuel tanks. The inside surface of integral or permanently fastened, such as riveted, fuel tanks shall be finished and sealed with sealant conforming to MIL-S-8802, MIL-S-29574, or SAE-AMS3276 to prevent corrosion and leakage of fuel. Interior surfaces that are fayed, whether sealed or not, shall be coated with 0.0009 to 0.0015 inch (23 to 38 μm) of corrosion preventive coating conforming to MIL-C-27725. MIL-C-27725 shall not be applied to exterior surfaces.

5.2.10.4 Lubricating oil and hydraulic fluid tanks. The inside surfaces of lubricating oil tanks constructed of corrosion-resistant materials shall not be painted. Tanks of other materials shall be finished with a baked resin coating conforming to MIL-R-3043, applied in accordance with MIL-C-5056.

5.2.10.5 Miscellaneous aluminum alloy tanks. Interior surfaces of miscellaneous aluminum alloy tanks, with the exception of potable water tanks, shall be surface treated in accordance with MIL-A-8625, type II, or MIL-C-5541, class 1A. The interior surfaces of potable water tanks shall not be painted or conversion coated.

5.2.11 Tubing.

5.2.11.1 Nonstructural tubing. With the exception of tubing constructed of titanium alloy, corrosion-resistant steel alloy, heat-resistant steel alloy, and as otherwise specified herein, all nonstructural tubing and plumbing lines shall receive the complete interior or exterior paint system, as applicable, on the exterior of the lines, and shall be protected in accordance with table V.

5.2.11.1.1 Oxygen tubing. Surface finishes (paints, primer coatings, and electrical coatings) and conversion treatments (anodizing or non-electrochemical chromate or phosphate conversion coatings) are not to be applied to the interior of oxygen tubing. Oxygen tubing is to be thoroughly cleaned of all contaminants prior to any mechanical processing, such as double boring, being performed.

5.2.11.1.2 Aluminum tubing and plumbing lines. Interior and exterior surfaces of aluminum-alloy tubing and plumbing lines shall be surface-treated in accordance with MIL-C-5541, class 1A, or MIL-A-8625, type II. The exterior of aluminum plumbing lines in fuel tanks require the application of a corrosion preventive coating conforming to MIL-C-27725.

Paint coatings shall not be applied to the interior surfaces of airspeed indicator tubing or other sensing lines. Aluminum tubing used in fire-extinguishing systems employing halogenated agents shall be finished internally and externally with a baked resin coating conforming to MIL-R-3043, applied in accordance with MIL-C-5056.

TABLE V. Tubing categories and required coatings.

Category	Category description	Primer coating 1/	Final paint system 2/
I	Single tubes having separable connections at each end.	Applied after all required forming operations have been completed and prior to fabrication of the assembly.	Topcoat applied after fabrication and prior to installation.
II	Assemblies made up of individual tubes permanently joined by nonseparable type fittings (brazing, welding, swaging) and having separable type connectors at each end.	Primer coating applied, followed by application of sealant (MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276 after all required bending and permanent joining has been completed and prior to final fabrication of the assembly.	Same as for category I
III	Single or multiple tube assemblies having one or more free ends which must be permanently joined by nonseparable type fittings.	Same as for category II. For tube assemblies employing a permanent joining process not compatible with the primer coating during fabrication, the primer coating may be omitted from the affected free ends at a distance acceptable to the procuring activity.	Same as for category I. For al assemblies having been only partially primed, additional primer coating shall be applied as required, followed by the coating of all nonseparable joints with sealant (MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276), followed by the required exterior paint system.
IV	Other types of tube assemblies not covered in categories I, II, or III. For this category, the contractor shall establish a paint protection system acceptable to the procuring activity.	Not applicable.	Not applicable.

1/ Apply primer coatings in accordance with tables I and II. Assemblies in categories I, II, and III, in which sleeves or ferrules are used in the separable connection, and the sleeves or ferrules are fixed in position by deformation of one or both members into contact, the primer coating need not extend beyond the initial point of intimate contact. For all tubing categories where flare fittings are used, primer coating must be applied to the end of the tube.

2/ Any damage occurring to the finish system during installation shall be touched up. For aluminum plumbing lines, see 5.2.11.1.2

5.2.11.1.3 Protection of tubing joints after installation. After installation of the tube assemblies, all remaining non-sealed joints that will not be disconnected during normal servicing, shall receive a coating of sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276, followed by the appropriate top coating. All remaining nonsealed joints that must be disconnected during normal servicing operations shall be coated with corrosion preventive compound conforming to MIL-PRF-16173, grade 4, or MIL-C-85054, which shall seal all exposed spaces between the parts. A second coat of the same material shall be applied to the same areas after a period of 60 minutes. Contractor-prepared maintenance instructions shall require periodic reapplication of this material in-service.

5.2.11.2 Structural tubing.

5.2.11.2.1 Structural carbon steel tubing. All exterior surfaces and all interior surfaces without completely welded or crimped ends of structural carbon steel tubular assemblies shall be finished in accordance with 5.2.5, tables II and III, and with the following, where applicable:

a. Assemblies completely closed by welding or to which the application of primer coating is impractical or ineffective, such as crimped-end tubing not closed by welding or tubing heat treated after assembly, shall be treated after assembly (and heat treated, if necessary) with hot [160°F (71°C) minimum] linseed oil conforming to TT-L-190, or corrosion preventive compound conforming to MIL-C-11796, classes 1 or 1A, or MIL-PRF-16173, grades 2 or 4. The corrosion preventive compound shall be applied under pressure into the hollow member through holes drilled in the tubing, or by immersion of the tubing in a bath of the preservative.
b. For large tubing structures, interconnecting holes may be drilled between members to promote circulation of the corrosion preventive compound, described in 5.2.11.2.1a.
c. Parts subjected to immersion in corrosion preventive oil shall be manipulated in such manner to ensure the absence of air pockets and shall remain in the bath until all bubbling has ceased. The members shall be thoroughly drained after treatment and all access holes drilled in the members shall be closed with cadmium plated, self-tapping screws, or blind rivets. The screws or rivets shall be wet installed with sealant conforming to MIL-S-81733 or MIL-S-29574, type II, and overcoated with the same after installation. The exterior surface of the tubing assemblies shall be free of oil, grease, and dirt prior to application of the prescribed finish system.

5.2.11.2.2 Structural aluminum-alloy tubing. Interior surfaces of structural aluminum-alloy tubing shall be protected in accordance with 5.1.5 and tables II and III. The interior surfaces of structural aluminum-alloy tubing closed by welding shall be coated with primer coating conforming to MIL-PRF-23377, type I or II, class C or N, or corrosion preventive compound conforming to MIL-PRF-16173, grade 2 or 4, applied through appropriately drilled holes.

5.2.11.2.3 Structural copper alloy, corrosion-resistant alloy, and heat-resistant alloy tubing. Interior and exterior surfaces of structural copper alloy, corrosion-resistant alloy, and heat-resistant alloy tubing need not be painted, except as required for dissimilar metal contact.

5.2.11.3 Mechanical attachment. Tubular parts that have fittings mechanically attached shall have all edges of the attachment sealed with a sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276.

5.2.12 Attaching parts and fasteners.

5.2.12.1 General finish. Attaching parts and fasteners, such as screws, nuts, bolts, bushings, spacers, washers, rivets, high-shear rivets, self-tapping screws, sleeves for "shakeproof" fastener studs, self-locking nuts, "speed nuts," and clamps, need not be painted in detail, except when dissimilar metals are involved in the materials being joined. All attaching parts, or the surfaces with which they are in contact, shall be wet installed with primer coating conforming to MIL-PRF-23377, type I or II, class C or N, TT-P-1757 or sealant conforming to MIL-S-81733 or MIL-S-29574, type II. Primer coating or sealant shall not be applied to the threaded portions of fasteners for which torque requirements are established without the coating. When installed in aluminum structures, all steel, cadmium plated, and non-aluminum fasteners shall be overcoated with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276. Dry-film thickness of sealant shall be a minimum of 0.006 inch (152 μm). For magnesium dissimilar metal combinations, 5.2.1.2 shall apply.

5.2.12.2 Close tolerance bolts. Prior to installation, close tolerance bolts shall receive application of primer coating conforming to MIL-PRF-23377, type I or II, class C or N, TT-P-1757, sealant conforming to MIL-S-81733, except where frequent removal of the bolts is required. For close tolerance bolts requiring frequent removal, use corrosion preventive compound conforming to MIL-C-11796, class 3, or MIL-PRF-16173, or corrosion-inhibiting, solid film lubricant conforming to MIL-L-46010 or MIL-L-23398. MIL-L-46010 requires heat curing and shall not be used on aluminum parts. MIL-L-23398 is air curing and may be used on all types of metallic parts. When a solid film lubricant is used, it shall be applied and completely cured prior to assembly. The bolt shall then be wet installed and fillet sealed (after installation) with sealant conforming to MIL-S-81733.

5.2.12.3 Adjustable parts. Threads of adjustable parts, such as tie rods and turnbuckles, shall be lubricated and protected, both before and after assembly, with anti-seize compound conforming to MIL-T-83483, with lubricating oil conforming to MIL-PRF-63460, with corrosion preventive compound conforming to MIL-PRF-16173, grade 3, or with lubricating oil conforming to VV-L-800, followed by corrosion preventive compound conforming to MIL-PRF-16173, grade 2.

5.2.12.4 Touch-up. All attaching parts shall receive final coating after installation. Topcoats shall be applied over the primer coating to match the color of adjacent exterior

surfaces, when necessary. Nuts and heads of bolts in joints that are subsequently lubricated need not receive final finishing.

5.2.12.5 Washers. Washers constructed of aluminum alloy 5356 or 5052, or high pressure phenolic laminates shall be used under machine screws, countersunk fasteners, bolt heads and nuts that would otherwise contact magnesium and shall be wet installed and fillet sealed after installation with sealant conforming to MIL-S-81733.

5.2.13 Areas subjected to corrosive fluids. Battery compartments constructed of leakproof and corrosion resistant material require no further finishing. All other battery compartments and adjacent areas subject to vapors and spills shall be coated with a polyurethane casting resin approved by the procuring activity. All bilge areas, all surfaces within 24.0 in. (610 mm) of urinals, and all areas beneath lavatories and galleys shall be finished with a primer coating conforming to TT-P-2760 applied to a dry film thickness greater than or equal to 2 mils (51 μm), or applied to a dry film thickness greater than or equal to 0.0009 inch (23 μm) of MIL-PRF-23377 or MIL-PRF-85582 and topcoated with coating conforming to MIL-PRF-85285, in accordance with 5.1.5 and tables II and III for exterior surfaces.

5.2.14 Fastenings and strut ends on seaplanes. All fastenings, strut ends, and other similar parts of seaplanes (see 3.5) exposed to the action of sea water or salt spray shall receive additional protection in the form of a coat of corrosion preventive compound conforming to MIL-PRF-16173, grade 4. Subsequent to painting, all open-ended struts shall be coated by dipping in corrosion preventive compound conforming to MIL-PRF-16173, grade 4, followed by draining and wiping the exterior surfaces prior to installation. If it is not possible to coat parts completely by dipping, application by brush or spray is permissible.

5.2.15 Float bumpers. The forward face of the float or hull under the bumper pad and all parts of the bumper shall receive a coat of corrosion preventive compound conforming to MIL-PRF-16173, grade 4, in addition to the protection required by 5.1.5 and tables II and III.

5.2.16 Electrical parts.

5.2.16.1 Connections. The exterior of electrical bonding and ground connections conforming to MIL-STD-464 shall be finished in accordance with 5.2 and table II after installation. All permanent electrical bonds, such as jumpers and ground studs, shall be sealed after installation with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276. Connectors not permanently sealed shall be internally and externally protected with material conforming to MIL-C-81309, type III.

5.2.16.2 Conduit and boxes. Electrical conduit and junction or relay boxes shall receive protection in accordance with 5.1.5 and tables II and III. Plastic coated and braided wire shall not be coated.

5.2.16.3 Electrical connector pins and sockets. Electrical connector pins and sockets shall have a thin, continuous coat of MIL-C-81309, type III, applied to the pins and pin receptacle end of the connector prior to mating the connector halves. The connector shells shall then be coated with MIL-C-81309, type III after mating the connector halves.

5.2.17 Surfaces and components exposed to high temperatures. Areas and components that are exposed to temperature ranges:

a. 300 to 400°F (149 to 204°C), either on the ground or in flight (other than instantaneous effects), shall be finished in accordance with 5.1.5 and tables II and III in the appropriate color and gloss. For exposure to operational temperatures of 250 to 350°F (121 to 177°C), sealant conforming to SAE-AMS3374 or SAE-AMS3276 shall be used. MIL-S-29574 may be used in areas where the operational temperature is a maximum of 300°F (149°C).
b. 400 to 500°F (204 to 260°C), a silicone finishing system shall be applied directly to surface treated metal, omitting the wash primer and primer coating. The color shall conform to the color scheme for the weapons system. For exposures up to 450°F (232°C), sealant conforming to MIL-A-46146 may be used, when authorized by the procuring activity.
c. Above 500°F (260°C), heat-resistant finishes conforming to TT-P-28 may be used, however, each application must be approved by the procuring activity.

5.2.17.1 Fire insulating paint for Naval aircraft. Within power-plant compartments of U.S. Navy aircraft and other compartments normally operating at temperatures below 300°F (149°C), where fires are likely to occur as a result of flammable fluid leakage, and in areas adjacent to bleed air ducts and valves that contain air at temperatures above 300°F (149°C), all fluid containers (air bottles, oxygen containers, hydraulic reservoirs, accumulators, and cylinders) which could escalate the intensity of a fire by explosion due to excessive heat, shall be protected by a finish system consisting of a minimum of 0.6 mil (15 μm) of primer coating conforming to MIL-PRF-23377 or MIL-PRF-85582 plus a minimum of 0.020 in. (0.51 mm) dry film thickness of MIL-PRF-46081 thermal insulating paint (normal interior finish requirements apply).

5.2.17.2 Coatings for temperature control. Surfaces subject to heating due to radiation from adjacent hot components or from exposure to a thermal pulse shall be finished with low-absorption coatings. The use of coatings for control of temperature must be approved by the procuring activity prior to use. The request for approval shall include all necessary technical information concerning the proposed material and application, with data supporting the effectiveness of the coating system.

5.2.18 Hull and float bottoms. Flying-boat hull bottoms and float bottoms shall be finished with a system in accordance with tables II and III that provides protection from the erosive effects of high speeds in water and shall be aerodynamically smooth. Use of rubber grommets

under the head of rivets, bolts, and screws on the exterior skin is prohibited. Where antifouling paint is prescribed, the finish shall be approved in each instance by the procuring activity.

5.2.19 Wood and phenolic surfaces. Wood and phenolic surfaces shall be finished with a minimum of two coats of varnish or enamel, plus an additional two coats, if in contact with metal surfaces or in exterior locations, in accordance with MIL-STD-171.

5.2.20 Molded plastic and ceramics. Transparent plastic parts shall not be painted. Other plastic parts (except fiberglass laminates, antenna and magnetic airborne detector (MAD) housing, and radomes) need not be painted, except for color-matching purposes. Plastic or ceramic insulators (used for radio antennae) shall not be painted. Their edges, however, shall be sealed with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276, after installation in exterior locations.

5.2.21 Finishing of ducts. The interior surfaces of aluminum alloy heating and cooling ducts need not be painted, provided that those surfaces have been anodized in accordance with MIL-A-8625, type II, and sealed. Aluminum alloy duct work treated in accordance with MIL-C-5541, Class 1A, shall be painted as required for interior surfaces (see tables II and III). Prior to application of insulation material, the exterior surfaces of insulated duct work, regardless of composition, shall be coated with material to withstand the temperatures and environment of the system. Titanium and nickel alloys do not require painting.

5.2.22 Reinforced plastic components. Plastic parts reinforced with fibers shall be finished for protection against erosion. Leading edges of fiber-reinforced plastic radomes, antennae, MAD housings, and other components exposed to the air stream, shall be finished with a rain-erosion resistant coating conforming to MIL-C-83231, MIL-C-83445, or MIL-PRF-85322. MIL-PRF-85322 requires the use of wash primer conforming to MIL-C-8514. Other methods of protection, such as a boot of erosion and high temperature-resistant material, may be used when approved by the procuring activity. In exterior locations, edges shall be sealed with sealant conforming to MIL-S-8802, MIL-S-29574, MIL-S-81733, or SAE-AMS3276. Transparent components, whether glass or plastic, shall not be painted. Plastic parts and surfaces, other than those described above, may be painted for color-matching purposes.

5.2.23 Metal leading edges. Exterior surfaces of metallic leading edges exposed to speeds in excess of 500 knots shall be finished with rain erosion-resistant coatings in accordance with MIL-F-18264. Exterior surfaces shall be aerodynamically smooth.

5.2.24 Helicopter rotor-blade leading edges. The finishing system used on the leading edges of helicopter rotor blades shall prevent deterioration of the underlying surfaces and shall be resistant to erosion from rain, sand particles, seaspray, and insects. This type of finishing system is not necessary when the edges are made of corrosion-resistant and erosion-resistant material, such as nickel-plated stainless steel.

5.2.25 Rubber (natural and synthetic). Natural and synthetic rubber shall not be painted, greased, or oiled.

6. NOTES

(This section contains information of a general or explanatory nature which may be helpful but is not mandatory.)

6.1 Intended use. This standard covers the standard methods and materials used for the protective surface treatment used on aerospace weapons system parts (including spares) and assemblies (such as fuselages, wings, cowls, strut empennage, rotor blades, and floats). This standard does not intend to address the application of solid film lubricants as a finishing system. This standard does not apply to equipment (such as propellers, electrical and electronic equipment, power plants, and instruments) or to standard contractor purchased accessories, (such as electric motors, generators, switches, hydraulic valves, and similar parts), unless specifically referenced in the item specification or drawing.

6.2 Issue of DoDISS. When this standard is used in acquisition, the applicable issue of the DoDISS must be cited in the solicitation (see 2.2.1 and 2.3).

6.3 Associated Data Item Descriptions (DIDs). This standard is cited in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), as the source document for the following DIDs. When it is necessary to obtain the data, the applicable DIDs must be listed on the Contract Data Requirements List (DD Form 1423), except where the DoD Federal Acquisition Regulation Supplement exempts the requirement for a DD Form 1423.

DID Number	DID Title
DI-MFFP-81336	Finish specification

The above DID was current as of the date of this standard. The current issue of the AMSDL must be researched to ensure that only current and approved DIDs are cited on the DD Form 1423.

6.4 Subject term (key word) listing.

Corrosion prevention
Finish specification
Protective coatings
Surface treatments

6.5 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

CONCLUDING MATERIAL

Custodians:
Army - MR
Navy - AS
Air Force - 11

Review activities:
Army - AR, AV, MI
Navy - CG, MC
Air Force - 71, 84, 99

Preparing Activity
Navy - AS
(Project MFFP-0605)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.
   NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-STD-7179	2. DOCUMENT DATE (*YYMMDD*) 970930

3. DOCUMENT TITLE
Finishes, Coatings, And Sealants, For The Protection Of Aerospace Weapons Systems

4. NATURE OF CHANGE (*Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.*)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (*Last, First, Middle Initial*)	b. ORGANIZATION	
c. ADDRESS (*Include Zip Code*)	d. TELEPHONE (*Include Area Code*) (1) Commercial: (2) DSN (*If Applicable*):	7. DATE SUBMITTED (*YYMMDD*)

8. PREPARING ACTIVITY

a. NAME	b. TELEPHONE NUMBER (*Include Area Code*)
COMMANDER NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION	(1) Commercial (732) 323-2947 (2) DSN 624-2947
c. ADDRESS (*Include Zip Code*) CODE 414100 B120-3 HIGHWAY 547 LAKEHURST, NJ 08733-5100	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone: (703) 756-2340 DSN 289-2340