

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
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1. TITLE  Finish Specification Report			2. IDENTIFICATION NUMBER  DI-MFFP-81402	
3. DESCRIPTION/PURPOSE 3.1 The finish specification identifies the specific organic and inorganic surface pretreatments and coatings intended to be used for corrosion protection of the materials identified in the corrosion prevention and control plan. The specification will be used by the acquiring activity to evaluate the adequacy of the finishes selected by the contractor in meeting the specific design, performance, and operational requirements contained in military specifications and standards and appropriate systems specifications.				
4. APPROVAL DATE (YYMMDD)  940606	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)  F/ASC-ENFSA	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description (DID) contains the format and content preparation instructions for data resulting from the work task described by paragraph 5.1.2 of MIL-STD-1568. 7.2 This DID must be tailored to the specific system being acquired and the acquiring service's specific requirements.  <div style="text-align: right;">(Continued on page 2)</div>				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER  F7034
10. PREPARATION INSTRUCTIONS 10.1 <u>Reference documents</u> . The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract. 10.2 <u>Format</u> . This specification shall be in the contractor's format. 10.3 <u>Content</u> . The finish specification shall include the following data. 10.3.1 <u>Scope</u> . The scope paragraph shall contain statements as to the degree of coverage encompassed by the document, for example, the entire system, parts thereof, spare parts, standard parts, government furnished equipment, and vendor supplied parts. It shall also specify the type of protection per MIL-F-7179.  <div style="text-align: right;">(Continued on page 2)</div>				
11. DISTRIBUTION STATEMENT  DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.				

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**Block 7, Application/Interrelationship (Continued)**

7.3 This DID is applicable to any system acquisition that includes a requirement for a finish specification in accordance with MIL-STD-1568. This includes MIL-F-7179, MIL-STD-1530, MIL-STD-1783, MIL-A-87244, and AFGS-87249.

7.4 This DID shall be used for the entire system and all major subsystems, including airframe, avionics, engine, mechanical subsystems, and support equipment.

7.5 This DID is intended for use in conjunction with the corrosion prevention and control plan DID.

7.6 This DID supersedes DI-S-3598A.

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**Block 10, Preparation Instructions (Continued)**

10.3.2 Requirements. The requirements paragraph shall contain the contractor's description of the application and control techniques to be utilized with the organic finishes. Any special considerations due to system peculiarity shall be stated, for example, aerodynamic heating, nuclear effects, severity of environment, electromagnetic compatibility/electromagnetic pulse requirements, and resistance to chemical/biological warfare agents/decontaminants. Definitions contained herein shall include exterior surfaces versus interior surfaces and permanently installed fasteners. Subsequent paragraphs shall specify the details of the finish system. Each finish procedure shall be assigned a code designation for reference on production drawings.

10.3.3 Special exterior finishes. Appropriate subparagraphs of the finish specification shall cover special finishes for special areas such as wing and empennage, control surface cutouts and wells, bomb bays, wheel wells and landing gears, leading edges, walkways, surfaces exposed to exhaust gases, surfaces exposed to high temperatures, air vehicle components, laminates, and exterior markings.

10.3.4 Notes. The notes section shall contain a list of surfaces not to be treated or coated along with supporting rationale. This section shall also contain definitions.

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Block 10, Preparation Instructions (Continued)

10.3.5 Sealing. The sealing paragraph shall include:

- (1) Sealing requirements on:
  - (a) Permanently attached structure
  - (b) Structure which is mechanically separable for maintenance
  - (c) Dual or multiple function interfaces (for example, electrically conductive structural joint)
  - (d) Mechanically attached creviced joints (for example, riveted)
  - (e) Galvanic couples (with protective permanent finish codes)
  - (f) Crevice sealing of sump located joints
  - (g) Environmental sealing (including mechanically separable hatches and avionic bays)
  - (h) Fluid tank sealing (fuels, operational fluids, condensed gases)
  - (i) Fuselage pressure sealing (joints, faying surfaces, windows)
  - (j) Acid sealing (batteries and battery boxes, including vents)
  - (k) Firewall sealing
  - (l) Aerodynamic smoothing
  - (m) Potting including electrical connectors
  - (n) Heat resistant sealing
  - (o) Fay surface sealing
  - (p) Permanent fastener sealing
  - (q) Drainage provisions
  - (r) Latrine sealing, integrity, and overflow provisions
  - (s) Galley sealing, integrity, and spillage provisions
  - (t) Removable fastener sealing
  - (u) Transparency sealing

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Block 10, Preparation Instructions (Continued)

- (v) Marker beacon, antennae, and other external interface installations
- (w) Coolant lines, elastomers, Marmon and "V" clamping
- (2) List of sealing materials and process specifications used.
- (3) Inspection and control requirements.

10.3.6 Finish codes. The finish specification shall contain a table of all finish codes allowed for use in the system. This table shall include, for each finish code, reference to the application specification or standard, reference to quality assurance verification methods, and the resulting finish thickness.

10.3.7 Specification cross references. The finish specification shall contain a cross reference of company and vendor specifications with the nearest equivalent military or industry standard specifications. Any company or vendor specifications which are not equivalent shall be identified and the differences described.

10.3.8 Other considerations. Alternative finishes to those described in MIL-F-7179 and MIL-S-5002 shall be presented in a separate section or appendix, and accompanied by supporting technical information to justify their use on any specific drawing.

10.4 Integrity program cross references. The following appendices, organized by subsystem, shall reference applicable paragraphs of documents containing information described in 10.3.

- 10.4.1 Airframe finish specification.
- 10.4.2 Engine finish specification.
- 10.4.3 Mechanical subsystems finish specification.
- 10.4.4 Avionics finish specification.
- 10.4.5 Support equipment finish specification.