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Date: 01-Jul-2026

SMI/REF: 2604-704

Product: **SYSTEM X PHANTOM** *(received 04-May-2026)*

Dilution: As received



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**BOEING SPECIFICATION SUPPORT STANDARD**

## BSS7432

## EVALUATION OF AIRPLANE MAINTENANCE MATERIALS

(Version: Original issue, 28-May-2019 / supersedes Boeing D6-17487)

*(Note: Boeing D6-17487 was cancelled and superseded by BSS7432 on 28-May-2019)*

***Category: Exterior and General Cleaners and Liquid Waxes, Polishes and Polishing Compounds***

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|---|---|
| Sandwich Corrosion Test | Conforms |
| Acrylic Crazing Test | Conforms |
| Paint Softening Test | Conforms |
| Hydrogen Embrittlement Test | Conforms |

Respectfully submitted,

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Director

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Sandwich Corrosion Test: Specimen preparation, testing, and interpretation must be in accordance with ASTM F1110 using the following materials and with the following exceptions:

a. Reagents and materials exception:
   (1). Clad 7075-T6 aluminum alloy in accordance with AMS-QQ-A-250/13 (AMS 4049 or AMS-QQ-A-250/13 optional) (2024-T3 Alclad specimens are neither required nor optional.)
   (2) Bare 7075-T6 aluminum alloy in accordance with AMS-QQ-A-250/12 (AMS 4045 or AMS-Q-A-250/12 optional) anodized in accordance with BAC 5019 or MIL-A-8625, Type I.
   (3) Anodize must be sealed. (2024-T3 nonclad specimens are neither required nor optional).
   (4) Distilled or deionized water may be used in place of ASTM F1193, Type IV reagent grade water for control specimens.
   (5) The filter paper may be Whatman No. 5 or equivalent in place of Whatman GFA glass fiber paper.

b. Procedure exceptions:
   (1) The filter paper strips must be 1 by 3 inches and must be placed in the center of the sandwiched specimens.
   (2) Each sandwich specimen must be held together with waterproof tape, with no more than 1 piece of tape (maximum width 0.75 inch) on each of two opposite edges.

c. Interpretation of result exceptions:
   (1) Leaching or lightening of the chromate sealed anodize coating must not be cause for rejection.
   (2) Deposits or residues from the material being tested that are not products of corrosion of the test panel surface must not be cause for rejection.
   (3) Special procedure for evaluation of fire extinguishing foams and liquids. Panels with very light darkening or staining, which have no obvious metal attack or pitting, may be swabbed (cotton-tipped swabs or cotton gauze) with a 0.26 mole/liter sulfuric acid solution and re-examined. If the coloration is substantially removed and there is no evidence of metal attack or pitting, the condition must not be cause for rejection. (The 0.26 mole/liter sulfuric acid solution can be prepared by adding 1.5 cc of concentrated sulfuric acid (SG = 1.84) to 100 cc of distilled or deionized water.
   (4) Panels must have a rating of 1 (no more than 5 percent of the surface area must be corroded) or better in accordance with ASTM F 1110. The preferred method of determining the corroded area is by using image analysis. Other means approved by the purchaser may be substituted.
   (5) Any corrosion in excess of that shown by the control group must be cause for rejection.

Sandwich Corrosion Test: *continued*

| | Bare 7075-T6 (AMS 4045) Anodized per BAC 5019 (Type 3 chromate seal) | Clad 7075-T6 Aluminum (AMS 4049) |
|---|---|---|
| **PRODUCT** | **1** | **1** |
| Control | 1 | 1 |

Result Conforms

Acrylic Crazing Test:

The material being tested must not craze, crack, or etch acrylic test specimens when tested in accordance with ASTM F 484 using Type C (stretched acrylic plastic in accordance with MIL-P-25690) stressed to an outer fiber stress of 4500 psi.

***PRODUCT: No crazing, cracking, or etching***

Result Conforms

Paint Softening Test Procedure:

a. Testing must be in accordance with ASTM F502 using the following coating systems.
   (1) BMS 10-79, Type II primer applied in accordance with BAC5882 plus BMS 10-60, Type II enamel in accordance with BAC5845.
   (2) BMS 10-79, Type III primer applied in accordance with BAC5882, plus BMS 10-100 coating in accordance with BAC5797.

b. Three specimens conforming to Section 7.7.a.(1) and three specimens conforming to Section 7.7.a.(2) must be used for each test condition.

c. The material being tested must not produce a decrease in film hardness greater than two pencils, or any discoloration or staining.
   NOTE: Slight darkening of the BMS 10-100 surface is acceptable.

***As received: Paint system 1: < 2 pencil hardness change after 24 hour post-exposure dry time.***
***Paint system2: < 2 pencil hardness change after 24 hour post-exposure dry time.***
***No staining / discoloration***

Result Conforms

Hydrogen Embrittlement Test:

Hydrogen Embrittlement testing must be in accordance with ASTM F 519 using cadmium plated Type 1a.2, Type 1c, or Type 2a specimens. All requirements of ASTM F519 for specimens, preparation, testing, and reporting must apply. Type 1a.2 specimens must meet the requirements of D6-4307.

***Specimens: Type 1c, cadmium plated per MIL-STD-870.***
***(45% load, 150 hours, notched immersed for the duration, room temp.)***

| | | |
|---|---|---|
| ***As received:*** | ***#1:*** | ***No failure occurred within 150 hours.*** |
| | ***#2:*** | ***No failure occurred within 150 hours.*** |
| | ***#3:*** | ***No failure occurred within 150 hours.*** |
| | ***#4:*** | ***No failure occurred within 150 hours.*** |

Result Conforms