	131 Avenue	SA		305) 971-7047 305) 971-7048	
Attn:	RealClean Aviati 608 North St Geneva, IL 6013		Date:	07-Dec-2018 1810-164	
Product:	TURBINE SOOT	Γ MASTER (received :	23-Oct-2018)		
Dilution:	As received Page 1 of 4				
	Exterior an	DEING D6-17487 REN d General Cleaners a shes and Polishing Co	nd Liquid Waxes.		
Sandwich (Corrosion Test	Conforms			
Acrylic Cra	zing Test	C	Conforms		
Paint Softening Test			C	Conforms	
Hydrogen f	Embrittlement Test		C	onforms	

Respectfully submitted,

Patricia D. Viani, SMI, Inc.

Client: Product:

Dilution:

RealClean Aviation Products

TURBINE SOOT MASTER

As received

BOEING D6-17487 REVISION T (Exterior & General)

Date: SMI/REF: 07-Dec-2018

1810-164

Page 2 of 4

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

Reagents and materials exception:

Clad 7075-T6 aluminum alloy in accordance with QQ-A-250/13 (AMS 4049 (1).or AMS-QQ-A-250/13 optional) (2024-T3 Alclad specimens are neither required nor optional.)

Bare 7075-T6 aluminum alloy in accordance with QQ-A-250/12 (AMS 4045 (2)or AMS-Q-A-250/12 optional) anodized in accordance with BAC 5019 or MIL-

A-8625, Type I.

Anodize shall be sealed. (2024-T3 nonclad specimens are neither required (3)

nor optional).

Distilled or deionized water may be used in place of ASTM F1193, Type IV (4) · reagent grade water for control specimens.

The filter paper may be Whatman No. 5 or equivalent in place of Whatman (5)

GFA glass fiber paper.

b. Procedure exceptions:

(2)

The filter paper strips shall be 1 by 3 inches and shall be placed in the center (1)of the sandwiched specimens.

Each sandwich specimen shall be held together with waterproof tape, with no (2)more than 1 piece of tape (maximum width 0.75 inch) on each of two opposite edges.

Interpretation of result exceptions: C.

Leaching or lightening of the chromate sealed anodize coating shall not be (1) cause for rejection.

Deposits or residues from the material being tested that are not products of corrosion of the test panel surface shall not be cause for rejection.

Special procedure for evaluation of fire extinguishing foams and liquids. (3)

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 shall 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.

Panels shall have a rating of 1 (no more than 5 percent of the surface area (4)shall 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.

Any corrosion in excess of that shown by the control group shall be cause for (5)

rejection.

Client	RealClear	n Aviation Products	Date:	07-Dec-2018
Produ	ct: TURBINE	SOOT MASTER	SMI/REF	
Dilutio BOEII		ed VISION T <i>(Exterior & Genera</i>	oli Done 2 a	
50			al) Page 3 o	114
Sandy	vich Corrosion Te			
		Bare 7075-T6 (AMS 4045) Anodized per BAC 5019	Clad 7075-T6 A	Aluminum
		(Type 3 chromate seal)	(AMS 40	49)
	PRODUCT	1	1	
	Control	1	1	
		1	Result	Conforms
Acrylic	Crazing Test:			
	The material bei	ing tested shall not craze, cr	ack, or etch acryl	ic test specimens
	when tested in ac	cordance with ASTM F 484 L	sing Type C (strete	ched acrulic niactic
	in accordance wi	ith MIL-P-25690) stressed to	an outer fiber stre	ss of 4500 psi.
		COCCUCT II		
		PRODUCT: No crazing, cr	acking, or etchin	g
		PRODUCT: No crazing, cr	acking, or etchin	g
(*)		PRODUCT: No crazing, cr	Result	g Conforms
Paint 9		PRODUCT: No crazing, cr	acking, or etchin	g
Paint S	Softening Test Pr	PRODUCT: No crazing, cr	Result	Conforms_
	Softening Test Pr Testing shall be systems.	ocedure: No crazing,	ResultF502 using the	Conforms following coating
a.	Softening Test Pr Testing shall be systems. (1) BMS 10-7	ocedure: in accordance with ASTM Type II primer applied in a	Result F502 using the	Conforms following coating
a.	Softening Test Proceeding Shall be systems. (1) BMS 10-7 BMS 10-6	ocedure: in accordance with ASTM g, Type II primer applied in a	Result F502 using the ccordance with BA	Conforms following coating
a.	Softening Test Proceeding Shail be systems. (1) BMS 10-6 (2) BMS 10-7	ocedure: in accordance with ASTM g, Type II primer applied in a 0. Type II enamel in accorda g, Type III primer applied in a	Result F502 using the ccordance with BAC5844	Conforms following coating
a.	Softening Test Proceeding Shall be systems. (1) BMS 10-7 BMS 10-6 (2) BMS 10-7	ocedure: in accordance with ASTM g, Type II primer applied in a Type II enamel in accorda g, Type III primer applied in a	Result F502 using the ccordance with BAC5845 accordance with BAC5797	Conforms following coating AC5882 plus 5. AC5882, plus
a.	Softening Test Proceeding Shall be systems. (1) BMS 10-7 BMS 10-6 (2) BMS 10-1 Three specimens	ocedure: in accordance with ASTM g, Type II primer applied in a tio. Type II enamel in accorda g, Type III primer applied in a tio coating in accordance with	Result F502 using the ccordance with BAC5845 accordance with BAC5797.	Conforms following coating AC5882 plus 5. AC5882, plus
a.	Softening Test Proceeding Shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) si	ocedure: in accordance with ASTM g, Type II primer applied in a coorda g, Type III primer applied in a 00 coating in accordance with accordance with a conforming to Section 12a. (1)	Result F502 using the coordance with BA nce with BAC5797. and three specimentition	Conforms following coating AC5882 plus AC5882, plus Dens conforming to
а. b. c.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils,	ocedure: in accordance with ASTM g, Type II primer applied in a coorda g, Type III primer applied in a 00 coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a prime any discoloration or staining to a conforming to Section 12a.	Result F502 using the ccordance with BA ccordance with BAC5845 accordance with BAC5797.) and three specimedition. I decrease in filming.	Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater
а. b. c.	Softening Test Proceeding Shail be systems. (1) BMS 10-7 BMS 10-6 (2) BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slige	ocedure: in accordance with ASTM g, Type II primer applied in a coorda g, Type III primer applied in a 00 coating in accordance with accordance with a conforming to Section 12a. (1)	Result F502 using the ccordance with BA ccordance with BAC5845 accordance with BAC5797.) and three specimedition. I decrease in filming.	Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater
а. b. c.	Softening Test Proceeding Shall be systems. (1) BMS 10-7 BMS 10-6 (2) BMS 10-7 BMS 10-1 Three specimens Section 12a(2) slip than two pencils, NOTE: Slip PRODUCT:	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to Coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10-	Result F502 using the coordance with BAC5844 accordance with BAC5797. and three specimal dition. decrease in filming.	Conforms Conforms following coating AC5882 plus AC5882, plus nens conforming to hardness greater ceptable.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a coorda g, Type III primer applied in a coorda g, Type III primer applied in a coordance with a conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a corn any discoloration or staining the conforming of the BMS 10-pencil hardness change after No discoloration or staining the coloration or stainin	Result F502 using the coordance with BAC5844 accordance with BAC5845 accordance with BAC5797. and three specimalition. decrease in filming. 100 surface is accordance is accordance.	Conforms Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10- pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining	Result F502 using the ccordance with BAC5845 accordance with BAC5797. and three specimal dition. decrease in filming. 100 surface is accordance with post-exity.	Conforms Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a coorda g, Type III primer applied in a 00 coating in accordance with a conforming to Section 12a. (1 hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10-pencil hardness change after the conforming the company discoloration or staining the conforming of the bms 10-pencil hardness change after the conforming of the bms 10-pencil hardness change after the conforming of the conforming of the conforming after the conforming of the bms 10-pencil hardness change after the conforming of the conforming after the conforming of the conforming after th	Result F502 using the ccordance with BAC5845 accordance with BAC5797. and three specimal dition. decrease in filming. 100 surface is accordance with post-exity.	Conforms Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10- pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining	Result F502 using the ccordance with BAC5845 accordance with BAC5797. and three specimal dition. decrease in filming. 100 surface is accordance with post-exity.	Conforms Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10- pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining	Result F502 using the ccordance with BAC5845 accordance with BAC5797. and three specimal dition. decrease in filming. 100 surface is accordance with post-exity.	Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10- pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining	Result F502 using the ecordance with BAC5845 accordance with BAC5845 accordance with B BAC5797. and three specimalition. A decrease in filming. 100 surface is accordance with BAC5797. and three specimalition.	Conforms Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.
b.	Softening Test Proceeding shall be systems. (1) BMS 10-7 BMS 10-7 BMS 10-1 Three specimens Section 12a(2) side than two pencils, NOTE: Slig PRODUCT: Paint system 1: 4	ocedure: in accordance with ASTM g, Type II primer applied in a to Type III primer applied in a to Type III primer applied in a to coating in accordance with conforming to Section 12a. (1) hall be used for each test corning tested shall not produce a or any discoloration or staining the darkening of the BMS 10- pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining pencil hardness change aft No discoloration or staining	Result F502 using the ecordance with BAC5845 accordance with BAC5845 accordance with B BAC5797. and three specimalition. A decrease in filming. 100 surface is accordance with BAC5797. and three specimalition.	Conforms following coating AC5882 plus AC5882, plus hens conforming to hardness greater ceptable posure dry time.

Client:

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1810-164

Page 4 of 4

Hydrogen Embrittlement Test:

Hydrogen Embrittlement testing shall 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 shall apply. Type 1a.2 specimens shall 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	
	10.00		