

PROCESS

RAYTHEON AIRCRAFT COMPANY

SPECIFICATION

Brazing

Aluminum	Mil-B-7883, AWS C3.7
Copper	Mil-B-7883, AWS C3.6
Nickel	Mil-B-7883, AWC C3.6
Silver	AWS C3.4, 3.5, 3.6
Furnace	Mil-B-7883, AWS C3.6
Induction	Mil-B-7883, AWS C3.5
Dip	Mil-B-7883, AWS C3.7
Nickel Brazing of Steel and Corrosion and Heat Resistant Alloys	Mil-B-7883, AWS C3.6
Torch	Mil-B-7883, AWS C3.4

Burn Testing

Interior/Upholstery Materials	BS 414, FAR 25.853
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Chemical Milling

Aluminum Alloys	Commercial Practice
Nickel Based Alloys	Commercial Practice
Steel Alloys	Commercial Practice

Chemical Processing

Chromic Acid Anodize, Type I - Aluminum	Mil-A-8625, AMS 2470
Sulfuric Acid Anodize, Type II - Aluminum	Mil-A-8625, AMS 2471
Color Anodize - Aluminum	AMS 2472
Hard Coat Anodize - Aluminum	Mil-A-8625
Black Oxide Conversion Coat - Steel	AMS 2485
Cleaning of Metals for Bonding	BS 25210
Conversion Coat, Class 1A - Aluminum	Mil-C-5541, AMS 2473
Conversion Coat, Class 3 - Aluminum	Mil-C-5541, AMS 2474
Conversion Coat, Magnesium (Dow 7)	Mil-M-3171, AMS 2475
Conversion Coat, Magnesium (Dow 19)	Mil-M-3171, AMS 2475
Dri-Lube	Mil-M-45202
Dry Film Lube	Mil-L-46010
Passivate	QQ-P-35
Phosphate Conversion Coat, Steel	AMS 2480, AMS 2481
Phosphate Coating	Mil-A-8625
Phosphoric Acid Anodize	BS 24554

Composites

Fabrication, Aramid Fiber/Epoxy Prepreg, 250-350 Deg F Curing	BS 23769
Fabrication, Carbon Fiber/Epoxy Prepreg, 250-350 Deg F Curing	BS 23767
Fabrication, Carbon Fiber Reinforced Parts	BS 23717
Fabrication, Fiberglass/Epoxy Prepreg Parts	BS 23771
Fiber Placement	BS 24946
Secondary Bonding, Room Temperature	BS 23738
Secondary Bonding, 250 - 350 Deg F Curing	BS 23773
Testing	BS 23717

Forming

Hot - Aluminum Alloys	As Required
Superplastic - Aluminum Alloys	As Required
Hot - Titanium Alloys	As Required
Superplastic - Titanium Alloys	As Required

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Alloy Steels
 Aluminum Alloys, Cast
 Aluminum Alloys, Wrought
 Copper/Beryllium Alloys
 Corrosion Resistant Steels
 Magnesium
 Stress Relief
 Titanium and Titanium Alloys

Mil-H-6875
 Mil-H-6088, AMS 2771
 Mil-H-6088, AMS 2770
 Mil-H-7199
 Mil-H-6875
 Mil-M-6857
 Mil-H-6875
 Mil-H-81200, AMS 2801

Metal Bonding

Metal Bonding

BS 2647

Peening

Rotary Flap
 Shot
 Shot, Forming

Mil-R-81841
 Mil-S-13165
 BS 25267

Plating and Coating

Cadmium Plate, Brush
 Cadmium Plate, Type I & II
 Cadmium Plate, Titanium: Low Hyd Embrit
 Cadmium Plate, Vacuum Deposited
 Chromium Plate, Decorative
 Chromium Plate, Hard
 Copper
 Hydrogen Embrittlement Relief
 HVOF (High Velocity Oxy Fuel)
 Nickel
 Nickel, Electroless
 Painting
 Plasma Flame Spray
 Powder Coat
 Primer
 Zinc

Mil-Std-865
 AMS 2400, AMS 2401, QQ-P-416
 AMS 2419
 Mil-C-8837, AMS 2426
 AMS 2406, QQ-C-320
 AMS 2406, QQ-C-320
 Mil-C-14550, AMS 2418
 AMS 2759/9
 Commercial Practice
 AMS 2403, QQ-N-290
 AMS 2404, AMS 2405
 Mil-F-18264
 AMS 2437
 Commercial Practice
 Mil-P-23377
 AMS 2404, ASTM B633

Soldering

Tin/Lead, Electrical
 Tin/Lead, Non-Electrical

J-STD-001B
 DOD-STD-1866

Surface Hardening

Carburizing of Steel
 Nitriding of Steel

Mil-S-6090
 Mil-S-6090

Testing, Certification

Welder Qualification

Mil-Std-1595

Testing, Destructive

Chemical Analysis
 Fracture Toughness
 Hardness, Micro Hardness
 Hardness, Rockwell
 Mechanical
 Metallurgical
 Salt Spray
 Spectrochemical
 Wet Solution Analysis

Standard Practice
 ASTM E99
 ASTM E384
 ASTM E18
 ASTM E8
 As Required
 ASTM B117
 As Required
 As Required

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Testing

Nondestructive

Eddy Current
Flourescent Penetrant
Magnetic Particle
Radiographic
Ultrasonic

ASTM E215
ASTM E1417
ASTM E1444
Mil-Std-453
Mil-Std-2154

Welding

Electron Beam
Fusion - Aluminum Alloys
Fusion - Magnesium
Fusion - Steel Alloys
Fusion - Titanium Alloys
Resistance - Aluminum Alloys
Resistance - Magnesium Alloys
Resistance - Nickel and Cobalt Base Alloys
Resistance - Steel Alloys
Resistance - Titanium Alloys
Seam

AMS 2681, BS 4891
Mil-Std-2219, BS 510
Mil-Std-2219
Mil-Std-2219, BS 511
Mil-Std-2219, BS 25272
Mil-W-6858
Mil-W-6858
Mil-W-6858
Mil-W-6858
Mil-W-6858
Mil-W-6858