



# Creative Pathways, Inc. Special Process Approvals

## Master List by Customer Primes and Nadcap Subscribers

| Specification No. | Customer       | Process Code | Nomenclature                                                                                  | Limit Code | Limitations / Comments                      |
|-------------------|----------------|--------------|-----------------------------------------------------------------------------------------------|------------|---------------------------------------------|
| ASTM-E-1417       | Aerojet Rocket | N/A          | NDT – Penetrant Inspection                                                                    | N/A        | 2016.06.15 / 2021.09.01                     |
| AWS D17.1         | Aerojet Rocket | N/A          | Fusion Welding for Aerospace Applications                                                     | N/A        | None                                        |
| NAS 410           | Aerojet Rocket | N/A          | NAS Certification and Qualification of Nondestructive Test Personnel                          | N/A        | None                                        |
| RA0115-116        | Aerojet Rocket | N/A          | NDT – Penetrant Inspection                                                                    | N/A        | SMPP: WI-860-007 Rev B per RA0115-116 Rev R |
| RA1104-003        | Aerojet Rocket | N/A          | Marking; Electrochemical Etching                                                              | N/A        | None                                        |
| RA1607-098        | Aerojet Rocket | N/A          | Fusion Welding, Process and Quality Requirements for                                          | N/A        | None                                        |
| RL10011           | Aerojet Rocket | N/A          | Fusion Welding for RS-25, Process and Quality Requirements for                                | N/A        | SMPP: WI-851-004 Rev D per RL10011 Rev Y    |
| Quality System    | Boeing         | 002          | Boeing approved QMS as defined in D1-4426 Processor Requirements Sec 6.16.2                   | None       | None                                        |
| BAC 5975          | Boeing         | 201          | Fusion Welding - CRES Heat Resist Nickel - Cobalt Alloys                                      | W2         | None                                        |
| MIL-STD-2219      | Boeing         | 202          | Fusion Welding for A/S App-Steel CRES - Heat Resist Alloys                                    | W2         | None                                        |
| AWS D17.1         | Boeing         | 202A         | Spec for Fusion Welding for Aerospace Applications for Steel - CRES and Heat Resistant Alloys | W2         | None                                        |
| AMS-STD-2219      | Boeing         | 203          | Fusion Welding for A/S App-Steel- CRES - Heat Resist Alloys                                   | W2         | None                                        |
| BAC 5975          | Boeing         | 210          | Fusion Welding - Aluminum Alloys                                                              | W2         | None                                        |
| MIL-STD-2219      | Boeing         | 211          | Fusion Welding for Aerospace Applications - Aluminum Alloys                                   | W2         | None                                        |
| AWS D17.1         | Boeing         | 211A         | Spec for Fusion Welding for Aerospace Applications for Aluminum Alloys                        | W2         | None                                        |
| AMS-STD-2219      | Boeing         | 211B         | Fusion Welding for Aerospace Applications - Aluminum Alloys                                   | W2         | None                                        |
| BAC 5975          | Boeing         | 214          | Fusion Welding - Titanium - Titanium Alloys                                                   | W2         | None                                        |
| MIL-STD-2219      | Boeing         | 214A         | Fusion Welding for Aerospace Applications - Titanium Alloys                                   | W2         | None                                        |
| AWS D17.1         | Boeing         | 214B         | Spec for Fusion Welding for Aerospace Applicable for Titanium Alloys                          | W2         | None                                        |
| AMS-STD-2219      | Boeing         | 214C         | Fusion Welding for Aerospace Applications - Titanium Alloys                                   | W2         | None                                        |
| BAC 5974          | Boeing         | 215          | Fusion Welding of Girth Joints in Systems Tubing                                              | None       | None                                        |
| BAC 5423          | Boeing         | 410          | Penetrant Inspection                                                                          | A3         | Limited to Type I, Method A Only.           |
| BSS 7039          | Boeing         | 410A         | Liquid Penetrant Inspection                                                                   | A3         | Limited to Type I, Method A Only.           |
| ASTM-E-1417       | Boeing         | 411          | Penetrant Inspection                                                                          | A3         | Limited to Type I, Method A Only.           |



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| BAC 5962            | Boeing       | 808          | Qual/Cert Welders and Weld Operators                                        | A3         | Excluding physical testing of weld samples. |
| MIL-STD-1595        | Boeing       | 811          | Welder Qualification                                                        | A3         | Excluding physical testing of weld samples. |
| AMS-STD-1595        | Boeing       | 811A         | Welder Qualification                                                        | A3         | Excluding physical testing of weld samples. |
| AWS D17.1           | Boeing       | 812          | Spec for Fusion Welding for Aerospace Applications for Welder Qualification | A3         | Excluding physical testing of weld samples. |
| Weld Inspector Cert | Boeing       | 812B         | Boeing Approved Visual Weld Inspector Certification Program                 | A3         | None                                        |
| BSS 7675            | Boeing       | 812C         | Personnel Certification for Visual Weld Inspectors/Examiners                | A3         | None                                        |
| NAS 410             | Boeing       | 849A         | NDI Personnel Certification Level 3 Penetrant                               | A3         | None                                        |
| STP0645             | Boeing       | H201A        | Welding, Fusion, Stainless Steel and Nickel Alloys                          | W2         | None                                        |
| STP0545             | Boeing       | H205         | Orbital Tube Welding - Corrosion Resistant Steel - Nickel                   | W2         | None                                        |
| HBPS-27-002         | Boeing       | H205A        | Orbital Tube Welding- CRES- Titanium and Nickel Alloys                      | None       | None                                        |
| STP0643             | Boeing       | H205B        | Orbital Tube Welding, CRES, Nickel and Titanium Alloys                      | W2         | None                                        |
| STP0644             | Boeing       | H210E        | Welding, Fusion, Aluminum Alloys                                            | W2         | None                                        |
| DPS10.301           | Boeing       | L204         | Fusion Weld                                                                 | W2         | None                                        |
| DPS10.225           | Boeing       | L204A        | Gas Tungsten Arc Welding                                                    | None       | None                                        |
| DPS10.322           | Boeing       | L205         | Orbital Tube Welding                                                        | W2         | None                                        |
| DPS 10.305          | Boeing       | L812         | Qualification of Fusion Welders & Welding Operators                         | A3         | Excluding physical testing of weld samples. |
| PS22162             | Boeing       | S205         | Automatic Gas Tungsten Arc Welding of Tubular Joints                        | None       | None                                        |
| PS22240             | Boeing       | S214         | Fusion Welding - Titanium                                                   | W2         | None                                        |
| ST0107LA0020        | Boeing       | U210         | Fusion Welding Aluminum Alloys                                              | W2         | None                                        |
| ST0501LT0010        | Boeing       | U410         | Penetrant Inspection - SMPP Req-d                                           | A3         | Limited to Type I, Method A Only.           |
| ASTM-E-1417         | Collins Aero | N/A          | Dye Penetrant Inspection                                                    | None       | None                                        |
| HS 447              | Collins Aero | N/A          | Inspection, Penetrant Methods of                                            | None       | None                                        |
| HS 4845             | Collins Aero | N/A          | Inspection, Radiographic                                                    | None       | None                                        |
| HS 5036 TYE         | Collins Aero | N/A          | Titanium Parts, Handling of                                                 | None       | None                                        |
| PN16.01             | Collins Aero | N/A          | Radiographic Inspection and Classification                                  | None       | None                                        |



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| PN16.03             | Collins Aero | N/A          | Penetrant Inspection and Classification                               | None       | None                   |
| PN44.02             | Collins Aero | N/A          | Computed Radiography                                                  | None       | None                   |
| SVHS 17169          | Collins Aero | N/A          | Titanium Welding                                                      | None       | None                   |
| 037-0143-000        | Honeywell    | N/A          | Gas Tungsten Arc Welding                                              | N/A        | None                   |
| 037-0143-100        | Honeywell    | N/A          | Process Specification, Thermal Switch Gas Tungsten Arc Welding (GTAW) | N/A        | None                   |
| 91547-P6200         | Honeywell    | N/A          | Welding, Fusion, Process for                                          | N/A        | None                   |
| 91547-P6202         | Honeywell    | N/A          | Welding, Fusion, Aluminum and Magnesium, Process for                  | N/A        | None                   |
| 91547-P6207         | Honeywell    | N/A          | Welding, Gas Tungsten-Arc, Process for                                | N/A        | None                   |
| AI-1029             | Honeywell    | N/A          | Weld Repairing of 17-22 AS and 17-22 AV Steel Parts                   | N/A        | None                   |
| AMS2685             | Honeywell    | N/A          | Welding, Tungsten Arc, Inert Gas (GTAW Method)                        | N/A        | None                   |
| AMS2689             | Honeywell    | N/A          | Fusion Welding Titanium and Titanium Alloys                           | N/A        | None                   |
| AWS<br>D17.1/D17.1M | Honeywell    | N/A          | Specification for Fusion Welding for Aerospace Applications           | N/A        | None                   |
| EI-1194             | Honeywell    | N/A          | Repair Welding of Machined Aluminum Alloy Components                  | N/A        | None                   |
| GPS4100-1           | Honeywell    | N/A          | Welding, Fusion Arc                                                   | N/A        | None                   |
| GPS7024-1           | Honeywell    | N/A          | Welding, Fusion Arc (F-18)                                            | N/A        | None                   |
| GPS7315-1           | Honeywell    | N/A          | Joining (Grimes)                                                      | N/A        | None                   |
| GPS7320-1           | Honeywell    | N/A          | Welding, Manual Gas Tungsten Arc, Aluminum Alloys (Grimes)            | N/A        | None                   |
| GPS7401-1           | Honeywell    | N/A          | Welding, Fusion Arc (Space Station)                                   | N/A        | None                   |
| LHP6116             | Honeywell    | N/A          | Fusion Arc Welding, Gas Tungsten Arc, and Plasma Arc Processes        | N/A        | None                   |
| LHP6119             | Honeywell    | N/A          | Tubing Assemblies, Orbitally Fusion Arc Welded                        | N/A        | None                   |
| LW 0201-002         | Honeywell    | N/A          | Fusion & Resistance Welding of Aerospace Alloys                       | N/A        | None                   |
| M691546             | Honeywell    | N/A          | Manufacturing Specification for Fusion Welding of Aluminum Alloys     | N/A        | None                   |
| NGPS 214            | Honeywell    | N/A          | Fusion Welding of Titanium and Titanium Alloys                        | N/A        | None                   |



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| NGPS 850             | Honeywell | N/A          | Fusion Welding                                                                                                                     | N/A        | None                   |
| NGPS 945             | Honeywell | N/A          | Edge Fusion Welding of Small Assemblies                                                                                            | N/A        | None                   |
| P6200                | Honeywell | N/A          | Process for Fusion Welding                                                                                                         | N/A        | None                   |
| P6207                | Honeywell | N/A          | Welding, Titanium, Gas Tungsten Arc, Process for                                                                                   | N/A        | None                   |
| P6406                | Honeywell | N/A          | Coating, Hardface, Process for                                                                                                     | N/A        | None                   |
| P6428                | Honeywell | N/A          | Coating, Gas Tungsten-Arc Welded, Hardface, Process for (Tip Shrouded Blades)                                                      | N/A        | None                   |
| PNCP52530            | Honeywell | N/A          | Application of Cobalt-Based Hard-Facing Alloy                                                                                      | N/A        | None                   |
| PS-3004              | Honeywell | N/A          | Weld Repair of Torque Tube Forgings                                                                                                | N/A        | None                   |
| S9074-AR-GIB-010/278 | Honeywell | N/A          | Requirements for Fabrication Welding and Inspection, and Casting Inspection and Repair for Machinery, Piping, and Pressure Vessels | N/A        | None                   |
| WBS28                | Honeywell | N/A          | Fusion Welding Supplement to AWS D17.1/D17.1M                                                                                      | N/A        | None                   |
| WBS5018              | Honeywell | N/A          | Fusion Arc Welding                                                                                                                 | N/A        | None                   |
| WBS5072              | Honeywell | N/A          | Orbitally Fusion Arc Welded Tubing Assemblies                                                                                      | N/A        | None                   |
| WBS60                | Honeywell | N/A          | Fusion Welding for Commercial Applications                                                                                         | N/A        | None                   |
| WBS68                | Honeywell | N/A          | Fusion Welding (Space Station)                                                                                                     | N/A        | None                   |
| WBS93                | Honeywell | N/A          | Fixed Process for Fusion Welding of Ammonia Tank Bellows, PN 2351363-3 (Space Station)                                             | N/A        | None                   |
| WBS7060              | Honeywell | N/A          | Fusion Welding for Commercial Applications                                                                                         | N/A        | None                   |
| WBS7063              | Honeywell | N/A          | Welding Stack Assembly, Stator                                                                                                     | N/A        | None                   |
| AWS D17.1            | Lockheed  | 401D         | Fusion Welding                                                                                                                     | N/A        | None                   |
| FPS-1095             | Lockheed  | 406A         | Steel Fusion                                                                                                                       | N/A        | None                   |
| FPS-1095             | Lockheed  | 406B         | Corrosion Resistant Steel, Fusion                                                                                                  | N/A        | None                   |
| FPS-1095             | Lockheed  | 406D         | Aluminum Fusion (Welding)                                                                                                          | N/A        | None                   |
| FPS-1095             | Lockheed  | 406E         | Titanium Fusion (Welding)                                                                                                          | N/A        | None                   |



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| 2ZZP00013         | Lockheed | 408A         | Fusion Welding, F-35 + Approved Cleaning PCD WI-851-005 Rev A for Aluminum and Titanium                                                                                                       | N/A        | None                                                                                                                           |
| 5PTPET02          | Lockheed | 411          | Arc Welding of Tubular Joints                                                                                                                                                                 | N/A        | None                                                                                                                           |
| AC7110            | Nadcap   | N/A          | Nadcap Audit Criteria for Welding/ to be used on audits after 30 April 2017                                                                                                                   | N/A        | None                                                                                                                           |
| AC7110/5          | Nadcap   | N/A          | Nadcap Audit Criteria for Fusion Welding (for audits before 6 Jan 2019)<br>Note: Includes Supplements C, D, F, G, and J                                                                       | N/A        | None                                                                                                                           |
| AC7110/5S         | Nadcap   | N/A          | Nadcap Supplemental Audit Criteria for Fusion Welding (used on audits before 5 May 2019)                                                                                                      | N/A        | <u>U1</u> Honeywell, <u>U10</u> GE Aviation, and <u>U11</u> The Boeing Company (Only)                                          |
| AC7110/12         | Nadcap   | N/A          | Nadcap Audit Criteria for Welder/Welding Operator Qualification                                                                                                                               | N/A        | None                                                                                                                           |
| AC7110/12S        | Nadcap   | N/A          | Nadcap Supplemental Audit Criteria for Welder/Welding Operator                                                                                                                                | N/A        | None                                                                                                                           |
| AC7114            | Nadcap   | N/A          | Nadcap Audit Criteria for NDT Suppliers Accreditation                                                                                                                                         | N/A        | None                                                                                                                           |
| AC7114/1          | Nadcap   | N/A          | Nadcap Audit Criteria for NDT Facility Penetrant Survey                                                                                                                                       | N/A        | None                                                                                                                           |
| AC7114/10         | Nadcap   | N/A          | Nadcap Audit Criteria for NDT Testing Facility Digital Radiography, Utilizing Digital Detector Array (DDA) & Computed Radiography (CR)<br>Utilizing Photostimulable Luminescence (PSL) Survey | N/A        | None                                                                                                                           |
| ACS-PRS-7005      | Northrop | N/A          | Penetrant Inspection / Nondestructive Testing                                                                                                                                                 | N/A        | Not Approved (Expired)<br><del>Weldments only; no Pre-Pent etching (outsource as needed).</del><br>Not approved Appendix A & B |
| ASTM-E-1417       | Raytheon | N/A          | Fluorescent Penetrant Inspection (FPI)                                                                                                                                                        | N/A        | None                                                                                                                           |
| ASTM-E-1742       | Raytheon | N/A          | Computed Radiography (CR)                                                                                                                                                                     | N/A        | None                                                                                                                           |