



## FLOWDOWN REQUIREMENTS

# SPECIAL PROCESS CONTROL

### Scope

Definition of special processes that may be applicable to the purchase order and the requirements that need to be met by the supplier for these processes.

### Requirements

- 1.** The requirements of this document are applicable in full to all items (including lower level items) that carry a FlexRadio part number.
  - 1.1.** FlexRadio requires Special Process Control for the processes listed in Section 3.2.
  - 1.2.** This requirement is applicable to all parts processed, assembled, manufactured, inspected, or tested at Seller's facility or its sub-tier suppliers.
- 2.** Exceptions include:
  - 2.1.** Piece parts, components and/or assemblies that are manufactured in accordance with (or manufactured to meet the requirements of) a military, federal, or commercial specification part number are exempt from the requirements of this document. Examples include JANTX, M39014, MS15795, NAS, RNR, Mil-PRF-39012, etc.
    - 2.1.1.** This exemption includes all Commercial-off-the-shelf (COTS) parts.
  - 2.2.** Special Process suppliers designated by name and/or location as part of a Technical Data Package (TDP) are exempt from the requirements of this document.
- 3.** Requirements for suppliers performing the Special Processes which are defined in Requirement 3.2:
  - 3.1.** Suppliers performing a Special Process shall meet one of the following:

- 3.1.1.** Nadcap accredited for the specification as defined in the eAuditNet supplier scope.
  - 3.1.2.** FlexRadio approved for the process as defined in the Approved Supplier List (ASL).
  - 3.1.3.** The Special Process supplier shall only perform processes for which they have been approved. Supplier scope is listed in the applicable section of the FlexRadio ASL.
    - 3.1.3.1.** In the event of a supplier meeting the requirements of 3.1.1 or 3.1.2 is not available, contact the FlexRadio buyer with a suggested source of supply for consideration.
  - 3.1.4.** If the TDP Special Process specification is not denoted in the FlexRadio ASL, the supplier may utilize any qualified supplier, based upon the supplier's own vendor selection process, for that process.
- 3.2.** Special Process Control Requirements shall apply to the following processes:
- 3.2.1.** Plating and Chemical Finishing processes
    - Examples include, but are not limited to: Conversion Coating, Passivation, Oxide Coating, Anodic Coating, Vapor Deposited Coating, and Plating.
  - 3.2.2.** Welding and Brazing Processes
    - Examples include but are not limited to: Fusion Welding, Spot Welding, Arc Welding, Resistance Welding, Friction Stir Welding, Electron Beam Welding, Brazing, and Diffusion Bonding.
  - 3.2.3.** Non-Destructive Testing (NDT) Processes
    - Penetrant, Magnetic Particle, Radiography, Ultrasonic, and Eddy Current.
  - 3.2.4.** Heat Treating Processes
    - Examples include but are not limited to: Annealing, Hardening, Tempering, Precipitation Hardening, Aging, and Case Hardening. Also included are thermal treatments specified by drawing callout such as Stress Relieving, Thermal Cycling and Stabilization Treatments.
    - This requirement does not apply to heat treatment processing that is controlled by an Industry/Military material specification. Examples include:
      - Aluminum Forging: 7075-T7352 IAW AMS 4117

- Aluminum Plate: 6061-T651 IAW ASTM B209
- Aluminum Casting: A356-T6 IAW AMS 4218

### **3.2.5. Paint Application Processes**

- Examples include but are not limited to: Paint Application in accordance with MIS-4152, MIS-47255, WS-9778, or WS-9780.
- Only supplies documented on the FlexRadio Approved Suppliers List (ASL) or provided by FlexRadio shall be used for the specifications listed; Nadcap accreditation of paint suppliers is not accepted by FlexRadio at this time.
- If the paint specification is not listed on the ASL, FlexRadio supplier approval is not required.

### **Data Submission Summary**

There is no deliverable data to FlexRadio required by this document.

### **Notes**

- A Special Process is defined as a process where the resulting output cannot be verified by subsequent monitoring or measurement.
- Use of Nadcap or FlexRadio approved sources of supply does not absolve the seller of their responsibility to monitor supplier performance, provide acceptable processes, products, and services to FlexRadio, and to comply with all specification and quality requirements.

### **Revision History**

Revision 0 – Initial revision. No edits.

Revision 1 – Removed use of “Qnote.” Revised note under 3.2.5 to indicate that information on approved paints will be provided by FlexRadio or will be found on their approved supplier list.