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TITLE: SUPPLIER SPECIAL PROCESSES AND SPECIAL PROCESS CONTROL

PURPOSE: Establish supplier and supplier sub-tier requirements for compliance with Special Processes and related controls.

1.0 RESPONSIBILITIES AND PROCEDURE

1.1 GENERAL

- 1.1.1 Key indicators of a process being a Special Process may include, but not be limited to one or more of the following conditions;
 - 1.1.1.1 Requires unique control methods due to process complexity or multiple parameters not readily detectable.
 - 1.1.1.2 Requires monitoring and control of process parameters.
 - 1.1.1.3 Requires unconventional verification methods.
 - 1.1.1.4 Requires qualified procedures, trained personnel, specific materials, specialized equipment, or certification of personnel and/or equipment.
- 1.1.2 Special Processes are listed in Appendix A
- 1.1.3 This document is contractual where invoked by Purchase Order.
 - 1.1.3.1 Specifications further defining approval requirements, will be referenced to indicate applicability, and may be one or more of the following;
 - 1.1.3.1.1 9-4796,
 - 1.1.3.1.2 9-4796-4,
 - 1.1.3.1.3 9-6654,
 - 1.1.3.1.4 JS-0001.
- 1.1.4 Ensure flowdown of this requirement to sub-tier sources utilized to fulfill the Purchase Order.
- 1.1.5 Where compliance is not possible of any contractual obligation, a Supplier Request Form 23G03 must be submitted to Unison Procurement, and be dispositioned prior to release of the affected product.
- 1.1.6 First Article Inspection maintenance will be performed in accordance with QD-4.6.2.2, and/or applicable process specification or process control specification.

- 1.1.7 Unison accepts NADCAP accreditations as justification to waive auditing of Supplier special processes, but reserves that right based on other forms of monitoring Supplier performance.
- 1.1.8 Certificate of conformance must identify the Unison specification and any approved Special Process sources used.
- 1.1.9 Supplier must grant Unison access to certification tracking services (e.g. OASIS), in order to monitor Supplier's current status and/or audit reports.

1.2 CONTROL PLANS AND PROCEDURES

1.2.1 CONTROL PLANS

- 1.2.1.1 Must documented, approved and maintained, and address the following elements;
 - 1.2.1.1.1 Operation sequence, methods and equipment used to accomplish manufacture,
 - 1.2.1.1.2 Inspection points, Characteristics inspected, method, and equipment used to accomplish conformance verification,
 - 1.2.1.1.3 Software Quality Assurance program requirements (where applicable).
 - 1.2.1.1.4 Unison specification 9-4796-1 should be used as a guide in preparing the plan.

1.2.2 PROCEDURES

- 1.2.2.1 Must be documented, approved and maintained, and address the following elements;
 - 1.2.2.1.1 Certification requirements of Authorizing Personnel must address the following elements;
 - 1.2.2.1.1.1 Experience time (OJT, degree, etc),
 - 1.2.2.1.1.2 Training,
 - 1.2.2.1.1.3 Examination,
 - 1.2.2.1.1.4 Recurrence of approval elements.
 - 1.2.2.1.2 Approval authority of Authorized personnel regarding the following elements;
 - 1.2.2.1.2.1 Work instructions / Tech-Plans,
 - 1.2.2.1.2.2 Personnel certification (excluding self),
 - 1.2.2.1.2.3 Equipment.

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1.3 SUB-TIER SUPPLIER

- 1.3.1 Sub-tier suppliers must be on either Unison's ASPL, or the end customers approved supplier as a special process source for the special process being performed.
- 1.3.2 Use of such sub-tiers does not alleviate the Supplier from the responsibility of assuring conformance and compliance to the contract.
- 1.3.3 Sub-tier's must be identified, by name and location, in Control Plans and FAI's.

2.0 REFERENCES

- 9-4796 Process Sheet Control
- 9-4796-1 Process Sheet Control
- 9-4796-4 Process Sheet Change Control
- 9-6654 Vendor Change Notifications
- JS-0001 Priority Item Control
- QD 4.6.2.2 Supplier First Article Inspection Requirements

3.0 DEFINITIONS/ABBREVIATIONS/FORMS

DEFINITIONS/ABBREVIATIONS

SPECIAL PROCESS - Process causing material to undergo a physical, chemical, or metallurgical transformation, in which product quality cannot be adequately or economically assured by inspection during manufacturing or processing.

SUBTIER - A supplier to the first-tier supplier awarded the Unison contract.

FORMS

- 23G03 Supplier Request Form

4.0 REVISION HISTORY

DESCRIPTION OF LATEST CHANGE:

General rewrite to UIQP 4.2.2 formatting standards. Aligned Special Processes with aerospace industry recognized categories. Removed allowance to use unapproved Unison suppliers as sub-tiers. Removed allowance to use a non-Unison or customer approved special process subtier.

DESCRIPTION OF PREVIOUS CHANGES:

Supersedes Rev F, released January 15, 1999.

END OF DOCUMENT

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SUPPLIER SPECIAL PROCESSES AND SPECIAL PROCESS CONTROL**APPENDIX A**

CATEGORY	DESCRIPTION (NON-INCLUSIVE)
Chemical Processing	Cleaning, Etching.
Joining	Welding, brazing, soldering, adhesive joining, glass sealing, processes using molten materials for fusing materials.
Molding	Rubber, Plastic, Polymer encapsulates or impregnates.
Non-Conventional Machining	EDM, LASER.
Non-Destructive Testing (NDT)	Eddy Current, Fluorescent Penetrant Inspection, Magnetic Particle, Radiographic/X-Ray, Ultrasonic-Test (excludes UTT).
Surface Enhancement	Electro-Deposition, Vacuum-Deposition, Mechanical Deposition, Flame Spray, Curable Coatings, Impregnated Coatings, Paint, Varnish, Anodizing, Plating, Ceramic.
Surface Treatment	Chemical Milling, Shot Peen.
Thermal	Heat Treat, Stress Relief, Aging, Solution Treatment, Embrittlement Relief, Hot Forming.