

# **SUPPLIER QUALITY ASSURANCE MANUAL (SQAM)**

## Record of Revisions

Issue	Date	Page(s)	Revision(s)	Author
01	9/14/2012	All	Creation	Adaora Nelson
02	11/29/2012	26	Revised Rating System Table	Adaora Nelson
03	10/02/2013	All	Updated company name and titles. Corrected grammatical errors	Adaora Nelson
04	1/31/14	7-8, 10-13, 15-16, 21-22, 25-26, 28	Clarified and re-classified supplier types. Updated document to fit supplier types. Added Conflict mineral requirements. Revised supplier scoring and risk assessment. Updated acronyms. Removed redundant requirements.	Adaora Nelson
05	10/14/2015	12	Added reference to DFARS 252.246-7007	Adaora Nelson
06	06/24/2016	6-8, 12, 15, 1921, 26-27	Updated ISO 10012-1:1992 to ISO 10012 (current revision). Added DFARS 252.204-7012 requirement. Updated supplier scorecard. Ref added for AS5553 and CA Civ Code, Created section 1.5 Definitions. Added definitions. DFARS req clarified, Ref to Certification added, CoC req. outlined, Packaging and shelf-life requirement added. FAIR triggers corrected	Tony Ly Robert Steffner Steve Morriss and Adaora Nelson
07	7/24/2017	All	Updated company name and logo (not indicated in document). Added ISO9001 for Class III suppliers. Added references to FAR 52.222-50 and FAR 52.203-19. Added information regarding Transfer of Work. Clarified certification from authorized distributor. Corrected remaining shelf-life to 80%. Added info re. Safran Pr-0011 for Nadcap. Moved section 13 Special Processes to 5. Re-written section 2. Added general QMS requirements including explicit flow-down requirements per AS9100 8.4.3 m. Expanded 2.6 regarding counterfeit parts. Changed passing survey/audit results to 90%	Robert Steffner
08	7/31/2020		1.2 and 1.3 re-worded. Added section 2.4. Added 2.5.8. Added 2.8.3. Added reference to AS9146. Expansion of Section 2.9. Minor changes/corrections throughout the document	Robert Steffner
09		All	Document re-written since integration of EMS Irvine and Mexicali operations	Robert Steffner

## Approvals

Approval:	Date:	Signature:
Mark Milton, VP of Quality	12/06/2021	<On file>
Robert Steffner, Supplier Quality Manager	12/06/2021	<On file>

## Contents

<b>SUPPLIER QUALITY ASSURANCE MANUAL (SQAM)</b> .....	<b>1</b>
<b>2. OVERVIEW:</b> .....	<b>6</b>
1.1. PURPOSE:.....	6
1.2. SCOPE:.....	6
1.3. RESPONSIBILITY:.....	6
1.4. REFERENCES.....	6
1.5. DEFINITIONS.....	7
<b>2. GENERAL REQUIREMENTS:</b> .....	<b>10</b>
2.1. CLASSIFICATION AND QUALITY MANAGEMENT SYSTEM:.....	10
2.2. SUPPLIER COMPLIANCE:.....	11
2.3. PROCESSORS:.....	11
2.4. REPAIR STATIONS:.....	11
2.5. ALL SUPPLIERS:.....	12
2.6. ORDER OF PRECEDENCE.....	14
2.7. CONTRACT REVIEW:.....	14
2.8. MATERIAL SUBSTITUTIONS (NON-PROPRIETARY SUPPLIERS):.....	15
2.9. CANCELED/SUPERSEDED SPECIFICATIONS AND STANDARDS.....	15
2.10. WORKMANSHIP STANDARD.....	16
2.11. STANDARD COMPONENTS:.....	16
2.12. OFFLOAD/TRANSFER OF WORK:.....	16
2.13. SAFRAN EDA SUPPLIER QUALITY ASSURANCE "QUALITY ALERTS" AND "QUALITY ADVISORY":.....	16
2.14. REVISION CONTROL:.....	17
<b>3. SUPPLIER CONTROLLED DESIGN:</b> .....	<b>17</b>
3.1. DESIGN APPROVAL:.....	17
3.2. MATERIAL REVIEW AUTHORITY:.....	18
3.3. SPECIAL PROCESS SOURCES:.....	18
<b>4. RAW MATERIAL/FORGINGS/CASTINGS:</b> .....	<b>18</b>
4.1. RAW MATERIAL REQUIREMENTS.....	18
<b>5. SUPPLY OF KITTED PARTS:</b> .....	<b>19</b>
<b>6. SPECIAL PROCESSES:</b> .....	<b>20</b>
6.2. APPROVAL FOR TIER 1 PROCESSORS IS BASED ON ONE OR MORE OF THE FOLLOWING:.....	20
6.4. APPROVED PROCESSOR'S REQUIREMENTS:.....	21
<b>7. IDENTIFICATION AND TRACEABILITY:</b> .....	<b>21</b>
7.1. PART MARKING AND SERIALIZATION:.....	21
<b>8. PROCESS CONTROL:</b> .....	<b>22</b>
8.1. MANUFACTURING PLANS AND TECHNIQUES (INVOKED WHEN TERMS IN 6.1.1 APPLY).....	22
8.2. RECORDS OF MANUFACTURING:.....	23
8.3. CONTROL OF WORK TRANSFER.....	24
<b>9. INSPECTION AND TESTING:</b> .....	<b>24</b>
9.1. PRODUCT INSPECTION AND VERIFICATION:.....	24
9.2. MATERIAL CERTIFICATION REQUIREMENTS:.....	25
9.3. PROCESS CERTIFICATION REQUIREMENT:.....	25

9.4.	SUPPLIER CERTIFICATION AND PROCESS RECORD – TOP ASSEMBLY (OR EQUIVALENT): .....	25
9.5.	DIRECT SHIPMENTS: .....	26
9.6.	CONTROL OF MONITORING AND MEASURING EQUIPMENT.....	26
<b>10.</b>	<b>HANDLING, STORAGE, PRESERVATION AND SHIPPING: .....</b>	<b>26</b>
10.1.	FOD – FOREIGN OBJECT DAMAGE/DEBRIS: .....	26
10.2.	ELECTRO STATIC DISCHARGE SENSITIVE MATERIAL: .....	26
10.3.	PROTECTION OF SENSITIVE SURFACES:.....	26
10.4.	PACKAGING SPECIFICATIONS: .....	27
<b>11.</b>	<b>NONCONFORMING PRODUCT: .....</b>	<b>27</b>
11.2.	DISCLOSURES OR NOTICE OF ESCAPE: .....	27
11.3.	“SCRAP” AND REWORK DISPOSITION: .....	28
<b>12.</b>	<b>SERVICE AND WARRANTY: .....</b>	<b>28</b>
12.1.	DEFINITION: .....	28
12.2.	CONTROL OF MATERIAL AT THE SUPPLIER: .....	28
12.3.	REPAIRS: .....	28
12.4.	FINAL INSPECTION AND SHIPMENT: .....	29
<b>13.</b>	<b>CORRECTIVE ACTION PROCESS: .....</b>	<b>29</b>
13.1.	RESPONSE CONTENT AND TIME REQUIREMENTS: .....	29
13.2.	WORKSHEET DETAILS: .....	29
13.3.	CORRECTIVE ACTION RESPONSIVENESS: .....	29
<b>14.</b>	<b>RISK MANAGEMENT .....</b>	<b>29</b>
14.1.	CONTROL OF KEY CHARACTERISTICS.....	29
14.2.	FAILURE MODES AND EFFECTS ANALYSIS (FMEA) .....	30
<b>15.</b>	<b>SUPPLIER RISK ASSESSMENT AND SCORECARD .....</b>	<b>30</b>
15.3.	AUDITS .....	30
15.4.	AUDIT / SURVEY RESULTS.....	30
15.5.	SUPPLIER SCORECARD:.....	30
APPENDIX A .....		32
APPENDIX B .....		33

## 2. Overview:

### 1.1. Purpose:

- 1.1.1. The Safran Electronics & Defense, Avionics USA, LLC (Safran EDA) Supplier Quality Assurance Manual (SQAM) defines, illustrates, and explains quality requirements for tier 1, sub-tier suppliers, and processors on product purchased.

### 1.2. Scope:

- 1.2.1. The Safran EDA SQAM is invoked by direct reference on the purchase order.
- 1.2.2. Deviation from these requirements are not permitted unless specifically authorized in writing by Safran EDA Supplier Quality Assurance.
- 1.2.3. This revision of SQAM as noted in the header replaces all previous versions.

### 1.3. Responsibility:

- 1.3.1. Suppliers and processors shall flow down all applicable requirements of SQAM to all their sub-tier suppliers and/or processors.

### 1.4. References

- SAE AS9003 – Aerospace Inspection and Test Quality Management System
- SAE AS9100 (current revision) Quality Systems – Aerospace – Model for Quality Assurance in Design, Development, Production, Installation and Servicing
- SAE AS9102 – Aerospace, First Article Inspection Requirements
- SAE AS9103 – Variation Management of Key Characteristics
- SAE AS9110 – Quality Management System for Aerospace Maintenance, Repair, and Overhaul Facilities
- SAE AS9120 – Quality Management System for Aerospace Product Distributors
- SAE AS9146 – Foreign Object Damage (FOD) Prevention Program
- ISO 9001 (current revision) – International Standard for Quality Management Systems
- ISO 10012 (current revision) – Quality Assurance Requirements for Measuring Equipment
- ISO 17025 – Quality Assurance Requirement for Testing and Calibration
- ISO/IEC 12207 – International Standard for Systems and Software Engineering Definitions
- SAE AS5553 – Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition / GIDEP
- SAE AS6174 – Counterfeit Material, Assuring Acquisition of Authentic and Conforming Material
- FAR 52.222-50 – Combatting Trafficking in Persons.
- FAR 52.203-19 – Confidentiality agreements restricting reporting associated with government contracts
- DFAR 252.204-7009 – Limitations on the Use and Disclosure of Third Party Contractor Reported Cyber Incident Information
- DFAR 252.204-7012 – Safeguarding of Unclassified Controlled Technical Information
- California Civil Code Section 1714.43
- 14 CFR Part 145 – Air Agency Certification (Repair Stations)

## 1.5. Definitions

- 1.5.1. **5 Why:** The 5 why's process refers to the practice of asking up to five times why a failure has occurred in order to get to the root cause or causes of a problem (the actual number of why's is not as important as arriving at the root cause).
- 1.5.2. **8D:** The 8D process (problem awareness, launch team, contain, diagnose, action, verify, prevent, and closure) is a problem solving method for product and process improvement.
- 1.5.3. **Approved Supplier Status:** see "Supplier Status"
- 1.5.4. **ATP:** Acceptance Test Procedure.
- 1.5.5. **Berry Amendment:** The DFARS clause series 252.225, specifically 252.225-7002 (Qualifying Country Sources as Subcontractors) and 252-225-7008 (Restriction on Acquisition of Specialty Metals) requires that any specialty metals incorporated into articles to be delivered to the DoD shall be melted in the United States its possessions or Puerto Rico or in certain qualifying countries.
- 1.5.6. **BAA:** Bilateral Airworthiness Agreements are executive agreements concluded prior to 1996 through an exchange of diplomatic notes between the U.S. Department of State and its foreign counterpart based on FAA technical recommendations.
- 1.5.7. **Cause-Effect/Fishbone/Ishikawa/ diagrams:** This approach is used in identifying and organizing the possible causes of a problem. The brainstorming focuses on machine, environment, human, measurement, and method.
- 1.5.8. **CA:** Corrective Action
- 1.5.9. **CI:** Continuous Improvement
- 1.5.10. **CMM:** Component Maintenance Manual. Repair, maintenance and overhaul manual approved by OEM or design authority.
- 1.5.11. **CoC / COC / CofC:** Certificate of conformance. Affidavit from seller certifying that all requirements stated and referred to in PO document including terms and condition been fulfilled.
- 1.5.12. **Conditional Supplier Status:** see "Supplier Status"
- 1.5.13. **Control Plan:** Living document that outlines how inputs/outputs of the process steps are controlled in order for the end product to meet customer expectations.
- 1.5.14. **Counterfeit part:** product that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved work that has reached a design life limit or has been damaged beyond possible repair, but is altered and misrepresented as acceptable.
  - A copy or substitute without legal right or authority to do so
  - Item whose material, performance, or characteristics are knowingly misrepresented by the vendor, supplier, distributor, or manufacturer
  - Non-conforming supplies tendered with intent to deceive
  - Used or reclaimed parts misrepresented as new
- 1.5.15. **Critical Parts:** Any part identified as a key characteristic as defined by Safran EDA, air worthiness or flight safety, with a history of PDCA's and/or escapes, or identified as critical by the customer.
- 1.5.16. **D1-4426:** Boeing's list of approved processors. Applies for components in assemblies designated to Boeing.
- 1.5.17. **DER:** Designated engineering representative appointed by the FAA.
- 1.5.18. **Disclosure:** A notification by a supplier or processor of a discrepancy on product which has already shipped to Safran EDA or Safran EDA's customer.
- 1.5.19. **DoD:** Department of Defense

- 1.5.20. **EAR:** Export Administration Regulations. Generally, exports of commercial or dual-use goods/technology from the United States are covered by the EAR. The EAR is administered by the Bureau of Industry and Security (BIS) at the U.S. Department of Commerce.
- 1.5.21. **ECN:** Engineering Change Notice.
- 1.5.22. **Escape:** Nonconforming product delivered to either a Safran EDA facility or a Safran EDA customer.
- 1.5.23. **FAA:** Federal Aviation Administration
- 1.5.24. **FAI:** First Article Inspection
- 1.5.25. **FAIR:** First Article Inspection Report
- 1.5.26. **FAR:** Federal Acquisition Regulation
- 1.5.27. **Flight Safety Parts:** Any part, assembly or installation whose failure, malfunction or absence would cause loss of or serious damage to the aircraft and/or serious injury or death to the occupants.
- 1.5.28. **FMEA:** Failure Modes and Effects Analysis. FMEA is a risk assessment tool that examines potential product or process failures, evaluates risk priorities, and helps determine counteractive actions to avoid the identified problems.
- 1.5.29. **Flowdown:** the process of ensuring that all levels of sub-tier suppliers receive ALL detailed information to properly plan, manufacture, process, and ship product. Includes engineering drawings, specifications and quality requirements.
- 1.5.30. **FOD:** Foreign Object Debris.
- 1.5.31. **Safran EDA:** Safran Electronics & Defense, Avionics USA, LLC
- 1.5.32. **ITAR:** International Traffic in Arms Regulations administered by the Directorate of Defense and Trade Controls under the U.S. State Department.
- 1.5.33. **Key characteristics:** per SAE AS9103.
- 1.5.34. **Manufacturing Plans:** A detailed sequential document that defines all operations required to produce product.
- 1.5.35. **May:** a clause that contains the verb “may” is strongly recommended.
- 1.5.36. **Model:** 3 dimensional electronic representation of a part or assembly.
- 1.5.37. **MRB:** Material Review Board.
- 1.5.38. **Nadcap:** (formerly National Aerospace and Defense Contractors Accreditation Program) an international standards setting organization for the aerospace and other industries.
- 1.5.39. **NDT:** Non-destructive testing such as x-ray, magnetic particle inspection, and fluorescent particle inspection.
- 1.5.40. **NIST:** National Institute of Standards and technology
- 1.5.41. **NOE:** Notice Of Escape, notification of past delivery of possibly nonconforming parts
- 1.5.42. **NVG:** Filtering for Night vision goggle compatibility
- 1.5.43. **OEM:** Original Equipment Manufacturer
- 1.5.44. **Processor:** Provides processing outside of normal machining operations.
- 1.5.45. **Proprietary products:** products designed by the supplier (ref. section 3).
- 1.5.46. **RCCA:** Root Cause and Corrective Action.
- 1.5.47. **SCAR:** Supplier Corrective Action Request
- 1.5.48. **SDS:** Safety Data Sheet (Previously MSDS)
- 1.5.49. **SHALL:** a clause that contains the verb “shall” is a mandatory requirement (will result in a major audit finding if not in place)
- 1.5.50. **Special Processes:** Processes used in the production of products whose quality cannot be fully verified later by nondestructive inspection of the product. Examples include welding, soldering, heat treating or plating metal, forming plastic, or writing software.
- 1.5.51. **SPC:** Statistical Process Control.



- 1.5.52. **SQA:** Supplier Quality Assurance.
- 1.5.53. **SQAM:** Supplier Quality Assurance Manual.
- 1.5.54. **Standard Hardware:** A part or material that conforms to an established industry or national authority published specification, having all characteristics identified by text description, National/Military Standard Drawing, or catalog item (ref. AS9102A).
- 1.5.55. **Sub-tier:** Any subsequent product/processing or service subcontracted by the Safran EDA purchase order holder (Tier 1).
- 1.5.56. **Supplier:** Provides components which will be part of or support Safran EDA products (typically airworthy products for aircraft installation).
- 1.5.57. **Supplier Status:** Safran EDA uses following supplier status levels:
  - 1.5.57.1. **Approved:** acceptable documentation, satisfactory audit results and Supplier Scorecard rating of 'Satisfactory' or better (see section 14.3)
  - 1.5.57.2. **Conditional:** Product inconsistency or audit results with Major corrective actions required.  
Suppliers in "Conditional" status are not eligible for orders until actions are taken to change their status
  - 1.5.57.3. **Unapproved/Deactivated:** Unable to meet criteria or will not perform corrective action requests.  
Suppliers in "Not Approved" status shall remain in the database but will prevent use of the supplier while they do not meet the requirements. Future use will be allowed if improvements are made to their quality system, appropriate documents are provided, and/or corrective actions are corrected
- 1.5.58. **Tier 1:** Safran EDA purchase order holder.
- 1.5.59. **Unapproved Supplier:** See "Supplier Status"

## 2. General Requirements:

All suppliers to Safran Electronics & Defense, Avionics USA, LLC, which are currently not certified to AS9100, AS9110 and/or AS9120 shall be compliant to applicable sections in those standards, latest revision. Suppliers currently not certified should have a plan to become certified (exceptions see 2.1.1.1 below).

### 2.1. **Classification and Quality Management System:**

2.1.1. The following outlines the minimum requirements and classification for Supplier's Quality Management System (QMS):

**Manufacturer** – produces components, subassemblies, and other goods for use.

**Maintenance Organization** – provides test, repair, and overhaul service in accordance with FAA and/or EASA regulations.

**Distributors and Brokers** – circulate products or services but are not directly responsible for the design, manufacturing, or application of the purchased product or service.

**Processors** – provide activities to accommodate functions of the parts.

**Tooling, Fixtures, Instrumentation, etc.:** provides supporting equipment, tools, fixtures, and jigs for product manufacturing and maintenance activities including calibration and testing services

Classification Requirements and Applicable Documentation		
Class I	Manufacturer, (Major OEM/subsystem, BTP, BTS)	AS/EN9100 or ISO9001 or other certification (COC and FAA Form 8130-3 / EASA Form 1 if required per PO)
Class II	Maintenance Organization (Test, Repair, & Overhaul Service)	FAA/EASA Certification (FAA Form 8130-3 / EASA Form 1)
Class III	Distributors and Brokers (COTS)	ASA-100, AS/EN 9100, AS/EN9120, ISO9001 or other broker/distributor certification. Compliance to PO requirements (COC and Manufacturer's COC)
Class IV	Processor (such as NDT, plating, NVG filtering)	AS9100 or AC7004, and Nadcap certification (COC, material/process certificate)
Class V	Others (such as Tooling, fixtures, instrumentation, service providers, or others)	All: Compliance to print/PO requirements (COC) Calibration: ISO17025 Accreditation Testing services: ISO17025 Accreditation Tooling: ISO9001 or other certification (COC) DER/DAR: Active FAA approval (8110-3)

2.1.1.1. Certification exceptions to ISO9001, AS9100, AS9110, AS9120, and/or AC7004 will be based on a Safran Supplier Quality management review. A supplier providing a part, item, software or service that is not intended to be delivered to a customer and is used for internal SEDA purposes only - a Non-Deliverable supplier - is excluded from the requirement to have a documented QMS.

2.1.2. Exceptions to ISO or other certification may be granted as follows:

- 2.1.2.1. Criticality of product
- 2.1.2.2. Critical business needs
- 2.1.2.3. Type of products provided
- 2.1.2.4. Size of manufacturing facilities/number of employees
- 2.1.2.5. Other (for example, tooling, ground support equipment, or small non-complex components)

2.1.3. Safran EDA Approved Suppliers:

- 2.1.3.1. Criteria to become a Safran EDA approved supplier are based on acceptable documentation, satisfactory audit results and risk assessment (see section 14).
- 2.1.3.2. Distributors shall be an approved Manufacturer source. If the manufacturer does not have approved distributors, the distributor must be approved by Safran EDA.
- 2.1.3.3. Brokers shall be an approved Safran EDA supplier and meet PO requirements

## 2.2. **Supplier Compliance:**

2.2.1. Shall comply with the Supplier Compliance Matrix. (ref. Appendix B)

## 2.3. **Processors:**

2.3.1. Processor Quality Management System (QMS):

- 2.3.1.1. All Safran EDA approved processors' quality systems shall be certified to AS9100 or AC7004 (Nadcap Aerospace Quality System)

2.3.2. Special Process Accreditation:

- 2.3.2.1. All Safran EDA approved special processors shall complete and maintain accreditation of special processes to Nadcap, if such special process is identified as such by Nadcap.
- 2.3.2.2. Nadcap accreditation exceptions will be based on a Safran EDA Supplier Quality management review.
- 2.3.2.3. For parts intended for delivery to Boeing the processor must be approved by Boeing and be listed on their D1-4426 – Approved Processors

2.3.3. Software processes shall be accredited to ISO/IEC 12207 or listed as an approved supplier by Safran EDA or other Safran Company. The supplier shall meet the intent of AS9115 as a minimum.

## 2.4. **Repair Stations:**

- 2.4.1. Repair Station must notify Safran in the event there are changes in their FAA/EASA certification status that impacts parts serviced for Safran.
- 2.4.2. All US based repair stations must comply with Duty Time Limitations IAW 14CFR121.377.

2.4.3. All US based repair stations must have an FAA approved Drug and Alcohol program in place.

2.4.4. All US based repair stations must have per FAA suitable facility for their repair activities.

## 2.5. **All Suppliers:**

2.5.1. Safran EDA audit surveillance of suppliers and processors is based on a periodic timeframe and/or risk assessment/performance indicators. (ref. Section 15).

### 2.5.2. Quality Record Retention:

2.5.2.1. Suppliers and processors and their sub-tiers shall define their responsibilities to retain the active and inactive records in a record management procedure:

2.5.2.1.1 The procedure shall include the archiving security and retrieval policies associated with internal/external record management.

2.5.2.1.2 Methods shall be in place to prevent tampering or loss of records.

2.5.2.1.3 A digital archive of data is preferred.

2.5.2.2. In the absence of other contract specific criteria, quality records are to be maintained for no less than **10** years past the end of the contract.

2.5.2.3. Records that are potentially the subject of, or relevant to, pending litigation or litigation, which is reasonably anticipated, shall not be disposed until approval is obtained from Safran EDA.

2.5.2.4. In case of termination of operation (takeover, transfer of ownership and joint venture), suppliers and processors shall define and implement the new responsibilities of record archiving, including the possible transfer to the owner as applicable.

2.5.2.5. In case of bankruptcy, the supplier shall ensure that archived records are maintained accessible for its customers and the Regulatory authorities, including their possible transfer to them.

### 2.5.3. Right of Access:

2.5.3.1. The supplier and processor shall provide access for Safran EDA personnel, customers, government and civil aviation authorities, to their facilities, personnel and documented information when requested as required for quality and management systems reviews, product / process validation, evaluations, or investigations.

2.5.3.2. The supplier and processor shall flow down this requirement to all of their sub-tier suppliers.

### 2.5.4. Import, Export, Security and Regulatory compliance:

2.5.4.1. Suppliers, Processors and their sub-tiers shall ensure compliance to ITAR and EAR requirements when handling Safran EDA parts and documentation.

2.5.4.2. Suppliers that receive DoD information shall comply with Federal regulations outlined in DFARS 252.204-7012, "Safeguarding covered Defense Information and Cyber Incident Reporting and rapidly report any cyber incident to the Department of Defense (DoD) at <http://dibnet.dod.mil> and to Buyer's Authorized Purchasing Representative within forty-eight (48) hours of discovery.

- 2.5.4.3. Suppliers affected by clause 2.4.5.2 shall flow down the substance of DFARS 252.204-7012 to its sub-tiers.
- 2.5.4.4. Suppliers exporting directly to Safran EDA, where Safran EDA is the importer of record with the U.S Customs and Border Protection (CBP), are obligated to follow compliance requirements below:
- Commercial invoice and Packing List
  - Country of origin part marking and documentation requirements
  - HTS code on shipping paperwork.
- 2.5.5. Regulatory Compliance
- 2.5.5.1. Suppliers are required to be in compliance with all national and regional legislation and requirements regarding waste disposal and environmental protection.
- 2.5.5.2. All suppliers doing business in the state of California, USA, with a worldwide gross receipts exceeding one hundred million US dollars, shall adhere to **California Civil Code Section 1714.43** with the scope of stating its efforts to eradicate slavery and human trafficking from its direct supply chain for tangible goods offered for sale.
- 2.5.5.3. Suppliers to Safran EDA shall comply with FAR 52.222-50 "Combatting Trafficking in Persons."
- 2.5.5.4. Suppliers are required to comply with FAR 52.203-19 regarding requiring its employees or subcontractors to sign confidentiality agreements or any statements that restrict the lawful reporting of fraud, waste or abuse associated with government contracts.
- 2.5.6. Awareness
- 2.5.6.1. The supplier shall ensure that persons in their organization and sub tier suppliers are aware of the following;
- Their contribution to product and service conformity.
  - Their contribution to product safety.
  - The importance of ethical behavior.
- 2.5.7. The supplier must report any conditions under which product malfunctions, defects, and unairworthy conditions to SEDA that is responsible for notifying their customers.
- 2.5.8. Flow down requirements:
- 2.5.8.1. It is the responsibility of the supplier and the processor to flow down all appropriate and relevant SQAM requirements and information to their sub-tier suppliers.
- 2.5.9. Cyber Security
- 2.5.9.1. DOD has published the Final Rule for DFARS 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting. It represents DoD's efforts to prevent improper access to important unclassified information in the supply base. The DFARS clause contains the following main requirements:

- 2.5.9.2. Contractors must provide adequate security for “covered contractor information systems,” to include implementing the security controls of National Institute of Standards and Technology (NIST) SP 800-171 as required. A "covered contractor information system" is an unclassified information system that is owned, or operated by or for, a contractor and that processes, stores, or transmits covered defense information.
- 2.5.9.3. Contractors must report cyber incidents to the DoD at <https://dibnet.dod.mil> within 72 hours of discovery, and subcontractors must provide the incident report number, automatically assigned by DoD, to the prime Contractor (or next higher-tier subcontractor) as soon as practicable. Contractors must also conduct a review for evidence of compromise, isolate and submit malicious software in accordance with instructions provided by the Contracting Officer, preserve and protect images of all known affected information systems and relevant monitoring/packet capture data for at least 90 days for potential DoD review, and provide DoD with access to additional information or equipment that is necessary to conduct a forensic analysis.
- 2.5.9.4. This DFARS clause must be flowed down in any subcontracts or similar contractual instruments in which subcontract performance will involve covered defense information or operationally critical support. The clause must be flowed down without alteration, except to identify the parties. The full DFARS clause can be found in its entirety under Related Links. Together, the threats we face necessitate that we work together to minimize risk, protect our sensitive information, and safeguard our global security.

## 2.6. **Order of precedence**

In the event there is a requirement that appears to be in conflict with any other requirement, the supplier shall contact Safran EDA Procurement for written confirmation. The order of precedence for documents is as follows:

- 2.6.1. Contract (e.g., Purchase Order; Long Term Agreement; SQAM-000 via contract)
- 2.6.2. Drawing Referenced on Purchase Order
- 2.6.3. SEDA Specifications Referenced on Drawing
- 2.6.4. Industry Specifications Referenced on Drawing

## 2.7. **Contract Review:**

- 2.7.1. Suppliers are responsible for assessing feasibility which may include:
- 2.7.1.1. Review of all technical information and requirements to determine compliance and acceptance (for example, PO, SQAM, engineering drawings, and process specifications).
  - 2.7.1.2. Review of any additional quality provisions included in the PO per EMS-QMS-I-358 - Quality Assurance Purchase Order Codes.
  - 2.7.1.3. Resource assessment
  - 2.7.1.4. Capability assessment
  - 2.7.1.5. Capacity analysis
- 2.7.2. Suppliers that cannot meet specified requirements, or the produced product is non-conforming, may apply for a Concession/Waiver. Such application is submitted to SEDA Buyer or Quality in writing. The application must include a description of the problem, root cause and corrective action to mitigate the issue.

## 2.8. **Material Substitutions (Non-proprietary suppliers):**

2.8.1. Material substitutions are **not allowed** unless authorized by engineering drawing / model, material specification, CMM, Safran EDA MRB disposition or superseding of a material specification (See 2.9 for exceptions). This applies to (and is not limited to):

- 2.8.1.1. Material Specification
- 2.8.1.2. Material grade
- 2.8.1.3. Material Condition

2.8.2. Suppliers manufacturing products for which Safran EDA has design authority may request a material substitution by contacting Safran EDA. Such request shall be made in writing.

2.8.3. Counterfeit/Fraudulent parts prevention:

- 2.8.3.1. Suppliers shall have a system to ensure that Fraudulent/Counterfeit Parts are not delivered to Safran EDA and/or Safran EDA Customers as described in DFARS **252.246-7007** and **SAE AS5553** Fraudulent/Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition, and **SAE AS6174**; Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel. Further information can be found at <http://counterfeitparts.sae.org/>
- 2.8.3.2. For reporting of suspect counterfeit/fraudulent see FAA Advisory Circular **AC 21-29**.
- 2.8.3.3. Counterfeit prevention system can be tailored in accordance with **ARP6328**; Guideline for Development of Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition Systems.
- 2.8.3.4. Requirements regarding counterfeit parts prevention is subject to be flown down to sub-tier suppliers.

## 2.9. **Canceled/Superseded Specifications and Standards**

Industry/Military/Federal Specification Cancellation Notice Interpretation:

For items where SEDA has design authority and calls out a cancelled industry, military or federal specification, the cancellation notice shall be reviewed. Any requirement or guidance in the cancellation notice to utilize other standards or specifications shall be interpreted as follows:

- Notices with "may" or "should" are not superseded by the alternate standard/specification. The last active version of the cancelled standard/specification shall be used. If certification cannot be obtained to the last active version, contact your buyer.
- Notices with "shall", "superseded" or "replaced by" provide a firm requirement to use the alternate standard/specification in place of the cancelled standard/specification.
- Exceptions to this interpretation are drawings or Purchase Orders that require a specific revision of the cancelled standard/specification (example: "Finish in accordance with MIL-G-45204C" or "Finish in accordance with ASTM B488-95"). The revision indicated is required to meet the requirements of the drawing regardless of inactive or cancelled status

Please contact the buyer for any assistance when interpreting cancellation notices, this requirement or if the specification is cancelled without replacement and non-procurable and there is no documented path to get to an available specification.

## 2.10. **Workmanship Standard**

For electrical parts, the plans and acceptance standards shall comply with J-STD-001 plus appendix A, Requirements for Soldered Electrical and Electronic Assemblies, and ANSI/IPC-A-610, Acceptability of Electronic Assemblies. Other part types shall have workmanship standards in accordance with the relevant industry standards, drawings, specifications, and the supplier's QMS. Workmanship requirements specified on the component specification/drawing or elsewhere on the contract or purchase order shall take precedence over this paragraph.

## 2.11. **Standard Components:**

- 2.11.1. Suppliers of standard hardware shall maintain traceability to actual manufacturer and manufacturing lot.
- 2.11.2. Suppliers shall ensure the standard hardware delivered to Safran EDA conforms to the latest specification or configuration requirements. A previous revision should be provided if specified on the PO.
- 2.11.3. Suppliers providing electronic components and/or electronic assemblies shall notify Safran in the event components become listed for obsolescence.

## 2.12. **Offload/Transfer of Work:**

### 2.12.1. Overview:

- 2.12.1.1. Tier 1 suppliers shall ensure the capability of all offload sub-tiers and the quality of all product.
- 2.12.1.2. If a repair station is used, the repair facility shall be FAA or EASA certified. And shall perform work to appropriate OEM/customer engineering and technical documents.
- 2.12.1.3. If a special processor is used, one or more of the following shall apply:
  - 2.12.1.3.1 Have appropriate certification (for example, Nadcap, ISO/IEC 12207 for software) or appropriate approval from Safran EDA SQA.
  - 2.12.1.3.2 Listed on the end customer's (for example, Boeing D1-4426, Honeywell) website as an approved processor, if applicable.
  - 2.12.1.3.3 Is approved for the process specification being performed.
  - 2.12.1.3.4 The sub tier shall perform a first article to validate the process.

### 2.12.2. Supplier/Processor Flow down of information:

- 2.12.2.1. The supplier is responsible for flowing down all applicable requirements to its sub-tiers.

### 2.12.3. Transfer of work – See 8.3

## 2.13. **Safran EDA Supplier Quality Assurance “Quality Alerts” and “Quality Advisory”:**

- 2.13.1. Compliance to “Quality Alerts” requirements is contractually required upon being issued by Safran EDA or as per the effectivity date listed in the alert. Suppliers and/or processors shall:
  - 2.13.1.1. Review the requirements listed in the alert



- 2.13.1.2. Determine contractual impact (if any) of the alert
  - 2.13.1.3. Notify the applicable Safran EDA buyer of the impact (if any)
  - 2.13.1.4. Take necessary actions to ensure compliance to requirements of the alert
  - 2.13.1.5. If requested to do so, respond in a timely fashion as outlined in the alert
  - 2.13.1.6. "Quality Advisory" are informational and suppliers and/or processors are responsible to review the advisory and assess impact (if any) and/or determine actions (if any).
  - 2.13.1.7. "Quality Alerts" and "Quality Advisory" are:
    - 2.13.1.7.1 The medium that is used to communicate pertinent quality related issues or other approved information to suppliers and/or processors.
    - 2.13.1.7.2 Typically transmitted to suppliers and/or processors as an email.
    - 2.13.1.7.3 Attachments may or may not be included.
- 2.13.2. Applicable Safran EDA Engineering Data:
- 2.13.2.1. Materials, parts or software shall be manufactured/processed to the latest material or process specification revisions in effect at the time of commencement of the manufacture/processing. A previous revision should be provided if specified on the PO.
  - 2.13.2.2. Safran EDA will notify suppliers of changes via email.
  - 2.13.2.3. Suppliers shall incorporate changes to work in process and future builds.
  - 2.13.2.4. Suppliers are responsible for flowing down changes to their sub tiers.
  - 2.13.2.5. Use of an older revision is not acceptable unless outlined on the PO or authorized by Safran EDA MRB through Safran EDA Supplier Quality. Written authorization is required prior to any shipment of the older.
  - 2.13.2.6. For parts already inducted into supplier stock that are of an older revision, suppliers shall notify Safran EDA Supplier Quality of the part numbers and quantities to arrange for proper MRB disposition.

## 2.14. **Revision Control:**

- 2.14.1. Supplier shall have a defined process to review and incorporate drawing and software revisions/changes.
- 2.14.2. The supplier and processors shall roll up the revision levels and document these changes in the revision table whenever any type of change is made.
- 2.14.3. Suppliers with design authority shall notify Safran EDA buyer of revision changes, provide updated technical/engineering drawings, and advise disposition of existing stock built to the old revision.

## 3. **Supplier Controlled Design:**

Scope: This applies to suppliers who have design authority.

### 3.1. **Design Approval:**

- 3.1.1. Product designs shall have Safran EDA review and approval unless stated on the purchase order, contract, or with Safran EDA engineering consent.

- 3.1.2. When specific engineering approval is not required, the supplier shall provide:
- 3.1.2.1. Qualification test procedures & reports
  - 3.1.2.2. Acceptance test procedures and current revisions to a top-assembly or final product engineering drawing / model(s)

3.1.3. The supplier shall meet Safran EDA contractual requirements for design related to performance requirements.

3.1.4. Approval verifies Safran EDA agreement with design and testing concepts for the intended application. Approval does not, however, relieve the supplier of responsibility to meet form/fit/function requirements.

### 3.2. **Material Review Authority:**

3.2.1. In the absence of engineering requirements, suppliers have material review authority for:

- 3.2.1.1. Product controlled by the supplier's design
- 3.2.1.2. Decisions not impacting the engineering requirements defined by Safran EDA or Safran EDA customer(s)

3.2.2. Supplier's disposition is limited to "scrap", "rework" and "RTV" for parts not under their design authority. It can under no circumstance be "UAI" or "repair".

3.2.3. Supplier's Material Review Board dispositions shall be made available for Safran EDA or a Safran EDA customer review upon request.

3.2.4. If a Corrective action (8D or equal) requires submittal to Safran EDA, process defined in section 11 shall be followed.

### 3.3. **Special Process Sources:**

3.3.1. Suppliers are responsible for the approval and the control of special process sub-tiers. Approval by Safran EDA or a Safran EDA customer is not necessary unless specifically required by Purchase Order or Safran EDA Engineering. All "Special Process" suppliers must be Nadcap certified if process is identified as Nadcap controlled process.

3.3.2. Tier 1 Safran EDA suppliers are responsible for sub-tier processor plan validation and approvals.

## 4. Raw material/forgings/castings:

### 4.1. **Raw Material Requirements**

Scope: Applies to suppliers who supply raw material / forgings / castings directly to Safran EDA and Safran EDA's suppliers.

4.1.1. Testing:

- 4.1.1.1. Definition: every kind of metal or non-metal shape to be used by the supplier for further machining and processing to get semi-finished or ready made parts which includes, but is not limited to, bar stock, tubes, plates, and sheets.
- 4.1.1.2. Suppliers shall have a method to test each batch / heat / lot of material.
- 4.1.1.3. Test results shall be maintained
- 4.1.1.4. Suppliers shall conduct annual raw material verifications.
- 4.1.2. Forging / Casting Requirements:
- 4.1.2.1. Includes but is not limited to all material types furnished as impression or press forgings, swagings, like forged or casted blocks, rings, and shapes.
- 4.1.2.2. The supplier shall maintain traceability from the raw material manufacturer's heat or lot numbers to each individual forging, casting, and swaging. Heat or lot numbers shall be noted on supplier's records. See Para 7.3 for Certification Requirements.
- 4.1.3. Approval of raw material suppliers / forgers / casters:
- 4.1.3.1. Safran EDA will base approval of raw material suppliers on (only suppliers who supply raw material directly to Safran EDA are affected):
- 4.1.3.1.1 ISO 9001 certification and QMS audit results
- 4.1.3.1.2 Initial survey
- 4.1.3.1.3 On-site audits (if required)
- 4.1.4. Foreign Material Requirements:
- 4.1.4.1. Special requirements apply to material produced in company(s) located in a country other than the United States or Canada and the country does not have a Bilateral Airworthiness Agreement (BAA) for the product being supplied. Suppliers intending to purchase raw material stock, forgings, castings and standard hardware from sources outside North America shall notify their assigned Safran EDA SQA and obtain concurrence prior to commencing the procurement activity.
- 4.1.4.2. All suppliers providing parts for U.S. Military programs shall conform to the Berry Amendment requirement which requires any specialty metals incorporated into articles to be delivered to the Department of Defense (DOD) shall be melted in the United States, its possessions, or Puerto Rico, or in certain qualified countries.
- 4.1.4.3. Conflict Mineral Reporting. Per Section 1502 of the Dodd-Frank Wall Street Reform, Consumer Protection Act of 2010, U.S. Securities and Exchange Committee (SEC) rules, require suppliers of electronics shall eliminate the procurement and use of tantalum, tin, gold and tungsten from the Democratic Republic of Congo (DRC) and adjoining countries. Electronics suppliers are to provide an annual certification report as described by Electronics Industry Citizenship Coalition (EICC) and the Global eSustainability Initiative (GeSI).

## 5. Supply of Kitted Parts:

- 5.1. Where kits of parts are supplied, the supplier shall establish a documented process within the QMS for the Management and Control of Kit Configurations, covering the following requirements:
- Kit to be configured within the Suppliers Bill of Materials system or equivalent

- Route cards/ picking list established for each Kit.
- Verification of issue status for each part in the Kit
- Provision and control of identification and traceability within the Kit
- Provision of adequately trained personnel
- Items subjected to concession/ production permit action shall be identified with the Safran EDA concession number prior to delivery

## 6. Special Processes:

### 6.1. **Scope:**

- 6.1.1. Processes used in the production/repair of products whose quality cannot be fully verified later by nondestructive inspection of the product. Examples include chemical processing, non-destructive testing, welding, heat treating or plating metal, forming plastic, or writing software.

### 6.2. **Approval for Tier 1 processors is based on one or more of the following:**

- 6.2.1.1. Nadcap accreditation.
- 6.2.1.2. ISO/IEC 12207 for software.
- 6.2.1.3. Existing end-customer approval (i.e. Boeing, Honeywell, and Airbus), if applicable.
- 6.2.1.4. On-site audit of the Processor's quality system and/or special process performed by Safran EDA or other Safran company.
- 6.2.1.5. Safran requirements for Heat Treatment per Pr-0011 for Nadcap accreditation do not apply to processors processing parts for Safran EDA.
- 6.2.2. Processors that perform special processes that are Nadcap commodities are required to have Nadcap accreditation. Any exceptions to this requirement will be based on Safran EDA Supplier Quality management review once the processor submits a request for waiver in writing.
- 6.2.3. Approvals are granted for each individual processor / process / specification combination, and are site location specific. Physical relocation of processing requires Safran EDA re-approval of the re-located processing prior to any use of that re-located processing on Safran EDA product.
- 6.2.4. Special process sources approved by Safran EDA for a Safran EDA, Military or Industrial specification that has been superseded by another Safran EDA, Military or Industrial specification shall be considered approved for the superseding specification.

### 6.3. **Supplier's use of Approved Processors:**

- 6.3.1. Suppliers may elect to use Safran EDA approved sources (or approved by a Safran Company) to perform special processes on aircraft production parts manufactured for Safran EDA.
- 6.3.2. Suppliers that elect to use a non Safran EDA/Safran approved source shall notify Safran EDA in writing and adhere to requirements set forth in section 2.8.1.3.
- 6.3.3. When Safran EDA customer-controlled processes are required, (eg. Boeing "BAC's) selected process sources shall be listed in the applicable customer's listing (eg. Boeing D1-4426) for the controlled process.

- 6.3.4. The supplier shall maintain and use an approved processor list, are responsible for ensuring that approved sources are audited and meet the requirements of the applicable specifications.
- 6.3.5. Suppliers are responsible for ensuring that processing meets the requirements of the applicable specifications defined in the engineering and contractual requirements.
- 6.3.6. The supplier's purchase order shall flow down to the processor all applicable information required to perform work correctly to engineering and contractual requirements. The purchase order shall clearly specify the full scope of processing to be performed, MRB actions required, applicable specification number(s), revisions and addendums or modifications, part numbers, quantity, serial numbers (if applicable), applicable program and prime customer and identify Safran EDA as the supplier's direct customer.

#### **6.4. *Approved processor's requirements:***

- 6.4.1. Work shall be planned, approved and executed in accordance with section 7 of this document as applicable to the scope of work being performed.
- 6.4.2. A packing slip, Certificate of Conformance with reference to specified process shall be included with all shipments.
- 6.4.3. Objective evidence of compliance to specifications and drawings shall be made available upon request.
- 6.4.4. Ensure a performance metric that will measure internal rework for each approved process and will be made available upon request.

## **7. Identification and Traceability:**

### **7.1. *Part Marking and Serialization:***

- 7.1.1. Part marking and serialization shall be identified in the supplier's control plan/manufacturing documentation for all parts.
- 7.1.2. Supplier manual defines packaging identification requirements.
- 7.1.3. All products shall be identified per engineering drawing/specification.
- 7.1.4. All product identification (including permanent etching) shall be clearly legible after final surface coatings (including prime and paint) unless specifically allowed by engineering specifications.
- 7.1.5. All products received by Safran EDA shall have supplier's final acceptance stamp on product or on a tag/package if product does not have an adequate space for stamping.
- 7.1.6. Non serialized parts shall be identified with date of manufacture (DOM eg. MM/YY), batch or lot number.
- 7.1.7. Country of origin must be identified on all products, bag or tags for imported parts in accordance with U.S. Customs regulation 19 CFR Part 134.11 e.g. "Made in China", "Product of Japan", "Assembled in Italy".
- 7.1.8. Parts requiring serialization shall be identified with unique serial numbers, which shall not be duplicated.
- 7.1.9. Serial numbers shall remain unique and consecutive for each engineering drawing / model part number regardless of revision.
- 7.1.10. When serial number traceability is required by design requirements, applicable serial numbers shall be identified on all supplier and supplier's sub-tier quality records (i.e. travelers and process certifications).

7.1.11. Paperwork for parts stored at supplier locations should be adequately identified to ensure traceability.

## 8. Process Control:

### 8.1. *Manufacturing Plans and Techniques (Invoked when terms in 6.1.1 apply)*

- 8.1.1. When purchase order, engineering or contractual requirements invoke any one of the following, manufacturing planning shall be submitted to Safran EDA for review:  
“Flight safety”, “Mission/Safety Critical”, “Safety of Flight”, or “Fracture Critical Traceable”, “Fatigue Critical”, “Maintenance Critical”, “Fracture Critical”, etc.
- 8.1.2. Manufacturing plans (MPS) requiring Safran EDA approval shall be submitted prior to start of manufacturing.
- 8.1.3. Any manufacturing performed prior to planning approval shall be performed per submitted plan at the supplier’s risk.
- 8.1.4. The planning shall include the minimum engineering data references (specification, flag note, etc.) necessary to control and produce the parts and include all of the machining, processing, test and inspection operations necessary to complete the parts to the purchase order and engineering requirements. This includes applicable satellite plans and techniques from sub tier suppliers and processors.
- 8.1.5. All planning shall be reviewed and approved by the tier 1 holder of the Safran EDA purchase order. When planning is required to be submitted to Safran EDA, the tier 1 source shall review and approve the planning prior to submission to Safran EDA.
- 8.1.6. The manufacturing planning shall be retained on file at the supplier’s manufacturing facility, and shall be available upon request by Safran EDA and/or its customers.
- 8.1.7. The planning text shall be in English and include the following details as a minimum:
  - 8.1.7.1. Name of applicable manufacturer with facility address.
  - 8.1.7.2. Full part number including dash number. When purchase orders refer to part numbers other than the design engineering part number, the planning shall clearly reference both part numbers.
  - 8.1.7.3. Engineering drawing / model revision level.
  - 8.1.7.4. Planning revision table including revision dates and descriptions of changes and traceability to the individual making the change. All planning changes shall be documented, including editorial changes to correct typographical errors or minor editorial changes.
  - 8.1.7.5. Raw material, raw material specification, raw material heat treat condition.
  - 8.1.7.6. All operations shall be noted in their proper manufacturing sequence, including all inspection and test points.
  - 8.1.7.7. Optional sequences or operations shall be defined in the planning.
  - 8.1.7.8. Part identification including method and text. All identification shall be applied prior to final inspection.
  - 8.1.7.9. Operations that are required to be performed per a particular specification shall list that specification as part of the operation description in the planning.
  - 8.1.7.10. Special process operations shall list the name and location of the processor, applicable specifications and specific parameters (i.e.: type, class, as applicable).

Special processes and sources for special processing shall be controlled and approved. (ref. section 5)

- 8.1.7.11. Maximum section thickness at time of heat treat shall be noted.
- 8.1.7.12. All thermal processing shall be listed as a separate operation (i.e., embrittlement relief, stress relief, etc.). Required times, conditional delay requirements and temperatures shall be noted.
- 8.1.7.13. All NDT techniques shall be approved by a recognized NDT Level 3 authority.
- 8.1.8. All manufacturing plans and techniques shall be reviewed by the supplier at least every five years to ensure compliance to current engineering and specification requirements.
- 8.1.9. Submittal shall be via email in electronic format to Safran Supplier Quality/.  
*Planning submitted to any destination other than the link noted shall not be reviewed.*  
The body of the email submittal shall identify at a minimum:
  - Part Number
  - Supplier Name
  - Program.
  - Special process techniques included, with processor and revision level.
- 8.1.10. Planning shall only be submitted to Safran EDA from the tier 1 holder of the Safran EDA purchase order. Techniques from sub-tiers **shall not** be submitted directly to Safran EDA.
- 8.1.11. Manufacturing plans submitted for Safran EDA review and approval shall be complete and officially 'released' by the supplier. Any subsequent changes (including, but not limited to: adding or removing notes, adding or removing operations, changes to processing parameters, etc.) require the supplier to roll up the revision level and document these changes in the revision table. This requirement is applicable to process technique sheets as well, and irrespective of, and independent of part production
- 8.1.12. A memo documenting the results of the manufacturing plan review shall be emailed back to the source(s) submitting the planning.
- 8.1.13. The supplier shall retain evidence of planning approval status.
- 8.1.14. Planning shall be revised as applicable and revisions documented until planning is approved by Safran EDA.
- 8.1.15. Once planning is approved by Safran EDA it shall be considered frozen. Any changes to approved planning shall be resubmitted for review and approval. The only exceptions shall be editorial changes to correct typographical errors or re-sequencing of pre heat treat machining operations governed by an industry specification. All changes to planning, including editorial changes, shall be documented in a revision table.

## 8.2. **Records of Manufacturing:**

- 8.2.1. The supplier and supplier's sub-contracted sources shall maintain manufacturing records that provide traceability to all manufacturing and inspection operations. These records shall clearly indicate material status and acceptability and shall include the following information as a minimum:
  - 8.2.1.1. Part number, revision, and material traceability.
  - 8.2.1.2. List of all serial numbers (if serialized) or quantity of parts (if non-serialized).
  - 8.2.1.3. Clear description of operations to be performed in the proper sequences to produce the completed product to include in process, receiving, and final inspections.

- 8.2.1.4. Record the number of parts accepted or rejected at each completed operation. Rejected serial numbers, if serialization is a requirement, and rejection documents/reports shall be noted adjacent to the applicable operation.
- 8.2.1.5. Record date of acceptance or rejection activity at each operation with operator's stamp or initials.
- 8.2.1.6. Clearly reflect the identification requirements, applicable specification, content and method. This can be accomplished as part of the Shop Traveler identification operation, reference to a work instruction or an attached picture of a correctly identified completed part (preferred).
- 8.2.1.7. When manufacturing lot quantities are reduced or "split", activity shall be recorded at applicable operations on both the original and on the new Shop Traveler. If serialization is required, the serial numbers remaining on the original and the serial numbers being transferred to the new traveler shall be clearly noted. The supplier's quality department shall approve split orders.
- 8.2.1.8. For operations performed by an outside source, record information traceable to source used, process purchase order, certification number part number and revision, and required specification(s).
  - Note: validation of any special process planning to ensure compliance to the specification parameters shall be accomplished prior to the actual process being performed. Objective evidence of the plan approval shall be retained and available upon request.
- 8.2.1.9. Evidence of any required rework activities.
- 8.2.1.10. Evidence of completion of MRB disposition actions.

### 8.3. **Control of work transfer**

- 8.3.1. Suppliers **must** notify Safran EDA, in writing, prior to transferring work to another Supplier location. Such notification must be made no less than 3 months prior to manufacturing of specific part at the new location. Supplier should provide estimated time for change in location for each part affected by the change, especially for future scheduled Purchase Order lines.
- 8.3.2. The supplier shall perform a first article to validate the process prior to shipping the next production run. FAIR report must be submitted to Safran EDA with or before first delivery of parts from first run.
- 8.3.3. For outsourcing to a sub tier, the Tier 1 (Safran EDA) supplier shall abide by requirements outlined in section 2.8 of this document.
- 8.3.4. For selection of suppliers performing special processes, supplier must coordinate with Safran EDA to ensure processor is approved per Safran EDA or Safran EDA's customer requirements.

## 9. Inspection and Testing:

### 9.1. **Product Inspection and Verification:**

- 9.1.1. Quality verification for all product and/or service purchased by Safran EDA shall be performed at the supplier's facility by supplier qualified inspector.
- 9.1.2. Lots shall be inspected for dimensional and specification conformance by the supplier's authorized inspection personnel in accordance with the supplier's quality system, Safran EDA SQAM requirements, assembly procedures, work instructions, ATP, engineering drawing / model and specification requirements.



9.1.3. Suppliers using sampling plans for acceptance of product shall submit plans to Supplier Quality Assurance for approval prior to use. Submittal should indicate approvals by other customers to facilitate review process.

9.1.4. Documentation required with shipment:

- Packing slip
- Certification of Conformance containing
  - Date and Signature of authorized representative
  - Serial numbers to be included, if applicable
  - Part Number
  - Part Revision
  - Lot Number or Date Code
  - Statement of Conformance
  - Safran Purchase Order and line item
  - Reference to eventual concession or copy thereof

#### Material and Process Certifications

Original Manufactures Certification for parts procured through Distributor.

Distributor of electronic components that is an Authorized Distributor by the OEM, certified to AS9100 and/or AS9120, may omit OEM certification if OEM Certification is maintained by the Authorized Distributor.

- If applicable, ATP and configuration sheets

Note: Proprietary suppliers require only a packing slip and Certificate of Conformance

## 9.2. **Material Certification requirements:**

9.2.1. Laboratory certifications shall reflect actual values, including mill data.

9.2.2. Chain of Custody traceability from original mill through material distributors to Safran

9.2.3. The supplier is responsible for approval of material received.

9.2.4. Certification of Conformance (See Para 8.1.4)

## 9.3. **Process Certification Requirement:**

9.3.1. The tier 1 supplier shall verify the certification received from processors.

## 9.4. **Supplier Certification and Process Record – Top Assembly (or equivalent):**

9.4.1. For assemblies and kits, all detail part numbers and standard hardware used in the assembly shall be listed, with standard hardware being traceable to its certificate of conformance, manufacturing lot and manufacturer.

9.4.2. All elastomeric materials (e.g. O-rings, shrink sleeving, seals.) shall be in accordance with **AMS2817**, individually packaged and have cure dates listed.

9.4.3. Chemicals and sealants shall be accompanied by a COC (Manufacturer and Distributor), and SDS.

9.4.4. A statement of conformance.

9.4.5. Authorized signature and date.

9.4.6. Shelf-life controlled items shall have at least 80% remaining shelf-life upon receipt at

Safran facility.

Note: Kits are not to be accepted or delivered by the supplier if all items defined as included in the kit are not present. "Ship short" authorization shall be obtained in writing from Purchasing by means of a purchase order amendment.

## 9.5. **Direct Shipments:**

9.5.1. When authorized by PO, suppliers can ship directly to Safran EDA customers using the supplier shipping documentation:

- 9.5.1.1. The shipper shall be provided by the Safran EDA buyer that identifies direct shipment instructions / requirements.
- 9.5.1.2. The PO number shall be referenced.
- 9.5.1.3. If serialized, the serial numbers being shipped shall be recorded on the shipper and submitted to Safran EDA Quality Analyst for final clearance. Safran EDA buyer shall provide the stamped and dated shipper back to the supplier upon successful completion of serial number clearance.
- 9.5.1.4. The supplier shall provide a completed shipper, packing slip and Certification of Compliance.

## 9.6. **Control of Monitoring and Measuring Equipment**

9.6.1. Minimum Expectations for Measuring Devices:

- 9.6.1.1. The measuring device shall be appropriate to the feature being measured, including the proper unit of measure (i.e., International System of Units [metric system] or Imperial [English]).
- 9.6.1.2. Supplier shall maintain a register of their monitoring and measurement equipment. The register shall include equipment type, identification, location and the calibration/verification method, frequency and acceptance criteria.
- 9.6.1.3. Measuring devices shall be calibrated to assure its accuracy as per ISO 17025 (current revision) Quality Assurance Requirements for Measuring Equipment and should be in compliance to NIST. Standards used for calibration shall be traceable to NIST or other national or international standards.

## 10. **Handling, Storage, Preservation and Shipping:**

### 10.1. **FOD – Foreign Object Damage/Debris:**

10.1.1. Suppliers shall have a process and training program which addresses elimination of Foreign Object Debris and prevention of Foreign Object Damage (FOD) in accordance with SAE AS9146

### 10.2. **Electro Static Discharge sensitive material:**

10.2.1. Suppliers delivering Electro Static Discharge sensitive product shall ensure its protection during the manufacturing process and ESD packaging for delivery (connector caps, bags, and bubble sheets).

### 10.3. **Protection of sensitive surfaces:**

10.3.1. Machined parts with finished or semi-finished unprotected (not plated) surfaces will be delivered with these surfaces covered with protective oil.

10.3.2. All threaded items shall have thread protection. Caps or equivalent protection will cover external threads.

#### 10.4. **Packaging Specifications:**

10.4.1. The packaging of product shipped to Safran EDA shall ensure minimum protection from transit damage:

10.4.1.1. Reference ASTM-D9351-98 for "Standard Practice for Commercial Packaging"

10.4.1.2. Reference MIL-STD-2073-1D for "Standard Practice for Military Packaging"

## 11. Nonconforming Product:

### 11.1. **Scope:**

11.1.1. Nonconforming product is defined as material that cannot be reworked into a conforming condition prior to any controlled process.

11.1.2. Suppliers that are not the original equipment manufacturer shall not make their own MRB disposition on nonconforming material.

11.1.3. Suppliers shall not perform unauthorized rework on nonconforming product.

11.1.3.1. For any discrepancy discovered that may be reworked into a conforming condition prior to subsequent processing, the supplier's standard internal rework process shall be followed.

11.1.3.2. For any discrepancy discovered by a processor during their operation, the specification for that specific special process shall provide rework guidelines, if permitted.

Note: Any NDT rejections must be submitted to Safran EDA MRB for review and disposition.

11.1.3.3. In all other cases, a RCCA (Root Cause and Corrective Action) shall be submitted to Safran EDA.

Note: Suppliers which exceed 8 Quality Notifications within a twelve month period may be required to submit RCCA's to the designated Safran EDA Supplier Quality representative.

Suppliers shall not ship nonconforming material to Safran EDA.

11.1.4. For supplier controlled design. (ref. section 3)

### 11.2. **Disclosures or Notice of Escape:**

11.2.1. Suppliers shall provide written notification to Safran EDA within 24 hours when a nonconformance is determined to exist, or is suspected to exist, on product already delivered to Safran EDA or Safran EDA customers.

11.2.2. Follow on communication shall be utilized to define details or extent of nonconformance(s).

11.2.3. Disclosures/Notice of escape shall be submitted to Safran EDA SQA and the applicable buyer using the most expeditious method.

11.2.4. Safran EDA SQA shall issue a formal "8 Step" corrective action to the supplier/processor via PDCA form.

11.2.5. The supplier/processor shall provide written acknowledgement as to the receipt of the

CA, confirmation of containment, and CA team members identified within 24 hours of the disclosure.

11.2.6. In the case of proprietary suppliers, an impact statement correlated with the supplier engineering organization. The impact statement shall contain a proposed disposition for the Safran EDA stock and instructions regarding the parts/assemblies installed on operating aircraft.

11.2.7. For manufacturing activities, the delta FAI shall be identified in the PDCA and completed on next production run for the issues identified in the disclosure.

### 11.3. **“SCRAP” and rework disposition:**

11.3.1. The supplier shall appropriately document scrap and rework dispositions.

11.3.2. The scrapped product shall be physically rendered useless and disposed to prevent unintended use.

11.3.2.1. Any rejections / findings by Safran EDA Quality Representatives will be counted against the supplier's performance. These rejects will be considered the same as rejected parts shipped into any Safran EDA facility.

11.3.2.2. Any costs associated with rework of discrepant material may be charged to the supplier.

11.3.2.3. All items returned to the supplier by Safran EDA or Safran EDA's customer shall be documented.

11.3.2.4. Service and warranty parts are defined. (ref. section 11)

11.3.2.5. Escapes shall be documented on a RCCA. (ref. section 12).

## 12. Service and Warranty:

### 12.1. **Definition:**

12.1.1. Service and Warranty components are defined as items returned by Safran EDA or its customers to the supplier for evaluation, repair, and/or replacement.

### 12.2. **Control of Material at the Supplier:**

12.2.1. Service and warranty repair components shall not be mixed with new production components during manufacturing or storage. They shall not be assembled into new production without the written authorization of Safran EDA and (when required) concurrence of Safran EDA customer.

12.2.2. All Service and Warranty components shall be uniquely identified by Safran EDA or supplier for traceability in the supplier's system throughout the repair process.

12.2.3. Warranty parts shall be inspected and tested (if appropriate) to confirm the rejection. Items are to be subsequently disassembled for component inspection when applicable.

12.2.4. Repairs shall not begin without a repair purchase order and Safran EDA authorization.

### 12.3. **Repairs:**

12.3.1. All repair and rework requires documented evidence of work performed. Repair records such as travelers, test reports, Acceptance Test Procedure (ATP), shall be retained for the rework/repaired item(s).

#### 12.4. ***Final Inspection and Shipment:***

12.4.1. The Supplier shall submit the following, as appropriate with shipment:

- 12.4.1.1. ATP/Test Report
- 12.4.1.2. Completed PDCA report (if required).
- 12.4.1.3. Replaced items shall be accompanied by Certification of Compliance

### **13. Corrective Action Process:**

#### 13.1. ***Response Content and Time Requirements:***

13.1.1. Safran EDA will issue a SCAR (Supplier Corrective Action Request) to supplier for repeat or critical nonconformance.

13.1.2. The supplier shall contain and identify all suspect products including:

- 13.1.2.1. Inventory
- 13.1.2.2. Work in process
- 13.1.2.3. Completed product pending final release
- 13.1.2.4. Product in transit/shipped

13.1.3. Root Cause, Corrective Action, and Preventive Plans shall be received within the time noted on the request. The supplier may ask for an extension if the original date cannot be met.

- 13.1.3.1. Customer Escapes/Disclosure – 5 business days
- 13.1.3.2. Product escapes to Safran EDA, included products rejected by SQA on site at the supplier – 30 days
- 13.1.3.3. Findings as results of QMS audits – 30 days

#### 13.2. ***Worksheet details:***

13.2.1. All requests shall be submitted via e-mail using the Safran EDA PDCA form.

#### 13.3. ***Corrective Action Responsiveness:***

13.3.1. Delinquent responses, repeat response rejection due to improperly addressing the issue to identify true direct and root case and or continued failure to provide corrective action responses in a timely manner shall result changing the supplier's status to "**Conditional**" and may ultimately result in removal as an approved supplier.

13.3.2. For repaired units, Safran EDA Supplier Quality must approve the SCAR submitted by the supplier prior to shipment. A copy of the SCAR should accompany the shipment.

### **14. Risk Management**

#### 14.1. ***Control of Key Characteristics***

12.1.1. Suppliers shall, at a minimum, develop a process for control and analysis of key characteristics as defined within the engineering drawing, model, purchase order and when the part(s)/process is specifically designated for SPC/process capability by Safran EDA.

12.1.2. All data pertaining to key characteristics shall be made available upon request and will

require approval by Safran EDA Supplier Quality Assurance.

12.1.2.1. When required, data will be provided in the format prescribed per AS9103, Variation Management of Key Characteristics

12.1.3. All processes that effect key characteristics shall be evaluated for statistical process capability (Cpk).

12.1.3.1. Cpk values less than 1.33 shall be addressed within an improvement plan.

## 14.2. **Failure Modes and Effects Analysis (FMEA)**

12.1.4. Suppliers are encouraged to deploy FMEA whenever possible. The requirement to implement FMEA may be imposed on suppliers for programs or products that need improvement or are critical in nature.

## 15. Supplier Risk Assessment and Scorecard

### 15.1. **Scope:**

All Safran EDA suppliers/processors will be monitored for risk at selection and re-evaluation. The Risk assessment will be based on:

- Supplier's Quality System
- Purchasing/Operations (Lead Time, operational efficiency, etc.),
- Financial risk,
- Health, Safety, and Environment.

### 15.2. **Purpose**

The results of the risk assessment will be used to manage oversight activities, including audit frequency, corrective action plans, and continuous improvement initiatives.

### 15.3. **Audits**

All suppliers will, periodically, be asked to complete an On-line survey and/or be subject for an on-site audit by Safran EDA personnel. Failure to complete surveys upon request will result in either on-site audit or de-activation as approved supplier to Safran EDA

### 15.4. **Audit / Survey Results**

A quality acceptance rating below 90% will result in the Supplier being placed into a 'Conditional' status. Suppliers in conditional status may not be eligible for new purchases.

### 15.5. **Supplier Scorecard:**

15.5.1. Safran EDA may use a supplier scorecard to measure and assess performance and risk of major/critical suppliers. Grading for the Supplier Scorecard is outlined below:

- **Excellent** – Suppliers are eligible for new and continued business.
- **Satisfactory** – Suppliers eligible for continued business.
- **Unsatisfactory** – Suppliers are not eligible for new purchases but are required to implement improvement efforts, including but not limited to issuance of Supplier Corrective Action Requests for adverse trends, on-site audits, capability studies and loss of eligibility for

continued purchases if quality ratings continue to decline.

- **Conditional** – Suppliers are not eligible for new purchases and review with strong recommendations to be removed to unapproved status.

### Supplier Scorecard Rating System

Supplier Status	On-Time Delivery	Defective Parts per Million	Number Days Late	High Impact Escapes
<b>Excellent</b>	>95%	0 to 100	0	
<b>Satisfactory</b>	>90% to 95	101 to 1000	1 to 3	
<b>Unsatisfactory</b>	75% to 90%	1001 to 2500	4 to 15	
<b>Conditional</b>	<75%	>2500	>15	≥ 1 event

## Appendix A

Item #	Full FAI	Delta FAI	FAI Trigger (Class I, III, and IV)
1	X		New supplier
2		X	New processor
3	X		Off-load to supplier
4		X	Off-load to processor
5	X		Work transfer to supplier
6		X	Work transfer to processor
7	X		2 year rule (lapse in production on make or buy parts)
8		X	Process change impacting fit, form, or function
9	X		P/N roll (fit, form, function, design change)
10		X	Standard work change
11		X	Technique sheet change impacting mfg process
12	X		New product
13		X	New process
14		X	Work Instruction change impacting mfg process
15		X	Assembly sequence change (Delta if planning was frozen)
16		X	ATP Change
17	X	X	Customer request
18		X	Formal configuration change
19	X	X	tooling/fixture/machine cell transfer or change
20		X	Change in inspection method
21		X	Change in manufacturing programming
22	X	X	Natural or man-made event which adversely affects the mfg process
23		X	Bill of material change
24	X		Change of location of supplier
25	X	X	Change of location of machining / processing within suppliers' premises
26	X	X	After receiving a disclosure letter
27		X	After CI event referring to part of process (Delta for each change to MFG process)



## Appendix B: Supplier Compliance Matrix

Clause*	Class I Manufacturer	Class II Maintenance Org.	Class III Distributor/Broker	Class IV Processors	Class V Other
2.1.1	X	X	X	X	X
2.1.2	X		X	X	X
2.1.3	X	X	X	X	X
2.2	X	X	X	X	X
2.3.1				X	
2.3.2	X	X		X	
2.3.3	X	X		X	
2.4		X			
2.5.1	X	X	X	X	X
2.5.2	X	X	X	X	X
2.5.3	X	X		X	X
2.5.4	X	X	X	X	X
2.5.5	X	X	X	X	X
2.5.6	X	X	X	X	X
2.5.7	X	X	X	X	X
2.5.8	X	X	X	X	X
2.5.9	X	X	X	X	X
2.6	X	X	X	X	X
2.7	X	X	X	X	X
2.8	X	X	X	X	X
2.8.1	X	X	X	X	
2.8.2	X	X			
2.8.3	X	X	X		
2.9.1	X				
2.9.2	X		X		
2.9	X	X	X	X	X
2.10	X	X	X	X	X
2.11.1	X	X	X	X	
2.11.2	X	X	X	X	
2.11.3	X	X	X		
2.12.1	X	X	X	X	X
2.12.2	X	X		X	
2.13	X	X		X	
2.14	X			X	
3	X				X
4.1.1	X		X		
4.1.2	X		X		
4.1.3	X				
4.1.4	X	X	X	X	X
5	X		X		
7	X	X		X	
7.1.2	X	X			

Clause*	Class I Manufacturer	Class II Maintenance Org.	Class III Distributor/Broker	Class IV Processors	Class V Other
7.1.3	X	X		X	
7.1.4	X	X	X	X	X
7.1.5	X	X	X	X	
7.1.6	X				
7.1.7	X	X	X		
7.1.8	X	X	X		X
7.1.9	X	X	X		X
7.1.10	X	X	X	X	X
7.1.11	X	X	X	X	X
8.1	X			X	
8.2	X			X	
8.3	X	X		X	
9.1	X	X	X	X	X
9.2	X	X		X	
9.3	X		X	X	
9.4	X	X		X	
9.5	X	X	X	X	
9.6	X	X	X		
9.7	X	X	X	X	X
10.1	X	X	X	X	X
10.2	X	X	X		
10.3	X	X	X	X	X
10.4	X	X	X	X	X
11.1	X	X	X	X	
11.2	X	X	X	X	
11.3	X	X	X	X	
12.1	X	X	X	X	
12.2	X	X		X	
12.3	X	X		X	
12.4	X	X		X	
13	X	X	X	X	X
14.1	X				
14.2	X				
15	X	X	X	X	X

Clause numbers as listed reference all subsequent clauses requirements until the next designated clause number