



AQAR Clauses

AEROSPACE QUALITY ASSURANCE REQUIREMENTS

The requirements of these clauses and any procedure or reports executed in implementation thereof, with their terms and conditions, become an integral part of the Purchase Order to the extent specified in the Purchase Order. These requirements supplement, but do not supersede, the presently existing terms and conditions of the Purchase Order. Compliance with the requirements of these clauses does not relieve the supplier of his responsibility for furnishing materials and services, which fully comply with applicable Drawing and Specification Requirements. It does not guarantee acceptance of materials and services by Integral Aerospace. Government documents are referenced herein by their basic number. Unless otherwise specified in the Purchase Order, the latest revisions and changes are applicable.

Date	Revision	Revision Summary	Approval
04/03/2013	NC	First release of consolidated AQAR requirements.	Helvin Bacareza
05/19/2013	A	Changed from "AQAR 912 - Heat Treatment of Component Parts" to "AQAR 913 - Heat Treatment of Component Parts"	Helvin Bacareza
06/18/2013	B	<ul style="list-style-type: none"> Relocate "Fastener Quality Act" clause from "Applicable to All Contracts" to "Requirements Evoked by Contract" section Update Goodrich to UTC Aerospace Systems 	Michael B. Roberts
4/3/2015	C	<p>Assigned Section Numbers for clarity</p> <p>Changed AQAR 910 to include exception of material procurement from sources listed in DFAR225.872-1.</p> <p>Approved Sources section, updated.</p> <p>Update to AQAR912 adding definition for catalogued parts</p> <p>Removed Approved Source List</p> <p>General Clause Packaging requirements added weight limitation for manual handling and palletizing</p>	Nik Desai
9/2/2015	D	<p>Updated AQAR 921 Sikorsky Aircraft Requirements for Original or certified True Copy requirements</p> <p>Added AQAR 914 Requirements for GE Engine parts</p> <p>Removed definition for standard pallet size</p>	Nik Desai
1/31/2017	E	<p>Changed Name of Company to Integral Aerospace from GE Aviation. CHANGE S-1005 TO IAS-1005, S-1007 TO IAS-1007. Reference to C-64 replaced with Integral Aerospace's Terms and Conditions</p> <p>Updated General Clause 1 – Document Availability, Certificate of Conformance, Approved Sources, Receiving Inspection, Corrective Action Deleted Government Inspection Clause.</p> <p>Replaced "bullets" within each clause with letters for sub paragraphs</p> <p>AQAR 910 Raw Material requirements was specified for Military Contracts only</p> <p>Section II numbered sections from AQAR 01 to AQAR 06, Modified AQAR 917, AQAR 921, Deleted AQAR 926, AQAR 928, AQAR 929, AQAR 936, AQAR 938, AQAR 939, AQAR 940.</p> <p>Modified AQAR 951. Deleted Sections III and IV</p>	Nik Desai
8/4/2017	F	Added AQAR Flow down requirements, Quality Management Requirements Flow down AS9100D Requirements for Prevention of Counterfeit and Parts, Product Safety & Ethical Behavior	Nik Desai
9/28/2017	G	Minor Corrections of formatting and Titles	Nik Desai
9/20/2018	H	Added "Supplier Control" and "Obsolescence" paragraphs. Revised the "Record Control and Retention" and "Notification of Changes" paragraphs.	Nik Desai
11/4/2019	I	<p>Update "Document Availability", "First Article Inspection", "Calibration", "Prevention of Counterfeit Parts", AQAR 918, AQAR 921</p> <p>Removed AQAR 932 Source Inspection (duplicate of AQAR 02)</p>	Bitra Mohammady
4/12/2021	J	<p>Added to Calibration clause: Certificate of calibration shall be received from suppliers along with back up data related to the calibration.</p> <p>Added AQAR 952 UTC Collins Aerospace</p> <p>Updates to "Prevention of Counterfeit Parts", "Calibration", "First Article Inspection", "Certificate of Compliance/Conformance", "Nonconformances" and "Packaging"</p>	<p>Christina Rodriquez</p> <p>Irene Lopez</p> <p>Bitra Mohammady</p>
8/12/2021	K	<p>Updated statements regarding DFARS in AQARs 910, 911 and 912</p> <p>Added to Calibration clause: Calibrations shall be performed in accordance with manufacturer calibration procedures, IA procedures or an approved procedure by IA.</p>	<p>Bitra Mohammady</p> <p>Christina Rodriquez</p>



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General AQAR Clauses

I. APPLICABLE TO ALL CONTRACTS

The following requirements are applicable for all Integral Aerospace contracts/purchase orders. Compliance is required for all suppliers doing business with Integral Aerospace.

DOCUMENT AVAILABILITY

AQARs and General Terms and Conditions are available on the company website or by contacting Integral Aerospace- **Purchasing or Supplier Quality Engineer**. <https://integralaerospace.com/about-us/quality/>

QUALITY MANAGEMENT SYSTEM – Supplier shall implement a Quality Management System in compliance with the type of services/products provided as shown below

Supplier Type	Acceptable Third-Party Certifications
Manufacturer	AS/EN/JISQ9100 / ISO9001 or equivalent
Outside Processor	AS9100 Compliant
Special Processor	NADCAP
Distributor	AS/EN/JISQ9100 / AS9120
Materials	AS/EN/JISQ9100
Calibration	AS/EN/JISQ9100 / ISO17025
Repair Station	FAR145
Engineering Services	AS/EN/JISQ9100/ISO9001

SUPPLIER CONTROL

Integral Aerospace controls and monitors the performance of its suppliers, including on-time and quality performance. If the supplier does not meet defined purchasing requirements (quality and/or delivery), Integral Aerospace will work with the supplier to address identified issue

AQAR FLOW DOWN REQUIREMENTS

Integral Aerospace’s AQAR requirements shall be communicated to sub-tier suppliers as applicable

IAS-1005

The requirements of IAS-1005 – “Integral Aerospace Supplier Quality System Requirements” are applicable.

TERMS AND CONDITIONS

The requirements of Integral Aerospace’s Terms and Conditions are applicable.

COMMUNICATION

All communication regarding the contract shall be submitted to Integral Aerospace Purchasing Department. It is the suppliers’ responsibility to ensure that their sub-tier suppliers are in compliance with the requirements of AQAR Document. Integral Aerospace reserves the right to disapprove the use of any sub-tier supplier. The supplier shall be responsible for all sub-tier services and goods. If some Integral Aerospace requirements cannot be met or can only partially be met, the supplier shall negotiate a mutually acceptable requirement with Integral Aerospace. Any deviations must be reviewed and approved by Integral Aerospace Quality and Purchasing prior to purchase order contract award. The supplier shall acknowledge the order to the customer and shall maintain ongoing communication with Integral Aerospace and provide an update with regards to the order status and issues (e.g., delays, nonconformities).

PREVENTION OF COUNTERFEIT PARTS

Supplier must implement control processes for prevention of counterfeit or suspect counterfeit parts use and their inclusion in products delivered to Integral Aerospace in accordance with AS5553 and AS6174 as a guideline. This includes identification, mitigation, detection, avoidance techniques, and reporting of suspect or confirmed counterfeit parts, assemblies, and/or materials.

Training to appropriate personnel should be provided in the awareness and prevention of counterfeit parts.

COMPETENCE REQUIREMENTS

Supplier personnel performing work for Integral Aerospace shall be trained or otherwise qualified and competent to perform work assigned to them, and supplier shall retain applicable records.

PRODUCT CONFORMITY, SAFETY & ETHICAL BEHAVIOR

Supplier shall have a program in place ensuring their employees are aware of their contribution to product conformity, product safety and importance of ethical behavior.

CALIBRATION

Calibration systems shall be in accordance with ANSI/NCSL 540-1, ISO17025, or equivalent standard. Equipment used to monitor, measure and/or test product or process conformity will be calibrated or verified (or both) at intervals necessary to assure continued accuracy. All reference standards used in calibration shall be current & traceable back to National Institute of Standards & Technology (NIST). Records shall be maintained and made available upon request. Control, care, and calibration of Integral Aerospace furnished measuring/test equipment and tooling shall be the responsibility of the Supplier and supplier must provide records of calibration and maintenance when requested. Certificate of calibration shall be received from suppliers along with back up data related to the calibration. Calibrations shall be performed in accordance with manufacturer calibration procedures, IA procedures or an approved procedure by IA.

FIRST ARTICLE INSPECTION *For the first lot produced*, First Article inspections shall be performed per latest revision of AS9102, using AS9102 forms. The supplier must list all drawing note and dimensions, locations and tolerances as defined by the drawing, along with actual measurements. The completed forms must accompany the first shipment of parts. This requirement is not applicable to products that has been identified as standard hardware and/or cataloged parts.

When performing a new FAI, supplier must send a copy of their bubble drawing along with the report.



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LIMITED SHELF LIFE MATERIALS Items with limited shelf life shall be marked on the item, package, or container with the manufactured date, storage temperature, special handling requirements, and expiration date of the items. When items are fabricated of rubber, the cure date of the rubber is to be shown in lieu of the date of manufacture. All identification markings shall be placed in accordance with applicable specifications. Unless otherwise stated, Integral Aerospace will not accept materials with less than 75% of shelf life remaining at the time of receipt without written authorization from Integral Aerospace Buyer.

CERTIFICATE OF COMPLIANCE/CONFORMANCE

A Certificate of Compliance/Conformance (C of C) shall be provided with each lot. The C of C shall include a statement that the items meet the requirements of the purchase order and/or specifications referenced on the drawing and/or purchase order. C of Cs must include, as a minimum, the following information:

1. Integral Aerospace Supplier/Processor name and address,
2. Serial number(s), if applicable
3. Integral Aerospace purchase order number,
4. Quantity of parts in shipment,
5. Part number, Revision & Description on purchase order,
6. Statement of work certifying product compliance,
7. Applicable Specifications including revision & Process Parameters
8. Signature or stamp of authorizing agent and Date,
9. Date code(s) or lot number(s), if applicable,
10. Original Manufacturer and site of manufacture,
11. Date of C of C,
12. Shelf life, if applicable,
13. Mechanical Properties,
14. Customer name and address,
15. Reference to Integral Aerospace approved concessions or deviations/waivers.
16. For Sikorsky Flight Safety Hardware, "time in" and "time out" are required on certifications

Distributors only - A copy of a Certificate of Conformance from the distributor specifying date code, lot/batch code or serial number(s) and the manufacturer's name shall be shipped with each order.

The latest revision of specifications reflected or implied in this purchase order are applicable unless otherwise noted.

One set of supporting Certification packet for Special Processes, Raw Materials, and/or Acceptance Testing shall accompany each PO line item to be shipped. All certifications provided must be clear and legible.

APPROVED SOURCES

When directed by Integral Aerospace PO, Suppliers and their sub-tier suppliers shall use Integral Aerospace's end-customer approved suppliers for Special Processes, Raw Materials, and/or Acceptance Testing. If no end customer Special Processor is required, then suppliers shall use only NADCAP approved facilities to perform Special Processes. A list of controlled special processes can be found on the Performance Review Institute website, www.pri-network.org.

RECORDS CONTROL & RETENTION

The supplier shall maintain, on file at the supplier's facility, records traceable to the conformance of product delivered to Integral Aerospace. Unless specified by contract or purchase order, the supplier shall retain such records for a period of not less than ten (10) years from the date of shipment under each applicable order for all products.

For critical safety or flight safety hardware, records shall be maintained for a minimum of 40 years or unless other specified by Integral Aerospace.

The supplier shall also ensure such records of the supplier's subcontractor(s) shall remain on file by the supplier's Subcontractor(s) or the supplier for the same retention period.

The supplier shall make such records available to Integral Aerospace and its authorized representatives, its customers, and regulatory authorities

All records shall be legible, complete, accurate and be maintained in good condition to prevent damage or deterioration when provided to Integral Aerospace and while being maintained at the suppliers site.

When requested by Integral Aerospace, the supplier shall make specified records available in the English language.

At any time during the identified retention period, at Integral Aerospace's request, the supplier will deliver such records or any part thereof in format / media and within a time frame as agreed to by both parties, to Integral Aerospace, at no additional cost to Integral Aerospace.

At expiration of the retention period, the supplier shall notify Integral Aerospace in writing. Integral Aerospace reserves the right to request delivery of such records. In the event Integral Aerospace chooses to exercise this right, the supplier shall promptly deliver such records to Integral Aerospace at no additional cost on media agreed to by both parties. If Integral Aerospace does not request the records, expired hardcopy records related to Integral Aerospace shall be shredded. Expired electronic records shall be permanently deleted.

Additional record control requirements are documented in IAS-1005 – "Integral Aerospace Supplier Quality System Requirements", Appendix C.

INTEGRAL AEROSPACE RECEIVING INSPECTION

Shipped hardware is subject to Integral Aerospace Receiving Inspection per Integral Aerospace inspection process.

Integral Aerospace reserves the right to return any product found to not pass receiving inspection; this includes product received that does not contain the correct or



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applicable paperwork as indicated by the purchase order. Cost associated to reworked hardware by Integral Aerospace may be flowed down to the supplier at the discretion Integral Aerospace Purchasing.

SAMPLE INSPECTION

Unless otherwise specified, component parts and/or assemblies shall be inspected in accordance with ANSI Z1.4. Dimensional Inspection Reports must accompany each part number on PO line item shipment (multiple line items for same part number may have 1 inspection report). Failure to abide by this requirement may be a cause for rejection. For Sikorsky parts See AQAR 921

CORRECTIVE ACTIONS

Supplier is required to provide prompt and effective corrective actions on all reported discrepancies. The supplier is responsible to respond to Integral Aerospace corrective action requests. Suppliers with a high volume of non-conformances or significant quality events are subject to increased surveillance, which may include but is not limited to a Quality Improvement Plan, Hardware Review, or Continuous Improvement (FTY) Project. Supplier must provide corrective action(s), and corrective action plans within a maximum of 30 calendar days, or as specified by the Corrective Action Request, from issuance of corrective action request. The requirements of IAS-1005, Appendix D are applicable.

RIGHT OF ACCESS TO ALL FACILITIES

Integral Aerospace, Integral Aerospace's customers and/or regulatory authorities shall have right of access to all facilities involved in this order and to all applicable records.

FLOW DOWN OF REQUIREMENTS

The supplier shall flow down to their suppliers the applicable requirements of this purchase order contract, including customer requirements and key characteristics.

NONCONFORMANCES

Discrepant hardware must be submitted to Integral Aerospace for disposition prior to any shipment. Nonconformance must be reported in accordance with Supplier Nonconforming Material Report form, IAT-1005-3, found on the Integral Aerospace website.

When a nonconformance is discovered after shipment, a notice of escape must be submitted to Integral Aerospace when a nonconformance is discovered after shipment. The notice of escape must include root cause, containment, corrective and preventive actions with owners and expected completion dates. All containment actions must be completed within 24 hours of discovering the escape. The requirements of IAS-1005, Appendix D are applicable.

Both Supplier Nonconforming Material Report and Notice of Escape should be sent to IA Buyer.

Additionally, continued nonconforming products and products received without proper and correct paperwork may be subject to additional costs flowed to the supplier.

OBSOLESCENCE

Supplier shall be aware of obsolescence issues. The supplier shall provide immediate notification to Integral Aerospace buyer and impacted personnel, describing the obsolete item, reason for obsolescence, estimated date the product will no longer be available, and any proposed alternatives. Timely notification is imperative to allow sufficient time to identify alternates for the affected parts, and perform any necessary certifications, which may involve regulatory agencies.

FOREIGN OBJECT DEBRIS

The Supplier shall develop and maintain a Foreign Object Debris (FOD) prevention program in accordance with NAS 412 and AS9100 requirements, unless otherwise specified, to identify and eliminate foreign object entrapment areas and paths through which foreign objects may migrate and cause product failure. The FOD program will include design, manufacturing, and process controls to prevent FOD in deliverable items. The Supplier shall employ appropriate housekeeping practices to assure timely detection and removal of residue/debris generated, if any, during the manufacturing operations and/or normal daily tasks. All occurrences of product rejections due to FOD shall be documented and investigated to determine the root cause of the FOD and implement actions to prevent any recurrence. The Supplier shall implement a FOD prevention program and shall provide initial and periodic FOD prevention awareness training programs. The Supplier shall include periodic self-assessment of internal FOD prevention practices to measure effectiveness. Delivered material must be clean and free from any material/debris, such as wire clippings, machined chips, burrs, grinding dust, forming materials, corrosion, oil and other foreign material on surfaces to prevent FOD entrapment. The Supplier should have special emphasis controls in place appropriate for the manufacturing environments. The Supplier shall ensure that FOD requirements are flowed down to the supplier's sub-contractor/sub-tier suppliers.

TEST & INSPECTION

Integral Aerospace, Integral Aerospace's customer, and the Government have the right to inspect and test all supplies called for by the purchase order contract, to the extent practicable, at all places and times including the period of manufacture, and in any event before acceptance. FAR Clause 52.246-2, inspection of supplies – fixed price, is hereby incorporated by reference https://www.acquisition.gov/far/html/52_246.html

ITAR REQUIREMENTS

No work purchased, manufactured or otherwise acquired for use in the performance of or to be delivered under this order shall be transported on vessels, aircraft, or other carriers leased to or from, owned, operated or controlled by any prohibited country identified in the International Traffic in Arms Regulations (ITAR), 22 CFR 126. No vessels, aircraft, or other carrier, while carrying any such work shall make an en route stop in any country identified in ITAR, 22 CFR 126.

The product and the associated technical data related to this purchase order are considered ITAR and or EAR controlled pursuant to 22 CFR Part 120-130 and 15 CFR Parts 730-744, respectively. Transfer of this product or data by any means to a Non-US person, whether in the United States or abroad, without US Government authorization.

FASTENER QUALITY ACT (FQA)

Certifications for products containing fasteners must be certified with one of the following statements to meet the Fastener Quality Act (FQA).

- All contained fasteners meet the requirements of the FQA and records of compliance are on file.
- All contained fasteners were produced prior to the implementation of FQA and are therefore exempt.



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- Materials and parts are not assembled with fasteners covered by FQA.

SHIPPER/MANIFEST

Serialized product traceable to single packaged shipment and adequately identified to reflect on one shipper/manifest is required unless written authorization to do otherwise is granted by Integral Aerospace Purchasing. If permission is granted, separate shipments must be clearly distinguishable, identified, and separated from each other.

PACKAGING

The requirements of IAS-1005, Appendix E are applicable. As a minimum, the supplier shall package all material in a manner that will ensure protection against corrosion, oxidation, deterioration and physical damage during shipment to Integral Aerospace and as described below:

When parts are procured directly from distributors, the manufacturers of "off the shelf" or "over the counter" packaging in addition to the packaging described below will be acceptable.

Electrostatic sensitive devices shall be packaged and handled per MIL-STD-1686 & ANSI/ESD S20.20 Electrostatic Discharge Control Program Standard requirements using ESD protective material.

- Coated magnetic cores, toroids, etc. shall be packaged to prevent damage from shipping and uncoated cores, toroids, etc. shall also be packaged to prevent oxidation and/or corrosion to the material.
- Printed wiring boards shall be packaged individually with sealed or taped ends. Desiccant, dryer or other antioxidant material shall also be used.
- Materials used to maintain item positions and lead configuration shall permit its removal and replacement without bending and/or destroying the leads.
- Wrapping and cushioning material shall not crumble, flake, powder, shed, or generate static electricity.
- Packaging shall be in containers using materials that do not introduce gases or chemicals that could be detrimental to the solderability of parts. Bags or containers made of silicones, sulfur compounds, or polysulfides, or processed with these compounds shall not be used.
- Raw Materials such as forged/castings surfaces after final machining should be packaged to prevent metal to metal contact.
- Each container of packaged materials for shipment should weigh no more than 35 lbs. for manual handling.
- Containers of packaged materials exceeding 35lbs for shipment must be palletized using Standard pallet sizes.
- Items damaged due to inadequate packaging will be rejected and returned to the supplier.

NOTIFICATION OF CHANGES

Supplier is responsible for notifying Integral Aerospace Purchasing within 30 days in the event of any significant change at the supplier's facility occurs, which includes but is not limited to changes to processes, products, services, external providers, location of manufacture, name, quality management system, and management, and obtain Integral Aerospace's approval. Note: any change that will affect the product configuration and quality, such as changes affecting frozen planning, special processes, approval status, notification and approval by IA may be required prior to the change and work being performed.

AUDITS, HARDWARE, REVIEWS, QUALITY SYSTEM QUESTIONNAIRE

Suppliers may be subject to onsite audits and hardware reviews. Upon the receipt of a supplier questionnaire, suppliers must respond within 10 days or may be subject to disapproval from the Integral Aerospace Approved Source List.

TITANIUM LIMITATIONS

When titanium material is machined for products per the contract, either DI water or non-halogenated coolant must be utilized exclusively as the coolant medium.

NON-CONVENTIONAL MACHINING LIMITATIONS Machining techniques performed by the supplier or their subcontractors which impact significant localized heating (i.e. EDM, ECM, plasma applications, laser use, etc.) are prohibited unless authorized by Integral Aerospace prior to performance.

II. REQUIREMENTS INVOKED BY CONTRACT

The following requirements are applicable when invoked by contract.

AQAR 01 - DSQR/SRP Agreement

Parts are subject to the terms and conditions of the Integral Aerospace Supplier Release Plan (SRP) prior to shipment. All materials shipped via this order must be accompanied by a C of C and either a packing slip or bar-coded shipping label. Full or partial acceptance status will be in accordance with the SRP and will be applied by the supplier's qualified DSQR or by an Integral Aerospace quality representative. Integral Aerospace reserves the right to audit or evaluate the supplier's compliance to this plan through a supplier funded EV1 evaluation or other means.

AQAR 02 Integral Aerospace Source Inspection

Prior to shipment from your plant, you are requested to notify the Buyer three days in advance of shipment so that arrangements may be made for source inspection.

Seller will provide Integral Aerospace Quality Assurance Representative with the facilities to inspect the article(s).

AQAR 03 Chemical Reports

A chemical and physical analysis report shall be supplied with each shipment per purchase order. Copies of certs can be provided when multiple deliveries of same part from same lot are shipped.



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AQAR 04 Destructive Analysis

A specimen of suitable size and configuration for destructive analysis shall accompany each shipment made against this order. The specimen shall be of the same material and shall have been processed with the lot it represents through all special processes (e.g.: heat treatment, electroplating, paint finish, etc.).

AQAR 05 Test Data

Test data readings and/or inspection measurements of items on this order must be taken and documented as indicated below. Particular emphasis shall be given to those characteristics which cannot normally be inspected upon receipt at Integral Aerospace (hidden measurements). The above record shall be adequate to ascertain the quality level of required articles and of the production processes used in manufacture of parts on this order. The use of electronic media is encouraged.

- A. Inspection measurements: (verifiable/objective evidence, no check marks)
- B. Test Data.
- C. Retain at Supplier.
- D. Submit with shipment.

AQAR 06 Certificate of Calibration

The calibration service shall provide a certificate of calibration for each item calibrated. The certificate must include the date of calibration, listed uncertainties, calibration due date, model and serial number of the equipment used in the calibration and a statement that all equipment/standards used are traceable to the National Institute of Standards and Technology (NIST). The certificate must also include the Integral Aerospace tool number, model number and serial number of the item calibrated.

AQAR 910 – Supplier Furnished Materials

Requirements for component parts and/or assemblies using Supplier Furnished Materials.

- a) Manufacturing facilities must maintain a quality system compliant to AS9100.
- b) Raw materials for Military Contracts shall not be procured from foreign agencies or produced in non-domestic mills unless procured from qualifying country sources as specified per DFARS 225.872-1 or previously approved by Integral Aerospace.
- c) Any “specialty metals” identified in DFARS Clause 252.225-7009 which have been melted or produced outside of the United States, its outlying areas or a qualifying country are prohibited and must be approved by Integral Aerospace prior to use. When approval is granted, an independent laboratory analysis by an Integral Aerospace approved laboratory may be required.
- d) When titanium material is machined, either DI water or non-halogenated coolant must be utilized exclusively as the coolant medium.
- e) A written dimensional report shall accompany each PO line item shipped.
- f) Component parts and or assemblies shall be inspected/tested in accordance with ANSI Z1.4 unless otherwise specified.
- g) In the case that suppliers utilize Digital Product Definition (DPD) / Model Based Definition (MBD) suppliers must comply with Integral Aerospace QWI 14.1-01. The suppliers must be approved by Integral Aerospace to receive MBD/DBD and must obtain DPD/MPD through export controlled channels (i.e. eDistrib).

AQAR 911 – Raw Materials

- a) Raw material suppliers must maintain a quality system compliant to ISO9001.
- b) One set of supporting certifications packets for raw materials and/or acceptance testing of said materials shall accompany each PO line item.
- c) Unless otherwise specified, in accordance with DFARS 252.225-7009, restrictions on articles containing specialty metals apply. An independent laboratory analysis by an approved laboratory may be required.
- d) Raw materials must be supplied in single heat lots. Written approval from Integral Aerospace Purchasing must be obtained prior to shipping multiple heat lots. If approval is granted, the supplier must ship in the heat lots in clearly identified containers, bundles, or skids.
- e) Supplier shall not mix material of any type. Material of different type or thickness must be shipped in clearly identified and separate containers, bundles, or skids.

AQAR 912 – Catalogued and/or Proprietary Products

- a) Standard Hardware: catalogued parts such as nuts, bolts, rivets, screws, etc. off the shelf items. Certification of Conformance by manufacturer must accompany the parts.
- b) Manufacturer’s proprietary parts: Items where there are no Integral Aerospace part numbers assigned. Certification of Conformance to Manufacturer Part Number and customer flow down as required by PO must accompany the parts.
- c) Source Controlled Drawing Items: These parts have Integral Aerospace part numbers and PO Specification calls out. C of C must reference Integral Aerospace part number.
- d) Supplier/Manufacturer’s part numbers: supporting certifications packets as specified per PO specification including raw materials and/or acceptance testing of said materials shall accompany each PO line item.
- e) Unless otherwise specified, in accordance with DFARS 252.225-7009, restrictions on articles containing specialty metals apply. An independent laboratory analysis by an Integral Aerospace approved laboratory may be required.

AQAR 913 – Heat Treatment of Component Parts

- a) The supplier shall maintain a quality system approved by AS9100, ISO9001, or NADCAP
- b) Special Processes must be approved by NADCAP
- c) Certifications shall include, at a minimum:
 - I. Process performed
 - II. Controlling specifications with revisions
 - III. Applicable process parameters (time, temperature)
 - IV. For Sikorsky Flight Safety Hardware, “time in” and “time out” are required on certifications
 - V. Mechanical properties after heat treat



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AQAR 914 – GE Aviation Engine Hardware Applications Requirements

Supplier must conform and comply to following Requirements for the fabrication or processing of components parts, assemblies, forgings, and castings delivered to Integral Aerospace, Santa Ana for GE Engines

- a) S-1000, S-1001, S-1002 and S-400 as applicable
- b) Processing and material certification will be required with each shipment.
- c) Certification must maintain lot and serial number traceability as applicable.
- d) Multiple shipment of a part with multiple lots that comes with multiple certificates the lot and serial number traceability must be maintained accordingly.

AQAR 915 – Integral Aerospace Furnished Materials

- a) The supplier is accountable for all Integral Aerospace supplied materials. All materials must be returned to Integral Aerospace, whether partially completed, complete, discrepant (with a red tag), or scrap. All scrap must be returned to Integral Aerospace upon completion of the order.
- b) The supplier may be subject to fees for any scrap or discrepant hardware. All costs are flowed down at the discretion of Integral Aerospace Purchasing.

AQAR 917 – Special Processes on Component Parts/Assemblies

- a) Certificates of conformance shall include, at a minimum, the following:
 - i. Processor Name and Address
 - ii. Controlling Specifications and Revisions
 - iii. Applicable Process Parameters
 - iv. For Sikorsky Flight Safety Hardware, “time in” and “time out” are required on certifications
 - v. Mechanical Properties
 - vi. Order Number
 - vii. Part Number
 - o Serial/Lot Numbers
 - o Statement of Work
 - o Signature and Date
- b) All special processes must be approved by NADCAP.

AQAR 918 – Rubber, Plastic, Chemical Products, etc.

- a) One certification package reflecting the supplier’s lot/batch number and cure date, including technical data sheets/ material safety data sheet (MSDS), shall accompany each purchase order line item to be shipped.

AQAR 921 – Sikorsky Aircraft

Requirements for the fabrication or processing of components parts, assemblies, forgings, and castings delivered to Sikorsky Aircraft.

- a) SSQR-20.1 Supplier Sampling Requirement is applicable
- b) SSQR-01 is applicable.
- c) SS9211 is applicable for Flight Safety or Critical Safety Items.
- d) Sikorsky approved sources are required for all special processes, laboratory testing and welding. Refer to the Approved Sikorsky Source List for Special Processes & SS9211 for all processes
- e) Processors of Flight Safety Parts (FSP) must maintain current approval from Sikorsky within past 12 months of the product shipment.
- f) Integral Aerospace Supplier furnished materials require mill certifications listing the applicable specifications and actual chemical and physical properties results.

Certification Requirements – Original or Certified True copy of special processing certification is required. Suppliers can present a “Certified True Copy” which means a complete copy (front and back) of the original certification including all terms, signatures, and dates, to which is attached or stamped, a signed statement which states, “The copied certificate has been compared to the original certificate and is a true copy in its entirety”. When a copy of the True Certified Certificate is sent with shipment, it is the supplier’s responsibility to guarantee its authenticity and traceability to the original certificate. The supplier must produce the original certificate or True Certified certificate within 3 business days from the request date.

- a) All documents/certifications must include the current revision letter of any specifications used.
- b) Heat treated parts must be 100% hardness tested and certified.
- c) Certifications must state “Sikorsky Aircraft Parts”
- d) Sikorsky Penetrant inspection per SS8806 requires parts to be penetrant inspected prior to processing that may mask indications, such as sanding, buffing, polishing, abrasive blending, tumbling, etc. Parts inspected after such operations require etching of at least .0002” from the surface prior to inspection.

AQAR 924 – Offshore Manufacturers

- a) One certification package for special processes, raw materials, and acceptance testing (if applicable) shall accompany each PO line item to be shipped.
- b) The supplier shall use only Integral Aerospace approved raw material and special process sources.
- c) Calibration system shall meet the requirements of ISO 17025

AQAR 927 – Government Source Inspection

- a) Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the local government representative (contact the local DCMA office) to schedule the inspection.
- b) When requested by the applicable government representative, copies of all applicable purchasing documents are to be sent directly to the applicable sub-tier supplier for use by their government representative.
- c) On receipt of this order, promptly furnish a copy to the Government Representative who normally services your plant or, if none, to the nearest Army, Navy, Air Force or defense supply agency inspection office. In the event the representative or office cannot be located, Integral Aerospace purchasing agent should be notified immediately.
- d) All work on this order is subject to inspection and test by the Government at all times (including the period of performance) and places, and in any event, prior to shipment.
The Government Representative who normally services your plant should be notified forty-eight (48) hours in advance of the time articles or processes are



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ready for inspection or test.

AQAR 930 – 100% Inspection

This requirement invokes 100% inspection of all hardware. Inspection reports must accompany each Purchase Order line item shipped

AQAR 931 – Frozen Planning

This AQAR imposed frozen planning. Once Integral Aerospace accepts the first article part, the supplier shall not deviate from the method of manufacture, equipment, materials or processes that may affect the fit, form, function, interchangeability, or performance of the hardware without the prior written consent of Integral Aerospace Supplier Quality.

AQAR 933 – Statistical Process Control

SPC shall be implemented and maintained as part of this purchase agreement. The supplier's SPC program shall be documented and include provisions for; selection and identification of key characteristics and/or processes, statistically based control charting, demonstration of continuous improvement, management supervision, corrective action, training, and flow down to sub-tier supplier. The requirement for and establishment of SPC key characteristics and/or key processes may be based on similar parts or processes.

AQAR 934 – In-Process Inspection

This AQAR imposes In-Process Inspection requirements. Necessary precautions to comply with the applicable in-process inspection requirements/hold points must be taken by the supplier.

AQAR 935 – Procedure/Technique Approval

This AQAR imposes procedure/technique approval requirements. The supplier must submit applicable procedures/techniques to Integral Aerospace for approval to ensure that the requirements of the purchase order are being satisfied.

AQAR 937 – Boeing

- a) If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.
- b) Unless otherwise specified, the requirements of H900 are applicable.
- c) This is a Boeing Company part; any special process source/laboratory used to make or test this component/assembly must be an approved vendor of Integral Aerospace and an approved vendor of Boeing Company, per Document D1-4426 (Boeing Approved Process Sources). This requirement applies only to "Build to Print" programs – contact The Buyer for further instructions.
- d) The Integral Aerospace subcontract, as well as their suppliers and processing sources must supply Integral Aerospace with Certification of Compliance that processes performed conform to Boeing Company Document D1-4426.

AQAR 941 – Northrop Grumman

- a) This AQAR imposes Northrop Grumman Quality/Contractual requirements. Necessary precautions to comply with the applicable Northrop Grumman Quality/Contractual requirements must be taken by the supplier. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.
- b) Any special processors utilized must be approved by Northrop Grumman.

AQAR 942 – UTC Aerospace Systems (formerly Goodrich) Document 300

This AQAR imposes Document 300 Quality requirements. Necessary precautions to comply with the applicable Document 300 requirements must be taken by the supplier. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 943 – Lockheed Martin (LMA) C-130

- a) This AQAR imposes Lockheed Martin C-130 Quality requirements as follows: "Work to be accomplished in performance of this purchase order is directly related to a Lockheed Martin Aeronautics company P.O. and must be accomplished in accordance with process specifications on the purchase order and applicable Lockheed Martin Aeronautics Company Appendix."
- b) If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.
- c) Supplier must certify to the latest LMA's C-130 specification.

AQAR 944 – Lockheed Martin Q4R

This AQAR imposes Lockheed Martin Quality Clause Q4R as follows:

A. Seller shall maintain a FOD prevention program. Seller's FOD prevention program shall include the review of design and manufacturing processes to identify and eliminate foreign object entrapment areas and paths through which foreign objects can migrate. Seller shall ensure work is accomplished in a manner preventing foreign objects or material in deliverable items. Seller shall maintain work areas and control tools, parts and materials in a manner sufficient to preclude the risk of FOD incidents. Seller shall document and investigate each FOD incident and ensure elimination of the root cause of each such incident. Integral Aerospace shall have the right to perform inspections, verifications and FOD Prevention Program audits at Seller's facility to ensure program documentation and effectiveness. Seller shall identify a FOD control person(s) responsible for implementing FOD prevention, awareness and training. Seller's FOD prevention program shall include periodic self-assessment of its internal FOD prevention practices, including subcontractors FOD prevention program at every tier, to measure effectiveness of program compliance to requirements. Seller's FOD prevention program shall provide annual FOD training to Seller's employees. At Integral Aerospace request, Seller shall provide records of such self-assessments and training to Integral Aerospace.

B. Seller's FOD prevention program shall, at a minimum, contain the following elements:

- (1) Design (when applicable) & Manufacturing Process Review,
- (2) Performance Measurement,
- (3) Training,
- (4) Material Handling and Parts Protection,
- (5) Housekeeping,
- (6) Tool Accountability,



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- (7) Hardware Accountability,
- (8) Lost Items,
- (9) Physical Entry Control into FOD Critical Areas, and
- (10) FOD Focal Points.

Seller shall ensure that the requirements of this AQAR are flowed down to Seller's subcontractors, at every tier. Prior to closing inaccessible or obscured areas and compartments during an assembly, Seller shall inspect for foreign objects/materials. Seller shall ensure that tooling, jigs, fixtures and test or handling equipment are maintained in a state of cleanliness and repair, sufficient to prevent FOD. By delivering items to Integral Aerospace, Seller shall be deemed to have certified that such items are free from any foreign materials that could result in FOD. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 946 – FAA Repair Station

This AQAR imposes the mandatory compliance with the amended Antidrug and Alcohol Misuse Prevention Program requirements per 14 CFR part 121, appendix I, section III and appendix J, section II. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 947 – FAA Repair Station, Part II

This AQAR imposes the mandatory compliance with the Hazardous Materials Training Requirements per amendments to 14 CFR Parts 119, 121, 135 and 145. Reference Department of Transportation's Hazardous Materials Regulations (ref: 49 CFR 171 thru 180) If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 948 – MBD/DPD Requirements

This AQAR imposes applicable customer and Integral Aerospace with Digital Product Definition and Model Based Definition (DPD/MBD) Requirements. This AQAR also imposes supplier compliance to ITAR, MLA, MA, TAA and EAR regulations. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 949 – Quality/Contractual Controls of Electrostatic Discharge

This AQAR imposes applicable customer and Integral Aerospace ESD requirements per WI 059. This AQAR also imposes supplier compliance to ESD packaging per Mil-E-17555 and identification per EIA RS-471. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.

AQAR 951 – General Atomics

- a) The supplier shall submit a CERTIFICATE OF CONFORMANCE with each lot/shipment attesting that each item of hardware and/or software conforms to all requirements of the purchase order and that all required test and inspections have been performed.
- b) Supplier shall submit certifications for raw material (chemical and physical characteristics) and/or processes (stating specification) used in the manufacturing of the item(s). Supplier shall include with each shipment of item product manufactured from Titanium material, an independent laboratory certified test report that states that the lot of material furnished has been tested, inspected, and found to be in compliance with applicable material specifications. The test report will list the specifications, including revision numbers or letters, to which the material has been tested and/or inspected and the material lot to which it applies. The test report shall include quantitative limits for chemical, mechanical, or physical properties, and contain the actual test and/or inspection values obtained.
- c) The supplier shall maintain a quality system meeting the requirements of ISO 9001 / AS 9100 and a calibration system shall conform to ANSI/NCCL Z540-1 or ISO 17025 unless otherwise agreed to by Integral Aerospace.
- d) All special processing (Plating, Soldering, Heat Treating, Welding, NDT, etc.) shall be performed only by suppliers listed in the current Integral Aerospace Approved Source List for special processes. (Contact your Integral Aerospace Buyer for a copy).
- e) Original Processing certifications are required.
- f) All documents/certifications must include the current revision letter of any specifications used.
- g) The applicable specification revisions are noted in the contract.
- h) Heat treated parts must be 100% hardness tested and certified.

AQAR 952 – UTC Collins Aerospace

This AQAR imposes ASQR-01, COL-ASQR-PRO-0003-01 and LS-SBU-A001-SQA quality requirements. Necessary precautions to comply with the applicable quality requirements shall be taken by the supplier. If the supplier is unaware or requires clarification of these requirements, contact Integral Aerospace Purchasing or Supplier Quality.