Contents

GENERAL REQUIREMENTS APPLY TO ALL

PROCESS SPECIFIC REQUIREMENTS

END-USER REQUIREMENTS (REF PO) - APPENDIX SECTIONS

1.0 INTRODUCTION

The requirements of this manual apply to all external providers that furnish product, material, processes, or product related services to *Enjet Aero Manchester LLC* (formally Spartan Aerospace LLC).

This manual, SQM-001, is intended to flow down Enjet Aero Manchester's customers' and "end-user" requirements in addition to AS9100, ISO14001, Nadcap and Enjet Aero Manchester requirements to external providers and throughout the supply chain. Your company's compliance to this manual is required. The end-use customer requirements shall take precedence over the requirements of this document. **Refer to the purchase order for the end-use customer.**

Please ensure your organization complies with all applicable sections of this manual (see section 3.3) including the appendix section for the end-use customer listed in the body of the Enjet Aero Manchester PO.

In this manual the term "external provider" is synonymous with the terms "supplier", "sub-tier", "processor", "producer", "seller", "subcontractor", "organization" and "vendor".

2.0 ENJET AERO MANCHESTER'S INTEGRADED MANAGEMENT SYSTEM (IMS) POLICY & SCOPE OF THE IMS

2.1 Enjet Aero Manchester has implemented an Integrated Management System Policy that combines the Quality Management System Policy (in accordance with AS9100) with the Environmental Management System Policy (in accordance with ISO14001) to create the following *Integrated Management System Policy* which is referred to as the **"5 C's":**

1. **Compliance**: Achieve and maintain compliance with all applicable environmental, legal, and other requirements.

2. **Customer**: Meet customer and industry quality requirements and standards regarding delivery, performance, and service.

3. **Continuous Improvement**: Continually improve our methods and systems to preserve customer satisfaction, the environment, and to prevent pollution.

4. **Communications**: Communicate this policy openly to stakeholders, interested parties, authorities, customers, and communities.

5. **Culture**: Cultivate an environment that encourages employees to achieve the quality and environmental objectives of the organization.

This policy is communicated to external providers, as well as other interested parties, for awareness, compliance, and support of Enjet Aero Manchester's commitment to the pursuit of environmental protection and product quality excellence.

2.2 For your organization's awareness and as an interested party, the scope of Enjet Aero Manchester IMS encompasses the IMS in accordance with the applicable sections of AS9100 and ISO14001. This scope applies to the Manchester, CT location producing stampings, brackets, weldments, rolled rings, sheet metal fabrications and machined components primarily for the aerospace industry and may extend to the gas turbine engine, firearm, and military vehicle industries. The IMS scope includes everything within direct control and authority of Enjet Aero Manchester. The scope encompasses the organization's business and operational processes for its production of deliverable product.

The scope also involves external parties, such as your organization, as far as Enjet Aero's influence extends. It is expected that your organization will demonstrate its ability to consistently provide products and services that meet requirements, applicable statutory/regulatory requirements, and continually improve to enhance overall customer satisfaction and environmental performance.

2.3 This Supplier Quality Manual, SQM-001, relates to the following standards:

- AS9100 sections 7.4 and 8.4
- ISO14001 sections 7.4 and 8.1

3.0 SCOPE/APPLICATION/PURPOSE

3.1 General

This manual forms a part of the Enjet Aero Manchester purchase order and applies to all external providers of product related material, processes, and services.

3.1.1 All documentation, including this document, and electronic media provided by Enjet Aero Manchester is the property of Enjet Aero Manchester. The documentation and electronic media shall be used only for the purposes of fulfilling the requirements of the Enjet Aero Manchester purchase order and not to be used for any other purpose.

3.1.2 All end-use customer specifications referred to in this document are proprietary to that end-use customer and shall be used only for the purpose intended and not to be used for any other purpose.

3.1.3 There are references to websites throughout this manual. These website links may change without notification. If a website link does not work, please contact Enjet Aero Manchester for direction.

3.2 Throughout this manual, *Enjet Aero Manchester LLC* may also be referred to as Enjet Aero, Enjet or EAM.

3.3 Application
Unless otherwise specified, this manual, when referenced by a purchase order, applies to Enjet Aero Manchester's external providers and all levels of sub-tier providers, their product shipments, processes, and services performed. Enjet Aero Manchester's external providers shall be responsible to flow down these requirements to their sub-tiers within the supply chain to ensure compliance to all requirements throughout the value stream.

PLEASE TAKE NOTICE OF THE FOLLOWING

3.3 Application of requirements (process approach):

A. ***All suppliers & sub-tiers*** – The main body of this manual, sections 1 thru 6, indicates the *general requirements* for **all** external providers as applicable.

B. ***Process specific*** - Your company's process *applicable section* from sections 7 thru 13.

C. ***End-user requirements*** - The *appendix section* required by the *"end-user"* as indicated in the body of the PO.

Your organization shall comply with the applicable *general requirements section (1 thru 6)*, applicable *process/service specific sections (7 thru 13)* and the *applicable end-user appendix* requirements.

In case of a conflict, the end-user customer requirements shall take precedence. **Figure 1** below shows how each section of this manual, along with the appendixes, applies to the product/process/service your company is providing.

3.3.1 If the PO has an end-use customer that is not included in the appendix section or there is no end-use customer indicated, then only the section(s) of this manual that apply to your organization are required.

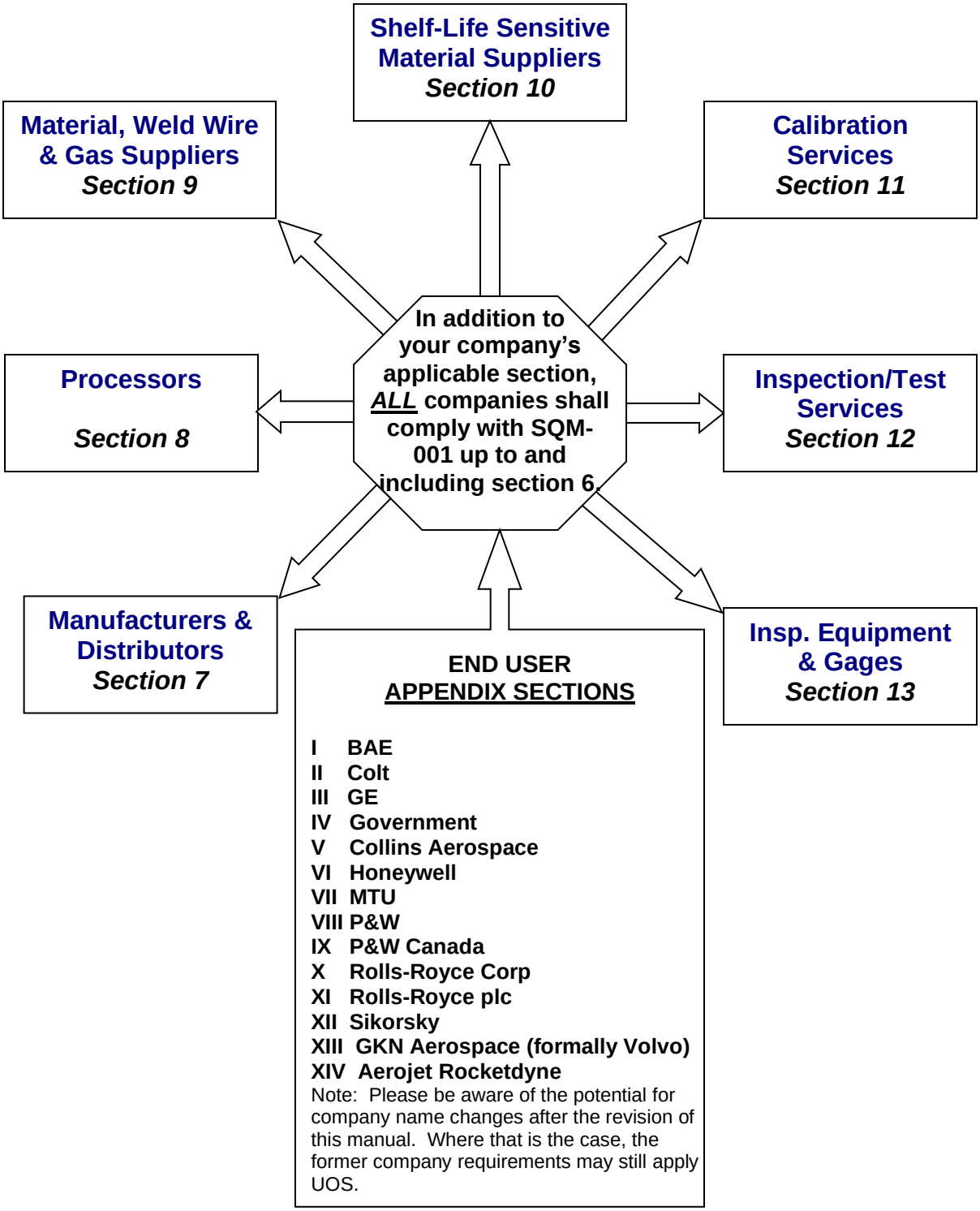

Figure 1
Refer to section 3.3

3.4 Purpose
This manual shall define and flow down requirements to external providers and throughout the supply chain in order to maintain compliance to requirements and:

3.4.1 Flow down Enjet Aero's customer and "end-user" requirements.

3.4.2 Flow down quality management system requirements per AS9100.

3.4.3 Flow down environmental management system requirements per ISO 14001. Additionally, as part of Enjet Aero's communication process, in accordance with ISO 14001 section 7.4.3, externally communicate information relevant to the environmental management system and as required by Enjet Aero's compliance obligations.

3.4.4 Flow down Nadcap requirements to ensure continued accreditation.

3.4.5 Ensure personnel in your organization are aware of:

a. Enjet Aero's Integrated Management System (IMS) Policy
b. relevant environmental and quality objectives
c. your organizations contribution to the effectiveness of Enjet Aero's IMS which includes the benefits of your organizations improved performance
d. the significant environmental aspects and related actual or potential impacts associated with their work
e. the implications of not conforming with applicable quality and environmental requirements including not fulfilling the organization's compliance obligations
f. relevant information/requirements and changes thereto
g. their contribution to the effectiveness of environmental requirements/regulations, including the benefits of enhanced environmental performance
h. their contribution to product conformity
i. their contribution to product safety
j. the importance of ethical behavior

3.4.6 The requirements in this manual are primarily end-user requirements that Enjet Aero's customers require the flow down throughout the supply chain.

3.4.6.1 As customers revise their requirements, the related requirements within this manual will be revised to stay current and compliant.

3.4.6.2 Your organizations compliance to this manual is required. If your company is an approved source by the end-user customer, Enjet Aero may notify that customer of any exceptions to this manual reported by your organization.

4.0 NORMATIVE REFERENCE

4.1 It is the responsibility of the external provider to obtain all applicable documentation, such as specifications and standards, which are required for the product, process or service being provided.

4.2 It is the responsibility of the external provider to ensure compliance to the latest revision of all applicable documentation (specifications, drawings, etc.) unless otherwise specified. Compliance to all requirements includes producing and maintaining objective evidence.

5.0 TERMS, DEFINITIONS, ACRONYMS AND REFERENCES

APQP – Advanced Product Quality Planning
AS9100 – Aerospace Standard: Model for Quality Assurance in Design, Development, Production, Installation and Servicing
AS9102 – Aerospace Standard: Aerospace First Article Inspection Requirements.
AS9103 – Aerospace Standard: Variation Management of Key Characteristics.
AS9120 - Quality Management Systems-Aerospace Requirements for Stocklist Distributors
AS9145 – Requirements for Advanced Quality Planning and Production Process Approval Process
AS9146 – FOD Prevention Program
AS13000 – Problem Solving Requirements for Suppliers
AS13003 – Measurement Systems Analysis
AS13004 – Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
AS13006 – Process Control Methods
AS13100 - AESQ Quality Management System Requirements for Aero Engine Design and Production Organizations
Attribute data – A result from a characteristic or property that is appraised only as whether it does or does not conform to a given requirement (e.g., go/no-go, accept/reject, pass/fail, etc.)
AWS – American Welding Society standards
C of C – Certificate of Compliance: Attesting conformance to all requirements.
Counterfeit Parts/Material – Fraudulent parts/material that has been confirmed to be a copy, imitation or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive or defraud.
CMMC - Cybersecurity Maturity Model Certification: Refer to NIST (SP) 800-171.
COTS Items – Commercial-Off-the-Self items.
CUI – Controlled Unclassified Information: Information the Government creates or possesses, or that an entity creates or possesses for or on behalf of the Government, that a law, regulation, or Government-wide policy requires or permits an agency to handle using safeguarding or dissemination controls.
DFARS – Defense Federal Acquisition Regulations Supplement.
DoD – Department of Defense
EAR – Export Administration Regulation
EMS – Environmental Management System
End-use customer – The company whose requirements must be met, typically Enjet Aero Manchester's customer. The requirements of the end-use customer shall be flowed down throughout the supply chain.

Environment – Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelationship
Environmental aspects – Element of an organization's activities or products or service that interacts or can interact with the environment.
Environmental impact – Change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organization's environmental aspects.
Export Management Compliance Program (EMCP) – A program required by the U.S. Government to ensure that companies comply with export control policies and regulations that are required for national security. The U.S. Department of Commerce Bureau of Industry and Security (BIS) publishes a compliance guideline.
External provider – Supplier, sub-tier, vendor, seller, external organization/processor/producer.
FAI – First Article Inspection
FAIR – First Article Inspection Report – unless otherwise specified, FAIRs shall conform to the latest revision of AS9102.
FOD – Foreign Object Damage/Foreign Object Debris – ref AS 9146 & NAS412
FPI – Florescent Penetrant Inspection
Frozen process – A process that requires customer approval prior to implementation and prior to making any changes. Frozen process is also referred to as a "fixed process" or "engineering source approval (ESA)".
GE or GEAE – General Electric Aerospace Engines
GSI – Government Source Inspection
Hidden requirements - Characteristics of a part, component, detail, or assembly which are inaccessible or concealed and cannot be inspected when received at ENJET AERO MANCHESTER.
HS – Hamilton Sundstrand; a Raytheon Technologies Corp. member company – name changed to Collins Aerospace.
IAQG – International Aerospace Quality Group
IAW – In accordance with
IMS – Integrated Management System
ISO – International Organization for Standards
ISO 9000 – Quality Management Systems - Fundamentals and Vocabulary
ISO 9001 – Quality Management System Requirements
ISO 14001 – Environmental Management Standard
ITAR – International Traffic in Arms Regulation
KPC – Key Process Characteristics (refer to AS9103)
LCS – "Laboratory Control at Source" – P&W's system for supplier's operating to their MCL Manual and proprietary to P&W end-use product
Life cycle – Consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposition.
MCL – P&W's "Material Control Laboratory" system
MSDS – Material Enjet Aero Safety Data Sheets
M&TE – Measuring and Test Equipment
MTR – Material Test Report
NAS 412 – National Aerospace Standard for FOD/FOD Prevention.
NDT – Non-Destructive Testing
Objective evidence – Data supporting the existence or verity of something
OEM – Original Equipment Manufacturer
Repair – A disposition for nonconforming material that requires prior written customer approval.
Rework – A disposition for nonconforming material that can be re-operated resulting in complete compliance to all requirements.
QMS – Quality Management System
PFMEA – Process Failure Mode Effects Analysis
Processor – The company performing the process iaw ENJET AERO MANCHESTER's PO
PO – Purchase Order
POC – Point of Contact

PPAP – Production Part Approval Process (United technologies may refer to UPPAP)
PQR – Procedure Qualification Report (welding)
PRI – Performance Review Institute
P&W – Pratt & Whitney; a Raytheon Technologies Corp. member company.
PWC – Pratt & Whitney Canada; a Raytheon Technologies Corp. member company.
QAD - P&W's "Quality Assurance Data" document typically required by P&W's RCC - The revision level of a QAD is identified by both a revision letter AND a control number.
QMS – Quality Management System
RCC – P&W's "Requirement Control Card" document that lists the required specifications and requirements and typically referred to on a P&W PO.
RR – Rolls-Royce Corporation (US) or Rolls-Royce plc (UK)
ENJET AERO MANCHESTER – Enjet Aero Manchester
ENJET AERO MANCHESTER-QMP-Process Cert – ENJET AERO MANCHESTER's procedure for the control of key characteristics.
Seller – Organization holding the ENJET AERO MANCHESTER's PO to provide parts, product, material, etc. to ENJET AERO MANCHESTER.
SABRe – Rolls-Royce's supplier management system requirements.
SABRe is available on-line using a search engine by entering "Rolls-Royce SABRe".
Shall – "Shall" indicates a mandatory requirement (must).
Sikorsky – Sikorsky Aircraft Lockheed Martin
SPD – P&W Canada's "Supplementary Product Data" document typically required by a P&W Canada PO that lists the applicable specifications.
Special Processes – All processes listed by Nadcap (PRI). Special processes, at a minimum, require end-use customer approval. The subcontractor is required to verify this approval is in place and current prior to processing.
Subcontractor – Sub-tier, supplier, processor, or vendor supplying product or material or providing a service or process.
UOS – Unless otherwise specified
UTC – United Technologies Corporation now Raytheon Technologies Corp.
VAC – Volvo Aerospace Corporation (now GKN Aerospace)
Variable data – Quantitative measurements taken on a continuous scale (e.g., actual measurements recorded as dimensional inspection results and not recorded as accept/reject attribute data).
WPS – Weld Procedure Specification
WPQR – Welder Performance Qualification Record

6.0 REQUIREMENTS FOR ALL SUBCONTRATORS/SUPPLIERS

6.1 General Requirements

As an external provider within the aerospace value stream your organization's compliance to all applicable requirements is essential.

6.1.1 Enjet Aero Manchester's customers require that the quality system of all members in the supply chain are AS9100/AS9120 certified by an accredited certification body or Nadcap accredited for special processes. In some cases, there are exceptions for companies, excluding special processors, which are ISO9001 certified or providing objective evidence showing *compliance* to AS9100/AS9120.

Note that customer requirements are revised on a regular basis with the expectation that AS9100/AS9120 certification will eventually become

mandatory with no exceptions. Companies that are not yet certified should consider certification to avoid potential disapproval.

6.1.2 Prior to the start of processing, ensure that your company is properly approved iaw the end-use customer requirements. See purchase order for the applicable end-use customer.

6.1.3 First time/new part number - Your organization is required to validate process capability and verify production readiness for all first time/new part numbers including forging and castings. Depending on the process being performed, your organization shall be required to issue or support a FAIR. The FAIR process shall be per customer end-use requirements that are typically iaw AS9102. Once validated and past the first article stage, Enjet Aero Manchester must be notified of any changes affecting the fulfillment of the Enjet Aero Manchester PO.

6.1.4 All subcontractors are required to complete and submit a Enjet Aero Manchester, Supplier Survey Questionnaire form (SA-FRM-SUPSERV). Once this survey is complete, Enjet Aero Manchester must be notified of any subsequent changes to your organization including the following:

6.1.4.1 Changes to the quality management system that impact approvals or can potentially impact Enjet Aero Manchester po requirements

6.1.4.2 Changes of applicable 3rd party approvals, registrations, and accreditations. This includes changes to your organization's AS9100, AS9120, ISO9001, ISO14001 and Nadcap accreditation, compliance, or certification status

6.1.4.3 Changes of any special process approvals

6.1.4.4 Changes to significant processes

6.1.4.5 Changes of customer approvals

6.1.4.6 Change in facility location/address

6.1.4.7 Company name change

6.1.4.8 Change of company ownership

6.1.4.9 Changes of key personnel including key contacts for Enjet Aero Manchester

6.1.4.10 Changes of quality management personnel

6.1.4.11 Changes that would require FAIR activity per AS9102

6.1.4.12 Changes in the supply chain and work transfers after related FAIR approval.

Control of changes - Any changes shall be controlled to the extent necessary to ensure continued conformity with quality, delivery and environmentally.

6.1.5 Enjet Aero Manchester shall also be notified of any of the following occurrences:

- Potential delivery of nonconforming product
- Ethical violations related to the requirements of the purchase order
- Regulatory violations
- Environmental violations

6.1.6 Where your organization outsources any process and/or purchases items to fulfill the requirements of the Enjet Aero Manchester PO, prior Enjet Aero Manchester approval is required. Your organization shall apply appropriate controls to ensure flow down of all applicable requirements and provide guidance consistent with the purchase order provisions. Your organization shall maintain responsibility for the delivery and quality of all sub-tier (external provider) provided product and services related to the requirements of the Enjet Aero Manchester purchase order. Enjet Aero Manchester shall be notified prior to any source changes.

6.1.7 Your organization shall have a contract review process to ensure requirement flow down throughout the value stream to fulfill all PO requirements (ref AS9100) and to determine:

a) requirements specified by Enjet Aero Manchester, including the requirements for delivery and post-delivery activities if applicable

b) requirements not stated by Enjet Aero Manchester but necessary for specified or intended use, where known

c) statutory and regulatory requirements applicable to the product (including environmental aspects and impacts) and

d) any additional requirements considered necessary by your organization

Note: Requirements related to the product can include special requirements.

Note: When applicable, post-delivery activities include, for example, actions under warranty provisions, contractual obligations such as maintenance services and supplementary services as recycling or final disposal.

6.1.8 All personnel shall be adequately trained/qualified to perform all activities to properly fulfill all PO requirements.

6.1.9 The following practices are <u>prohibited</u>:

6.1.9.1 Not following approved processes including fixed/frozen processes and approved data cards
6.1.9.2 Repairs of any type without prior customer approval
6.1.9.3 For Enjet Aero Manchester supplied material - Using other than Enjet Aero Manchester supplied material
6.1.9.4 Supplying known nonconformance without prior approval
6.1.9.5 Supplying counterfeit parts/material
6.1.9.6 Falsifying documentation

6.1.10 ***SPECIAL ATTENTION*** from lessons learned – As a preventive action and to *reduce potential risks,* the following items are emphasized for your organization's knowledge and awareness:

- Titanium alloys – When processing/handling titanium please ensure all controls are in place to comply with all related requirements. Aerospace customers typically have strict requirements for processing and handling titanium to avoid contamination and controls for cleaning prior to application of special processes.

- Special processes – Prior to processing, ensure your company has the approvals, qualifications and controls required per end-use customers.

- FOD – Ensure shipments to Enjet Aero Manchester, including the product, shipping containers and any packaging material is free of foreign objects.

- Frozen processes – If invoked, ensure frozen process approvals are in place, the approved process is followed, no changes were performed without prior customer approval and your company certifies that the approved frozen process was followed.

- Key characteristics – If invoked, the process is planned to accommodate the controls and data collection required per end-use customer requirements.

- Critical features – Review for critical requirements including major features, flight safety requirements and to ensure the planned process accounts for the needed controls.

- Pre-production requirements - Review for pre-production requirements (e.g., APQP, PAPP) to ensure submittals/approvals are in place prior to production.

- Risk mitigation – Review for potential risks throughout the process to implement mitigation actions and controls. Depending on the type of product or customer requirements, a PFMEA may be required.

- Raw material controls – it is critical to ensure that only the required material is supplied or utilized in the manufacturing process. Ensure that all raw material is:
  - properly identified,
  - maintains identification,
  - maintains traceability,
  - controlled to prevent co-mingling with different material types,
  - segregated to ensure only the correct material is selected for the job at hand {only the material for the current production run is permitted at the workstation} and
  - carefully verified for correctness prior to processing or delivery.

6.1.11 Enjet Aero Manchester supplied material (raw material and product)

6.1.11.1 All Enjet Aero supplied material shall be identified, verified, segregated, protected, and safeguarded while under the control of your organization. Enjet Aero Manchester shall be notified if supplied material is lost, damaged, or otherwise found unsuitable for use.

6.1.11.2 All Enjet Aero supplied material shall be controlled, and traceability always maintained.

6.1.11.3 Enjet Aero supplied material shall not be co-mingled with other material.

6.1.11.4 Different material types shall be clearly segregated from each other.

6.1.11.5 Enjet Aero shall be notified if a nonconformance is produced on supplied material. Nonconforming material shall be controlled per the control of nonconforming product/material section of this manual and be accounted for, identified, and segregated and action taken per Enjet Aero's direction.

6.1.11.6 Control of raw material is a critical process to ensure that only the required material is utilized in the manufacturing process. Ensure that all raw material is:
- properly identified,
- maintains identification,
- maintains traceability,

- controlled to prevent comingling with different material types,
- segregated to ensure only the correct material is selected for the job at hand {only the material for the current production run is permitted at the workstation} and,
- carefully verified for correctness prior to processing.

6.1.12 The implementation of *Advanced Product Quality Planning (APQP)* is advised to support development of a product/process. Enjet Aero Manchester may request APQP per AS9145 or the AS130xx standard series. AS13100 will replace the current AS130xx series of standards (excluding AS13001). AS13100 will become effective by January 1, 2023. Refer to the following the AESQ website: https://aesq.sae-itc.com/

6.1.12.1 APQP is a requirement for some end-use customers per **Annex A**. When Annex A is listed in the body of the PO, your organization is required to perform APQP as specified.

6.1.13 Your organization shall have a process for load and capacity planning to ensure capacity is in alignment with Enjet Aero Manchester's delivery requirements.

6.2 Documented Information

6.2.1 The subcontractor's procedures, data, reports, and records shall be made available and, when required, be supplied to Enjet Aero Manchester to verify compliance to PO requirements. All documents, including data, inspection reports, first article inspection reports, all certifications, test reports, process certifications, etc., shall have traceability to the product/process. Record retention shall be maintained iaw end-use customer requirements made available upon request. To assure compliance to record retention requirements, retention should be indefinitely.

All deliverable documentation must be completely legible and clear enough to remain legible for electronic distributions and storage.

Refer to the section of this manual that applies to your company for documents that are required with your product shipment.

6.2.2 Enjet Aero Manchester supplied documentation - All Enjet Aero supplied documents, including Enjet Aero's customer documents, are to be used by subcontractors to fulfill the requirements of the applicable Enjet Aero purchase order only. These documents are not to be used for any other purpose and shall be returned upon completion. You may not copy or disclose any information from these documents without Enjet Aero's management's written permission.

6.2.3 Mylars - Enjet Aero Manchester supplied Mylars must be returned with each shipment.

6.3 Inspection and/or test

6.3.1 Inspection and/or test per PO and end-use customer requirements shall be performed and documented. This documentation shall be made available or submitted upon request by Enjet Aero Manchester. Note, however, that first article inspection/test reports must be submitted with each first article shipment.

6.3.2 Only qualified personnel shall be used for inspection and/or testing. This includes proper vision exams for personnel performing visual inspection.

6.3.3 All measuring and test equipment shall be controlled in a calibration system consistent with the requirements in the section for "Calibration Services" in this manual.

6.3.4 Inspection sample sizes shall be used only if permitted and in accordance with the end-use customer's requirements.

6.4 Right of access

6.4.1 The sub tiers shall allow Enjet Aero Manchester, Enjet Aero Manchester's customers, government representatives and regulatory authorities access to all applicable areas of all facilities at any level of the supply chain involve in the purchase order and all applicable documents and record. Additionally, access to the subcontractor and sub tier facilities shall be permitted for reviews, evaluations, audits and surveys of systems, documentation, equipment, and processes relative to product compliance**.**

6.4.2 Please be aware that Enjet Aero, Enjet Aero's customer or 3rd party auditors may visit or contact your organization, without advance notice, to verify compliance to requirements. Additionally, if a representative of your organization is visiting Enjet Aero, they may be subject to interviews by Enjet Aero's customer or 3rd party auditors.

6.5 Frozen process

When invoked, adherence to the approved frozen processes (a.k.a. fixed process, engineering source approval, ESA, classified parts) is required and recorded on your C of C (frozen process number shall be recorded as applicable). You are required to ensure your sub-tiers have the same control. No changes are permitted without prior Enjet Aero Manchester approval.

6.6 FOD – Foreign object debris/damage (FOD) remains a major concern and is viewed as a major potential source of risk by regulators and customers.

6.6.1 External providers, subcontractor, suppliers, and sub-tiers shall have a FOD prevention and detection program to ensure the delivery of FOD free product. To prevent foreign object damage, all parts, packaging, and shipping containers shall be clean and free of foreign objects including:

- grit, dirt, corrosion & contaminants
- metal chips and burrs
- tumble media and peening media
- loose or unrestricted items such as hardware, details, and unused consumables
- the use of newsprint and Styrofoam “peanuts and chips” as packaging material is prohibited.

6.6.2 Comply with the requirements of AS 9146 and NAS 412 for FOD Prevention Programs.

6.6.3 Refer to the appendix sections for end-user FOD prevention specifications.

6.7 Key Characteristics/Key Process Characteristics

When key characteristics are specified on a purchase order document and/or drawing, monitoring and control of key characteristics is required by your company. The requirements shall be per the customer-end use specification. In the absence of such specification, compliance shall then be per “AS 9103”. Documented objective evidence must be maintained and a copy supplied with each product shipment.

Key characteristics may be identified on a drawing with symbols. Careful review of the drawing is necessary to ensure compliance. Key characteristics are also referred to as key process characteristics (KPC).

6.8 Serial Numbers

6.8.1 For Enjet Aero Manchester supplied material that have serial numbers, each serial number shall be listed on your certification. For example, if your company is performing a process on Enjet Aero Manchester supplied serialized parts; your certificate must accurately list each piece serial number that you processed.

6.8.2 For product/material that you will manufacture, fabricate and/or supply and if serial numbers are required on a purchase order document and/or drawing, you are required to contact Enjet Aero Manchester purchasing department for direction upon receipt of the purchase order prior to your release for production.

6.9 Nonconforming product/material

6.9.1 Enjet Aero Manchester expects all product and processes to conform to all requirements. Preventative action is required by your company to eliminate the causes of potential nonconformities to prevent their occurrence and to ensure on time delivery.

6.9.2 Nonconformances include product and/or documentation that are not in full compliance to the Enjet Aero Manchester PO, drawing or this document. Nonconforming product also includes nonconforming product returned to your company by Enjet Aero Manchester.

6.9.3 Nonconforming product shall not be shipped to Enjet Aero Manchester unless prior written authorization is obtained from Enjet Aero Manchester's quality department. When authorized, nonconforming product must be clearly identified to ensure control once received at Enjet Aero Manchester.

6.9.4 If your company produces a nonconformance on Enjet Aero Manchester supplied material, Enjet Aero Manchester shall be immediately notified, and direction shall be provided. Your company is required to account for all Enjet Aero Manchester supplied material, conforming and nonconforming.

6.9.5 Your organizations nonconforming product control shall provide for timely reporting of delivered nonconforming product. Reporting shall be documented with all necessary details for accurate containment.

6.9.6 You are required to take immediate actions on all nonconformance produced by your company. At a minimum this includes:

- immediate reporting to Enjet Aero Manchester for all Enjet Aero Manchester supplied material/product for Enjet Aero Manchester's review and disposition.
- control to prevent its unintended use or delivery
- segregation
- identification
- containment
- corrective action
- preventive action
- take action to the effects, or potential effects, of the nonconformity when nonconforming product is detected after delivery or use has started. In this case, Enjet Aero Manchester must be immediately notified
- take action necessary to contain the effect of the nonconformity on other processes or product

All these items shall be clearly documented in detail for review/evaluation by Enjet Aero Manchester personnel.

6.9.7 Enjet Aero Manchester reserves the right to obtain incurred cost from your company for nonconformances caused by your company. In addition to material costs, these costs can include Enjet Aero Manchester's and Enjet Aero Manchester's customer's activities relative to the nonconformance.

6.10 Corrective and Preventive Action

6.10.1 Enjet Aero Manchester and Enjet Aero Manchester's customers expect all product and processes to conform to all requirements. Preventative action through risk-based thinking is required by your company to eliminate the causes of potential nonconformities to prevent their occurrence and to ensure on time delivery. To achieve this, the following actions are required:

a) determine risks as a basis for planning
b) determine potential nonconformities and their causes
c) evaluate the need for the action to prevent occurrence of nonconformances
d) determine and implement actions needed
e) record results of actions taken
f) review the effectiveness of the preventive actions taken

6.10.2 In the case of nonconformities, action shall be taken to eliminate the causes of nonconformities to prevent recurrence. Corrective action shall be appropriate to the effects of the nonconformities encountered. Methodology of AS13000 is suggested and may be required.

6.10.3 The following actions shall be taken and documented by the appropriate personnel in your company:

a.) review of the nonconformities (including customer complaints)
b.) determine the cause
c.) determine actions to ensure the nonconformities do not recur. This includes evaluating the need for global/systemic actions to contain the effect of the nonconformity on other processes or product
d.) determine and implement the actions needed
e.) initiate and maintain records of the results of actions taken. These records shall remain legible, readily identifiable, and retrievable
f.) review the effectiveness of the corrective action taken
g.) flow down these corrective action requirements to a supplier when it is determined that the supplier is responsible for the nonconformity

h.) specific actions where timely and/or effective corrective actions are not achievable

i.) determine if additional nonconforming product exists based on the causes of the nonconformities and taking further action when required

All these items shall be clearly documented in detail for review/evaluation by Enjet Aero Manchester personnel. These documents shall be maintained as evidence of the actions taken and controlled to remain legible, readily identifiable, and retrievable.

6.11 Work Transfer

6.11.1 Work being transferred to your organization: As a producer of new product, your organization is required to validate process capability and verify production readiness for all work being transferred to your organization.

6.11.2 If your organization plans to transfer any of Enjet Aero Manchester product, prior Enjet Aero Manchester approval is required. Upon Enjet Aero Manchester's approval, your organization is then required to have a process to manage the work transition including completion of work transfer documentation per end-use customer requirements. Work transfer includes any source changes, relocations and address changes involved with processing Enjet Aero Manchester work.

Note: For guidelines on implementing a process for work transfer, reference the IAQG Supplier Chain Management Handbook (SCMH) http://www.sae.org/servlets/registration?PORTAL_CODE=IAQG&OBJECT_PKG=iaqg.businessClasses&OBJECT_TYPE=SCMHGeneral&PAGE=getSCMHBOOK&vgenNum=1074&scmhs=2&REF=login .

6.12 Software control - Software used in the design, analysis, manufacture, inspection, test, or calibration which directly affects or verifies the configuration, conformity, or quality of a product shall be controlled and secured. Refer to the applicable section of AS9100 and customer end-use appendix as applicable.

6.13 Packaging, Handling and Storage

6.13.1 Handling and storage by your company shall ensure prevention against damage, deterioration, corrosion and potential FOD.

6.13.2 Product shipment and required deliverable documents shall be packaged to protect against damage, deterioration, corrosion, negative environmental impact and FOD. Each shipment shall be adequately identified. Handling and storage by your company shall ensure prevention against damage, deterioration, corrosion and potential FOD.

6.13.3 **Enjet Aero Safety Data Sheets (SDS),** formally known as Material Enjet Aero Safety Data Sheets or MSDS

6.13.4 The subcontractor shall maintain an effective system for tracking SDS for product supplied to Enjet Aero Manchester.

6.13.5 Suppliers of substances and chemicals – All substances and chemicals shall be supplied in a container properly labeled with the identity of the chemical, name and address of the responsible party and the appropriate hazard warnings. Each shipment shall include the appropriate SDS.

6.14 Environmental Management Systems (EMS)

6.14.1 Enjet Aero Manchester is an ISO14001 registered company. Compliance to local, state, and federal environmental regulations is required by your organization and your sub-tiers to be in alignment with Enjet Aero Manchester's Integrated Management System (IMS) policy. All services, processes, and product provided, including transport, shall comply with all applicable environmental, legal, and other requirements, laws, and regulations. This shall also apply if a representative of your company visits Enjet Aero Manchester. Additionally, that individual needs to be aware of our IMS policy, upon arrival, read Enjet Aero Manchester's environmental, health and Enjet Aero Safety agreement and sign the visitor's log.

6.14.2 Ensure personnel throughout your organization are aware of any knowing and willful act to violate environmental regulations is punishable in accordance with the applicable legal statutes.

6.14.3 Life cycle perspective – Determines environmental aspects consideration is given to life cycle perspective. As your organization is likely part of the life cycle perspective, consider your product/process/service regarding environmental aspects and impacts (causes and effects) and the extent of control or influence your organization can exert to minimize negative environmental impacts and identify any opportunities for improvement. Note: The typical life cycle stages include acquisition of raw material, design, production, transportation/delivery, use, end-of-life treatment, and final disposition.

6.15 SPECIAL SOURCE INSPECTION REQUIREMENTS (only if specified on the PO)

The following applies only if specifically indicated on the ENJET AERO MANCHESTER PO:

A. Enjet Aero Manchester Source Inspection

Prior to shipment from your facility, you are required to contact Enjet Aero Manchester purchasing or quality manager to request source inspection at your facility.

B. End-Use Customer Source Inspection

Enjet Aero Manchester's customer source inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the end-use customer representative who normally services your facility so that appropriate planning for inspection can be accomplished. If the representative or office cannot be located, promptly notify the Enjet Aero Manchester purchasing agent.

C. Government Source Inspection (GSI)

Government quality assurance is required prior to shipment from your facility. Upon receipt of this order, promptly notify the government representative who normally services your facility so that appropriate planning for government inspection can be accomplished. If the representative or office cannot be located, promptly notify the Enjet Aero Manchester purchasing agent.

6.16 Counterfeit Material/Parts Prevention Program

Sub-tiers shall establish and maintain a Counterfeit Parts/Material Prevention/Avoidance and Control plan using industry standard AS5553 (electronic parts) and /or AS6174 (counterfeit material) as guidelines. This shall be flowed down to all levels of the supply chain. The program shall be to prevent the delivery of counterfeit parts and include (but not limited to):

A. Ensure that only new and authentic parts/materials are used and delivered with the required, unaltered, documentation. The seller shall establish and implement test and/or inspection activities necessary to assure the authenticity and conformance of purchased material, including:
   - traceability and documentation verification
   - visual inspection
   - tests/inspections
   - tests/inspections are performed by qualified personnel in accordance with required accept/reject criteria

B. only purchase directly from original manufacturers, manufacturer franchised distributors, authorized manufacturers/distributors, or end-use customer approved manufacturers/distributor
C. notify Enjet Aero Manchester of any known counterfeit material
D. maintain a method of traceability that ensures tracking of the entire supply chain back to original source. This traceability method shall clearly identify the name and location of all the supply chain

intermediaries from the manufacturer to the direct source of the material and shall include the manufacturer's commodity or item level identification for the item(s) such as date codes, lot codes, heat codes, serializations, unique item identifiers or batch identifications

E. a certification of conformance (C of C) shall be supplied, attesting conformance to requirements (see the section of this manual for the minimum requirements for a C of C). The C of C and all other required documentation shall be reviewed for accuracy, traceability, identity, authenticity, clarity, completeness, and authorized signature attesting conformance to the required standards for the associated item(s). Once approved, the c of c and all other required documentation as well as the seller's c of c shall be provided with the item(s) to Enjet Aero Manchester

F. the seller shall be responsible for any penalties associated with fraud and falsification. Additionally, the seller is liable for any remedial costs should any counterfeit material be provided. The buyer is not obligated to return suspect of confirmed counterfeit material

G. any knowing and willful act to falsify, conceal or alter a material fact, or any false, fraudulent, or fictitious statement or representation in connection with the performance of work under Enjet Aero Manchester's purchase order may be punishable in accordance with the applicable legal statues. Seller shall ensure employees are aware of this clause.

6.17 Conflict Minerals

Conflict minerals are the minerals or their derivatives, determined by the Secretary of State, to be financing conflict in the Democratic Republic of the Congo or an adjoining country. Do not supply any material that contains "conflict minerals" as defined by the U.S. congress per the Dodd-Frank Act. See the rules at http://www.sec.gov/rules/final/2012/34-67716.pdf .

6.18 Affirmative Action

Enjet Aero Manchester is committed to aggressive affirmative action and to equal opportunities for all present employees as well as for applicants in all phases of employment process without regard to race, color, religion, national origin, age, sex, political belief, physical or learning disability, including blindness, marital status, past or present history of mental disorder, sexual orientation, including Connecticut General Statutes 4a-60(a)(1), as amended in State of Connecticut Public Act 07-245 and sections 9(a)(1) and 10(a)(1).

6.19 ITAR/EAR

Be aware of ITAR/EAR information that may be associated with the PO. This includes product, documentation, and electronic media. Your organization shall be required to comply with applicable ITAR/EAR regulations and all applicable laws regarding export-controlled items.

6.20 Export Management Compliance Program (EMCP)

6.20.1 As required by the U.S. government, an EMCP is required to ensure compliance with export control policy for information and technology. This program shall ensure compliance with national security by operating export activities in accordance with the Export Administration Regulations (EAR). The U.S. Department of Commerce Bureau of Industry and Security (BIS) publishes a compliance guideline. Information and technology associated with Enjet Aero Manchester PO shall be managed accordingly by your organization.

6.20.2 If a representative from your organization will be visiting Enjet Aero Manchester, then Enjet Aero Manchester must receive advance notification of any visitors that are not U.S. citizens prior to entering the facility. The EMCP requires that Enjet Aero Manchester is made aware of any foreign nationals representing or employed by your company prior to their visit to Enjet Aero Manchester. Enjet Aero Manchester reserves the right to request proof of U.S. citizenship of any individual having access to Enjet Aero Manchester's information and technology.

6.21 Cybersecurity Maturity Model Certification (CMMC)

There is an increasing threat that malicious groups are actively targeting DoD/military supply chain organizations by gaining a foothold into suppliers' systems causing possible security breaches, product afety issues, financial damage, and operational disruption. As part of the DoD supply chain, the information associated with the Enjet Aero Manchester PO may be DoD information that needs to be protected against malicious cyber activity if residing on or transiting through a network or internal information system.

6.21.1 Per Defense Federal Acquisition Regulation Supplement (DFARS) clause 252.204-7012 your organization is required to provide adequate security to Enjet Aero Safeguard DoD information.

6.21.2 NIST SP 800-171, refers to National Institute of Standards and Technology Special Publication 800-171, is a unifying standard that governs Controlled Unclassified Information (CUI) in non-federal information systems and organizations within the Defense Industrial Base (DIB). Your organization is required to have CMMC capability in accordance with the NIST SP 800-171 in preparation for compliance.

6.21.3 Immediately contact your Enjet Aero Manchester POC if you identify anything that causes you concern or suggests that anything untoward has occurred on your network that can potentially have affected Enjet Aero Manchester related information.

6.22 Ethics and Code of Conduct

As a provider to the aerospace industry, Enjet Aero Manchester is required to flow down requirements for all organizations throughout the supply chain to adopt and be compliant with a code of conduct that addresses, at a minimum: awareness of and commitment to ethical business practices; facilitates the timely discovery, investigation, disclosure and implementation of corrective actions for violations; provides awareness to employees on compliance; allows employees to anonymously report ethics and compliance issues. Ethics and compliance issues related to Enjet Aero Manchester's purchase orders may be reported to Enjet Aero Manchester's purchasing manager or quality manager.

Ensure personnel throughout your organization are aware that any willful act to falsify, conceal or alter a material fact, or any false, fraudulent, or fictitious statement, or representation in connection with the performance of work under Enjet Aero Manchester's purchase order may be punishable in accordance with the applicable legal statues.

7.0 Requirements for Manufacturing Facilities (including Machine Shops, Sheet Metal Fabricators, Waterjet, Grinding, etc.) and Distributors

7.1 Ensure that your company has the approval required by the end-user specified on the Enjet Aero Manchester PO and the approval is current. The typical minimum approval is AS9100 (AS9120 for distributors). If the proper approval is not in-place or is expired, do not begin work and immediately notify Enjet Aero Manchester's purchasing agent.

7.2 Hidden requirement inspection - In-process inspection operations shall be sequenced within the manufacturing process to ensure inspection of all characteristics while accessible (prior to becoming hidden). Actual measurements, variable data, shall be recorded for all hidden requirements produced by the supplier on the supplier's inspection report. A copy of this report shall be submitted to Enjet Aero Manchester with the first shipment.

7.3 The following documentation shall be supplied with the shipment to Enjet Aero Manchester:

7.3.1 **Certificate of Conformance (C of C)** shall be provided with each shipment. At a minimum the C of C shall include:

- Name and address of processor or supplier
- Applicable product identification, i.e., part number
- Applicable requirement(s), i.e., Enjet Aero Manchester purchase order.
- Date the C of C was issued
- Enjet Aero Manchester's PO number
- Serial numbers if applicable
- Part quantity
- Material and processor traceability information if applicable
- If applicable, the frozen process/fixed process or ESA identification and revision shall be applied to the certification.
- Signature of authorized quality individual.

7.3.2 **First Article Inspection Report (FAIR)** – A FAIR shall be supplied with the associated first article shipment to Enjet Aero Manchester at the times a FAIR is required per AS9102. Your company will need to understand all the requirements of AS9102. In addition to FAI on new production, compliance is required for all evaluation activities and partial (delta) or re-accomplishment of FAI requirements iaw AS9102.

Completed forms 1, 2 and 3 of AS9102 are required and shall be supplied with the first article shipment(s) along with all required supporting documentation. Also refer to the applicable end-use customer appendix section which may have additional forms that are required as part of the FAIR package.

All certifications shall form a part of the FAIR, including as applicable, but not limited to:

- Complete variable data inspection results on from 3 per AS9102.
- Raw Material certification (if your organizations supplied the raw material)
- Weld wire certifications (if welding was performed)
- All special process certifications (if special processes were performed)
- Qualification test reports/certifications (if applicable)
- Part marking replica (if your organization applied part ID marking)

7.3.2.1 Fastener distributers – a copy of the customer approved FAIR is required to accompany the first shipment and any subsequent changes that require a FAIR or a partial FAIR per end-use customer requirements shall be submitted with the associated shipment. Per AS9102, this typically will not apply to COTS items (see AS9102 for definition).

7.4 Manufacturers producing gages - Gages produced to a gage drawing shall be fully inspected by the manufacturer. A complete signed inspection report with actual variable data shall be supplied with each gage.

8.0 Requirements for Processors performing Special Processes

Special processes include, but not limited to, all processes identified by Nadcap (PRI) including:

- Applied finishes (e.g., plating, painting, and coating)
- Chemical processing (e.g., cleaning)
- Laboratory
- Materials testing
- Heat treat
- Non-destructive testing (all)
- Non-conventional machining (e.g., laser, EDM, etc.)
- Surface enhancements (shot peening)
- Welding (all process types)
- Brazing

Some end-use customers (OEM's) may have additional processes that are considered special processes.

8.1 Customer Approval - The subcontractor shall possess current end use customer approval prior to processing. Objective evidence of this approval shall be made available to Enjet Aero Manchester upon request.

8.2 Nadcap Accreditation - Unless otherwise authorized, current Nadcap accreditation is required. Your company's certification, which is supplied with each shipment, shall indicate current Nadcap accreditation.

8.3 Qualification - Applicable personnel and applicable machine qualification (e.g., resistance welding) requirements must be current.

8.4 Changes to special processes – Changes to special process instructions are not permitted after initial first article submittal without Enjet Aero's approval.

8.5 Welding – Welding procedures (a. k. a. schedules, data cards or WPS) and their qualifications (a. k. a. PQR) are required for all welding iaw end-use customer specifications. Qualifications include lab test reports for substantiation that the welds meet the end use customer requirements. Once qualified no process/procedure changes are permitted without first qualifying the changes and notifying Enjet Aero. At a minimum, weld qualification test reports are required to be submitted with each first article and any process/procedure revisions

8.5.1 Only qualified welders meeting the required vision requirements shall be permitted to weld product. Objective evidence of each welder's qualification, such as a WPQR, and passing the required vision exam shall be made available or submitted to Enjet Aero upon request.
Your company's documentation provided with each shipment must include the welders' identification.

8.5.2 If filler material is used, your company shall have a procedure for control of filler material to ensure traceability and that only the required filler material is used. Each shipment shall include a copy of the original certifications/test reports for the filler material. Actual chemical & physical test results shall be included on the report.

8.6 Heat treat – Heat treat furnace charts shall be used and properly controlled. Furnace charts shall be made available and/or submitted to Enjet Aero Manchester upon request.

8.7 For all Rolls-Royce end use *special processes* – DATA CARDS are required. The Data Card per Rolls-Royce SABRe (also ref. MLC 127 and RRP 5000) shall be supplied for approval. Once approved, continued compliance to the Rolls-Royce approved Data Card is required. No variation from the approved Data Card is permitted without having Rolls-Royce approval of a revised data card.

8.8 Certification of conformance – Signed and dated certification to required specifications including all required information and Nadcap accreditation expiration date shall be supplied. Original or certified true copy certifications shall be supplied with each shipment.

8.9 Test reports – Applicable test reports shall be supplied with the associated shipment(s)

9.0 Raw Material, Castings, Forgings, Weld Wire & Compressed Gas (shielding gas) Suppliers

9.1 It is critical to ensure that only the required material is delivered. Ensure that all raw material is:

- Conforming to Enjet Aero Manchester PO (the PO requirements shall be flowed down throughout the supply chain),
- properly and clearly identified,
- maintains identification,
- maintains traceability,
- controlled and segregated to prevent comingling with different material types, lots, and heats,
- is accepted and certified to the latest specification revision unless otherwise specified and

- carefully verified for correctness prior to delivery

9.2 Material Certification/Material Test Reports (MTR's) - All raw material (including weld wire) must be supplied with certifications/MTR's from each company in the supply chain enabling complete traceability by a unique identifier (i.e., heat number) and material type. Certifications/MTR's, at a minimum, shall be in accordance with the following:

9.2.1 Provide the chronological paper trail required for the complete chain of custody clearly linking every company in the supply chain from the mill/melt source through to Enjet Aero Manchester.

9.2.1.1 Supply chain documentation traceability: The certification/reports from each provider in the supply chain shall indicate the purchasing company's name and location in addition to the unique identifier (e.g., heat number).

9.2.1.2 Documentation shall not be altered in any manner including the removal of a provider's company's name.

9.3 MTR's shall be supplied with each shipment and include actual chemical & physical test results complete to the material specification. If material is supplied by a distributor (stockiest), a copy of the melt source/mill's MTR must accompany each shipment along with the distributor (stockist) certification with clear traceability.

9.4 Enjet Aero Manchester's material supplier shall review each sub-tiers' MTR's/certifications to verify acceptability to all requirements. Review of the material certifications shall include traceability and chain of custody verification.

9.5 All weld wire sticks shall be flag tagged and spools shall be labeled.

9.6 Shipments of raw material – heat lots shall not be mixed. Separate heat lots shall be shipped separately and in separate packages.

9.7 A FAIR is required to be submitted for all new forgings and castings. Evidence of a customer approved FAIR is required for existing forgings and castings.

9.8 Compressed/shielding gas shall be certified as stated below:

9.8.1 Argon – shall not be less than 99.995% purity containing not more than 5 ppm free oxygen and not more than 10 ppm moisture

9.8.2 Helium - shall not be less than 99.995% purity containing not more than 5 ppm free oxygen and not more than 10 ppm moisture

9.8.3 Nitrogen – Purity: 99.99% minimum.

9.9 Unless otherwise specified, suppliers shall comply with the specification requirements, latest issue. Suppliers are required to maintain such specifications and/or request specifications when needed.

9.9.1 Compliance to the following DFARS regulations is required (also see applicable customer- end use appendix for any additional regulations):

9.9.2 Domestic Specialty Metals (Berry Amendment) per DFARS 252.225.7008, 252.225.7009, and 252.225.7010. Qualifying Countries are listed at 252. 225.7012.

9.9.3 FAR 5.2.230-7 Anti-Kickback

9.9.4 DFARS clauses may be accessed at: http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html

9.10 Supplier's "end-use customer" approval shall be current.

9.11 End use customer requirements must be satisfied (also refer to the applicable appendix):

9.11.1 **Pratt & Whitney (P&W):** Also see applicable appendix.

A.) Refer to the applicable MCL manual section for:

- Non-Metallic raw Material (F-17)
- Forgings and rings for rotor parts (F-17 and F-26)
- Rotor Bar, Billet, and Plate Stock (F-17)

B.) **PWA Supplements are automatically invoked when they exist** (Ref PWA 300). These supplements are identified as PWA-S xxxx where x = the same numbers of the AMS Specification. The PWA supplement is automatically invoked with no further reference.

9.11.2 **Pratt & Whitney Canada (PWC or CPW)**: For supplying metallic raw material for PWC end-use product in addition to P&WC appendix section of this manual: Compliance to CPW 100 and the requirements specified above for P&W.

9.11.3 **Rolls-Royce**: See applicable appendix

10.0 Suppliers of Shelf-Life Sensitive Material

10.1 The subcontractor shall submit a certification for all material whose acceptability has a limited shelf life. The supplied items must be identified with the respective cure/manufacturing date, shelf-life expiration date, lot traceability, storage conditions and any other special requirements for storage and usage. No material shall be shipped to Enjet Aero Manchester with less than 75% of its shelf life remaining.

10.2 When required by end-use customer specifications, documented evidence of approved source shall accompany each shipment.

10.3 Also refer to the MSDS section of this manual.

11.0 Calibration Services

11.1 Calibration systems shall meet the applicable requirements of ISO10012 or ANSI/NCSL Z540.3. The calibration certificate shall indicate the system specification.

11.2 Calibration interval analysis methodology used to maintain the reliability shall have a stated reliability goal to meet a minimum 95% reliability target for equipment in-tolerance at the end of their interval schedule.

11.3 Calibration certificate traceable to NIST is required for all calibration.

11.4 Enjet Aero Manchester must be notified of any out of tolerance results in order to determine if there is a significant out of tolerance condition that requires analysis of product impact. Report “as received” (prior to adjustment) inspection results and any other equipment deficiencies so appropriate action can be taken.

12.0 Companies performing an inspection service

Companies performing an inspection service on Enjet Aero Manchester supplied product shall provide a detailed inspection report and a C of C certifying that inspection equipment used is calibrated and traceable per the Calibration Service section of this manual.

13.0 Companies Providing measuring and test equipment and hard gages

All measuring and test equipment being supplied shall be accompanied with a calibration certification indicating traceability to NIST.

13.1 Gages produced to a gage drawing shall be fully inspected by the manufacturer. A complete signed inspection report with actual variable data shall be supplied with each gage.

14.0 Revision History

Minor editorial/grammatical changes may not be identified.

Approval	Approval	Revision/Date	Reason for Change
V. Zita	D. Desmarest	- /12/20/07	Initial release
V. Zita	D. Desmarest	A / 4/25/08	Section 1.0: Referred to AS 9100 section 7.1.4. Added section 1.1.2. Section 1.3: added reference to figure 1 and added figure 1. Added additional definitions to section 3.0. Revised section 4.7 for control of key characteristics. Added additional detail to section 7.0 for raw material requirements (purchasing request 7 DFAR & OEM specifics). Added additional frozen process requirements to section 4.5. Included a P&W "F-Section" guide in appendix V. Added 5.2 & 11.2 - gage inspection reports required for hard gaging
V. Zita	D. Desmarest	B / 10/11/11	Assigned section number 1 to Introduction Section 2.0 Added the section for the IMS policy. Adjusted all section numbers accordingly Added section 3.1.3 - There are references to websites… for direction. Section 3.3 – Added figure 1 Section 3.3.1 added. Section 6.1.1 added – "Most end-use customers require … customer requirements". Section 6.3 – Inspection and test: Included additional detail. Section 6.10 added for corrective/preventive action. Section 6.13 – EMS updated accordingly. Added section 7.1 – "Ensure that your company has the approval required by the end-user specified on the Enjet Aero Manchester PO...agent." Section 8.5.2 was added for filler material control. Section 9.0: Added weld wire & Compressed gas and requirements their requirements. Section 11 – Added additional detail for calibration services. Added: BAE, Colt, Gov't, and Rolls-Royce plc to the appendix section. Appendix X: Added - 1.1 All subcontractors …SABRe manual. Appendix X & XI: Updated web site addresses.
V. Zita	D. Desmarest	C/11/01/2013	Changed Volvo Aero to GKN. Figure I: Added customer "company name change" note. Section 5 – Added definition of counterfeit parts/material. Added 6.1.2.11 for notification of regulatory violations. Section 6.1.2 – Form id change. Added section 6.1.4 for contract review (ref P&W sub-tier assessment). Added section 6.1.5 for qualified personnel (ref P&W sub-tier assessment). Section 6.1.6.5 – Added prohibiting supply of counterfeit parts/material. Added section 6.1.7 for emphasizing areas that need special attention based on lessons learned. Added section 6.1.8 for additional detail for Enjet Aero Manchester supplied material control. Section 6.9.5 added for reporting of delivered nonconformance. Affirmation action changed from section 6.15 to 6.16. Added Counterfeit Parts Prevention Program – section 6.15. Section 7 – Added "Distributors" Section 8.2 – Editorial changes. Added section 9.1 for raw material controls. Added section 9.4.3: requirement for Nitrogen gas. Added Appendix XIV & requirements for Aerojet Rocketdyne throughout

			the document. Where there is reference to Rolls-Royce special processes: Replaced RPS900 with MLC 127 and RRP5000
V. Zita	D. Desmarest	D/ 04/03/2018	Throughout - Included the term “external provider” (example in section 3.2) and “risk” (risk-based thinking) to be in alignment with AS9100 D: 2016. Introduction - Additional clarification Added section 2.2 iaw AS9100D & ISO1400E (4.3) Section 3.2 & 3.3 – Clarification. Section 3.4 – Added “purpose” section and subsection including AS9100 D & ISO 14001 E awareness. Added section 4.1 for obtaining required documents. Section 5.0 – Updated terms & definitions as applicable. Section 6.1 – Added aerospace sentence. Section 6.1.1 – Added AS9120 for distributors. Revised to incorporate customers’ latest QMS requirements. Section 6.1.3.2 – Added additional clarification. Section 6.1.4 – Added to included environmental violations. Section 6.1.3 – Added statement at end of section for control of changes Section 6.2 – Change Documentation to Documented information. Section 6.4.2 – Added for awareness of being contacted or visited by auditors. Section 6.6 - Added additional FOD prevention detail. Section 6.10.1 – Added “risk”. Section 6.12 – Changed MSDS to SDS. Section 6.13 – Added “and transporting” and created subsections to include additional requirements per ISO 14001 E. Section 6.15 – Additional counterfeit material requirements added throughout the section. Section 6.16 - Added for Conflict Minerals. Section 6.18 – Added ITAR/EAR if applicable. Section 6.19 – Added code of conduct Section 7.1 – Added AS9120 for distributors (required per P&W Eagle Eye and ASQR-01). Section 9.2 – Broke out into multiple section with added traceability and mat’l certification detail; now 9.2, 9.3 & 9.4. Sections 9.8.1 & 9.8.2 – Updated DFAR clause numbers. Section 9.10.1 – corrected reference to P&W appendix section. Section 9.10.2 - corrected reference to P&WC appendix section. Section 11.1 – updated calibration specifications. Section 14.0 – added statement for minor changes. Appendix V (UTC Aerospace)– Changed Hamilton Sundstrand to UTC Aerospace Systems & throughout as applicable. Section 1 added websites, section 1.1 for ASQR & UTCQR doc and 1.2 for gov’t contracts. Appendix VIII (P&W) – Added ASQR-15.1 for FOD prevention. Added section 1.1 for ASQR & UTCQR doc. Appendix IX (P&WC)- Section 1 added websites, added section 1.1 for ASQR & UTCQR doc and 1.3 for gov’t contracts. Appendix X (R-R) – Added certification is required for every company in the supply chain. Added FOD prevention per SABRe. Appendix XII – For Sikorsky removed reference to UTC & throughout as applicable & added Lockheed Martin. Appendix XIV – Updated Aerojet Rocketdyne requirements. Editorial/grammatical changes throughout as applicable and may not be indicated.

V. Zita	D. Desmarest	E/ 01/18/2019	Updated inserting IMS for Quality 2.1, 2.2, 3.4.2, Section 5.0 added definitions associated with this revision. Added sections 6.1.3.9 & 6.1.3.10 requiring Enjet Aero Manchester notification of changes. Section 6.11 added for work transfers Section 6.19 added for EMCP. Section 11.4 was added for calibration services to report out of tolerance conditions. Appendix IX – Added SQOP-01-01
V. Zita	D. Desmarest	F/ 05/01/2020	Section 2.3: Added to show relationship to standards AS9100 & ISO14001. Section 5.0: Added definition for attribute data, APQP, AS13000 series, hidden requirements, PFMEA, PPAP and variable data. Section 6.1.3: Added for first time/new part number including castings and forgings. Section 6.1.4.12: Added for changes in the supply chain. Section 6.1.6: Clarification to require prior Enjet Aero Manchester approval. Section 6.1.10: Added PFMEA may be required. Section 6.1.12: Added for APQP. Section 6.10.2: Added AS13000. Section 6.11.2: Rewrite for clarification of work transfers. Section 7.2: Added for hidden requirement inspection. Section 8.9: Special process test reports required. Section 9.11.1: Added B.) for PWA supplements automatically invoked. Sections 9.2.1.1 & 9.2.1.2: Added for additional clarification for raw material supply chain traceability. Section 9.7: Added for forging & casting FAIRs. Appendix VIII: • Para 1 added “comply” (ref ASQR-01 section 5.1.1). • Para 4 added for PWA-S supplements. • Para 6 added F-14 in the PWA 300 example table. Appendix IX: Para 1 added “comply” (ref ASQR-01 section 5.1.1). Appendix XIV: Updated to include Aerojet spec AR1. Revise where needed: • UTC Aerospace name change to Collins Aerospace. • Replace references to United Technologies Corp. (UTC) with Raytheon Technologies Corp. Editorial/grammatical changes as needed throughout. Section numbers re-sequenced accordingly to accommodate changes.
V. Zita	D. Desmarest P. Hayden	G / 05/14/2021	Section 3.2: Added “and all levels of sub-tier providers.” Section 3.4.6: Added to clarify that requirements are primarily a flow down from end-user customers. Section 5.0: Updated accordingly including addition of AS13100. Section 6.1.12: Added AS13100 requirement. Section 6.1.12.1 was added for required APQP & reference to Annex A. Added section 6.12 for software control. Added section 6.21 for CMMC. Section 7.1: Removed ISO9001. Section 7.3.2.1 added to clarify distributor FAIR requirements. Appendix VIII & IV: Added ASQR-07.5 for software control. Appendix XIV: Updated section 1.1, added sections 3c, 3d and 7. Annex A added for APQP flow down.

V. Zita	D. Desmarest J. Rhodes	H / 02/22/2022	Section 6.1.13: Added for capacity plan requirement. Appendix XIV for AR: Added second cross-ref specification RF0008-000 Appendix sections for Collins, P&W and P&WC, added distributor requirements. Appendix section VIII for P&W: Enhancements for flow down of MCLM sections required to be included on sub-tiers' certifications. Added section for flowing down requirements for processes/material obtained from Turkey.
V. Zita	D. Desmarest J. Rhodes	J / 04/18/2022	Name change from Spartan Aerospace LLC to Enjet Aero Manchester LLC throughout. Sections 5.0 & 6.6.2 – Added AS9146 for FOD prevention aligning with customer requirements.

BAE Systems
End – Use Requirements

APPENDIX I –BAE Systems End – Use Requirements

1. General Requirements - BAE is a provider of mobility and protection systems (ground support) and requires supplies to maintain a quality system that meets the requirements of ISO9001 and BAE Systems Supplier Quality Manual.

2. First article requirements or Production Part Approval Process (PPAP) shall be per BAE Systems Supplier Quality Manual. Additionally, a Component First Article Test (CFAT) may be required if indicated.

3. Special processes – Only BAE approved suppliers can be used.

4. For supplying fasteners or assemblies with fasteners installed: Fastener Quality Assurance Requirements – The supplier shall implement and maintain a fastener quality assurance program that complies with the latest revision of the Fastener Quality Act. SAE grade 8.1 or 8.2 fasteners are not an acceptable substitute for grade 8 fasteners. Suppliers shall implement and maintain a fastener quality assurance program which:
   a Assures the homogeneity of the fastener lots. A homogeneous fastener lot is defined as a lot in which all the fasteners are of the same size, type, grade, plating and manufacturer.
   b. Assures that individual threaded fasteners are identified by a fastener manufacturer symbol (logo) and grade. The manufacturer's symbol shall be listed in MIL-HDBK 57 (listing of fastener manufacturer's identification symbols).
   c. Provide objective evidence that the fasteners purchase order requirements. Ensure the use of an independent accredited laboratory or its equivalent whenever test/inspections are performed to gather mechanical/material requirements as objective evidence. Laboratory accreditation shall be by an independent authority using recognized laboratory standards.

5. Castings – Only BAE approved casting manufacturers are permitted to provide castings. Castings per the requirements of BAE's Supplier Quality Manual.

6. DFAR 252.225-7014 – Preference for domestic specialty metals, Alt.1 applies.

7. ITAR – Compliance to ITAR.

8. 15 CFR PART 700 systems regulations, defense priorities and allocations system apply.

Colt Defense LLC
End – Use Requirements

APPENDIX II –Colt Defense LLC End – Use Requirements

1. General Requirements - Colt is a Firearms Company that requires suppliers to maintain a documented quality system that is adequate to address the complexity of the work contracted and to satisfy all PO requirements and Colt's Supplier Quality Manual.

   1.1. Suppliers shall meet the terms and conditions of Colts "terms and conditions of purchase" that can be accessed at: http://www.colt.com/mil/terms.asp

2. First article requirements shall be per Colt's Supplier Quality Manual. A first article is required under the following conditions:
   - The part is new to the suppler
   - The supplier has not delivered the part during the past 24 months.

   Unless other wise specified, the supplier shall select five (5) pieces from the first article lot and provide 100% variable dimensional inspection results on each piece. A ballooned drawing accounting for all drawing notes and features shall accompany this report. Any additional first article requirements shall be indicated on the PO

3. Raw material - All raw materials from every heat lot shall be tested by Colt after receipt at Enjet Aero Manchester. The supplier shall be responsible for any out of spec condition.

4. ITAR – Compliance to all the International Traffic In Arms Regulations (ITAR) is required.

APPENDIX III

General Electric Aircraft Engines (GEAE)
End – Use Requirements

APPENDIX III - GE End – Use Requirements

The subcontractor shall maintain a quality system iaw the requirements of **GEAE's** specification **S-1000**. GEAE approved processes and suppliers shall be used as required.

Any Laboratory testing that may be required by GEAE must be performed by a laboratory that has been approved iaw GEAE's specification **S-400**. All certifications of compliance for laboratory testing must state "GE S-400 approved".

APPENDIX IV

Government
End – Use Requirements

APPENDIX IV - Government End – Use Requirements

1. General Requirements – Refer to the PO, drawing, any applicable quality plans, and/or applicable engineering data listings (EDL) for all requirements.

2. Government Source Inspection (GSI) – Only if GSI is specifically indicate on the PO the following is required:

   Government quality assurance is required prior to shipment from your plant. Upon receipt of this order, promptly notify the government representative who normally services your plant so that appropriate planning for government inspection can be accomplished. Upon receipt of this order, promptly furnish a copy to the government representative who normally services your plant. If the representative or office cannot be located, promptly notify the Enjet Aero Manchester purchasing agent.

3. Specifications and regulations - The following is provided for access to applicable requirements/regulations:

   a. Military Standards, Specifications and related publications may be accessed at: http://dodssp.daps.dla.mil/

   b. FAR clauses may be accessed at: http://www.arnet.gov/far/

   c. DFARS clauses may be accessed at http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html

APPENDIX V

Collins Aerospace
(Formally UTC Aerospace Systems & Hamilton Sundstrand)
End – Use Requirements

APPENDIX V – Collins Aerospace End – Use Requirements

1. General requirements - The subcontractor shall maintain a quality system iaw the requirements of Raytheon Technologies Corp. (formally United Technologies) Aerospace Supplier Quality Requirements specification ASQR-01 http://www.utc.com/Suppliers/Pages/Aerospace-Supplier-Quality-Requirement-Documents.aspx and UTC terms & conditions http://www.utc.com/Suppliers/Pages/Terms-and-Conditions.aspx .

1.1 Suppliers shall comply with the latest revision of applicable ASQR and UTCQR documents. The supplier shall review the applicable portal for the latest revision every 60 days and implement all changes within 60 days of the publication revision date.

1.2 PO's that flow down a government contract number require compliance to all applicable U.S. Government Provisions & Clauses. See http://www.utc.com/Suppliers/Pages/Terms-and-Conditions.aspx .

1.3 Collins Aerospace approved processes and suppliers shall be used as required.

1.4 Distributors

1.4.1 All Distributors in the supply chain shall be certified by an industry accredited body to AS/EN/JISQ 9100, AS/EN/JISQ 9120, ISO 9001, or IATF16949:2016.

1.4.2 All Distributors of metals, electronics, and hardware in the supply chain shall be on the UTC Qualified Distributor Listing (QDL).

2. Classification of Characteristics shall be iaw QC13.01-03

3. Control of Material for Procured Parts shall be iaw HS 14722

Honeywell
End – Use Requirements

APPENDIX VI – Honeywell End – Use Requirements

The subcontractor shall maintain a quality system iaw the requirements of the applicable **Honeywell** specifications. Honeywell approved processes and suppliers shall be used as required.

MTU
End – Use Requirements

APPENDIX VII - MTU End – Use Requirements

The subcontractor shall maintain a quality system iaw the requirements of the applicable **MTU** specifications including MTN94111. MTU approved processes and suppliers shall be used as required.

Pratt & Whitney (P&W)
End – Use Requirements

APPENDIX VIII - P&W End – Use Requirements

1. General – P&W end-use: The subcontractor shall maintain a quality system iaw the requirements of AS9100, AS9120 or Nadcap, as applicable **and** Raytheon Technologies Corp. (formally United Technologies) Aerospace Supplier Quality Requirements specification ASQR-01. The subcontractor must access and comply with the latest revision of ASQR-01: http://www.utc.com/Suppliers/Pages/Aerospace-Supplier-Quality-Requirement-Documents.aspx and P&W's terms & conditions http://www.utc.com/Suppliers/Pages/Terms-and-Conditions.aspx. Please be aware that P&W may contact or visit you to verify compliance.

1.1 Suppliers shall comply with the latest revision of ASQR and UTCQR documents. The supplier shall review the portal for the latest revision every 60 days and implement any changes within 60 days of the publication revision date. The P&W specification revision lists are available at http://www2.pratt-whitney.com/procurement/tphome.htm .

1.2 PO's that flow down a government contract number require compliance to all applicable U.S. Government Provisions & Clauses http://www.utc.com/Suppliers/Pages/Terms-and-Conditions.aspx . For additional clause the see terms and conditions of purchase section at http://www2.pratt-whitney.com/procurement/tphome.htm then go to *Pratt & Whitney Additional U.S. Government Flow Down Clauses* and find the clauses that apply to the contract number on the PO.

1.3 Only P&W approved processes and suppliers shall be used.

1.4 Distributors

1.4.1 All Distributors in the supply chain shall be certified by an industry accredited body to AS/EN/JISQ 9100, AS/EN/JISQ 9120, ISO 9001, or IATF16949:2016.

1.4.2 All Distributors of metals, electronics, and hardware in the supply chain shall be on the UTC Qualified Distributor Listing (QDL).

2. FAIR Requirements – Per ASQR-01

3. The following are required only if specified on the drawing, Enjet Aero Manchester operation sheet, P&W PO documents that may be a part of

the Enjet Aero Manchester PO or in the body of the Enjet Aero Manchester PO:

a. Frozen process requirements – Per PWA-370

b. Key Characteristics – Per PWA-39345 (may be shown on the drawing as "KPC")

c. Flight Safety Parts – Per ASQR-09.1

4. Control of materials, processes and parts – Per PWA 300 including the following:

a. Compliance and certify to the applicable section of the P&W Material Control Laboratory (MCL) Manual.

b. Laboratory Control at Source (LCS) subcontractors shall possess a valid P&W Supplier Authorization (Enjet Aero Manchester) document.

c. LCS subcontractors shall certify "Parts have been controlled to P&W requirements for LCS per P&W MCL Manual section F-17 and PWA 300".

d. Non-LCS subcontractors (subcontractors that *do not* posses a valid P&W Supplier Authorization):

- Non-LCS subcontractors shall comply with all required testing and certify to the applicable MCL Manual section(s).

- Enjet Aero Manchester may be required to over test non-LCS supplied material and processes. Non-LCS suppliers and processors shall supply an identified test piece with the shipment. The test piece shall be such that Enjet Aero Manchester can have the proper P&W MCL/LCS testing performed. These tests can be a repeat of the tests that the subcontractor performed and certified to.

e. PWA-S Supplements to AMS specifications: When an AMS Specification is referenced on a drawing, or in the case of subcontracted processes or raw materials on a purchase order, and a PWA Supplement exists, the **PWA Supplement is automatically invoked with no further reference.** These supplements are identified as PWA-S xxxx where x = the same numbers of the AMS specification.

f. **P&W MCL Manual Sections:**
For sub-tier processing, product and product related material for P&W end-use. The controls, testing and **certifications** must be in compliance with section F-22 and ***all*** other applicable P&W MCL Manual sections. The following table is provided as a reference guide, please refer to PWA 300 for the required MCL Manual sections.

This table is for reference to assist in the determination of what MCL Manual sections can apply for supplied materials and processing. All applicable sections are required to be included on the sub-tiers' certification along with the material or process specification.

MATERIAL/PROCESS	MCM F-SECTIONS		
RAW MATERIAL	F-14	F-17	
FORGING	F-4	F-17	
HEAT TREAT	F-17	F-40	
COATING	F-17	F-57	
WELD WIRE	F-17	F-53	
PLATING/CHEMICAL FINISHING/TITANIUM CLEAN	F-17	F-44	
ADHESIVE BONDING	F-17	F-42	
EDM/LBMR/LASER BEAM MARKING	F-17	F-43	
RESISTANCE WELDING	F-17	F-60	
FUSION WELDING	F-17	F-53	F-61
FURNACE BRAZING	F-17	F-40	F-62
TORCH BRAZING	F-17	F-62	
LAB TESTING	F-23		
*NON-LCS	F-22		

*Non-LCS sub-tier providing a process or metallic parts – certification must show the process was performed in accordance with the F-22 and any other applicable F-sections

5. FOD Prevention - shall be per ASQR-15.1

6. Software control, as applicable, shall be per the requirements of ASQR-07.5 for the development, operation and maintenance of manufacturing, test and support software and deliverable software.

7. For any line items on the purchase order that are designated as, "IN ANTICIPATION OF GOVT. CONTRACT," please contact the cognizant Enjet Aero Manchester buyer for further guidance if it is anticipated that any material or service in support of this purchase order is obtained or expected to be obtained from the country of Turkey, or any of its entities controlled by the government of Turkey.

Pratt & Whitney Canada (CPW or P&W Canada)
End – Use Requirements

APPENDIX IX - P&W Canada End – Use Requirements

1. General Requirements - General – **P&W Canada** end-use: The subcontractor shall maintain a quality system iaw the requirements of AS9100, AS9120 or Nadcap, as applicable, P&W Canada SQOP-01-01 **and** Raytheon Technologies Corp. (formally United Technologies) Aerospace Supplier Quality Requirements specification ASQR-01. The subcontractor must access and comply with the latest revisions of SQOP-01-01 https://eportal.pwc.ca and ASQR-01: http://www.utc.com/Suppliers/Pages/Aerospace-Supplier-Quality-Requirement-Documents.aspx and P&W Canada terms & conditions http://www.utc.com/Suppliers/Pages/Terms-and-Conditions.aspx . Please be aware that P&W Canada may contact or visit you to verify compliance.

1.1 Suppliers shall comply with the latest revision of ASQR and applicable UTCQR documents. The supplier shall review the portal for the latest revision every 60 days and implement any changes within 60 days of the publication revision date. The P&W specification revision lists are available at http://www2.pratt-whitney.com/procurement/tphome.htm .

1.2 P&W Canada's approved processes and suppliers shall be used.

1.3 Distributors

1.3.1 All Distributors in the supply chain shall be certified by an industry accredited body to AS/EN/JISQ 9100, AS/EN/JISQ 9120, ISO 9001, or IATF16949:2016.

1.3.2 All Distributors of metals, electronics, and hardware in the supply chain shall be on the UTC Qualified Distributor Listing (QDL).

2. Control of materials, processes, and parts – Per CPW 100 including the following:

Compliance and certify to the applicable section of the P&W Material Control (MCL) Manual (see the appendix for P&W).

Laboratory Control at Source (LCS) subcontractors shall possess a valid P&W Supplier Authorization (Enjet Aero Manchester) document.

LCS subcontractors shall certify as outlined in appendix VIII for P&W.

Non-LCS subcontractors, suppliers and processors shall comply as outlined in appendix VIII for P&W.

3. Software control, as applicable, shall be per the requirements of ASQR-07.5 for the development, operation and maintenance of manufacturing, test and support software and deliverable software and is used in the design, analysis, manufacture, inspection, test, or calibration which directly affects or verifies the configuration, conformity, or quality of a product.

APPENDIX X

Rolls-Royce Corp (RRC) - Indianapolis
End – Use Requirements

APPENDIX X - Rolls-Royce Corp End – Use Requirements

1. General Requirements - The subcontractor shall maintain a quality system iaw the requirements of **Rolls-Royce's** Supplier Advanced Business (SABRe) manual.
   SABRe can be accessed on the Rolls-Royce's supplier management website:
   https://suppliers.rolls-royce.com/GSPWeb/appmanager/gsp/guest?_nfpb=true&_pageLabel=portal_gsp_portal_page_6&_nfls=false .

1.1 Rolls-Royce approved processes and suppliers shall be used as required. All companies in the supply chain at every level must be certified in accordance with Rolls-Royce's SABRe manual. Certification such as ISO9001, AS9100, AS9120 and Nadcap accreditation are required depending on your company's process or product being supplied.

2. Special Documentation Requirements – Additional documentation required by Rolls-Royce:
   - FAIRs – Using applicable forms per SABRe
   - Special processes – The processor shall develop a data card and submit to Rolls-Royce for approval. A copy of the approved data card shall be forwarded to Enjet Aero Manchester.
   - NDT requires a Rolls-Royce approved level III. All data cards or technique sheets must be signed by the approved level III and a copy forwarded to Enjet Aero Manchester.

3. FAIR Requirements:
   FAIR shall be per SABRe including completion of all required forms. FAIRs that include special processes must include a current Rolls-Royce approved data card.

4. Special Process Requirements – In addition to being Nadcap accredited (UOS) and Rolls-Royce approved (ref MLC 127 and RRP5000), special processes shall be performed to a Rolls-Royce approved data card. No changes to the process are permitted without an approved revised data card.

5. FOD prevention shall be per the applicable section of SABRe and NAS 412.

Rolls-Royce plc (United Kingdom)
End – Use Requirements

APPENDIX XI - Rolls-Royce plc End – Use Requirements

All companies in the supply chain at every level must be certified in accordance with Rolls-Royce's SABRe manual. Certification such as ISO9001, AS9100, AS9102 and Nadcap accreditation is required depending on the process performed by your company.

Same as Rolls-Royce Corp. requirements. The Rolls-Royce SABRe manual can be accessed: https://suppliers.rolls-royce.com/GSPWeb/appmanager/gsp/guest?_nfpb=true&_pageLabel=portal_gsp_portal_page_6&_nfls=false

APPENDIX XII

Sikorsky Lockheed Martin
End – Use Requirements

APPENDIX XII – Sikorsky End – Use Requirements

1. General requirements - The subcontractor shall maintain a quality system iaw the **Sikorsky** specifications. Sikorsky approved processes and suppliers shall be used as required.

2. If required; Process Critical, Flight safety parts shall comply with SS9211.

3. FAIR requirements shall be iaw Sikorsky Aircraft Specifications

GKN Aerospace (Formally Volvo Aero or VAC)
End – Use Requirements

APPENDIX XIII – GKN End – Use Requirements

1. General requirements - The subcontractor shall maintain a quality system iaw the requirements of **VAC's** SQAR 210 (Supplier Quality Systems Requirements…). Applicable approved processes and suppliers shall be used as required.

2. Applicable Volvo specifications:

   SQAR 200 - DEFINITIONS AND ABBREVIATIONS

   SQAR 210 - SUPPLIER QUALITY SYSTEM REQUIREMENTS AND ADDITIONAL SPECIFIC SUPPLIER REQUIREMENTS

   SQAR 300 - FIRST ARTICLE INSPECTION (FAI)

   SQAR 310 - MANUFACTURING APPROVAL OF CRITICAL OPERATIONS PERFORMED BY SUPLIERS TO VOLVO AERO (Applicable only when specified on PO or drawing).

   SQAR 315 - REQUIREMENTS FOR SUPPLIER AUTHORIZED TO SHIP PARTS WITH VOLVO AERO FULL RELEASE

   SQAR 320 - REPORTING OF SUPPLIER NON-CONFORMANCES TO VOLVO AERO

3. Environmental controls - Products and processes used to produce product being delivered to Volvo shall be free from chemicals identified on their blacklist.

Aerojet Rocketdyne (formally P&W Rocketdyne)
End – Use Requirements

APPENDIX XIV – Aerojet Rocketdyne End – Use Requirements

1. General – Aerojet Rocketdyne (AR) end-use: The subcontractor shall maintain a quality system iaw the requirements of AR1 and SR-059 as applicable. AR approved processors/suppliers shall be used as required.

1.1 Prior to merging with Aerojet, Rocketdyne was part of P&W. All applicable P&W specifications have been converted to AR specifications. Suppliers shall use the AR version of the former P&W specifications. The conversion list can be found in AR's RF0004-526 and RF0008-000.

1.2 P&W MCL Manual Sections - RF0008-104 shall be used to convert P&W MCL manual sections to AR's material control requirements that may be applicable to your organization.

2. FAIR Requirements – AS9102

3. The following are required only if specified on the drawing, Enjet Aero Manchester operation sheet, or Enjet Aero Manchester PO:

   a. Frozen process requirements – Per RFPWA-370

   b. Key Characteristics – Per PWA-39345 (may be shown on the drawing as "KPC")

   c. Post Award Review (PAR) – Per AR's Q251 document

   d. FAIR with Compliance Matrix (CM) – Per AR's Q261 document

4. Control of materials, processes and parts – Per RFPWA 300.

5. FOD program – guidance per AR1 and NAS 412

6. Metallic raw material, including weld filler material, shall meet the applicable requirements of SR-059 which includes testing by an ISO17025 approved US based test lab.

7. Special process sources shall be listed in the approved processor list in the AR Supplier Portal Gateway https://accessto.rocket.com/talisen/cgi-bin/projects.cgi .

ANNEX A

Advanced Product Quality Planning

The following is required when this Annex is listed in the body of the purchase order (ref section 6.1.12).

1. General Requirements – Manufacturing subcontractors performing work for PWA or PWC end use are required to complete Advanced Product Quality Planning (APQP) in accordance with ASQR-09.2.

1.1 Subcontractors must complete and submit the required documentation to Enjet Aero Manchester's Quality department before shipment of product.

1.2 Documentation is required for each part number during the First Article process only. Subsequent processing of the same part number does not require re-submission.

2. Required Documentation – Subcontractors shall complete the following documentation referenced in ASQR-09.2. A supplier workbook will be provided upon acceptance of the purchase order.

2.1 Element 3 – Process Flow Diagram

2.2 Element 4 – Process Failure Mode and Effects Analysis. PFMEA to be completed in accordance with AS13004.

3. Submission to Enjet Aero Manchester – The supplier workbook shall be submitted to Enjet Aero Manchester for approval prior to shipment of product. Product may be shipped to Enjet Aero Manchester prior to completion only with written consent from Enjet Aero Manchester.

4. Approval – Approval of the documentation will be provided using the ASQR-09.2 form 1 and must be signed by a member of Enjet Aero Manchester Quality or Engineering.

5. Exclusions – Subcontractors performing PWA/PWC approved processes listed in the PWA/ PWC MCL Source Qualification List are exempt.

6. Training – Upon request, training and or guidance will be provided by Enjet Aero Manchester.

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