



Supplier Quality Manual

GKN Aerospace Alabama
Tallahassee, Alabama, United States

Revision	H
Supersedes	Supplier Quality Manual, Rev. G
Function	Supplier Quality & Development
Approval	Christopher P. Irvine <i>Senior Supplier Quality Engineer</i>
Effectivity	February 1, 2024
Classification	(U) UNCLASSIFIED

Introduction

GKN Aerospace shall procure compliant and conforming products and services from our supply base to facilitate provision of compliant and conforming products and services to our customers within quality, delivery and cost parameters. To this end, GKN Aerospace shall evaluate, re-evaluate, improve, develop, monitor and support supplier compliance to requirements, risk mitigation, and continued performance. Through these activities, and by conducting ourselves and our business activities in accordance with (IAW) GKN Aerospace’s “Five Principles” (see below), GKN Aerospace intends to establish and maintain data-driven, performance-based, symbiotic partnerships worldwide to the benefit of GKN Aerospace, our end users, our customers and our suppliers.

GKN Aerospace reminds suppliers they shall comply with all requirements within any individual GKN Aerospace written agreement, arrangement and / or purchase order including, but not limited to, GKN Aerospace requirements, GKN Aerospace customer requirements, requirements of applicable international standards and all applicable government regulations and statutes. This Supplier Quality Manual (SQMAN) is supplemental to, and does not supersede, requirements found within any GKN Aerospace written agreement, arrangement and / or purchase order agreed between GKN Aerospace and the supplier.

GKN Aerospace eagerly anticipates establishing and maintaining a data-driven, performance-based, symbiotic partnership with your organization.

The Five Principles of GKN Aerospace



Safe



Open & Honest



Respect & Care



Innovative



Ownership

Table of Contents

Revision History	4
Reference Information.....	4
SQMAN Format.....	6
9100.4.2 Understanding the Needs and Expectations of Interested Parties	7
9100.4.3 Determining the Scope of the Quality Management System	7
9100.4.4 Quality Management System and Its Processes	8
9100.5.3 Organizational Roles, Responsibilities, and Authorities.....	8
9100.6.1 Actions to Address Risks and Opportunities	9
9100.7.1.2 People	9
9100.7.1.3 Infrastructure	9
9100.7.1.5 Monitoring and Measuring Resources	10
9100.7.1.6 Organizational Knowledge	10
9100.7.2 Competence	10
9100.7.5.2 Creating and Updating	10
9100.7.5.3 Control of Documented Information	10
9100.8.1.3 Product Safety.....	11
9100.8.1.4 Prevention of Counterfeit Parts	11
9100.8.2.1 Customer Communication.....	11
9100.8.2.3 Review of the Requirements for Products and Services.....	12
9100.8.3.1 General.....	12
9100.8.3.2 Design and Development Planning.....	13
9100.8.3.3 Design and Development Inputs	13
9100.8.3.4 Design and Development Controls.....	13
9100.8.3.5 Design and Development Outputs	13

9100.8.4.1	General.....	13
9100.8.4.2	Type and Extent of Control.....	15
9100.8.4.3	Information for External Providers.....	16
9100.8.5.1	Control of Production and Service Provision.....	21
9100.8.5.2	Identification and Traceability.....	22
9100.8.5.4	Preservation	23
9100.8.6	Release of Products and Services	23
9100.9.2	Internal Audit	24
9100.9.3.2	Management Review Inputs.....	24
9100.10.1	General.....	25
9100.10.2	Nonconformity and Corrective Action.....	25
13100.4.2	Understanding the Needs and Expectations of Interested Parties	26
13100.4.3	Determining the Scope of the Quality Management System	27
13100.6.1	Actions to Address Risks and Opportunities	27
13100.7.1.2	People	27
13100.7.1.3	Infrastructure.....	27
13100.7.1.6	Organizational Knowledge	27
13100.8.1.4	Prevention of Counterfeit Parts.....	27
13100.8.2.1	Customer Communication	27
13100.8.3.4	Design and Development Controls	28
13100.8.4.1	General	28
13100.8.4.2	Type and Extent of Control	28
13100.8.4.3	Information for External Providers	29
13100.8.5.1	Control of Production and Service Provision	35
13100.8.5.2	Identification and Traceability	35

13100.8.5.4	Preservation	35
13100.8.6	Release of Products and Services	36
13100.9.3.2	Management Review Inputs	37
13100.10.1	General	37
13100.10.2	Nonconformity and Corrective Action	37
Costing		37
Suppliers of Services Not Associated with Production of Aircraft Products		37

Revision History

Revision	Summary	Approval	Effectivity
H	Significant update. Documents and forms updated, requirements moved from #.8.5.2 to #.8.5.4, added costing, revised notes and corrected typographical errors.	Christopher P. Irvine	February 1, 2024
G	Complete rewrite. Improves alignment of requirements with standards, and simplifies requirement flow-downs.	Christopher P. Irvine	January 1, 2024
F	Not Applicable	Christopher P. Irvine	August 24, 2023
E	Not Applicable	Christopher P. Irvine	August 20, 2023
D	Not Applicable	Christopher P. Irvine	October 26, 2022
C	Not Applicable	Christopher P. Irvine	August 12, 2022
B	Not Applicable	Jay Woodrow	April 4, 2017
A	Not Applicable	Darryl Mann	September 12, 2008

Reference Information

Definitions and Revisions

Terms and Definitions within ISO 9000, 9100 / 9110 / 9120, 13100, GKN Aerospace customer documents, applicable government regulations and statutes, as well as any definitions below, apply within SQMAN.

Mechanism a process, system, technique or tool

Information marked as “NOTE:” is for guidance and / or assistance with meeting the associated requirement(s). References to documents and requirements are always to the latest revisions of the same.

Standards, Regulations and Statutes

5553 (AS)	Counterfeit EEE Parts; Avoidance, Detection, Mitigation and Disposition
6174 (AS)	Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
9102 (AS/EN/SJAC)	First Article Inspection Requirements
9103 (AS/EN/SJAC)	QMS – Variation Management of Key Characteristics
9100 (AS/EN/JISQ)	QMS – Requirements for Aviation, Space and Defense Organizations
9110 (AS/EN/SJAC)	QMS – Requirements for Aviation Maintenance Organizations
9120 (AS/EN/SJAC)	QMS – Requirements for Aviation, Space and Defense Distributors
9138 (AS/EN/SJAC)	QMS – Statistical Product Acceptance Requirements
9145 (AS/EN/SJAC)	Requirements for APQP and PPAP
9146 (AS/EN/SJAC)	Foreign Object Damage (FOD) Prevention Program
9162 (AS/EN/SJAC)	Aerospace Operator Self-Verification (OSV) Programs
9163 (AS/EN)	Certificate of Conformity Requirements
9117 (AS/EN/SJAC)	Delegated Product Release Verification (DPRV)
13001 (AS)	Delegated Product Release Verification Training Requirements
13100 (AS)	QMS Requirements for Aero Engine Design and Production Organizations
14001 (ISO)	Environmental management systems
45001 (ISO)	Occupational Health and Safety Management Systems
10012 (ISO)	Requirements for Measurement Processes and Measuring Equipment
17025 (ISO/IEC)	General Requirements for the Competence of Testing and Calibration Labs
S20.20 (ANSI/ESD)	ESD Control Program for Electrical / Electronic Parts, Assemblies, Equipment
41 USC 423	<i>Commonly Known As (c.k.a.)</i> Procurement Integrity Act
10 USC 271	Truthful Cost or Pricing Data <i>c.k.a.</i> Truth in Negotiations Act (TINA)
15 CFR 700	Defense Priorities and Allocations System (DPAS)
DoDI 5200.48	Department of Defense Instruction on Controlled Unclassified Information (CUI)
14 CFR 21	Certification Procedures for Products and Articles <i>c.k.a.</i> FAR 21
48 CFR Chapter 1	Federal Acquisition Regulation (FAR)
48 CFR Chapter 2	Defense Acquisition Regulations System (DFARS)
22 CFR 120 – 30	International Traffic in Arms Regulations (ITAR)
15 CFR 730 – 80	Export Administration Regulations (EAR)
29 CFR 1910	Occupational Safety and Health Administration (OSHA)
49 CFR 100 – 10	Hazardous Materials and Oil Transportation
49 CFR 171 – 85	Hazardous Materials Regulations
14 CFR	Aviation and Space – Federal Aviation Administration (FAA)
EASA Part 21	European Union Aviation Safety Agency – Initial Airworthiness
EASA Part 145	European Union Aviation Safety Agency – Continued Airworthiness
ICAO Annex 16	International Civil Aviation Organization – Environmental Protection
IATA DGR	International Air Transport Association – Dangerous Goods Regulations

Forms and Records

PUR 1.3.3.1	Supplier Production Information: Supplier Technical Support Request (STSR)
PUR 1.3.4.1	Supplier Quality Assurance Information: Supplier Concession Request
PUR 1.9.1.5	Annual Supplier Registration Information: Representations and Certifications
PUR 1.9.1.6	Annual Supplier Registration Information: Add / Modify Profile Information
PUR 1.9.1.7	Annual Supplier Registration Information: 9100-Series Compliance Survey
PUR 1.9.1.8	Supplier Assessment Information: Product / Service Risk Evaluation
PUR 1.9.1.9	Supplier Registration Information: Service Add / Modify Profile Information
PUR 1.9.1.10	Annual Supplier Registration Information: Supplier Risk Evaluation

SQMAN Format

SQMAN follows a standard format. With few exceptions, section headers follow the common section outline of 9100 / 9110 / 9120 and 13100, followed by sections for costing and for suppliers of services not associated with production of aircraft products. SQMAN may utilize additional subsection headers to facilitate the effective and efficient communication of requirements.

When any particular section of 9100 / 9110 / 9120 or 13100 are referenced within SQMAN, suppliers shall reference both the particular section referenced, as well as all subsections within the particular section referenced, in the applicable international standard.

SQMAN does not reference all sections of 9100 / 9110 / 9120 and 13100. For unreferenced sections, the supplier shall comply with GKN Aerospace requirements, GKN Aerospace customer requirements, requirements of their direct customer, requirements of applicable international standards and all applicable government regulations and statutes.

9100.##

Suppliers of this category shall be either compliant or certified to 9100 / 9110 / 9120 IAW GKN Aerospace customer requirements, but may not be compliant to 13100.

For the purposes of SQMAN, suppliers of this category shall comply with all applicable requirements within the 9100.## sections of SQMAN, where “.##” represents section numbers of the applicable international standard.

13100.##

Suppliers of this category shall be either compliant or certified to 9100 / 9110 / 9120, and shall be compliant to 13100, IAW GKN Aerospace customer requirements.

For the purposes of SQMAN, suppliers shall comply with all applicable requirements within the 13100.## sections of SQMAN, where “.##” represents section numbers of 13100.

9100.4.2 Understanding the Needs and Expectations of Interested Parties

Suppliers shall identify GKN Aerospace Alabama as (1) of its interested parties.

Suppliers, including all applicable sub-tiers, shall consider the SQMAN subsection “Standards, Regulations and Statutes” when determining applicable Quality Management System requirements.

Suppliers, including all applicable sub-tiers, shall retrieve copies of the most-recent revisions of the documents within the SQMAN subsection “Standards, Regulations and Statutes” as appropriate.

Suppliers, including all applicable sub-tiers, shall retain objective evidence that includes justification for the inapplicability of any document, document section, or individual requirement referenced within any written agreement, arrangement and / or purchase order from their direct customer or GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall ensure their direct customer, GKN Aerospace, our customers, government and regulatory agencies, and appointed third parties have access to applicable areas of their facilities, sub-tier facilities, partner facilities and documented information, as well as the ability to conduct audits, review quality investigations, verify products, processes and services.

Suppliers, including all applicable sub-tiers, shall ensure their direct customer, GKN Aerospace, our customers, government and regulatory agencies, and appointed third parties have access necessary to fulfill our mandate in the event access is restricted due to export control or intellectual property concerns.

Suppliers, including all applicable sub-tiers, shall provide language translation services to their direct customer, GKN Aerospace, our customers, government and regulatory agencies, and appointed third parties as appropriate to the access required to fulfill our mandate.

Suppliers, including all applicable sub-tiers, may coordinate facility access with a Supplier Quality and Development representative.

9100.4.3 Determining the Scope of the Quality Management System

Suppliers required to be compliant with 9100 / 9110 / 9120 shall provide objective evidence of compliance to the applicable international standard to GKN Aerospace every (6) months.

NOTE: Suppliers required to be compliant with 9100 / 9110 / 9120 may provide a completed copy of *Biannual Supplier Registration Information: 9100-Series Compliance Survey* (PUR 1.9.1.7), or equivalent, as objective evidence of compliance to 9100 / 9110 / 9120.

Suppliers required to be certified to 9100 / 9110 / 9120 shall operate IAW the applicable international standard and provide objective evidence of certification to the applicable international standard to GKN Aerospace within (10) business days of receiving initial certification and recertification certificates from a Certifying Body.

Suppliers required to be certified to 9100 / 9110 / 9120 shall notify GKN Aerospace within (10) business days of any change in certification status, and provide objective evidence of compliance to the applicable international standard within (10) business days if their certification is no longer active.

Suppliers required to be certified to 9100 / 9110 / 9120 whose certification is no longer active shall continue to provide objective evidence of compliance to the applicable international standard to GKN Aerospace every (6) months until the supplier provides GKN Aerospace with objective evidence of recertification.

NOTE: Suppliers pending recertification to 9100 / 9110 / 9120 may provide a completed copy of *Biannual Supplier Registration Information: 9100-Series Compliance Survey* (PUR 1.9.1.7), or equivalent, as objective evidence of compliance to 9100 / 9110 / 9120.

9100.4.4 Quality Management System and Its Processes

Suppliers, including all applicable sub-tiers, shall include the sharing of mistakes without fear of retribution and consideration of human factors during investigations and improvement plan creation within its Quality Management System processes.

Suppliers, including all applicable sub-tiers, shall include the training of employees on human factors within its Quality Management System processes.

9100.5.3 Organizational Roles, Responsibilities, and Authorities

Suppliers, including all applicable sub-tiers, shall ensure persons responsible for product conformity are authorized to stop and correct quality issues.

Suppliers, including all applicable sub-tiers, shall ensure products and services are contained to prevent delivery to their direct customer if the process cannot be immediately shutdown by design.

Suppliers, including all applicable sub-tiers, shall identify accountable personnel for ensuring product conformity for products produced across multiple shifts.

9100.6.1 Actions to Address Risks and Opportunities

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) risk management mechanism that facilitates assessment of risks, including those that could threaten future performance, and ensure mitigation is in place for identified risks, appropriate to the level of risk identified.

Suppliers, including all applicable sub-tiers, shall consider how their activities, products, processes and services interact with the environment, which may include interactions with respect to air, water, land, natural resources, energy usage, energy emittance, waste or by-product generation and space usage, when assessing and identifying risks.

Suppliers, including all applicable sub-tiers, shall detail identified risks in a register and conduct a review of how they manage risk at least once per calendar year.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain a crisis management and business continuity plan that facilitates informing their direct customer within (3) business days of becoming aware of any issue described below:

- any issue regarding incidents that impact their ability to meet direct customer commits
- risks that could impact their business continuity
- a change in the appointed Quality Manager
- significant changes to the Quality Management System
- a change in ownership or discontinuation of their business activities
- significant issues of breaches of Information Technology security systems
- procurement of substances used in production subject to laws and regulations concerning their control or use

9100.7.1.2 People

Suppliers, including all applicable sub-tiers, shall determine and provide the necessary persons to facilitate the distribution of GKN Aerospace written agreement, arrangement and / or purchase order requirements to their applicable sub-tiers, verifying and / or validating compliance to the same, as appropriate.

9100.7.1.3 Infrastructure

Suppliers, including all applicable sub-tiers, shall use a cross-functional approach to develop project plans when implementing new plants, facilities, or equipment.

Suppliers, including all applicable sub-tiers, shall inform their direct customer and GKN Aerospace of plans to implement new plants, facilities and equipment at least (3) months prior to the start of production.

9100.7.1.5 Monitoring and Measuring Resources

Suppliers, including all applicable sub-tiers, shall provide the necessary persons for conducting Measurement Systems Analysis studies for identified key characteristics, as applicable, IAW 9103.

9100.7.1.6 Organizational Knowledge

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) mechanism to capture undocumented organizational knowledge (i.e. "hidden factory") for processes used to produce products and services provided to GKN Aerospace.

9100.7.2 Competence

Suppliers, including all applicable sub-tiers, may delegate verification activities IAW 9117, as appropriate.

Suppliers, including all applicable sub-tiers, shall ensure their DPRV personnel are trained and certified IAW 13001, as appropriate.

Suppliers, including all applicable sub-tiers, shall ensure contract or agency personnel, in addition to their employees, receive on-the-job training.

Suppliers, including all applicable sub-tiers, shall inform persons whose work can affect quality about the consequences of nonconformity to customer requirements.

9100.7.5.2 Creating and Updating

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) mechanism to ensure created and updated documentation is traceable to a responsible person making the change, and ensure that created or updated documentation is not altered without proper traceability of authorization of the alteration.

9100.7.5.3 Control of Documented Information

Suppliers, including all applicable sub-tiers, shall retain documented information related to Critical Safety Item(s) for (40) years from the date of manufacture, unless GKN Aerospace customer requirements specify a longer retention period.

Suppliers, including all applicable sub-tiers, shall retain documented information related to all other serialized and not serialized parts, as well as nondestructive evaluation / testing process-related records, for (10) years from the date of manufacture, unless GKN Aerospace customer requirements specify a longer retention period.

Suppliers, including all applicable sub-tiers, shall retain documented information related to design records for (10) years from the date of notification from GKN Aerospace of withdrawal of type certificates (civil programs), or the notification of withdrawal of support (military programs), unless GKN Aerospace customer requirements specify a longer retention period.

Suppliers, including all applicable sub-tiers, may dispose of any documented information after the duration of its respective retention period if the contract associated with the documented information is closed.

9100.8.1.3 Product Safety

Suppliers, including all applicable sub-tiers, shall report to their direct customer anything that may affect the safe and reliable operation of products provided to GKN Aerospace, identified at any stage in the life of the product, within (1) business day of verification.

9100.8.1.4 Prevention of Counterfeit Parts

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process to prevent counterfeit parts IAW either 5553 or 6174, as applicable.

Suppliers, including all applicable sub-tiers, shall include, within at least (1) process, a mechanism for reporting counterfeit parts to their direct customer within (24) hours of confirmation.

Suppliers, including all applicable sub-tiers, shall include, within at least (1) process, a definition for fraudulent activity, potential consequences for fraudulent activity, and next actions if fraudulent activity is discovered.

9100.8.2.1 Customer Communication

Suppliers shall only accept “privileges, agreements, and instructions” not related to the clarification of technical requirements from GKN Aerospace in writing via a revised written agreement, arrangement and / or purchase order for products and services provided to GKN Aerospace.

Suppliers shall submit a completed copy of *Supplier Production Information: Supplier Technical Support Request (STSR)* (PUR 1.3.3.1) to GKN Aerospace to request clarification of technical requirements by GKN Aerospace or GKN Aerospace customers.

Suppliers shall only accept “privileges, agreements, and instructions” related to the clarification of technical requirements from GKN Aerospace in writing via a *Supplier Production Information: Supplier Technical Support Request (STSR)* (PUR 1.3.3.1) approved by GKN Aerospace IAW PUR 1.3.3.1 form instructions.

Suppliers, including all applicable sub-tiers, shall not accept solely verbal “privileges, agreements, and instructions” from their direct customer for products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall not refuse to communicate with GKN Aerospace regarding products and services provided to GKN Aerospace, as well as their Quality Management System, so long as GKN Aerospace conduct ourselves and our business activities IAW GKN Aerospace’s “Five Principles.”

Suppliers, including all applicable sub-tiers, shall report any grievance that may result in discontinued communication with GKN Aerospace regarding products and services provided to GKN Aerospace, as well as the supplier’s Quality Management System, within (1) business day of occurrence or within (1) business day after the completion of an on-site visit by GKN Aerospace personnel.

Suppliers, including all applicable sub-tiers, shall provide access to data within the Online Aerospace Supplier Information System (OASIS) and Nadcap databases to their direct customer and GKN Aerospace.

9100.8.2.3 Review of the Requirements for Products and Services

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process for the creation, modification and distribution of at least (1) document including all requirements related to individual products and services provided to GKN Aerospace (e.g. a characteristics / requirements matrix).

9100.8.3.1 General

Suppliers, including all applicable sub-tiers, shall have a design and development process compliant with 9145 if they design and develop products and services on behalf of GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall have an appointed person (or equivalent) who is responsible for coordinating all design and development activities, and functions as a single point of contact for GKN Aerospace if they design and develop products and services on behalf of GKN Aerospace.

9100.8.3.2 Design and Development Planning

Suppliers, including all applicable sub-tiers, shall configure and plan design reviews appropriate to the design project, and include the dates of planned design reviews in the design and development plan, which shall be shared with their direct customer if they design and develop products and services on behalf of GKN Aerospace.

9100.8.3.3 Design and Development Inputs

Suppliers, including all applicable sub-tiers, shall identify and review lessons learned / best practices from previous design projects and previous manufacturing projects, as well as personal experiences from team members, for consideration during new design projects if they design and develop products and services on behalf of GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall conduct an appropriate risk assessment against new or novel technologies and identify mitigating actions prior to implementation into a new design project if they design and develop products and services on behalf of GKN Aerospace.

9100.8.3.4 Design and Development Controls

Suppliers, including all applicable sub-tiers, shall conduct design reviews IAW the design and development plan if they design and develop products and services on behalf of GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall utilize a "Design for 'X'" (DFX) approach during product design and development, which may include considering 'X' factors such as Manufacturing (DFM), Assembly (DFA), Cost (DFC), Quality (DFQ), Inspection (DFI), Service (DFS), Procurement (DFP), etc., as appropriate if they design and develop products and services on behalf of GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall provide test specimens for design approval upon request by their direct customer or GKN Aerospace if they design and develop products and services on behalf of GKN Aerospace.

9100.8.3.5 Design and Development Outputs

Suppliers, including all applicable sub-tiers, shall create and retain comprehensive technical documented information of all aspects that influenced the design through its development (e.g. alternative designs, meeting minutes, notes and other communications where key decisions are made, problems encountered along with resolutions, etc.) if they design and develop products and services on behalf of GKN Aerospace.

9100.8.4.1 General

Suppliers, including all applicable sub-tiers, shall notify their direct customer and GKN Aerospace of any changes with respect to purchase types, business structure, business classifications, payment terms, commodity codes, country codes, etc. within (10) business days of the effectivity date, as applicable.

Suppliers, including all applicable sub-tiers, shall notify their direct customer and GKN Aerospace of any change in quality leadership personnel, reporting structure, scope, name, address, or special process accreditation status within (10) business days of the effectivity date.

Suppliers shall provide completed copies of *Annual Supplier Registration Information: Representations and Certifications* (PUR 1.9.1.5), *Annual Supplier Registration Information: Supplier Profile Add / Modify Information* (PUR 1.9.1.6), *Annual Supplier Registration Information: Supplier Risk Evaluation* (PUR 1.9.1.10), any supplemental certifications or accreditations as applicable, a W-9 (or international equivalent) and Banking / Remittance Information on official letterhead to be added to the GKN Aerospace Approved Supplier List (ASL).

Suppliers shall provide objective evidence of a risk assessment to their direct customer for any product or service the supplier is providing upon request.

NOTE: Suppliers may provide a completed copy of *Supplier Assessment Information: Product / Service Risk Evaluation* (PUR 1.9.1.8), or equivalent, as objective evidence of a risk assessment for any product or service.

NOTE: GKN Aerospace may request a supplier to complete a Non-Disclosure Agreement (NDA) prior to adding the supplier to the GKN Aerospace ASL.

Suppliers shall provide updated copies of PUR 1.9.1.5, PUR 1.9.1.6 and PUR 1.9.1.10 at least once every (12) months, as well as comply with the appropriate requirements within SQMAN section 9100.4.3, to remain on the GKN Aerospace ASL.

Suppliers shall maintain acceptable performance ratings (detailed below) to remain on the GKN Aerospace ASL.

Suppliers shall maintain a quality performance rating of at least 99%; calculated as shown.

$$R_Q = \frac{Pieces_{Accepted}}{(Pieces_{Accepted} + Pieces_{Rejected})} \times 100\%$$

Suppliers shall maintain a delivery performance rating of at least 97%, calculated as shown; deliveries made more than (10) business days before the On-Dock Date (ODD) are “early,” and deliveries made more than (2) business days after the ODD are “late.”

$$R_D = \frac{(Pieces_{Accepted} + Pieces_{Rejected} - Pieces_{Early} - Pieces_{Late})}{(Pieces_{Accepted} + Pieces_{Rejected})} \times 100\%$$

Suppliers shall receive a blended rating, where the quality rating is weighted 50%, the delivery rating is weighted 30%, and the corrective action rating, calculated as shown below, is weighted 20%.

$$R_{CA} = 100\% - \left((CA_{Created} \times 1\%) + (CA_{Late\ Response} \times 2\%) \right)$$

Suppliers shall inform GKN Aerospace if at least (9) months have passed since the most-recent receipt of supplier performance data from GKN Aerospace.

NOTE: GKN Aerospace may remove a supplier from the GKN Aerospace ASL for failing to meet any GKN Aerospace requirements (including requirements in SQMAN), GKN Aerospace customer requirements, applicable international standards, and any applicable government regulations and statutes.

NOTE: GKN Aerospace may pursue options outside of removal from its ASL to resolve unfavorable performance trends.

NOTE: Suppliers may request an opportunity to calibrate supplier performance data with a GKN Aerospace Supplier Quality and Development representative.

9100.8.4.2 Type and Extent of Control

Suppliers, including all applicable sub-tiers, shall notify, and obtain the approval of, their direct customer for any change to processes, products or services impacting products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall notify their direct customer and GKN Aerospace of any change of sub-tiers or any manufacturing location change, impacting products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall notify their direct customer of any significant change in their Quality Management System or normal business operations.

Suppliers shall establish, implement and maintain at least (1) process that covers work transfers between sub-tier facilities, between sub-tiers, between the supplier and any sub-tier, and between supplier facilities.

Suppliers, including all applicable sub-tiers, shall receive approval from their direct customer prior to commencing any work transfer activity, and shall keep their direct customer and GKN Aerospace informed of the progress of the work transfer from the beginning of work transfer activity until the work transfer is completed.

Suppliers shall keep GKN Aerospace informed of any work transfer activity within their supply chains that may impact products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall provide test specimens for inspection, verification, investigation and / or audit purposes upon request by their direct customer or GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall facilitate on-site verification and / or validation audits of performance, products, processes and services by their direct customer and / or GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall ensure personnel are available for the duration of the audits, and that direct customer and / or GKN Aerospace personnel are provided an opportunity to privately collate the results of the audits prior to sharing.

NOTE: Unacceptable performance by customer-designated and / or customer-directed suppliers, including all applicable sub-tiers, may be escalated to a GKN Aerospace customer to resolve open issues.

9100.8.4.3 Information for External Providers

Suppliers, including all applicable sub-tiers, shall refer to GKN Aerospace written agreements, arrangements and / or purchase orders to understand holistic GKN Aerospace requirements for any individual product or service. GKN Aerospace written agreements, arrangements and / or purchase orders include all GKN Aerospace requirements, all GKN Aerospace customer requirements, all international standard requirements and all applicable government regulatory and statutory requirements.

9100.8.4.3a

Suppliers, including all applicable sub-tiers, shall refer to written agreements, arrangements and / or purchase orders of their direct customer for specific requirements for processes, products and services, including any applicable specification, drawing, process or work instruction requirements.

9100.8.4.3b

Suppliers, including all applicable sub-tiers, may consider any product, service, method, process or equipment to be “approved” if all applicable requirements within the applicable GKN Aerospace written agreement, arrangement and / or purchase order are fulfilled.

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the release of products and services:

- 9100 / 9110 / 9120 section 8.6
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.6
- SQMAN section 9100.8.6
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.6

9100.8.4.3c

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding competence, including any required qualification of persons:

- 9100 / 9110 / 9120 section 7.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.2
- SQMAN section 9100.7.2
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.2

9100.8.4.3d

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding their interactions with their customers:

- 9100 / 9110 / 9120 section 8.2.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.2.1
- SQMAN section 9100.8.2.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.2.1

9100.8.4.3e

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the control and monitoring of their performance:

- 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2

- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2
- SQMAN sections 9100.8.4.1 and 9100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2

9100.8.4.3f

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding verification and validation activities intend to perform at their facilities:

- 9100 / 9110 / 9120 section 8.4.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.4.2
- SQMAN section 9100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.4.2

9100.8.4.3g

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding design and development control:

- 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6
- SQMAN sections 9100.8.3.1 through 9100.8.3.5
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6

9100.8.4.3h

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding special requirements, critical items, or key characteristics:

- 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- SQMAN section 9100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1

9100.8.4.3i

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding test, inspection and verification (including production process verification):

- 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- SQMAN section 9100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1

9100.8.4.3j

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the use of statistical techniques for product acceptance and related instructions:

- 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1
- SQMAN sections 9100.7.1.5 and 9100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1

9100.8.4.3k

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding implementation of a quality management system:

- 9100 / 9110 / 9120 section 4.4
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 4.4
- SQMAN section 9100.4.4
- direct customer requirements regarding 9100 / 9110 / 9120 section 4.4

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding customer-designated, customer-directed or approved external providers:

- 9100 / 9110 / 9120 section 8.4.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.4.1
- SQMAN section 9100.8.4.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.4.1

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding notification of nonconforming processes, products and services:

- 9100 / 9110 / 9120 section 8.7
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.7
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.7

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding preventing the use of counterfeit parts:

- 9100 / 9110 / 9120 section 8.1.4
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.1.4
- SQMAN section 9100.8.1.4
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.1.4

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding notification and approval of changes to processes, products and services:

- 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- SQMAN section 9100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1

NOTE: 9100 section 8.5.1, subsection 8.5.1.3, is for Product Process Validation, which points to First Article Inspection, to be completed IAW 9102; 9102 is the vehicle for obtaining GKN Aerospace approval for changes to processes, products and services, and section 4.6.f.2 of 9102 specifically mentions the verbiage from 9100 / 9110 / 9120 section 8.4.3k.

Suppliers, including all applicable sub-tiers, shall ensure the flow-down of all applicable requirements, including GKN Aerospace requirements, GKN Aerospace Customer requirements, as well as government regulations and statutes, to all sub-tiers that support their production of products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the provision of test specimens for design approval, inspection / verification, investigation and auditing:

- 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2
- SQMAN sections 9100.8.3.4 and 9100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the retention of documented information:

- 9100 / 9110 / 9120 section 7.5.3
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.5.3
- SQMAN section 9100.7.5.3
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.5.3

Suppliers, including all applicable sub-tiers, shall ensure the flow-down of all applicable requirements, including GKN Aerospace requirements, GKN Aerospace Customer requirements, as well as government regulations and statutes, by all sub-tiers to all sub-tiers within their respective supply chains that support production of products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall ensure all sub-tiers within their respective supply chains understand all applicable requirements, including GKN Aerospace requirements, GKN Aerospace customer requirements, as well as government regulations and statutes.

9100.8.4.3l

Suppliers, including all applicable sub-tiers, shall refer to GKN Aerospace written agreements, arrangements, and / or purchase orders, GKN Aerospace customer requirements, SQMAN section 9100.4.2, and direct customer requirements regarding the right of access to the applicable areas of facilities and to applicable documented information, at any level of the supply chain.

9100.8.4.3m

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding awareness of persons' contributions to product conformity, service conformity and product safety, as well as the importance of ethical behavior:

- 9100 / 9110 / 9120 section 7.3
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.3
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.3

9100.8.5.1 Control of Production and Service Provision

Suppliers, including all applicable sub-tiers, shall comply with all appropriate sections of 9145, as applicable to the provision of any particular product or service, even if they do not design and develop products and services on behalf of GKN Aerospace.

NOTE: Appropriate sections of 9145 should include sections 4.5 (i.e. Phase 3 – Process Design and Development) and 4.6 (i.e. Phase 4 – Product and Process Validation), at a minimum.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain an Electrostatic Discharge (ESD) control program IAW S20.20 or equivalent, as appropriate.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process for controlling and monitoring identified and documented critical items (i.e. key characteristics) as applicable IAW 9103.

Suppliers, including all applicable sub-tiers, shall ensure suitable infrastructure, specifically product-specific tooling, is calibrated to appropriate NIST standards.

Suppliers, including all applicable sub-tiers, shall ensure adequate training of all persons involved in the provision of products and services provided to GKN Aerospace, including any required qualifications.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) mechanism that ensures software has documented change history, including version and change controls, verifies inspection software test results against test results from an independent inspection method, controls access to software, analyzes risks, confirms software is identified in all applicable work instructions, and prevents undesired changes.

Suppliers, including all applicable sub-tiers, shall ensure welding operators are examined once every (2) years to American Welding Society (AWS) standard D17.1.

Suppliers, including all applicable sub-tiers, shall ensure NDT personnel have their color vision perception checked once every (5) years, shall ensure welders / welding operators have their vision checked once every (2) years, and shall ensure non-NDT inspectors have their vision checked once each year, including a one-time color vision perception check.

Suppliers, including all applicable sub-tiers, shall ensure product test and product inspection activities are conducted in an environment with lighting conditions providing at least 700 LUX, and at least 1000 LUX where accurate visual inspections are performed, unless GKN Aerospace customers specify different conditions.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process to conduct First Article Inspections (FAIs), and generate First Article Inspection Reports (FAIRs), IAW 9102.

Suppliers, including all applicable sub-tiers, shall conduct a FAI, and generate a FAIR, prior to ceasing production, IAW 9102.

Suppliers, including all applicable sub-tiers, may utilize an Operator Self-Verification (OSV) program, as appropriate; any OSV program utilized shall be IAW 9162.

9100.8.5.2 Identification and Traceability

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) mechanism that ensures traceability is maintained for all product and service types throughout the production life cycle, including flight safety parts (FSPs) or equivalent, products with key characteristics (KCs) or equivalent, and special processes or equivalent.

9100.8.5.4 Preservation

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain a foreign object debris (FOD) / foreign object damage (FOD) program IAW 9146.

Suppliers, including all applicable sub-tiers, shall ensure a Safety Data Sheet (SDS), c.k.a. Material Safety Data Sheet (MSDS), as well as a Technical Data Sheet that includes any Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) content, accompanies all potentially hazardous materials, IAW applicable regulations and statutes.

Suppliers, including all applicable sub-tiers, shall ensure that deliveries are IAW all applicable regulations and statutes at their origin and destination, as well as any pass-through geographic areas as appropriate, including:

- OSHA regulations
- European Union (EU) regulations
 - European Agency for Safety and Health at Work (EU-OSHA)
 - Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- any other regulations and statutes, as applicable

Suppliers, including all applicable sub-tiers, shall consider the SQMAN subsection “Standards, Regulations and Statutes” when determining applicable regulations and statutes for deliveries.

Suppliers, including all applicable sub-tiers, shall ensure part and material deliveries are marked, labeled, and packaged IAW applicable international, national and local regulations at the delivery origin, and shall comply with United States Department of Transport (USDOT) regulations at a minimum.

9100.8.6 Release of Products and Services

Suppliers, including all applicable sub-tiers, shall consider and document risks associated with the premature release of products and services at risk (i.e. proceeding at risk).

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process to create, approve and issue Certificates of Conformance (CoCs) IAW 9163.

Suppliers, including all applicable sub-tiers, shall ensure CoCs include serial numbers for serialized products.

Suppliers, including all applicable sub-tiers, shall ensure CoCs also include the country of origin of the manufactured articles.

Suppliers, including all applicable sub-tiers, shall ensure all applicable special process documentation, including specifications, test results, the special process supplier's name, the special process supplier's address, the special process supplier's purchase order number with associated line item(s), accompany CoCs.

Suppliers, including all applicable sub-tiers, shall ensure the acceptance test plan (ATP) number, with configuration / revision, and the material acceptance test accompany CoCs for materials, as applicable.

Suppliers, including all applicable sub-tiers, shall ensure tooling acceptance documentation that includes the tool number, tool material, tool design and tool electronic media, as applicable, accompany CoCs for tooling.

Suppliers, including all applicable sub-tiers, shall ensure a statement affirming compliance with all applicable Qualified Product Lists (QPLs) is present on CoCs.

Suppliers, including all applicable sub-tiers, shall place paperwork associated with products provided to GKN Aerospace, including concession paperwork, in a sealed, clear enclosure that is easily visible and easily accessible, either on the inside, or the outside, of the packaging container.

9100.9.2 Internal Audit

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process describing their internal audit process, including the frequency at which different types of internal audits are completed.

Suppliers, including all applicable sub-tiers, shall produce at least (1) audit report per year as objective evidence of compliance with their internal audit process frequency requirement(s).

9100.9.3.2 Management Review Inputs

Suppliers, including all applicable sub-tiers, shall consider information on the performance and effectiveness of the Quality Management System with regard to products and services provided to GKN Aerospace, either in the management review, or separate reviews focused on GKN Aerospace products and services.

9100.10.1 General

Suppliers, including all applicable sub-tiers, shall collaborate with their direct customer in the creation, implementation and maintenance of improvement plans developed in response to either any nonconformity or unfavorable performance trend that presents either a realized issue or unrealized risk with respect to products and services provided to GKN Aerospace discovered during evaluation, re-evaluation, or normal business operations.

9100.10.2 Nonconformity and Corrective Action

Suppliers, including all applicable sub-tiers, shall utilize the 8D Problem Solving Process (i.e. from step D0 to step D8) upon request by their direct customer to analyze and document their response to a nonconformity that has occurred, and may utilize other processes (i.e. 4D) as applicable.

Suppliers, including all applicable sub-tiers, shall ensure root cause corrective action (RCCA) analyses include containment action(s), root cause(s), corrective action(s), preventative action(s) and follow-on action(s) for both occurrence and detection.

NOTE: Suppliers may utilize BSO 10.1.0.1 and BSO 10.1.0.2 to collect and share RCCA information.

Suppliers, including all applicable sub-tiers, may conduct root cause corrective action (RCCA) analysis for nonconformities discovered within their facility associated with top drivers established, at least, every (3) months if their Quality Management System contains verbiage to this effect; records for nonconformities not related to top drivers shall reference this RCCA process.

Suppliers, including all applicable sub-tiers, shall ensure containment action(s) are established, implemented and being maintained, at most, (2) business days after they receive notification of a nonconformity discovered at their direct customer.

Suppliers, including all applicable sub-tiers, shall ensure cross-functional teams conduct root cause corrective action (RCCA) analyses, including RCCA analyses utilizing the 8D Problem Solving Process (i.e. from step D0 to step D8) and other processes (i.e. 4D) to analyze and document their response to a nonconformity that has occurred as appropriate and / or as requested by their direct customer.

Suppliers, including all applicable sub-tiers, shall submit RCCA responses to their direct customer, at most, (5) business days after notification of a nonconformity discovered at their direct customer.

Suppliers, including all applicable sub-tiers, shall provide corrected / revised / updated paperwork, at most, (3) business days after the request is issued to avoid generating a nonconformity record due to insufficient paperwork.

Suppliers may receive a nonconformity record (NCR) for any nonconformity to a written agreement, arrangement and / or purchase order requirement discovered at GKN Aerospace.

Suppliers, including all applicable sub-tiers, may receive a Supplier Corrective Action Request (SCAR) against a nonconformity grouping at the discretion of GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall provide SCAR responses to GKN Aerospace, at most, (15) business days after the SCAR is issued by GKN Aerospace.

Suppliers may submit concession requests to GKN Aerospace; any concession submitted shall utilize PUR 1.3.4.1.

NOTE: GKN Aerospace may inspect products associated with concession requests at the supplier's facility prior to shipment.

Suppliers shall ensure the packaging for products submitted under concession are clearly marked.

13100.4.2 Understanding the Needs and Expectations of Interested Parties

Suppliers shall identify GKN Aerospace Alabama as (1) of its interested parties.

Suppliers, including all applicable sub-tiers, shall consider the SQMAN subsection "Standards, Regulations and Statutes" when determining applicable Quality Management System requirements.

Suppliers, including all applicable sub-tiers, shall retrieve copies of the most-recent revisions of the documents within the SQMAN subsection "Standards, Regulations and Statutes" as appropriate.

Suppliers, including all applicable sub-tiers, shall retain objective evidence that includes justification for the inapplicability of any document, document section, or individual requirement referenced within any written agreement, arrangement and / or purchase order from their direct customer or GKN Aerospace.

Suppliers, including all applicable sub-tiers, may coordinate facility access with a Supplier Quality and Development representative.

13100.4.3 Determining the Scope of the Quality Management System

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.4.3.

13100.6.1 Actions to Address Risks and Opportunities

Suppliers, including all applicable sub-tiers, shall consider how their activities, products, processes and services interact with the environment, which may include interactions with respect to air, water, land, natural resources, energy usage, energy emittance, waste or by-product generation and space usage, when assessing and identifying risks.

13100.7.1.2 People

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.7.1.2.

13100.7.1.3 Infrastructure

Suppliers, including all applicable sub-tiers, shall inform their direct customer and GKN Aerospace of plans to implement new plants, facilities and equipment at least (3) months prior to the start of production.

13100.7.1.6 Organizational Knowledge

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.7.1.6.

13100.8.1.4 Prevention of Counterfeit Parts

Suppliers, including all applicable sub-tiers, shall include, within at least (1) process, a definition for fraudulent activity, potential consequences for fraudulent activity, and next actions if fraudulent activity is discovered.

13100.8.2.1 Customer Communication

Suppliers shall submit a completed copy of *Supplier Production Information: Supplier Technical Support Request (STSR)* (PUR 1.3.3.1) to GKN Aerospace to request clarification of technical requirements by GKN Aerospace or GKN Aerospace customers.

Suppliers shall only accept “privileges, agreements, and instructions” related to the clarification of technical requirements from GKN Aerospace in writing via a *Supplier Production Information: Supplier Technical Support Request (STSR)* (PUR 1.3.3.1) approved by GKN Aerospace IAW PUR 1.3.3.1 form instructions.

Suppliers, including all applicable sub-tiers, shall not refuse to communicate with GKN Aerospace regarding products and services provided to GKN Aerospace, as well as their Quality Management System, so long as GKN Aerospace conduct ourselves and our business activities IAW GKN Aerospace’s “Five Principles.”

Suppliers, including all applicable sub-tiers, shall report any grievance that may result in discontinued communication with GKN Aerospace regarding products and services provided to GKN Aerospace, as well as the supplier’s Quality Management System, within (1) business day of occurrence or within (1) business day after the completion of an on-site visit by GKN Aerospace personnel.

13100.8.3.4 Design and Development Controls

Suppliers, including all applicable sub-tiers, shall provide test specimens for design approval upon request by their direct customer or GKN Aerospace if they design and develop products and services on behalf of GKN Aerospace.

13100.8.4.1 General

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.8.4.1.

13100.8.4.2 Type and Extent of Control

GKN Aerospace replaces paragraph (4) of 13100 section 8.4.2.1 with the following for suppliers, including all applicable sub-tiers, required to be compliant to 13100:

The supplier shall ensure that the counterfeit part prevention process includes a mechanism for reporting counterfeit parts to the organization’s purchasing representative within 24 hours of it being confirmed.

Suppliers, including all applicable sub-tiers, shall notify, and obtain the approval of, their direct customer, for any change to processes, products or services impacting products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall notify their direct customer and GKN Aerospace of any change of sub-tiers or any manufacturing location change, impacting products and services provided to GKN Aerospace.

Suppliers shall establish, implement and maintain at least (1) process that covers work transfers between sub-tier facilities, between sub-tiers, between the supplier and any sub-tier, and between supplier facilities.

Suppliers, including all applicable sub-tiers, shall receive approval from their direct customer prior to commencing any work transfer activity, and shall keep their direct customer and GKN Aerospace informed of the progress of the work transfer from the beginning of work transfer activity until the work transfer is completed.

Suppliers shall keep GKN Aerospace informed of any work transfer activity within their supply chains that may impact products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall provide test specimens for inspection, verification, investigation and / or audit purposes upon request by their direct customer or GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall facilitate on-site verification and / or validation audits of performance, products, processes and services by their direct customer and / or GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall ensure personnel are available for the duration of the audits, and that direct customer and / or GKN Aerospace personnel are provided an opportunity to privately collate the results of the audits prior to sharing.

13100.8.4.3 Information for External Providers

Suppliers, including all applicable sub-tiers, shall refer to GKN Aerospace written agreements, arrangements and / or purchase orders to understand holistic GKN Aerospace requirements for any individual product or service. GKN Aerospace written agreements, arrangements and / or purchase orders include all GKN Aerospace requirements, all GKN Aerospace customer requirements, all international standard requirements and all applicable government regulatory and statutory requirements.

13100.8.4.3a

Suppliers, including all applicable sub-tiers, shall refer to written agreements, arrangements and / or purchase orders of their direct customer for specific requirements for processes, products and services, including any applicable specification, drawing, process or work instruction requirements.

13100.8.4.3b

Suppliers, including all applicable sub-tiers, may consider any product, service, method, process or equipment to be “approved” if all applicable requirements within the applicable GKN Aerospace written agreement, arrangement and / or purchase order are fulfilled.

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the release of products and services:

- 9100 / 9110 / 9120 section 8.6
- 13100 section 8.6
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.6
- GKN Aerospace customer requirements regarding 13100 section 8.6
- SQMAN section 13100.8.6
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.6
- direct customer requirement regarding 13100 section 8.6

13100.8.4.3c

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding competence, including any required qualification of persons:

- 9100 / 9110 / 9120 section 7.2
- 13100 section 7.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.2
- GKN Aerospace customer requirements regarding 13100 section 7.2
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.2
- direct customer requirement regarding 13100 section 7.2

13100.8.4.3d

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding their interactions with their customers:

- 9100 / 9110 / 9120 section 8.2.1
- 13100 section 8.2.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.2.1
- GKN Aerospace customer requirements regarding 13100 section 8.2.1
- SQMAN section 13100.8.2.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.2.1
- direct customer requirement regarding 13100 section 8.2.1

13100.8.4.3e

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the control and monitoring of their performance:

- 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2
- 13100 sections 8.4.1 and 8.4.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2
- GKN Aerospace customer requirements regarding 13100 sections 8.4.1 and 8.4.2
- SQMAN sections 13100.8.4.1 and 13100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.4.1 and 8.4.2
- direct customer requirement regarding 13100 sections 8.4.1 and 8.4.2

13100.8.4.3f

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding verification and validation activities intend to perform at their facilities:

- 9100 / 9110 / 9120 section 8.4.2
- 13100 section 8.4.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.4.2
- GKN Aerospace customer requirements regarding 13100 section 8.4.2
- SQMAN section 13100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.4.2
- direct customer requirement regarding 13100 section 8.4.2

13100.8.4.3g

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding design and development control:

- 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6
- 13100 sections 8.3.1 through 8.3.6
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6
- GKN Aerospace customer requirements regarding 13100 sections 8.3.1 through 8.3.6
- SQMAN section 13100.8.3.4
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.3.1 through 8.3.6
- direct customer requirement regarding 13100 sections 8.3.1 through 8.3.6

13100.8.4.3h

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding special requirements, critical items, or key characteristics:

- 9100 / 9110 / 9120 section 8.5.1
- 13100 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 13100 section 8.5.1
- SQMAN section 13100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1

- direct customer requirement regarding 13100 section 8.5.1

13100.8.4.3i

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding test, inspection and verification (including production process verification):

- 9100 / 9110 / 9120 section 8.5.1
- 13100 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 13100 section 8.5.1
- SQMAN section 13100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- direct customer requirement regarding 13100 section 8.5.1

13100.8.4.3j

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the use of statistical techniques for product acceptance and related instructions:

- 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1
- 13100 sections 7.1.5 and 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1
- GKN Aerospace customer requirements regarding 13100 sections 7.1.5 and 8.5.1
- SQMAN section 13100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 sections 7.1.5 and 8.5.1
- direct customer requirement regarding 13100 sections 7.1.5 and 8.5.1

13100.8.4.3k

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding implementation of a quality management system:

- 9100 / 9110 / 9120 section 4.4
- 13100 section 4.4
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 4.4
- GKN Aerospace customer requirements regarding 13100 section 4.4
- direct customer requirements regarding 9100 / 9110 / 9120 section 4.4
- direct customer requirement regarding 13100 section 4.4

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding customer-designated, customer-directed or approved external providers:

- 9100 / 9110 / 9120 section 8.4.1
- 13100 section 8.4.1

- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.4.1
- GKN Aerospace customer requirements regarding 13100 section 8.4.1
- SQMAN section 13100.8.4.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.4.1
- direct customer requirement regarding 13100 section 8.4.1

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding notification of nonconforming processes, products and services:

- 9100 / 9110 / 9120 section 8.7
- 13100 section 8.7
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.7
- GKN Aerospace customer requirements regarding 13100 section 8.7
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.7
- direct customer requirement regarding 13100 section 8.7

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding preventing the use of counterfeit parts:

- 9100 / 9110 / 9120 section 8.1.4
- 13100 section 8.1.4
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.1.4
- GKN Aerospace customer requirements regarding 13100 section 8.1.4
- SQMAN section 13100.8.1.4
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.1.4
- direct customer requirement regarding 13100 section 8.1.4

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding notification and approval of changes to processes, products and services.

- 9100 / 9110 / 9120 section 8.5.1
- 13100 section 8.5.1
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- GKN Aerospace customer requirements regarding 13100 section 8.5.1
- SQMAN section 13100.8.5.1
- direct customer requirements regarding 9100 / 9110 / 9120 section 8.5.1
- direct customer requirement regarding 13100 section 8.5.1

NOTE: 9100 section 8.5.1, subsection 8.5.1.3, is for Product Process Validation, which points to First Article Inspection, to be completed IAW 9102; 9102 is the vehicle for obtaining GKN Aerospace approval for changes to processes, products and services, and section 4.6.f.2 of 9102 specifically mentions the verbiage from 9100 / 9110 / 9120 section 8.4.3k.

Suppliers, including all applicable sub-tiers, shall ensure the flow-down of all applicable requirements, including GKN Aerospace requirements, GKN Aerospace Customer requirements, as well as government regulations and statutes, to all sub-tiers that support their production of products and services provided to GKN Aerospace.

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the provision of test specimens for design approval, inspection / verification, investigation and auditing:

- 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2
- 13100 sections 8.3.4 and 8.4.2
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2
- GKN Aerospace customer requirements regarding 13100 sections 8.3.4 and 8.4.2
- SQMAN sections 13100.8.3.4 and 13100.8.4.2
- direct customer requirements regarding 9100 / 9110 / 9120 sections 8.3.4 and 8.4.2
- direct customer requirement regarding 13100 sections 8.3.4 and 8.4.2

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding the retention of documented information:

- 9100 / 9110 / 9120 section 7.5.3
- 13100 section 7.5.3
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.5.3
- GKN Aerospace customer requirements regarding 13100 section 7.5.3
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.5.3
- direct customer requirement regarding 13100 section 7.5.3

13100.8.4.3l

Suppliers, including all applicable sub-tiers, shall refer to GKN Aerospace written agreements, arrangements, and / or purchase orders, GKN Aerospace customer requirements, SQMAN section 13100.4.2, and direct customer requirements regarding the right of access to the applicable areas of facilities and to applicable documented information, at any level of the supply chain.

13100.8.4.3m

Suppliers, including all applicable sub-tiers, shall refer to the following for specific requirements regarding awareness of persons' contributions to product conformity, service conformity and product safety, as well as the importance of ethical behavior:

- 9100 / 9110 / 9120 section 7.3
- 13100 section 7.3
- GKN Aerospace customer requirements regarding 9100 / 9110 / 9120 section 7.3
- GKN Aerospace customer requirements regarding 13100 section 7.3
- direct customer requirements regarding 9100 / 9110 / 9120 section 7.3

- direct customer requirement regarding 13100 section 7.3

13100.8.5.1 Control of Production and Service Provision

Suppliers, including all applicable sub-tiers, shall comply with all appropriate sections of 9145, as applicable to the provision of any particular product or service, even if they do not design and develop products and services on behalf of GKN Aerospace.

NOTE: Appropriate sections of 9145 should include sections 4.5 (i.e. Phase 3 – Process Design and Development) and 4.6 (i.e. Phase 4 – Product and Process Validation).

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain an Electrostatic Discharge (ESD) control program IAW S20.20 or equivalent, as appropriate.

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process for controlling and monitoring identified and documented critical items (i.e. key characteristics) as applicable IAW 9103.

Suppliers, including all applicable sub-tiers, shall ensure suitable infrastructure, specifically product-specific tooling, is calibrated to appropriate NIST standards.

Suppliers, including all applicable sub-tiers, shall ensure adequate training of all persons involved in the provision of products and services provided to GKN Aerospace, including any required qualifications.

13100.8.5.2 Identification and Traceability

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.8.5.2.

13100.8.5.4 Preservation

Suppliers, including all applicable sub-tiers, shall ensure a Safety Data Sheet (SDS), c.k.a. Material Safety Data Sheet (MSDS), as well as a Technical Data Sheet that includes any Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) content, accompanies all potentially hazardous materials, IAW applicable regulations and statutes.

Suppliers, including all applicable sub-tiers, shall ensure that deliveries are IAW all applicable regulations and statutes at their origin and destination, as well as any pass-through geographic areas as appropriate, including:

- OSHA regulations
- European Union (EU) regulations
 - European Agency for Safety and Health at Work (EU-OSHA)
 - Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- any other regulations and statutes, as applicable

Suppliers, including all applicable sub-tiers, shall consider the SQMAN subsection “Standards, Regulations and Statutes” when determining applicable regulations and statutes for deliveries.

Suppliers, including all applicable sub-tiers, shall ensure part and material deliveries are marked, labeled, and packaged IAW applicable international, national and local regulations at the delivery origin, and shall comply with United States Department of Transport (USDOT) regulations at a minimum.

13100.8.6 Release of Products and Services

Suppliers, including all applicable sub-tiers, shall establish, implement and maintain at least (1) process to create, approve and issue Certificates of Conformance (CoCs) IAW 9163.

Suppliers, including all applicable sub-tiers, shall ensure CoCs include serial numbers for serialized products.

Suppliers, including all applicable sub-tiers, shall ensure CoCs also include the country of origin of the manufactured articles.

Suppliers, including all applicable sub-tiers, shall ensure all applicable special process documentation, including specifications, test results, the special process supplier’s name, the special process supplier’s address, the special process supplier’s purchase order number with associated line item(s), accompany CoCs.

Suppliers, including all applicable sub-tiers, shall ensure the acceptance test plan (ATP) number, with configuration / revision, and the material acceptance test accompany CoCs for materials, as applicable.

Suppliers, including all applicable sub-tiers, shall ensure tooling acceptance documentation that includes the tool number, tool material, tool design and tool electronic media, as applicable, accompany CoCs for tooling.

Suppliers, including all applicable sub-tiers, shall ensure a statement affirming compliance with all applicable Qualified Product Lists (QPLs) is present on CoCs.

Suppliers, including all applicable sub-tiers, shall place paperwork associated with products provided to GKN Aerospace, including concession paperwork, in a sealed, clear enclosure that is easily visible and easily accessible, either on the inside, or the outside, of the packaging container.

13100.9.3.2 Management Review Inputs

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.9.3.2.

13100.10.1 General

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.10.1.

13100.10.2 Nonconformity and Corrective Action

Suppliers, including all applicable sub-tiers, shall comply with SQMAN section 9100.10.2.

Costing

In addition to administrative, GKN Aerospace customer-imposed and rework costs, GKN Aerospace may charge suppliers, at most, US\$ 1,000 for each nonconformity to requirements stated within any applicable written agreement, arrangement and / or purchase order; this includes nonconformities submitted on concession, nonconformities discovered at GKN Aerospace, GKN Aerospace customer(s) and GKN Aerospace end user(s). This charge shall increase by US\$ 100 on January 1 of each calendar year, beginning in 2025.

Suppliers shall submit an itemized invoice reflecting costs incurred producing an FAIR, IAW 9102, for each procured product or service. Submittal of the itemized invoice shall only occur after GKN Aerospace has accepted the FAIR; the supplier and GKN Aerospace shall agree on the total FAIR reimbursement amount, and the total FAIR reimbursement amount shall not exceed US\$ 500 for each procured product or service.

Suppliers of Services Not Associated with Production of Aircraft Products

These suppliers shall provide a completed copy of *Supplier Registration Information: Service Supplier Profile Add / Modify Information* (PUR 1.9.1.9), a W-9 (or international equivalent) and Banking / Remittance Information on official letterhead to be issued a written agreement, arrangement and / or purchase order from GKN Aerospace.