

APPENDIX I - SUPPLIER QUALITY ASSURANCE REQUIREMENTS

PAC-3 PROGRAM

This Appendix I with the Supplier Quality Assurance Requirements for the **PAC-3** program defines **GKN Fokker Aerospace** additional Program Specific Quality Requirements and forms an integral part of the Purchase Order (PO) concluded between Supplier and **GKN Fokker Aerospace**.

The contents of this Appendix I is additional to or replacing one or more of the standard Fokker Quality Requirements as provided in Annex B “Supplier Quality Assurance Requirements (standard)”. All terms defined in the Purchase Order shall be applicable to this Appendix I, unless explicitly defined otherwise in this Appendix I.

Supplier shall have systems and methods to assure full compliance to this Appendix I. When products or services applicable to the PO are procured by the Supplier from sub-tier suppliers, the supplier shall flow down the Appendix I requirements as necessary to assure full compliance is achieved.

In case of of differences or inconsistencies with texts in the Main Contract, the stipulations in this Appendix I will prevail.

The latest valid version of this document is available on the GKN / GKN Fokker Aerospace website via: <https://www.gknaerospace.com/en/Utilities/gkn-aerospace-suppliers/fokker/>

APPROVAL

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CHANGE LOG

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01 GENERAL

This Appendix I defines **GKN Fokker's** additional Program Specific Quality Requirements and forms an integral part of the Purchase Order (PO) concluded between Supplier and **GKN Fokker**.

The contents of this Appendix I is in addition to or replacing one or more for the standard Fokker Quality Requirements as provided in Annex B "Supplier Quality Assurance Requirements (standard)".

All terms defined in the Purchase Order shall be applicable to this Appendix I, unless explicitly defined otherwise in this Appendix I.

Supplier shall have systems and methods to assure full compliance to this Appendix I. When products or services applicable to the PO are procured by the Supplier from sub-tier suppliers, the supplier shall flow the Appendix I requirements as necessary to assure full compliance is achieved.

02 PAC-3 SUPPLIER NOTIFICATION OF CHANGE

Supplier shall notify GKN Fokker's Supplier Quality Engineering of any substantial change to the production line, both at the Supplier's facility and the Supplier's sub-tier suppliers, using a Notification of Change (NoC) form that can be acquired through GKN Fokker's Supplier Quality Engineering.

A substantial change is a change to any part of a manufacturing, testing or inspection process that is considered essential to ensuring that the hardware meets or exceeds the engineering requirements as defined in the Technical Data Package (TDP) including:

- (a) Changes that affect the Form, Fit, Function or Performance of deliverable hardware
- (b) Changes to materials in deliverable hardware that require a change to the manufacturing process that are defined in the Technical Data Package.
- (c) Changes to steps in the manufacturing process that will result in (a).
- (d) New qualification of a component or assemblies used in deliverable hardware that will result in (a).
- (e) Changes to Special Tooling or Special Test Equipment (ST/STE).
- (f) Changes to special process elements such as soldering, welding, plating, coatings, chemical processing, heat treat and/or Non-Destructive Testing (NDT) (i.e. radiographic, ultrasonic, magnetic particle, etc.).
- (g) A change of the physical location of a process or equipment within the same building, the same production facility and/or to another production site that will result in (a).
- (h) Changes to machine equipment or similar capital equipment items used in the fabrication process that will result in (a).

Approval by GKN Fokker's Supplier Quality Engineering of the Notification of Change will be one of the following:

- Conditional approval to implement the change, Production Line Validation (PLV) waived, with specific objective evidence required for final approval
- Conditional approval to implement the change with PLV required
- Approval of the change with no objective evidence needed

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03 FIRST ARTICLE INSPECTION

FAI shall be performed by the Supplier in accordance with the latest revision of Aerospace Standard AS9102. Supplier shall utilize the current AS9102 forms, including:

Form 1 - Part Number Accountability

Form 2 - Product Accountability - Materials, Special Processes and Functional Testing

Form 3 - Characteristic Accountability, Verification and Compatibility Evaluation

Supplier shall be required to perform a new FAI when there is a lapse in production exceeding twelve (12) months. Any changes or deviations as defined in AS9102 shall require a full or partial (delta) FAI. In addition:

All design or process changes shall require a full or partial delta (FAI).

Changes must be communicated to GKN Fokker in advance. Actions associated with changes shall require a new Full (complete) or Partial (addressing changes) First Article Inspections (FAI) as a contractual obligation.

Documentation:

FAI is required for all the part/assembly number(s) included on the PO with no exception.

Note: When a drawing for an assembly includes a parts list and/or sub-assembly drawings, all revision levels shall be included and validated on the AS9102, Form 1.

FAI is required for sub-assemblies and detail parts that make up the configuration item(s) included on the PO, with the following exceptions:

Catalog and Commercial Off-the-Shelf:

If the part number, as listed on the PO, is for a LMMFC, GKN Fokker or Supplier designed product that has a standard catalog or commercial off-the-shelf hardware included at sub-assembly levels, then FAI is not required for the standard catalog or commercial off-the-shelf parts/assemblies.

04 TOOLING/EQUIPMENT DOCUMENTATION CONTROL AND ACCOUNTABILITY

The requirements of this quality note are applicable only if Lockheed Martin Missiles and Fire Control (LMMFC), GKN Fokker or government tooling/equipment is provided or acquired in the performance of the Purchase Order.

Definition:

The term "tooling / equipment", as used herein, shall include all LMMFC, GKN Fokker or government owned tools/equipment (examples: production tools, special test equipment, special inspection tooling, certified tools, and lifting devices).

Supplier Receiving Inspection:

All tooling and test equipment furnished by LMMFC, GKN Fokker or the government for performance of work hereunder shall be promptly inspected by Supplier upon receipt to determine all tooling details have been received (inventory against the tool design drawing) undamaged. Any discrepancy shall be reported in writing to GKN Fokker, who will furnish instructions as to action required.

Accountability:

The Supplier shall be responsible and accountable for all tooling provided under this purchase order. Supplier shall not dispose, transfer, or return tooling without proper notification and written authorization from GKN Fokker. The Supplier's quality system shall define tool storage requirements, to include periodic preservation/condition checks for all tools in storage.

GKN Fokker may authorize by written notice from LMMFC the use of the tooling hereunder for performance on other Purchase Orders. Such authorization must be in advance of any changed use.

Movement of Government Owned Tooling/Equipment:

The Supplier shall complete form DD1149 for all movements of government owned tools/equipment. A copy of the DD1149 shall be sent via e-mail to GKN Fokker's Supplier Quality Engineering.

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Modification to Supplier Designed Tooling/Equipment:

No modification to the tooling acquired or manufactured to produce production items, shall be accomplished without the prior written consent of GKN Fokker. Upon completion of any modification, Supplier shall promptly report each modification, giving the following:

- Tool identification number
- New configuration revision level
- Nomenclature
- Part number made from tool
- Description of modification (copy of old revision drawing & New revision drawing)
- Cost of tool modification
- PO number

Modification to LMMFC or GKN Fokker Designed Tooling/Equipment:

No modification, repair, or rework of LMMFC or GKN Fokker designed tooling / equipment shall be performed without GKN Fokker approval via an approved Tool Action Request (TAR). Prior to modification, repair, or rework, the Supplier shall complete the TAR Form# 3-27060 tool action request and submit to GKN Fokker. TAR Form can be acquired through GKN Fokker's Supplier Quality Engineering.

Special Supplier acceptance tools - requirements for control and accountability

In addition to the other requirements set forth herein, acceptance tooling/equipment shall require the following: All tools to be used for hardware acceptance must be documented on drawings made to good commercial practices and capable of being reproduced.

Prior to tool fabrication, Supplier shall submit to GKN Fokker for review and approval two copies of the tool design package.

Good commercial practices as related to tool design, means that the design must be adequate to provide all information necessary to fabricate an exact duplicate tool by any competent tooling manufacturer.

The tool drawing must include a complete bill of material, all heat treatment requirements, finish, tolerance, and/or coordination information pertinent to fabrication and functional integrity of the tool/ equipment.

Compliance with requirements of the design criteria checklist, as specified in [Section A below](#), is required.

The package shall consist of drawings, operating instructions and inspection/ test plans for each acceptance tool to be built or acquired for accepting hardware during the course of this purchase order unless otherwise covered by written exception agreed to by GKN Fokker and the Supplier. This includes gages, inspection, or fabrication tools / equipment.

Tooling/equipment to be used for hardware acceptance requires inspection and acceptance by quality control. Tooling/equipment to be used for hardware acceptance shall be periodically re-verified and/or recalibrated in accordance with the applicable tool maintenance plan, calibration procedure and calibration standard, at intervals established by quality engineering. The terms quality control and quality engineering, as used in this paragraph, are LMMFC or GKN Fokker for LMMFC or GKN Fokker designed tooling and Supplier for Supplier designed tooling.

Unless otherwise covered by written exception agreed to by GKN Fokker and the Supplier, periodic recalibration will be the responsibility of the Supplier.

The Supplier shall be responsible to create and maintain inspection records for all tools used for hardware acceptance, including periodic re-verification/calibration records.

Primary Identification Number (PIN):

Where the Supplier has assigned to the tooling a Supplier identification number, this Supplier identification may be used by GKN Fokker or LMMFC as the Primary Identification Number (PIN), Where a Supplier identification number has not been assigned, LMMFC via GKN Fokker will assign a prefixed PIN for identification and marking of tooling / equipment. All tooling assigned a PIN by the Supplier or LMMFC shall be physically identified with a LMMFC provided identification tag.

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Section A:

Design criteria checklist for acceptance tooling/gages acquired by and used at Supplier's facility to accept GKN Fokker production hardware. Standard gage makers tolerances will apply (i.e. 10% of part tolerances on gages)

Production tooling used as a media of acceptance shall not exceed 50% of the part tolerance
All tooling will be dimensioned and toleranced compatible to geometric dimensioning as required by ANSI Y14.5M or ASME Y14.5m

Drawings will be made to good commercial practices (i.e. the design must provide all information necessary to fabricate an exact duplicate tool without reference to any other document other than the tool drawing).

Tool/equipment designs shall include:

- A complete bill of materials.
- Complete dimensioning of all details either on the assembly or detail views.
- Commercial hardware such as dowels, socket head cap screws etc. may be identified in the bill of material only.

Tool/equipment drawings must contain the following information:

- Tool numbers
- Tool drawing and revision letter
- Hardness finish and stabilization requirements must be specified.
- A complete set of operating instructions. Operating instructions shall be a minimum size of 8 1/2 x 11 sheets properly identified by drawing sheet number.
- Tool drawing/instructions must list all features checked and used as acceptance criteria by the tool.
- A recommended frequency of calibration.

05 MATERIAL REVIEW AUTHORITY

Once a deviation or waiver (nonconforming) condition is identified, continuing to add value to the item(s) without GKN Fokker approval is at Supplier risk. Unless otherwise specified in this purchase order or other contractual documentation, the Supplier and/or any of their suppliers/subcontractors DO NOT have authority to process use-as-is, repair, or standard repair procedures via their Material Review Board (MRB).

This MRB authority requirement is not applicable to Commercial Off the Shelf Products (COTS).

These dispositions, including Request for Deviations and Request for Waivers, require GKN Fokker MRB disposition and shall be submitted to GKN Fokker for approval (this does not include rework or scrap). The Supplier shall utilize its own NC Form, but shall accompany each NC form with GKN Fokker's RCCA Form. This RCCA form can be acquired through GKN Fokker's Supplier Quality Engineering.

06 COUNTERFEIT PART PREVENTION

Sourcing:

Supplier shall only purchase products to be delivered or incorporated as work to GKN Fokker directly from

- The Original Component Manufacturer (OCM)
- Original Equipment Manufacturer (OEM)
- Through an OCM/OEM authorized suppliers (distributor)
- Or from suppliers that obtain such parts exclusively from the original manufacturer of the parts or their authorized dealers with no intermediaries.

Supplier may use another source only if:

- The foregoing sources are unavailable,
- Supplier's inspection and other counterfeit risk mitigation processes will be employed to ensure the authenticity of the work,
- The suppliers meet applicable DOD-adopted counterfeit prevention industry standards and processes (including tests) and;
- Supplier obtains the advance written approval of GKN Fokker.

Approval to use another source other than defined above requires the submittal of a comprehensive risk mitigation test and inspection plan to GKN Fokker's Procurement Representative. The risk mitigation plan shall define appropriate tests and inspections, as well as acceptance criteria, to validate the products authenticity.

Test results shall be reviewed and approved by GKN Fokker's Quality Engineering prior to shipping or incorporating into deliverable hardware.

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Counterfeit Prevention Processes:

Supplier shall develop and implement a counterfeit product control plan using industry recognized standards applicable to the product being delivered as guidance. The plan shall be available for GKN Fokker review upon request.

The Supplier's counterfeit avoidance and detection systems are subject to GKN Fokker and/or GKN Fokker's customer audit and approval.

Traceability:

Supplier shall implement systems that assure traceability of all material from the original manufacturer to product acceptance by GKN Fokker.

For electronic parts, Supplier shall have processes that enable tracking from the OCM, OEM or the OCM/OEM authorized suppliers, whether the electronic part is supplied as a discrete electronic part or is contained in an assembly.

This requirement applies to all work delivered to GKN Fokker either directly or indirectly as components or included in assemblies.

This entire note, or requirements that meet the intent of this note, shall be flowed down to all sub-tier suppliers under this contract and the Supplier shall provide evidence of compliance to this note upon request.

07 LOCKHEED MARTIN SOURCE INSPECTION

Note: The following requirement is only applicable for GKN Tallassee and other suppliers who directly deliver to Lockheed Martin MFC on behalf of GKN Fokker.

Suppliers who only deliver to GKN Fokker and NOT directly to LMMFC do not have to meet this requirement, as for these parts Source Inspection by LMMFC will be performed at GKN Fokker.

A LMMFC Source Inspection is required on all products in addition to inspection requirements elsewhere in the Purchase Order (PO). A source inspection request shall be made no less than ten (10) working days prior to the desired shipment time. To submit your request for source inspection, you shall log into your Exostar account (<http://portal.exostar.com>) and access the LM P2P Portal.

Upon logging in, click on the "Ship to LMC" tab, select the PO line item and click on the "Request LMC Action" button located at the bottom of the page. On the details & scheduling page that displays, enter the quantity to be inspected, the date desired for the visit of our source representative and press the "Submit" button. Upon submission, the inspection lot number will be displayed.

If upon requesting source inspection the PO status changes from "Source Inspection Required to Authorization to Ship - Qualified Vendor Program (QVP)" or "Authorized to Ship - Alternate Inspection Method (AIM)", then these parts have been identified to skip source inspection and you may immediately process a ship to record and expedite material shipment.

When a completed source inspection checklist document is provided at the time of the source inspection activity, the document shall be included in the data package with each shipment of hardware.

Source inspection does not relieve the supplier of responsibility for Non-Conforming hardware found at a LMMFC's facility.

If you require additional assistance, please contact the LM P2P Helpdesk at 863-647-0558.

The supplier shall submit all data and documentation electronically using the P2P Ship-To module via Exostar (<https://portal.exostar.com>) prior to each shipment.

Refer to the following link for P2P Exostar How-To videos for guidance
https://myexostar.com/?ht_kb=imp2p-training-resources#videos