

Purchase Order Quality Requirements (POQR) Revision C
Date 07/26/23

QA CLAUSES ARE MANDATORY AND APPLICABLE TO ALL PURCHASE ORDERS

QA1 – NOTIFICATION OF CHANGES BY THE SUPPLIER: During performance of the contract, the Supplier is required to give Triumph Actuation Systems, LLC written notice when making any changes in their BMS/QMS system, address change, processes, processors, procedures previously approved by Triumph Actuation Systems, LLC and changes in management personnel that have responsibility for quality of product or service furnished to Triumph Actuation Systems, LLC. This includes any Distributors that changes a supplier for all procured parts, with the exception of COTS items.

Triumph Actuation Systems, LLC, at its option, may elect to conduct an on-site evaluation to determine the impact of such changes on previous approvals on product or service quality levels.

QA2 – FOR GOVERNMENT/MILITARY RATED CONTRACTS SEE:

www.triumphsupplysource.com/SupplierProvisions: Triumph General Terms and Conditions and Triumph Company Terms and Conditions

QA3 - SPECIAL PROCESSING SUPPLIER AND SUB-TIERS

“Use only special process suppliers listed on the Nadcap Approved Vendor List”

For Build to Print product Nadcap and Customer approval is required

- a. If the drawing **is not** a Triumph Actuation Systems, LLC original or current design authority **1SR57** or **26437** found on the bottom right of the engineering drawing, **use** the customer (design authority) Approved Vendor List, i.e. Northrop Grumman, Gulfstream, Boeing etc.
- b. If the specification listed on the Triumph Actuation Systems, LLC drawing **is** a customer specification number **use** the customer Approved Suppliers List. i.e. BAC spec, use Boeing Approved Suppliers List.

Ensure the special process referenced specification is being performed within 90 days of the latest revision.

QA4 - UNAUTHORIZED USE OF NONCONVENTIONAL MACHINING METHODS

Unless otherwise specified on the engineering drawing, specification or purchase order, supplier or sub-tiers shall not use any non-conventional manufacturing or processing methods, such as electrical discharge machining (EDM), electro chemical machining (ECM), laser or abrasive water jet cutting, flame spray coatings, etc., without proper written authorization from Triumph Actuation Systems, LLC. To request approval, please contact your buyer for the correct request form to submit.

QA5 – CURE DATES FOR ELASTOMERS/EXPIRABLES

Elastomers - Cure date shall meet industry standard, AS5316 latest revision, unless the Customers, Northrop Grumman and/or Gulfstream and/or their affiliated programs are called out on the Purchase Orders, in which case, cure date shall meet eight (8) quarters or less.

Expirable (Paints, Primers, Adhesives, Epoxies, Sealants, etc.), 100% -75% of shelf life must be remaining upon date of receipt at Triumph Actuation Systems, LLC.

QA6 – SUPPLIER SAMPLING PLAN

Located on the Supplier Portal under the following location:

www.triumphsupplysource.com/suppliers/reports

QA7 – PACKAGING, PACKING, AND MARKING REQUIREMENTS

Located on the [Supplier Portal](#) under the following location:
www.triumphsupplysource.com/suppliers/reports

QA8 – SOURCE CONTROLLED DRAWINGS: Typically used for components that are qualified to application-specific requirements that have been reviewed and approved by Triumph Actuation Systems, LLC Engineering Department.

- a) **Any changes** to these Source Controlled Drawings after the initial approved design must be submitted to Triumph Actuations Systems, LLC Engineering for review and documented approval.

QA9 – DIGITALLY SCANNED CERT PACKAGES: Triumph requires that when a part is ready to ship to TAS-Clemmons, your site will scan the complete cert package and email it to: TASNC-CERTPKGS@triumphgroup.com. The cert package should be named using the following naming convention: Part Number, Purchase Order, Packing Slip, Date:

Part Number.Purchase Order.Packing Slip.Date
Example: (1FA123456.123456.12345.02132015)

Delegated Suppliers will use: TASNC-SIDAPKGS@triumphgroup.com for eligible Supplier Inspection Delegated Authority (SIDA) part numbers and the same naming convention as listed above.

The shipment of delegated parts would only need to have a Packing Slip, Triumph's Delegated Product Release Verification Form, (QF-0150) in color and a Certificate of Conformance upon receipt at Triumph.

QA10 - CERTIFICATE OF CONFORMANCE

Every shipment shall be accompanied by a legible and reproducible copy of a Certificate of Conformance. The Certificate must include, at a minimum, the following:

1. Suppliers name and address.
2. Triumph Actuation Systems, LLC purchase order number.
3. Quantity shipped.
4. Country of Origin
5. Triumph's part number and vendor part number (if applicable) and revision number.
6. Serial Numbers, Batch Numbers, Cert Numbers, Heat Numbers or Cure Dates as applicable.
7. Signature and Title of Authorized Representative.
8. The Certificate of Conformance must contain a statement that processing and tests have been performed as required and meet the drawing requirements and/or purchase order.
9. Products controlled by heat numbers, cert. numbers, batch numbers or cure dates must be linked to the certificate of conformance by the controlling number.
10. Each shipment must also be accompanied by **legible and reproducible** copies of all raw material, processing, test and hardware certifications needed to produce the part in accordance with the engineering drawing and/or purchase order requirements.
11. The Suppliers Certificate of Conformance with the title of the Authorized Representative must be submitted with each shipment.

QA11 – SQAM001 TRIUMPH'S SUPPLIER QUALITY ASSURANCE MANUAL APPLIES

Located on Triumph's Supplier Portal www.triumphsupplysource.com

QA12 - DIMENSIONAL FIRST ARTICLE INSPECTION



Triumph Actuation Systems, LLC.

Triumph Actuation Systems, LLC requires full compliance to **SAE AS9102 using the latest revision, Aerospace First Article Inspection Requirement**, when there is a first production run or if there has been a lapse of 2 or more years in production. The supplier shall mark all open or unused fields on the FAI report, "N/A" to ensure each field has been reviewed. *The supplier **shall** provide a copy of the Ballooned Drawing with each characteristic and/or requirement clearly marked with unique identifier number. The number may be circled or boxed for easy visual identification.*

QA13 – SUPPLIER -RESPONSIBLE NONCONFORMANCE COST RECOVERY

At the discretion of TAS-Clemmons, suppliers may be subject to charges for recovery of costs associated with any/all supplier-responsible non-conforming parts/material or documentation. Such charges may include:

Minimum of \$300 (USD) administrative charge for each non-conforming document, each request for error correction required to documentation and/or each request for missing documentation.

QA14 – ACCEPTANCE AUTHORITY MEDIA (AAM)

Triumph Actuation Systems, LLC suppliers **shall** have as part of their QMS, a policy for their employees and suppliers of the use of Acceptance Authority Media (AAM). Suppliers AAM policy shall comply with the AS/EN/9100 Requirements and FAA 14 CFR Part 21 (Section 21.2)

Triumph Actuation Systems, LLC suppliers shall upon request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity per AS/EN/9100 Requirements and FAA14 CFR Part 21 (Section 21.2)

The areas of focus of this assessment shall include but are not limited to:

- Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.)
- Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, "Stamp/Sign as you go", etc.)
- Authority Media Application Misrepresentation (i.e. Uncertified personnel, Fraudulent Activity-Falsification of documentation, Work not performed as planned, etc.)
- Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper use of authority media, etc.)

QA15 – Part Identification

All parts shall be marked to have proper traceability back to the supplier, per supplier Identification, and/or serial numbers, as applicable. This requires at a minimum, the packaging of the parts shall be tagged with the Supplier's name and the Triumph part number. Should the supplier choose to physically mark the actual part(s) themselves, the methods and the location of the part marking shall be submitted for approval through the buyer. **Any supplier identifier shall not be an extension of the part number.**

QA16 – FAA/PMA (Federal Aviation Administration/Parts Manufacturer Approval)

Parts shall not be delivered to Triumph, Clemmons having any markings on the *parts themselves* indicating the supplier's part number or FAA/PMA. The supplier's part packaging may have the supplier's part number on the package, in addition to the Triumph part number, but no PMA markings on the packaging as well.

QA17 – Obsolescence

Suppliers are responsible to notify Triumph, Clemmons 6 months in advance of a site closure or commodity obsolescence, to include parts and consumables.

END OF QA CLAUSES

ADDITIONAL QUALITY ASSURANCE REQUIREMENTS ARE APPLICABLE ONLY WHEN NOTED ON THE PURCHASE ORDER:

SPECIFIC CUSTOMER REQUIREMENTS ARE LOCATED ON THE TRIUMPH SUPPLY SOURCE PORTAL

NOTE:

QARs 20 through 31 do not apply to those COTS items with a prefix of MS, NAS, and AS items.

QAR16 - SOURCE INSPECTION/TEST Triumph Actuation Systems, LLC source inspection is mandatory on this purchase order. Reference SQAM001 for this requirement. It is not necessary for suppliers to contact Triumph to schedule source inspection activities. Triumph utilizes the Verify e-launch system to manage and deploy Verify personnel to support Triumph's source inspection program. Access the supplier portal and enter Approved Sources-Authorized Providers for scheduling an e-Launch Source Inspection request to Verify.

QAR17 - GOVERNMENT SOURCE INSPECTION

Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government Representative who normally services your plant so that appropriate planning for government source inspection can be accomplished.

QAR18 - SUPPLIER INSPECTION DELEGATION AUTHORITY (SIDA)

Suppliers that have been evaluated, approved, and listed on Triumph Actuation Systems, LLC Approved Suppliers List for this program, must conform to all requirements of QP-0020 when this QAR is noted on the purchase order. Applicable to all qualifying delegated products. Non-qualifying products as defined in QP-0020 and non-delegated product must conform to the requirements of QAR32. The Supplier Quality Management System requires being registered or compliant to AS9100. All SIDA suppliers are required to submit with each shipment the Form QF-0150 – Delegated Product Release Form

QAR19 – FAR/DFARS - Reference www.triumphsupplysource.com: Supplier Provisions: Triumph Company Terms and Conditions; Clemmons: FAR/DFARS Flow-down Addendum

QAR20 – SPECIAL CUSTOMER REQUIREMENT AIRBUS

Ref Airbus Supplier Requirements (ASR) A1501, A1502, A1504, A1505, as applicable

QAR21 – SPECIAL CUSTOMER REQUIREMENT – RAYTHEON (Includes: Goodrich, UTC/UTAS, Pratt & Whitney, Collins and Hamilton Sundstrand) Refer to Aerospace Supplier Quality Requirements (ASQR-01) for Quality System Requirements

QAR22 - SPECIAL CUSTOMER REQUIREMENT – EATON AEROSPACE GROUP

Quality Requirements for Subcontractors QC 06.1

QAR23 - SPECIAL CUSTOMER REQUIREMENT – HONEYWELL

Honeywell Supplemental Purchase Order Condition (SPOC) Manual requirements

QAR24 - SPECIAL CUSTOMER REQUIREMENT – SAFRAN LANDING SYSTEMS AND SAFRAN NACELLES

Reference GRP-0087 Safran Requirements to External Providers



Triumph Actuation Systems, LLC.

QAR25 – SPECIAL CUSTOMER REQUIREMENT – NORTHROP GRUMMAN

SQAR Manual - Supplier Quality Assurance Manual

NGC APPROVED SOURCES REQUIRED FOR SPECIAL PROCESSES

Note: For any NGC (Build to Print - Cage code 26512) Grumman Standard Specification (GSS) takes precedence over any MIL- Spec/Military standard or Industry Standard. Refer to GP20A Northrop Grumman Specification para. 4.6

QAR26 – SPECIAL CUSTOMER REQUIREMENT – QARBON AEROSPACE (FORMERLY TRIUMPH AERO STRUCTURES & VOUGHT) Quality Requirements QA-MAN-0002

QAR27 – SPECIAL CUSTOMER REQUIREMENT – MOOG

Moog Supplier Quality Requirements (SQR-1) If goods or services are related to a Government Contract, Form 116-32 applies

QAR28 – Was Deleted and requirements moved to QAR 21 – HAMILTON SUNDSTRAND/UTAS/PRATT & WHITNEY

QAR 29 – SPECIAL CUSTOMER REQUIREMENT–GULFSTREAM – Gulfstream APPROVED SOURCES REQUIRED FOR SPECIAL PROCESSES

QAR 30 – SPECIAL CUSTOMER REQUIREMENT – BELL HELICOPTER

Supplier Quality Requirements Manual SQRM-001

QAR 31 – SPECIAL CUSTOMER REQUIREMENT – BOEING COMMERCIAL / MILITARY

D1-4426 flow down requirements applies on special process purchase orders.

Boeing Quality Purchasing Data Requirements (BCA/BGS) X31764 applies

Boeing Advanced Product Quality Planning (APQP) & Production Part Approval Process (PPAP) X38656, applies when listed on the PO.

In addition to, any Q-clause(s) flowed down from Customer PO, as applicable

QAR 32 – SUPPLIER FINAL INSPECTION VERIFICATION CHECKLIST FORM QF-0112

Located on the Supplier Portal under the following location: Quality Requirements, Quality Requirements – Clemmons QF-0112 is required for all non-qualifying delegated product as defined in QP-0020 and all non-delegated product.

The supplier **must** complete this form and attach it to the cert package.

QAR 33 – DROP SHIP AUTHORIZATION

Drop Ship authorizes approved and delegated suppliers to drop ship articles to Triumph Customers.

QAR 34 – APQP ELEMENTS REQUIRED – Items noted below shall be submitted to Triumph for review and approval when noted on the Purchase Order.

(Example: QAR34 Items 1, 2, 5, 6 & 9 apply)

1. Design Records
2. Design Risk Analysis (e.g. DFMEA); only applicable to design organization
3. Process Flow Diagram
4. Process Failure Mode and Effects Analysis (PFMEA)
5. Control Plan
6. Measurement System Analysis (MSA)
7. Initial Process Capability Studies
8. Packaging, Preservation and labeling Approvals
9. First Article Inspection Report (FAIR)
10. Customer PPAP Requirements
11. PPAP Approval Form (or equivalent)

QAR 35 – SPECIAL CUSTOMER REQUIREMENT - CURTISS WRIGHT



Triumph Actuation Systems, LLC.

Supplier Quality Requirements SQR-100 Applies

QAR 36 - SPECIAL CUSTOMER REQUIREMENT – HEROUX DEVTEK, INC.
HPS-011 Quality Requirements for Suppliers with Design Responsibility

QAR 37 - SPECIAL CUSTOMER REQUIREMENT - SAAB
REQ-05842 Supplier Quality Management Requirements for Suppliers providing products to be used on Boeing Programs

QAR 38 - SPECIAL CUSTOMER REQUIREMENT - PIPER
Quality Procedure 6.2 Supplier Quality Assurance Requirements

QAR 39 - SPECIAL CUSTOMER REQUIREMENT – CESSNA/TEXTRON AVIATION
Supplier Quality Requirements P1

QAR 40 – SPECIAL CUSTOMER REQUIREMENT – TRIUMPH YAKIMA
QWI 06.01.02 Purchase Order Quality Clauses and SQAM001

QAR 41 – SPECIAL CUSTOMER REQUIREMENT - CESA
EC033 General Quality Requirements for Suppliers

QAR 42 – SPECIAL CUSTOMER REQUIREMENT - EPIC
QPM-007 Quality Procedures Manual: Supplier Quality Requirements

QAR 43 – SPECIAL CUSTOMER REQUIREMENT – HANWHA COPORATION
SQARs Q1000 through Q8000

END OF ADDITIONAL QUALITY (QAR) REQUIREMENTS

Signatures of Approval

Director of Quality
Procurement Manager
Director of Program Management
Director of Engineering
Controller

REVISION RECORD CHANGES

Reason for change:

Date/Rev: 1/26/18 Rev NC

Date/Rev: 1/30/20 Rev. A Update cure date for elastomers to meet industry standard with the exception of those for Northrop Grumman or Gulfstream

Date/Rev: 2/3/22 Rev. B: Added NOTE Page 3NOTE: QARs 20 through 31 do not apply to those COTS items with a prefix of MS, NAS, and AS items.

Griff Parrish

Date/Rev: 7/26/23 Rev C: Complete rewrite

Carole Sagraves, Sean Wood