REVISIONS					
REV	DESCRIPTION	DATE	APPROVED		
OI	Original Issue	6-2012	G.Baugh		
A	Updated QA002 to Require Contract Review	7-2012	G.Baugh		
В	Required C of C's to be traceable to the MNAI PO and Part Number	11-2012	G.Baugh		
C	Update the FOD requirements of QA007	2-2013	G.Baugh		
D	Updated QA010	3-2013	C.Vonasek		
Е	Updated QA011	10-2013	C.Vonasek		
F	Created QA012 for Record Retention requirements	1-2014	G Sutton		
G	Created QA013 for Supplier Performance Management	7-2014	G. Sutton		
Н	DCR 59938 created to add SPOC's to the Document Control System	7-2016	T.Ryan		
J	DCR 59979 Formatting changes to entire document, added to 2.0 Applicable documents,	10-2016	B.Harris		
K	3.0 acronyms, QA004 is new and added environmental requirements, Calibration has been added to QA001 Quality System, added title to QA005, DCR 60168 rewrite of Quality Clause QA009 to add FAA PAH process of reporting non conformances to MNAI Quality. Title Change to Supplier Quality Requirement and revision to QA007 to add references to industry standards. QA012 record retention has been changed to 12 years.	11/2017	B Harris		
L	DCR60243 add QA015 adding the requirement for UTAS specific parts requirements, the ASQR-01 flow down and revise QA014 to add "Company Relocation"	01/2018	BHarris		
М	DCR60308 correct calibration quality call out, and add new AS9100 Rev D flow down, added new section as 4.0 Conducting Business with MNAI, corrected QA001 clause to restate requirements for calibration suppliers. QA003 modified to speak to certs for	02/2018	B Harris		
N	calibrated equipment.  DCR60322 – Add the vison check requirement in the calibration section per the UTAS ASQR-01 sect 6.2.2.	02/19/2018	Sulf		

# QUALITY SPECIFICATION

APPROVALS	DATE	MarathonNorco Aerospace, Inc. WACO, TEXAS						
ORIGINATOR T. RYAN CHECKED	5/20/2016	Supplier Quality Requirements						
APPROVED B. HARRIS 05/20/201		SIZE	FSCM	DWG NO	QS-3	36457	REV	N
Originating DCR 59938		A	74025	DIST. CODE		SHEET	1 OF 8	

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#### 1. SCOPE

This document lists the Supplier Quality Requirements and applies to all MarathonNorco Aerospace Inc. Suppliers. This document is located on the MPTC.com website under Quality Requirements

#### 2. REFERENCE DOCUMENTS

SAE AS9100	Aerospace Quality System Standard
FAA part 21	New Product Manufacturing
SAE AS9102	First Article Inspection (FAI)
Nadcap	Special Processing

NAS412 Foreign Object Damage/ Foreign Object Debris (FOD) Prevention IAQG OASIS International Aerospace Quality Group <a href="http://www.sae.org/iaqg/">http://www.sae.org/iaqg/</a>

ASQR-01 UTAS Supplier Quality Requirements

http://www.utc.com/Suppliers/Pages/Aerospace-Supplier-Quality-

Requirement-Documents.aspx

#### 3. ACRONYMS

MNAI	MarathonNorco Aerospace Inc.
COC	Certificate of Conformance
FAI	First Article Inspection
FAIR	First Article Inspection Report
ATP	Acceptance Test Procedure
ATR	Acceptance Test Report
FOD	Foreign Object and Debris
PAH	FAA Production Approval Holder
DA	Design Authority

IAQG International Aerospace Quality Group http://www.sae.org/iaqg/

#### 4. CONDUCTING BUSINESS WITH MNAI

Suppliers shall conduct business in a manner that is appropriate, as it applies to ethical behavior, legal, environmental, and social responsibilities. MNAI manufacturers product primarily for the aerospace industry. It is critical that any supplier along with their suppliers understand the requirements within the SAE AS9100 standard. A supplier of product or service to MNAI shall make sure that your organization:

- understands their contribution to product conformity
- understands their contribution to product safety
- understands the importance of ethical behavior

#### 5. QUALITY CLAUSES

# **Supplier Quality Requirements**

#### **QA001 - QUALITY SYSTEM**

Suppliers shall maintain a Quality Management System (QMS) suitable to the products and services provided to MarathoNorco Aerospace.

- Distributors shall have a system that conforms to ISO 9001 or AS9120.
- Special process suppliers shall have a system that is compliant to AC7004 PRI-Nadcap.
- Calibration Suppliers shall have a system that is compliant to ISO 10012-1, A2LA, ISO 17025 or ISO9001 or equivalent, with traceability to the National Institute of Standards and Technology (NIST)
  - Calibration Eye Exam Requirement

Unless otherwise specified, procedures shall be implemented to ensure that eye examinations, including visual acuity and color vision, as applicable, are administered by a medically qualified / trained person to all individuals performing visual inspection, other product acceptance activities and/or M&TE calibration that require visual acuity.

- Intervals shall not exceed one year.
- Individuals shall be tested in at least one eye, either corrected or uncorrected.
- Color Perception testing is required one time only. Individuals shall be capable of adequately distinguishing and differentiating colors used in the method for which certification is required, the process being performed or inspection activity.
- Records shall be retained for each individual.

Note: Vision tests may be substituted for the options listed in the Table 6 providing the equivalence is verified and documented by a licensed optometrist or ophthalmologist.

Table 6: Minimum Vision Requirements

Individual performing	Shall be compliant with minimum vision requirements of
Visual inspection	Near vision requirements of
(i.e. calibration, non-weld, in-	<ul> <li>Snellen 14/18, (20/30), or</li> </ul>
process, layout, dimensional)	Jaeger 2
Visual Inspections on Welds	American Welding Society Standard (AWS) D17.1
Nondestructive Testing (NDT)	Aerospace Industries Association National Aerospace Standard
	(AIA/NAS) 410

- All other suppliers shall have a system that is compliant to AS/EN9100
- An ISO9001 system may be approved by MNAI Quality and Purchasing dependent on the material or service provided and to the product line in which it may support within MNAI.
- MNAI may also approve a supplier temporally which does not have a certified QMS dependent of the product and or service provided. MNAI may conduct an onsite audit to approve the supplier temporarily with the approval of Quality and Purchasing combined.

AS9100 requirements can be found utilizing the resources at IAQG <a href="http://www.sae.org/iaqg/">http://www.sae.org/iaqg/</a>.

Purchase Orders identified for Boeing the D1-4426 an approved process source must be utilized and flowed down to any sub-tier supplier.

The supplier's quality system shall be documented and made available for review and/or audit by MNAI.

#### **QA002-PURCHASE ORDER**

It is the responsibility of the supplier to conduct a Contract Review of the MNAI Purchase Order and to ensure that they are working to the latest version of specifications referenced within this document as well as the Supplier Quality Requirements. This Data must also be flowed down to any Sub-Tier Suppliers utilized in the process.

## **QA003-CERTIFICATE OF CONFORMANCE**

All Suppliers must provide raw materials test reports / certification results / laboratory analysis requirements (e.g., tensile strength, stress rupture, hardness, chemical composition, etc.), as defined by the product definition and/or the purchase order.

Equipment, tools or gages requiring calibration certs at the time of purchase must provide certs traceable that are certified and traceable to NIST

All Certificates of Conformance must be traceable to the MNAI Purchase order, part number and provide serial number, lot or batch number for traceability.

### QA004- ENVIRONMENTAL/SAFETY COMPLIANCE

Supplier shall comply with all applicable laws, directives, regulations and/or ordinances in effect related to toxic and /or hazardous substances, including but not limited to the EU Directive 2011/65/EU on Restriction Of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS), 76/769/EEC European Marketing and Use Directive and European Regulation (EC) n 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (the REACH Regulation). Supplier shall provide data on all declarable substances contained in products.

- -Material furnished under specific purchase orders shall not be made out of or contain mercury or asbestos in any of its mineral forms.
- -In July 2010, President Obama signed into law the Wall Street Reform and Consumer Protection Act, also known as the Dodd-Frank Act. On August 22, 2012, the SEC adopted a final rule relating to Conflict Minerals as mandated by the Dodd-Frank Act. SEC registered companies are required to comply with this final rule for the calendar year beginning January 1, 2013. Supplier cooperation will be needed to get information from smelters/refiners in their supply chain as to whether products contain "Conflict Minerals" that originate in the DRC or adjoining countries.
- -After Dec. 1, 2015, distributors must ensure that each container of hazardous chemicals being shipped is labeled with a GHS compliant label.

#### **QA005-FIRST ARTICLE INSPECTION (FAI)**

Supplier shall perform First Article Inspection in accordance with the requirements set forth in SAE AS9102, Aerospace First Article Inspection Requirement. Supplier shall forward one (1) copy of First Article Inspection Report (FAIR) to MNAI (with the first shipment) with Supplier's Proposed Fixed Process and shipper in the first shipment of parts. Once received and approved by MNAI, the process is considered "FIXED". Therefore any changes to the product, process, sub-tier suppliers and/or facility locations require immediate notification and MNAI approval. Once approval is obtained, supplier shall submit a new FAIR.

#### QA006-INSPECTION/ACCEPTANCE TESTING

Include with each shipment a copy, signed by an authorized agent of the Supplier, of the results of the lot or item acceptance tests (lot Inspection) required by the applicable specification. Where dimensional or quantitative limits are established by the specification, the report shall indicate the actual values obtained. Test report shall include control identity (e.g., heat, lot, serial number) of material/item tested. Supplier is required to maintain/retain inspection and test records as required by the PO/Contract.

# QA007-FOREIGN OBJECT DEBRIS/DAMAGE (FOD)

Supplier *shall* establish and maintain systems and procedures necessary to provide a definitive program of foreign object damage/control (FOD). FOD programs shall reference the requirements in NAS412 and SAE AS9146 or other aerospace standards on FOD prevention.. MarathonNorco reserves the right to reject supplier's foreign object damage control procedure/plan.

# **QA008-RIGHT OF ACCESS**

The Supplier *shall* provide MNAI, its customer, and/or official authorities access to its and or its sub-tier supplier's premises, as required by AS9100 and FAA/EASA Standards to inspect and evaluate suppliers facilities, systems, data, equipment, personnel and any articles that will be incorporated into a MarathonNorco product.

#### **OA009-NONCONFORMING MATERIAL**

MarathonNorco does not accept product that is Nonconforming. MNAI is a FAA PAH and/or Design Authroity for product sourced to suppliers. Suppliers to MNAI do not have the authority to make non-conforming material disposition on MarathonNorco Aerospace Inc.'s behalf. Any supplier producing product for MNAI is required to notify MNAI Quality and Purchasing in writing within 24hours of identifying non-compliant product to the PAH requirements. A full description and technical explanation of the issue, population of product at risk, containment, and initial corrective action is required.

There is no provision within MarathonNorco to review Nonconforming material for conditional acceptance. Only products and services that meet the approved data (the MNAI Purchase Order and MNAI Drawing) will be accepted.

When MarathonNorco identified nonconforming product that fails AQL levels and determines the cause to be the Suppliers responsibility, the Supplier shall be debited for MarthonNorco's cost for inspecting the nonconforming product 100% as well as shipping charges for having to return the product.

The supplier shall initiate internal corrective action per AS9100, Section 8.5.2 and 8.5.3 for all nonconforming product that are determined to be supplier responsibility. The results shall be made available for customer review upon request.

#### **QA010-SPECIAL PROCESSING**

Includes chemical treatments all materials, heat treatment of material, paint and prime operations. Unless otherwise noted on the Purchase Order, only NADCAP accredited suppliers shall be approved processors shall be used. For purchase orders that are identified for Boeing the D1-4426 Approved Process Source must be utilized and flowed down to any Sub-Tier Supplier.

# **QA011- COUNTERFEIT PARTS PREVENTION**

Definitions for purposes of this requirement:

"Counterfeit Parts" shall mean a part, component, module, or assembly whose origin, material, source of manufacture, performance, or characteristics are misrepresented. This term includes, but is not limited to,

A - parts that have been (re)marked to disguise them or falsely represent the identity of the manufacturer,

- B defective parts and/or surplus material scrapped by the original manufacturer, and previously used parts pulled or reclaimed and provided as "new".
- C As used herein, "authentic" shall mean genuine; from the legitimate source claimed or implied by the marking and design of the product offered; and manufactured by, or at the behest and to the standards of, the manufacturer that has lawfully applied its name and trademark for that model/version of the material.
- D "Independent Distributor" shall mean a person, business, or firm that is neither authorized nor franchised by an Original Component Manufacturer ("OCM") to sell or distribute the OCM's products but which purports to sell, broker, and/or distribute such OCM products. Independent Distributors are also referred to as unfranchised distributors, unauthorized distributors, and/or brokers.
- E SELLER represents and warrants that only new and authentic materials are used in products required to be delivered to MarathonNorco Aerospace Inc. or any of its subsidiaries or affiliates (hereinafter "MarathonNorco Aerospace Inc.") and that the work delivered or products sold contain no Counterfeit Parts, or the individual materials sold to MarathonNorco Aerospace Inc. are not Counterfeit Parts. No other material, part, or component other than a new and authentic part is to be used unless approved in advance in writing by MarathonNorco Aerospace Inc. To further mitigate the possibility of the inadvertent use of Counterfeit Parts, SELLER shall only purchase authentic parts/components directly from the Original Equipment Manufacturers ("OEMs")/OCMs or through the OEM's/OCM's authorized distribution chain. SELLER must make available to MarathonNorco Aerospace Inc., at MarathonNorco Aerospace Inc. request, OEM/OCM documentation that authenticates traceability of the components to that applicable OEM/OCM. The documentation that authenticates traceability must be available for at least 7 years past the date of SELLER's receipt. Purchase of parts/components from Independent Distributors is not authorized unless first approved in writing by a MarathonNorco Aerospace Inc. Procurement Representative. SELLER must present complete and compelling support for its request and include in its request all actions to ensure the parts/components thus procured are legitimate parts. MarathonNorco Aerospace Inc. approval of SELLER request(s) does not relieve SELLER's responsibility to comply with all Purchase Order requirements, including the representations and warranties in this requirement.
- F SELLER shall maintain a documented system (policy, procedure, or other documented approach) that provides for prior notification and MarathonNorco Aerospace Inc. approval

before parts/components are procured from sources other than OEMs/OCMs or through the OEM's/OCM's authorized distribution chain. SELLER shall provide copies of such documentation for its system for MarathonNorco Aerospace Inc. inspection upon MarathonNorco Aerospace Inc. request.

G -If the SELLER is providing electronic components/devices only, the following certification applies:

Certification of Origin of Product: Acceptance of this Purchase Order constitutes confirmation by the SELLER that it is either the Original Equipment Manufacturer (OEM), Original Component Manufacturer (OCM), or a franchised or authorized distributor of the OEM/OCM for the product herein procured. SELLER further warrants that OEM/OCM acquisition documentation that authenticates traceability of the components to that applicable OEM is available upon request. If the SELLER is not the OEM/OCM or a franchised or authorized distributor, the SELLER confirms by acceptance of this Purchase Order that each product supplied to MarathonNorco Aerospace Inc. has been procured from the OEM/OCM or a franchised or authorized distributor of the OEM/OCM. The supplier further warrants that OEM/OCM acquisition traceability documentation is accurate and available to MarathonNorco Aerospace Inc. request.

H - SELLER shall flow the requirements of this provision to its subcontractors and suppliers at any tier for the performance of this Purchase Order.

### QA012 – RECORD RETENTION OF MNAI DOCUMENTATION

The supplier *shall* maintain adequate records on all inspection and tests. Unless otherwise stated on the PO either directly or by flow down of MNAI customer documents, such records shall be retained on file for a period of 12 years minimum and shall be traceable to MNAI purchase order and part number. Suppliers will regard the documents created to meet MNAI requirements Proprietary and cannot be released without MNAI consent and approval. Electronically Stored Documents are to be backed up. Paper records are to be preserved & protected from Damage. In the event the records are damaged or lost MNAI must be notified immediately.

#### **QA013 – SUPPLIER PERFORMANCE MANAGEMENT**

MNAI expects suppliers to achieve 100% On-Time-Delivery (OTD) and Quality. All suppliers with a 12 month average performance below 95% for either OTD or Quality will be placed on a non-preferred status and removed from any future New Business quoting opportunities until improvement demonstrated or determined reasonable under special circumstances.

# **QA014 – NOTIFICATION OF CHANGES**

This paragraph pertains to ALL changes:

Company Name

Company Relocation

Manufacturing address change

Remit address

Production definition and revision

Process definition and revision

Quality System certifications (including lapse or revocation of)

Any other industry accreditations (including lapse or revocation of)

The supplier shall notify MarathonNorco Aerospace Quality department and purchasing of any of the above listed items, immediately at the time of the changes.

#### **QA015** – End Use Customer Specific Requirements

Product requiring customer specific requirements from UTAS will be marked in the purchase order "For UTAS end use". If the MNAI PO is marked with this statement supplier must follow the flow down requirements of UTC ASQR-01 Aerospace Supplier Requirements.