

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

1.0 INTRODUCTION

1.1 This Quality Assurance Instruction specifies the requirements and procedures that shall be applied to, and carried out by, all approved suppliers to Martin-Baker America, Inc. (MBAI) of direct products, Ground Support Equipment and test house services but excludes calibration services and indirect product.

1.2 In accordance with our approvals, MBAI must demonstrate that it has established and is able to maintain a quality system. The system must include such controls and procedures necessary to ensure that each product, part or appliance produced by MBAI or its partners, or supplied from subcontractors, conforms to the applicable design data and is in condition for safe operation, and thus we can exercise the privileges set out in EASA Part 21 Subpart G.

1.3 In furtherance of the requirements stated in section 1.2, the purpose of this document is to prescribe the general requirements for the establishment and maintenance of a quality management system (QMS) by the supplier in order to assure that materials and services meet the standards of quality required. The system shall ensure control of quality is maintained throughout the entire process of procurement, manufacturing, and test, including storage, packaging, and delivery.

1.4 It is preferred by MBAI to procure production hardware and services from suppliers who hold a recognized QMS certification (e.g., BS EN ISO 9001 / AS9100/ AS9120).

1.5 Where a potential supplier does not hold a recognized QMS approval, MBAI will conduct a supplier evaluation prior to any “approved” acceptance onto the MBAI Approved Supplier List in accordance with internal procedures.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

2.0 APPLICABLE DOCUMENTS

PU-002, Purchase Order- Standard Terms and Conditions

QAD No. 2, Quality Assurance Document No. 2 - General Manufacturing Requirements

QAD No. 5, Quality Assurance Document No. 5 - Classification of Characteristics

QA 06, Inspection Sampling Plan

QA 10, AS9102 First Article Inspection

SAE AS 9100

SAE AS 9102

SAE AS 9120

EASA Part 21 Subpart G

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

3.0 GENERAL QUALITY ASSURANCE REQUIREMENTS

3.1 Organization

The responsibility for control of quality shall be clearly defined within the supplier's organization and the functional relationship between Quality Assurance and other departments shall be clear. The department charged with this responsibility shall also have sufficient staff with the authority to assure that quality requirements are consistently maintained.

3.2 Procedures / Systems Overview

The supplier's QMS shall be implemented by formal documentation. Documentation shall include, but not be limited to:

3.2.1 An organization chart of the supplier's management structure.

3.2.2 A documented contract review process with objective evidence of determination and review of customer requirements.

3.2.3 Procedures to assure the generation and retention of records of controlled quality during "in-process" operations.

3.2.4 A system for identifying the inspection status of articles by means of stamps, tags, production cards, routing cards or labels. The system shall provide traceability to the individual responsible for the inspection operation.

3.2.5 A system to ensure proper distribution, change control, availability, personnel awareness, and correct use of documents.

3.2.6 A system of quality record retention.

3.2.7 A system to assure identification, segregation, disposition and corrective action for non-conforming materials or products.

3.2.8 A system to assure that all products and services procured from procurement sources conform to applicable contractual design and quality requirements.

3.2.9 A system for scheduled periodic review or audit of the systems and procedures comprising the supplier's QMS.

3.2.10 A system to assure calibration and/or accuracy verification of all test and measurement equipment used for control of "in-process" operations or for product acceptance tests and measurements.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

3.2.11 A system to assure the approval of competencies including any required qualification of persons to assure continued conformance to requirements.

3.3 Right of access and Prime Contractor Inspection - Refer to PU-002

3.4 Supplier Evaluation

3.4.1 The supplier's facilities and QMS shall be evaluated in accordance with the requirements of this document prior to obtaining full supplier approval status and at subsequent intervals to assure continued conformance to these requirements. Approval shall be based upon the supplier's quality history records and/or assessment of the supplier's facilities and QMS. The supplier's quality assurance procedures, documents, inspection and test equipment, methods and techniques, records and other quality reliability operations are subject to this evaluation.

3.5 Source Control

3.5.1 Any item or part not catalogued under British or American Standards, nor engineered by Martin-Baker Aircraft, Co., Ltd. (MBA) will be specified on a "Source Control" or "Specification Control" drawing.

3.5.2 Items procured against an MBA "Source Controlled Drawing" that specifies both the supplier's drawing number and configuration status (Issue No.), shall be supplied at the specified status.

3.5.3 The supplier shall ensure that their certifying documentation exhibits both the contractor's drawing number and configuration status (Issue No.).

3.5.4 The supplier is responsible for ensuring the acceptability of any changes subsequent to the inception of the contractor's drawing into the design, by submitting the relevant drawings to the contractor's Technical Manager for approval prior to the supply of the later configuration.

3.5.5 Configuration changes, which are approved by the contractor, shall be confirmed by amendment to the contractor's drawing.

3.6 Certifying Documentation

3.6.1 Each delivery of components or services to MBAI shall be accompanied by a legible, certifying document, exhibiting an unequivocal statement that the items conform in all respects to the P.O. requirements. The document shall include:

- the designated part number which must include MBA's number if MBA designed product, (i.e., on an MBA drawing);
- the issue status of MBA designed product and other product as applicable;
- a description of the product.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

- a unique serial/batch number.
- reference to the PO number, including line item on non-COTS items.
- the signature of an authorized representative of the supplier.

3.6.2 The certifying document shall be explicit to the extent that the materials or component status can be determined without the need for supplementary documentation, or supplementary documentation is to be also provided (e.g. Anodize and/or plating Certs).

3.6.3 In addition to the certifying document supplied with the product MBAI requires the supplier to maintain full traceability of all parts to the manufacturer, including a copy of the Mill Certificate for any raw materials, a copy of the Certificate of Conformance for any subcontracted operations, a copy of any “First Article” inspection reports and any Production Work Orders. All this documentation must remain on file and shall be readily available upon request compliant with MBAI PU-002, Record Retention clause.

Documentation requirements to be provided with shipment are defined in below table:

BLACK CIRCLE (●) = REQUIRED	MBA Design machined/fabricated product, seals, O-rings, and gaskets	COTS - Exclusive of raw material. Otherwise, includes Plumber's and Industry Standard Hardware.	Raw Material - Metal, Fabric, Plastics	Assy Items	Composite Parts	Source Control	COM PARTS
CofC from Vendor	●	●	●	●	●	●	●
Full traceability to manufacturer		●					●
Raw Material Cert fully traceable to manufacturer	●		●				●
Test Reports where applicable within the specification, ATP, Drawing, PO, etc. Example MTR (mill cert) for metallic raw material.	●		●	●		●	●
Any subcontracted process CofC, if applicable.	●				●		●
CofC for any detail components purchased to an industry standard (ref. 6.2)	●			●			●

NOTE: MBAI may require dimensional inspection reports as test reports if those dimensions are not able to be verified by MBAI Inspection.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

3.6.4 Where “Free Issue” material has been supplied by MBAI, the allocated MBAI Batch Number shall be stated on the certifying documentation, along with a statement that it was free issued.

3.6.5 Where the supplier has purchased material raw material in furtherance of the contract, the supplier shall allocate a Batch Number to enable traceability back to the material supplier. Copies of the Material Certification (Mill Cert), including applicable Chemical and Physical Test Reports, shall be submitted with each certifying document, with full traceability through distribution.

3.6.6 Where test reports are required by the P.O., material specification or engineering drawing, the supplier shall provide such reports, with supporting documentation (i.e. data results) and shall be signed by a responsible representative of the company performing the tests, with each delivery, along with full traceability through distribution.

3.6.7 Non-conforming items shall not be delivered without prior written authority of MBAI. This authority shall be restricted to MRB / Concession Application, accepted by MBA's Material Review Board, except as defined in Sections 6.7.4 and 6.7.5.

3.6.8 This QA document in no way relieves the supplier of supplying items in accordance with the P.O. requirements. All changes to the P.O. requirements must be negotiated with MBAI and will be formally agreed by the issue of an amended P.O. prior to delivery. If there are any question concerning conflicting information between the P.O. and this document, contact MBAI purchasing for clarification.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

4.0 DETERMINATION OF CUSTOMER REQUIREMENTS

4.1 The supplier shall undertake a detailed review of all P.O.s, drawings, and process specifications in order to determine all MBAI requirements. This process shall be documented and traceable to each P.O.

Some of MBAI's customers require the flow down of their nation's regulations (e.g., US DFARs or EASA part 21G); these will be identified in the P.O. documentation.

4.1.1 In addition to the flow down of customer requirements in 4.1, the supplier shall inform their MBAI Supplier Quality Engineer of any of the following within 10 days and closure of any resulting corrective action within 30 days:

4.1.1.1 Loss of their third party-certification (e.g. FAA, CAA, Registrar, NADCAP)

4.1.1.2 Change in the Quality organization, processes or procedures that are known to affect or could potentially affect conformity of any MBAI item.

4.2 When manufacturing components to MBA design, suppliers must read MBA drawings in conjunction with MBA Quality Assurance Document 2 (QAD 2).

4.3 Suppliers may request an Authorized Drawing Revision (ADR) to revise drawing requirements or tolerances with the aim of improving process capability or efficiency. ADR requests should be directed to MBAI SQA representative, copying MBAI Purchasing.

4.4 If the supplier cannot meet all P.O., drawing and process specification requirements, MBAI Purchasing shall be promptly notified of such, and the order shall not be processed unless and until rectified by MBAI Quality Engineering.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

5.0 PROCUREMENT CONTROL

5.1 Selection of Sub-Tier Suppliers

5.1.1 Proprietary manufacturers shall maintain a list of all such approved organizations in a register of suppliers.

5.1.2 Suppliers manufacturing items of equipment to MBA or MBAI design requirements may only use MBAI approved sources of supply, except for raw materials and commercial off the shelf (COTS) products, subject to supplier's compliance with Section

5.1.3. MBAI approved sources of supply can be found on MB Share. In exceptional cases, a supplier can be authorized to control their own sources of supply. This will only be authorized for a supplier, by an MBAI audit of their supplier management / SQA process. An acceptable score must be achieved in the Supplier Management (Sub-Tier) section. Suppliers using this exception must inform MBAI of the vendor names of all sub-tiers used.

5.1.3 When using supplier approved sources, the supplier shall demonstrate a program of selection, approval, rating, and audit of sub-tier suppliers.

5.1.4 MBAI approval does not relieve the supplier from exercising the controls necessary to assure conformity of the product with all the applicable specification requirements.

5.3 Procurement Criteria

5.3.1 Contract Provisions; no further sub-contracting of MBAI components is permitted without prior written approval from MBAI. All P.O.s for sub-tier processing shall include the following provisions:

5.3.1.1 Basic Requirements. The supplier shall ensure that all quality requirements and contractual flowdowns for each procured article are specified in the contract or P.O. The P.O. shall clearly define the requirements of the contract, including applicable drawings, revision levels, specifications, document requirements, etc.

5.4 Supplier Acceptance of Procured Items

5.4.1 The Supplier's Receiving Inspection shall provide for the following:

5.4.1.1 The performance of inspections and tests on procured articles to the extent necessary to verify conformance to the requirements of the applicable specification and drawing. The amount of inspection performed shall be consistent with the critical nature of the article and information available from

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

previous inspections or tests. Verification that the procurement source's shipping document and accompanying certification and reports reflect matching levels of configuration.

5.4.1.2 Statistical sampling techniques where applicable in accordance with the sampling inspection requirements of section 6.5.3.

5.5 Acceptance testing of each item shall include the documentation and retention of data, which reflects specification compliance.

5.6 Supplier's manufactured and/or processed articles in production stores shall be identified to a discrete number, control record or P.O. as applicable and shall bear evidence of supplier inspection acceptance. A system to ensure "First In – First Out" principles is required.

5.7 Physical segregation of raw material and purchased articles shall be maintained. This requirement shall provide, as a minimum, segregation of materials or articles awaiting inspection or test results, accepted materials or articles, and rejected materials or articles.

5.8 Identification of Materials. All purchased articles released from the supplier's receiving inspection, shall be clearly identified to indicate acceptance or rejection status.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.0 PRODUCT CONTROL

6.1 Acceptance Criteria

6.1.1 The supplier shall provide controlled documentation for determining that an article produced and/or services provided are in conformance with the terms of the sub-contract or P.O. These documents shall include objective evidence of formal "First Article" verification and authorization, when requested. The supplier shall ensure that processing, fabrication and manufacturing operations and all quality program functions are accomplished in accordance with the documents specified within the applicable contract or P.O.

6.2 Test and inspection planning for items not of Martin-Baker design and/or not to an industry standard (e.g., BS, NAS, ASTM, ANSI) shall demonstrate effective testing and inspection of product by use of a control plan. A control plan shall include, as a minimum, the following:

6.2.1 A description of the item to be tested or inspected

6.2.2 Parameters to be tested or inspected

6.2.3 The nominal and tolerance values of these parameters and the measuring and test equipment to be used, including type, range, and accuracy

6.2.4 Sequence of tests or inspection steps

6.2.5 Sampling inspection methods (refer to section 6.5.3 for limitations)

6.3 Quality Assurance Change Control

6.3.1 The supplier shall establish and maintain an effective change system to assure controlled distribution and revision updating of all engineering drawings, drawing changes, inspection, and test procedures, specifications, and similar documents. The supplier shall provide for the removal of all superseded or obsolete documents from manufacturing, test, and inspection areas.

6.3.2 There are times when MBAI, due to time constraints, must enter a program of "Simultaneous Engineering". Such part numbers are ordered as "Proof of Concept" (POC) which will be clearly marked on the P.O. Such drawings, issued under these conditions, may not be approved (signed) and should be destroyed on completion of the P.O. Under no circumstances should a sub-contractor use these drawings for production parts regardless of the recorded revision level.

6.3.3 The supplier shall establish a system to notify MBAI of changes to processes, products, or services, including changes to their suppliers or location of manufacture and to obtain the approval of MBAI as required.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.4 Inspection, Measuring and Test Equipment

6.4.1 Control Procedures

The supplier shall establish and maintain a control procedure to assure that manufacturing tooling and inspection and test equipment are inspected, calibrated and otherwise controlled according to the specific conditions surrounding their use and sensitivity to change, wear, damage and adjustment. The supplier's control procedure shall be established and organized in such a way that inspection and calibration will be scheduled and that adherence to the procedures of control can be monitored by the quality assurance activity.

Procedures shall also include plans for periodic preventative maintenance and shall define action taken on items which have been accepted with out-of-tolerance equipment.

6.4.2 Approved Equipment

The supplier shall provide, during the term of the sub-contract or P.O., sufficient equipment to determine conformance with the procurement documents. All such equipment shall be used in an environment and in a manner to ensure continued measurements of the required accuracy.

6.4.3 Calibration

All measuring and test equipment shall be calibrated using standards whose accuracy is traceable to national or international standards. Records shall be maintained showing date and results of last calibration, by whom it was calibrated and the date of next calibration. Measuring and test equipment and measurement standards shall be labelled to indicate as a minimum requirement, the date of the last calibration, by whom it was calibrated and the date the next calibration is due.

6.4.4 Standards

The supplier may use their own standards laboratory or employ an outside service. In either case, traceability to national or international standards is a requirement. Calibration shall be compatible with the design and quality requirements of the product and applicable specifications.

6.4.5 Jigs and Fixtures

The supplier's system for the control of jigs and fixtures shall include the following requirements:

6.4.5.1 Production jigs, fixtures and other devices used as inspection or test media shall be initially inspected for accuracy prior to use and shall require periodic re-

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

inspection and calibration at established intervals to preclude built-in errors in the finished product.

6.4.5.2 Any tooling furnished to the supplier by MBAI shall not be altered, reworked, or modified without prior written approval of MBAI Purchasing.

6.4.5.3 The supplier shall maintain complete accountability, including periodic inspection for excessive wear, damage and missing details of tooling supplied by MBAI.

6.4.5.4 Objective evidence of proper control and maintenance shall be maintained by the supplier.

6.5 Inspection operations

6.5.1 First Article Inspection

As required by AS9102, suppliers supplying parts to an MBAI part number shall complete First Article Inspection (FAI) in accordance with QA 10.

To facilitate the above requirements, certain events requiring a FAI will be listed as a FAI requirement in the P.O. line item text. Typically, these will be changes detectable to MBAI (e.g., Design class 1 & 2 affecting fit form or function, change of vendor and for parts where there is a lapse in production of > 2 years). This change is intended to facilitate the supplier with the MBAI FAI requirements but absence of such in the P.O. text does not waive the supplier of their FAI requirements.

6.5.2 First off Verification and Legacy Stock Acceptance

For First off Verification, refer to section 6.5.1. Considering legacy (residual) parts which have been held in stock by suppliers and from which previous acceptable deliveries have been made to MBAI and there is a break in supply exceeding 2 years. In this case, MBAI can accept these parts if the original batch number and date of last supply is annotated on the supplier certificate of conformity delivered with the goods.

6.5.3 Sampling Inspection

Sampling inspection is to be employed in accordance with MBAI QA 06. Suppliers' proposed sampling inspection plans, which are not in accordance with QA 06, must be submitted with a detailed written description to MBAI for review and approval. Sampling plans used by the supplier shall provide the confidence and quality level appropriate for the supplier's equipment.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.5.4 Completed item Inspection and Testing

The supplier's QMS shall ensure that there is a documented system for final inspection and test of completed articles before acceptance by MBAI. The degree, duration and number of such final tests performed on each article shall be sufficient to provide a measure of the overall quality of the completed article. Testing shall be performed so that it simulates, to the highest degree practicable, product end use and functional requirements. The supplier's quality program shall encompass re-inspection and testing of any function affected by modifications, repairs or replacements accomplished after completion of final tests and inspection.

6.5.5 Identification

The supplier shall maintain a system for identifying the inspection status of products during the manufacturing process.

6.6 Quality Assurance Records

The supplier shall generate and maintain records as required by this specification and shall maintain these records indefinitely. All records shall be made available upon request to MBAI, prime contractor or Government Representative. Records shall provide evidence that the required inspection and tests have been performed, including part, component or system identification, inspection or test involved, number of items accepted or rejected. The records shall be suitable in format, accuracy, and completeness to permit analysis. Where numerical results are required, the actual value obtained shall be recorded. Where tape, film or other media are required, they shall be identified with the characteristics measured (e.g., RT film). Where defective or non-conforming material is involved, the records shall include the result of analysis and corrective action taken. The supplier shall require compliance with this requirement by his sub-suppliers. If the supplier intends to dispose of records, MBAI shall be informed prior to disposal and records shall be transferred in appropriate format to MBAI.

6.7 Non-Conforming Items

6.7.1 The supplier shall inform MBAI of any non-conforming processes or products and obtain approval on any MBA designed product before disposition. (Refer to section 6.7.6)

6.7.2 The supplier shall maintain an effective system for the segregation, identification, and control of non-conforming items. This system shall prevent its unauthorized use, shipment or intermingling with conforming items.

6.7.3 The supplier shall ensure that non-conforming items of Martin-Baker design are not delivered to the buyer or any other consignee without authorization (refer to section 6.7.6).

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.7.4 Suppliers may perform a material review without written authorization on items of their own design, subject to the requirements of section 6.7.5.

6.7.5 Supplier procedures shall provide the following:

6.7.5.1 Non-conforming materials shall be properly identified and diverted from normal production flow by segregation in holding areas or by special labelling, tagging or other suitable means for suspending further manufacturing. If size configuration allows, the non-conforming material shall be moved from inspection or production area to a controlled area designated for storage of non-conforming material.

6.7.5.2 Material Review Board action shall not be taken if the non-conformance adversely affects safety, reliability, weight, performance or interchangeability of parts or assemblies.

6.7.5.3 Adequate records of material review decisions and corrective action on non-conforming materials shall be maintained by the supplier.

6.7.5.4 The supplier shall ensure that the responsibilities for non-conforming materials extend to lower tier suppliers.

6.7.5.5 MBAI reserves the right to review, approve or reject the decision of the supplier's Material Review Board.

6.7.6 Suppliers shall submit their requests for material review action to their MBAI Purchasing contact. Each application shall be allocated an individual serial number which shall be stated on all quality assurance documentation relating to the non-conforming items.

6.8 Preservation, Packing and Handling

6.8.1 In performance of the contract, the supplier shall provide necessary protection of all articles to prevent damage, loss, deterioration, degradation, and substitution.

6.8.2 Articles which are required to be stored at the supplier's, shall be protected against deterioration and damage. Means shall be provided for safety, preventative maintenance, and periodic inspection.

6.9 Process Control

6.9.1 The supplier shall establish and maintain an effective system for monitoring all processing operations. This system shall include but not necessarily be limited to the following:

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.9.1.1 Establish methods and procedures for the control of all metallurgical, chemical and or other special manufacturing or inspection process which have an effect upon the quality and life of the product.

6.9.1.2 Continually monitor their processes and system to verify the adequacy of processes materials, solutions, equipment, and their associated control parameters.

6.9.2 Process control shall include:

6.9.2.1 Identification of process chemicals.

6.9.2.2 Periodic monitoring requirements for solutions and equipment.

6.9.2.3 Objective evidence of compliance.

6.9.3 Supplier's methods and procedures used to maintain controls and objective evidence of control over such processes, including environmental and contamination control, shall be in accordance with applicable specifications.

6.9.4 The supplier's special processes, such as x-ray, penetrant, magnetic particle, ultrasonic, heat treatment, plating etc., including the equipment and operating personnel shall be subject to approval and certification in accordance with applicable specifications.

6.10 Segregation Control

A supplier manufacturing both commercial and government contract products shall maintain a standard quality system for all products or positive segregation controls over government work.

6.11 Chemical Obsolescence

It is mandatory that each supplier pro-actively lists, reviews with necessary external parties and advises MBAI at the earliest point possible of any future chemical obsolescence used directly or in-directly for the production of Martin-Baker products. Such reviews will be carried out periodically as required so as not to delay a timely notice to MBAI. Chemical Obsolescence form QAF 744 is available upon request from MBAI purchasing. This requirement will be cascaded down to the supply chain. This requirement is essential in allowing for a time period for re-qualification testing of suitable alternatives.

6.12 Foreign Object Damage (FOD) Protection

The supplier will implement a FOD procedure in accordance with AS9146 with the aim of prevention of FOD damage to products being developed, manufactured, assembled, operated, repaired, modified, refurbished, maintained, or handled for MBAI. The procedure will also meet the requirements of AS9100 Revision D 8.1.a, 8.5.1.o, and 8.5.4.b.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

6.13 Prevention of Counterfeit Parts

The supplier will implement procedures to prevent counterfeit or suspect counterfeit part use in line with the requirements of AS9100 Revision D 8.1.4

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

7.0 QUALITY ASSURANCE

7.1 Corrective Action

7.1.1 The supplier shall take action to eliminate the causes of non-conformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the non-conformities encountered.

The supplier shall have a documented procedure to define requirements for:

7.1.1.1 Reviewing non-conformities (including customer complaints).

7.1.1.2 Implementing containment action to prevent further processing and delivery of non-conforming product.

7.1.1.3 Determining the root causes of non-conformities.

7.1.1.4 Evaluating the need for action to ensure that non-conformities do not recur.

7.1.1.5 Determining and implementing action needed.

7.1.1.6 Records of the results of action taken.

7.1.1.7 Reviewing the effectiveness of the corrective action taken.

7.1.1.8 Flowing down corrective action requirements to a sub-supplier when it is determined that the sub-supplier is responsible for the non-conformity.

7.1.1.9 Specific actions where timely and/or effective corrective actions are not achieved.

7.1.1.10 Determining if additional non-conforming product exists based on the causes of the nonconformities and taking further action when required.

7.2 Supplier shall show evidence that consideration is given to results of analysis, evaluation, and management review to identify opportunities for continual improvement and shall be able to demonstrate the continual improvement of the quality management system.

7.3 Where MBAI issues a Corrective Action Report (CAR) form to the supplier, all actions shall be documented on the form. Submission dates are normally 30 days for medium severity but can vary dependent upon the severity status highlighted on the first page of the form. Your MBAI Supplier Quality Engineer can advise the due date.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

7.4 Containment actions shall be implemented, documented, and reported back to MBAI in a timely manner.

7.5 Where a supplier contests liability of a CAR, supporting objective evidence shall be documented on the CAR and submitted to MBAI for review within 30 days.

7.6 All corrective actions shall be documented, and records of such action shall be available for review upon request by MBAI or customer representative.

7.7 MBAI Supplied Material (Free Issue)

7.7.1 The supplier shall inspect MBAI supplied materials upon receipt to the extent practical to detect in-transit damage and to determine that the material is that which is specified on the engineering drawing, that it is complete and of the correct type, color, size or grade. Periodic inspections shall be conducted to determine that the quality is maintained that storage conditions are adequate and that damage or deterioration has not occurred in handling or storage. Unless otherwise specified, functional tests shall be performed prior to further processing or installation to determine operational integrity.

7.7.2 The supplier shall advise the buyer of any MBAI supplied materials found damaged, malfunctioning, or unsuitable for its intended use.

Martin-Baker America, Inc.
QUALITY ASSURANCE REQUIREMENTS

8.0 OVERVIEW OF MBAI QUALITY SCORECARD

8.1 The supplier shall regularly review the Quality Weighting data issued monthly by MBAI to ensure actions are in place to address issues and improve their Q Weighting score. Should the supplier disagree with any of the data presented, MBAI Supplier Quality Engineer is to be contacted for resolution.

The maximum monthly achievable figure is 100 points. This comprises 20 points maximum for five categories with deductions for quality related issues. The categories and scoring for such deductions and a breakdown of the Q Weighting score calculation is provided below.

The confirmed data is one month in arrears to allow for timely return of any outstanding CARs

Q Weighting Score System					
Points	QW # of Notifications	QW Late CA's	QW Doc Issues	QW Complaint Qty %	QW Return Rate %
20	0	0	0	< 5.00	< 3.00
15	1 - 2	1	1	5.00 - 14.99	3.00 - 7.99
10	3 - 5	2	2	15.00 - 24.99	8.00 - 14.99
5	6 - 9	3	3	25.00 - 39.99	15.00 - 24.99
0	> 10	> 4	> 4	> 40.00	> 25.00

**All changes to this document are noted with a vertical bar in the left-side margin*