



Supplier Requirements Manual

MM03

Conformance to this manual is a requirement for all of MERRILL suppliers & subcontractors, unless otherwise specified on the purchase orders.

Table of Contents

1 Scope and Purpose

- 1.1 Scope
- 1.2 Purpose

2 Approved Supplier List

3 Quality

- 3.1 Change Control
- 3.2 Non-Conforming Product
- 3.3 Unauthorized Repair or Substitution
- 3.4 Corrective Actions
- 3.5 Inspection, Measurement and Test Equipment
- 3.6 Order of Precedence
- 3.7 Traceability
- 3.8 Handling, Packaging and Preservation
- 3.9 Standards and Specifications
- 3.10 Models
- 3.11 Retention of Records
- 3.12 Counterfeit Prevention
- 3.13 Conflict Materials
- 3.14 Ethics and Compliance Program
- 3.15 Product Safety

4 Purchase Orders

- 4.1 Cancellation Clause
- 4.2 Purchase Order Acceptance

5 Delivery

- 5.1 Window Times
- 5.2 Advance Shipment Notification
- 5.3 Shipping Documents
- 5.4 Certifications
- 5.5 Drop Shipments

- 5.6 Late Shipments
- 5.7 Premium Freight

6 Technical Satisfaction

- 6.1 Continuous Improvement
- 6.2 Corrective / Preventative Action
- 6.3 Source Inspection

7 Supplier Performance Scorecard

- 7.1 Quality
- 7.2 Delivery
- 7.3 Overall Rating
- 7.4 Supplier Probation

8 Purchase Order Quality Requirements

- 8.1 Certificate of Conformance (COC)
- 8.2 COTS Certificate of Conformance
- 8.3 Material Certification
- 8.4 [Special Processes](#) / Process Certification
- 8.5 Supplier Inspection Reports
- 8.6 Inspection Reports Required for Key Characteristics
- 8.7 Sampling Inspection
- 8.8 First Article Inspection Report (FAIR)
- 8.9 Weld Procedure Approval
- 8.10 PPAP
- 8.11 Process Capability
- 8.12 Source Inspection

9 Revision History

1. Scope and Purpose

1.1. Scope

This manual defines the requirements for all suppliers and sub-contractors to Merrill Technologies Group (MERRILL*) and all of its subsidiaries. Suppliers and subcontractors for both products and services are included in the scope. This manual supplements and expands on the requirements described in purchase orders. All approved Suppliers, as determined and documented by the MERRILL Purchasing Department, are expected to meet all requirements herein. NOTE: All suppliers and subcontractors of products and services will henceforth be referred to as “Suppliers” in this manual. All other non-approved Suppliers are expected to meet the requirements of their purchase orders and any specific sections of this manual indicated on purchase orders.

*NOTE: MERRILL, as stated throughout this manual, refers to MERRILL Technologies Group, or any of its subsidiaries, formerly known as, Merrill Aviation and Defense, Merrill Engineering & Integration, Merrill Fabricators, and Merrill Tool & Machine.

1.2. Purpose

The purpose of this manual is to clearly communicate the responsibilities of both Suppliers and MERRILL personnel, to reduce confusion and misunderstandings, and to ensure the on-time delivery of products and services that meet the MERRILL requirements the first time, with minimal added costs.

2. Approved Suppliers List (ASL)

MERRILL maintains a list of approved Suppliers and customer mandated Suppliers. An approved Supplier is one that provides a significant amount of business to MERRILL and is important to ensuring MERRILL customer quality and delivery performance. If the Supplier is on the ASL, they are required to meet stricter standards as defined by MERRILL.

3. Quality

The following requirements apply to all purchase orders whether or not they are specifically stated on the MERRILL Purchase Order.

3.1 Change Control

The Supplier is required to notify MERRILL of any changes within the approved supply chain at all tiers and all levels. Only authorized and approved subcontractors may be utilized that meet all local, state, federal, and customer requirements. This included key characteristics where required. (Supporting documentation required).

MERRILL notification is mandatory regarding changes in the subcontractor's product and/or process. Proper approval must be obtained prior to making any planned changes. (Supporting documentation required).

Upon successful completion of a purchase order for a particular product or services, MERRILL may issue repeat orders for the same product or services. The Supplier may not make any changes to materials, subcontractors, manufacturing methods, processing, equipment, etc. from those approved on previous orders without written direction to do so from an authorized MERRILL representative.

3.2 Non-Conforming Product

If product is found to be non-conforming prior to delivery, it is the responsibility of the Supplier to notify the MERRILL Quality and/or Purchasing Contact. Do not ship non-conforming product without prior authorization of a Quality or Purchasing Representative.

All non-conforming product that has been authorized to ship by the MERRILL Facility must be clearly identified as such. This is commonly done with the use of the product being identified with red tags or by a similar means.

It is NOT acceptable to identify the product by writing on it with paint pens or permanent markers unless authorized by a MERRILL representative.

3.3 Unauthorized Repair or Substitution

The Supplier shall not deviate from the intent of the Purchase Order Requirements, drawing (Print) requirements, and other associated standards and specifications without authorization of a MERRILL Quality or Purchasing Representative. This includes welding, plugging, using threaded inserts, supplying comparable / substitute material, components, etc.

This requirement must be flowed down to any work subcontracted by the Supplier. (See Change Control)

3.4 Corrective Actions

In the event that the Supplier fails to meet purchase order or drawing requirements, MERRILL may request that the Supplier complete a formal corrective action. This request may be accomplished through the use of any suitable equivalent format. It is the expectation that the containment response be completed in less than 24 hours from receipt, and that the final response is completed within 14 days from date the corrective action was issued. An extension to the 14 days may be granted from the MERRILL Supply Chain Group. The request must be made in writing.

MERRILL reserves the right to take appropriate actions required to mitigate the impact of the non-conformances to our customers. Reasonable costs for these actions may be assessed against the supplier.

Suppliers shall use the MERRILL Corrective Action Report (MF0703), or equivalent, for all responses.

3.5 Inspection, Measurement, and Test Equipment

The Supplier is expected to provide all necessary inspection, measurement, and/or test equipment required to adequately assess the conformance of the product and/or process. The Supplier is expected to periodically review any such equipment for continuing adequacy. Equipment should have a sufficient measurement range to measure the products produced. Equipment should have accuracy of 10% of tolerance unless otherwise specified by MERRILL Quality Department, and be Calibrated and traceable to international or national measurement standards.

(Supplier must have Personnel with the knowledge and skills to perform the required inspections, read blueprints, interpret GDT and understand the applicable specifications).

When unique equipment is required, it is the responsibility of the Supplier to acquire this equipment unless specifically stated otherwise in the Purchase Order.

Supplier is expected to maintain a system for validating the ongoing conformance of the product they produce and to the requirements of the purchase order, drawings and all associated specifications. Records of these validations will be retained and will be available for review by MERRILL employees.

3.6 Order of Precedence

The order of precedence for the Scope of Work, and when data does not match, is located within the MERRILL Terms and Conditions, which can be found at: <http://www.merrilltg.com/termsandconditions/>.

3.7 Traceability

All products and services covered under a MERRILL Purchase Order require traceability back to the source materials and services. The Supplier shall have an effective system in place to retain and retrieve all quality records that apply to the Purchase Order within a reasonable amount of time from date of request. (Typically, no greater than 72 hours from time of request).

Raw materials delivered to MERRILL must be positively identified with Material Type, Heat#, and/or Lot#.

Those items that cannot have markings physically applied shall be packaged and the package label with all markings required. All items in the package must be from the same homogenous lot.

Transfer of ownership through the supply chain is required to verify that traceability is maintained.

3.8 Handling, Packaging, and Preservation

The Supplier shall take all reasonable precautions to ensure that product arrives at MERRILL without damage due to handling, transportation, etc. Product shall arrive free from any corrosion and shall have the ability to be stored for reasonable periods of time without special handling by MERRILL to prevent degradation. (This includes rust).

Materials and goods supplied by MERRILL to the Supplier must be handled appropriately to avoid damage. It is the responsibility of the Supplier to immediately notify MERRILL upon the receipt of damaged materials or goods.

3.9 Standards and Specifications

It is the responsibility of the Supplier to understand and utilize the latest Revision of all standards and specifications required in the Purchase Order and drawings. This includes the verification and use of superseding Standards or Specifications.

3.10 Models

When the Supplier is provided with models, the data may be consulted to resolve missing dimensions on blueprints. Conflicts between blueprint and models should be reported to a MERRILL representative for resolution immediately upon identification of the conflicting data. Unless otherwise indicated on the Purchase Order, prints are master.

3.11 Retention of Records

Supplier is required to maintain inspection and/or test records and documentation for supplied product. Documents must be maintained for a minimum of 7 years unless otherwise specified on the purchase order. These records shall be available for review/audit by MERRILL upon request.

3.12 Counterfeit Prevention

Suppliers shall establish and maintain a Counterfeit Parts / Material Prevention Plan to ensure that counterfeit work is not delivered to MERRILL.

Definitions of counterfeit parts may include but not limited to; unauthorized copies or Substitutes of an Original Equipment Manufacturer (OEM) or Original Component Manufacturer (OCM), parts that are not traceable to an OEM sufficient to ensure authenticity in OEM design and manufacture, parts that do not contain proper external or internal materials or components required by the OEM and are not constructed in accordance with OEM design, parts that have been re-worked, re-marked, re-labeled, repaired, refurbished but are represented as OEM authentic or as new or parts that have not successfully passed all OEM required testing, verification, screening, and quality control processes.

The supplier warrants that counterfeit items shall not be supplied to the purchaser or in the purchaser's products by the supplier and that only new, unused, authentic, genuine and legitimate items shall be provided. The supplier shall maintain a method of traceability that ensures tracking of the supply chain back to the manufacturer of all Items included in the products being supplied.

If the supplier is providing electronic components, assemblies, or equipment containing electronics of any type, it is required that materials comply with the requirements of DFARs 252.246-7007 Contractor Counterfeit Electronic Part Detection and Avoidance System as well as DFARs 252.246-7008 Source of Electronic Parts. The supplier shall include the substance of this clause in all subcontracts, including subcontracts for commercial items that are for electronic parts or assemblies containing electronic parts, unless the subcontractor is the original manufacturer.

3.13 Conflict Minerals

In the Democratic Republic of Congo (DRC) and neighboring countries, conflict minerals (Tin, Tantalum, Tungsten and Gold) may serve as funding sources from mines that finance militia groups committing human rights abuses.

MERRILL policy is to not purchase conflict minerals, materials or products using metals made from conflict minerals and expects its suppliers and their sub-tier suppliers to acquire minerals only from responsible sources. MERRILL expects our suppliers to have in place policies and due diligence measures that will enable us to reasonably assure that products and components supplied to us containing conflicted minerals are DRC conflict free.

3.14 Ethics and Compliance Program

Supplier acknowledges and accepts full and sole responsibility to maintain an ethics and compliance program appropriate for its business through the performance of this Order. MERRILL strongly encourages supplier to model its program in accordance with the Federal Sentencing Guidelines, applicable guidance from enforcement authorities, FAR 52.203-13 Contractor Code of Business Ethics and Conduct, and industry best practices. Supplier shall publicize to its employees who are engaged in the performance of work under

the Order that they may report any concerns of misconduct by MERRILL or any its employees or agents to an authorized MERRILL Procurement Representative. Supplier shall convey the substance of this clause to its subcontractors.

3.15 Product Safety

Supplier acknowledges and accepts full responsibility for its processes and agrees to manage all Products during their entire life cycle within the scope of the contract. Supplier agrees to deliver all Product in a state of configuration in which the Product conforms to specified requirements and is able to perform to the designed or intended purpose without causing unacceptable risk or damage to the Product. The Supplier shall plan, implement, and control its processes as needed to assure product safety as appropriate to the organization and the Product (s) and or services being provided to MERRILL.

4. Purchase Orders

4.1 Cancellation Clause

Cancellation of PO's clauses can be located within the MERRILL Terms and Conditions, which can be found at:
<http://www.merrilltg.com/termsandconditions/>.

4.2 Purchase Order Acceptance

The supplier understands that acceptance of any MERRILL purchase order is validation of its agreement to abide by all applicable requirements for the duration of the contract (Purchase Order).

Full Purchase Order Acceptance provisions can be found the MERRILL Terms and Conditions, which can be found at:
<http://www.merrilltg.com/termsandconditions/>.

5. Delivery

Delivery of product is expected to occur 100% of the time on the exact calendar date specified on the Purchase Order. Any deviations from schedule must be discussed with a qualified MERRILL representative prior to the scheduled delivery date.

The following requirements also apply to all shipments unless specifically waived by a qualified MERRILL representative.

5.1 Delivery Times

MERRILL does not require that shipments be delivered within a certain period of time on the delivery date. Shipments will be accepted between the hours of 7:00 AM and 3:30 PM on non-holiday weekdays. Other delivery times can be arranged by a qualified MERRILL representative when there is an urgent need.

5.2 Advance Shipment Notification

MERRILL requires advance notification of shipment (ASN) on all shipments of productive items. The ASN can be sent to your MERRILL Purchasing agent via email or fax. Verbal notification by telephone will be accepted if circumstances require. At a minimum, the ASN shall include:

1. Delivery Date
2. Purchase Order number
3. Carrier Name
4. Progressive (PRO) Number (or other tracking number)
5. Line Item number(s)

5.3 Shipping Documents

MERRILL requires that each shipment be accompanied by an appropriate shipping record such as a Shipper or Packing List. At a minimum, this document shall include:

1. Supplier Name
2. Purchase Order number
3. Line Item number(s)
4. MERRILL Job Number (If given on PO)
5. Ship To information
6. Bill To information
7. Quantity
8. Description

5.4 Certifications

When required by the Purchase Order, hard copies of material and/or product certifications are required to accompany each shipment and/or line item. Certifications may also be provided electronically by previous arrangement with a qualified MERRILL representative.

5.5 Drop Shipments

In some cases, MERRILL will require drop shipments to other MERRILL facilities. When this is the case, it will be indicated on the Purchase Order. Other drop

shipments of any kind are permitted only in extreme circumstances. These drop shipments must be approved in advance by an authorized MERRILL representative.

5.6 Late Shipments

When it becomes known to the Supplier that a shipment will not be delivered on time, the MERRILL Purchasing agent must be notified immediately.

5.7 Premium Freight

All premium freight charges are the responsibility of the Supplier unless the use of premium freight is requested by an authorized MERRILL representative.

6. Technical Satisfaction

In order to provide our customers with the highest quality product with the most value, MERRILL works jointly with Suppliers to continuously improve our products and processes. Suppliers are expected to participate in these efforts in a timely manner.

6.1 Continuous Improvement

The Supplier may be requested to participate in various types of activities that encourage continuous improvement, including but not limited to:

1. Sample Material Trials
2. Designed Experimentation
3. Continuous Improvement Workshops
4. Layered Audits
5. 5S Activities
6. Six Sigma projects

6.2 Corrective / Preventive Action

On some occasions, the Supplier may be called upon to assist with closure of action items as a result of correction and/or prevention of discrepancies noted by our customers. The Supplier is expected to actively participate in these activities in a timely manner. Some examples of these actions are:

1. Increased sample size and/or frequency
2. Additional inspections and/or testing
3. Product serialization
4. Intensified Internal Audits
5. Statistical Process Control

6.3 Source Inspection

MERRILL must be able to completely rely on the quality and timeliness of the products and processes provided by its Suppliers. It is the responsibility of the Supplier to ensure that this is possible.

In the event that the Supplier demonstrates through repeated quality and/ or delivery issues that it is not capable of ensuring 100% on time and usable parts, the Supplier may be placed on “Source Inspection” status. This means that an MERRILL designate will be sent to the Supplier site at Supplier’s expense to review and approve product prior to shipment.

In the event that “Source Inspection” status results in the discovery of repeat issues, the Supplier may be placed on “Third Party Inspection” status. This means that MERRILL will hire a qualified third party at Supplier’s expense to review and approve product prior to its arrival at MERRILL.

7. Supplier Performance Scorecard

The following scoring guidelines will be used to measure MERRILL Supplier performance. The ratings will be compiled and published for Supplier review on at least a quarterly basis by Supplier Quality Assurance.

MERRILL will use this list for the purpose of identifying those Suppliers that need improvement while also rewarding exceptional Suppliers. The ratings shall apply to all Approved Suppliers and may apply to all other Suppliers.

7.1 Quality

The Supplier will be measured based on the number of units that are received and approved in relation to the total number of units received. The Supplier Quality Rating will be listed as a percentage of acceptable units. A higher number represents a better score.

7.2 Delivery

The Supplier Delivery Rating will be measured based on the number of purchase order line item releases that are received at MERRILL by the scheduled dock date in relation to the total number of purchase order line item releases by MERRILL. A higher number represents a better score.

7.3 Overall Rating

The Supplier's overall rating is the arithmetic sum of all of the Supplier's receipts for the previous 12 months including all MERRILL subsidiaries. There will be an overall Quality Rating and an overall Delivery Rating for each Supplier.

The Supplier's overall rating will be considered strongly when awarding new business, with preference given to those Suppliers with higher overall ratings. Priority for Supplier improvement activities will be given to those Suppliers with unacceptable ratings. MERRILL may terminate any long term contracts with Supplier's who continue to have unacceptable ratings.

7.4 Supplier Probation

Any Supplier with excessive or continual quality and/or delivery issues may be subject to Probation. If placed on probation the following process may be followed:

1. MERRILL will assist in drafting the Supplier's development plan
2. Meeting held with Supplier to discuss development plan criteria
3. Supplier plan to meet agreed upon development criteria, with milestone dates, due to MERRILL within 30 days
4. Supplier must meet all dates of milestones and completely address entire development plan
5. No quality or delivery issues while on probation

Once the Supplier completes all steps of the probation process and meets all Milestones on their development plan and those have been verified at the supplier location, the Supplier will then be placed back on the approved Supplier list.

8. Purchase Order Quality Requirements

The following requirements apply when they are specified on MERRILL Purchase Orders.

8.1 Certificate of Conformance (COC)

Supplier will provide a COC with each shipment that specifically states that all parts produced to fulfill a specific MERRILL purchase order meet the drawing AND purchase order requirements. This certificate must indicate the purchase order and line items, part numbers, part names, drawing revisions, and quantities of each part. The certificate must be signed and dated by an authorized Quality representative with the name and title legibly printed.

Certificate of Conformance must state with assurance that the product does not contain functional mercury in any form, and no Mercury-bearing instruments or equipment have been used in the manufacture, fabrication, assembly, or testing of this product.

Certificates of Conformance are not to be taken lightly. They are a signed statement of adherence to all MERRILL Purchase Order and Drawing Requirements.

A sample Certificate of Conformance is available upon Request.

8.2 COTS Certificate of Conformance (COTS = Commercial Off The Shelf)

Supplier shall supply a Bill of Lading (can also be called Packing List, Packing Slip, Shipping Ticket, etc...) that includes the following:

1. Date
2. Name of the Supplier
3. Part Number of the product
4. Quantity of product
5. Statement of Conformance to Purchase Order, Drawing, or Part Number requirements
6. Signature of authorized Supplier representative
7. MERRILL Purchase Order Number

8.3 Material Certification

The Supplier shall provide Material Certification that consists of 2 basic documents; the Bill of Lading (also called Packing List, Packing Slip, Shipping Ticket, etc...), and the Mill Test Report (MTR). The Bill of Lading links the delivered material to the MTR through our Purchase Order number * and the Material Heat Number.

All Material Certification documents must be legible!

A. The Bill of Lading must include the items referenced in section 5.3 of this document and shall include the following:

1. Date
2. Name of the Supplier
3. MERRILL Purchase Order Number *
4. Heat or Melt lot number of the Material being delivered
5. Material Specification
6. Material Size
7. Material Quantity

**Note: When a Machining Vendor is also supplying the Material, the Bill of Lading must indicate their Name and their Order Number.*

- B. The Mill Test Report must include the following:
1. Name of the Mill or Testing facility
 2. A Statement of Conformance to the Material Specification as stated on MERRILL Purchase Order or Drawing.
 3. Heat Number (Melt Number, Lot Number, etc...)
 4. Chemical Composition test results.
 5. Actual Mechanical Property test results as required by the Material Specification or our Purchase Order.
 6. Results of any Nondestructive Testing or Inspection as required by the Material
 7. Country of Origin (Country of original Melt).
 8. Statements of Compliance to applicable Hazardous Material restrictions (Lead, Mercury, Cadmium, Hexavalent Chrome, etc...).
 9. Signature of a Quality Representative.

8.4 **Special Processes / Process Certification**

Special processes are defined as a process that produces outputs which cannot be fully verified on a part by part basis prior to shipment to MERRILL.

Supplier must provide a Certificate of Conformance / Certificate of Test for all Processing , *Special Processes* or Testing performed by them, or for them on MERRILL Parts.

Processing / Testing Certification

1. Heat Treatments
2. Coatings
3. Treatments
4. Painting
5. Conversions
6. Plating
7. Shot Peen
8. Nondestructive Testing / Nondestructive Examination (NDT / NDE)
9. Destructive Testing
10. Acceptance / Performance Testing
11. Assembly
12. Welding *including Brazing*

The most recent revision of the appropriate Processing / Testing specification must be recorded on the certification unless a previous revision is stated on the PO.

Special Processes / Process Certifications shall contain the following information:

- MERRILL Purchase Order
- Part number, Serial and/or lot numbers of material processed

- Process specification and revision
- Objective evidence demonstrating compliance with applicable process
- Certification stating the process was performed per the applicable drawing/specification with date and signature of authorized representative
- Name and address of entity that performed the process

8.5 Supplier Inspection Report

The Supplier is required to provide Inspection Reports with each shipment of product for 100% of the parts supplied.

The following items must be included on the Inspection Report

1. All features with Geometrical tolerances of .010" (0.26mm) and less.
2. All features with General tolerances of .010" (0.26mm) TOTAL Tolerance or Less.
3. All Surface Finishes of 64 micro inch (1.6 micrometers) and less.
4. All Surface Finishes that indicates a range (i.e. 64 -125 micro inch)
5. All Threaded hole sizes (acceptance per certified Go / No Go gages)
6. All Threaded hole depths (include "thru" as a depth).
7. Location of the above features per Sheet & Zone, or by a road-mapped Drawing.

Inspection Reports must also include the following information:

1. Suppliers Name
2. MERRILL Purchase Order Number
3. Part Number
4. Revision Level
5. Part Name
6. Signature of Supplier Quality Representative
7. Date

Dimensional Requirements including Tolerances must be listed. Corresponding measurement or test results must be recorded. Any measurement that falls out of the tolerance range must be starred (*). See section 3.2 for nonconforming product.

A sample Inspection Report is available upon request

8.6 Key Feature Inspection Report

Supplier will inspect and provide reports for all Key Features as indicated on the drawing or in the purchase order for 100% of the parts supplied.

8.7 Sampling Inspection

MERRILL requires that the Supplier inspect parts to the MERRILL Supplier Sampling Table found in Appendix A of this manual.

The default index value is 1.0. As appropriate specific index values may be indicated on the purchase order.

Acceptance criteria: Accept the lot if all samples are conforming.

8.8 First Article Inspection Report (FAIR)

The Supplier must submit the following Document Package with the first shipment of parts to demonstrate that the product meets all dimensional and noted requirements.

1. Road-mapped drawing(s) (each characteristic and note is identified with an individual number)
2. Inspection Report accounting for all Road-mapped characteristics on one part.
3. Material Certifications (if applicable)
4. Process Certifications (if applicable)
5. Test results (if applicable)
6. COTS Certificates (if applicable)
7. Part must be tagged, or otherwise identified, as the "First Article" for shipment to MERRILL.

A sample of a First Article Inspection Form can be provided upon request.

A sample of a First Article Tag can be provided upon request.

8.9 Weld Procedure Approval

The Supplier is required to submit their Welding Procedure Specification (WPS), and Procedure Qualification Record (PQR) for approval prior to weldment start-up.

8.10 PPAP

The Supplier is required to complete a full PPAP (Production Product Approval Process) per AIAG requirements. The default PPAP level is Level 3, other levels as applicable will be stated on the purchase order. An approved Warrant must be received from MERRILL Quality prior to the release of any production material.

8.11 Process Capability

Capability studies must be performed and determined to be adequate prior to beginning production. The Supplier shall utilize appropriate statistical controls in order ensure ongoing process capability. An authorized MERRILL representative shall clearly define capability requirements.

8.12 Source Inspection

Product will be inspected at the Supplier's facility by MERRILL personnel. MERRILL must be notified no later than 5 business days in advance of product completion. Product cannot be shipped as complete until Source Inspection at Supplier's Facility has been complete.

8.13 Supplier's external providers

The Supplier may not use external providers without verification of documented customer approval. In the event customer authorization is received, the Supplier must apply appropriate controls to their sub-tier or external providers, to ensure all customer flow down requirements are achieved and verified by the Suppliers Quality Assurance procedures.

9 Revision History

Rev. 0 – dated 2/5/09 – Original Release

Rev. 1 – dated 7/24/09 – Sect. 3.5.1 Received deliverables requirements, added MSDS. Added sect 3.5.2.1 MSDS shall be made available. Added sect 10.1.1.5 – MSDS sheets (as required).

Rev. 2 – dated 01/20/2010 – Sect. 3.9.1 and 4.3.1 removed 121 Appendix & J Air Carrier; added F.A.R 120

Rev. 3 – dated 8/17/2011 Combined MERRILL and Merrill Defense Supplier Manuals

Rev. 4 – dated 12/3/2012 Added MAD quality clauses Q113 thru Q120, added Defense to Aviation, Removed No Process Changes Clause as it is spelled out in section 3.2, added more information to clause Q106 and added successful to 3.2.

Rev. 5 – dated 8/19/13 1.1 added Defense and Ranger to Scope, 3.2 added verbiage from deleted quality clauses, 3.3 added plural to non-conforming products, 3.5 added Merrill reserves the right to appropriate actions to mitigate impact of non-conform. 3.6 added equipment must have accuracy of 10% of tolerance measured and conformable to NIST & added Supplier to maintain system for validating non conformances. 3.7 Added Order of Precedence. 3.11 added "Unless otherwise indicated on PO, Prints or master". 3.12 added Sampling inspection additions including c=0 requirement. Edited Quality Clauses and Appendix A added full sampling plan.

Rev. 6 – dated 7/23/2014 removed Quality Clause numbers – changed to definitions since PO's list the requirements and not the clause numbers.

Rev. 7 – dated 3/18/2015 added section 9

Rev. 8 - dated 12/15/15 revised section 9 and reworded some areas. Also removed original Section 4.

Rev. 9 – dated 1/18/2017 changed wording from “vendor” to “supplier” and removed all reference to the FAA. Also added ASL to Section 2, renamed section 5.1, section 7 on Supplier Rating was completely rewritten.

Rev.10 – dated 8/8/2017 – added # 7 to Section 8.2 to show the MERRILL Purchase Order Number on the COTS Certificate of Conformance.

Rev. 11 – dated 4/9/2018 – added section 8.13 which pertains to the Suppliers use of external providers

Rev. 12 – dated 5/7/2018 – added sections 3.14 and 3.15 for Ethics and Compliance Program and Product Safety.

Rev. 13 – dated 5/24/2018 – in 8.8 #7 was added stating the tagging of “First Article” parts and it was added that a sample of such tag could be provided. Paragraph was removed about the option of a FAIR requirement being waived. Also specified one part in #2.

Rev. 14 – date 7/6/2018 – in 8.3 asterisk was added to Purchase Order number, #3 under A and the Note after #7 in section A.

Rev. 15 – Date 10/15/19 – in 3.6 referred to MERRILL Terms and Conditions for order of precedence, in 3.7 added positive traceability, in section 4.1 and 4.2 referred to MERRILL Terms and Conditions, Section 7 renamed from Supplier Rating to Supplier Performance Scorecard in 8.1 COC must include mercury prohibition, and various other minor updates.

Rev. 16 – Date 3/1/2022 – Updated Section 8.4 to include definition of Special Process and defined what is need on process certifications

APPENDIX A

MERRILL

Vendor Sampling Table

If not specified by PO, the default Index Level is 1.0

LOT SIZE	INDEX VALUE (IV)										
	0.1	0.15	0.25	0.4	0.65	1.0	1.5	2.5	4.0	6.5	10
	SAMPLE SIZE										
2 - 8	All	All	All	All	All	All	All	5	3	3	3
9 - 15	All	All	All	All	All	13	8	5	3	3	3
16 - 25	All	All	All	All	20	13	8	5	3	3	3
26 - 50	All	All	All	32	20	13	8	7	7	5	3
51 - 90	All	80	50	32	20	13	13	11	8	5	4
91 - 150	125	80	50	32	20	19	19	11	9	6	5
151 - 280	125	80	50	32	29	29	19	13	10	7	6
281 - 500	125	80	50	48	47	29	21	16	11	9	7
501 - 1200	125	80	75	73	47	34	27	19	15	11	8
1201 - 3200	125	120	116	73	53	42	35	23	18	13	9
3201 - 10,000	192	189	116	86	68	50	38	29	22	15	9

To determine the sample size, select the row based on the lot size, select the column based on the required Index Value. Randomly select and inspect the required number of samples. If any non-conformances are found reject the lot and 100% sort all parts.