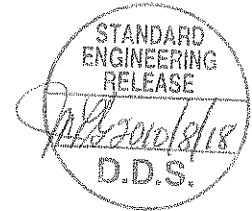




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SUPPLIER QUALITY REQUIREMENTS

TEAC / Goodrich SIS Digital Data Systems MANUAL



CAGE CODE 3SDT5

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DOCUMENT NUMBER 96039801-005
REVISION C
CREATION DATE September 12, 2006

Table with 4 columns: Department Title, Name / Authority, Signature, Date. Rows include President/Chief Operating Officer, Materiel Manager, Quality Assurance Manager/AS9100 Representative, Manufacturing Manager, and Contracts Manager.

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Page 2
20-May-10
Revision C

TABLE OF CONTENTS

1.	INTRODUCTION	5
1.1.	SCOPE	5
2.	DEFINITIONS	7
2.1.	REFERENCES	7
3.	REQUIREMENTS BY PRODUCT TYPE	9
4.	REQUIREMENTS	15
4.1.	GOODRICH CORPORATION PORTAL – AEROVANTIX.....	15
4.1.1.	Bar coding of products delivered to TEAC Aerospace Technologies	15
4.2.	SPECIALTY METALS COMPLIANCE - DFAR 252.225-7014.....	15
4.3.	DIRECTORATE OF DEFENSE TRADE CONTROLS (DDTC) REGISTRATION	15
4.4.	DESIGN CONTROL AND NOTIFICATION OF CHANGES	16
4.4.1.	Design Control.....	16
4.4.2.	Notification of Changes	16
4.5.	SUPPLIER PURCHASING AND SUB-CONTRACTING.....	16
4.5.1.	Certification of materials purchased by Goodrich suppliers	17
4.5.2.	NADCAP Waiver Process	17
4.6.	PRODUCT IDENTIFICATION.....	17
4.7.	ELECTRONIC PART AND CIRCUIT CARD ASSEMBLY MANUFACTURE AND INSPECTION.....	18
4.8.	TEST RECORDS	18
4.8.1.	Supplier Acceptance/Functional/Qualification/Environmental Test (ATP/FTP/QUAL//EMI/ESS) Records	18
4.8.2.	Requirements: Acceptance/Functional /Qualification/Environmental Test (ATP/FTP/QUAL//EMI/ESS) Record	18
4.9.	DEVIATIONS	18
4.10.	HANDLING, STORAGE, PACKAGING, PRESERVATION, AND DELIVERY	19
4.10.1.	Packaging.....	19
4.10.2.	Delivery Paperwork	20
4.11.	LEAD FREE MATERIALS COMPLIANCE	20
4.12.	APPLICABILITY OF FIRST ARTICLE INSPECTION	20
4.13.	VALIDATION OF WIRING HARNESSSES (A.K.A ELECTRICAL CABLES).....	21
4.14.	VALIDATION OF CIRCUIT CARD ASSEMBLIES (CCA).....	22
4.15.	VALIDATION OF ASSEMBLIES (MECHANICAL OR ELECTRO-MECHANICAL)	23
	Appendix A – Quick Reference Guide	25
	Appendix B – Test Reports Required	27
	Appendix C – TEAC / Goodrich SIS-DDS Supplier Acknowledgement of Compliance	29

RECORD OF REVISIONS

Revision	Change Reason	Date	Author(s)
A	Initial release per ERN 2622	30-Sep-08	T. Cook
B	Revise per CRS T33R533Y	October 08	T. Cook
C	Revise per ECN 6378	20-May-10	R. Stanard/L. Watkins

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Page 4
20-May-10
Revision C

1. INTRODUCTION

TEAC Aerospace Technologies, a wholly owned subsidiary of Goodrich Corporation, is dedicated to providing products and services of high quality and to the satisfaction of its customers. Our supplier's contribution to this effort is key to Goodrich's success.

This document (reference 96039801-005) is specific to this site (TEAC Aerospace Technologies, hereafter referred to as "Goodrich" or "the company") and is a supplement to the Goodrich Sensors and Integrated Systems (Goodrich SIS) document titled "Quality Requirements for Suppliers" (reference SIS MSD 740A.1). These two documents in combination specify the minimum requirements for conducting business with Goodrich, and are the means by which contractual quality assurance requirements of Goodrich customers are flowed to the supplier. Additional specific Goodrich supplier quality requirements may appear on individual purchase orders. It is the responsibility of the supplier to review this document as well as the purchase order to ensure all quality requirements are met.

Questions or comments regarding these requirements should be directed to the Goodrich purchasing agent noted on the purchase order.

1.1. SCOPE

This document together with the Goodrich SIS document titled "Quality Requirements for Suppliers" (reference SIS MSD 740A.1) describes the minimum requirements to be met when supplying Goodrich with products or services. Exceptions to these, or any, Goodrich purchase order requirements must be explicitly approved by Goodrich in writing.

Only those suppliers, who demonstrate and maintain compliance with all applicable Goodrich requirements, will remain approved to receive Goodrich purchase orders.

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Quality
Requirements

Page 5
20-May-10
Revision C

2. DEFINITIONS

Additional definitions may be found in the Goodrich SIS document titled "Quality Requirements for Suppliers" (reference SIS MSD 740A.1).

DDTC – Directorate of Defense Trade Controls

EAR – U.S. Export Administration Regulations.

FAA – Federal Aviation Administration. Government commercial aircraft regulatory safety authority.

ITAR – International Traffic in Arms Regulations.

NADCAP – National Aerospace and Defense Contractors Accreditation Program. The NADCAP organization assesses and approves requesting companies and authorizes them to use the NADCAP mark to indicate that their applicable product, process, or service is in compliance with applicable standards and/or specification.

Shelf Life Material – Material which the manufacturer or Goodrich has determined to have a limited useful life.

Source Inspection – A means by which Goodrich, or a third party, may perform necessary inspections at the supplier (source).

Sub-Tier Supplier – A supplier utilized by Goodrich suppliers. It is synonymous with sub-contract supplier.

2.1. REFERENCES

- a. MSD470A.5 Supplier Nadcap Waiver (Section 4.2.1)
- b. MSD470A.1 Quality Requirements for Suppliers (Section 1, 1.2)
- c. 99937401-001 Bar Coding (Section 4.0 and 4.7)
- d. MDS D002 Lead Free Control Plan (Section 4.8)
- e. MIL-STD-1686 (Section 4.7)
- f. 252.225.7014 DFARS (Section 4.0)
- g. MIL-PRF-16173 (Section 4.7)
- h. ICP-A-610 (Section 4.4)
- i. SAE-AS9102 (Section 4.9)

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Page 8
20-May-10
Revision C

3. REQUIREMENTS BY PRODUCT TYPE

The supplier, to identify all requirements for the Goodrich order, must review both the Goodrich SIS document "Quality Requirements for Suppliers" (reference SIS MSD 740A.1) and this document (reference 96039801-005).

To determine which requirements apply to the supplier by product type, refer to "Table 1- Requirements by product type" below. Requirements that apply to the specified product type are denoted by an "X" or a number. Numbers refer to foot notes found immediately below the table. Where "N/A" is noted, the requirement does not apply to that product type. For delivery documentation requirements, refer to Appendix A "Quick Reference"

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Page 10
20-May-10
Revision C

TABLE 1- Requirements By Product Type

Goodrich specification	1. Circuit Card Assemblies	2. Circuit Card Assemblies (w/ acceptance test)	3. Electrical Harnesses	4. Machined parts	5. Mechanical or Electro-mechanical Assemblies	6. Products manufactured to seller design.	7. Distributor of age or temperature sensitive materials	8. Distributors (all other materials, see 6 at left)	9. Special processes
SIS MSD 740A.1									
Sections 1 through 7 in their entirety	2	2	2	3	1	1	3	2	1
Appendix A- Fixed processes	X	X	X	N/A	N/A	N/A	N/A	N/A	N/A
Appendix B- Key characteristics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Appendix C- FAI Requirement	X	X	X	X	X	N/A	N/A	N/A	N/A
Appendix D- Nonconforming product	X	X	X	X	X	X	X	X	X
Appendix E- Root cause corrective action	X	X	X	X	X	X	X	X	X

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Supplier
Quality
Requirements

Page 11
20-May-10
Revision C

Goodrich specification	1. Circuit Card Assemblies	2. Circuit Card Assemblies (w/ acceptance test)	3. Electrical Harnesses	4. Machined parts	5. Mechanical or Electro-mechanical Assemblies	6. Products manufactured to seller design.	7. Distributor of age or temperature sensitive materials	8. Distributors (all other materials, see 6 at left)	9. Special processes
Appendix F- Nonconformance charge back program	X	X	X	X	X	X	X	X	X
Appendix G- Score cards	X	X	X	X	X	X	X	X	X
Appendix H- Certificates of Conformance/Compliance	X	X	X	X	X	X	X	X	X
Appendix I- Communication and responsibilities	X	X	X	X	X	X	X	X	X
Appendix J- Export/Import compliance	X	X	X	X	X	X	X	X	X
Appendix K- Lot Sampling	X	X	X	X	X	N/A	N/A	N/A	N/A
Appendix L- Goodrich supplied software	4	4	N/A	N/A	N/A	4	N/A	N/A	N/A
Appendix M- Direct Ship authority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Appendix N- Right of entry	X	X	X	X	X	X	X	X	X
Appendix O- Key supplier certification process	5	5	5	5	5	5	5	5	5
Appendix P- Supplier escalation process	X	X	X	X	X	X	X	X	X
Appendix Q- Counterfeit parts prevention	X	X	X	N/A	N/A	X	N/A	X	N/A

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Supplier
Quality
Requirements

Page 12
20-May-10
Revision C

Goodrich specification	1. Circuit Card Assemblies	2. Circuit Card Assemblies (w/ acceptance test)	3. Electrical Harnesses	4. Machined parts	5. Mechanical or Electro-mechanical Assemblies	6. Products manufactured to seller design.	7. Distributor of age or temperature sensitive materials	8. Distributors (all other materials, see 6 at left)	9. Special processes
96039801-005									
4.0- General requirements	X	X	X	X	X	X	X	X	X
4.1- Design control and notification of changes	X	X	X	X	X	X	X	X	X
4.2- Supplier purchasing and sub-contracting	X	X	X	X	X	X	X	X	X
4.3- Product identification	X	X	X	X	X	X	X	X	X
4.4- CCA manufacture and inspection	X	X	X	N/A	N/A	X	N/A	N/A	N/A
4.5- Test records	N/A	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.6- Deviations	X	X	X	X	X	X	X	X	X
4.7- Packaging and delivery	X	X	X	X	X	X	X	X	X
4.8- Lead Free Control Plan	X	X	X	N/A	N/A	N/A	N/A	X	N/A

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Supplier
Quality
Requirements

Page 13
20-May-10
Revision C

Goodrich specification	1. Circuit Card Assemblies	2. Circuit Card Assemblies (w/ acceptance test)	3. Electrical Harnesses	4. Machined parts	5. Mechanical or Electro-mechanical Assemblies	6. Products manufactured to seller design.	7. Distributor of age or temperature sensitive materials	8. Distributors (all other materials, see 6 at left)	9. Special processes
4.9- Applicability of FAI	X	X	X	X	X	N/A	N/A	N/A	N/A
4.10- Validation of harnesses (cable assemblies)	N/A	N/A	X	N/A	N/A	N/A	N/A	N/A	N/A
4.11- Validation of CCAs	X	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.12- Validation of other assemblies	6	6	N/A	N/A	X	N/A	N/A	N/A	N/A

- 1- All sections less 5.9.2.
- 2- All sections less references to age and temperature sensitive materials found in section 5.9.2.
- 3- All sections less references to ESD sensitive materials found in section 5.9.2.
- 4- When software or firmware is provided by Goodrich
- 5- Applies when the supplier is deemed by Goodrich to qualify for the process
- 6- Applies when the supplier assembles both CCAs and higher level assemblies

4. REQUIREMENTS

The supplier shall meet the requirements of the Goodrich purchase order in its entirety. If any second tier subcontract is required it is the supplier's responsibility to ensure that all Goodrich purchase order requirements are cascaded to the sub-tier supplier. The sub-tier may not then further subcontract the purchase order. It is the responsibility of the Goodrich supplier to ensure that the product conforms to all required specifications and to maintain all records of product manufacture and inspection.

Note – Suppliers, as well as Goodrich, must ensure that a Non-Disclosure Agreement (NDA) is in place prior to exchanging technical data with Goodrich, and with sub-tier suppliers as defined by the NDA.

4.1. GOODRICH CORPORATION PORTAL – AEROVANTIX

The supplier must obtain "user access" to, and utilize, the Goodrich Corporation portal Aerovantix (<http://www.aerovantix.com>) to:

- Manage Goodrich orders
- Obtain Goodrich supporting documentation
- Obtain supplier performance reports
- Utilize Aerovantix barcode functionality

4.1.1. Bar coding of products delivered to TEAC Aerospace Technologies

Products manufacture to TEAC drawing must be ship to TEAC in container that are identified with bar codes as described in the document titled "Supplier_ Bar Coded Shipping Label – Preparation and Placement".

Ref. 99937401-001

4.2. SPECIALTY METALS COMPLIANCE - DFAR 252.225-7014

Domestic Specialty Metals requirements delineated in Defense Federal Acquisition Regulation Supplement (DFARS) 252.225-7014 is applicable to all orders delivered to Goodrich. Any exceptions to this requirement must be approved by Goodrich in writing.

4.3. DIRECTORATE OF DEFENSE TRADE CONTROLS (DDTC) REGISTRATION

Suppliers, who are issued TEAC purchase orders for products that ITAR controlled, must be DDTC registered. For information regarding DDTC registration, contact the U.S. Department of State Directorate of Defense Trade Controls office, or visit the website <http://www.pmdtc.state.gov>.

4.4. DESIGN CONTROL AND NOTIFICATION OF CHANGES

Both industry and military standards and specifications referenced on design documentation shall be to the latest revision in effect on the date of the purchase order, unless otherwise specified.

4.4.1. Design Control

When the supplier is manufacturing to a Goodrich design, no departure from the drawing and/or specification (with regard to part number identification, physical or functional interchangeability, or process and material changes) shall be incorporated unless specifically authorized via approved and controlled documentation from Goodrich.

In addition, for drawings under Goodrich design control, material substitutions are not allowed unless formally authorized (i.e. by engineering drawing, Bill of Material (BOM), Request to Ship Non-Conforming Material and/or material specification).

When the supplier maintains design control and desires to incorporate a change that requires Goodrich approval, or incorporate a change that affects product form, fit, function, or specification requirements, then the supplier shall request written approval from Goodrich prior to incorporation of the change.

4.4.2. Notification of Changes

The supplier shall inform Goodrich of any die, mold, pattern, or other tooling changes or repairs made to tooling (used in the manufacture of product fulfilling purchase orders) when that tooling influences or controls any Goodrich controlled product characteristics.

The supplier shall inform Goodrich of any quality system changes as well as process or material changes that may affect product quality, prior to implementing the proposed changes.

The supplier shall inform Goodrich of any supplier name change, change of address, etc. that requires Goodrich update of supplier contact information database.

4.5. SUPPLIER PURCHASING AND SUB-CONTRACTING

Suppliers may choose to sub-contract some portion of their work in which case they must implement and maintain controls that will ensure products/services procured from their sub-tier suppliers meet all requirements.

The supplier shall ensure that both the supplier and their subcontractor use Goodrich approved special process sources. A list of Goodrich approved special process sources may be obtained from the Goodrich portal Aerovantix (<https://www.aerovantix.com/login/LoginPage.asp>).

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Quality
Requirements

Page 16
20-May-10
Revision C

Goodrich suppliers are ultimately responsible for any work contracted to their sub-tier suppliers. They are also responsible for ensuring that their sub-tier suppliers have a quality system that will ensure the supplier is receiving compliant product and that applicable sections of this document and/or the purchase order are flowed down to ensure quality requirements are met for all products delivered to Goodrich.

In the event that an item becomes obsolete, Goodrich requires 12 months prior notification of such and reserves the right to make a 'last buy' to insure uninterrupted delivery to the end customer.

4.5.1. Certification of materials purchased by Goodrich suppliers

Clear traceability of all materials must be established for all products provided to Goodrich by suppliers. As such, when Goodrich suppliers procure any components or raw materials that are then supplied directly to Goodrich, a Certification of Compliance (or Conformance) traceable to the parts supplied, shall be retained by the supplier and made available upon request to Goodrich for a minimum of 10 years.

Certifications for components used in product shipped to Goodrich shall be provided within 48 hours when requested by Goodrich per the requirements set forth in this document.

4.5.2. NADCAP Waiver Process

If the supplier finds it necessary to utilize the services of a special process supplier that is not NADCAP certified, the supplier shall request a NADCAP waiver for the special process supplier in accordance with the Goodrich document "NADCAP Waiver Process" (reference SIS MSD 740A.5). This document may be obtained from the Goodrich Procurement Agent.

4.6. PRODUCT IDENTIFICATION

Unauthorized re-assignment of serialized assemblies and/or components thereof is strictly prohibited. Upon identifying the need to remove or replace any serialized component from an upper or lower level assembly, the supplier shall request in writing the authorization for such changes. The request must identify the part numbers affected, a reason for such change, and provide all serial numbers affected by the change including upper and lower assembly serial numbers affected by the change (i.e. removed P/N xxx SN xxx from P/N xxx SN xxx and replaced with P/N xxx SN xxx). The supplier shall submit the written request to the cognizant Goodrich buyer and wait for the written approval from Goodrich. Goodrich QA, through the buyer, will provide the written instructions to the supplier, how to process the removed part, and the written response after reviewing the supplier request. The Goodrich buyer will provide the written response to the request to the supplier once received from Goodrich Quality Assurance. A copy of the authorization is to accompany the product shipment to Goodrich for traceability.

NOTE - Traceability documentation for all product shipped to Goodrich shall be provided within 48 hours when requested by Goodrich.

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4.7. ELECTRONIC PART AND CIRCUIT CARD ASSEMBLY MANUFACTURE AND INSPECTION

The supplier shall apply the requirements of IPC-A-610 and the manufacturer's installation and inspection standards to the manufacturing and inspection processes of circuit card and other electronic assemblies. The supplier shall use the most stringent requirement of either document.

4.8. TEST RECORDS

4.8.1. Supplier Acceptance/Functional/Qualification/Environmental Test (ATP/FTP/QUAL//EMI/ESS) Records

Each shipment must be accompanied by a legible and reproducible copy of the supplier's certification identifiable with submitted material for which test/inspection reports (as applicable) are on file and available for examination. This certificate must contain the signature and title of the authorized representative and assure conformance to specified requirements including:

- Actual test results
- Test Certificate of Conformance Statement

4.8.2. Requirements: Acceptance/Functional /Qualification/Environmental Test (ATP/FTP/QUAL//EMI/ESS) Record

At a minimum the following is required for Acceptance/Functional /Qualification/Environmental Test Records:

- Supplier's name
- Purchase Order Number
- Part Number
- Serial Numbers tested (as applicable)
- Drawing or Plan Revision
- Quantity tested
- Quantity Accepted (List serial numbers when applicable)
- Quantity Rejected (List serial numbers when applicable)
- Test numbers or sequences
- Test requirement
- Test Actual
- Signature or stamp and date of test operator that performed the test

4.9. DEVIATIONS

Any material not conforming to Goodrich drawings or referenced specifications shall not be shipped to Goodrich without Goodrich approval in writing.

If the supplier desires to ship non-conforming material, the supplier shall submit the Supplier's standard non-conforming material documentation detailing the discrepancy, quantity discrepant, the root cause and corrective action to eliminate the

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Supplier
Quality
Requirements

Page 18
20-May-10
Revision C

discrepancy, and the effectivity date of the correction. The supplier shall submit the request to Goodrich via the Goodrich Procurement Agent.

Goodrich will notify the supplier of approval or denial of the request to ship the non-conforming material.

The supplier shall include a copy of the approved documentation with the shipment of the non-conforming material

Note - Approval for shipment of non-conforming material does not establish any precedent for acceptance of future material. The company's policy is to accept only material which conforms to all purchase order, drawing, and associated specification requirements.

4.10. HANDLING, STORAGE, PACKAGING, PRESERVATION, AND DELIVERY

The supplier shall preserve the conformity of product during internal processing and delivery to the intended destination. This preservation includes identification, handling, packaging, storage and protection. Preservation includes where applicable and in accordance with product specifications or applicable regulations, provisions for appropriate environment, cleaning, and prevention and detection of foreign objects.

Material subject to corrosion shall be dipped or sprayed with corrosion protection oil that meets or exceeds MIL-PRF-16173 Grade 3 or as defined in the purchase order.

4.10.1. Packaging

The use of staples in packaging should be avoided.

All ESD Sensitive items including assemblies and components thereof shall be packaged in accordance with MIL-STD-1686. In addition, intermediate and shipping containers shall be clearly marked as "Electrostatic Discharge Sensitive" or in accordance with MIL-STD-1686.

Synthetic rubber products used in assemblies shall meet the age requirements of the applicable specification. In addition, all assemblies shall be marked with the cure date of the oldest synthetic rubber part in the assembly, as well as the date of assembly and shelf life limitations.

Marking may be accomplished by decal, rubber stamp, or metal tag. Each package of synthetic rubber components shall be marked with date of cure, date of expiration or shelf life limitations, part number, Purchase Order number, quantity, expiration date (when applicable) compound number, and manufacturer's identification (if different than part number). Upon receipt at Goodrich, products must have at least 75% of the shelf life remaining. Unless otherwise specified, o-rings and seals shall be packaged individually. Bulk packaging is not acceptable.

Each package/container of consumable life sensitive material shall be marked with date of cure and/or manufacture, date of expiration or shelf life limitations, part number, Purchase Order number, quantity, expiration date (when applicable) compound number, and manufacturer's identification (if different than part number ordered), applicable specification number and any

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special storage requirements. Upon receipt at Goodrich, products must have at least 75% of the shelf life remaining.

When temperature controlled material is involved the supplier shall provide material packaging suitable to maintain proper temperature during transportation from their facility to Goodrich. The supplier shall provide necessary temperature measuring equipment to monitor the material during transportation to assure compliance to the specifications of the Purchase Order/Contract. Packaging for such material shall be clearly marked as containing temperature controlled material. Goodrich reserves the right to reject or retain any material where temperature storage requirements have not been met.

The supplier shall include the applicable Material Safety Data Sheets with each shipment and ensure that all packaging and containers are properly marked with MSDS information as required by federal, state and local regulatory agencies.

Containers are to be marked with barcode as described in Section 4.1.1.

4.10.2. Delivery Paperwork

The supplier shall include all required documentation (i.e. FAIR, certifications, test results, etc) with the delivery of the hardware (refer Appendix A "Quick Reference").

In addition to the requirement to provide a Certification of Conformance with each shipment, one Packing Slip shall be submitted.

When returning previously rejected material to Goodrich, the supplier shall reference the Discrepancy Report or Failure Analysis Report (as applicable) number on the shipping document, and shall state if the items have been replaced or reworked.

4.11. LEAD FREE MATERIALS COMPLIANCE

It is the policy of Goodrich to prohibit the use of "Lead Free" (or RoHS compliant) components in Goodrich products. However, the company recognizes that some components may only be available as a "Lead Free" component. In these cases, the supplier must comply with the Goodrich SIS document "Lead Free Control Plan (LFCP)" (reference SIS MSD D002). When the LFCP is utilized, the supplier must so indicate on the applicable Certificate of Conformance. The LFCP document may be obtained from the Goodrich Procurement Agent.

4.12. APPLICABILITY OF FIRST ARTICLE INSPECTION

The First Article Inspection (FAI) must meet the requirements of SAE AS9102. The supplier shall perform a full FAI when a part number is supplied to Goodrich for the first time.

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Quality
Requirements

Page 20
20-May-10
Revision C

Thereafter, the supplier shall perform a full FAI, or a partial FAI for affected characteristics, when any of the following events occurs:

1. A change in item design affecting fit, form or function.
2. A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, that can potentially affect fit, form or function.
3. A change in numerical control program or translation to another media that can potentially affect fit, form or function.
4. A natural or man-made event, which may adversely affect the manufacturing process.
5. A lapse in production for two years.

The FAI requirements may be satisfied by a partial FAI that addresses differences between the current configuration and prior approved configurations provided that a full approved first article is on file. When a partial FAI is performed, the supplier shall complete only the affected fields in the FAI forms.

FAI requirements may also be satisfied by previously approved FAI performed on identical characteristics of similar parts produced by identical means. When FAI requirements (partial or complete) are satisfied in this manner, identify the approved configuration in the index of part numbers on Form 1.

4.13. VALIDATION OF WIRING HARNESSSES (A.K.A ELECTRICAL CABLES)

The supplier's manufacturing method must be validated to meet drawing requirements PRIOR to the first delivery of production items. This requirement applies to the first delivery of a part number only.

The supplier shall provide the following PRIOR to delivery of production harnesses:

- 1) a First Article Inspection Report (FAIR) in accordance with the requirements of this document,
- 2) the first article specimen (the part from which the actual FAIR recorded values are derived),
- 3) a copy of the Supplier's manufacturing instructions (router, traveler, etc.),
- 4) acceptance test data sheet per drawing or specification (if acceptance testing is required by PO), and
- 5) tooling drawing or specification (if the PO includes tooling).

96039801-005

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The FAIR cannot be approved until all items described above are received by Goodrich.

The specimen (see bullet 2 above) must be identified with a tag to include the following information:

- the supplier name,
- the part number,
- the revision letter,
- the FAIR date, and
- the phrase "First Article".

The shipping documents must clearly state the delivered item is a "First Article" and reference the purchase order line that specifies first article (if applicable).

The above items shall be reviewed by Goodrich to validate the product of the supplier's manufacturing process meets requirements. Goodrich Procurement shall notify the supplier of the results. If the results are positive, the Goodrich Procurement Agent shall notify the supplier that production material may be delivered. If the results are negative, the Procurement Agent shall notify the supplier of the reason for disapproval.

No production material may be delivered without approval by Goodrich.

Once the validation is accomplished, the supplier's manufacturing instructions (see 3 above) are "frozen". When the supplier plans a change to the manufacturing process that substantially affects the product (including any changes of material), the supplier shall submit the proposed change to Goodrich for approval. Goodrich reserves the right to reject process changes based on the affect of the changes on the final product.

Alternative means of validating the process, such as source inspection, may be utilized to fulfill this requirement. Any alternative method must be approved by Goodrich in writing.

4.14. VALIDATION OF CIRCUIT CARD ASSEMBLIES (CCA)

The supplier's manufacturing method must be validated to meet drawing requirements PRIOR to the first delivery of production items. This requirement applies to the first delivery of a part number only.

The supplier shall provide the following PRIOR to delivery of production CCA's:

- 1) A First Article Inspection Report (FAIR) in accordance with the requirements of this document,
- 2) The first article specimen (the part from which the actual FAIR recorded values are derived),
- 3) A copy of the Supplier's manufacturing instructions (router, traveler, etc.),

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- 4) Acceptance test data sheet per drawing or specification (if acceptance testing is required),
- 5) Tooling and/or test equipment drawing or specification (if the PO includes tooling), and
- 6) Bare board coupon, if required by PO.
- 7) The FAIR cannot be approved until all items described above are received by Goodrich.

The specimen (see 2 above) must be identified with a tag to include the following information:

- a. the supplier name,
- b. the part number,
- c. the revision letter,
- d. the FAIR date, and
- e. the phrase "First Article"

The shipping documents must clearly state the delivered item is a "First Article" and reference the PO line that specifies first article (if applicable).

The above items shall be reviewed by Goodrich to validate the product of the supplier's manufacturing process meets requirements. Goodrich Procurement shall notify the supplier of the results. If the results are positive, the Goodrich Procurement Agent shall notify the supplier that production material may be delivered. If the results are negative, the Procurement Agent shall notify the supplier of the reason for disapproval.

No production material may be delivered without approval by Goodrich.

Once the process validation is accomplished, the supplier's manufacturing instructions (see 3 above) are "frozen". When the Supplier plans a change to the manufacturing process that substantially affects the product (including any changes of material), the supplier shall submit the proposed change to Goodrich for approval. Goodrich reserves the right to reject process changes based on the affect of the changes on the final product.

4.15. VALIDATION OF ASSEMBLIES (MECHANICAL OR ELECTRO-MECHANICAL)

The supplier's manufacturing method must be validated to meet drawing requirements PRIOR to delivery of production items. This requirement applies to the first delivery of a part number only.

The supplier shall provide the following PRIOR to delivery of production parts:

- 1) A First Article Inspection Report (FAIR) in accordance with the requirements of this document,
- 2) The first article specimen (the part from which the actual FAIR recorded values are derived),

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UNCONTROLLED WHEN PRINTED

Supplier
Quality
Requirements

Page 23
20-May-10
Revision C

- 3) A copy of the supplier's manufacturing instructions (router, traveler, etc.),
- 4) Acceptance test data sheet per drawing or specification (if acceptance testing is required),
- 5) Inspection plan*, and
- 6) Tooling and/or test equipment drawing or specification (if the PO includes tooling).
- 7) *Note: The inspection plan is to describe at what stage(s) of manufacture inspection will be performed and how it will be accomplished.

The FAIR cannot be approved until all items described above are received by Goodrich.

The specimen (see 2 above) must be identified with a tag to include the following information:

- a. the Supplier name,
- b. the part number,
- c. the revision letter,
- d. the FAIR date, and
- e. the phrase "First Article".

The shipping documents must clearly state the delivered item is a "First Article" and reference the PO line that specifies first article (if applicable).

The above items shall be reviewed by Goodrich to validate the product of the supplier's manufacturing process meets requirements. Goodrich Procurement shall notify the supplier of the results. If the results are positive, the Goodrich Procurement Agent shall notify the supplier that production material may be delivered. If the results are negative, the Procurement Agent shall notify the supplier of the reason for disapproval.

No production material may be delivered without approval by Goodrich.

Once the process validation is accomplished, the supplier's manufacturing instructions (see 3 above) are "frozen". When the supplier plans a change to the manufacturing process that substantially affects the product (including any change of material), the supplier shall submit the proposed change to Goodrich for approval. Goodrich reserves the right to reject process changes based on the affect of the changes on the final product.

Appendix A

Quick Reference - Goodrich Supplier Minimum Shipment Requirements

This "Quick Reference" is intended to provide the Goodrich suppliers with the minimum documentation requirements for shipment of products and services in accordance with a Goodrich Purchase Order. The requirements listed may not be complete or current in accordance with the purchase order. The Supplier is obligated to review and comply with all Goodrich purchase order requirements prior to releasing material for shipment.

Printed Circuit Board Suppliers –

- Certificate of Conformance
- First Article Inspection Report (FAIR) as required in this document
- Functional or Acceptance Test results as applicable in this document
- Non-Conforming Material Information as required in this document

Machined Part Suppliers –

- Certificate of Conformance
- First Article Inspection Report (FAIR) as required in this document
- Process Certifications as applicable
- Non-Conforming Material Information as required in this document

Process Suppliers –

- Certificate of Conformance
- Process Certifications as applicable
- Non-Conforming Material Information as required in this document

Commercial Off The Shelf (COTS) Distributors –

- Certificate of Conformance

Note: Suppliers of Hi-8 film, blank Compact Disks, blank DVD disks, desktop computers, printers, and related commercially available products (i.e. cables, routers, speakers, monitors, etc.) are not required to provide a Certificate of Conformance.

Non-COTS Distributors –

- Certificate of Conformance
- Traceability in accordance with this document

Age Sensitive and Other Chemical Material Suppliers –

- Certificate of Conformance
- Material Safety Data Sheets as applicable
- Packaging and identification in accordance with this document

Completed Assembly (Build to Print) Suppliers –

- Certificate of Conformance
- First Article Inspection Report (FAIR) as required in this document
- Process Certifications as applicable
- Functional or Acceptance Test results as applicable in this document
- Non-Conforming Material Information as required in this document

Supplier
Quality
Requirements

96039801-005
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Page 26
20-May-10
Revision C

Appendix B

Test reports are required to be provided for the following TEAC products:

All top level products (i.e. Removable Memory Modules, Mission Data Recorders, Video Reproducers, etc.) must be shipped by the supplier with Acceptance Test Reports for each serial number.

Circuit Card Assemblies listed below must also be shipped with Acceptance Test Reports for each piece.

50585701-426

50585701-428

50585701-441

50585701-442

50585701-475

51571007-502

51585701-444

51975701-402

51975701-406

51975701-408

51975701-413

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Supplier
Quality
Requirements

Page 27
20-May-10
Revision C

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Requirements

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Page 28
20-May-10
Revision C

Appendix C

TEAC / Goodrich SIS-DDS Supplier Acknowledgement of Compliance

_____ Company Name _____ acknowledges receipt of this document.
Furthermore, _____ Company Name _____ has reviewed all requirements either included or referenced in this document and agrees to adhere to such when referenced in TEAC Aerospace Technologies purchase orders.

Acknowledgement:

Print Name / Title

Signature

Date

Instructions: Upon reviewing this document TEAC / Goodrich SIS-DDS suppliers are required to print, complete, sign and date this page of the document, then forward it to:

TEAC / Goodrich SIS-DDS Quality Assurance
1 Cupania Circle
Monterey Park, CA 91755.

As an alternative, the signed acknowledgement may be sent electronically to the TEAC Aerospace Technologies Procurement Agent.

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Quality
Requirements

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Page 29
20-May-10
Revision C

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Supplier
Quality
Requirements

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Page 30
20-May-10
Revision C