AMENDMENT RECORD

Revision	Date	Pages Affected	Section Affected	Reason for Change	Entered in Procedure by
Orig	18MAR13	N/A	N/A	New procedure	D. Bartlett, R. Hayward, G.Patino, K.Yoshiki-Gravelsins
A	20DEC13	5, 6 6 9, 11 15 16 18 28 33 36, 37 38, 39	1, 4.2.1 3 7.1, 7.1.4 7.4.2 7.4.3 7.5.1.1 8.2.4(b) 8.5.2 Appendix A Appendix B	Added specific quality approvals by commodity Deleted reference to internal procedure Added references to divisional documents Added conditions requiring supplier notification Added counterfeit / fraudulent / substandard item checks Added conditions that would require process verification Added C of C statement requirements Added reference to OEM CAR Added shipping document requirements Added C of C content requirements	R. Hayward, L. Munoz, R. O'Doy, P. Smith, V. Young, K.Yoshiki-Gravelsins

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1. PURPOSE AND SCOPE

- To define the quality and environmental requirements to be met by the supplier in providing products, materials, and services to Magellan Aerospace. Quality requirements include the supplier's process of procurement, planning, manufacturing, inspection and testing, design and development, storage, packaging, release and shipment of product as defined in the contractual requirements of the Purchase Order, including specified clauses.
- Magellan Aerospace suppliers shall meet the requirements specified in AS/EN/SJAC 9100 and the Magellan Aerospace Supplier Quality Requirements Manual (SQRM), specified herein. **Exceptions and/or specific quality requirements are documented in the Magellan Aerospace Supplier Evaluation Questionnaire (Form 7.04b).** The Magellan SQRM document may be supplemented by divisional requirements as specified by divisional appendices.

2. DEFINITIONS

- ***Escape***: A product shipped to Magellan Aerospace by a supplier but found to be deviating to purchase order requirements, drawings, specification etc.

Foreign Object Debris: A substance, debris or article, alien to the product or assembly that has been allowed to invade the product.

- ***Foreign Object Damage***: Any damage attributed to a foreign object that can be expressed in physical or economic terms which may or may not degrade the product's required safety and/or performance characteristics.
- ***Repair***: Work performed on a material, product, process, due to a non conformance to the drawing/specification, work that when complete will not bring the material, product, and process 100% compliant to the applicable drawing /specification (form, fit, function and reliability)

- ***Rework***: Work performed on a material, product, process, due to a non conformance to the drawing/specification, work that when complete will bring the material, product, and process 100% compliant to the drawing/specification (form, fit, function and reliability).

3. RELATED DOCUMENTS AND APPLICABLE FORMS

	Magellan Division forms and appendices
Q209	Magellan Aerospace Standard PO Terms and Conditions
7.04a	Corporate supplier evaluation questionnaire, Cover letter
7.04b	Corporate supplier evaluation questionnaire, Quality
7.04c	Corporate supplier evaluation questionnaire, Supplemental
7.04d	Corporate supplier corrective action form
6.01a	Corporate supplier environmental questionnaire

4. QUALITY MANAGEMENT SYSTEM

4.1 General Requirements – refer to AS9100 standard

4.2 Documentation Requirements

4.2.1 General

The supplier shall establish, document and maintain a Quality Management System – QMS in accordance with the latest revision of the AS 9100 standard or its European and Far East equivalent EN 9100 and SJAC 9100.

NOTE 1: **Recognized QMS approvals are listed by commodity below:**

Product or Service Category	Approval
Bought out Finished	**AS9100**
Calibration / Laboratory / Testing Services	**ISO 17025; ISO 10012; ANSI A540**
Castings / Forgings	**AS9100**
Design	**AS9100**
Machining and Fabrication	**AS9100; AC7004**
Raw Material / Hardware Supplier	**AS9120; AS7103; AS7104: AS9100**
Special Processes	**AS9100**
Tooling Suppliers / Manufacturers	**ISO 9001**

Exceptions and/or specific quality requirements are documented in the Magellan Aerospace Supplier Evaluation Questionnaire (Form 7.04b).

4.2.2 Quality Manual

The supplier shall prepare a quality manual covering the requirements of this document. The quality manual shall include or make reference to the quality system procedures and outline the structure of the documentation used in the quality system.

The supplier shall:

a) Prepare documented procedures consistent with the requirements of this Manual;

b) Effectively implement the quality system and its documented procedures.

The range and detail of the procedures that form part of the quality system shall be dependent upon the complexity of the work, the methods used, and the competence needed by personnel involved in carrying out the activity.

4.2.3 Control of Documents

Suppliers shall be fully responsible for the safe custody of all drawings, instructions and specifications supplied by Magellan Aerospace. The supplier shall ensure revision levels of drawings, specifications, operation sheets and technical plans are as stated on the Purchase Order. Any discrepancies shall be resolved with the Magellan Aerospace Purchasing Department prior to commencing work. The supplier shall ensure that only the relevant Purchase Order specified issue levels of documents are readily available for personnel at required work areas. Supplier shall not use or disclose to third parties any customer and or Government design data for any purpose other than the production and support of products and services to be supplied to Magellan Aerospace.

NOTE 2: Titles and organizational structure may vary by division

4.2.4 Control of Records

Supplier shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of records. Supplier shall meet records requirements specified by purchase order and as specified in the divisional appendices listing applicable end use customer specification requirements.

No records shall be destroyed without written permission from Magellan Aerospace. Retention period begins upon shipment of the last item specified in

the Purchase Order to the applicable Magellan Aerospace division.

Quality records shall be legible, identifiable to product involved and be stored and maintained in such a way that they are readily retrievable. Originals of documents shall be retained in an area that meets all local fire and life safety codes.

Sub–Tier Supplier quality records shall be maintained in the same manner. Quality records shall be available for viewing by Purchaser QAR and regulatory authorities upon request. Proprietary (OEM) information may be exempted.

5. MANAGEMENT RESPONSIBILITY

Supplier management is responsible for providing, and maintaining resources to the extent necessary to comply with the Magellan purchase order. Supplier shall provide training to its employees to the extent necessary in order to carry out and meet Magellan purchase order requirements. Training shall include interpretation of Magellan specific requirements including the latest issue of Magellan Aerospace Supplier Quality Requirements Manual (Q7.4.1-3) and divisional appendices, as applicable. Supplier management shall be focussed on customer satisfaction with emphasis on quality, on-time delivery, cost reduction, risk management, and continuous process improvement.

6. RESOURCE MANAGEMENT

Supplier Management is responsible for providing and maintaining resources to the extent necessary to comply with Magellan Aerospace purchase order requirements. This shall include, but is not limited to, training of the supplier's employees to meet P.O. requirements, requirements of the Magellan Aerospace Supplier Requirements Manual, and requirements for any identified special processes, quality inspection, test functions, and ITARs compliance. Supplier management shall focus on customer satisfaction and continuous process improvement.

The supplier shall ensure that personnel performing tasks on behalf of Magellan Aerospace that have the potential to cause a significant environmental impact are competent on the basis of appropriate education, training or experience and shall retain associated records.

7. PRODUCT REALIZATION

7.1 Planning of Product Realization

1) All manufacturing and process operations needed for product realization should be planned by the supplier. When stipulated on the Magellan

purchase order the quality or technical plan for the manufacture of products or Special Processes must be submitted for Magellan approval. The plan shall address the manufacturing sequence and identify the inspection verification points, including key characteristics and/or critical to quality characteristics, and process controls selected by suppliers or identified by Magellan. The plan shall also include, as applicable all characteristics which are not verifiable upon receipt have been adequately controlled and verified.

2) The plan shall, where the manufacturing process requires the use of consumable items, i.e. weld wire, braze alloy etc. assure that traceability of the consumable has been recorded and maintained.

3) Subsequent to the acceptance of technical plans, prototypes or samples by Magellan or its customers, the supplier shall not make any change to plans to produce acceptable product without first obtaining the written consent of Magellan.

4) Software Quality Control shall be established for software (i.e., CNC programs) related to the design, fabrication, inspection and/or test of deliverable articles to Magellan.

5) The supplier shall establish and maintain documented procedures for final inspections, testing activities and any in process inspection deemed necessary in order to verify that the specific requirements for finished product are met. The supplier shall work within and inspect to tolerances and limitations specified on the drawings. Final inspection shall include verification of acceptance of all previous inspection activities. All inspection and testing operations must be done by authorized personnel.

6) The use of SPC is recommended and if mandatory, the requirement shall be documented on the purchase order.

7) Sampling inspection shall not be used as a means of product acceptance unless approved in advance by Magellan. The plan shall preclude the acceptance of known defectives in the lot. No sampling inspection is permitted on Magellan repairs, overhaul or industrial components.

8) Annual vision testing applies to all personnel performing inspection and/or welding operations to the following standard, **unless otherwise specified by divisional documents.**

<u>Visual Inspectors:</u>

a) Distant Vision: Snellen E.F. 20/30 or equivalent, in at least one eye, corrected or uncorrected.

b) Near Vision: Snellen E.F. 20/20, in at least on eye, corrected or uncorrected.

c) Colour Vision: Ability to distinguish and differentiate between colours on the standard Ishihara colour charts or equivalent

Non-destructive Testing (NDT) Inspectors:

a) Must meet the requirements of NAS 410

Welders, Torch Brazers, Flame and Plasma Spray Operators:

a) Distant Vision: Snellen E.F. 20/30 or equivalent, in at least one eye, corrected or uncorrected.

b) Near Vision: Snellen E.F. 20/20, in at least on eye, corrected or uncorrected.

c) Colour Vision: Ability to distinguish and differentiate between colours on the standard Ishihara colour charts or equivalent

9) Purchase orders may be subject to source inspection at suppliers or sub tiers facility. Magellan supplier quality must be contacted 72 hours in advance of the order being ready for source.

10) The purchase order may also require Government Quality Assurance inspection. Prompt arrangements must be made with the area Quality Assurance Representative or facility.

11) First Article Inspection:

The requirements for First Article Inspection (FAI) are provided in Section 7.5.1.1

12) The supplier shall maintain appropriate inspection and test records to substantiate conformance or non-conformance to the specified requirements. The quality status must be easily identifiable during all stages of manufacture. All quality and environmental records shall be legible and identifiable to the product involved. All records maintained at the suppliers facility must be made available to the purchaser as and when requested. Record retention shall be as defined in Section 4; Non-conforming product in Section 8.

NOTE 3: As general practice, the Quality Plan, which includes the Technical Plan for special processes, shall address all items listed in paragraph 7.1. Where requirements are specified by purchase order or contract, these shall take precedence.

7.1.1 Project Management

The supplier shall employ a project management approach to the management of products based on product and organization as appropriate. Supplier shall

select the life cycle phases (such as concept, design, planning, execution and closing of the project) processes, tools and techniques that appropriately fit to meet project requirements.

Managing a project includes, but is not limited to:

- Identifying and adhering to customer requirements
- Establish clear and achievable objectives
- Balancing the competing demands for quality, scope, time, and cost

The supplier shall adapt a project management culture and structure (project manager, project team, as appropriate) to deal with scheduled constraints, mitigate risk, manage resources to successfully achieve goals and objectives.

7.1.2 Risk Management

The supplier shall establish, implement and maintain a process for managing risk to meet the requirements specified on Magellan Aerospace purchase orders. Risks that may affect delivery, cost or quality shall be identified prior to the supplier's commitment to supply product to Magellan Aerospace.

7.1.3 Configuration Management

Supplier shall maintain a configuration management system to comply with Magellan Aerospace purchase orders. Supplier shall have a defined process to review and incorporate drawings, specifications and supplemental instructions and changes thereto to the extent necessary to ensure that only documents of the revision specified in the Magellan Aerospace P.O. are utilized. The defined process shall ensure the removal of all obsolete documentation from the manufacturing, inspection and test areas. Unless otherwise specified in the purchase order, materials or parts shall be manufactured and/or processed to the latest material or process specification revisions in effect at the time of the start of the manufacturing and/or processing. Supplier shall have a documented system to ensure that planning changes are reviewed, at a minimum, by its production, engineering (when available and/or applicable), and quality organizations

7.1.4 Control of Work Transfers

Unless prohibited in the Magellan purchase order to offload work **or as defined in divisional requirements**, Magellan Aerospace suppliers (Purchase order holder) may choose to offload, but shall ensure the capability of all offload sub-tiers and the quality of all products meet Magellan purchase order requirements. Magellan Aerospace suppliers are also required to flow down to their lowest tier

suppliers the applicable requirements listed in the Magellan Aerospace purchase documents. When Magellan Aerospace end customer requires the use of Customer Approved Suppliers, the supplier and / or its sub-tier are responsible for using only those approved suppliers listed on the end customer's (for example, Boeing, Lockheed, GE Aviation) web portals. All suppliers' purchased materials or services must be obtained from the Magellan Aerospace end customer's approved supplier / qualified parts list (where applicable).

7.2 Customer-related Processes

7.2.1 Determination of Requirements Related to the Product

The supplier shall review requirements specified by Magellan Aerospace purchase order to meet product requirements including regulatory activities. The supplier shall determine and establish product support after delivery including maintenance and warranty as required.

7.2.2 Review of Requirements Related to the Product

The supplier shall have a documented process to review quotation requests and purchase orders received from Magellan Aerospace including subsequent purchase order changes. This process shall accurately identify and disseminate all contractual quality, configuration, process, performance and other requirements to all personnel responsible for compliance with the requirements of the Magellan Aerospace purchase order. The purchase order describes the agreement between Magellan Aerospace and the supplier. Some of the items that may be included in the purchase order are:

a) Stock or Part Number and Description

b) Price

c) Quantity

d) Delivery Date

e) Payment Terms

f) F.O.B.

g) Shipping Instructions

h) Quality Requirements

i) Technical Requirements

j) Terms and Conditions

k) Environmental Requirements

Supplier shall have in their possession all necessary information and technical documents required to carry out contractually obligations.

7.3 Design and Development

Supplier shall meet specific design and development requirements specified by way of Purchase Order and supplemental documents, all in accordance with the requirements of AS9100.

7.4 Purchasing

7.4.1 Purchasing Process

Suppliers shall be selected and evaluated based on their ability to supply product in accordance with Magellan Aerospace requirements. The criteria for selection, evaluation and re-evaluation are outlined below.

a) Approval scope is granted in accordance with the commodities provided in the corporate supplier evaluation questionnaire (refer to form 7.04b).

Initial approval may be granted to a candidate supplier whose submitted supplier evaluation questionnaire (refer to forms 7.04b and 7.04c) adequately addresses controls for the elements outlined in internal and customer quality requirements documents for approved suppliers and for the scope of approval assigned above. Evidence of system/process approval can additionally include:

- Recognized third party registration of the quality system
- Quality system approval by other Magellan Aerospace divisions
- Quality system approval by other major aerospace customers
- OEM supplier
- Process certification by Nadcap

NOTE 4: For suppliers providing materials testing / laboratory / calibration services, the supplier must be in compliance with ISO 17025, where required by customer, otherwise an alternate process is acceptable.

NOTE 5: For non-aerospace applications, where the organization is the OEM, initial supplier approval may be granted by Magellan Aerospace provided there is approval from both the Engineering and Quality Departments. In such cases, the type or level of goods or services that the supplier is approved to supply must be clearly defined and these limitations must be entered in the approved supplier database.

b) Supplier review shall take place at a minimum of every 3 years and/or on before the expiry of the supplier's main QMS approval or as required by contract. The review will include, at a minimum, the update of supplier specifications, certificates, and records based on the individual supplier qualifications and approvals.

NOTE 6: A minimum supplier rating must be maintained as specified in supporting divisional appendices.

c) The necessary actions to take when suppliers do not meet requirements are specified in supporting divisional appendices.

d) When specified by contract, suppliers shall use customer-approved special process sources

e) A supplier is approved in accordance with the schedule below. The scope of approval may be limited to a type or level of goods or service or to first article inspection.

i. *Approved* – Supplier questionnaire, certifications and on-site audits (as applicable) are approved

ii. *Conditional* – Approval is in process

iii. *Inactive* - Approval has lapsed or renewal is on hold due to a lack of purchase order activity within last 12 months

iv. *Disapproved* – Lack of delivered quality, unacceptable performance

f) Supplier risk shall be identified and appropriate risk management measures employed.

7.4.2 Purchasing Information

Suppliers are required to meet all requirements specified by Purchase Order and Terms and Conditions, including but not limited to:

a) Requirements for approval of product, procedures, processes and equipment

b) Requirements for qualification of personnel

c) Quality management system requirements

d) Use of identified specifications, drawings, process requirements, inspection/verification instructions, and other relevant technical data at the revision/issue status indicated

e) Requirements for design, test, inspection, verification, use of statistical techniques for product acceptance, and related instructions for acceptance by Magellan Aerospace, and as applicable critical items including key characteristics

f) Requirements for test specimens (e.g., production method, number, storage conditions) for design approval, inspection/verification, investigation or auditing

g) Record retention requirements.

h) And in addition, the supplier shall:

- Notify Magellan Aerospace of nonconforming product
- Obtain approval for nonconforming product disposition
- **Notify Magellan Aerospace of changes in quality manager representative**
- **Notify Magellan Aerospace of changes in manufacturing facility location for Magellan approval**
- **Request changes in frozen process planning for Magellan approval, with final approval from the OEM**
- Flow down to the supply chain the applicable requirements including customer requirements, and
- Provide right of access by Magellan Aerospace, our customer, and regulatory authorities to the applicable areas of all facilities, at any level of the supply chain involved in the order, and to all applicable records.

7.4.3 Verification of purchased product

Suppliers shall establish and implement 100% inspection or an approved sampling plan (refer to Section 8.2.4) to ensure that product purchased by Magellan Aerospace meets specified purchase requirements. Purchaser's or Purchaser's Customer verification activities performed at any level of the supply chain should not be used by the supplier as evidence of effective control of quality and does not absolve the supplier of its responsibility to provide acceptable product and to comply with all requirements.

All work in progress (including, but not limited to, work performed by Supplier's sub-tier suppliers) shall be subject to such inspection and tests as Purchaser may direct. Purchaser's customer or Purchaser's customer's representative, may perform such inspections and tests. If inspections and tests are made on Supplier's (or Supplier's sub-tier supplier's) premises, Supplier shall furnish, at no additional charge, facilities and assistance for safe and convenient inspections and tests as required. All inspections and tests shall be performed in such manner as not to unduly delay the work. Purchaser may charge Supplier for additional costs to Purchaser when work is not ready for verification at the time designated.

Where the supplier delegates verification activities to sub-tier suppliers, the requirements of delegation shall be defined and a register of delegations maintained.

Where product purchased by the supplier is released for production use by the supplier pending completion of all required verification activities, it shall be identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet requirements. Product cannot ship to Magellan until the required verification activities are complete, unless otherwise authorized by Magellan.

Supplier shall have a system that ensures that items procured in support of Magellan purchase orders shall have all necessary end user approvals and prevents the shipment of counterfeit, fraudulent or substandard items (CFSI). Supplier receiving process should include product and documentation review for indicators of counterfeit/fraudulent/substandard Items (CFSI) such as:

- **Altered manufacturers name, logo, serial number, manufacturing date**
- **Items differing in configuration, dimensions, fit, finish, colour, or other attributes from that expected**
- **Markings on items or documentation are missing, unusual, altered, or inconsistent with that expected**
- **Markings or documentation from country other than that of the sub-tier supplier**
- **Items, sold as new, exhibit evidence of prior use**
- **Performance inconsistent with specifications or certification or test data furnished**
- **Documentation that appear altered, incomplete, or lack expected traceability, safety standard organization or manufacturers markings**
- **Poor workmanship**

Except as otherwise stated in this Agreement, all shipments shall be subject to final inspection and acceptance or rejection by Purchaser after receipt and performance testing at site. Purchaser shall have the right to require the prompt correction of defective work by Supplier, at Supplier's risk and expense, or may elect to correct the defective work itself and back charge Supplier for the cost of the correction. If correction is impracticable, Supplier shall bear all risk after notice of rejection and shall at Purchaser's request, promptly make all necessary replacements at Supplier's expense. If Supplier fails to make prompt replacements, Purchaser may make such replacements and back charge Supplier for excess costs incurred by Purchaser.

7.5 Production and Service Provision

7.5.1 Control of Production and Service Provision

The supplier shall plan and carry out production and service provision under controlled conditions. Controlled conditions shall include, as applicable,

a) the availability of information that describes the characteristics of the product,

NOTE 7: This information can include drawings, parts lists, materials and process specifications, and digital product definitions.

b) The availability of work instructions, as necessary,

NOTE 8: Work instructions can include process flow charts, production documents (e.g., manufacturing plans, travelers, routers, work orders, process cards) and inspection documents.

c) The use of suitable equipment,

NOTE 9: Suitable equipment can include product specific tools (e.g., jigs, fixtures, molds) and software programs.

d) The availability and use of monitoring and measuring equipment,

e) The implementation of monitoring and measurement,

f) The implementation of product release, delivery and post-delivery activities,

g) The accountability for all product during production (e.g., parts quantities, split orders, nonconforming product),

h) Evidence that all production and inspection/verification operations have been completed as planned, or as otherwise documented and authorized,

i) Provision for the prevention, detection and removal of foreign objects. Supplier shall ensure that products are free of Foreign Object Debris / Damage during the manufacturing process and prior to shipment.

j) Monitoring and control of utilities and supplies (e.g., water, compressed air, electricity, chemical products) to the extent they affect conformity to product requirements, and

k) Criteria for workmanship, specified in the clearest practical way (e.g., written standards, representative samples, illustrations).

NOTE 10: Quality Plans shall include as appropriate (see Section 7.1):

- processes to manage critical items, including process controls where key characteristics have been identified,
- monitoring and measuring equipment to measure variable data,

- in-process inspection/verification points when adequate verification of conformance cannot be performed at later stages of realization, and
- special processes
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7.5.1.1 Production Process Verification

1) When requested by purchase order, the supplier shall perform and submit a report on first article inspection (FAI) in conformance with SAE AS9102 to the revision stated on the purchase order. **Variations** to this may be defined on the purchase order. The supplier shall perform and submit a full first article inspection (FAI), or a partial (delta) FAI for affected characteristics, when any of the following events occurs:

- A change in the drawing revision (e.g. Drawing, Parts List, CAD Models, Engineering Changes, Specification Changes, etc.)
- A change that can potentially affect fit, form or function:

i. Manufacturing source(s) - Use of new forging, casting, swaging supplier, or use of new processing house, that accounts for the creation of design characteristics.

ii. Process(s) - Any method that effects the generation of design characteristics. This includes routing (Routers) sequence, methods of machining, or assembly and test.

iii. Inspection method(s) - Gages designated by supplier to accept design characteristics features have been changed.

iv. Location of manufacture - Product is no longer manufactured in its entirety at supplier facility.

v. Relocation of machine center at supplier site.

vi. Tooling - Supplier designed fixture that holds the part during inspection has been modified, added, removed.

vii. Materials - Part is manufactured and/or processed from an optional material type than the one called out on the engineering drawing.

- A change in numerical control program or translation to another media that can rotationally affect fit, form or function.
- A natural or man-made event, which may adversely affect the manufacturing process. Moved machinery to another location of supplier facility.
- A lapse in production for two years or as specified by the customer. Manufacturing for that item exceeded 2 years or as specified by customer from the last work order completion date.

2) The first article sample shall be produced using the material, tooling, processes, and planning to be used for subsequent deliveries. The first article report may be submitted prior to or with delivery of the product. The first article report shall be performed per SAE First Article Quality Standard AS9102 latest revision. The report shall include the engineering drawing, or model based derivative data (MBD) with numbered characteristics corresponding to the first article report and shall include all drawing characteristics, blueprint notes, and specifications. FAIR must also include all supporting documentation such as but not limited to, material test reports, NDT test reports, where applicable. The FAIR part must be identified, tagged or package separately and forwarded with the data package to the attention of the divisional Quality Assurance department.

3) The following optional (O) fields 12, 21, & 22 in the AS9102 FAI Report Form 1 are considered mandatory.

4) When the end deliverable item is an assembly, separate FAIR's shall be submitted for all detail parts, and subassemblies, that are included in the "build to print" requirements. A FAIR shall also be submitted for the top assembly.

5) When the deliverable end item is a detail, a single FAIR shall be submitted.

6) An amended First Article Inspection Report (FAIR) is required, showing only those characteristics whose actual values have been revised by the engineering drawing or process specification. The amended FAI may be submitted prior to, or with delivery of the product. The Amended FAIR shall be performed per the SAE First Article Quality Standard AS9102. The amended FAIR must also include all supporting documentation such as but not limited to, material test reports, NDT

test reports, where applicable. The amended FAIR part must be identified, tagged or packaged separately and forwarded with the data package to the attention of the divisional Quality Assurance department.

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7.5.1.2 Control of Production Process Changes

- Personnel authorized to approve changes to production processes shall be identified. The supplier shall control and document changes affecting processes, production equipment, tools or software programs.
- The results of changes to production processes shall be assessed to confirm that the desired effect has been achieved without adverse effects to product conformity.

7.5.1.3 Control of Production Equipment, Tools and Software Programs

- Production equipment, tools and software programs used to automate and control/monitor product realization processes shall be validated prior to release for production and shall be maintained.
- Suppliers utilizing software to inspect physical characteristics or attributes of the product or service delivered to Magellan, i.e. tensile machines, spectroscopy, coordinate measuring machines (CMM), C.N.C. machining, programmable heat treatment controllers, etc. shall establish, document and maintain a software quality assurance program that has provisions for the following:

a) The control over revisions to software caused by customer engineering and/or specification changes.

b) Providing work instructions to personnel who actually use the software.

c) Controlling master and back-up discs to prevent unauthorized changes, damage, etc.

d) Approval of software programs and revisions to them.

e) Controlling revision status (i.e. via revision date, revision letter, etc.)

f) Proving out new or revised software programming through inspection and/or testing.

Suppliers who receive digital product definition data from Magellan (or Magellan customers) shall have a system to control / identify:

a) Verification of the integrity of the file transfer;

b) Configuration Management;

c) Problem Reporting & Corrective Action (i.e. for nonconforming datasets, graphics, etc.);

d) Media Security;

e) Data Exchange Methods (changes to data exchange methods require notification to Magellan);

f) Computing Equipment;

g) Maintain full traceability of all derivative data back to the original Magellan provided electronic definition.

- Storage requirements, including periodic preservation/condition checks, shall be defined for production equipment or tooling in storage.

7.5.1.4 Post –Delivery Support

- Supplier shall provide post-delivery support as applicable and upon request for the:
- Collection and analysis of in-service data,
- Actions to be taken, including investigation and reporting, when problems are detected after delivery,
- Control and updating of technical documentation,
- Approval, control and use of repair schemes, and
- Controls required for off-site work (e.g., supplier's work undertaken at the customer's facilities).
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7.5.2 Validation of Processes for Production and Service Provision

All special processes including but not limited to: non-destructive testing, welding, heat treat, chemical processing, thermal spray, non-conventional machining methods such as Electro-discharge Machining (EDM), chemical milling and Laser, coatings/plating, materials testing, etc. must be performed by

Supplier or customer approved facilities. Suppliers must receive Purchaser approval prior to subcontracting any processes and when requested, submit a copy of the purchase order on the nominated source to Purchaser procurement department for review of the flow down requirements. The supplier shall list all sources for special processes on their certificate of conformance. The list shall include the process specification, the source that performed the process and the applicable end user supplier code, i.e., Heat Treat per HT5088, ABC Heat Treat Company, Honeywell supplier code 123456.

Suppliers or sub-tier suppliers providing special processes shall comply with all requirements stipulated on the Purchase Order and specified in the special process quality plan. Certification and / or test reports shall be included with each shipment as per Appendix A, unless otherwise specified by P.O.

Refer to required supplier shipping documents in Appendix A.

7.5.3 Identification and Traceability

- The supplier shall maintain the identification of the configuration of the product in order to identify any differences between the actual configuration and the agreed configuration.
- The supplier shall identify the product in accordance with the drawing requirements and maintain product traceability to materials and processes.
- All suppliers are required to assure that individual unit traceability is maintained throughout all processing steps. All product, including manufacturing / assembly / inspection / verification records and material shall be identified by lot number, material type, specification and revision, heat number and/or serial number where required to maintain traceability and part marking.
- Each assembly shall be traceable to the product acceptance records that are associated with the final product. The assembly shall also be traceable to each serialized or lot numbered sub-assembly or part and their product acceptance records.
- Serial nos. shall be unique and not duplicated for any reason regardless of the part or assembly identification number, design, function or usage of the item being manufactured.

- When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), the supplier shall establish appropriate controls for the media.

7.5.4 Customer Property

The supplier shall take care with customer property and shall assume responsibility for any loss, damage or destruction while it is under the suppliers control or being used by the supplier.

The supplier shall identify, verify, protect and safeguard customer property provided for use or incorporation into the product.

The material supplied by purchaser shall be used only for the order concerned. The supplier shall not substitute other material without written and specific authorization from the purchaser.

Where a supplier is instructed to drop ship material to a subsequent purchaser supply source, the shipping supplier must enclose a packing slip with the shipment and forward all documentation for the material to the purchaser supplier quality.

For products manufactured from the purchaser supplied materials, the suppliers release documentation shall be annotated with the purchaser shipping order number on which the material was supplied.

The supplier must maintain identity of all surplus material and tooling for return to the purchaser at the end of the contract unless otherwise directed by the purchaser.

Material lost, damaged or found unsuitable for intended us shall be reported to the purchaser immediately on the applicable documentation, and records shall be maintained.

7.5.5 Preservation of Product

The Quality Plan shall provide the necessary instructions for the handling and protection of specialized material (i.e. titanium, magnesium, etc.), preservation methods and secured storage to prevent damage or deterioration of product. Where specific packaging and preservation requirements are not specified on the purchase order, best commercial practices are to be followed as a minimum. The packaging must be of adequate substance to ensure that the product will not deteriorate or be damaged in transit.

The supplier shall also have in place a system to control, detect and prevent FOD.

Supplier shall identify any shelf life limitations on their certificate of conformance, and shelf life shall be in compliance with Purchase Order requirements.

7.6 Control of Monitoring and Measuring Equipment

a) The supplier shall identify all measuring equipment used in the manufacture and acceptance of the purchaser's product.

b) The supplier must calibrate or have calibrated such equipment to a system that meets or exceeds the requirements of ANSI/NCSL Z540.3, ISO 10012-1 or ISO 17025 or as defined by end user specifications.

c) All calibrating measuring instruments must be traceable to a national standard.

d) Calibration frequencies must be clearly defined, instruments clearly labelled with the expiry date and a positive recall system must be in place.

e) Documentation must be available to determine calibration system is within a 95% reliability target (UTC specification: ASQR-01).

f) Tooling used as a media of inspection shall be controlled in the same manner as previously described.

g) Magellan supplied tooling or gauging must not be altered in anyway without the permission of the Magellan division.

h) Tooling/gauging on loan must be maintained in good working order and returned to the respective division at the conclusion of the contract and must be in a usable condition.

8. MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General

- The supplier shall plan and implement the monitoring, measurement, analysis and improvement processes needed to:

a) demonstrate conformity to product requirements

b) ensure conformity of the quality management system by establishing, implementing and maintaining programs for:

- monitoring and measuring customer satisfaction, and

- conducting internal audits
- continually improve the effectiveness of the quality management system through: analysis of customer feedback; analysis of product nonconformity and trends analysis of processes; and monitoring of subtier suppliers.

8.2 Monitoring and Measurement of Product

8.2.1 Inspection and Testing

- Supplier shall carry out all inspection and testing in accordance with the Quality Plan or contract requirements. The inspection performed shall include, as applicable, receiving inspection, in-process inspection, special processes, final inspection and first article inspection.
- Only competent personnel shall perform inspection and testing. Where required by process specification or by contract, only qualified or certified personnel shall be used and applicable vision requirements shall be met.

100% inspection of all product characteristics is required, unless otherwise stated on the purchase order or when allowed by Magellan's customer-designated requirements and agreed to in writing by Magellan. Sampling inspection shall only be used as a means of product acceptance when Magellan has determined that the plan is statistically valid to contractual obligations. The plan shall preclude the acceptance of known defectives in the lot. In all cases, inspection requirements identified by engineering drawing or specification take precedence over the inspection requirements defined herein. No sampling is allowed on repair, overhaul and industrial components.

When critical items, including key characteristics, have been identified the supplier shall ensure they are controlled and monitored in accordance with the established processes.

8.2.2 Inspection by Purchaser, Customer or Regulatory Body

- All work in progress (including, but not limited to, work performed by supplier's sub-tier suppliers) shall be subject to such inspection and tests as Purchaser may direct. Inspections and tests may include verification of documentation, inspection of material or services, witnessing re-inspection or re-test of a selected sample, or physical inspection/testing of the product in question to determine contract compliance. Purchaser, customer quality assurance representatives, and regulatory authorities representatives, may perform such inspections and tests on Supplier's (or Supplier's sub-tier suppliers) premises, in which case the Supplier and their sub-tier suppliers shall furnish, at no additional charge, facilities, personnel, equipment and assistance for safe and convenient inspections and test as required by the inspectors.
- For orders requiring source inspection at the supplier's premises or that of the supplier's sub tier, the supplier shall contact the purchaser's quality control representative in advance to allow timely inspection. Similarly for orders requiring government quality assurance, the supplier shall make arrangements promptly with the Quality Assurance Representative (QAR) so that appropriate inspection can be accomplished prior to release authorization.
- All inspections and tests shall be performed in such manner as not to unduly delay the work. Purchaser may charge supplier for additional costs to Purchaser when work is not ready for inspection at the time designated.
- Where first article inspection is a requirement, the FAI report shall be presented to the Magellan representative upon his/her first visit.
- Such surveillance shall in no way relieve the supplier of the total responsibility for the performance to the Purchase Agreement or for the quality of the product in question or imply that the product will not be rejected upon receipt at our facility or by our customer at our facility or the customer's facility.

- A copy of the source inspection report signed by the Magellan representative shall be forwarded to Magellan along with the shipment.
- NOTE 11: Magellan reserves the right to waive source inspection as applicable.
-

8.2.3 Inspection Status and Records

- Process documents shall identify the inspection status of the part(s) being produced for conformance or nonconformance with regards to inspection and tests performed. Inspection status of parts shall be easily detectable during all stages of manufacture or production using router cards, tags, inspections stamps etc. The system shall assure that only product that has passed the required inspections and tests are dispatched, used or installed.
- If allowed by Magellan Aerospace in writing, supplier may release product for production use pending completion of all required measurement and monitoring activities, provided product is identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet requirements.
- The suppliers system shall establish and document controls for acceptance authority media.
- Failure to provide documentation as objective evidence of meeting purchase order and drawing/specification requirements may result in payment being withheld until proper documents have been received. Records shall be provided at no additional cost and be available within 24 hours of being requested.
- Inspection reports shall be submitted to Magellan only when specified by Purchase Order.

8.2.4 Release Documents

- Each batch/lot of material submitted for Magellan's acceptance must be accompanied by the documentation specified on the Purchase Agreement and meet the following requirements, where applicable:

a) All inspection and test documentation shall be traceable to the lot of material shipped.

b) Each Certificate of Conformance (Release Note) shall be legible and traceable to the company's authorized release personnel and formatted to provide the following as per Appendix B:

- the Supplier identity (name and address)
- unique identification number for certificate
- the Purchase Agreement number, line item, and Work Order, if applicable
- the part number, including revision, on the purchase agreement
- the part criticality, as applicable
- the serial and/or lot number, as applicable
- lot/batch traceability and quantity
- material specification and revision, as applicable
- a statement indicating the material/part/process has been completed, inspected and is in conformance to **all requirements of** the applicable **purchase order,** specification, drawing, and technical plan number including revision and/or issue level **(Note: statements referencing "belief, opinion or point of view" of the certifier are not acceptable)**
- for material, certificate of analysis stated
- revisions of: electronic model, 2D drawing , parts list, picture sheet data list (PSDL) and any additional engineering data defined in the purchase order
- test reports or certifications confirming processes such as NDT, Heat Treat, Plating, etc. have been performed by the supplier or by sub-tier sources approved by Magellan. Include source and approval number, as applicable. Nadcap accreditation must be maintained current with the production time of the Purchase Order/contract.
- Concessions (waivers)

- where applicable, identification of nonconforming material or process, and a copy of the dispositioned Deviation Report
- For “Surplus Material” the following statement is required: "Product/part(s) are/is in "New" or "Un-Used" condition".
- For “Surplus Material” that is in “used” or “as-removed” condition the supplier must obtain prior approval from Magellan Aerospace in advance of shipment. The certification shall state “Product/part(s) are/is in "Used” or “As-removed” condition”, and must be tagged, accordingly.
- Where customs is involved, duplicate copies of the C of C to be provided on the outside and inside of the package
- Date
- Where required by purchase order, end customer name and program identifier
-

8.2.5 First Article Inspection

- Refer to Section 7.5.1.1, Production Process Verification

8.3 Control of Nonconforming Product

- The supplier shall ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. A documented procedure shall be established to define the controls and related responsibilities and authorities for dealing with nonconforming product.
- NOTE 12: The term “nonconforming product” includes nonconforming product returned by a customer.
- The supplier’s documented procedure shall define the responsibility and authority for the review and disposition of nonconforming product, and the process for approving personnel making these decisions.
- Where practicable, the supplier shall deal with nonconforming product by one or more of the following ways:

a) by taking action to eliminate the detected nonconformity;

b) by authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer,

c) by taking action to preclude its original intended use or application;

d) by taking action appropriate to the effects, potential effects, of the nonconformity when nonconforming product is detected after delivery or use has started;

e) by taking actions necessary to contain the effect of the nonconformity on other processes or products.

- The supplier's nonconforming product control process shall provide for timely reporting of delivered nonconforming product.
- The supplier shall not use dispositions of use-as-is or repair, unless specifically authorized by Magellan Aerospace if the nonconformity results in a departure from the contract requirements.
- Non conforming product that has not been dispositioned by Magellan Aerospace may not be shipped unless specific written authorization has been provided to the supplier by Magellan Aerospace. When non conforming product is authorized to be shipped it must by suitably identified and packaged separately from the conforming material.
- Nonconformances shall be submitted to Magellan Aerospace as directed by Magellan Aerospace. Product subject to a nonconformance disposition must have the deviation recorded on the C of C.
- Supplier repair procedures submitted to MAL shall include a detailed routing procedure including the sequence of operations, specifications, inspection, acceptance criteria and a provision for the recording of traceability of consumables used. Magellan Aerospace approval is required prior to commencing a repair.
- Suppliers system shall provide for containment and notification within 24 hours of nonconformances that may affect product already delivered.

- Suppliers of tooling/gauging are required to submit all deviations as directed by Magellan Aerospace for review and disposition prior to delivery. Failure to comply shall result in the supplier absorbing additional costs incurred by Magellan Aerospace.
- Scrap purchaser material is the property of the purchaser and must be conspicuously and permanently marked, or positively controlled, until physically rendered unusable. Magellan Aerospace shall direct the supplier to return scrap material or provide objective evidence that material has been scrapped. Records of such must be maintained.
- Proprietary (OEM) manufacturers may use their own internal MRB function providing it does not violate Magellan Aerospace drawing requirements and referenced specifications.
- Escapes shall be documented as directed by Magellan Aerospace. A copy of such document will be forwarded to the supplier, including the cause and corrective action Form 7.04(d) to be completed by the supplier to the extent dictated by the document.
- When nonconforming product is corrected it shall be subject to re-verification to demonstrate conformity to the requirements.
- Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained, shall be maintained.
- Except as otherwise stated in this Agreement, all shipments shall be subject to final inspection and acceptance or rejection by Purchaser after receipt and performance testing at site. Purchaser shall have the right to require the prompt correction of defective work by Supplier, at Supplier's risk and expense, or may elect to correct the defective work itself and back charge Supplier for the cost of the correction. If correction is impracticable, Supplier shall bear all risk after notice of rejection and shall at Purchasers request, promptly make all necessary replacements at Supplier's expense. If Supplier fails to make prompt replacements, Purchaser may make such replacements and back charge Supplier for excess costs incurred by Purchaser.

8.4 Analysis of Data – refer to Section 8.1

8.5 Improvement

8.5.1 Continual Improvement

- Magellan Aerospace encourages suppliers to have systems in place to promote and implement continuous improvement activities in quality, service, delivery, value, and environmental management. This philosophy should be fully deployed throughout the supplier's organization. Examples of techniques utilized for continuous improvement initiatives, include, but are not limited to:
- a) Statistical Process Control / Control Charts
- b) Design of Experiments (DOE)
- c) Theory of Constraints
- d) Parts per million (PPM) Analysis
- e) Lean Manufacturing / Value Analysis
- f) Benchmarking
- g) Kaizen Events
- h) Mistake Proofing
- i) Failure Modes and Effects Analysis
- Where mandatory, the requirement for statistical process control shall be provided on the Purchaser Purchase Order.

8.5.2 Corrective Action

- The supplier shall take action to eliminate the causes of nonconformities in order to prevent their occurrence. Corrective actions shall be appropriate to the effects of the nonconformities encountered.
- A documented procedure shall be established to define requirements for:
- a) reviewing nonconformities (including customer complaints)
- b) determining the causes of nonconformities,

- c) evaluating the need for action to ensure that nonconformities do not recur,
- d) determining and implementing action needed,
- e) records of the results of action taken,
- f) reviewing corrective action taken,
- g) flow down of the corrective action requirements to a sub-tier supplier, when it is determined that the sub-tier supplier is responsible for the root cause, and
- h) specific actions where timely and ⁄ or effective corrective actions are not achieved.

Based on supplier performance or specific product/process non-conformances, Magellan will issue to the supplier a Corrective Action Request (CAR) document, Form 7.04(d) **or OEM equivalent.** The supplier's response shall be directed to the documents issuer on or before the "due date" shown on the document. Overdue CAR responses, or no response at all, or failure to provide follow-up documentation/records could impact the business relationship between the supplier and Magellan, and may lead to the removal of the supplier from the Magellan Approved Supplier register.

When performing a corrective action investigation, at a minimum, the supplier shall consider the following:

Immediate Corrective Action:

- Identify and contain the problem.
- Identify the extent of the nonconforming condition.
- Quarantine all suspected material.
- Review the discrepancy to determine the appropriate disposition.
- Take action to notify all parties (at the supplier, supplier's sub-tiers, and customer, as appropriate) of the non-conformance
- Identify the direct cause of the nonconforming condition.
- Establish a corrective action plan for the direct cause of the nonconfomance that includes the actions to prevent the discrepancy from happening again in the short term.
- Establish when the direct cause corrective action plan will take effect.
- Establish the effectivity where the product will be shipped to Magellan Aerospace without the defect.

Root Cause:

- Identify the root cause(s) of the nonconformance. Note: operator error is not acceptable as a root cause.

Root Cause Correction:

- Identify the actions required to solve the identified root cause(s).
- Establish the projected completion dates for implementation of actions including procedural changes, training
- Establish when the root cause corrective action plan will be complete including the projected date that the root cause will be fixed.

Corrective Action Verification Plan

- Describe the actions that will be taken to verify that the root cause corrective action plan has been implemented. This would include the completion of any committed activities such as shop changes, training performed and the creation of new and revised documents and procedures.
- Provide evidence of completed activities such as copies of shop changes, training records, creation of new and revised documents and procedures

Follow-Up:

- Describe when and what will be audited. Include dates and processes to be reviewed. Describe if the correction be checked annually during an internal audit or addressed during a special audit. The follow up activity must evaluate the effectiveness of the root cause correction to prevent reoccurrence of the nonconformance.

At Magellan's request, the supplier shall provide records and or documentation that attest the implementation of the corrective action and the resulting improvement. Magellan may elect to perform on-site Corrective Action follow-up.

Where a formally documented cause and corrective action response has not been requested by Magellan, the supplier shall review the process to ensure no further discrepancies occur. This does not negate the supplier from obtaining cause and corrective action. The results shall be made available to Magellan upon request.

8.5.3 Preventive Action

- The supplier shall determine action to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions shall be appropriate to the effects of the potential problems.

- A documented procedure shall be established to define requirements for
- a) determining potential nonconformities and their causes,
- b) evaluating the need for action to prevent occurrence of nonconformities,
- c) determining and implementing action needed,
- d) records of results of action taken, and
- e) reviewing preventive action taken.

9. ENVIRONMENTAL, HEALTH & SAFETY REQUIREMENTS

The Purchaser's Environmental Management System meets the requirements of the ISO 14001 standard. The Purchaser will uphold environmental stewardship and the management of environmental impacts associated with all activities in its organization. The Purchaser encourages its business partners, including suppliers and their sub–tier suppliers, to be environmentally responsible and to consider achieving ISO 14001 certification.

No part of the Purchase Order will be performed, nor will any of the materials, supplies, articles, or equipment manufactured or furnished under said Purchase Order be manufactured or fabricated in any plants, factories, buildings, or surroundings, or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of the Purchase Order. Supplier agrees to comply with all laws and regulations affecting this Purchase Order in any manner and agrees to execute further stipulations that may be necessary to effect such compliance. All laws and regulations required to be incorporated in contracts of this character are hereby incorporated by reference.

When requested the supplier shall complete the Supplier Environmental Questionnaire (Form 6.01a) to the satisfaction of Magellan Aerospace.

- The supplier shall identify any potential health and safety and environmental impacts by listing controlled substances on their certificate of conformance. Supplier shall submit to Purchaser Material Safety Data Sheets (MSDS), as required by Purchaser's statutes and regulations. All Material Safety Data Sheets must be current and certification must be less than three (3) years old.

APPENDIX A – Supplier Shipping Documents

DOCUMENTATION TO BE SUPPLIED WITH EACH SHIPMENT	***PRODUCT OR SERVICE CATEGORY***													
	Forging/ Casting	**Raw Material**	**Machining Only**	**Build to Print (Including Processing)**	**Fabrication**	**Mech./Hydraulic Assemblies**	**Tooling/ Fixtures**	**Special Processing**	**Standard Catalog Hardware**	**Sealers, Coatings, Lubricants, chemicals, etc.**	**Calibration**	**Laboratory/ Testing Services**	**Design**	**Delegated Supplier FL4**
Supplier's Packing Slip	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Certificate of Conformance **FL1**	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Completed First Article Inspection Report / Delta FAI in accordance with latest Rev of AS 9102 (This standard does not apply to Standard Catalog Hardware)	**FL2**	**FL2**	X	X	X	X	**FL2**	**FL2**					X	X
Raw material certification traceable to material specification and heat lot / batch number. All metallic material documents shall be traceable from receipt at Magellan back to the origin of the material through all intermediary stockists,	X	X	X	X	X	X	X	X		**FL2**			X	**FL3**

processors, distributor's, etc.														
Process Certifications	X	X		X	X	X	X	X					X	**FL3**
Supplier's inspection records that reflect product review and acceptance	**FL2**		**FL2**	**FL2**	**FL2**	**FL2**	**FL2**	**FL2**					X	**FL3**
Functional Test Report						**FL2**	**FL2**						X	**FL3**
Metallurgical test reports (chemical and mechanical analysis)	X	X		X	**FL2**	X		X					X	**FL3**

-
- Flag Notes:

FL1: Review (Prime) Customer Quality requirements in addition to standard C of C; Magellan's customer may request that additional information be is listed on Certificate of Conformance and/or referenced document.

FL2: When invoked in the Magellan purchase order

FL3: To be supplied to Magellan upon request

FL4: Delegated Supplier status (i.e., Dock-to-Stock, Source Delegation, Supplier Delegation, etc.) applies when supplier has been granted approval from specific Magellan division

NOTE: Suppliers who have demonstrated an acceptable level of documentation performance may have requirements relaxed by Magellan Quality Assurance.

- APPENDIX B – C OF C Content Requirements

TO BE INCLUDED ON THE CERTIFICATE OF COMPLIANCE/CONFORMANCE	*TYPE OF CERTIFICATE OF COMPLIANCE/CONFORMANCE*					
	Detail Parts	Assemblies (FL5)	Standard Hardware (FL1, FL4)	Raw Material	Age or Environmentally Sensitive Materials	Tooling
Full Part (or Product) Number (includes castings and forgings)	X	X	X	X	X	X
Serial Number(s) (when applicable)	X	X		X		
Part Designation	X	X				
Material Description and Specification	X	X	X	X	X	X
Special Process Name, Specifications, and Revisions	X	X				
Product Specification and Revision	X	X	X	X	X	X
Quantity of Parts Shipped	X	X	X	X	X	X
Program ID, when requested	X	X	X	X		
Customer Name (Magellan)	X	X	X	X	X	X
Supplier's Name and Address	X	X	X	X	X	X
Original Manufacturers			X	X	X	
Revisions of: electronic model, 2D drawing, parts list, picture data list (PSDL), and any additional engineering data defined in the Magellan purchase order	X	X		X		
Magellan Purchase Order Number and Line Item, and Release Number, if applicable	X	X	X	X		X
Original Manufacturer's Batch Number			X	X	X	

Supplier/Distributor Batch Number			**X**			
Chemical Properties				**X**		
Material Hardness				**X**		
Mechanical Test Data				**X**		
Date of Manufacture and Cure Date					**X**	
Shelf Life Expiration Date					**X FL3**	
Environmental Storage Condition					**X**	
Certification Approval. Printed name, Signature and Date. Note: An electronic signature is an acceptable alternative to the written signature.	**X**	**X**	**X**	**X**	**X**	**X**
Quality Assurance Stamp, when required	**X FL2**	**X FL2**				

FL1 For standard hardware items that are part of a Qualified Products List (QPL) or other prime customer procurement document/specification, the supplier's certificate of conformance/packing list shall certify that the manufacturer of the hardware is included in the procurement document.

FL2 All Certificates of Compliance/Conformance shall bare evidence that final inspection has been performed with the quality assurance stamp affixed and dated to the Certificates of Compliance/Conformance.

FL3 Material shall not be shipped to Magellan with less than 75% of the required remaining shelf life unless approved by Magellan

FL4 A packing list is an acceptable alternative to the certificate of conformance provided it includes a statement that the product conforms to all purchase order requirements.

FL5 The certificate of conformance shall define all details within an assembly along with the aforementioned notations for each detail unless otherwise noted. The C of C may be accomplished as a single certificate or on multiple certificates. The required content is the same as noted in the Certificate of Compliance/Conformance for detail parts. When providing individual certifications for each detail part contained in the end item assembly, the individual certifications must be traceable to the certification for the end item assembly.