External Quality Codes

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QC-EQC





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1 Revision

Revision Level	Date	Changed By	Reason for Change
А	10/6/16	Travis Lang	Initial Release

2 Purpose

This document lists customer provided quality requirements that are required to be flowed down to Aerocom's sub-tier suppliers.

3 Scope

Purchase orders placed by Aerocom listing any quality codes.

4 Quality Codes

• H6

Buyer's First Article Configuration Inspection (FACI) is required prior to delivery of the first production unit. This inspection will be accomplished with both supplier & buyer participation on a unit acceptable & ready for shipment. Buyer purchasing is to be notified at least 72 hours in advance of FACI readiness.

• H12

A certified, signed statement that material/parts conform to applicable specifications shall accompany shipment and be enclosed with packing slip. Certification must contain the manufacturer's name.

• H13

Certified actual, quantitative chemical &/or detailed mechanical test reports including material producer's certificate for raw material shipped to buyer &/or used against this purchase order must accompany shipments & be included with the packing slip. Reports must validate compliance to current raw material procurement specifications as required on the purchase order and be traceable by heat or lot number.

• H14

The supplier shall provide certifications of conformance for all special processes performed as a part of this purchase order. "Special processes" include but are not limited to: chemical processing, composites, castings, forgings, shot peening, painting/coatings, heat treatment, nondestructive testing, welding/brazing, etc. The certificate of conformance shall list the process specification, revision, and any other documentation/data required by the process specification. "Special processes" performed as a part of this purchase order shall only be performed by current Honeywell-Glendale approved sources. A current list of Honeywell-Glendale Controlled Specifications governing special processes and approved sources are listed in the APSL at "https://www.ssc.honeywell.com". If the specification is not listed in the Controlled Specification list on the APSL or if the supplier cannot access the Honeywell-Glendale approved sources website (APSL), contact the Honeywell Buyer for direction.

The supplier shall monitor the delivery and quality performance of all special process sources used on

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Honeywell-Glendale components. Copies of any nonconformance documentation resulting from the use of these special process sources shall be sent to the Honeywell buyer.

• H27

During performance on this order, seller quality control or inspection system & manufacturing processes are subject to review, verification & analysis by authorized government representatives. Government inspection or release of product prior to shipment is not required unless seller is otherwise notified. Seller shall provide a copy of this order to its government representative upon government request.

• H29

Buyer source inspection is required prior to shipment from seller's plant. Seller shall notify buyer's purchasing department 72 hours in advance of any inspection need. The seller shall make available to the buyer's Quality representative any necessary specifications, documents, facilities and assistance. Evidence of buyer's Quality representative's certification shall accompany shipment.

• H42

Process coupons of the material used for fabrication, which have accompanied the components through the processes, shall be delivered with the finished components. Coupons shall be large enough for analysis & shall be identified (preferably stamped) with the finished component part number, serial number (as applicable) & related process. Coupons shall be supplied for each process performed on this contract, unless limited by the purchase order.

Туре	Minimum Coupon Size	
Bar & Forging Stock	½" x ½" x 3 ¼"	
Sheet & Plate Stock	½" x 6"	

• H43

Raw material coupon (large enough for analysis) of the material used for fabrication shall be delivered with each finished component. Coupon shall be identified (preferably stamped) with finished component part number & serial number. When raw material can be certified as being identical (from the same lot) only one coupon needs to be supplied per shipment - when authorized by the buyer.

Туре	Minimum Coupon Size
Bar & Forging Stock	½" x ½" x 3 ¼"
Sheet & Plate Stock	½″ x 6″

• H51

Buyer's in-process source inspection is required on this order. Seller shall notify buyer's purchasing department 72 hours in advance of any inspection need. The seller shall make available to the buyer's quality representative any necessary specifications, documents, facilities & assistance. Evidence of buyer's Quality representative's certification shall accompany shipment.

• H61

All parts for this purchase order item shall be from the same raw material lot number. If a single lot cannot be provided, the parts shall be supplied from a minimum number of lots & each lot shall be packaged & identified separately to maintain lot identification & traceability.

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• H62

Components supplied on this purchase order shall be accompanied by a report showing actual mechanical dimensions recorded for all features from each individual component & shall be identified with the individual components.

• H69

Buyer's Quality representative's report of Final Acceptance shall accompany material shipment.

• H71

Articles shall be individually or compartmentally packaged; bulk packaging prohibited.

• H98

Manufacturing Readiness Review (MRR). A Manufacturing Readiness Review (MRR) shall be conducted at the subcontractor's facility prior to the start of manufacturing when required by the Purchase Order (PO) or Statement of Work (SOW). The subcontractor shall submit the MRR data package to the Buyer a minimum of 10 days in advance of the scheduled MRR.

MRR Objective. The MRR objective is for the subcontractor to demonstrate the overall production readiness prior to manufacturing, and to ensure that items to be manufactured will meet the requirements of the PO, SOW, engineering drawings and engineering specifications. The subcontractor shall demonstrate that all necessary manufacturing plans, inspection plans, travelers (build documentation), tooling, facilities, and other resources are in place and available to ensure meeting all quality and design requirements within the negotiated program budget and schedule.

MRR Team. The subcontractor MRR team shall consist of representatives from the management and the technical functions. The management functions shall include the contract administrator and responsible project engineer as a minimum. The technical representatives shall include design engineer/ representative, manufacturing engineer/representative, and quality engineer/representative as a minimum.

MRR Presentation. The MRR presentation shall address the following items as a minimum:

- 1) Subcontractor Project Team Organization with key personnel identified
- 2) Overall Program Schedule including current status
- 3) Procurement status including all sub-tier suppliers
- 4) Manufacturing milestone schedule
- 5) Action Item Status/Review
- 6) Design Status (as applicable) including current status, trade-offs, producability studies, lessons learned, etc.
- 7) Detailed Manufacturing Flow Diagram including subcontractor inspection points and recommended Buyer Mandatory Inspection Points (MIP).
- 8) Manufacturing Documentation Status
- 9) Inspection Documentation Status
- 10) Test Documentation Status
- 11) Tooling needs and statuses including drawing status, build status, calibration status, etc.
- 12) Facilities Readiness including layout and capacity (including plant tour during MRR)
- 13) Operators and Inspectors training



14) Overall Project Risk Assessment; technical, cost, schedule. Should include any plans to mitigate risks identified.

MRR Data Package. The MRR data package shall include the following as a minimum:

- 1) Copy of MRR presentation
- 2) Any Subcontractor Data Requirements List (SDRL) Items as defined in the PO/SOW

MRR Supporting Documentation. The following documentation, as a minimum, shall be available for review at the MRR:

- 1) Subcontractor Drawings and Specifications (as applicable)
- 2) Traveler(s)/Build Documentation
- 3) Test Procedures (as applicable)
- 4) Inspection Procedures
- 5) Tooling Drawings

• H99

Counterfeit Parts Prevention Counterfeit Parts

For purposes of this clause, Work consists of those parts delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, goods, and assemblies) provided to Honeywell by the Parts For purposes of this clause, Work consists of those parts delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, goods, and assemblies) provided to Honeywell by the SUPPLIER or SUPPLIER'S sub-tier Supplier's. "Counterfeit Work" means Work that is or contains items intentionally misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved Work that has reached a design life limit or has been damaged beyond possible repair prior to delivery, but is intentionally altered and misrepresented as acceptable satisfying express contract requirements.

SUPPLIER agrees that Counterfeit Work will not be intentionally or negligently delivered to HONEYWELL.

This clause is applicable to all sellers (contractors, subcontractors and distributors) except for the OCM/OEM of the lowest piece part level. An OCM, or Original Component Manufacturer, is considered a company that manufactures a part that it has designed and for which it owns the intellectual property rights. An OEM, or Original Equipment Manufacturer, is considered a company that manufactures products that it has designed and sells those products under the company's brand name.

SUPPLIER shall only purchase products to be delivered or incorporated as Work to HONEYWELL directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain with part pedigree directly from the OEM. Work shall not be acquired from independent distributors or brokers unless approved in advance in writing by HONEYWELL.

The SUPPLIER shall verify the direct sub-tier supplier procurement source and associated certifying paperwork. The SUPPLIER's standard incoming inspection methods shall be used to detect potential counterfeit parts and materials.

SUPPLIER shall promptly notify HONEYWELL with the pertinent facts if SUPPLIER becomes aware or has reason to believe that it has furnished Counterfeit Work. When requested by HONEYWELL, SUPPLIER shall



provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.

In the event that Work delivered under this Contract constitutes or includes Counterfeit Work, SUPPLIER shall, at its expense, promptly replace such Counterfeit Work with genuine Work conforming to the requirements of this Contract. Additionally SUPPLIER shall reimburse HONEYWELL's reasonable costs of removing Counterfeit Work, of reinserting replacement Work, and of any testing necessitated by the reinstallation of Work after Counterfeit Work has been exchanged. The remedies contained in this paragraph are in addition to any remedies HONEYWELL may have at law, equity or under other provisions of this Contract.

This clause applies in addition to any quality provision, specification, statement of work or other provision included in this Contract addressing the authenticity of Work. To the extent such provisions conflict with this clause, this clause prevails.

SUPPLIER shall provide original component manufacturer/original equipment manufacturer (OCM/OEM) documentation that authenticates traceability of the affected items to the applicable OCM/OEM.

Upon request, the SUPPLIER shall provide as information only the SUPPLIER's Counterfeit Work plan and procurement procedures verifying compliance with this section's requirements.

Data Retention

The SUPPLIER shall retain all SUPPLIER and sub-tier Supplier history records and reports including, but not limited to, assembly records, test records, anomaly records, procurement traceability and documentation for the period defined by the governing material specification and contract.

SUPPLIER shall include this clause or equivalent provisions in all lower first-tier subcontracts, and require that each of the sub-tier supplier flow the same clause to all sub-tier suppliers to prevent the inadvertent use of counterfeit parts and materials for the delivery of items that will be included in or furnished as Work to HONEYWELL.

• H193

There will be no change in the design of the part, in the material & processes, in its construction or in the manufacturer's part number after the first acceptable unit has been received by Satellite Systems unless requested &/or approved by Honeywell in writing.

• H504

Supplier shall provide the following data:

- 1) First article inspection
- 2) 100% critical features
- 3) 1.5% AQL sample on non-critical

The inspection methods shall be identified in the inspection records.

• H529

Supplier shall use SSO assigned serial numbers.