Date: January/16/2014

2014-001				
X Bowling Green	X Cambridge Spring	gs X Dayton	Williston	X Erie
Mexico	Indianapolis	X Cary Sup	oport Saegertov	vn X Grandview
July 16, 2014		PURPOSE: (check one)	X Clarify/ Reinforce	X New Requirement
			Customer Notification	
Updated 460 (Clauses			
Reference the requirements	460 Clauses have been updated and can be used effective immediately. Reference the Action Plan section for more detail related to the effectivity requirements of particular clauses. A high level summary of the changes, additions, and deletions are listed below.			
	X Bowling Green Mexico July 16, 2014 Updated 460 0 460 Clauses h Reference the requirements	X Bowling Green X Cambridge Spring Mexico Indianapolis July 16, 2014 Updated 460 Clauses 460 Clauses have been updated Reference the Action Plan section requirements of particular clauses	X Bowling Green X Cambridge Springs X Dayton Mexico Indianapolis X Cary Suparation Cary Suparation X Cary Suparation July 16, 2014 PURPOSE: (check one) Updated 460 Clauses 460 Clauses have been updated and can be updated Reference the Action Plan section for more derequirements of particular clauses. A high lever	X Bowling Green X Cambridge Springs X Dayton Williston Mexico Indianapolis X Cary Support Saegertov July 16, 2014 PURPOSE: X Clarify/ Reinforce Customer Notification Updated 460 Clauses 460 Clauses have been updated and can be used effective immore Reference the Action Plan section for more detail related to the requirements of particular clauses. A high level summary of the

Submission of certifications, test reports, frozen planning and any other technical data shall be submitted through the secure website at https://sft.lord.com. You will be asked to enter the recipient, which is typically the email of the person to whom you are sending the documents (i.e. First_Last@LORD.com). Specific recipient instructions for certification packages and frozen planning are found in clauses W and 171, respectively.

Clause requirements are located at www.LORD.com/suppliers.

Please read the actual 460 clause for the full requirements! The complete 460

<u>Change!</u> H - First Article Inspection Report Approval: Inspection methods identified on the FAI are the methods to be used by the supplier and LORD for sample and final inspection. Changes shall be approved by the re-evaluation and resigning of the FAI by both the supplier and LORD. If a functional gage has been specified and agreed upon as the operating inspection method, actual values are not required. Indicate on the FAI that the functional gage (including gage number) was used for the inspection. Clarified conditions when a first article is required. Added the use of the LWI-0774f1 as a replacement for 460-001 form.

<u>Change!</u> L - Non-conventional machining such as Electric Discharge Machining, Laser Cutting, Plasma Cutting and Laser Marking or any process that uses heat generating methods for material removal: Suppliers shall obtain written approval via an SR (reference clause P) for any part number using these heat generating methods. Approval via an SR is always required for each individual part number by supplier, regardless of any drawing notes or methods as stated on the quotation to LORD. The SR is required for the first time that a specific part number is shipped using the non-conventional machining method. LORD Specification PRC-S-0230 details additional requirements.

<u>Change!</u> O - Inspection: You shall inspect product to the degree necessary to ensure compliance to all requirements, which may result in higher sampling levels than required by the minimum industry specified sampling plans (i.e. ANSI/ASQ Z1.4) or LORD customer requirements. Inspection methods used shall be, at a minimum, the ones established and approved during APQP and used during the FAI. LORD technical standard TS-026, Standard Measuring Methods, available at www.LORD.com/suppliers, shall be used by the supplier for legacy product in cases where APQP was not performed; however, the following method change note applies. Inspection methods identified on the FAI are the methods to be used by the supplier and LORD for sample and final inspection. Changes shall be approved by the re-evaluation and resigning of the FAI by both the supplier and LORD.

<u>Change!</u> P - Supplier Requests: If you are submitting an SR for a nonconforming category (Type I or Type II nonconformance), obtain concurrence to submit the SR from your assigned SQE prior to submittal. A reduction of 20% in the number of nonconformance related SRs is being targeted for next year. Definitions for FusionOps choices for selecting the submission code are now stated in Clause P.



<u>Change!</u> **T - Shipment and Packaging Requirements:** General corrosion requirements to be applied throughout processing have been added. Guidelines for protecting parts against damage during manufacturing, in-transit to and from sub-tier processors, and for shipment to LORD are detailed. Corrosion protection requirements for packaging and shipping have been clarified and expanded. Please read the entire clause for details.

Change! W - Certification: All documents submitted shall accurately reflect the manufacturing and inspection processes of the supplier and their sub-tier suppliers. Form 460-001 has been replaced with Form LWI-0774f1 System Checklist. Forms LWI-0774f1 System and Process Checklists provide a tool that defines the minimum information required to be submitted for each clause and guides you through the process of compiling your certification package. Instructions are provided directly on the form which can be found on http://www.LORD.com/suppliers. If you need instruction using the new certification form or have any questions, please contact your SQE directly.

<u>Change!</u> **040 - Government Source Inspection:** Clarified to not begin work on the parts until the government has communicated to you what requirements they will need to witness.

<u>Change!</u> 058 - Manufacture/Subcontracting of Classified Parts (Bell Helicopter): Removed the 200% hardness test requirement. Hardness testing shall be conducted per the requirements of the drawings and specifications. Threads shall be inspected per the drawing/specification requirements and the agreed upon inspection method as established during APQP, or per the guidelines in TS-026 for legacy product.

<u>Change!</u> 090 - Certification Req'd - Certificate of Conformance (C of C): Requires the use of LWI-0774f1 System Checklist for metallic and plastic materials. Chemicals and materials other than metallic and plastic may use LWI-0774 System Checklist or another Certificate of Conformance document meeting the minimum requirements listed in the clause.

<u>Change!</u> 120 – Certified Test Report-Chem/Mech Prop: Added that the certification shall state the starting size of the material when the raw material size is specified on the drawing. For raw material supplied by LORD, a copy of the LORD shipping document for the material provided is required. A C of C per clause 090 is no longer required for LORD supplied material.

<u>Change!</u> 140 - Certified Test Report - NonMetallic Mat'l: Requires the use of LWI-0774f1 System Checklist for metallic and plastic materials. Chemicals and materials other than metallic and plastic may use LWI-0774 System Checklist or another Certificate of Conformance document meeting the minimum requirements listed in the clause. As a reminder, Clause 140 requires a Certified Test Report stating the actual results of all testing required by the material specification as stated on the drawing, in the specification or on the purchase order.

Change! 171 - Supplier Planning Approval Req'd: Frozen planning shall be prepared in accordance with LORD WI-05-02-02 and the requirements of the applicable LORD engineering drawing. All planning shall be submitted in English. Frozen planning shall be submitted and approved prior to the start of manufacturing or per the schedule agreed upon between LORD and the Supplier for both original and revised planning. All planning submittals require submission of a Supplier Request (SR), per general clause P. The SR shall have Frozen Planning chosen as the reason for request and the SR Item Description block completed with a statement as to why the planning is being submitted for approval. If the submission is for a proposed revision to an existing approved frozen plan, the reason shall include a requested effectivity date and justification for the revision. LORD will review the proposed revision and provide a response indicating if the change is denied or if LORD will allow the revised frozen planning package to be submitted. No changes to the frozen planning or manufacturing process shall be implemented without LORD approval to proceed. The supplier shall upload the actual planning package to the LORD SFT (Secure File Transfer) Site at https://sft.lord.com and specify the recipient as DL-Frozen Planning@lord.com, unless directed otherwise. Any subsequent product shipments will require the frozen planning revision stated on the Certification System Checklist form LWI-0074F1. The Part Number, Frozen Planning Number (if different than part number) and Planning Revision (Letter/Number or Date) shall be identified (Example: Part Number: Y-35027-1-1, Company ABC Planning Number: FP 83, Planning Revision B, 3/31/00). Please contact Joe Baniewicz at Joe_Baniewicz@LORD.com or your SQE with any questions.

Change! 402 - For Sikorsky End Use: Clarified application of UTC specification ASQR-01 to state that it shall not override any specific or unique LORD drawing requirements. Clarified application of SS7777 as follows: If SS7777 appears in the process table, it shall apply to all material specifications and process specifications listed under the Process Spec column of the process table. In the cases where a LORD specification (i.e. "PRC", "PRD", or any other LORD internal document) is listed under the Process Spec column of the process table, then SS7777 is not invoked for that specific process.

<u>Change!</u> 406 - Counterfeit Work for Lockheed Martin: Replaced the clause with the current requirement being flowed down from Lockheed Martin. Please read this clause in its entirety for changes to this clause requirement.



<u>Change!</u> 410 - Restriction on Acquisition of Certain Articles Containing Specialty Metals - DFAR 252.225-7009

(June 2012): Updated references to documents, noted non applicable items, and updated the list of Qualifying Countries per DFAR 225.003 (10) (December 2012).

<u>Deleted!</u> 420 - ITAR Controlled: This clause was deleted since it is a duplicate of information provided on the LORD purchase orders and the LORD drawings.

NEW! 428 - Certification Req'd - REACH: Compliance indicates that all supplied components contain no Substances of Very High Concern (SVHC) in accordance with Regulation (EC) No 1907/2006. If certifying an assembly, all components must be compliant with REACH. REACH applies to **all** supplied material, including chemical substances.

NEW! 429 - Certification Req'd - RoHS: RoHS restricts the use of the following six hazardous materials to the indicated levels: Lead (Pb) <0.1%, Mercury (Hg) <0.1%, Cadmium (Cd) <0.01%, Hexavalent Chromium (Cr VI) <0.1%, Polybrominated Biphenyls (PBB) <0.1%, Polybrominated Diphenyl Ethers (PBDE) <0.1%. If certifying an assembly, all components shall be compliant with RoHS.

ACTION PLAN:

Suppliers: Please review the clauses in detail and incorporate the changes into your flow down system internally and with your sub-tier suppliers, as needed. LORD will allow 60 days from the date of issue of this Quality Alert for suppliers to comply with the use of the new mailboxes, the conversion from Form 460-001 to LWI-0774f1 (if not already underway at your facility), the shipment and packaging requirements detailed in Clause T, changes to clause 406, and implementation of clauses 428 and 429.

Please direct all questions and clarifications to your LORD Supplier Quality Engineer or me at 814-868-0924, ext. 6450; <u>lisa.erdely@LORD.com</u>.

LORD: Distribute and review with your Quality and Sourcing Teams. Internal review sessions to be scheduled by Supplier Quality.

ISSUED BY: Asa Cally-Causgiove
Lisa Erdely-Causgrove

Global Quality Manager, Supplier Quality

QA No. 2014-001 Date: January/16/2014

QUALITY ALERT

DISTRIBUTION

A.	Suppliers - Indicate commodity(s) or check "ALL ACTIVE SUPPLIERS" or "NONE".			
	Commodity(s):	Aerospace, Industrial, Electro-mechanical, Oil & Gas		
	All Active Suppliers:	X		
	None:			
	Director, Purchasing: M. Bucklad, M. Rose, A. Theodorakis			
B.	Lord Plant Quality Manager(s): J. Briar, G. Buck	Quality Manager(s): J. Briar, G. Buckman, E. Fleming, D. Palotas tor, Global Quality: C. Fowle		
	Director, Global Quality: C. Fowle			
	DCAS:			
	Other: K. Baldwin, W. Dickinson, L. Erde	ely-Causgrove, G. Hoffman, G. Kolb, P. Snippert, K. Wood		
C.	ustomer - Indicate customer (s) or check "NONE".			
	None: Customer	X		

INSTRUCTIONS TO DISTRIBUTION LIST:

- 1. All personnel: Upon receipt, review this alert and implement the "ACTION PLAN" in your area(s) of responsibility. Destroy this alert when it expires.
- 2. Department managers, supervisors and/or group leaders/team leaders: Communicate this alert to your staff by posting the alert in a public area (work area bulletin boards, etc.). Destroy this alert when it expires.