



One Space Park Redondo Beach, CA 90278

22 October 2019

To: Northrop Grumman Aerospace Systems Suppliers

Subject: Supplier Alert Notification – Metallic Harness & Conductivity Issue

Dear valued supplier,

Hardness & conductivity variations have been discovered on machined Aluminum parts due to machining processes, cutter selection & pocket geometry.

One or more of these variables has been shown to result from excessive heating that has caused localized variations in the aluminum material, resulting in changes to the base aluminum micro structure. These variations in the micro structure have resulted in significant changes to conductivity that is outside of allowable specs. These areas of variations are identifiable as dark spots, visible to the naked eye on the machined areas, only after pre-penetrant etch, as well as during and after chem film and anodize operations.

Suppliers are advised to visually inspect machined aluminum components for dark spots after pre-penetrant etch. If dark spots are seen, it is advised to take conductivity readings directly on those spots to verify spec conformance.

Discussions are encouraged with processing facilities to be vigilant and identify any dark spots during the processing cycle with any indications to be checked for conductivity. Please reach out to Bob Riffle (Supplier Manufacturing Engineer - (316) 554-6052 / robert.riffle@ngc.com) or Tony Bennett (Supplier Quality Field Engineer - (817) 472-8804 / anthony.bennett@ngc.com). The affected areas observed to date have been approximately .500 inches in diameter.

Products affected that exceed specification limits must be submitted via the SMRR process.

Sincerely,

Nikki Kodama

Director, Supplier Quality