

FINDINGS/RECOMMENDATIONS

FIRST ARTICLE RESULTS:

- The Dimensional inspection was found to be acceptable with no out of tolerance conditions indicated. All inspection fixtures and gages were found to be of current calibration dates.
- All paperwork, NDT certifications, material receiving inspection reports, Process Operation sheets and Inspection Method Sheets (IMS) were found to be acceptable

A RECOMMENDATION TO APPROVE THE FIRST ARTICLE WILL BE PROVIDED TO THE CONTRACTING OFFICER AT DLA AVIATION RICHMOND.

PRODUCTION / MANUFACTURING / QUALITY ASSURANCE

FINDINGS

- A review of all areas was performed and Union Machine Company has demonstrated they have the capability to produce critical spares for multiple warfighter platforms.

RECOMMENDATIONS

- Union Machine must ensure they have UID*marking Capabilities as it is now mandated and compliance will be required IAW contract requirements.

* **Unique identification (UID):** A system of establishing globally unique and unambiguous identifiers within the Department of Defense, which serve to distinguish a discrete entity or relationship from other like and unlike entities or relationships. (Ref: **MIL-STD-130N Change 1**)

<https://www.acq.osd.mil/dpap/pdi/uid/index.hTml>

- A recommendation to make the Process/Operation sheets “unique” that being color coded depending on contract i.e. Blue for Air Force, Yellow for Navy, Green for Army, White for commercial, etc. The NAVSUP WSS team has seen this process at other sites and found it very effective for immediate identification of a part on the manufacturing floor.
- The inspection team observed a metal shelf at the entrance to the QA area which had boxes on every shelf marked with part numbers and notes written on the box. Closer review indicated that many of these boxes were awaiting various dispositions either from DLA, FRC or other Government entity. In one case one box contained items awaiting a protest from UM on a PLT determination made by a FRC 12 months earlier. A recommendation was made that detailed paperwork be attached to each box and ensure that a follow-up was made on each item to prevent lost or delinquent deliveries.
- Union Machine Company assigns serial numbers to the many parts that they currently manufacture, however all serial numbers are recorded in a notebook that goes back approx. 15 years. There is no back-up for this system. The team recommended that they look into an automated serial number assignment system and store electronically and off site.
- The Quality and Manufacturing team did a review of the MRB records and QDR records for accuracy and disposition. The following was observed:
 - Union Machine received a QDR in 2013 from FRCE on a Seal and Runner manufactured under a 2011 contract. The QDR was written for non-conformance found during installation on a T64 engine. The item was shipped back to Union Machine and was held for further instructions. The team interrogated the JDRS system and found that this QDR was closed with no further action required. This item remained in the MRB area for 5 years without resolution. In this case the inspection team recommended that the QA department keep records with an automatic reminder of items such as this so these items are not stored without any follow-up. It was recommended that the items returned be marked as “SCRAP”, and disposed of properly.
 - While manufacturing a Turbine case on a 2010 contract, a RFV was generated on 4 serial numbers indicating an “over max” condition on the 4 parts. The RFV was dated November 2011 and was passed to the DCMA for review and forwarding to the buying activity. Upon review of the non-conformance report it was noted in the actions section that the DCMA had sent an email to QA November 2011 indicating that the waiver was rejected and the disposition is “SCRAP”. These four (4) items were found to still be in the MRB room when indeed they should have been marked as scrap and disposed of properly. The proper procedure would have been that the DCMA

address the rejection on the DD1694 and passed to Union Machine instead of sending an email. Union Machine should have better control of the items in the MRB area and perform inventory possibly every month to check the status of the items to ensure the issues are resolved in a timely manner.

PLEASE NOTE THAT THESE ARE JUST OBSERVATIONS WITH RECOMMENDATIONS THAT CAN POSSIBLY IMPROVE UNION MACHINES ABILITY TO CONTINUE TO PROVIDE A QUALITY PRODUCT ON TIME.

The NAVSUP WSS team concludes that Union Machine is a quality shop and has diverse manufacturing capabilities with a solid Quality and Manufacturing background. Union Machine has been found to be acceptable for the manufacture of both Critical Safety Items (CSI) and Critical Application Items (CAI) for the Navy and the Marine Corps.

This document is provided in support of the Source Approval Process which mandates that a Site Survey be performed at least every ten (10) years. It should be included with every Source Approval Request submitted by Union Machine Company to all branches of the service. It in no way has any direct bearing on a company's request for source approval. The source approval process is clearly outlined by each buying command and the company seeking source approval should ensure that they follow the procedures as outlined in the Source Approval Instructions.

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