Frequent Findings in Maintenance Areas

We have compiled findings for a complete biennial cycle so all carriers in the program were captured. There were a total of 124 findings from 90+ biennial/initial surveys. We have focused them down to their core issue and tied them to the applicable Quality and Safety (Q & S) requirements.

Here are some of the most common findings

Quality Assurance

- Internal audit program does not cover all functional areas of maintenance. Area most often not on the audit schedule is quality assurance and its programs.

Q & S requirements (Air Carrier Management subsection) state that "an internal quality audit program or other method capable of identifying in-house deficiencies and measuring the company's compliance with their stated policies and standards has been implemented."

- Not all corrective actions address the root cause of the deficiencies.

Q & *S* requirements (Air Carrier Management subsection) further state "audit results are analyzed in order to determine the cause, not just the symptom, of any deficiency. The Q & S requirements also state in the Maintenance, Quality Assurance subsection that "the cause of any recurring discrepancy or negative trend is researched and eliminated."

- Vendor Audit programs not providing adequate oversight of repair/overhaul vendors that perform maintenance on components that are critical to flight.

Q&S requirements (Maintenance Inspection Activity subsection) "Also required is a system to evaluate contract vendors, suppliers, and their products."

DOD expectations: The process may entail a program requiring vendors who overhaul safety of flight or major aircraft components (i.e. engines, landing gear, primary flight controls, emergency rafts and slides) to receive an on-site audit; while all others will receive another form of audit i.e. phone, mail-out audits etc. If risk-based, the process must have an established, robust means for measuring and assigning risk (Bottom line, the DOD expectation is for carriers to continue to provide on-site oversight (carrier, CASE) of those non OEM or non OEM approved maintenance providers conducting repair and overhaul of major aircraft components.)

Maintenance Inspection

- No documented required inspection item or equivalent program that ensures proper accomplishment of maintenance that can impact safety of flight.

Q&S requirements (Maintenance Inspection Activity subsection) "A process to ensure required aircraft inspections are completed and the results properly documented is required.

DOD expectations: All carriers (135, 121, & Foreign) are required to have a process (I.E. Required Inspection Item or second set of eyes) in place to ensure the proper accomplishment of maintenance that can impact safety of flight.

Maintenance Training

- Appropriate recurrent training not being provided to all maintenance personnel

Q&S requirements (*Maintenance Training subsection*) *Orientation, familiarization, OJT, and appropriate recurrent training for all full and part-time personnel is expected*

DOD expectations: All personnel receive recurrent training either awareness or return to service on ETOPS, RVSM, and CAT I/II/III programs, Also recurrent training is required for all personnel who have engine run/taxi authorization.

- Tracking of recurrent training requirements is not being accomplished, resulting in overdue training.

Q & *S* requirements (Maintenance Training subsection) states that "training documentation is required; it is current, complete, (and) well maintained."

DOD expectations: All training requirements are tracked to ensure maintenance personnel are aware of training due dates. Process includes procedures to ensure personnel who are overdue are not authorized and are not performing the tasks they are overdue on.

Fueling and Servicing

- Frequently used fuel vendors not being audited, identified discrepancies not being tracked to closure, and audit frequencies beyond industry standards.

- Fuel quality checks not being conducted at locations not normally audited under the quality assurance program. (AD HOC)

Q & S requirements (Maintenance, Fueling and Servicing subsection) state that "aircraft fuel is free from contamination." Further states "Procedures for the monitoring and verifying vendor servicing practices are included in this program."

DOD expectations: Documented process and procedures are in place to ensure quality fuel is uploaded into operator's aircraft no matter the locations of the upload.

Maintenance Manuals

- Revision receipt transmittals not being tracked to closure.

Information printed from electronic means not properly controlled to prevent use of non-current data.

Q & *S* requirements (Maintenance Manuals subsection) state that "company policy manuals and manufacturer's maintenance manuals are current."

DOD expectations: All controlled manuals (company, manufacture) are current. Company has documented procedures to ensure that the latest revision is incorporated into the manuals. (Just being on a subscription service does not ensure currency)

- Operating policies and procedures not documented.

Q & *S* requirements (Maintenance Manuals subsection) also state that "management policies, lines of authority, and company maintenance procedures are documented in company manuals and kept in a current status."

DOD expectations: All maintenance policies and procedures are documented and are kept current. (**Document what you do and do what you document**)

In addition, 90 days before a survey, we mail a list of both the operations and maintenance common audit findings to the company.