



## **ATTACHMENT 49**

**AIRWORTHINESS GROUP CHAIRMAN'S FACTUAL REPORT**

**LAX-02-GA-201**

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MEMORANDUM FOR RON TESTA, ATSET GROUP, INC.

As we agreed, I attended the FAA-sponsored meeting on C-130A airworthiness at Dulles today. The meeting agenda is attached as enclosure (1) for reference. Following is a recap of the meeting in the order in which it actually occurred, with the pertinent points made by each presenter:

Ed Freeman, FAA (AFS-510)

- The maintenance requirements for restricted category aircraft are no less stringent than for unrestricted.
- FAR 91.409(f) outlines four separate inspection program options:
  - 1) 121, 135 continuous airworthiness inspection program.
  - 2) 135.419 Approved Aircraft Inspection Program (AAIP)
  - 3) Manufacturer recommended program.
  - 4) Any other program approved by the FAA.
- Options 1-3 are based on following a manufacturer's recommended program. It follows that any Option 4 program would also need to be based on manufacturer's recommendations or long-term operator experience.
- Currently there are a number of ex-military C-130As in a variety of civilian uses, but no standardized inspection program, and no continuing airworthiness program from Lockheed since C-130A policy was ceded to the Air Force in the 1950s.
- FAA held a meeting 6/14 with principal C-130A operator PMIs, Lockheed USAF, and tech advisors to develop a standard for inspections.
- FAA present concern is with scope of inspections, rather than the frequency. What is inspected is more important than how often. Focus is totally on inspections rather than maintenance or overhaul.
- Key recommendation of 6/14 meeting is to adopt USAF inspection cycle for timing, and USAF Program Depot Maintenance (PDM) standards as basis for individual inspection programs. Rationale for using USAF PDM is that it is thorough and complete program based on 30+ years of experience, data, and trend analysis. FAA will welcome any alternative suggestions proposed by operators through the FAA admin chain.
- FAA is also examining L-382 Airworthiness Directives (ADs) for applicability to C-130A. Some ADs may have been incorporated by USAF as Time Compliance Technical Orders (TCTOs), but not certain. Most C-130As type certificated for restricted use between 1988-1990 with no TCTO incorporation since. FAA will examine TCTOs for applicability as ADs; may be simple or may be very complex to determine. Likewise, Allison ADs for the 501-D13 may be directly applicable to the T-56-9. Potential for major impact on operators since D13s operated with Limited Life Components (LLCs) that have identical part numbers with T56

replace-on-failure parts. USAF did not convert to LLC-based maintenance in early 1980s due to anticipated retirement of C-130As.

- Future Type Certifications for ex-military aircraft will have continuing airworthiness direction. Present problem lies in individual operators having developed their own inspection programs which FAA now deems inadequate.

- Freeman Q & A

Q. What is driving this. Every C-130A user is currently operating under an FAA approved inspection program?

A. Department of the Interior brought lack of consistency among operators to FAA attention. FAA looked at L-382 maintenance plan from Lockheed and determined it is applicable to C-130A. Safety is primary concern, even if there haven't been any apparent problems. FAA's charter is to be proactive in preventing unsafe situations.

Q. The L-382 plans and procedures are based on operating a transport aircraft. Why should that apply to restricted use aerial tankers?

A. FAA concern is continuing airworthiness and must take a conservative approach.

Q. Aren't USAF TCTOs based on combat readiness requirements and anticipated future use. Why should they apply to restricted use aircraft?

A. We'll look at that.

Q. If operator incorporates all TCTOs will he be able to use C-130As like the USAF--i.e. carrying cargo and pax?

A. No. Aircraft will still be type certificated for a specific use.

Duane Powers, Hawkins & Powers Aviation

- Bottom line: H & P will be forced out of business if FAA proposals implemented.
- H & P operates a wide variety of ex-military aircraft, most only 100-200 hours per year. Aircraft are operated below max gross at reduced power settings generally operated and maintained in arid non-corrosive atmosphere. In case of FB4Y H & P has far more experience in operating than the US government. These factors were all considered in the development of H & P's inspection plan. H & P does not play with fire, they put it out. FAA is playing with fire in that the net result will be to kill the aerial tanker industry for no good reason, and leave the US government without the means to fight wild fires.

Powers Q & A

Q. What will the dollar impact be to H & P.

A. Can't say until FAA defines requirements, but even minimal requirements will be intolerable financially.

Bill Broadwell, Air Tanker Association

- Association is concerned that this FAA initiative will be extended to all ex-military aircraft.
- Implementation if required will affect operators differently, but restricted category aircraft can't be used for other purposes. Operators do not have a great deal of flexibility, and there is concern that the industry will be badly hurt and that the US will lose a key resource.
- Why is the FAA so determined to fix something that isn't broken?

Jim Peale, Warner Robins Air Logistics Center.

- USAF has 30 years of C-130 experience, as well as collecting info from foreign users and Lockheed. USAF PDM program developed over time based on data and analysis, not theoretical models. Different PDM interval for each C-130 model with 42 months established for the As.
- PDM can be accomplished by operators at home bases if they have the right equipment and training. Currently, operators are not accomplishing critical maintenance functions. Accident waiting to happen.
- USAF experience has been that structural damage due to corrosion and fatigue cracking more a function of time than flight hours. Do not recommend extending the inspection cycle. TCTOs based on safety of flight considerations not combat readiness or other factors. Should be incorporated in all aircraft.
- USAF can provide incorporation data for specific aircraft and general PDM information to FAA. Up to FAA to promulgate in the interests of air safety. USAF can't go direct to operators.

Peale Q & A.

Q. Civilian equivalent of PDM is D check. Don't D checks accomplished more often than 42 months obviate the need for PDM?

A. No. Won't see some stress/corrosion until 42 months. Time based or long time analysis of lots of data.

Ray Frewer, Lockheed.

- Lockheed has no continuing responsibility or liability for C-130A. All turned over to the USAF as part of the initial C-130 program. Do publish bulletins as aware of problems.
- L-100 and C-130A very different aircraft. No valid comparison of maintenance programs.

Philip Akers, FAA (AIR-120).

- FAA policy not to go back and require retesting once type certificate has been issued, but can correct design problems or safety defect with ADs. Try to take common sense approach, but bottom line direction from Congress is to require high standard of safety. Will work with the operators as much as possible but will impose TCTOs or other directives in the interest of air safety.
- C-130A will have to always operate in restricted category since not manufactured to FAA passenger carrying specs. FAR 25 compliance never evaluated.
- FAA currently looking at 18 structural ADs and 8 engine ADs for L-382 for applicability to C-130A. Also weighing TCTOs for incorporation.
- Will incorporate depot level maintenance TOs in future Type Certification data sheets to preclude same problems in future.
- Concern that current Supplemental Type Certificates (STCs) for tankers do not contain direction on corrosion inspection of tail and fuselage sections affected by air drops or maintenance requirements for the tank doors.

Dee McCombie, US Forestry Service.

- USFS current contract requires operators to comply with Faa directives in effect at the time of the contract implementation. If FAA requires new inspection



in the PDM concept and thinks it is the safest course of action. Anticipate that he will press for its adoption.

Freeman also indicated that the focus of his shop is on multi-engine turboprop aircraft, and that he will look at P-3s "soon". He said that the same rationale would be applied, i.e.,--if there was a body of maintenance data and a history of depot level procedures and practices based upon the analysis of trends, that he would anticipate extending those procedures to the P-3 operators as requirements, just as with the C-130 TCTOs. Although he is a rated Electrician FE, his knowledge of the P-3 program is very limited at the moment.



A. L. Ross