



ATTACHMENT 37

AIRWORTHINESS GROUP CHAIRMAN'S FACTUAL REPORT

LAX-02-GA-201

INFORMATION PAPER

The following information describes Department of the Interior's (DOI) rationale for concern relating to continued operation of surplus military C-130A aircraft offered for service by airtanker contractors.

In October 1987, the Interagency Airtanker Board suspended the use of B-119 airtankers because of the fatal accidents caused by structural defects. Subsequently, the U.S. Forest Service (USFS) acquired a quantity (28) of surplus military C-130A that was transferred to contractors for conversion to airtankers to be used in suppressing wildfires.

DOI and USFS have cooperative agreements making airtankers under contract to one agency available to the other. The contract process provides for inspection of aircraft to ensure the vendor's ability to comply with the specifications of the contract. During the contract pre-award evaluation process, Office of Aircraft Services (OAS) inspectors concluded that essential inspection and maintenance services critical to sustaining the aircraft in an airworthiness condition under normal operating conditions were not being accomplished.

The United States Air Force C-130A maintenance program is designed to assure that latent defects are discovered and corrected before malfunctioning or serious trouble results. This system includes Programmed Depot Maintenance (PDM) inspection and service on a scheduled 42-months calendar year cycle.¹ In part, the PDM includes core inspection requirements that are designed to direct the attention of maintenance personnel to components and areas (or zones) where defects are suspected to exist due to usage under normal operating conditions. (For the purpose of this discussion, core PDM inspection requirements are those inspection items essential to ensure safe aircraft operations irrespective of the flight environment in which the aircraft is operating.) The fact that the aircraft were transferred out of a "military system" into the "civilian system" and issued a restricted category Type Certificate, Airworthiness Certificate, and an FAA-approved inspection program does not negate the requirement for the inspection and maintenance of selected components previously serviced in PDM. Attachment 1 includes representative examples of core inspection functions performed during PDM that should be accomplished irrespective of the flight environment in which the aircraft is operating.

OAS Inspectors visited T & G Aviation, Inc. and evaluated C-130A, Serial No. 56-0478. This exercise resulted in the following conclusions:

1. Type Certificate Data Sheet (TCDS) No. 15NM Revision 3 was issued on May 16, 1989. This TCDS provided for the certification in the restricted category. This TCDS was the basis of the issuance of a Special Airworthiness Certificate for C-130A SN 56-0748. The holder of this TCDS was Hercules, Medford, Oregon. (See Attachment 3.)
2. The last PDM accomplished was dated August 26, 1985 (aircraft time 12 437 hours).
3. A PDM extension inspection was performed June 13, 1989 (aircraft time 13,967 hours). The extension extended the airworthiness of the aircraft through December 15, 1989.
4. The aircraft was issued an Airworthiness Certificate on February 8, 1990.

¹Table 1-2, USAF T.O 00-25-4, *Depot Maintenance of Aerospace Vehicles and Training Equipment*

5. FAA approval of T & G's aircraft inspection program was obtained June 28, 1990. FAA states,² "T & G Aviation's inspection program, approved by the Flight Standards District Office (FSDO) in Scottsdale, Arizona, includes the inspection procedures and life-limited component overhauls/replacements necessary to maintain the aircraft in an airworthy condition."

6. TCDS No. 15NM Revision 4 was issued on July 16, 1990. The Certificate Holder was the United States Forest Service. (See Attachment 3.)

A. Note 4 states in part, "The aircraft must be serviced and maintained in accordance with USAF T.O. 1C-130-A-2-1 through 1C-130A-2-13."

B. Note 6 states in part, "Prior to civil airworthiness certification the USDA Forest Service must show that the following have been accomplished:

a. Compliance with all USAF Technical Orders which affect airworthiness."

7. There is no documentary evidence that core PDM items have been accomplished subsequent to the last PDM inspection or PDM extension inspection.

8. T&G indicated three other C-130A aircraft they operate are being inspected under the same circumstances.

Further, records available to OAS indicate aircraft N130HP operated by Hawkins and Powers Aviation is similarly maintenance-managed although noteworthy is the variation between the T&C and H&P FAA-approved maintenance program.

There is less than universal agreement on what constitutes required maintenance of C-130A surplus military aircraft. The basis of the confusion appears to be a) a lack of common and continuous interpretation of the language provided in the Note portion of the Type Certificate, and b) a process that does not require critical PDM items to be accomplished in a civilian operating environment.

Attachment 4 is a record of telephone conversation between DOI representative and Hawkins and Powers (H&P) regarding the application of USAF Technical Order on C-130A aircraft. Attachment 5 is the FAA Northwest Mountain Region position on the same issue which is diametrically opposed to the H&P position.

The U.S. Air Force C-130 System Program Engineer, Robins AFB, advises against using C-130A aircraft unless core PDM requirements are identified and accomplished in accordance with the prescribed time cycle.

In summary, it appears the current C-130A surplus military aircraft maintenance standards to which commercial operators are being held are not equivalent to minimum essential PDM inspection items and TBO items necessary to sustain an aircraft in an airworthy condition regardless of the flight environment in which the aircraft is operated. The program should be systematized to ensure a level of inspection and maintenance consistent with operating requirements. DOI would like to use the C-130A aircraft in its fire suppression activities and is looking forward to resolving this issue as soon as possible.

Attachments

²FAA letter to Director, Office of Aircraft Services, October 26, 1992.