

BRIEFING PAPER
LOCKHEED C-130A CERTIFICATION AND MAINTENANCE
February 11, 1992

The National Field Programs Branch, AFS-510, has commenced work on action item number four discussed in the Department of the Interior (DOI)/Federal Aviation Administration (FAA) meeting on January 14. Item number four tasks Flight Standards to issue a bulletin to FAA Field Offices on approval of C-130A inspection programs to ensure that the minimum of "core" items of the Programmed Depot Maintenance (PDM) are incorporated.

Mr. Ed Freeman has been assigned the project of preparing the bulletin to the FAA Field Offices. He needs the PDM "core" inspection material as soon as possible, whether this is supplied by the USAF directly or via FAA Engineering, AIR-100. A draft bulletin, prepared by AFS-510, will be routed for coordination when completed.

An informal inquiry was made to the Airworthiness Law Branch, AGC-210, on February 3, regarding the mandatory incorporation of the "core" inspections in the operator's existing FAA approved inspection program. The Field Programs Branch, AFS-510, has reviewed the applicable Federal Aviation Regulations (FAR) 21, 43, and 91 and find they support the incorporation of these airworthiness inspections. The FAA General Counsel's review of the bulletin will be requested prior to its release to the FAA field inspectors.

An issue which must still must be addressed is how the FAA will be informed of future revisions or changes to the "core" inspection items. The U.S. Air Force has indicated that the "core" list is dynamic and subject to change.

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AFS-510, [REDACTED]

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DEPARTMENT OF THE INTERIOR/FEDERAL AVIATION ADMINISTRATION
LOCKHEED C-130A CERTIFICATION AND MAINTENANCE ISSUES
January 14, 1993

On January 14, representatives from the Department of the Interior (DOI), U.S. Forest Service (USFS), U.S. Air Force (USAF), and the Federal Aviation Administration (FAA) met at FAA Headquarters to discuss Lockheed C-130A Certification and Maintenance Program issues. A list of attendees is attached to this briefing paper. -

After the introductions of attendees, Mr. Ben Campbell, Deputy Director, Office of Aircraft Services, discussed the certification and maintenance issues facing DOI in their contract arrangements with operators of C-130A aircraft. He categorized DOI's concerns as primary and secondary. The primary concern is that C-130A inspections called for by the U.S. Air Force Programmed Depot Maintenance (PDM) were not accomplished as a result of the issuance of Type Certificate Data Sheets (TCDS), Airworthiness Certificates or FAA approval of aircraft inspection programs. A secondary concern is the inconsistent application of the TCDS "Notes", pertaining to the accomplishment of U.S. Air Force Technical Orders (T.O.). Furthermore the DOI reported significant differences, between operators, of FAA approved inspection programs. A possible solution, The DOI believes, is that the certification process and FAA approved inspection programs should at least include a "core" of PDM items.

Mr. Jim Peale, U.S. Air Force, discussed the C-130A PDM program. He pointed out that the PDM maintenance requirements are based on the U.S. Air Forces's operating experience, and in the case of the C-130A, a 42 month calendar year PDM interval was established irrespective of the flight environment in which the aircraft is operated. The "core" requirements are minimum to maintain the aircraft in an airworthy condition. Within the PDM are items he identified as "core" items for the inspection of components and areas where defects are suspected or known to exist. These include inspections for corrosion and cracks and other discrepancies, which uncorrected, would effect safety of flight. The "core" items list is dynamic, changed by need, and may be revised from time-to-time based on what problems are found. At the present time, the C-130A has 43, more or less, "core" inspection requirements. Members at the meeting agreed that the FAA could benefit from a list of "core" items to be incorporated in the operator's inspection program and possibly noted in the TCDS instead of the normal phrase "All T.O.'s effecting airworthiness...." Mr. Peale pointed out that the C-130 "A" model has no civil counterpart and references to the Lockheed L-382 in the TCDS may not be valid in all cases (e.g. even the aluminum is a different alloy than the L-382). The difference in

terminology for life limited parts by the USAF and the FAA was clarified in order to apply equitable regulatory requirements for a Part 91 FAA approved inspection program.

| The engine Time Compliance Technical Orders (TCTO) are controlled by Kelly Air Force Base. The FAA should establish a dependable source of engine and propeller TCTO's, and any changes, in order to prevent the omission of incorporating any Allison or Hamilton Standard Safety TCTO's in the TCDS and AD's. Safety Time Compliance Technical Orders (Safety TCTO), which are similar to FAA AD's, are not specified in the FAA TCDS.

Prior to the conclusion of the meeting, the attendees suggested some measures to enhance the FAA certification and inspection programs of C-130A aircraft. A realistic time frame for completion was suggested for each project. Time frames were categorized as immediate (1-3 months) future, while others would be medium (3-9 months) and long term (9-18 months) or ongoing (continuous). The suggested projects are as follows:

- o The Aircraft Certification Service (AIR) will ensure future issuance of Type Certificate Data Sheets (TCDS) clearly define what U.S. Air Force Technical Orders (T.O.) are applicable for civil certification. (Medium Term/Ongoing)

- o Maintain close AFS/AIR coordination on the certification and inspection program approval of surplus military aircraft. Both services should work closely with the FAA member to the Interagency Committee for Aviation Programs (ICAP) and establish national policy for both services. (Immediate Term/Ongoing)

- o Flight Standards should issue an Advisory Circular specific to C-130A inspection program approval requirements. (Long Term)

- o AIR should establish an Air Force/FAA liaison relationship for C-130A airworthiness. Liaison is necessary to establish a "core" list of T.O.'s of the Programmed Depot Maintenance (PDM) inspection items. This list is dynamic as a result of the experience gained by the U.S. Air Force with a particular type of aircraft. (Immediate Term/Ongoing)

- o Flight Standards should issue a bulletin to FAA Field Offices on approval of C-130A inspection programs to ensure that the minimum of "core" items are incorporated. (Immediate Term)

- o AIR should issue Airworthiness Directives specific to the C-130A as appropriate. (Ongoing)

Completion of the above projects will require the continued assistance and cooperation of the DOI and the USAF. Comments from persons attending the DOI/FAA meeting January 14 indicated there was a cooperative atmosphere and a beneficial exchange of information.

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