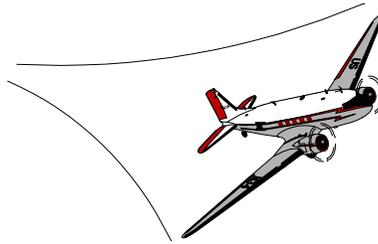


SPECIAL AIRWORTHINESS INFORMATION

AIRCRAFT CERTIFICATION SERVICE
800 INDEPENDENCE AVENUE, S.W.
WASHINGTON, DC 20591



U.S. Department
of Transportation
**Federal Aviation
Administration**

No. ACE-94-01
October 24, 1994

Published by: FAA, AFS-613, P.O. Box 26460, Oklahoma City, OK 73125

This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

INTRODUCTION:

The purpose of this Special Airworthiness Information is to advise owners and operators of Lockheed Model C-130A and C-130B model airplanes operating under FAA Restricted Category Type Certificates of certain recommended actions that may prove to be significant to the continued airworthiness of these airplanes.

This action recommends that operators conduct general checks and inspections of various areas of the airplane. Accomplishment of these actions is recommended, but **is** not mandatory. Information obtained from the results of the recommended actions may assist the FAA in determining if subsequent rulemaking action is necessary and may help in defining subsequent corrective action.

BACKGROUND:

A fatal accident involving a Lockheed Model C130A airplane occurred on August 13, 1994, during **fire** suppression operations. Although investigation as to the cause of the accident is currently ongoing, and an early determination of cause is not anticipated, there are indications that an in-flight explosion occurred followed by a fire in the No. 2 or No. 3 engine nacelle. Subsequently, an in-flight failure of the airframe occurred.

Although the specific cause of the accident is not known at this time, areas of suspect have been defined, and are currently being investigated. These areas include, among other things, the auxiliary fuel tanks, bleed air system, and electrical components and their associated grounding assembly. Until a final cause of the accident is determined, and in the interest of safety, this Special Airworthiness Information sheet is being released to recommend that operators perform various checks and inspections to ensure the integrity of these areas. Accomplishment of these checks and inspections potentially may uncover an unsafe condition and provide additional information to the FAA for defining corrective actions that may be required.

Dissemination of this information at this time is intended to be a preventive measure; it does not preclude the possibility of the issuance of mandatory action subsequent to the outcome of the accident investigation.

RECOMMENDATIONS:

The following actions are recommended for all Lockheed Model C-130A and C-130B airplanes operating under FAA Restricted Category Type Certificates:

1. Within the next 60 days accomplish the following inspections and checks:
 - a. Operate the engines and inspect for fuel system leaks.
 - b. Conduct a detailed visual inspection of the No. 2 and No. 3 engines for hot gas leaks, and inspect the structure in the path of possible leaks. Inspect the heat shield, firewall, and engine mount for deterioration or damage due to hot gas leaks.
 - c. Inspect the auxiliary fuel tanks (bladder) inboard of the No. 2 and No. 3 engines for fuel leakage, and for any abrasion or wearing of the bladder material that could result in fuel leaks. Verify the presence and integrity of the close out ribs on either side of the auxiliary fuel tanks just inboard of the inboard nacelles. Determine whether the underlying tank support is the original hard fiber board or whether other material(s) may have been substituted.
 - d. Verify the integrity of the bleed air system.
 - e. Inspect all electrical components (pumps, actuators, electric valves, etc.) in the inboard nacelles and in the wing forward of the front spar to verify if these items are properly grounded. Inspect the electrical components and associated wiring for possible ignition sources, chaffing, proper routing and attachment, plug connectors, etc.
2. Within the next 60 days, perform a general visual inspection for cracks or fuel leaks of the top wing center section planks between the front and rear spar.
 - a. If any crack or leakage is found, prior to further flight, repair in accordance with a method specified in the Structural Repair Manual.
 - b. Report the results of these inspections, positive or negative, and any repairs to the Los Angeles Aircraft Certification Office, Attention: William Roberts, ANM-120S, FAA, Transport Airplane Directorate, 3229 East Spring Street, Long Beach, California 90806-2425; fax (310) 988-5210.
3. Prior to any further operations, emphasize the need for an inspection for fuel leakage. The recommended procedure to use is the "sniff" test.

These recommended checks and inspections may be accomplished in accordance with the appropriate USAF Technical Order (TO).

FOR FURTHER INFORMATION CONTACT:

Federal Aviation Administration Attn: Mr. Curtis Jackson, ACE-120A Atlanta Aircraft Certification Office, 1669 Phoenix Parkway, Suite 210C, Atlanta, GA 30349, Telephone: (404) 991-2910.