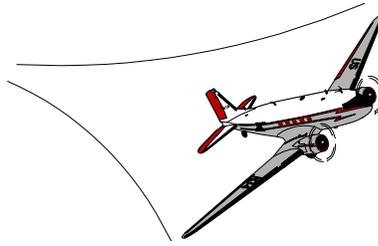


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



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

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

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

Introduction:

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to inform registered owners of De Havilland DH 80A Puss Moth, DH 82A Tiger Moth and DH 83 Fox Moth aircraft of British Aerospace Technical News Sheet CT(MOTH) No. 32, Issue 2. This revision to TNS CT(Moth) No. 32, is a follow on to Issue 1, which restricted the affected models from aerobatic operations pending the results of an accident investigation.

Background:

An Australian Tiger Moth aircraft suffered structural failure while engaged in aerobatics during early 1998. The original issue of TNS CT(Moth) No. 32 was issued to restrict Certain De Havilland Moth models from aerobatics and spinning maneuvers pending the results of the accident investigation.

It was determined that the structural integrity of the accident aircraft's wing structure was severely compromised by pre-existing damage and a general deterioration due to age and environment. Among the conditions noted were: glue failure, fungal attack, wood shrinkage, lack of drainage, and the local deterioration of the wood structure caused by the corrosion of attached metallic components.

The investigators also found that over the course of years, some of the inspection panels had been unintentionally deleted when the aircraft was recovered. This prevented the thorough inspection of the wing structures.

Discussion:

The inspection of any airplane is a cornerstone in maintaining airworthiness. As an aircraft ages, inspections play a role of constantly increasing importance to identify potential problems before they become critical and while repair or preventative measures are still practical. A key factor in achieving a thorough inspection is providing a means of access to the inspector. Consequently, inspection panels/openings must be provided in sufficient numbers and in locations which permit the thorough inspection of primary structure.

Originally, the wing inspection openings in many fabric covered aircraft were positioned primarily to allow the inspection/replacement of control cables and to allow the inspection of the wing attachment fittings. The wing structure was open for a detailed inspection whenever the fabric was replaced; an event which occurred every few years when cotton or linen were the standard materials.

Synthetic fabrics have now generally replaced the cottons and linens originally used. These new materials may easily last ten or more years. Consequently, the wing structure may not be inspected in close detail as often as in the past. This, along with the aging of the aircraft, increases the importance of providing adequate inspection access to the airframe.

Recommendation:

The FAA is recommending, but not requiring, that owners/operators of De Havilland DH 80, DH 82A, and DH 83 aircraft install the inspection panels in the wings of their aircraft and routinely inspect the aircraft as detailed by British Aerospace Technical News Sheet CT(MOTH) No. 32, Issue 2, dated November 1, 1998.

Copies of Technical News Sheet CT(Moth) No. 32, Issue 2 can be obtained from British Aerospace Military Aircraft and Aerostructures, Ltd., Chadderton Site, Greengate, Middleton, Manchester, M24 1SA, England. Technical Support may be obtained from the Engineering Support Manager, Telephone (44) 161-955-8789, or fax (44) 161-955-8798.

For Further Information, Contact:

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