Airworthiness Concern Sheet

FAA

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Make, Model, Series, Serial No.:
DeHavilland (British Aerospace) Model DH.C1 Chipmunk, S/N's C1-001 through C1-1014 (British manufactured Chipmunks)

Reason for Airworthiness Concern:
Un-commanded flap retraction could occur due to faulty flap latch plate

FAA Description of Airworthiness Concern

The FAA has been made aware of a potentially unsafe condition on the DeHavilland Chipmunk airplanes. An unknown number of unapproved flap operating system latch plates, similar in shape to approved p/n C1-CF-1489 latch plates, were manufactured by an unknown supplier. The unapproved latch plates were made of a shaft that was pressed onto the plate, rather than being manufactured as a single piece machined from bar stock. The shaft and plate on the unapproved latch plates can become separated or bent and allow an un-commanded retraction of the flaps. One of these unapproved two-piece latch plates, discovered during an inspection being done in accordance with DeHavilland Support Limited Technical News Sheet (TNS) No. TNS 184 was found to be bent and partially separated. TNS 184 requires any latch plate that is installed on the airplane to be examined for excessive wear of the part where it contacts the flap lever quadrant plate. There have been at least 20 latch plates sold to replace worn latch plates and there was a report that one of the worn latch plates allowed the flaps to retract during a landing approach.

DeHavilland Support Limited issued Technical News Sheet (TNS) No. 184 to recommend a repetitive inspection of any approved flap latch plate, p/n C1-CF-1489 or C1-CF-1133A, for excessive wear and replacement if needed. DeHavilland Support Limited has also issued TNS No. 208 which recommends a one-time inspection to determine if an unapproved two-piece flap latch plate is installed, and if so, the part must be replaced with an approved one-piece part. The United Kingdom Civil Aviation Authority (UK CAA) has issued Airworthiness Directive (AD) G-2009-001 requiring compliance with TNS 208. Because TNS 184 is referenced within TNS 208, the UK CAA AD also incorporates compliance to TNS 184.

A potential routine Airworthiness Directive (AD) may be needed to require the inspection and possible replacement of worn or unapproved flap latch plates in order to prevent an un-commanded flap retraction and possible stalling of the airplane during a landing approach.

Request for Information:

Because the FAA is considering airworthiness action on these airplanes, we are soliciting additional information from the Associations and Type Clubs. Any information such as related service problems, proposed alternate inspection/repair procedures, cost impact, etc. should be returned in writing to the FAA at the address above by April 12, 2010. Note: Any comments or replies to the FAA need to be as specific as possible. Please provide specific examples to illustrate your comments or concerns.

Attachments: *SDR(s) ☐ *A/IDS ☐ *SL(s) ☒ *SAIB ☐ *FAASR/NTSBSR ☐ *AD ☒ *AMOC ☐ *RA ☒

Notification: FAA ☒ *AOPA ☒ *EAA ☒ Type Club ☒ *TC Holder ☒ Other:

Response Requested by **4/12/2010** {Emergency (10 days) ☐ Alert (30 days) ☐ Information (90 days) ☒}

* Service Difficulty Reports (SDRs); Accident/Incident Data System (A/IDS); Service Letter (SL); Special Airworthiness Information Bulletin (SAIB); Federal Aviation Administration (FAA)/National Transportation Safety Board (NTSB) Safety Recommendation (FAASR/NTSBSR); Airworthiness Directive (AD); Alternate Method of Compliance (AMOC); Risk Assessment (RA); Aircraft Owners & Pilots Association (AOPA); Experimental Aircraft Association (EAA); Type Certificate (TC)