



1. Effectivity

Plastic two-part detachable flight control column hand-grips installed in all aircraft.

2. Purpose

To alert maintainers and operators to check for any detectable looseness between the control column and the grip. This may indicate failure of the plastic mating halves and/or attaching hardware.

3. Background

An accident resulted from loss of control at low altitude when the plastic control column grip suddenly separated from the control column. The grip was an approved STC part installed on an aircraft not listed by the STC. The grip consists of two halves clamped together with two through bolts. The lower through-bolt also attached the grip to the control column. Although the lower through-bolt remained in the column, the grip separated from the column because the lower and upper through-bolt boss areas had cracked and broken completely away from the grip.



Figure 1 – Mounting bolt bosses broken away (courtesy ATSB)

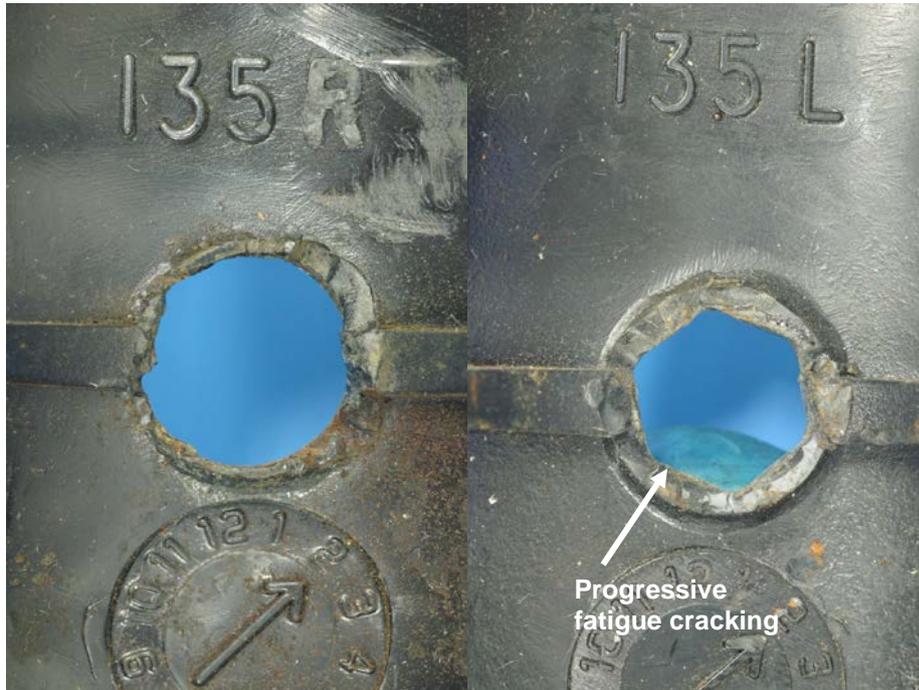


Figure 2 - Lower bolt boss fatigue cracking (courtesy ATSB)

4. Recommendations

Check all detachable grips for looseness on the control column. Any detectable looseness between the grip and the control column may indicate loose or thread-bound through bolts, failure of the plastic through-bolt bosses, poor mating of the shell halves, improper installation and/or poor maintenance practices.

Carefully inspect the recessed areas of the grip around the thru-bolt bosses for signs of cracking and separation from the grip. If a grip remains loose on the control column after tightening, inspect for wear caused by chafing, check that electrical wiring in the grip assembly is not trapped between the grip halves preventing complete clamping and that the fasteners are not thread-bound.

Maintainers and operators must ensure that the respective aircraft is listed on the appropriate STC before installation of the STC approved part.

5. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link e-mail address:

AirworthinessBulletin@casa.gov.au

or in writing, to: Airworthiness & Engineering Branch
Civil Aviation Safety Authority
GPO Box 2005, Canberra, ACT, 2601