

LAA/AWA/14/05
21st March 2014

ALL DH 82 (Tiger Moth), DH82A (Tiger Moth) & DH82B (Queen Bee) Aircraft.

Emergency Airworthiness Directive Prohibiting Aerobatics Pending an Inspection of the Lower Fuselage Tie Rods.

In December 2013 an Australian registered de Havilland DH82A Tiger Moth suffered an in-flight structure failure which resulted in the aircraft crashing into the sea killing both occupants. The aircraft was engaged in a pleasure flight and was conducting simple aerobatics when the failure occurred.

The actual cause of this catastrophic failure has yet to be determined but, early on in the investigation, it became clear that both fuselage tie rods had failed and that there was clear evidence of fatigue in the fracture faces.

The Tie Rod that failed had been manufactured under an Australian Parts Manufacturing Approval (PMA) part No. JRA-776-1.



Fig. 1. View looking aft, showing the area of concern and position of Tie Rod.

Australian Transport Safety Bureau

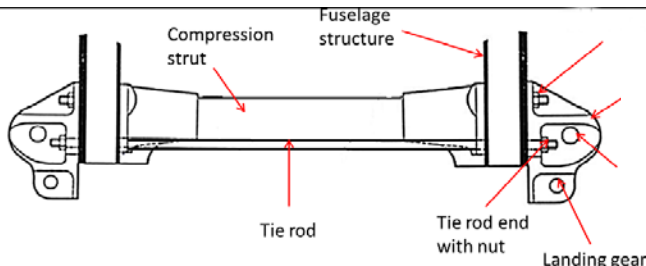


Fig. 2. Cutaway sketch showing the position of the Tie Rod.

Australian Transport Safety Bureau

Because of the obvious negative safety implications revealed by these suspect Tie Rods the Australian Transport Safety Bureau issued a preliminary report; a copy of this report can be found [HERE](#).

The UK CAA have just issued an Emergency Airworthiness Directive (EAD) restricting DH82 types to non-aerobatic flight until the provenance of the Tie Rods fitted to the aircraft has been established. In any event, this check must be carried out within 10 flying hours.

This EAD (G-2014-0001-E) can be found [HERE](#).

Note: This AD primarily required that the provenance of the Tie Rod is established; full details of the inspection requirements can be found in the EAD. This check can be performed by the owner of the aircraft.

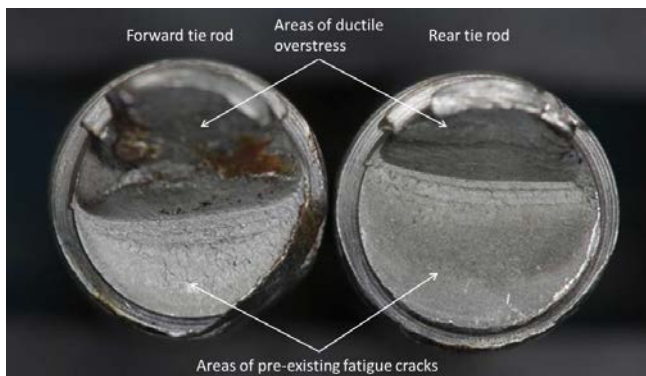


Fig. 3. Fuselage Lateral Tie Rod Ends showing left side fracture faces.

Australian Transport Safety Bureau