

Follow-up Action on Occurrence Report

SERIOUS INCIDENT TO SLINGSBY T67 M260 FIREFLY, G-BYOB, AT STAPLEFORD TAWNEYON 3 AUGUST 2007

CAA FACTOR NUMBER : F8/2008
FACTOR PUBLICATION DATE : 10 July 2008
OPERATOR : Private
CAA OCCURRENCE NUMBER : 2007/07902
AAIB REPORT : Bulletin 4/2008

SYNOPSIS

From AAIB Report:

As the crew carried out functional checks of the flight controls while taxiing for takeoff, the left wheelbrake master cylinder became detached from the rudder/brake pedal mechanism. The failure was consistent with the effects of previous overload and consequent weakening of the mechanism as a result of inadvertent exceedance of the maximum allowable nosewheel steering angle during ground towing. In this situation, as the primary steering stops were within the pedal mechanism rather than on the nosewheel leg, the mechanism could be severely overloaded. Damage could both weaken the mechanism and reduce the clearances between its moving parts and other components, potentially preventing operation of the rudder and/ or wheelbrake controls, and could remain undetected for a considerable time.

The aircraft manufacturer had taken a number of measures aimed at reducing the likelihood of the pedal mechanism being damaged during towing. A relatively minor aircraft modification could probably eliminate the possibility of such damage. Three Safety Recommendations are made.

FOLLOW UP ACTION

The three Safety Recommendations made by the AAIB following their investigation are reproduced below together with the CAA's responses.

Recommendation 2008-006

It is recommended that the UK Civil Aviation Authority ensure that the prohibition by Slingsby Advanced Composites Ltd on using a non Slingsby-approved towbar with T67 aircraft, is made mandatory.

CAA Response

The CAA accepts this Recommendation. The responsibility for the control of the matters addressed in this Recommendation, in terms of the worldwide fleet of T67 aircraft, passed to EASA on 28 September 2003, in accordance with EC Regulation No 216/2008. It is therefore EASA's responsibility in the longer term to consider the issue of an Airworthiness Directive based upon the Manufacturer's Service Bulletins for the aircraft or to agree that a Flight Manual amendment is required to highlight this issue. Nevertheless, the CAA notes that EASA considers Issue 3 of Slingsby Service Bulletins (SB) 187 and 188 (which the CAA had accepted as part of its administration

of Slingsby Advanced Composites Ltd's Design Organisation Approval for EASA) to be adequate for preventing further damage to the rudder system during towing.

The CAA will, however, include a general article in the next GASIL publication to highlight the need to exercise caution when using towbars during ground manoeuvring of aircraft. The CAA will also issue a Letter to Operators to owners/operators of UK registered Slingsby T67 aircraft highlighting the issue and the content of the Manufacturer's Service Bulletins.

CAA Status - Closed

Recommendation 2008-007

It is recommended that Slingsby Advanced Composites Ltd develop modifications for the T67 aircraft, aimed at eliminating the possibility that forces generated during ground towing could cause undetected damage to the rudder/brake pedal mechanism.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2008-008

It is recommended that EASA require the development of modifications for the Slingsby Advanced Composites Ltd T67 aircraft, aimed at eliminating the possibility that forces generated towing could cause undetected damage to the rudder/brake pedal mechanism.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed