AD/GC-1/5

18/2020

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (**AD**) under subregulation 39.001 (1) of CASR. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct an unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Landing Gear Stop Ring

Swift Museum Foundation GC-1A and GC-1B Series Aeroplanes

Applicability:	Swift Museum Foundation GC-1A and GC-1B model aircraft fitted with Adel Precision Products Corporation landing gear with forged aluminium torque knees.
Requirement:	1. Install a suitable external stop or other equivalent means which will function as a safety measure in case of failure of the internal stop ring.
	2. Examine the Adel strut assembly stop ring and replace if the stop ring is loose or shows signs of separation at the braze. After reassembly, the external stop must be installed so that there exists a clearance of 1/32 to 1/8 inch between the face of the stop and side of the strut cylinder with the gear fully extended. In the event there is insufficient clearance, the external stop must be reworked until the proper clearance is obtained.
	3. Re-check the clearance mentioned in requirement 2, with the strut fully extended. If there is no clearance between the external safety stop and the strut cylinder, disassemble the strut and examine the internal stop ring for indications of failure. If failure of the stop ring is apparent, the inner cylinder assembly, Adel P/N 16084, must be replaced or suitably reworked.
	Note 1: United States of America Federal Aviation Administration (FAA) AD 58-10-03 is the source document for the requirements of this AD.
Compliance:	1. Unless previously accomplished, within 6 months after the commencement date of this AD.
	2. Unless previously accomplished, at the time of installation of the external stop in accordance with Requirement 1, or within the next 100 hours' time in service.
	3. At intervals not to exceed 100 hours' time in service.
	This AD commences on 17 September 2020.
Background:	Failures have been reported of the stop ring brazed to the inner piston strut. Failures resulted in the piston sliding out of the strut and the torque knees assuming a straight position. This overextension of the strut precludes gear retraction into the wheel well.
	An audit of the Australian Aircraft Register found that Swift Museum Foundation GC-1B aircraft have been on the register for some time and that requirements equivalent to the applicable FAA ADs have not previously been mandated in Australia for these aircraft.

Swift Museum Foundation GC-1A and GC-1B Series Aeroplanes

AD/GC-1/5 (continued)

This AD is issued to mandate requirements equivalent to FAA AD 58-10-03.



Pieter van Dijk Delegate of the Civil Aviation Safety Authority 28 August 2020