## (2) Rolls Royce (De Havilland) Cirrus Engines

UK National Airworthiness Directives previously published in CAP 476 – Mandatory Aircraft Modifications and Inspections Summary

## (2) Cirrus Minor II and IIA

**CAA AD No:** 1746 PRE 80

**Associated Material:** 687, 688 and 689

**Description:** Diameter of propeller front plate increased. Length of propeller spinner reduced. Diameter of propeller hub sleeve flange increased.

**Applicability – Compliance – Requirement**

Applicable when wooden propellers are fitted. Service instruction J10 refers. Compliance required before flight.

**CAA AD No:** 1747 PRE 80

**Associated Material:** 1243

**Description:** Introduction of steel distance pieces on cylinder holding down studs.

**Applicability – Compliance – Requirement**

Service instruction J20 and J20A refers. Compliance required before flight.

**CAA AD No:** 1748 PRE 80

**Associated Material:** 1288

**Description:** Conversion of Rotax vacuum pump from type M0105 to M0106.

**Applicability – Compliance – Requirement**

Service instruction J22/G5 refers. Compliance required before flight.

**CAA AD No:** 1749 PRE 80

**Associated Material:** 1609

**Description:** Carburettor enrichment valve diaphragm in improved material.

**Applicability – Compliance – Requirement**

Service instruction J30 refers. Compliance required before flight.

## (2) Cirrus Major II and III

**CAA AD No:** 1750 PRE 80

**Associated Material:** 446/447

**Description:** Serrated type propeller hub and front plate introduced.

**Applicability – Compliance – Requirement**

Compliance required before flight.

**CAA AD No:** 1751 PRE 80

**Associated Material:** 710 or 2032

**Description:** Simms vernier magneto coupling in softer material.

**Applicability – Compliance – Requirement**

Service instruction G1 refers. Compliance required before flight.

**CAA AD No:** 1752 PRE 80

**Associated Material:** 734

**Description:** Piston type oil pump, rotor diameter revised.

**Applicability – Compliance – Requirement**

Applicable to piston type oil pumps prior to Part No. GC 1601/12. (GC 1601/12 and later stroke number incorporate these Mods.) Service instruction G2 refers. Compliance required before flight.

**CAA AD No:** 1753 PRE 80

**Associated Material:** 885

**Description:** Piston type oil pump, piston diameter revised.

**Applicability – Compliance – Requirement**

Applicable to piston type oil pumps prior to Part No. GC 1601/12. (GC 1601/12 and later stroke number incorporate these Mods.) Service instruction G2 refers. Compliance required before flight.

**CAA AD No:** 1754 PRE 80

**Associated Material:** 912

**Description:** Piston type oil pump, main body port dimensions revised.

**Applicability – Compliance – Requirement**

**Cirrus Major II and III** *continued*

**CAA AD No:** 1755 PRE 80

**Associated Material:** 923

**Description:** Piston type oil pump, bush oil slot depth increased.

**Applicability – Compliance – Requirement**

**CAA AD No:** 1756 PRE 80

**Associated Material:** 1289

**Description:** Conversion to Rotax vacuum pump from type M0105 to M0106.

**Applicability – Compliance – Requirement**

Service instruction J22/G5 refers. Compliance required before flight.

## (2) Cirrus Engine Inspections

**CAA AD No:** 1757 PRE 80

**Associated Material:** 1

**Description:** Die cast cylinder head Part No. JD201. Inspection for cracks every 10 hours.

**Applicability – Compliance – Requirement**

Applicable to Minor II and IIA. Service instruction J19 and 19A refers.

**CAA AD No:** 1758 PRE 80

**Associated Material:** 2

**Description:** Amal type 120 fuel pump. Inspection of lower diaphragm washer every 50 hours or three months whichever is the longer until Mod 1645 Part 1 or 1668 Part 1 embodied.

**Applicability – Compliance – Requirement**

Applicable to Minor I, II and IIA. Service instruction F7/J35 refers.

**CAA AD No:** 1759 PRE 80

**Associated Material:** 3

**Description:** Crankshaft. Inspection for fatigue crack.

**Applicability – Compliance – Requirement**

Applicable to Minor II and IIA. Service instruction J14 refers.

**CAA AD No:** 1760 PRE 80

**Associated Material:** 4

**Description:** Zenith carburettor type FAIHB blanking plug.

**Applicability – Compliance – Requirement**

Applicable to Minor II and IIA. Service instruction J17 refers.

**CAA AD No:** 1761 PRE 80

**Associated Material:** 5

**Description:** Zenith carburettor main discharge assembly inspection.

**Applicability – Compliance – Requirement**

Applicable to Minor II and IIA. Service instruction J27 refers.

## Cirrus Engine Inspections *continued*

**CAA AD No:** 1762 PRE 80

**Associated Material:** 6

**Description:** Crankshaft. Inspection of front end with approved penetrant detector every 200 hrs and after shock loading.

**Applicability – Compliance – Requirement**

Applicable to Minor I, II, IIA, Major II and III. Service instruction F1/G13/J36 refers.

**CAA AD No:** 1763 PRE 80

**Associated Material:** 7

**Description:** Piston type oil pump GC1601. Inspection for wear/damage on piston and rotor every 300 hours.

**Applicability – Compliance – Requirement**

Applicable to Major II and III. Service instruction G2 refers.

**CAA AD No:** 1764 PRE 80

**Associated Material:** 8

**Description:** Hobson carburettor type AI48GM1. Inspection for external cracks in main body every 10 hours until Mod. 2014 embodied.

**Applicability – Compliance – Requirement**

Applicable to Major II and III. Service instruction G8 refers.

**CAA AD No:** 1765 PRE 80

**Associated Material:** 9

**Description:** Amal type 136 fuel pump. Internal examination every 150 hours or 12 months whichever is the sooner.

**Applicability – Compliance – Requirement**

Applicable to Major II and III. Service instruction G10 refers.

**CAA AD No:** 1766 PRE 80

**Associated Material:** 10

**Description:** Amal type 136/AD/2 fuel pump. Check of cam shaft thread not later than 100 hours from 6 July 1957.

**Applicability – Compliance – Requirement**

Applicable to Major II and III. Service instruction G11 refers.

## Cirrus Engine Inspections *continued*

**CAA AD No:** 1767 PRE 80

**Associated Material:** 11

**Description:** Cirrus Engine Controls – 50 hour inspection – Ball and Socket joints type EA 767/3.

(Note: This subject was previously covered by CAA Airworthiness Notice No. 23, which is now cancelled.)

**Applicability – Compliance – Requirement**

Applicable to aircraft fitted with Cirrus Minor or Cirrus Major engines. Not exceeding 50 flight hours, inspect as detailed in paragraphs 1 to 5 inclusive.

1 Inspect all ball and socket joints type EA 767/3 and ensure that there is at least 1/16" clearance between the socket and the lever arm to which the threaded portion of the ball joint is attached.

2 Ensure that the control rods do not foul any adjacent structure or mechanism throughout their full range of movement.

3 Ensure that the screwed end of the control rod is safely in the socket, but does not protrude into the socket housing.

4 Ensure that the spring behind the inner concave pad in the socket is serviceable.

5 With the controls assembled, screw up the adjusting pad in each socket until the ball joint is clamped tight, then slacken off until the next split pin hole in the socket is in line with the slot in the adjustment pad. Under no circumstances should the adjustment pad be slackened more than 1/4 of a turn. Lock in the approved manner with 1/16" split pin.