

Airworthiness Directive Schedule

Aeroplanes

Allied Ag Cat G-164 Series

31 March 2011

- Notes**
1. This AD schedule is applicable to Allied Ag Cat Productions G-164A, G164B and G-164B-20T aircraft (formerly Schweizer Aircraft Corp.) manufactured under FAA Type Certificate No. 1A16.
 2. The date above indicates the amendment date of this schedule.
 3. New or amended ADs are shown with an asterisk *

Contents

| | | |
|---------------|--|---|
| DCA/G164/1A | Elevator Control Horn Attachment Bolts - Inspection and Renewal..... | 2 |
| DCA/G164/2A | Rudder Cables - Inspection..... | 2 |
| DCA/G164/3A | Cancelled – DCA/G164/14 refers..... | 2 |
| DCA/G164/4A | Aileron Cables - Inspection | 2 |
| DCA/G164/5A | Lower Wing Attachment Fitting - Inspection | 3 |
| DCA/G164/6 | Aileron Bellcrank - Inspection..... | 3 |
| DCA/G164/7 | Landing Wire Attachment Lug - Modification..... | 3 |
| DCA/G164/8A | Elevator Control Rods - Inspection..... | 3 |
| DCA/G164/9 | Elevator Torque Tubes - Inspection | 4 |
| DCA/G164/10 | Control Surface Lock - Modifications..... | 4 |
| DCA/G164/11 | Main Landing Gear Struts - Inspection..... | 5 |
| DCA/G164/12 | Main Landing Gear Struts - Inspection..... | 5 |
| DCA/G164/13 | Fuel Shut-off Valve – Modification..... | 5 |
| * DCA/G164/14 | Cancelled – DCA/G164/15 refers..... | 6 |
| * DCA/G164/15 | Rudder Main Spar – Inspection and Rework..... | 6 |

DCA/G164/1A Elevator Control Horn Attachment Bolts - Inspection and Renewal

- Applicability:** Models G-164A S/N 1 through 1659A and G-164B S/N 1B through 56B and all G-164A and G-164B aircraft in which the elevator control horn assembly and torque tube end fittings have not been modified per Grumman Gulfstream SN 23.
- Requirement:**
1. Inspect per Grumman American Ag-Cat SB 51.
 2. Renew AN4-12A or NAS 1304-12 bolts.
(FAA AD 73-19-10 refers)
- Compliance:**
1. Inspection - At intervals not exceeding 100 hours TIS until Grumman Gulfstream SN 23 embodied.
 2. Renewal - At intervals not exceeding 1000 hours TIS or 12 months, whichever is the sooner.
- Effective Date:** DCA/G164/1 - 2 May 1986
DCA/G164/1A - 24 September 1999

DCA/G164/2A Rudder Cables - Inspection

- Applicability:** Models G-164 S/N 101 through 400, G-164A S/N 401 through 1719, G-164B S/N 1B through 206B, and 208B through 277B, not modified per Grumman American drgs. A1831 Sht 1 and A1833 or A3371-1 and -3.
- Requirement:** Inspect per Grumman American Ag-Cat SB 56B. Replace any cables before further flight that show broken strands.
(FAA AD 75-14-04 refers)
- Compliance:** At intervals not exceeding 100 hours TIS.
- Effective Date:** DCA/G164/2 - 2 May 1986
DCA/G164/2A - 24 September 1999

DCA/G164/3A Cancelled – DCA/G164/14 refers

- Effective Date:** 19 December 2008

DCA/G164/4A Aileron Cables - Inspection

- Applicability:** Models G-164 S/N 1 through 400, G-164A S/N 401 and up, G-164B S/N 01B and up, G-164C S/N 01C and up.
- Requirement:** Inspect per Gulfstream American Ag-Cat SB 63. Renew defective cables before further flight.
(FAA AD 78-23-11 refers)
- Compliance:** At intervals not exceeding 600 hours TIS.
- Effective Date:** DCA/G164/4 - 2 May 1986
DCA/G164/4A - 24 September 1999

DCA/G164/5A Lower Wing Attachment Fitting - Inspection

Applicability: All model G-164, G-164A and G-164B

Requirement: Inspect per Gulfstream American Ag-Cat SB 65. Remove corrosion and repair as prescribed before further flight.
(FAA AD 78-26-03 refers)

Compliance: At intervals not exceeding 500 hours TIS or 6 months, whichever is the sooner.

Effective Date: DCA/G164/5 - 2 May 1986
DCA/G164/5A - 24 September 1999

DCA/G164/6 Aileron Bellcrank - Inspection

Applicability: Model G-164B S/N 1B through 656B.

Requirement: Inspect per Gulfstream American Ag-Cat SB 75A. Rectify defective parts as prescribed before further flight.
(FAA AD 82-13-06 refers)

Compliance: At intervals not exceeding 300 hours TIS until modified per SB 75A Parts B and C.

Effective Date: 2 May 1986

DCA/G164/7 Landing Wire Attachment Lug - Modification

Applicability: All model G-164B prior to S/N 420B

Requirement: To assure -2.05g capability, install lower wing forward landing wire attachment lugs (LH and RH) P/N A1065-601.

Compliance: By 31 July 1986

Effective Date: 2 May 1986

DCA/G164/8A Elevator Control Rods - Inspection

Applicability: All G-164 series

Requirement: To prevent possible failure of the forward and aft elevator control system push-pull rods and end fittings, inspect per Schweizer SB 85 and rectify defective assemblies prior to further flight.
(FAA AD 89-18-02R1 refers)

Compliance: At intervals not exceeding 12 months.

Effective Date: DCA/G164/8 - 30 September 1989
DCA/G164/8A - 24 September 1999

DCA/G164/9 Elevator Torque Tubes - Inspection

Applicability: Models G-164 and G-164A that have elevators with S/N 461 and below.

Requirement: To prevent failure of the elevator torque tube, accomplish the following:-

1. Remove two inboard blind rivets that attach the elevator leading edge skin cover, to the right-hand elevator torque tube. Visually inspect the torque tube for cracks where inboard elevator rib, is welded to the torque tube and between the two inboard blind rivets. If no cracks are found, install new rivets before further flight. If cracks are found, comply with part 3 before further flight.
2. Visually inspect the lefthand elevator torque tube for cracks where the inboard rib is welded to the torque tube.
3. Modify torque tube per Grumman G-164 ASB 33.

(FAA AD 66-27-06 refers)

- Compliance:**
1. At 600 hours TTIS or within next 25 hours TIS, whichever is the later, and thereafter at intervals not to exceed 100 hours TIS, until modified per part 3 of this AD.
 2. Within next 25 hours TIS and thereafter at intervals not to exceed 100 hours TIS, until modified per part 3 of this AD.

Effective Date: 24 September 1999

DCA/G164/10 Control Surface Lock - Modifications

Applicability: Models G-164 and G-164A S/N 301 through 450, and S/Ns below 301 which have been modified to incorporate parking brake installation and stick control lock kit P/N A1521-301K.

Requirement: To prevent fouling of the control stick by the surface control lock and inadvertent locking of the right toe brake master cylinder during flight maneuvering, accomplish the following:-

1. On model G-164, S/N 301 through 400, install a tension spring and two "S" hooks per Grumman Aircraft Engineering Corporation drawing A1521, Rev B, Sheet 2.
2. On all aircraft listed in the applicability, modify the parking brake and stick control lock installation per Grumman Aircraft Engineering Corporation SB 39.

(FAA AD 67-09-04 refers)

- Compliance:**
1. Within next 25 hours TIS.
 2. Within next 25 hours TIS.

Effective Date: 24 September 1999

DCA/G164/11 Main Landing Gear Struts - Inspection

Applicability: Model G-164 and G-164A S/N 1 through 1064, equipped with Grumman American main landing gear struts P/N A1515-11, -12, P/N A1530-11, -12, and Cessna struts P/N 0341109-1, -2.

Requirement: To prevent possible hazards associated with main landing gear strut failures, accomplish the following:-

1. Remove the gear struts and inspect the struts for cracks using dye penetrant or magnetic particle inspection procedures. Replace cracked or corroded parts prior to further flight with unused struts, Grumman American P/N A1530-33, -34.
2. Inspect the struts for cracks and corrosion damage using dye penetrant inspection procedures, This inspection can be conducted without removing the struts from the aircraft. Replace cracked or corroded parts prior to further flight with unused struts, Grumman American P/N A1530-33, -34. Grumman American Aviation Corporation SN 13 also refers.

(FAA AD 76-13-10 refers)

Compliance:

1. At 4500 total landings or within next 100 landings, whichever is the later, and thereafter at intervals not to exceed 4500 landings.
2. At intervals not to exceed 1000 landings.

Effective Date: 24 September 1999

DCA/G164/12 Main Landing Gear Struts - Inspection

Applicability: Model G-164 series incorporating Frenco Co. main landing gear struts P/N 1428, installed per STC SA647WE.

Requirement: To prevent possible hazards associated with main landing gear strut failures, accomplish the following:-

Remove the main gear struts, Frenco Co. P/N 1428, and inspect the struts for cracks using dye penetrant and a glass of at least 10 power or magnetic particles inspection. During this inspection particular attention should be directed to the upper bend radius, and fuselage attachment area.

If cracks are found, before further flight, replace the cracked strut with an unused strut of the same part number.

(FAA AD 76-21-03 refers)

Compliance: At 2000 total landings or within next 100 landings, whichever is the later, and thereafter at intervals not to exceed 2000 landings.

Effective Date: 24 September 1999

DCA/G164/13 Fuel Shut-off Valve – Modification

Applicability: Model G-164A aircraft, S/N 1726A through to 1730A

Model G-164B aircraft, S/N 335B through to 659B

Model G-164B-20T aircraft, all S/N

Requirement: To prevent the fuel valve from being turned through to the un placarded "OFF" position which could result in reduced fuel flow and loss of engine power, accomplish the following:

1. Modify the fuel shut-off valve control by fitting a new stop-plate P/N A1552-71 per the instructions in Schweizer Aircraft Corp. Ag-Cat Service Bulletin No. 78.

2. Before installing a fuel shut-off valve P/N 3/4-86-6-RT-6 (A3580-1) on any aircraft, accomplish requirement 1 of this AD.

(FAA AD 2007-17-02 refers)

Compliance:

1. Within the next 100 hours TIS.
2. From 27 September 2007.

Effective Date: 27 September 2007

* **DCA/G164/14** **Cancelled – DCA/G164/15 refers**

Effective Date: 31 March 2011

* **DCA/G164/15** **Rudder Main Spar – Inspection and Rework**

Applicability: Aircraft models G-164, G-164A, G-164B and G-164B with 73" wing gap, and Aircraft models G-164B-15T, G-164B-20T, G-164B-34T, G-164C, G-164D and G-164D with 73" wing gap.

Note: This AD retains the requirements in superseded DCA/G164/14 and revises the AD compliance.

Requirement: To prevent failure of the weld of the main spar due to possible corrosion in the spar tube which could result in loss of aircraft control, accomplish the following:

1. Drill an access hole in the spar tube and with the aid of a borescope inspect the lower internal cavity of the rudder spar tube for corrosion. Also inspect the exterior of the rudder main spar for corrosion. Accomplish these actions per steps 1 through to 3 of Grumman American Aviation Corporation Ag-Cat SB No. 61 dated 6 June 1977.

If any corrosion is found repair per chapter 4 of FAA Advisory Circular 43.13-1B change 1 dated 27 September 2001 before further flight, or replace the damaged parts before further flight. Accomplish these actions per steps 5 and 6 of SB No. 61 and chapter 4 of FAA AC 43.13-1B.

After every inspection, repair or parts replacement per requirement 1 of this AD, protect the internal cavity of the spar tube for corrosion by filling with warm raw linseed oil, Paralketone or CRC3 (LPS Heavy Duty Rust Inhibitor Type 3) or a suitable approved equivalent protector for alloy steel, and allow to drain. Seal the access hole with Scotch caulking compound, or use a suitable silicone based sealant or approved equivalent. Accomplish these actions per step 4 of SB No. 61.

After every inspection, repair or parts replacement per requirement 1 of this AD, check the rudder rigging per the instructions in Ag-Cat Maintenance Manual pages 6-14 through to 6-16, copyright 1978, or Ag-Cat G-164D Maintenance Manual pages 6-24 and 6-29, copyright 1995, as applicable.

2. A rudder shall not be fitted to any aircraft unless the rudder spar has been inspected, protected for corrosion and sealed per requirement 1 of this AD.

(AD 2011-05-07 refers)

Compliance:

1. By 30 April 2011 unless previously accomplished within the last 60 months, and thereafter at intervals not to exceed 60 months.
2. From 30 April 2011.

Effective Date: 31 March 2011