

Airworthiness Directive Schedule

Helicopters

Airbus Helicopters SA 315 (Lama) and SA 316 (Alouette III)

27 October 2011

- Notes**
1. This AD schedule is applicable to Airbus Helicopters SA 315B (Lama) and SA 316C (Alouette III) helicopters (formerly Eurocopter, Eurocopter France and Aerospatiale) manufactured under EASA Type Certificate (TC) No. R.123 (formerly DGAC TC No. 14).
 2. The date above indicates the amendment date of this schedule.
 3. New or amended ADs are shown with an asterisk *

Contents

DCA/ASP-315/2A	Main Gear Box - Modification.....	2
DCA/ASP-315/3	Main Drive Shaft And Free Wheel Assembly - Inspection	2
DCA/ASP-315/4	Tail Rotor Gear Box Pitch Control Shaft - Inspection And Modification	2
DCA/ASP-315/5	Main Gear Box - Inspection.....	2
DCA/ASP-315/6A	Main Rotor Hydraulic Dampers - Modification.....	2
DCA/ASP-315/7A	Telec Noise Filters - Screw Replacement and Inspection	3
DCA/ASP-315/8	Control Shaft Support Attachment Mountings - Inspection	3
DCA/ASP-315/9	Main Rotor Hydraulic Drag Dampers - Inspection and Rectification.....	3
DCA/ASP-315/10	Main Gear Box Splined Drive - Inspection	3
DCA/ASP-315/11	Servo Controls - Inspection.....	4
DCA/ASP-315/12	Tail Rotor Gear Box Stay - Inspection.....	4
DCA/ASP-315/13	Tail Rotor Control Cables - Life Limitation	4
DCA/ASP-315/14A	Intermediate Drive Freewheel Assembly - Inspection And Removal	4
DCA/ASP-315/15	Main Rotor Drive Freewheel Assembly - Modification And Inspection.....	5
DCA/ASP-315/16D	Horizontal Stabiliser Spar - Inspection and Modification.....	5
DCA/ASP-315/17	Main Rotor Gear Box - Inspection.....	7
DCA/ASP-315/18	Transmission Deck - Inspection And Modification	7
DCA/ASP-315/19	Tail Boom - Inspection	7
DCA/ASP-315/20	Horizontal Stabiliser Installation - Modification	7
DCA/ASP-315/21A	Main Gearbox A Frames - Life Limitation.....	8
DCA/ASP-315/22	Tail Rotor Control Rod - Inspection.....	8
DCA/ASP-315/23A	Main Gear Box - Inspection.....	8
DCA/ASP-315/24	Main Rotor Hub - Inspection	8
DCA/ASP-315/25	Cancelled - DCA/ASP-315/16D refers	8
DCA/ASP-315/26	Cancelled - DCA/ASP-315/16D refers	9
DCA/ASP-315/27	Main Rotor Blades - Life Limitation	9
DCA/ASP-315/28A	Main Rotor Blade Root Reinforcement Band - Inspection	9
DCA/ASP-315/29	Main Rotor Blade Attachment Fittings - Inspection.....	9
DCA/ASP-315/30A	Tail Rotor Blades - Inspection.....	9
DCA/ASP-315/31	Main Rotor Gear Box - Inspection.....	10
DCA/ASP-315/32	Tail Rotor Blades – Service Life Limitation	10
DCA/ASP-315/33	Main Gear Box Bevel Gear - Inspection.....	10
DCA/ASP-315/34	MGB Overhauled by Pilatus - Inspection	11
DCA/ASP-315/35	Cancelled – DCA/ASP-315/37 refers.....	12
DCA/ASP-315/36	MGB Tail Rotor Drive – Inspection and Replacement	12
DCA/ASP-315/37	Main Rotor Blades – Inspection and Replacement.....	13
* DCA/ASP-315/38	Rotor Drive Free-Wheel Assembly – Inspection and Replacement.....	14

DCA/ASP-315/2A Main Gear Box - Modification

- Applicability:** All main gear boxes P/N 319A.62.00.000.1 or .2 with S/N lower than 2000.
- Requirement:** Replace second planet gear stage per Aerospatiale Alouette SB 05.47. (BV AD 78-228-37 (B) refers)
- Compliance:** At 500 hours TTIS but not later than 28 February 1979.
- Effective Date:** DCA/ASP-315/2 - 31 January 1973
DCA/ASP-315/2A - 26 January 1979

DCA/ASP-315/3 Main Drive Shaft And Free Wheel Assembly - Inspection

- Applicability:** All Model SA315B helicopters
- Requirement:** FAA AD 73-13-2
- Compliance:** As detailed
- Effective Date:** 31 August 1973

DCA/ASP-315/4 Tail Rotor Gear Box Pitch Control Shaft - Inspection And Modification

- Applicability:** All Model SA315 helicopters fitted with tail rotor gear boxes P/N 3160S.66.10.000 not incorporating Mod. AM 1582.
- Requirement:** Aerospatiale SB 01.03.
- Compliance:** For installed gear boxes within the next 10 hours TIS. For all other gear boxes - prior to installation.
- Effective Date:** 30 September 1973

DCA/ASP-315/5 Main Gear Box - Inspection

- Applicability:** All Model SA315 helicopters
- Requirement:** Aerospatiale SB 01.08.
- Compliance:** Daily
- Effective Date:** 2 September 1974

DCA/ASP-315/6A Main Rotor Hydraulic Dampers - Modification

- Applicability:** All SA315, SA318C and SA319B helicopters with hydraulic dampers 3130S.13.60.000.
- Requirement:** Aerospatiale SB 65.20 or 65.107 as applicable. (BV AD's 75-147-10 and 75-146-34 refer)
- Compliance:** As detailed
- Effective Date:** 15 September 1975

- DCA/ASP-315/7A Telec Noise Filters - Screw Replacement and Inspection**
- Applicability:** All SA315, SA318C and SA319B helicopters with Telec type 7502, 7601, 8301 and 8501 noise filters installed.
- Requirement:** Aerospatiale SB 01.10 or 01.38 as applicable.
- Compliance:** Screw replacement - by 31 January 1978, unless already accomplished.
Inspection - at intervals not exceeding 100 hours TIS.
- Effective Date:** DCA/ASP-315/7 - 31 September 1977
DCA/ASP-315/7A - 16 December 1977
- DCA/ASP-315/8 Control Shaft Support Attachment Mountings - Inspection**
- Applicability:** All SA319B helicopters not incorporating mod. AMS 07.2109.
- Requirement:** Aerospatiale SB 05.57.
(BV AD 75-198-25 refers)
- Compliance:** At intervals not exceeding 50 hours TIS until modified in accordance with Aerospatiale SB 65.108.
- Effective Date:** 16 January 1976
- DCA/ASP-315/9 Main Rotor Hydraulic Drag Dampers - Inspection and Rectification**
- Applicability:** All Model SA315B and SA319B incorporating main rotor heads P/N 3160S.12.10.000.1 through .14 and P/N 3160S.12.20.000.1 through .7, and modified in accordance with mod. S296-AM1108 or SB 65-52.
- Requirement:** To prevent failure of main rotor hydraulic drag damper fixed levers, accomplish the following:-
1. Inspect each hydraulic damper fixed lever for cracks in area of eccentric attachment hole.

Replace any lever found cracked with a serviceable unit of the same P/N, before further flight.
 2. Remove all hydraulic dampers from main rotor head. Inspect, rectify as necessary and re-install in accordance with sub-para. 1C of Lama SB 65.15 dated 23 September 1974 for Model SA-315B and sub-para. 1C of Alouette SB 65.101 dated 23 September 1974 for Model SA-319B.
- Compliance:** Para 1. Daily, until para 2 is accomplished.
Para 2. Within next 100 hours TIS.
- Effective Date:** 9 January 1976
- DCA/ASP-315/10 Main Gear Box Splined Drive - Inspection**
- Applicability:** All main gear boxes P/N 319A.62.00.000, all issues.
- Requirement:** Aerospatiale SB 05.12.
- Compliance:** As detailed.
- Effective Date:** 15 October 1976

DCA/ASP-315/11 Servo Controls - Inspection

- Applicability:** All Model SA315, SA318C and SA319B having SAMM 4300 servo controls with control finger P/N 74802A.
- Requirement:** Aerospatiale SB 01.42.
(BV AD 77-65-35(B) refers)
- Compliance:** Within next 100 hours TIS, unless already accomplished.
- Effective Date:** 30 September 1977.

DCA/ASP-315/12 Tail Rotor Gear Box Stay - Inspection

- Applicability:** All Model SA319B with stay P/N 3160S.23.10.220.
- Requirement:** Aerospatiale SB 05.62.
(BV AD 77-63-30(B) refers)
- Compliance:** Within next 100 hours TIS unless already accomplished, thereafter at intervals not exceeding 2,400 hours TIS.
- Effective Date:** 30 September 1977.

DCA/ASP-315/13 Tail Rotor Control Cables - Life Limitation

- Applicability:** All Model SA319B having following cables fitted with flyweights:-
319A.88.00.010-1 or -2
319A.88.00.011-1 or -2
319A.88.00.020-1 or -2
319A.88.00.021-1 or -2
- Requirement:** Renew cables fitted with flyweights.
- Compliance:** At intervals not exceeding 200 hours TIS.
- Effective Date:** 30 September 1977.

DCA/ASP-315/14A Intermediate Drive Freewheel Assembly - Inspection And Removal

- Applicability:** All Model SA315 with intermediate bearing P/N 31305.67.12.00 all dash numbers and all S/N's.
- Requirement:** Inspect per Aerospatiale SB 01.14 Rev.2.
(BV AD 79-16-17(B) refers)
- Compliance:** Within next 50 hours TIS, unless already accomplished. Bearing assemblies which have been repaired by chrome-plating must be removed from service within next 50 hours TIS following inspection.
- Effective Date:** DCA/ASP-315/14 - 23 March 1979
DCA/ASP-315/14A - 12 May 1989

DCA/ASP-315/15 Main Rotor Drive Freewheel Assembly - Modification And Inspection

- Applicability:** All Model SA315 and SA319B with M.G.B. P/N 3160S.62.00.000 or 319A.62.00.000, freewheel assembly P/N 3160S.60.10.00 and clutch assembly P/N 3180S.63.10.000, 3160S.63.20.000 or 319A.63.00.000.
- Requirement:** Modify per Aerospatiale Lama SB 65.06 and Alouette SB 65.81 issue 2.
Inspect per Aerospatiale Lama SB 05.14 and Alouette SB 05.65.
(BV AD 79-53-18(B) refers)
- Compliance:** Modification - within next 100 hours TIS, but not later than 31 December 1979.
Inspection - on completion of first flight after embodiment of modification and thereafter at intervals not exceeding 100 hours TIS.
- Effective Date:** 6 April 1979.

DCA/ASP-315/16D Horizontal Stabiliser Spar - Inspection and Modification

- Applicability:** All model SA 315B
- Requirement:** To improve the horizontal stabiliser fatigue strength, accomplish modifications 072214 and 072215 on all the horizontal stabilisers, and inspect the inside of the tube, as follows:-
- 1. Stabilisers P/N 315A35-10-000-1**
- 1.1 Within three months, perform a visual inspection of the inside of the tube per paragraph 2.B.(1) of Eurocopter France SA 315 SB 55.01, Revision 3.
If corrosion is found inside the tube, other than in the half-shell area, replace the tube within 500 hours TIS of the inspection or by December 31, 1998 whichever is the sooner.
- 1.2 The inspection per paragraph 1.1 is then to be carried out at intervals not to exceed six years.
- 1.3 Compliance with paragraph 2.B.(2) of SB 55.01 R3, which corresponds to the embodiment of modifications 072215 (adding half-shells on the spar tube) and 072214 (installation of the spar tube without play) was required to be completed by 30 April 1984. (DCA/ASP-315/16C referred)
- 1.4 Specific checks to be carried out once compliance has been ensured with paragraph 1.3 :
After the last flight of the day, visually check the installation of the half-shells and of the horizontal stabiliser.
Every 400 flying hours or every four months whichever is the sooner, visually check the condition of the installation and lubricate the spar tube attachment bolts.
- 1.5 For the horizontal stabilisers P/N 315A35-10-000-1 on which modification 072215 has been embodied, accomplish the following.
Confirm that there are no traces of marking on the spar tube and rework the stabiliser support fittings per paragraph 1C of SA 315 SB 01.23, within 50 flying hours (unless already accomplished) and thereafter at intervals not to exceed 400 hours TIS or when the horizontal stabiliser is removed. (DCA/ASP-315/25 referred)
- 1.6 For the horizontal stabilisers P/N 315A35-10-000-1 on which modification 072215 has been embodied and which do not have the letter "X" engraved on the identification plate in the official stamp area, the following was also required to be accomplished by 13 February 1989.

To remove any traces of corrosion and improve the protective treatment at the half-shell-to-stabiliser tube centre section assembly points, perform checks and any required reworking, return the assembly to flight-worthy condition and mark the letter "X" on the stabiliser per paragraph 1.C of SB 01.25. (DCA/ASP-315/26 referred)

2. Stabilisers P/N 315A35-10-000-2 and Higher Dash Numbers

2.1 Within three months, perform a visual inspection of the inside of the tube per paragraph 2.B.(1) of SB 55.01, Revision 3.

If corrosion is found inside the tube, other than in the half-shell area, replace the tube within the next 500 hours TIS after the inspection, or by 31 December 1998 whichever is the sooner.

2.2 The inspection described in paragraph 2.1 is then to be carried out at intervals not to exceed six years.

2.3 By 30 September 1997, check and if necessary modify the supports and the stabiliser per paragraph 2B(2) of SB 55.01 R3 (modification 07.2215). Check the condition of the tube inside the area which is covered by the two half-shells per paragraph 2B(3) of SB 55.01 R3 within 8 days or 10 flying hours whichever is the sooner. If a crack is found, discard the tube.

2.4 Specific checks to be carried out once compliance has been ensured with paragraph 2.3 of this Airworthiness Directive:

After the last flight of the day, visually check the installation of the half-shells and of the horizontal stabiliser.

At intervals not to exceed 400 hours TIS or every four months whichever is the sooner, visually check the condition of the installation and lubricate the spar tube attachment bolts.

2.5 Embodiment of modification 072214 (installation of the spar tube without play) was required by 30 April 1984. (DCA/ASP-315/16C referred)

2.6 For the horizontal stabilisers P/N 315A35-10-000-2, confirm that there are no traces of marking on the spar tube and rework the stabiliser support fittings as described in paragraph 1C of SB 01.23, within the next 50 hours TIS unless already accomplished, then at intervals not to exceed 400 hours TIS or when the horizontal stabiliser is removed. (DCA/ASP-315/25 referred)

3. All Stabilisers held as spares

Before installation on an aircraft, these must be modified by the embodiment of modifications 072214 and 072215 and the inside of the tube be visually inspected per paragraph 2.B.(1) of SB 55.01, Revision 3. (DGAC AD 96-277-037 refers)

Compliance: Compliance is required at the times specified within the requirement of this airworthiness directive.

Effective Date: DCA/ASP-315/16C - 2 March 1984
DCA/ASP-315/16D - 29 August 1997

DCA/ASP-315/17 Main Rotor Gear Box - Inspection

Applicability: All Model SA315 with M.G.B. P/N 319A.62.00.000.1 to .4.

Requirement: Check output flange angular displacement per Aerospatiale SB 05.16. Remove from service any M.G.B. found with displacement exceeding specified limit before further flight.

Compliance: Within next 10 hours TIS for M.G.B.'s which have exceeded 390 hours TIS and thereafter at intervals not exceeding 400 hours TIS.

Effective Date: 27 October 1980.

DCA/ASP-315/18 Transmission Deck - Inspection And Modification

Applicability: All Model SA315 not incorporating mod. AM 2195.

Requirement: Inspect per Aerospatiale SB 05.17 and install two central clamps as per SB 53.02. Repair defective installations before further flight.

Compliance: At 400 hours TTIS and thereafter reinspect at intervals not exceeding 400 hours TIS.

Effective Date: 6 March 1981

DCA/ASP-315/19 Tail Boom - Inspection

Applicability: All Model SA315

Requirement: Accomplish the following for Aerospatiale SB 05.19:

1. Visually inspect per paras C(1) (A) and (B).
2. Dye penetrant inspect and check T.G.B. to tail boom attachment per para C(2).
Repair defective installations before further flight.

Compliance: 1. Visual inspections C(1) (A) - daily (Note (2) applies).
C(1) (B) - at intervals not exceeding 400 hours TIS.

2. Inspection and check - within next 50 hours TIS and thereafter whenever T.G.B. or tail boom removed or installed.

Effective Date: 16 April 1982

Note: The daily inspection may be accomplished by pilot subject to:
(a) Adequate instruction by LAME responsible for the aircraft.
(b) Maintenance Release endorsed to refer to inspection requirement.
(c) Copy of requirement document(s) attached to Maintenance Release.

DCA/ASP-315/20 Horizontal Stabiliser Installation - Modification

Applicability: All Model 315 with stabiliser P/N 315A.35.10.000.1 incorporating mod. AMS 2215, or P/N 315A.35.10.000.2 incorporating mod. AMS 2199.

Requirement: Modify per Aerospatiale SB 55.02.
(BV AD 82-168-23(B) refers)

Compliance: Within next 100 hours TIS.

Effective Date: 28 January 1983.

DCA/ASP-315/21A Main Gearbox A Frames - Life Limitation

- Applicability:** All Model 315 with 'A' frames P/N 315A21.04.000; 315A21.05.000; 3160S22.04.000 and .000.1; 3160S22.05.000 and 000.1.
- Requirement:** Modify or replace 'A' frames per Eurocopter SB 01.18 R1.
(BV AD 83-084-25(B)R1 refers)
- Compliance:** As prescribed in Eurocopter SB 01.18 R1.
- Effective Date:** DCA/ASP-315/21 15 July 1983
DCA/ASP-315/21A 3 September 1993

DCA/ASP-315/22 Tail Rotor Control Rod - Inspection

- Applicability:** All Model 315 with control rods P/N 3160S66.00.001.3 in tail rotor gear boxes modified per AMS 2178.
- Requirement:** Inspect per Aerospatiale SB 01.19.

Incorrectly shot peened rods must be renewed as prescribed within 50 hours TIS following inspection.
(BV AD 84-84-27(B) refers)
- Compliance:** Prior to 750 hours TTIS or within next 50 hours TIS for gear boxes which have exceeded 700 hours TTIS.
- Effective Date:** 31 August 1984

DCA/ASP-315/23A Main Gear Box - Inspection

- Applicability:** All Model 315B with M.G.B. P/N 319A62.00.000.1 to .4 having S/N higher than 2000 not incorporating mods. AMS 2218 and 2239.
- Requirement:** 1. M.G.B's not incorporating mod. AMS 2218 and installed in helicopters configured for sling load operations where total weight of aircraft plus slung load exceeds 1800 kg. - Inspect per Aerospatiale SB 01.20.

2. M.G.B's incorporating mod AMS 2218 but not mod. AMS 2239. - Inspect per Aerospatiale SB 05.25.
(BV AD 84-099-028(B)R1 refers)
- Compliance:** As detailed in Aerospatiale SB's 01.20 and 05.25 respectively.
- Effective Date:** DCA/ASP-315/23 - 31 August 1984
DCA/ASP-315/23A - 7 October 1988

DCA/ASP-315/24 Main Rotor Hub - Inspection

- Applicability:** All Model 315 with main rotor hub body P/N 3160.12.10020 and 3160.12.10020.1.
- Requirement:** Inspect per Aerospatiale telex SB 65.34.
(BV AD 84-134-29(B) refers)
- Compliance:** Within next 50 hours TIS and thereafter at intervals not exceeding 400 hours TIS until 3000 hours TTIS, thereafter at intervals not exceeding 50 hours TIS.
- Effective Date:** 16 November 1984

DCA/ASP-315/25 Cancelled - DCA/ASP-315/16D refers

DCA/ASP-315/26 Cancelled - DCA/ASP-315/16D refers**DCA/ASP-315/27 Main Rotor Blades - Life Limitation**

Applicability: All Model SA 315B with main rotor blades P/N 3160S.11.30 or .40.000, S/N 15227 through 15329 without the AMS Aerospatiale 07-2258.

Requirement: To prevent possible fatigue failure at the blade spar fitting assembly, the service life of affected blades is reduced to 400 hours TTIS.

Compliance: Retire affected blades at 400 hours TTIS or within next 25 hours TIS whichever is the later.

Effective Date: 20 July 1990

DCA/ASP-315/28A Main Rotor Blade Root Reinforcement Band - Inspection

Applicability: All Model SA 315B with main rotor blades P/N 3160S 11.30.000, 3160S 11.40.000, 3160S 11.50.000. (all dash numbers)

Requirement: To detect fretting corrosion at the main rotor blade spar-to-skin interface, inspect per Eurocopter SB 65.38 revision 1. If the template does not touch the skin, change P/N per SB 65.38 revision 1 para 2.3, and return the blades to service.

If the template touches the skin, remove the blades from service per SB 65.38 revision 1 para 2D.
(BV AD 93-104-034(B) R1 refers)

Compliance: At 2900 hours TIS since new or reconstruction, or within the next 100 hours TIS whichever is the later.

Effective Date: DCA/ASP-315/28 - 3 September 1993
DCA/ASP-315/28A - 21 January 1994

DCA/ASP-315/29 Main Rotor Blade Attachment Fittings - Inspection

Applicability: All model SA 315B

Requirement: To prevent fatigue failure of the main rotor blade attachment fitting, inspect the fitting in the area of the rotor blade attachment bolts for cracks per the maintenance manual revision dated 03-96, Chapter 5.
(GSAC AD 96-081-036(B) refers)

Compliance: At intervals not to exceed 400 hours TIS.

Effective Date: 7 June 1996

DCA/ASP-315/30A Tail Rotor Blades - Inspection

Applicability: Model SA 315B with tail rotor blades;
P/N 3160S-34-10000 all dash numbers,
P/N 3160S-34-11000 all dash numbers.

Requirement: To prevent failure of the tail rotor blades, accomplish the following:-

Visually inspect the skin on the upper and lower blade surfaces for cracks per paragraph 2.B. of Eurocopter SA315 Alert SB n° 05-36. If a crack is found, remove the blade from service before further flight.
(DGAC AD 1998-288-042(A) R1 refers)

Compliance: Within next 10 hours TIS and thereafter at intervals not to exceed 10 hours TIS. Blade P/Ns 3160S-34-10000-03 to -09 must be inspected before each flight per the Maintenance Manual chapter 5.1.

Note: *Repetitive inspections between the scheduled inspections may be accomplished by the pilot in accordance with CAR Part 43, Appendix A. The pilot must be trained and authorised (Part 43, Subpart B refers) and certification by the pilot must be provided (Part 43, Subpart C refers).*

Effective Date: DCA/ASP-315/30 – 31 July 1998
DCA/ASP-315/30A - 26 April 2001

DCA/ASP-315/31 Main Rotor Gear Box - Inspection

Applicability: Model SA 315B with any main rotor gear box which is not modified by MOD 072241.

Requirement: To prevent damage to the main rotor gear box and loss of drive to the main rotor, accomplish the following:-

1. Check the magnetic plug. If the oil is found contaminated, comply with work card 5.41.202 instructions before further flight.
2. Check the oil filter. If the oil is found contaminated, comply with work card 5.41.202 instructions before further flight.
(GSAC AD 98-303-041 (A) refers)

Compliance: 1. After the last flight of the day.
This inspection may be accomplished by the pilot.
2. At intervals not to exceed 25 hours TIS.

Effective Date: 18 December 1998

DCA/ASP-315/32 Tail Rotor Blades – Service Life Limitation

Applicability: Model SA 315B fitted with tail rotor blades P/N 3160S34.11.000.00, S/N 23484 through 23493.

Requirement: The service life of the 10 referenced tail rotor blades is limited to 400 hours TTIS.
(GSAC AD T1999-129-043(A) refers)

Compliance: Remove applicable tail rotor blades at 400 hours TTIS.

Effective Date: 7 May 1999

DCA/ASP-315/33 Main Gear Box Bevel Gear - Inspection

Applicability: SA 315B equipped with main gear box P/N 319A62-00-000.4, S/N M1242, M2194, M2516, NT3488, NT3563, 3.2888, 3.3091 and 3-11336.

Requirement: To detect a cracked main gear box bevel gear, prevent failure of the main gear box and the loss of the main rotor drive, accomplish the following:-

Remove the MGB and inspect both bevel gear faces for cracks per paragraph 2 of EUROCOPTER Lama Alert Telex 01.32. If a cracked bevel gear is found, rectify per Lama Alert Telex 01.32 before further flight.
(GSAC AD 2001-149-044(A) refers)

Compliance: Within next 50 hours TIS or by 31 December 2001, whichever is the later.

Effective Date: 31 May 2001

DCA/ASP-315/34 MGB Overhauled by Pilatus - Inspection

Applicability: SA 315B equipped with MGB P/N 319A62-00-000-1 through -4 with the following S/Ns:

10007, 3-10204, 3-10206, 3-10272, 3-10335, 3-10377, 3-10382, 3-10424, 3-10434, 3-10437, 3-10441, 3-10490, 3-10574, 3-10603, 3-10640, 3-10663, 3-10676, 3-10709, 3-10710, 3-10712, 3-10731, 3-10751, 3-10753, 3-10766, 3-10804, 3-10814, 3-10853, 3-10902, 3-10927, 3-10943, 3-10950, 3-10951, 3-10988, 3-10989, 3-110, 3-11008, 3-11026, 3-11104, 3-11124, 3-11190, 3-11210, 3-11232, 3-11238, 3-11301, 3-11376, 3-11427, 3-11511, 3-11537, 3-11565, 3-11571, 3-11583, 3-11607, 3-11608, 3-11662, 3-11691, 3-11694, 3-11698, 3-11735, 3-11775, 3-2115, 3-2174, 3-2217, 3-2218, 3-2263, 3-2267, 3-2279, 3-2286, 3-2300, 3-2303, 3-2305, 3-2307, 3-2322, 3-2334, 3-2345, 3-2346, 3-2347, 3-2348, 3-2352, 3-2353, 3-2354, 3-2355, 3-2372, 3-2373, 3-2374, 3-2391, 3-2399, 3-2400, 3-2410, 3-2411, 3-2413, 3-2414, 3-2415, 3-2424, 3-2442, 3-2445, 3-2470, 3-2472, 3-2481, 3-2484, 3-2495, 3-2500, 3-2503, 3-2515, 3-2545, 3-2549, 3-2555, 3-2573, 3-2574, 3-2582, 3-2584, 3-2589, 3-2591, 3-2594, 3-2596, 3-2597, 3-2616, 3-2688, 3-2736, 3-2741, 3-2751, 3-2764, 3-2769, 3-2782, 3-2783, 3-2818, 3-2820, 3-2850, 3-2852, 3-2871, 3-2891, 3-2896, 3-2917, 3-2927, 3-2934, 3-2943, 3-2954, 3-2955, 3-2960, 3-3001, 3-3090, 3-3094, 3-3110, 3-3131, 3-3137, 3-3144, 3-3166, 3-3179, 3-3195, 3-3217, 3-3218, 3-3221, 3-3232, 3-3251, 3-3265, 3-3279, 3-3283, 3-3286, 3-3299, 3-3317, 3-3318, 3-3319, 3-3329, 3-3355, 3-3358, 3-3372, 3-3375, 3-3633, 3-431, 3-536.

M-2013, M-2061, M-2072, M-2079, M-2139, M-2144, M-2145.

NT-3378, NT-3380, NT-3404, NT-3423, NT-3429, NT-3443, NT-3447, NT-3449, NT-3467, NT-3474, NT-3490, NT-3502, NT-3509, NT-3539, NT-3552, NT-3560, NT-3586, NT-3590, NT-3620, NT-3653, NT-3671, NT-3676, NT-3722, NT-3724, NT-3729.

NOTE: MGBs having a part number that ends in -V are not affected by this AD even if their S/N appears in the above list.

Requirement: To prevent wear, eventual failure of the splined coupling and loss of power to the tail rotor, accomplish the following:-

(a) Within 10 hours TIS, re-identify the MGB, if appropriate, per paragraph 2.C., of Eurocopter ASB 05.40. The gearbox S/Ns listed above have undergone overhaul at the Pilatus overhaul and repair shop in Switzerland and may have had an unauthorized Loctite sealant used in the in the drive pinion assembly. Gearboxes that have been overhauled at an authorized workshop since their overhaul at Pilatus, need only be re-identified per paragraph 2.C, of ASB 05.40 as terminating action for this AD.

(b) Within 10 hours TIS, accomplish the following per ASB 05.40, except this AD does not require you to return the MGB to PILATUS.

(1) Inspect the magnetic drain plug and the MGB oil filter for a rust-colored deposit per paragraph 2.B.1.a) of ASB 05.40. If a rust-colored deposit is found, replace the MGB with an airworthy MGB before further flight.

(2) Inspect the angular displacement on the MGB output flange per paragraph 2.B.1.b) of ASB 05.40. If the angular displacement is 1 millimeter (0.039 inch) or more, replace the MGB with an airworthy MGB before further flight.

(3) Take an oil sample and drain the MGB per paragraph 2.B.1.c) of ASB 05.40. If the oil is rust-colored, replace the MGB with an airworthy MGB before further flight. If the oil is not rust-colored, store the sample.

(c) Between next 40 and 50 hours TIS, accomplish the requirements of paragraph (b)(2) of this AD and take an oil sample from the MGB. If the oil is rust-colored, replace the MGB with an airworthy MGB before further flight. If the oil is not rust-colored, store the last sample.

(d) At intervals not to exceed 10 hours TIS, accomplish the requirements of paragraph (b)(1) of this AD.

(e) At each oil change, accomplish the requirements of paragraphs (b) and (c) of this AD, and compare the oil sample to the previous sample. If the oil is rust-colored, replace the MGB with an airworthy MGB before further flight. If the color is unchanged, store the last sample for future comparison.
(DGAC T2001-368-045(A) refers)

Compliance: Compliance is required at the times specified within the requirement of this airworthiness directive.

Effective Date: 25 October 2001

DCA/ASP-315/35 Canceled – DCA/ASP-315/37 refers

Effective Date: 25 February 2010

DCA/ASP-315/36 MGB Tail Rotor Drive – Inspection and Replacement

Applicability: Model SA 3180, SA 318 B, SA 318 C, SE 3160, SA 316 B, SA 316 C, SA 319 B and SA 315 B aircraft fitted with a main gearbox (MGB) P/N 319A62-00-000-4 S/Ns 3-10228, 3-11372 or 3-10822.

Requirement: To detect metal particle(s) and any missing rollers on the lower bearing of the bevel gear wheel in the MGB, which could lead to failure of the tail rotor drive system, accomplish the following:

1. Inspect the magnetic element of the MGB per the instructions in paragraph 2.B.1. of Eurocopter Lama ASB 65.43. If no metal particle is found on the magnetic element of the MGB, flights can be resumed. If one or more metal particles are found on the magnetic element of the MGB, comply with requirement 2 before further flight.

2. Perform a borescope inspection of the lower bearing of the bevel gear wheel, per the instructions in paragraph 2.B.2. of ASB 65.43. If all the rollers are in place in the bearing cage, and if no metal particle(s) are found on the magnetic element, flights can be resumed. If one or more rollers are missing from the bearing cage replace the MGB with a serviceable MGB before further flight. If all the rollers are in place in the bearing cage, and if metal particle(s) are present on the magnetic element, perform a borescope inspection of the lower bearing of the bevel gear wheel, per the instructions in paragraph 2.B.2. of ASB 65.43 to determine whether or not the MGB can be kept in service.

(DGAC AD F-2004-198R1 refers)

Note: On spare MGBs, comply with the instructions in paragraph 2.B.2. of ASB 65.43. before installation on an aircraft.

Compliance: 1. Before further flight and thereafter at every rotor shutdown until requirement 2 has been accomplished.

2. Within the next 10 hours TIS.

Effective Date: 28 July 2005

DCA/ASP-315/37 Main Rotor Blades – Inspection and Replacement

Applicability: Model SE3160, SA315B, SA316B, SA316C and SA319B aircraft, fitted with main rotor blade P/N L3160-100-01, S/N 600 through to 671 manufactured under a Parts Manufacturer Approval approved by Supplemental Type Certificate No. SH778GL.

Note 1: This AD supersedes DCA/ASP-315/35 to revise the AD applicability and the requirement. The replacement of affected blades with a S/N blade that is not affected by this AD is terminating action to the requirements of this AD.

Requirement: To prevent failure of a blade which could result in loss of aircraft control, accomplish the following:

1. For blades S/N 600 through 666, 668 through 669, and 671 (except those identified with "SB L3160-P-001A" next to the blade data plate):

Tap and inspect the root doublers of each blade for voids, and inspect the forward and aft edges for a paint cracks in the areas identified in figure 1 of Phlight of Phancy Corp. SB No. SB L3160-P-001 dated 20 May 2009 and the instructions in part A of paragraph 2.a. through to 2.e of SB No. SB L3160-P-001.

If no voids or paint cracks are found in the root doublers or fittings, and the only voids found are isolated to a 0.25 inch edge band of the doubler or a fitting as identified in figure 1 of SB No. SB L3160-P-001, then repeat the inspection at intervals of 30 hours TIS.

If a void is found in any doubler or a root fitting not isolated to the .25 inch band as identified in figure 1 of the SB, or if a paint crack of any length is found along the forward or aft edge of a root fitting between blade stations 35.02 and 42.52, then replace the blade before further flight.

Note 2: Blades which have root doublers and root fittings fitted per modification IAC-3160M-006 are identified with "SB L3160-P-001A" next to the blade data plate.

2. For blades S/N 600 through to 671 (except those identified with "SB L3160-P-001B" next to the blade data plate):

Inspect each blade in the areas identified in figures 2 and 3 of SB No. SB L3160-P-001 and the instructions in part B of the SB as follows:

Remove the paint and coin tap inspect the upper and lower surface of the No. 2 spar to tip weight housing bond as identified in figure 2 of SB L3160-P-001 for a bond void. Accomplish the inspection per the instructions in part B of paragraphs 2.a. through to 2.e. of SB L3160-P-001.

With the aid of a 10X or higher magnifying glass, visually inspect the No. 1 spar around the through pins for hole elongation, cracks in the spar and pin movement. (Pins should be flush with upper and lower spar surfaces). Visually inspect the outboard face of the tip weight housing for evidence of movement relative to the spar. (The tip weight housing should be flush with the face of the No. 1 and 2 spars).

Measure the thickness of the upper and lower spar with calipers. Hold the calipers against the face of the No. 1 spar in alignment with the through pins as identified in figure 3 of SB L3160-P-001.

If any of the following defects are found, replace the blade with an airworthy blade before further flight:

- (i) A void between the No. 2 spar and tip weight housing,
- (ii) For the No. 1 spar: A crack, or an elongated through pinhole, or movement of a through pin, or a through pin that is not flush with the spar surface,
- (iii) Movement of the tip weight housing, or a tip weight housing that is not flush with the No. 1 and No. 2 spar; or
- (iv) An upper or lower spar with a thickness of less than 0.045 inches.

If no defects are found as identified in paragraphs (i), (ii), (iii) or (iv) of this AD, then repeat the inspections at intervals not to exceed 30 hours TIS.

Note 3: Blades fitted with a supplemental abrasion strip to protect the No. 1 Spar from erosion and fitted with a second row of pins to restore the load path redundancy to loads from the tip weight housing per modification PPC-L3160-001B are identified with "SB L3160-P-001B" next to the blade data plate.

Note 4: The replacement of an affected blade with an airworthy blade with a S/N that is not affected by this AD is terminating action to the requirements of this AD.

(FAA AD 2010-02-07 refers)

Compliance: 1. Within the next 10 hours TIS unless previously accomplished, and if no voids or paint cracks are found in the root doublers or fittings, and the only voids found are isolated in the .25 inch edge band of a doubler or in a fitting as identified in figure 1 of SB No. SB L3160-P-001, then repeat the inspection at intervals not to exceed 30 hours TIS.

2. Within the next 10 hours TIS, unless previously accomplished, and if no defects are found as identified in paragraphs (i), (ii), (iii) or (iv) of this AD, then repeat the inspections at intervals not to exceed 30 hours TIS.

Effective Date: 25 February 2010

*** DCA/ASP-315/38 Rotor Drive Free-Wheel Assembly – Inspection and Replacement**

Applicability: Model SA 315 B, SE 3160, SA 316 B, SA 316 C, SA 3180, SA 318 B, SA 318 C and SA 319 B helicopters, all S/N.

Requirement: To prevent the free-wheel assembly slipping under high rotor torque loads due to the possible installation of a free-wheel cage of incorrect design, accomplish the requirements in EASA AD 2011-0143.

Note 1: A copy of EASA AD 2011-0143 can be obtained from <http://ad.easa.europa.eu/>

Note 2: Eurocopter ASB SA 315B No 65.48 original issue, dated 23 March 2011, Eurocopter ASB SE 3160, SA 316B, SA 316C, SA 319B, SA 3180, SA 318B and SA 318C ASB No 65.149 original issue, dated 23 March 2011 and later approved revisions of these documents are acceptable to comply with the requirements of this AD.

(EASA AD 2011-0143 refers)

Compliance: Within the next 100 hours TIS or by 27 January 2012 whichever occurs sooner, unless previously accomplished.

Effective Date: 27 October 2011