# **Airworthiness Directive Schedule**

# Helicopters Airbus Helicopters Deutschland BO 105 Series 26 January 2023

Notes:	1.	This AD schedule is applicable to Airbus Helicopters Deutschland BO105 C, BO105 D, BO105 S, BO105 LS A-1, BO105 LS A-3 helicopters manuf Eurocopter Deutschland (formerly Messerschmitt-Bolkow-Blohm GmbH) EASA Type Certificate No. R.011 (formerly LBA TCDS No. 3025).	actured by
	2.	The European Union Aviation Safety Agency (EASA) is the National Airw Authority (NAA) responsible for the issue of State of Design Airworthines (ADs) for these helicopters. State of Design ADs can be obtained directly EASA website at: <u>http://ad.easa.europa.eu/</u>	s Directives
	3.	This AD Schedule includes Federal Aviation Administration (FAA) ADs m EASA.	andated by
	4.	The date above indicates the amendment date of this schedule.	
	5.	New or amended ADs are shown with an asterisk *	
		Contents	
DCA/BO105/1B		Airworthiness Directive Compliance at Initial Airworthiness Certificate Issue	3
DCA/BO105/2		Tail Rotor Blades – Inspection and Rework	
DCA/BO105/3		Main Rotor Head Nuts and Bolts – Inspection and Replacement	
DCA/BO105/4		Main Rotor Gearbox Oil Pump – Inspection and Rework	
DCA/BO105/5		Tail Rotor Blade Grips – Inspection and Replacement	
DCA/BO105/6		Tail Rotor Blade Grips – Inspection and Replacement	
DCA/BO105/7		Bendix Shaft and Clutches – Inspection and Replacement	
DCA/BO105/8		Hoist Cable – Inspection and Replacement	
DCA/BO105/9		Cancelled - EASA AD 2018-0056 refers	
DCA/BO105/10		Tail Rotor Balance Weights and Control Lever – Inspection and Replacement	
DCA/BO105/11		Power Turbine Speed – Operational Limitation, Placard and AFM Amendment	
DCA/BO105/12		EASA AD 2010-0153 Cancelled – EASA AD 2021-0142 refers	
DCA/BO105/13		MRB Erosion Protective Shell – Inspection and Replacement	
DCA/BO105/14		Cancelled – DCA/BO105/15A refers	
DCA/BO105/15A		Cancelled – EASA AD 2011-0091R2 refers	
DCA/BO105/16		Emergency Float Kit – Inspection and Modification	
DCA/BO105/17		Tail Rotor Pitch Links – Inspection and Replacement	12
/ · · · · · · · · · · · · · · · · · · ·		ADs listed below are available directly from the National Airworthiness Authority to NAA websites are available on the CAA website at	
		govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-design- es/ If additional NZ ADs need to be issued when an unsafe condition is found to ex	int
		autical product in NZ, they will be added to the list below.	
2011-0091R2		Cancelled – EASA AD 2014-0230 refers	
2013-0015		Cancelled – EASA AD 2021-0142 refers	
2014-0180R1		Cancelled – EASA AD 2015-0166 refers	
2014-0230		Main Gearbox – Inspection	
2014-0235		Cancelled – EASA AD 2015-0017 refers	
2015-0017		Rescue Hoist Control Grip – Inspection	13
2015-0042		Cancelled – EASA AD 2021-0142 refers	
2016-0166		Cancelled – EASA AD 2016-0060 refers	13
2015-0220		Electrical Power System – Inspection	13
2016-0060		Cancelled – EASA AD 2016-0142 refers	13
2016-0118-E		MRB Erosion Protection Shell – Inspection	14

2016-0142R1	Swashplate Assembly – Inspection	14
2018-0056	Main Rotor Mast - Inspection	14
2019-0024	Cancelled - EASA AD 2021-0142 refers	14
2021-0142	Airworthiness Limitations	14
* 2023-0006-E	Swashplate Assembly - Inspection	14

# DCA/BO105/1BAirworthiness Directive Compliance at Initial Airworthiness Certificate Issue

- Applicability: Eurocopter BO105 A, BO105 C, BO105 D, BO105 S, BO105 LS A-1, BO105 LS A-3 helicopters, all variants, all S/N.
- Note 1: DCA/BO105/1B revised to cancel LBA AD 2001-281 and LBA AD 1976-136/2, which have both been superseded by EASA AD 2021-0142. New or amended ADs are shown with an asterisk \*

**Requirement:** Compliance with the following Luftfahrt-Bundesamt (LBA) Airworthiness Directives and EASA Airworthiness Directives (as applicable) is required:

Luftfahrt- Bundesamt (LBA) / EASA / Transport Canada AD No:	Messerschmitt-Bolkow- Blohm / Eurocopter Service Information:	Subject:	AD Applicability:
LBA AD 1972-023 (In German)	Allison Commercial SL No. 250 CSL-10 dated 9 Dec 1971	Allison C250 Series Engine - Introduce Life Limitation per SL No. 250 CSL-10	Refer to LBA AD 1972-023
LBA AD 1973-025	None	Tail Rotor Output Bendix Driveshaft - Modification	Refer to LBA AD 1973-025
LBA AD 1974-022	MBB BO105 ASB 4 dated 2 Mar 1973 & MBB BO 105 SB 10-11 dated 19 Dec 1973	Main Rotor Head Bolts Corrosion and Wear - Bolt Replacement	Refer to LBA AD 1974-022
LBA AD 1974-157	MBB BO105 ASB 7 & 8	Bendix Shafts - Shaft Replacement	Refer to LBA AD 1974-157
LBA AD 1975-103	MBB BO105 ASB 9 dated 30 Apr 1975	Main Rotor Head Nuts - Nut Replacement	Refer to LBA AD 1975-103
LBA AD 1975- 106/2	MBB BO105 ASB 11 & 12 both dated 16 Jun 1975	Hose Assemblies - Inspection and Replacement	Refer to LBA AD 1975- 106/2
LBA AD 1975-171 (In German)	MBB BO105 SB 90-11 Rev 1 dated 18 Jul 1975	Engine Compartment Deck Socket Connection - Rework per MBB BO105 SB 90-11 Rev 1	Refer to LBA AD 1975-171 (In German)
LBA AD 1975- 172/2	MBB BO105 SB 40-19 and 40-21 both dated 2 Jun 1975	Tandem Hydraulic Units - Replacement of certain production lots	Refer to LBA AD 1975- 172/2
LBA AD 1975- 191/2	MBB BO105 SB 80-21 dated 25 Jul 1975	Load Hook Electrical System - Inspection and Replacement	Refer to LBA AD 1975- 191/2
LBA AD 1975-238	MBB BO105 SB 60-25 rev 1	Right Outboard Engine Mount Flange - Flange Replacement	Refer to LBA AD 1975-238
* LBA AD 1976- 136/2	Cancelled	Cancelled	Refer to EASA AD 2021- 0142
LBA AD 1976- 255/2	MBB BO105 SB 40-15 dated 12 Aug 1974 & MBB BO105 SB 40- 29 dated 14 Jun 1976	Dual Hydraulic Booster - Inspection and Replacement	Refer to LBA AD 1976- 255/2
LBA AD 1976- 256/3 (In German)	MBB BO105 AB No. 13 rev 2 dated 17 Dec 1979	Rotor Brake - Inspect and modify per MBB BO105 AB No. 13	Refer to LBA AD 1976- 256/3 (In German)
LBA AD 1976- 317/2	MBB BO105 ASB 15	Tail Boom Assembly - Bearing Bracket Modification – Terminating Action	Refer to LBA AD 1976- 317/2
LBA AD 1977-306	MBB BO105 SB 10-7 rev 1 dated 2 Nov 77 & MBB BO105 SB 60- 37 dated 27 Jun 77	Input Shaft and Ram Air Ventilation - Replacement and Modification	Refer to LBA AD 1977-306
LBA AD 1978-257	MBB BO105 SB 40-15 rev 3	Dual Hydraulic System -	Refer to LBA AD 1978-257

	dated 16 Oct 1978	Inspection and Adjustment	
LBA AD 1979-136	MBB BO105 ASB 17 dated 20 Feb 1979	Exhaust Pipe Clamps - Inspection and Replacement	Refer to LBA AD 1979-136
LBA AD 1979-137	MBB BO105 SB 60-43 dated 9 Jan 1979	Drive Shaft Fairing Asbestos Cloth - Inspection	Refer to LBA AD 1979-137
LBA AD 1979-135	MBB BO105 SB 10-24 & 10-34	Main Rotor Transmission Bearings - SB 10-34 – Terminating Action	Refer to LBA AD 1979-135
LBA AD 1979-234	MBB BO105 SB 20-10 rev 2 dated 26 Feb 1979	Interference between TR Control Linkage and Nose Door Hardware - Rework	Refer to LBA AD 1979-234
LBA AD 1979-444	MBB BO105 SB 60-46 dated 20 Aug 1979	Engine Cowling - Rework	Refer to LBA AD 1979-444
LBA AD 1979- 235/2	MBB BO105 SB 40-38 rev 1 dated 13 Aug 1979	Dual Hydraulic Boost System - Modification	Refer to LBA AD 1979- 235/2
LBA AD 1978- 295/2	MBB BO105 ASB 16 rev 2 dated 28 Sep 1979	Tail Rotor Blades and Heads - Replacement - Terminating Action	Refer to LBA AD 1978- 295/2
LBA 1980-95/2 (In German)	MBB BO105 AB No. 19 rev 1 dated 27 March 1980	Bendix Drive Shafts - Inspect and modify per MBB BO105 AB No. 19	Refer to LBA 1980-95/2 (In German)
LBA AD 1980-208	MBB BO105 ASB 60-54 and 10- 37 both dated 27 June 1980	Main Gearbox - Rework	Refer to LBA AD 1980-208
LBA AD 1984- 177/2	MBB BO105 SB 80-81 rev 1 dated 4 Dec 1984, MBB BO105 SB 80-4 rev 1 dated 27 Nov 1984 & Siren SB 10A dated 13 Aug 1984	Cargo Hook - Accomplish SB Actions	Refer to LBA AD 1984- 177/2
LBA AD 1984-128	MBB BO105 ASB 23 dated 26 Jul 1984	Tail Rotor Blades - Accomplish SB Actions	Refer to LBA AD 1984-128
LBA AD 1983- 124/2	MBB BO105 ASB 22 rev 1 dated 17 Apr 1984	Tandem Hydraulic Units - Spring Replacement - Terminating Action	Refer to LBA AD 1983- 124/2
LBA AD 1984-178	MBB BO105 SB 30-18 rev 2 dated 18 Dec 1978 & MBB BO105 SI 102	Vertical Fin - Modification	Refer to LBA AD 1984-178
LBA AD 1985-50 (In German)	MBB BO105 AB No. 24 dated 18 February 1985	Tail Rotor Control Rods - Inspect and replace per MBB BO105 AB No. 24.	Refer to LBA AD 1985-50 (In German)
LBA AD 1985-265	MBB BO105 ASB 26 dated 12 Dec 1985	Tandem Hydraulic System - Modification	Refer to LBA AD 1985-265
LBA AD 1986-106	MBB BO105 ASB 28 dated 27 Mar 1986	TR Gearbox Attach Bolts - Replacement	Refer to LBA AD 1986-106
LBA AD 1986-148	MBB BO105 ASB 105-60-101 dated 18 Jul 1986 & MBB BO105 SB 105-60-65	Fuel System Drain Valve - Drain Valve Replacement – Terminating Action	Refer to LBA AD 1986-148
LBA AD 1987- 106/2	MBB BO105 ASB BO-10-101 rev 2 dated 26 May 1987 & MBB BO105 ASB 105LS-10-2 rev 1 dated 26 May 1987	Main Rotor Head Blade Bolts - Replacement	Refer to LBA AD 1987- 106/2
LBA AD 1989- 123/2 (In German)	MBB BO105 ASB No. 105-40- 102 dated 20 April 1989	Dual Hydraulic System - Inspect and rework per MBB BO105 ASB No. 105-40-102	Refer to LBA AD 1989- 123/2 (In German)
LBA AD 1991-204	MBB BO105 ASB BO105-60-105 18 Nov 1991	PC Air Tube & Pipe Assembly Clearance - Rework and Replacement	Refer to LBA AD 1991-204
LBA AD 1992-273	MBB BO105 ASB 105-30-104	Transmission System - Transmission Flange Inspection	Refer to LBA AD 1992-273
LBA AD 1995-458	Eurocopter ASB 105-80-118 rev	Voltage Controller -	Refer to LBA AD 1995-458

	1 dated 29 Nov 1995	Replacement	
LBA AD 1999- 300/3	Eurocopter ASB 105-10-114 rev 2 dated 31 Aug 1999	Main Rotor System Tension Torsion Strap - Inspection and Replacement	Refer to LBA AD 1999- 300/3
LBA AD 1999- 289/3	Eurocopter ASB BO 105-10-113 rev 3 dated 10 Nov 2000	Main Rotor System Tension Torsion Strap - Inspection and Replacement	Refer to LBA AD 1999- 289/3
* LBA AD 2001-281	Cancelled	Cancelled	Refer to EASA AD 2021- 0142
EASA AD 2010- 0049	Eurocopter ASB BO105-40-106 dated 19 Dec 2008	Cyclic Stick Locking Device - Modification	Refer to EASA AD 2010- 0049
LBA AD 2008-388	Eurocopter Deutschland GmbH BK117 ASB MBB-BK117-30-113, dated 23.09.2008 Eurocopter Deutschland GmbH BO105 ASB BO105-30-116, dated 23.09.2008	Tail Rotor – Balance Weights & Control Lever – Inspection / Replacement	BO 105 A, BO 105 C, BO 105 LS A-1 BO 105 D, BO 105 DS, BO 105 DB, BO 105 DBS, BO 105 DB-4, BO 105 DBS-4, BO 105 DBS-5 and BO 105 S
LBA AD 2009- 110R1	Eurocopter Canada Limited ASB- BO 105 LS 40-10, dated 08.05.2009 Eurocopter Deutschland ASB BO105-40-106, dated 19.12.2008 Eurocopter Deutschland ASB MBB-BK117-40-113, dated 22.12.2008	Rotors Flight Control – Cyclic-Stick Locking Device – Modification	BO 105 A, BO 105 C, BO 105 D, BO 105 LS A-1, BO 105 LS A-3 and BO 105 S
LBA AD 2009-182	Goodrich SB 42315-489-01 Rev. 1 Breeze-Eastern SB BLH-20200- 504-25-01 Breeze-Eastern SIL01 BLH- 20200-431 Breeze-Eastern SIL01 HK-116-5	Equipment / Furnishings – D-Lok Hook of the Rescue Hoist – Inspection / Removal from Service / Replacement	BO105 A, BO105 C, BO105 D, BO105 S, BO105 LS A-1, BO105 LS A-3, all variants, all S/N
LBA AD 2010-181	Eurocopter Deutschland GmbH ASB BO105-60-110 Rev. 1, dated 03.03.2010 Rolls-Royce Corporation 250- C20 Series CEB A-1400 Rev. 3, dated 19.01.2009	Engine – Power Turbine Speed – Operation Limitation	BO105C, BO105D and BO105S
LBA AD 2010-207	Eurocopter Deutschland ASB BO105-10-121 Rev. 1 MM BO105, Chapter 101-15 Airworthiness Limitations, Revision 26)	Time Limits / Maintenance Checks – Main Rotor Blades with Bolted Lead Inner Weight - Life Limitation	BO 105 C (Variants CB-5) BO 105 D (Variants DBS- 5) BO 105 S (Variants CBS- 5)
LBA AD 2010- 291R1	Eurocopter Deutschland ASB BO105-10-124 Rev. 1, dated 18.10.2010 ASB BO105LS-10-12 Rev. 1, dated 20.10.2010 Maintenance Manual (MM) BO105, Maintenance Manual (MM) BO105 LS A-1 Maintenance Manual (MM) BO105 LS A-3	Main Rotor – Main Rotor Blade Erosion Protective Shell – Inspection / Replacement	BO 105 A, BO 105 C, BO 105 D, BO 105 LS A-1, BO 105 LS A-3 and BO 105 S
LBA AD 2010- 325R1	BO105 Maintenance Manual / Wartungshandbuch, Kapitel 11, Abschnitt 11-12 bis 11-19 einschließlich der geänderten Tabelle 11-2 vom 04.04.2011 und dem geänderten Bild 11-14 vom 04.04.2011 Eurocopter Deutschland ASB BO105-10-125 Rev. 1, dated 04.04.2011	(ATA 63) Main Rotor Drive – Main Gearbox Inspection	BO105 A, BO105 C (Variants C23, CB, CB-4, CB-5), BO105 D (Variants D, DS, DB, DB-4, DBS, DBS-4, DBS-5), BO105 S (Variants CS, CBS, CBS-4, CBS-5)
LBA AD 2012-157	Apical Industries Inc. ASB SB2008-01, Rev. A, dated	(ATA 25) Liferaft / (ATA 32) Emergency Flotation	BO 105 A, BO 105C, BO 105 S, BO 105 LS A-1 and

			03.03.2010	Section – Installation of	BO 105 LS A-3
				Liferaft External Inflation Handle Placards and	
				Replacement of Liferaft	
				Operation Placards	
	CF-2009	9-12	Eurocopter Canada ASB BO 105 LS 30-12, dated 12 December 2008, or later revisions approved by Transport Canada.	Tail Rotor Balance Weights Corrosion	BO 105 LS A-3
	CF-2008	8-17R1	Eurocopter Canada ASB BO 105 LS-10-10 Revision 1, dated 8 January 2008, or later revision approved by Transport Canada.	Tension Torsion Straps	BO 105 LS A-3
Note 2:			rt of this AD (each individual L certified in the aircraft log boo		ransport Canada AD)
Note 3:			turer service information at lat requirements of this AD.	ter approved revisions is	acceptable to comply
Complian	ice:		mpliance required before the i iness, or at the next Review o		
			on, whichever is the sooner, u		
			e inspections, if required, are		
		applicab	s specified in the individual LB le.	A ADS, the EASA ADS a	and the FAA ADS, as
Effective	Date:		105/1 - 29 July 2010 105/1A - 27 September 2012		
			105/1B - 1 July 2021	<u>-</u>	
DCA/BO1	05/2 T	ail Rotor	Blades – Inspection and Rev	work	
Applicabi	Applicability: All model through 5		BO 105 series aircraft fitted with tail rotor blades P/N 105-31742, S/N all 48.		
Note:			pertains to fiberglass plastic lo ed 29 March 1974 or later app		74-64 per MBB SB
Requirement: To preve		To preve	ent Tail Rotor Blade (TRB) failure, accomplish the following:		
	1. Sec revisions		cure TRB end caps per SB 30-8 dated 5 July 1974 or later approved s.		
2. Acc applicabl			complish the instructions in action 2.a) or 2.b) of LBA AD 1974-162 as le.		
		(LBA AD	1974-162 refers)		
Complian	ice:	1. By	29 August 2010.		
		2. At e accompl	every post flight inspection unt ished.	il the requirements in M	BB SB 30-8 have been
Effective	Date:	29 July 2	2010		

# DCA/BO105/3 Main Rotor Head Nuts and Bolts – Inspection and Replacement

- Applicability: All model BO 105 series aircraft fitted with quadruple nuts and Bendix tie bar retaining bolts.
- **Requirement:** To prevent MRH failure, accomplish the following:

Remove quadruple nuts P/N 105-14101.19 and 105-14101.20, and bolts P/N 105-14101.22 and 105-14101.23 and magnaflux inspect them for cracks. Replace cracked parts before further flight.

- **Note:** MBB SB No. 10-18 dated 18 July 1975 and later approved revisions pertains to the subject of this AD.
  - (LBA AD 1975-170/2 refers)
- **Compliance:** Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 300 hours TIS until the life limitation of 2400 hours TTIS.
- Effective Date: 29 July 2010

# DCA/BO105/4 Main Rotor Gearbox Oil Pump – Inspection and Rework

- Applicability:All model BO 105 series aircraft fitted with a main rotor gearbox oil pump P/N 7631955 112 with S/N all through 229, or oil pump P/N 7631 955 115 with S/N all through 229.
- **Requirement:** To prevent failure of the main rotor gearbox sun and planetary gear carrier, accomplish the following:

1. Inspect the main gearbox chip detector per the instructions in chapter 10-1-2, page 17 of the BO 105 Maintenance and Overhaul Manual. If any chips are found accomplish corrective actions before further flight.

2. For oil pump P/N 7631 955 112:

Replace the oil pump plunger and compression spring per the instructions in MBB SB No. 10-20 dated 25 May 1976 and MBB SB No. 10-16 dated 28 July 1975 or later approved revisions.

3. For oil pump P/N 7631 955 115:

Replace the oil pump compression spring per the instructions in MBB SB No. 10-16.

- (LBA AD 1976-206 refers)
- **Compliance:** 1. Within the next 10 hours TIS unless previously accomplished and thereafter at intervals not to exceed 10 hours TIS until accomplishment of requirements 2 or 3, as applicable.
  - 2. Within the next 100 hours TIS unless previously accomplished.
  - 3. Within the next 100 hours TIS unless previously accomplished.

Effective Date: 29 July 2010

DCA/BO105/5 T	ail Rotor Blade Grips – Inspection and Replacement
Applicability:	All model BO 105 series aircraft fitted with blade grips P/N 105-31711 and P/N 105- 31722.
Requirement:	To prevent failure of the tail rotor blades due to possible cracks in the inboard end and/or cracks in the laminated pack retaining bolt bore, accomplish the following:
	1. Inspect the inboard end of the blade grips for cracks per the instructions in paragraph 2.A of MBB BO 105 SB No. 30-24 dated 1 December 1978 or later approved revisions. If any defects are found accomplish corrective actions before further flight.
	2. Dye penetrant inspect the laminated pack retaining bolt bore per the instructions in paragraph 2.A of MBB BO 105 SB No. 30-24. If any defects are found accomplish corrective actions before further flight.
	(LBA AD 1978-339 refers)
Compliance:	<ol> <li>Within the next 100 hours TIS unless previously accomplished and thereafter inspect per the Special Inspection Instructions in the BO 105 Maintenance and Overhaul Manual at intervals not to exceed 100 hours TIS.</li> </ol>
	2. Within the next 100 hours TIS unless previously accomplished and thereafter inspect per the Special Inspection Instructions in the BO 105 Maintenance and Overhaul Manual at intervals not to exceed 600 hours TIS.
Effective Date:	29 July 2010
DCA/BO105/6	Tail Rotor Blade Grips – Inspection and Replacement
Applicability:	All model BO 105 series aircraft, all S/N fitted with tail rotor blade grips P/N 105- 31711 and P/N 105-31722.
Requirement:	To prevent failure of the tail rotor blades due to possible cracks in the clevis area of the blade grips, accomplish the instructions in MBB BO 105 AB No. 18 dated 15 March 1979 or later approved revisions. If any defects are found accomplish corrective actions before further flight.
	(LBA AD 1979-144 refers)
Compliance:	Within the next 10 hours TIS unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS.
Effective Date:	29 July 2010
DCA/BO105/7 E	Bendix Shaft and Clutches – Inspection and Replacement
Applicability:	All model BO 105 series aircraft, all S/N fitted with Bendix shafts and Bendix clutches P/N 19E 143-1, 19E 144-1/2/3, 19E 145-1/2/3, 19E 146-1, 105 31503, 105 31504, 105 31505 or 105 31506.
Requirement:	To prevent failure of the shaft and clutch due to possible corrosion of the inner sides of the diaphragms, inspect per the instructions in MBB SB No. 60-45 dated 20 July 1979 or later approved revisions. If any defects are found accomplish corrective actions before further flight.
	(LBA AD 1979-443 refers)
Compliance:	Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 1200 hours TIS or 2 years whichever occurs sooner.
Effective Date:	29 July 2010

#### DCA/BO105/8 Hoist Cable – Inspection and Replacement

- Applicability: Model BO 105 series aircraft, all S/N fitted with rescue hoist P/N 0134-0353, 0136-1175 or 105-81101.
- **Requirement:** To prevent failure of the hoist cable due to possible previous damage, accomplish the instructions in MBB AB No. 21 dated 14 September 1982 or later approved revisions. If any defects are found accomplish corrective actions before further flight.

(LBA AD 1982-099 refers)

**Compliance:** Before further hoist operation unless previously accomplished and thereafter after every hoist operation and for frequent actuation during a hoist mission after every 10<sup>th</sup> hoist cycle.

Effective Date: 29 July 2010

#### DCA/BO105/9 Cancelled - EASA AD 2018-0056 refers

Effective Date: 26 March 2018

#### DCA/BO105/10 Tail Rotor Balance Weights and Control Lever – Inspection and Replacement

Applicability:	Models BO 105A, BO 105C, BO 105LS A-1, BO 105D, BO 105DS, BO 105DB, BO
	105DBS, BO 105DB-4, BO 105DBS-4, BO 105DBS-5 and BO 105S aircraft, all S/N.

**Requirement:** To prevent failure of the tail rotor balance weights due to possible corrosion, accomplish the following:

Inspect the tail rotor balance weights and control levers per the instructions in Eurocopter Deutschland (ECD) BO105 ASB No. ASB BO105-30-116 dated 23 September 2008 or later approved revisions.

If any defects are found which exceeds the acceptable limits specified in ASB No. ASB BO105-30-116, replace defective parts before further flight.

**Note:** The replacement of defective parts is not a terminating action for the repetitive inspection requirements of this AD.

(EASA AD 2008-0206 refers)

**Compliance:** By 29 August 2010 or the next 100 hours TIS whichever occurs sooner unless previously accomplished, and thereafter at intervals not to exceed 600 hours TIS or 48 months whichever occurs sooner.

Effective Date: 29 July 2010

# DCA/BO105/11 Power Turbine Speed – Operational Limitation, Placard and AFM Amendment

Applicability: All model BO 105C, BO 105D and BO 105S aircraft series fitted with Rolls Royce Corporation (formerly Allison, Detroit Diesel Allison) 250-C20 series engines, except those aircraft embodied with ECD VTOL retrofit kit 105-80037.

**Requirement:** To prevent 3rd stage turbine wheel failure due to detrimental vibrations in a particular RPM range which could result in loss of engine power, accomplish the following:

1. Review the aircraft records or inspect both engines and determine if a  $3^{rd}$  stage turbine wheel P/N 23065833 is fitted to any of the aircraft engines.

If a  $3^{rd}$  stage turbine wheel P/N 23065833 is found fitted, accomplish requirement 2 of this AD.

2. Install a placard next to the RPM indicator on the instrument panel in full view of the pilot per the instructions in Eurocopter Deutschland GmbH ASB BO105-60-110 revision 1, dated 3 March 2010 or later approved revisions.

Min. Continuous 98%
Min. Transient 95%
ASB BO105-60-110

3. Amend the AFM and insert the applicable revision listed in table 1 into the aircraft AFM.

Table 1 – Model BO 105 AFM Revisions

Model	Model Variant	AFM Revision
BO 105C	C23 (Europe), C-2 (USA) and CDN (Canada)	No. 5
BO 105S	CS (Europe) and CS-2 (USA)	
BO 105C	CB (Europe), CB-2 (USA) and CDN-B (Canada)	No. 8
BO 105S	CBS (Europe), CBS-2 (USA) and CDN-BS (Canada)	
BO 105D	DB and DBS (Europe)	No. 4

- **Note 1:** Rolls Royce Corporation 3<sup>rd</sup> stage turbine wheels P/N 23065833 are no longer in production.
- **Note 2:** The placard on the aircraft instrument panel can be removed once affected 3<sup>rd</sup> stage turbine wheels P/N 23065833 are removed from service and both engines have turbine wheel P/N fitted which are not affected by this AD per the instructions in paragraph 2.C.(1)(d) of Rolls-Royce Corporation 250-C20 Series CEB A-1400 revision 3 dated 19 January 2009, or later approved revisions.

(EASA AD 2010-0128 refers)

- Compliance: 1. By 29 August 2010.
  - 2. By 29 August 2010.
  - 3. By 29 August 2010.

Effective Date: 29 July 2010

# DCA/BO105/12 EASA AD 2010-0153 Cancelled – EASA AD 2021-0142 refers

Effective Date: 1 July 2021

#### DCA/BO105/13 MRB Erosion Protective Shell – Inspection and Replacement

- Applicability: Model BO105 A, BO105 C, BO105 D, BO105 LS A-1, BO105 LS A-3 and BO105 S helicopters, all variants (except variants CB-5 and DBS-5), all S/N.
- **Requirement:** To prevent loss of the MRB erosion protective shell due to possible debonding which can result in an unbalanced main rotor, high vibration, damage to the aircraft and loss of aircraft control, accomplish the following:

1. Review the aircraft records or inspect the aircraft and determine the P/N of the main rotor blades and determine whether any blades have been replaced between September 2006 and March 2010. Affected main rotor blade P/N are listed in ECD ASB BO105-10-124 revision 1 dated 18 October 2010 or later EASA approved revisions.

If an affected main rotor blade is found fitted, accomplish a one-time inspection of the erosion protective shell for debonding per the instructions in ASB BO105-10-124.

If any debonding is found, replace the erosion protective shell at the time indicated in, and per the instructions in chapter 14-2 of the applicable BO105 Maintenance Manual (MM).

2. Affected main rotor blades listed in ASB BO105-10-124 fitted with erosion protective shells which have been replaced between September 2006 and March 2010 shall not be fitted to any aircraft unless the blades have been inspected and reworked as applicable, per the requirements in this AD.

**Note:** Inspections and corrective actions accomplished prior to the effective date of this AD per the original issue of ECD ASB BO105-10-124 are acceptable to comply with the initial requirements of this AD. After the effective date of this AD, inspections and corrective actions must be accomplished per ASB BO105-10-124 revision 1 or later EASA approved revisions.

(EASA AD 2010-0216-E)

- **Compliance:** 1. Within the next 10 hours TIS, or next 4 flight cycles, or by 3 December 2010 whichever occurs sooner, unless previously accomplished.
  - 2. From 3 November 2010.

Effective Date: 3 November 2010

DCA/BO105/14 Cancelled – DCA/BO105/15A refers

Effective Date: 27 September 2012

#### DCA/BO105/15A Cancelled – EASA AD 2011-0091R2 refers

Effective Date: 8 November 2012

# DCA/BO105/16 Emergency Float Kit – Inspection and Modification

Applicability: Model BO-105A, BO-105C, BO-105S, BO-105LS A-1 and BO-105LS A-3 aircraft fitted with Apical emergency float kit P/N 20430-300, S/N all through to 009 (embodied under FAA STC SR00856LA).

**Requirement:** To prevent an unsafe condition accomplish the inspections and corrective actions specified in FAA AD 2011-25-01.

(FAA AD 2011-25-01 refers)

Compliance:By 26 July 2012

Effective Date: 26 January 2012

# DCA/BO105/17 Tail Rotor Pitch Links – Inspection and Replacement

- Applicability: Model BO105 LS A-3 aircraft, all S/N fitted with tail rotor pitch links P/N 117-31821, 117-31822 or B642M1018101 with a S/N listed in appendix 1 of Able Engineering & Component Services (Able) ASB No. 2012-001 revision IR, dated 7 March 2012.
- **Requirement:** To prevent failure of the tail rotor pitch link due to possible spherical bearing migration out of the bearing bore which could result in loss of aircraft control, accomplish the requirements in FAA AD 2012-13-11.

(FAA AD 2012-13-11 refers)

**Compliance:** At the compliance times specified in FAA AD 2012-13-11.

Effective Date: 27 September 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-ofdesign-airworthiness-directives/

If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ, they will be added to the list below.

2011-0091R2 Cancelled – EASA AD 2014-0230 refers

Effective Date: 4 November 2014

2013-0015 Cancelled – EASA AD 2021-0142 refers

Effective Date: 1 July 2021

2014-0180R1 Cancelled – EASA AD 2015-0166 refers

Effective Date: 25 August 2015

2014-0230 Main Gearbox – Inspection

Note: The repetitive inspections of the MGB magnetic plugs for chips mandated by requirement (1) of EASA AD 2014-0230 per the instructions in ASB BO105-10-125 revision 3 and the BO105 MM may be accomplished by adding the inspection requirements to the tech log. The visual inspection may be performed and certified under the provision in Part 43 Appendix A.1 (7) by the holder of a current pilot licence, if that person is rated on the aircraft, appropriately trained and authorised (Part 43, Subpart B refers), and the maintenance is recorded and certified as required by Part 43.

<u>If any deposits are found</u> on the MGB magnetic plug per Changed Table 11-2 of ASB BO105-10-125 revision 3 during any inspections, then a maintenance engineer must accomplish all required corrective actions per ASB BO105-10-125 revision 3 before further flight.

Effective Date: EASA AD 2014-0230 - 4 November 2014 EASA AD 2014-0230 (note added) - 26 November 2015

2014-0235 Cancelled – EASA AD 2015-0017 refers

Effective Date: 10 February 2015

2015-0017 Rescue Hoist Control Grip – Inspection

Effective Date: 10 February 2015

2015-0042 Cancelled – EASA AD 2021-0142 refers

Effective Date: 1 July 2021

2016-0166 Cancelled – EASA AD 2016-0060 refers

Effective Date: 6 April 2016

2015-0220 Electrical Power System – Inspection

Effective Date: 23 November 2015

# 2016-0060 Cancelled – EASA AD 2016-0142 refers

Effective Date: 2 August 2016

# 2016-0118-E MRB Erosion Protection Shell – Inspection

Effective Date: 21 June 2016

#### 2016-0142R1 Swashplate Assembly – Inspection

- Applicability: BO105 A, BO105 C, BO105 D, BO105 S and BO105 LS A-3 helicopters, all variants, all S/N, and BO105 LS A-3 helicopters, modified in accordance with EASA STC 10039633, or previously by LBA STC EMZ NR. 0654/3058 (so called "Superlifter").
- Effective Date: 2016-0142 2 August 2016 2016-0142R1 - 26 April 2018
- 2018-0056 Main Rotor Mast Inspection
- Applicability: BO105 A, BO105 C, BO105 D, BO105 LS A-1, BO105 LS A-3 and BO105 S helicopters, all variants, all S/N.
- Effective Date: 26 March 2018

# 2019-0024 Cancelled - EASA AD 2021-0142 refers

- Effective Date: 1 July 2021
- 2021-0142 Airworthiness Limitations
- Applicability: BO105 A, BO105 C, BO105 D, BO105 S, BO105 LS A-1 and BO105 LS A-3 helicopters, all variants, all S/N, including BO105 LS A-3 helicopters modified in accordance with EASA Supplemental Type Certificate (STC) 10039633, or previously LBA Germany STC EMZ NR. 0654/3058 (commercially known as "Superlifter").

Effective Date: 1 July 2021

#### \* 2023-0006-E Swashplate Assembly - Inspection

Applicability: BO105 A, BO105 C, BO105 D, BO105 S, BO105 LS A-1 and BO105 LS A-3 helicopters, all variants, all S/N, and

BO105 LS A-3 helicopters, embodied with EASA STC 10039633, or previously embodied with LBA STC EMZ NR. 0654/3058 (so called "Superlifter").

Effective Date: 16 January 2023