Airworthiness Directive Schedule

Helicopters

Airbus Helicopters Deutschland EC135 P2

21 December 2017

Notes:

1. This AD schedule is applicable to Airbus Helicopters Deutschland EC 135 P2 helicopters manufactured under EASA Type Certificate No. R.009 (formerly LBA TC No. 3061).
2. The European Aviation Safety Agency (EASA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these helicopters. State of Design ADs can be obtained directly from the EASA web site at http://ad.easa.europa.eu/
3. The date above indicates the amendment date of this schedule.
4. New or amended ADs are shown with an asterisk *

Contents

DCA/EC135/1A Airworthiness Directive Compliance at Initial Airworthiness Certificate Issue 3
DCA/EC135/2A Main Rotor Hub Shaft - Inspection 3
DCA/EC135/3A Tail Rotor Drive Shaft Bearing Attachment Flange - Inspection 4
DCA/EC135/4 Main Rotor Blade Lead-Lag Damper Attachment – Inspection 4
DCA/EC135/5 Air Conditioning System - Modification 4
DCA/EC135/6A Main Rotor Drive Torque Struts - Inspection 5
DCA/EC135/7 Primary Flight and Navigation Displays - Replacement 5
DCA/EC135/8 Automatic Engine Control – Software Improvement 5
DCA/EC135/9 Cancelled – Purpose Fulfilled 5
DCA/EC135/10 FADEC Fail – AFM Revision 6
DCA/EC135/11 Cancelled – DCA/EC135/27 refers 6
DCA/EC135/12 Emergency Flotation System - Modification 6
DCA/EC135/13A Cancelled – EASA AD 2006-0318R2 refers 6
DCA/EC135/14 LH and RH Cable Channel Wire Harnesses – Inspection 6
DCA/EC135/15 Direct Current Power Distribution – Modification 7
DCA/EC135/16 Cancelled – DCA/EC135/17 refers 7
DCA/EC135/17 Cancelled – DCA/EC135/18 refers 7
DCA/EC135/18A Cancelled – DCA/EC135/31 refers 7
DCA/EC135/19 Cancelled – DCA/EC135/20 refers 7
DCA/EC135/20 Cancelled – DCA/EC135/26 refers 7
DCA/EC135/21 Cancelled – DCA/EC135/28 refers 7
DCA/EC135/22 Cyclic Stick Locking Device – Modification and AFM Amendment 7
DCA/EC135/23 Main Rotor Lower Mast Bearing – Inspection 8
DCA/EC135/24 Cancelled – DCA/EC135/25 refers 8
DCA/EC135/25A Cancelled – DCA/EC135/33 refers 8
DCA/EC135/26A Main Gearbox – Inspection 8
DCA/EC135/27 Main Rotor Sliding Sleeve – Inspection and AFM Amendment 10
DCA/EC135/28 Cancelled – EASA AD 2010-0058R1 refers 11
DCA/EC135/29A Instrument Control Panel – Flight Limitation, Placard and Modification 11
DCA/EC135/30A Cancelled – EASA AD 2017-0002 refers 11
DCA/EC135/31 Cancelled – EASA AD 2010-0227R1 12
DCA/EC135/32 Cancelled – DCA/EC135/35 refers 12
DCA/EC135/33 Tailboom Fenestron Ring Frame – Inspection and AFM Amendment 12
DCA/EC135/34A Mechanical Air Conditioning System – Inspection 13
DCA/EC135/35 Instrument Lighting in NVG Mode – AFM Amendment and Modification 14

DCA/EC135/36 Fire Extinguishing System Injection Tubes – Replacement 14
DCA/EC135/37 Emergency Float Kit – Inspection 15
DCA/EC135/38 Cancelled – DCA/EC135/39 refers 15
DCA/EC135/39B Cancelled – EASA AD 2012-0085R4 refers 15
From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and you can obtain them directly from the National Airworthiness Authority (NAA) web sites. Links to the NAA web sites are available on the CAA web site at http://www.caa.govt.nz/airworthiness-directives/states-of-design/ 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. 16
2012-0085R6 Main Rotor Hub – Inspection 16
2013-0176 Flight System Actuators – Inspection 16
* 2013-0178 Cancelled - EASA AD 2017-0243 refers 16
2013-0228-E Main Rotor Actuator – Replacement 16
2013-0289-E Rear Structure / Ring Frame – Inspection 16
2013-0306-CN AD Cancelled by EASA – Purpose fulfilled 16
2013-0307-E Fuel Quantity Indication – AFM Amendment 17
2014-0226 Main Gearbox and Tail Gearbox Oil – Inspection 17
2017-0002 Main Transmission Housing – Modification 17
2010-0058R1 Tail Rotor, Cyclic and Collective Control Levers – Inspection 17
2010-0227R1 Tail Rotor Rod and Ball Pivot – Inspection 17
2006-0318R2 Tail Rotor Linear Control Transducer Bearing and Rod – Inspection 17
2017-0147 Tail Rotor Controls – Modification 17
2017-0199 Outboard Load System – Inspection 18
* 2017-0243 Airworthiness Limitations – Amendment 18

DCA/EC135/1A Airworthiness Directive Compliance at Initial Airworthiness Certificate Issue

Applicability Model EC 135 aircraft.

Requirement: Compliance with the following LBA Airworthiness Directives (as applicable) is required:

LBA AD Nr	AD Subject
1998-033/7	Bearing supports of the tail rotor drive shaft. Inspection of the bolt connections for loose bolts and damage
1998-109	Oil cooling system - Fan - Replacement of Shaft with Spline
1998-389	Fuselage - Tail Boom - Replacement of Bearing Support
1999-102/2	Fuselage - Tail Boom - Bearing-Location No. 1 of the Tail Rotor Shaft

Note: Each part of this AD (each individual LBA AD) shall be certified in the aircraft log book separately.

Compliance: Before issue of New Zealand Airworthiness Certificate.
Repetitive inspections to be accomplished at intervals not to exceed the times specified in the LBA Airworthiness Directives.

Effective Date: DCA/EC135/1 - 30 July 1999
DCA/EC135/1A - 30 March 2006

DCA/EC135/2A Main Rotor Hub Shaft - Inspection

Applicability: Model EC 135 series

Requirement: To prevent fracture of the main rotor hub-shaft, which could result in loss of control of the helicopter, accomplish the following per Eurocopter Deutschland Alert SB EC 135-62A-004 Revision 2:

1. Visual inspection of the main rotor hub-shaft.
2. Dye Penetrant Inspection of the main rotor hub-shaft.

Replace main rotor hub-shaft before further flight if any cracks are found.

(LBA AD 1999-185/3 refers)

Compliance: Initial Inspection:

1. Visual inspection before further flight.
2. Dye penetrant inspection within 10 hours TIS.

Following the initial inspections, accomplish either:-

1. Visual inspections at intervals not to exceed 15 hours TIS, or
2. Dye penetrant inspections at intervals not to exceed 100 hours TIS.

Effective Date: DCA/EC135/2 - 30 July 1999
DCA/EC135/2A - 17 December 1999

DCA/EC135/3A Tail Rotor Drive Shaft Bearing Attachment Flange - Inspection

Applicability: Model EC 135 series S/N 0005 through S/N 0120.

Requirement: To prevent a fracture of the bearing attachment flange of the tail rotor drive shaft, accomplish the following per Eurocopter Deutschland Alert SB EC 135-53A-010 Revision 2:

1. Inspect the bearing attachment flange for cracks. Replace the bearing attachment flange before further flight, if any cracks are found.

2. Install additional bearing support bracket.

(LBA AD 1999-199/3 refers)

Compliance: 1. Before further flight and thereafter at intervals not to exceed 15 hours TIS until modified, and then inspect (visual inspection only) at intervals not to exceed 50 hours TIS.

2. By 14 October 1999.

Effective Date: DCA/EC135/3 - 30 July 1999
DCA/EC135/3A - 7 October 1999

DCA/EC135/4 Main Rotor Blade Lead-Lag Damper Attachment – Inspection

Applicability: Model EC 135 series

Requirement: To ensure proper screw connection of the nut of the expansion bolt which serves as bearing support attachment for the main rotor blade lead-lag damper, accomplish the following:-

Inspect the lockwire and of the head of the expansion bolt per Eurocopter Deutschland Alert SB EC 135-62A-005.

(LBA AD 1999-264 refers)

Compliance: The inspection must be accomplished after the last flight of the day and must be repeated every 15 flight hours until the replacement of nuts and bearing pins by modified nuts and bearing pins has been accomplished.

Effective Date: 30 July 1999

DCA/EC135/5 Air Conditioning System - Modification

Applicability: Model EC 135 series S/N 0005 through 0169 equipped with air conditioning system, except; S/N 0030, 0076, 0093, 0098, 0102, 0104, 0106, 0108, 0110, 0111, 0113, 0114, 0116, 0117, 0119, 0121, 0145, 0146, 0148, 0150, 0152, 0155.

Requirement: To prevent a short circuit following a failure of the spring resistor located in the compressor/condenser unit of the air conditioning system, and possible smoke and fire in the helicopter, accomplish the following:-

Install an insulating mat in the area of the spring resistor per Eurocopter SB EC135-21A-002 Revision 1.

Alternatively, the air conditioning system may be deactivated and placarded per Eurocopter SB EC135-21A-002 Revision 1.

(LBA AD 2000-270 refers)

Compliance: Within next 25 hours TIS.

Effective Date: 10 August 2000

DCA/EC135/6A Main Rotor Drive Torque Struts - Inspection

Applicability: Model EC 135 series

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

1. Inspect, mark, exchange and observe life limitation limits of the LH and RH torque struts per ASB ECD 135-63A-002 Revision 4.
2. Brief all pilots:-

   During flight if a thump-like sound occurs followed by an unusual vibration (similar to faulty Aris);
   – continue flight with reduced power
   – land at the nearest suitable airfield.

(LBA AD 2001-107/3 refers)

Compliance:
1. At the times specified in ASB ECD 135-63A-002 Revision 4.
2. Before the next flight.

Effective Date: DCA/EC135/6 - 22 March 2001
DCA/EC135/6A - 28 August 2003

DCA/EC135/7 Primary Flight and Navigation Displays - Replacement

Applicability: Model EC 135 Series S/N 0005 through 0216 equipped with SMD45H Smart Multifunction Display.

Requirement: To prevent loss of primary flight display information check that the S/N of the SMD45H unit is not one of the faulty units listed in Eurocopter ASB EC135-31A-002 Revision 1. If the S/N is one of the listed units, operation of the helicopter is restricted to VFR conditions until the SMD45H is replaced with a serviceable unit. Placard instrument panel accordingly.

(LBA AD 2001-306 refers)

Compliance: Within next 50 hours TIS.

Effective Date: 29 November 2001

DCA/EC135/8 Automatic Engine Control – Software Improvement

Applicability: Model EC 135T1 S/N 0005 through 0187 with Turbomeca Arrius 2B1 engines

Requirement: To prevent loss of automatic engine control, accomplish Eurocopter ASB EC135-71A-016 in combination with Turbomeca SB 319 73 2019.

(LBA AD 2001-304 refers)

Compliance: By 28 February 2002

Effective Date: 29 November 2001

DCA/EC135/9 Cancelled – Purpose Fulfilled

Effective Date: 28 August 2003

DCA/EC135/10 FADEC Fail – AFM Revision

Applicability: Model EC135 T1

Requirement: To maintain automatic engine control in the event of possibly spurious FADEC FAIL caution indications, comply with Eurocopter Deutschland ASB No. EC135-71A-024. This ASB requires the insertion of pages into the AFM.

(LBA AD 2002-333 refers)

Compliance: Within 50 hours TIS.

Effective Date: 28 August 2003

DCA/EC135/11 Cancelled – DCA/EC135/27 refers

Effective Date: 22 January 2010

DCA/EC135/12 Emergency Flotation System - Modification

Applicability: All model EC 135 aircraft fitted with removable and/or fixed parts of ECD Emergency Flotation System Version 1.

Requirement: Due to the increased admissible maximum take-off weight of EC135 aircraft, the ECD Emergency Flotation System Version I no longer meets requirements, and the removable parts of the emergency flotation system version I must be replaced.

Remove the removable parts of ECD Emergency Flotation System Version I. Install all removable parts and components of ECD Emergency Flotation System Version II.

These actions must be accomplished per the instructions in Eurocopter Deutschland EC135 Alert Service Bulletin No. EC135-32A-010 dated 13 September 2004.

(LBA AD D-2005-414 refers)

Compliance: By 23 March 2006.

Effective Date: 23 February 2006

DCA/EC135/13A Cancelled – EASA AD 2006-0318R2 refers

Effective Date: 25 April 2017

DCA/EC135/14 LH and RH Cable Channel Wire Harnesses – Inspection

Applicability: All model EC135 aircraft, S/Ns 0005 through 0654.

Requirement: To prevent short circuits in the wiring harnesses due to the possibility of damage/chafing caused by the side channel cover attachment hardware, accomplish the following:

Inspect the wire harnesses in both the LH and RH cable channels, per the instructions in Eurocopter Deutschland EC135 ASB No. EC135-53A-017. If the wire harnesses are damaged, accomplish a manufacturer approved repair scheme, before further flight.

Modify the LH and RH side channel cover attachments and attach chafing protection to the wire harnesses, per the instructions in EC135 ASB No. EC135-53A-017.

For aircraft fitted with a co-pilot collective lever, modify the cover attachments per the instructions in EC135 ASB No. EC135-53A-017.

(EASA AD 2007-0021-E refers)

Compliance: Within the next 25 hours TIS or by 21 March 2007, whichever is the sooner.

Effective Date: 9 February 2007

DCA/EC135/15 Direct Current Power Distribution – Modification

Applicability: Model EC135 aircraft, S/N 0005 all through 0497, excluding 0028, 0473, 0484, 0492 and 0496.

Requirement: To prevent energy sources interfering with each other due to the possibility of power lines being routed too close to each other and too close to signal lines, modify and separate the direct-current (DC) power supply lines per the instructions in Eurocopter Deutschland EC135 Alert Service Bulletin (ASB) No. EC135-24A-013.

(EASA AD 2007-0165 refers)

Compliance: Within the next 100 hours TIS, or at the next annual inspection, or by 31 December 2007, whichever is the sooner.

Effective Date: 28 June 2007

DCA/EC135/16 Cancelled – DCA/EC135/17 refers

Effective Date: 31 January 2008

DCA/EC135/17 Cancelled – DCA/EC135/18 refers

Effective Date: 24 April 2008

DCA/EC135/18A Cancelled – DCA/EC135/31 refers

Effective Date: 25 November 2010

DCA/EC135/19 Cancelled – DCA/EC135/20 refers

Effective Date: 26 June 2008

DCA/EC135/20 Cancelled – DCA/EC135/26 refers

Effective Date: 28 May 2009

DCA/EC135/21 Cancelled – DCA/EC135/28 refers

Effective Date: 29 April 2010

DCA/EC135/22 Cyclic Stick Locking Device – Modification and AFM Amendment

Applicability: Model EC135 aircraft, S/N 0005 through to 0699, except S/N 0028, 0076, 0093, 0098, 0099, 0102, 0104, 0106, 0108, 0110, 0111, 0113, 0114, 0116, 0117 and 0119.

Requirement: To prevent take-off with a locked cyclic stick which could result in loss of aircraft control accomplish the following:

1. Modify the cyclic stick locking/centering device by removing the slide and spring from the cyclic stick cantilever per the instructions in ECD Alert Service Bulletin (ASB) No. ASB EC135-67A-015, dated 14 April 2008 or later approved revisions.

2. Amend the AFM by inserting the following note into the AFM:

> **NOTE:** Before starting the engines, the cyclic stick must be moved to its neutral position. By folding the cantilever towards the pin, it is possible to move the cyclic stick into its neutral position and to center it. Locking the cyclic stick is no longer possible.

Note: Requirement 2 may be accomplished by inserting a copy of this AD into the AFM, or by inserting the ECD supplied AFM page(s) into the AFM.

(EASA AD 2008-0113 refers)

Compliance: 1. & 2. By 15 September 2008.

Effective Date: 31 July 2008

DCA/EC135/23 Main Rotor Lower Mast Bearing – Inspection

Applicability: Model EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2 and EC135 T2+ aircraft, all S/N.

Requirement: To prevent the outer race of the lower hub shaft bearing dislocating due to the retaining bolts becoming loose, accomplish the following:

1. Inspect the lower mast bearing attachment hardware and install lock washers per section 3.B of Eurocopter ASB No. EC135-63A-013 revision 02 or later approved revisions.

2. For aircraft which have previously been modified per Eurocopter ASB No. EC135-63A-013 original issue or revision 01, inspect the lower mast bearing attachment hardware and install lock washers per section 3.B of ASB No. EC135-63A-013 revision 02.

3. A main rotor gearbox shall not be fitted to any aircraft unless the instructions in section 3.B of ASB No. EC135-63A-013 revision 02 has been accomplished.

(EASA AD 2008-0175-E refers)

Compliance:

1. Within 3 flight cycles after detecting any unusual vibration during main rotor startup, or within 3 flight cycles after detecting any unusual vibration at the end of the main rotor rundown, or within the next 50 hours TIS, or by 31 March 2009, whichever occurs sooner.

2. Within the next 400 hours TIS.

3. From 20 September 2008.

Effective Date: 20 September 2008

DCA/EC135/24 Cancelled – DCA/EC135/25 refers

Effective Date: 27 March 2009

DCA/EC135/25A Cancelled – DCA/EC135/33 refers

Effective Date: 23 December 2010

DCA/EC135/26A Main Gearbox – Inspection

Applicability: Model EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2+, all S/N fitted with a MGB P/N 4649 010 003, 4649 010 005, 4649 010 006, 4649 010 006X, 4649 010 008, 4649 010 008X, 4649 001 007, 4649 010 010 or 4649 010 013.

Note 1: This AD retains the requirements in superseded DCA/EC135/26. The AD applicability revised to exclude those aircraft fitted with a modified MGB. Aircraft fitted with a MGB P/N not listed in the applicability of this AD is not affected by this AD.

Requirement: To prevent tooth failure of the MGB drive pinion due to wear, accomplish the following:

1. <u>For aircraft S/N all through to 504 which have not been modified</u> (to use a more efficient lubricating oil) per Eurocopter Deutschland (ECD) SB EC135-63-011, take an oil sample per the instructions in ASB EC135-63A-012 revision 4, dated 27 April 2009 or later EASA approved revisions.

After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

2. For aircraft S/N all through to 504 which have been modified per SB EC135-63-011 take an oil sample per the instructions in ASB EC135-63A-012.

After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

3. For aircraft S/N 505 onwards, take an oil sample per the instructions in ASB EC135-63A-012.

After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

Note 2: The first oil change must be accomplished at 50 hours TSN.

4. If the chip warning indicator illuminates, accomplish the instructions and the corrective action at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

5. For a MGB that has accumulated 300 hours or more TTIS, TSN, TSO or TSR (Time Since Repair):

Inspect the MGB log card and/or the aircraft log book and determine if any chip indication log entries are recorded. Depending on the findings accomplish the instructions and corrective actions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

Note 3: Oil sampling, analysis and corrective actions accomplished prior to the effective date of this AD per the instructions in ECD ASB EC135-63A-012 original issue or revision 01, revision 02 or revision 03 is acceptable to comply with the initial requirements of this AD. After 28 May 2009 (the effective date of DCA/EC135/26) oil sampling, analysis and corrective actions must be accomplished per the instructions in ECD ASB EC135-63A-012 revision 04 or later approved revisions.

Note 4: The installation of a MGB with a P/N not listed in the applicability section of this AD is a terminating action to the requirements of this AD.

(EASA AD 2009-0106R1-E refers)

Compliance: 1. Within the next 100 hours TIS, unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.

2. Not before 100 hours TIS after the aircraft has been modified per ECD SB EC135-63-011, or within the next 100 hours TIS for aircraft that have already been modified per ECD SB EC135-63-011 unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.

3. Not before 90 hours TIS after the first oil change, or within the next 100 hours TIS, whichever occurs later unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.

4. From 28 May 2009 (the effective date of DCA/EC135/26).

5. Before further flight unless previously accomplished.

Effective Date: DCA/EC135/26 - 28 May 2009
DCA/EC135/26A - 8 December 2011

DCA/EC135/27 Main Rotor Sliding Sleeve – Inspection and AFM Amendment

Applicability: Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 635 T1(CPDS) helicopters, all S/N.

Note 1: This AD retains the requirements of superseded DCA/EC135/11 and introduces an AFM amendment which contains the requirements of that AD.

Note 2: This AD is not applicable to EC 135 P2+, EC 135 T2+, EC 635 P2+ and EC 635 T2+ helicopters as these aircraft have been certificated and delivered with the appropriate AFM preflight check instructions.

Requirement: To prevent dislocation of the plain journal bearing towards the inside or outside of the main rotor sliding sleeve resulting in limited movement of the collective controls and reduced helicopter control, accomplish the following:

1. Amend the AFM by inserting a copy of the applicable AFM page which is attached to Eurocopter ASB EC135-62A-021 initial issue dated 23 June 2005 or later EASA approved revisions into the AFM.

2. Visually inspect the position of the upper and lower plain journal bearings in the sliding sleeve for dislocated plain journal bearings per the instructions in the applicable AFM page which is attached to Eurocopter ASB EC135-62A-021. If the plain journal bearings have moved and found in the incorrect position contact the aircraft manufacturer for corrective action instructions which must be accomplished before further flight.

Note 3: The visual inspection requirements of this AD may be accomplished by adding the inspection requirement 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.

3. Amend the AFM with the applicable revision level indicated in the following table or later approved revision which contains the requirements of this AD. Remove the copy of the AFM page which was introduced by requirement 1 of this AD.

Model	AFM revision or later approved revisions
EC135 P1(CDS)	15
EC135 P1(CPDS)	15
EC135 P2(CPDS)	13
EC135 T1(CDS)	18
EC135 T1(CPDS)	19
EC135 T2(CPDS)	9
EC635 T1(CPDS)	19

Note 4: The accomplishment of corrective actions is not a terminating action for the preflight inspections of the main rotor sliding sleeve.

(EASA AD 2009-0272 refers)

Compliance: 1. Before further flight unless previously accomplished and until requirement 3 of this AD is accomplished.

2. Before further flight and thereafter at every preflight inspection until requirement 3 of this AD is accomplished.

3. By 22 February 2010.

Effective Date: 22 January 2010

DCA/EC135/28 Cancelled – EASA AD 2010-0058R1 refers

Effective Date: 7 April 2017

DCA/EC135/29A Instrument Control Panel – Flight Limitation, Placard and Modification

Applicability: Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ aircraft, all S/N fitted with Instrument Control Panel (ICP) P/N C19269AA, S/N E0034, E0055, E0066, E0081, E0097, E0252, E0456, E0467, E1029, E1117, E1179, E1271, E1391, E1434, E1462, E1486, E1490, E1529, E1582, E1730, E1849, E1874, E1891, E1972, E2041, E2117 and E2156 through to E2400.

Note 1: No action required if the aircraft is already in compliance with DCA/EC135/29. This AD revised to introduce the option to replace affected ICP with an ICP embodied with modification standard 'Amdt. C' as an acceptable method of compliance with the modification requirements of this AD.

Requirement: To prevent unintentional turning of BARO rotary knobs on certain Instrument Control Panels (ICP) due to insufficient turn resistance which can result in erroneous altitude information and increase the risk of flight into terrain during IFR operation, accomplish the following:

1. Review the aircraft records or inspect the aircraft and determine the S/N of the ICP P/N C19269AA installed on the aircraft.

If an affected ICP is found installed on the aircraft, install a placard with text "**Single Pilot IFR Operation Prohibited**" on the instrument panel in full view of the pilots before further flight per the instructions in ECD ASB EC135-31A-053 revision 2, dated 23 May 2011 or later approved revisions and inform the flight crew.

2. Modify the ICP per the instructions in ASB EC135-31A-053 or replace the ICP with a unit embodied with modification standard 'Amdt. C' or higher, and remove the placard introduced by requirement 1 of this AD

3. An affected ICP shall not be fitted to any aircraft unless the ICP has been modified per the instructions in ASB EC135-31A-053 or unless the ICP is embodied with modification standard 'Amdt. C' or higher.

Note 2: ICP P/N C19269AA with S/N E2401 through to E2999 have been modified by ECD per the requirements of this AD prior to installation on an aircraft, or prior to despatch as a replacement unit. The ICP manufacturer (Thale) has informed ECD that ICP units from S/N E3000 onwards have been embodied with modification standard 'Amdt. C' at production. Existing units can be returned to Thales for modification to this standard.

Note 3: Eurocopter Deutschland GmbH (ECD) ASB EC135-31A-053 revision 2, dated 23 May 2011 or later approved revisions is acceptable to comply with the requirements of this AD.

(EASA AD 2010-0207R1 refers)

Compliance:

1. By 23 October 2010 (ten days after the effective date of DCA/EC135/29).
2. By 13 December 2010 (two months after the effective date of DCA/EC135/29).
3. From 13 October 2010 (the effective date of DCA/EC135/29).

Effective Date: DCA/EC135/29 - 13 October 2010
DCA/EC135/29A - 30 June 2011

DCA/EC135/30A Cancelled – EASA AD 2017-0002 refers

Effective Date: 23 January 2017

DCA/EC135/31 Cancelled – EASA AD 2010-0227R1

Effective Date: 7 April 2017

DCA/EC135/32 Cancelled – DCA/EC135/35 refers

Effective Date: 29 September 2011

DCA/EC135/33 Tailboom Fenestron Ring Frame – Inspection and AFM Amendment

Applicability: Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ helicopters, all S/N fitted with ring frame P/N L535A3501230.

Note 1: This AD retains the requirements of superseded DCA/EC135/25A, reduces the repetitive inspection intervals and requires the modification of the aft ring frame as a terminating action to the repetitive inspection requirements of this AD.

Requirement: To prevent structural failure of the tailboom to fenestron ring frame attachment which could result in loss of aircraft control, accomplish the following:

1. Revise the preflight check in section 4 of the AFM by inserting a copy of pages 6 or 7 (as applicable to the aircraft model) of Eurocopter Deutschland ASB EC135-53A-022 revision 2 dated 30 November 2010, or later approved revisions into the AFM, and advise the flight crew of this amendment.
Accomplish a visual inspection of the rear structure tube per the instructions in ECD ASB EC135-53A-022. If any cracks are detected in the ring frame, replace with a serviceable part before further flight.

Note 2: The AFM amendment and the preflight inspection of the ring frame for cracks per requirement 1 of this AD 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.

Note 3: The amendment of the AFM to a revision level as indicated in appendix 1 of EASA AD 2010-0254 (as applicable to helicopter model) is acceptable to comply with the AFM amendment per requirement 1 of this AD.

2. Accomplish a visual inspection per the instructions in ECD ASB EC135-53A-022. revision 2, or later approved revisions. If any cracks are detected in the ring frame, replace with a serviceable part before further flight.

3. Modify the aft ring frame and change the ring frame P/N to L535H2120302 per the instructions in Eurocopter Deutschland SB EC135-53-023 original issue, dated 19 August 2009 or later EASA approved revisions.

4. An aft ring frame with P/N L535A3501230 shall not be fitted to any helicopter which already has ring frame P/N to L535H2120302 fitted or is in compliance with requirement 3 of this AD.

Note 4: The installation of a P/N L535A3501230 ring frame as replacement part is not a terminating action for the repetitive inspection requirements of this AD.

Note 5: The modification of a helicopter per requirement 3 of this AD is a terminating action for the repetitive inspection requirements of this AD.

(EASA AD 2010-0254 refers)

Compliance: 1. Before further flight after 24 September 2009 (the effective date of DCA/EC135/25A) unless previously accomplished, and thereafter before the first flight of every day accomplish a visual inspection of the rear structure tube per requirement 1.

2. Within the next 25 hours TIS, or within 100 hours TIS since the last inspection per DCA/EC135/25A whichever occurs sooner, and thereafter at intervals not to exceed 25 hours TIS.

3. By 23 December 2011.

4. From 23 December 2010.

Effective Date: 23 December 2010

DCA/EC135/34A **Mechanical Air Conditioning System – Inspection**

Applicability: Model EC 135 P2+ and EC 135 T2+ aircraft, S/N 870, 872, 873, 879, 883, 884, 888, 893, 900, 905, 911, 914, 916, 917, 923 and 926 fitted with a mechanical air condition system with compressor bearing block P/N L210M1872105.

Note 1: This AD revised to introduce an optional terminating action to the repetitive inspections per note 2 of this AD.

Requirement: To prevent bearing cage debris entering the engine inlet due to possible failure of a bearing in the air conditioning compressor bearing block which could result in engine compressor damage and loss of engine power, accomplish the following:

Inspect the upper bearing in the bearing block of the mechanical air conditioning system compressor, per the instructions in Eurocopter Deutschland (ECD) ASB EC135-21A-013 original issue, dated 06 June 2011 or later approved revisions.

If water, corrosion or grease leaks are found deactivate the air conditioning system per the instructions in ECD ASB EC135-21A-013 before further flight.

Note 2: The repetitive inspections mandated by this AD may be terminated when the mechanical air conditioning system compressor bearing block P/N L210M1872105 is replaced with an improved block P/N L210M1872107 or P/N L210M1872886 per the instructions in of ECD SB EC135-21-015 original issue, dated 12 July 2011 or later approved revisions.

(EASA AD 2011-0111R1 refers)

Compliance: Within 25 hours TIS or 14 days after 30 June 2011 (the effective date of DCA/EC135/34), whichever occurs sooner, <u>and</u>

If condensation is found accomplish the AD requirements thereafter at intervals not to exceed 25 hours TIS or 28 days whichever occurs sooner, <u>and</u>

If no water, corrosion or grease leaks are found, accomplish the AD requirements thereafter at intervals not to exceed 100 hours TIS or 3 months whichever occurs sooner.

Effective Date: DCA/EC135/34 - 30 June 2011
DCA/EC135/34A - 27 October 2011

DCA/EC135/35 Instrument Lighting in NVG Mode – AFM Amendment and Modification

Applicability: Model EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ aircraft, S/N 0642 through to 0999 fitted with the optional NVG system.

Note 1: This AD supersedes DCA/EC135/32 (EASA AD 2010-0247-E refers) to introduce a terminating modification.

Requirement: To prevent failure of the NVG system diodes which could result in loss of the entire instrument and overhead panel lighting and suddenly increase the background lighting for the CAD, the VEMD, the PFD and the ND to maximum intensity which could impair the flight crew vision and result in loss of aircraft control, accomplish the requirements in EASA AD 2011-0168.

Note 2: Eurocopter Deutschland GmbH (ECD) ASB EC135-33A-009 revision 2 dated 30 June 2011 and later approved revisions is acceptable to comply with the requirements of this AD.
(EASA AD 2011-0168 refers)

Compliance: At the compliance times specified in EASA AD 2011-0168.

Effective Date: 29 September 2011

DCA/EC135/36 Fire Extinguishing System Injection Tubes – Replacement

Applicability: Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ helicopters, all S/N fitted with a single engine fire extinguishing system P/N L262M1808101, L262M1812101 or P/N L262M1812102, or fitted with a dual engine fire extinguishing system P/N L262M1813102.

Requirement: To prevent failure of the fire extinguishing system due to non-compliant injection tubes accomplish the following:

1. Modify or replace RH and LH injection tubes and elbow (if installed) listed in table 1 of this AD per the instructions in Eurocopter Deutschland GmbH (ECD) ASB EC135-26A-003 revision 01 dated 16 May 2011 or later approved revisions.

Table 1 – Parts to be modified or replaced:

For single engine fire extinguishing systems:	RH tube P/N L262M1810101 LH tube P/N L262M1811801 and/or P/N L262M1809101
For dual engine fire extinguishing systems:	RH tube P/N L262M1814101 RH tube P/N L262M1808212 LH tube elbow P/N L262M1815101 LH tube P/N L262M1808211

2. An injection tube or elbow listed in table 1 of this AD shall not be installed on any helicopter unless the part has been modified per the instructions in ECD ASB EC135-26A-003.
(EASA AD 2011-0172 refers)

Compliance: 1. <u>For single engine fire extinguishing systems P/N L262M1808101, P/N L262M1812101 and P/N L262M1812102</u>:

By 29 June 2012.

<u>For dual engine fire extinguishing system P/N L262M1813102</u>:

By 29 March 2012.

2. From 29 September 2011.

Effective Date: 29 September 2011

DCA/EC135/37 Emergency Float Kit – Inspection

Applicability: Model EC-135 aircraft fitted with Apical emergency float kit P/N 644.1801, S/N all through to 031 (embodied under FAA STC SR01855LA).

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

Note: A copy of FAA AD 2011-25-01 can be obtained from http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet

(FAA AD 2011-25-01 refers)

Compliance: By 26 July 2012

Effective Date: 26 January 2012

DCA/EC135/38 Cancelled – DCA/EC135/39 refers

Effective Date: 19 May 2012

DCA/EC135/39B Cancelled – EASA AD 2012-0085R4 refers

Effective Date: 4 October 2012

From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and you can obtain them directly from the National Airworthiness Authority (NAA) web sites. Links to the NAA web sites are available on the CAA web site at http://www.caa.govt.nz/airworthiness-directives/states-of-design/
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.

2012-0085R6 Main Rotor Hub – Inspection

Applicability: EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS), EC 135 T2+, EC 635 T1(CPDS), EC 635 P2+ and EC 635 T2+ helicopters, all serial numbers.

Effective Date: 2012-0085R4 - 4 October 2012
2012-0085R5 - 30 October 2012
2012-0085R6 - 9 February 2016

2013-0176 Flight System Actuators – Inspection

Applicability: EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2+, EC 135 P2 (CPDS), EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2+, EC 135 T2 (CPDS), EC 635 P2+, EC 635 T1 (CPDS) and EC 635 T2+ helicopters, all S/N.

Effective Date: 21 August 2013

*** 2013-0178 Cancelled - EASA AD 2017-0243 refers**

Effective Date: 21 December 2017

2013-0228-E Main Rotor Actuator – Replacement

Applicability: EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS), EC 135 T2+, EC 635 T1 (CPDS), EC 635 T2+ and EC 635 P2+ helicopters, all serial numbers.

Effective Date: 25 September 2013

2013-0289-E Rear Structure / Ring Frame – Inspection

Applicability: EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS), EC 135 T2+, EC 635 P2+, EC 635 T1 (CPDS) and EC 635 T2+ helicopters, all S/N, if fitted with mounting ring frame X9227 P/N L535H2120301, or P/N L535H2120303, or P/N L535H2120304 without frame reinforcement.

Note: Ring frames X9227 with frame reinforcement P/N L535H2100201 are not affected by the requirements of this AD

Effective Date: 10 December 2013

2013-0306-CN AD Cancelled by EASA – Purpose fulfilled

Effective Date: EASA AD 2013-0306 - 27 December 2013
EASA AD 2013-0306-CN - 26 April 2017

2013-0307-E Fuel Quantity Indication – AFM Amendment

Applicability: EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS), EC 135 T2+, EC 635 P2+, EC 635 T1 (CPDS) and EC 635 T2+ helicopters, all S/N.

Effective Date: 21 December 2013

2014-0226 Main Gearbox and Tail Gearbox Oil – Inspection

Applicability: EC135 P2+ and EC135 T2+ helicopters, S/N as listed in Appendix 1 of this AD.

Effective Date: 24 October 2014

2017-0002 Main Transmission Housing – Modification

Applicability: EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3 helicopters, all S/N.

Effective Date: 23 January 2017

2010-0058R1 Tail Rotor, Cyclic and Collective Control Levers – Inspection

Applicability: EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS), EC135 T2+, EC635 T1(CPDS), EC635 P2+ and EC635 T2+ helicopters, all S/N.

Effective Date: 7 April 2017

2010-0227R1 Tail Rotor Rod and Ball Pivot – Inspection

Applicability: EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS), EC135 T2+, EC635 T1(CPDS), EC635 P2+ and EC635 T2+ helicopters, all S/N.

Effective Date: 7 April 2017

2006-0318R2 Tail Rotor Linear Control Transducer Bearing and Rod – Inspection

Applicability: EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS), EC135 T2+, EC635 T1(CPDS), EC635 P2+ and EC635 T2+ helicopters, if fitted with a Bearing Part Number (P/N) LN9367GE6N2, or with an affected part (see Note of this AD).

Note: For the purpose of this AD, an affected part is a Floor P/N L533M1014101, or P/N L533M1014102, or P/N L533M1014103, or P/N L533M1014104, or P/N L533M1014105, or P/N L533M1014106, that has not been modified and re-identified in service in accordance with the instructions of ECD Alert Service Bulletin (ASB) EC135-67A-012, or in production in accordance with drawing L671M5040051, or a Rod P/N L671M5040205, or a Lever P/N L671M5040101.

Effective Date: 25 April 2017

2017-0147 Tail Rotor Controls – Modification

Applicability: EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N.

Effective Date: 31 August 2017

2017-0199 Outboard Load System – Inspection

Applicability: EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N.

Effective Date: 26 October 2017

*** 2017-0243 Airworthiness Limitations – Amendment**

Applicability: EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N.

Effective Date: 21 December 2017