TYPE CERTIFICATE DATA SHEET

No. EASA.R.009

for

EC135

Type Certificate Holder

Airbus Helicopters Deutschland GmbH

Industriestrasse 4
D-86609 Donauwörth
Germany

For Models:

EC135 P1		
EC135 P2	EC135 P2+	EC635 P2+
EC135 P3	EC635 P3	
EC135 T1	EC635 T1	
EC135 T2	EC135 T2+	EC635 T2+
EC135 T3	EC635 T3	

TABLE OF CONTENTS

SECTION 1: EC135 P1(CDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 P1
	1.3 Variant	EC135 P1(CDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	12 December 1994
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	14 June 1996
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 12, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 12 December 1994 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR-27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR-29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR-27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and EFIS EFS 40
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and EFIS EFS 40

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawing No. L000M0002051 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Pratt & Whitney Canada 2 x Model PW 206B	
5.2	Type Certificate	TCCA TC/TCDS n°:	E-23
		EASA TC/TCDS n°:	EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	854
AEO-MCP	2 x 69	56 500 (97.4)	104	820
2½ min OEI-TOP	1 x 100	59 400 (102.4)	104	930
OEI-MCP	1 x 86	58 250 (100.4)	104	885

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 95 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations

VFR day and night
Non-icing conditions
For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
For Ditching, see Note 2

12. Maximum Mass — 2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance

		with RFMS 9.1-3 “Supplement for flights with gross mass above 2 720 kg up to 2 835 kg” and when SB EC135-11-003 is incorporated.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 219 mm aft of DP at 2 720 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 387 mm aft of DP at 2 720 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	six (or seven, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 P1(CDS), initially LBA-approved, dated 14 June 1996, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
s/n 0006, and subsequent.

2. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.
The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
- survival type emergency locator transmitter
- life raft installation
- life preserver.

* * *

SECTION 2: EC135 P1(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 P1
	1.3 Variant	EC135 P1(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	11 April 1996
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	6 November 1998
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 3, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 April 1996 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions
   - No. SC 1 "Primary Structures Designed with Composite Material"
   - No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
   - No. SC 3 "Electronic Flight Instrument Systems"
   - No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"
4. Deviations — none
5. Equivalent Safety Findings
   - Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
   - CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
   - CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters
6. Environmental Protection Requirements
   - 6.1 Noise Requirements — see TCDSN EASA.R.009
   - 6.2 Emission Requirements — n/a
7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)
   - 7.1 Master Minimum Equipment List (MMEL) — JAR-MMEL/MEL Section 1, Amdt. 1
CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
   - 7.2 Flight Crew Data (FCD) — CS-FCD, Initial Issue, dated 31 January 2014
   - 7.3 Simulation Data (SIMD) — *reserved*
   - 7.4 Maintenance Certifying Staff Data (MCSD) — *reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawing No. L000M0002051 and following modifications
2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.
4. Dimensions
   - 4.1 Fuselage

Length:	5.87 m
Width hull:	1.56 m
Height:	3.35 m

   - 4.2 Main Rotor — Diameter: 10.20 m
   - 4.3 Tail Rotor — Diameter: 1.00 m
5. Engine
   - 5.1 Model — Pratt & Whitney Canada
2 x Model PW 206B
   - 5.2 Type Certificate

TCCA TC/TCDS n°:	E-23
EASA TC/TCDS n°:	EASA.IM.E.017

   - 5.3 Limitations

     Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	854
AEO-MCP	2 x 69	56 500 (97.4)	104	820
2½ min OEI-TOP	1 x 100	59 400 (102.4)	104	930
OEI-MCP	1 x 86	58 250 (100.4)	104	885

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 95 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations

VFR day and night
Non-icing conditions
For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
For Ditching, see Note 3

12. Maximum Mass — 2 720 kg

Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 “Supplement for flights with gross mass above 2 720 kg up to 2 835 kg” and when SB EC135-11-

		003 is incorporated.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 219 mm aft of DP at 2 720 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 387 mm aft of DP at 2 720 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 P1(CPDS), initially LBA-approved, dated 6 November 1998, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin

Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
s/n 0030, and subsequent.

2. Night Vision Goggles Operational Capability:
Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.
The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 3: EC135 P2(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 P2
	1.3 Variant	EC135 P2(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	5 June 2001
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	10 July 2001
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009) (LBA: 3061, until issue 9, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 5 June 2001 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawings No. L000M0010051 + L710M0013054 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Pratt & Whitney Canada 2 x Model PW 206B2	
5.2	Type Certificate	TCCA TC/TCDS n°:	E-23
		EASA TC/TCDS n°:	EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator rpm [%]	PWR turbine rpm [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 250 (98.7)	104	869
AEO-MCP	2 x 69	56 500 (97.4)	104	835
30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 86	58 250 (100.4)	104	900

6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations — VFR day and night
Non-icing conditions
For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
For Ditching, see Note 3

12. Maximum Mass — 2 835 kg

13. Centre of Gravity Range — Longitudinal C.G. limits
maximum forward limit:

		4 180 mm aft of DP at 1 840 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 P2(CPDS), initially LBA-approved, dated 10 July 2001, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.
2.	Maintenance Manual	-

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   1.1 s/n 0189, and subsequent.
   1.2 any EC135 P1(CPDS) that has been upgraded to EC135 P2(CPDS) according to SB EC135-71-017.
   1.3 s/n 165 that has been upgraded to EC135 P2(CPDS) in accordance with SB EC135-71-022.
2. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.
3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.
   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 4: EC135 P2+

I. General

1.	Type/ Model	
	1.1 Type	EC135
	1.2 Model	EC135 P2+
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	8 February 2005
5.	State of Design Authority	EASA
6.	Type Certificate Date	21 February 2006
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 8 February 2005 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.1 (a) and CS 27.2 (b)(2)(i), initial issue
- CS 27.25 (a) (1) and CS 27.143(c) (1), Amdt. 2

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.

- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawings of EC135 P2(CPDS) + L000M0022051 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Pratt & Whitney Canada 2 x Model PW 206B2
5.2	Type Certificate	TCCA TC/TCDS n°: E-23 EASA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	57 250 (98.7)	104	869
AEO-MCP	2 x 69	56 500 (97.4)	104	835

30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 89.5	58 250 (100.4)	104	900

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations

VFR day and night
Non-icing conditions
For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
For Ditching, see Note 3

12. Maximum Mass — 2 910 kg

Note: Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent or after SB EC135-62-028.

13. Centre of Gravity Range

Longitudinal C.G. limits
maximum forward limit:

		4 180.0 mm aft of DP at 1 840 kg 4 227.3 mm aft of DP at 2 910 kg 4 229.3 mm aft of DP at 2 950 kg maximum rearward limit: 4 570.0 mm aft of DP at 1 500 kg 4 369.0 mm aft of DP at 2 910 kg 4 362.6 mm aft of DP at 2 950 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 P2+, initially EASA-approved, dated 21 February 2006, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

1.1 s/n 0505, and subsequent.
1.2 any EC135 P2(CPDS) that has been upgraded to EC135 P2+ according to SB EC135-71-033.

2. Night Vision Goggles Operational Capability:
Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.
The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
- survival type emergency locator transmitter
- life raft installation
- life preserver.

* * *

SECTION 5: EC635 P2+

I. General

1.	Type/ Model	
	1.1 Type	EC135
	1.2 Model	EC635 P2+
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	17 July 2006
5.	State of Design Authority	EASA
6.	Type Certificate Date	6 December 2006
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 17 July 2006 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.1 (a) and CS 27.2 (b)(2)(i), initial issue
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"

- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawings of EC135 P2(CPDS) + L000M0022051 and following modifications
   - EC635 Kit (Drawing No. W533M1700051)

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

Note: The variant EC635 P2+ corresponds to the EC135 P2+ plus structural reinforcement of cabin structure according to the drawing W533M1700051

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Pratt & Whitney Canada

2 x Model PW 206B2

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
EASA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	57 250 (98.7)	104	869
AEO-MCP	2 x 69	56 500 (97.4)	104	835
30 sec OEI-TOP	1 x 128	60 500 (104.3)	104	990
2 min OEI-TOP	1 x 125	59 500 (102.6)	104	950
OEI-MCP	1 x 89.5	58 250 (100.4)	104	900

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations

V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 910 kg <u>Note:</u> Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent or after SB EC135-62-028.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180.0 mm aft of DP at 1 840 kg 4 227.3 mm aft of DP at 2 910 kg 4 229.3 mm aft of DP at 2 950 kg maximum rearward limit: 4 570.0 mm aft of DP at 1 500 kg 4 369.0 mm aft of DP at 2 910 kg 4 362.6 mm aft of DP at 2 950 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

<u>IV. Operating and Service Instructions</u>

1.	Flight Manual	EC635 P2+, initially EASA-approved, dated 6 December 2006, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)

- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   s/n 0505, and subsequent

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 6: EC135 P3(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 P3
	1.3 Variant	EC135 P3(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	4 July 2014
5.	State of Design Authority	EASA
6.	Type Certificate Date	18 March 2015
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 4 July 2014 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR-27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1 (a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503	
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505	
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509	
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519	

- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans

29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations none

5. Equivalent Safety Findings

- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557(d) related to safety enhanced colour scheme (‘black&yellow’ in place of ‘red’) for the emergency exit handle cap
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition TDD L0000M333300, Issue A

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure

Landing gear: skid-type
Powerplant: 2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage
Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor — Diameter: 10.40 m

4.3 Tail Rotor — Diameter: 1.00 m

5. Engine

5.1 Model — Pratt & Whitney Canada
2 x Model PW 206B3

5.2 Type Certificate
TCCA TC/TCDS n°: E-23
EASA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less.
Refer to approved RFM for reduction in V_{NE} with altitude

		and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (up to 1 900 kg) Minimum 85 % (above 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	Maximum mass: Ramp and taxi mass: 3 000 kg Gross mass: 2 980 kg Minimum mass: Gross mass: 1 600 kg
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 152 mm aft of DP at 2 039 kg 4 201 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 555 mm aft of DP at 1 600 kg Lateral C.G. Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 P3, initially EASA-approved, dated 18 March 2015, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   1.1 s/n 1178, and subsequent

   1.2 any EC135 P2+ that has been upgraded to EC135 P3(CPDS) according to SB EC135-71T-045.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

4. Designation:
   "H135" is used as marketing designation for EC135 P3(CPDS) helicopters.

* * *

V. Notes

SECTION 7: EC635 P3(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC635 P3
	1.3 Variant	EC635 P3(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	4 July 2014
5.	State of Design Authority	EASA
6.	Type Certificate Date	18 March 2015
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 4 July 2014 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503	
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505	
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509	
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519	

- For IFR Certification: CS-27 Amdt. 2, Appendix B, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:
  29.861 (a) Fire Protection of Structure, controls, and other parts
  29.901 (c) Powerplant: Installation

29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2 Appendix C requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- JAR 27.1549(b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557(d) related to safety enhanced colour scheme (‘black&yellow’ in place of ‘red’) for the emergency exit handle cap
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition — TDD L0000M333300, Issue A
+ EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
Tail rotor: Fenestron, 10 blades
Fuselage: metal-composite structure
Landing gear: skid-type
Powerplant: 2 independent freewheel turbines

Note: The variant EC635 P3 corresponds to the EC135 P3 plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada
2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
EASA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres

Self-sealing fuel tank (from s/n 0250)

		Fuel tank capacity: 701.0 litres Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (up to 1 900 kg) Minimum 85 % (above 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	Maximum mass: Ramp and taxi mass: 3 000 kg Gross mass: 2 980 kg Minimum mass: Gross mass: 1 600 kg
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 152 mm aft of DP at 2 039 kg 4 201 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 555 mm aft of DP at 1 600 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg

		Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC635 P3, initially EASA-approved, dated 18 March 2015, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC635 Illustrated Parts Catalogue.

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 1178, and subsequent

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter

V. Notes

- life raft installation
- life preserver.

4. Designation:
“H135M” is used as marketing designation for EC635 P3(CPDS) helicopters.

* * *

SECTION 8: EC135 P3H

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 P3
	1.3 Variant	EC135 P3H
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	11 May 2012
5.	State of Design Authority	EASA
6.	Type Certificate Date	15 November 2016
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 May 2012 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements
- For EASA Approvals 10077342 and 10077343, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10078010 see §V, Note 4
- For EASA Approval 10080963 Rev.1 see §V, Note 5
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10

3. Special Conditions
   - “Protection from effects of HIRF”
   - “Lithium Battery Installations”
   - For EASA Approval 10082775: “Pressure refuelling and fuelling provisions below fuel level”
4. Deviations — none
5. Equivalent Safety Findings
   - CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 “Engine Training Mode”
   - CS 27.1305, CS 27.1321(a), CS 27.1351(d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) “Part Time Display of Vehicle Parameters”
   - CS 27.1545(b)(4), CS 27.1549(b) “Airspeed & Powerplant indication green marking”
   - CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters
6. Environmental Protection Requirements

6.1 Noise Requirements	see TCDSN EASA.R.009
6.2 Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2 (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1 Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2 Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3 Simulation Data (SIMD)	*reserved*

7.4 Maintenance Certifying Staff Data (MCSD) *reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition — TDD E0000M269800, Issue B

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length:	5.87 m
Width hull:	1.56 m
Height:	3.35 m

4.2 Main Rotor — Diameter: 10.40 m

4.3 Tail Rotor — Diameter: 1.00 m

5. Engine

5.1 Model — Pratt & Whitney Canada
2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°:	E-23
EASA TC/TCDS n°:	EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity:	680.0 litres
Usable fuel:	670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity:	673.4 litres
Usable fuel:	664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

Fuel tank capacity:	710.0 litres
Usable fuel:	700.5 litres

		Self-sealing fuel tank (from s/n 0250) Fuel tank capacity: 701.0 litres Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (GM < 1 900 kg) Minimum 85 % (GM > 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFM or RFMS
12.	Masses	
	12.1 Maximum gross mass	2 980 kg
	12.2 Maximum ramp and taxi mass	3 000 kg
	12.3 Minimum gross mass	1 700 kg
	12.4 Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
	12.5 Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 121 mm aft of DP at 2 150 kg 4 171 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 541 mm aft of DP at 1 700 kg Lateral C.G. Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)

17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1. Flight Manual — EC135 P3H, initially EASA-approved, dated 15 November 2016, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3. Structural Repair Manual — EC135 P3H, T3H Structural Repair Manual (SRM)

4. Weight and Balance Manual — Refer to approved RFM

5. Illustrated Parts Catalogue — EC135 P3H, T3H Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 2006, and subsequent.

2. Designation:
   “H135” is used as marketing designation for EC135 P3H helicopters.

3. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a

CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

* * *

SECTION 9: EC635 P3H

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC635 P3
	1.3 Variant	EC635 P3H
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	11 May 2012
5.	State of Design Authority	EASA
6.	Type Certificate Date	15 November 2016
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 May 2012 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008

- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements
- For EASA Approvals 10077342 and 10077343, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10078010 see §V, Note 4
- For EASA Approval 10080963 Rev.1 see §V, Note 5
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10

3. Special Conditions
   - "Protection from effects of HIRF"
   - "Lithium Battery Installations"
   - For EASA Approval 10082775: "Pressure refuelling and fuelling provisions below fuel level"

4. Deviations — none

5. Equivalent Safety Findings
   - CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 "Engine Training Mode"
   - CS 27.1305, CS 27.1321(a), CS 27.1351(d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) "Part Time Display of Vehicle Parameters"
   - CS 27.1545(b)(4), CS 27.1549(b) "Airspeed & Powerplant indication green marking"
   - CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1 Noise Requirements	see TCDSN EASA.R.009
6.2 Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2 (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1 Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2 Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3 Simulation Data (SIMD)	*reserved*
7.4 Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

TDD E0000M269800, Issue B
+ EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
Tail rotor: Fenestron, 10 blades
Fuselage: metal-composite structure
Landing gear: skid-type
Powerplant: 2 independent freewheel turbines

Note: The variant EC635 P3H corresponds to the EC135 P3H plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Pratt & Whitney Canada
2 x Model PW 206B3

5.2 Type Certificate

TCCA TC/TCDS n°: E-23
EASA TC/TCDS n°: EASA.IM.E.017

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	99.8	105.5	900
AEO-MCP	2 x 69	97.4	105.5	835
30 sec OEI-TOP	1 x 128	104.3	104.5	990
2 min OEI-TOP	1 x 125	102.6	104.5	950
OEI-MCP	1 x 89.5	99.8	104.5	900

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

		Fuel tank capacity: 710.0 litres Usable fuel: 700.5 litres Self-sealing fuel tank (from s/n 0250) Fuel tank capacity: 701.0 litres Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (GM < 1 900 kg) Minimum 85 % (GM > 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
12.	Masses	
	12.1 Maximum gross mass	2 980 kg
	12.2 Maximum ramp and taxi mass	3 000 kg
	12.3 Minimum gross mass	1 700 kg
	12.4 Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
	12.5 Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 121 mm aft of DP at 2 150 kg 4 171 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 541 mm aft of DP at 1 700 kg Lateral C.G. Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01

16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1. Flight Manual — EC635 P3H, initially EASA-approved, dated 15 November 2016, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.IM.E.017

3. Structural Repair Manual — EC135 P3H, T3H Structural Repair Manual (SRM)

4. Weight and Balance Manual — Refer to approved RFM

5. Illustrated Parts Catalogue — EC635 P3H, T3H Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 2006, and subsequent

2. Designation:
   “H135M” is used as marketing designation for EC635 P3H helicopters.

3. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components

approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c

CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

* * *

SECTION 10: EC135 T1(CDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 T1
	1.3 Variant	EC135 T1(CDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	12 December 1994
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	14 June 1996
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 17, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 12 December 1994 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and EFIS EFS 40
-- Single Pilot/ Dual Pilot IFR certification with AFCS and EFIS EFS 40)

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- CS 27.865(c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawings No. L000M0010051 + L710M0013054 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Safran Helicopter Engines (former: Turbomeca) 2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	57 706 (101.1)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2-½ min OEI-TOP (2B1)	1 x 119.8	56 113 (103.7)	104	945
2-½ min OEI-TOP (2B1A)				
2-½ min OEI-TOP (2B1A_1)				
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids

6.1 Fuel Refer to approved RFM

6.2 Oil Refer to approved RFM

6.3 Additives Refer to approved RFM

7. Fluid capacities

7.1 Fuel Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil Refer to approved RFM

7.3 Coolant System Capacity n/a

8. Air Speed Limitations V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations
Power on:
Maximum 104 %
Minimum 95 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature Refer to approved RFM

11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 720 kg Note: Operation of the aircraft with MTOW between 2 720 kg and 2 835 kg is only permitted in accordance with RFMS 9.1-3 “Supplement for flights with gross mass above 2 720 kg up to 2 835 kg” and when SB EC135-11-003 is incorporated.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 219 mm aft of DP at 2 720 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 387 mm aft of DP at 2 720 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T1(CDS), initially LBA-approved, dated 14 June 1996, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.
2.	Maintenance Manual	

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)

- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 0005, and subsequent.

2. Engine:

   If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

   If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 11: EC135 T1(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 T1
	1.3 Variant	EC135 T1(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	26 May 1999
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	11 April 1997
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 17, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 April 1997 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
-- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawing No. L000M0009051 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1 Model — Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	54 706 (101.1)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2-½ min OEI-TOP (2B1)	1 x 100	56 113 (103.7)	104	945
2-½ min OEI-TOP (2B1A)	1 x 119.8			
2-½ min OEI-TOP (2B1A_1)	1 x 128			
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 95 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for

		variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 720 kg Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 “Supplement for flights with gross mass above 2 720 kg up to 2 835 kg” and when SB EC135-11-003 is incorporated.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 219 mm aft of DP at 2 720 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 387 mm aft of DP at 2 720 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T1(CPDS), initially LBA-approved, dated 26 May 1999, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.
2.	Maintenance Manual	

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 0092, and subsequent.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

4. If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

   If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

* * *

SECTION 12: EC635 T1(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC635 T1
	1.3 Variant	EC635 T1(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	10 August 2001
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	31 August 2001
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 3, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 10 August 2001 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
-- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
- EC135 Basic Master List Drawing No. L000M0007051
- Drawing No. L000M0009051 and following modifications
- EC635 Kit (Drawing No. W530M0700051

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

Note: The variant EC635 T1(CPDS) corresponds to the EC135 T1 (CPDS) plus structural reinforcement of cabin structure according to the drawing W530M0700051.

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m

4.3 Tail Rotor — Diameter: 1.00 m

5. Engine

5.1 Model — Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B1/2B1A/2B1A_1

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	54 706 (101.1)	104	895
AEO-MCP	2 x 69	53 406 (98.7)	104	855
2-½ min OEI-TOP (2B1)	1 x 100	56 113 (103.7)	104	945
2-½ min OEI-TOP (2B1A)	1 x 119.8			
2-½ min OEI-TOP (2B1A_1)	1 x 128			
OEI-MCP	1 x 86	54 706 (101.1)	104	895

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations — Power on:
Maximum 104 %
Minimum 95 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 720 kg Note: Operation of the aircraft with MTOM between 2 720 kg and 2 835 kg is permitted only in accordance with RFMS 9.1-3 “Supplement for flights with gross mass above 2 720 kg up to 2 835 kg” and when SB EC135-11-003 is incorporated.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 219 mm aft of DP at 2 720 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 387 mm aft of DP at 2 720 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC635 T1(CPDS), initially LBA-approved, dated 31 August 2001, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS

9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3. Structural Repair Manual — EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)

4. Weight and Balance Manual — Refer to approved RFM

5. Illustrated Parts Catalogue — EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 0173, and subsequent.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

4. If the engine "Arrius 2B1A" is installed, the RFMS 9.2-57 is applicable.

   If the engine "Arrius 2B1A" is modified by application of the software TU45C, the engine is identified as "Arrius 2B1A_1" on the engine identification plate. In case that an engine "Arrius 2B1A_1" is installed, the RFMS 9.2-62 is applicable."

* * *

SECTION 13: EC135 T2(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 T2
	1.3 Variant	EC135 T2(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See "Section: Administrative, II.3"
4.	Type Certification Application Date to LBA	5 February 2002
5.	State of Design Authority	EASA
6.	Type Certificate Date by LBA	9 August 2002
7.	Type Certificate n°	EASA: EASA.R.009 (LBA: 3061)
8.	Type Certificate Data Sheet n°	EASA: EASA.R.009 (LBA: 3061, until issue 7, dated 3 June 2003)
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 1st indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 April 1997 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:

-- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
-- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   - EC135 Basic Master List Drawing No. L000M0007051
   - Drawings No. L000M0009051 + L710M0012054 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1 Model — Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 75	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105.0)	104	1 024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 86	54 821 (101.3)	104	942

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 835 kg
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180 mm aft of DP at 1 840 kg 4 224 mm aft of DP at 2 835 kg maximum rearward limit: 4 570 mm aft of DP at 1 500 kg 4 369 mm aft of DP at 2 835 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T2(CPDS), initially LBA-approved, dated 9 August 2002, or later (LBA)/EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.
2.	Maintenance Manual	

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)

- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   1.1 s/n 0243, and subsequent

   1.2 any EC135 T1(CPDS) that has been upgraded to EC135 T2(CPDS) according to SB EC135-71-023.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 14: EC135 T2+

I. General

1.	Type/ Model	
	1.1 Type	EC135
	1.2 Model	EC135 T2+
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	8 February 2005
5.	State of Design Authority	EASA
6.	Type Certificate Date	21 February 2006
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 8 February 2005 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this

Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
- EC135 Basic Master List Drawing No. L000M0007051
- Drawings of EC135 T2(CPDS) + L000M0021051 and following modifications

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Safran Helicopter Engines (former: Turbomeca) 2 x Model Arrius 2B2
5.2	Type Certificate	EASA TC/TCDS n°: EASA.E.029
5.3	Limitations	

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator [rpm (%)]	PWR turbine [rpm (%)]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105.0)	104	1 024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 89.5	54 821 (101.3)	104	942

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations — VFR day and night

		Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 910 kg <u>Note:</u> Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent, or after SB EC135-62-028.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180.0 mm aft of DP at 1 840 kg 4 227.3 mm aft of DP at 2 910 kg 4 229.3 mm aft of DP at 2 950 kg maximum rearward limit: 4 570.0 mm aft of DP at 1 500 kg 4 369.0 mm aft of DP at 2 910 kg 4 362.6 mm aft of DP at 2 950 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

<u>IV. Operating and Service Instructions</u>

1.	Flight Manual	EC135 T2+, initially EASA-approved, dated 21 February 2006, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual

- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   1.1 s/n 0506, and subsequent.

   1.2 any EC135 T2(CPDS) that has been upgraded to EC135 T2+ according to SB EC135-71-033.

   1.3 s/n 858 that has been retrofitted to EC135 T2+ according to SB EC135-00-002.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 15: EC635 T2+

I. General

1.	Type/ Model	
	1.1 Type	EC135
	1.2 Model	EC635 T2+
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	17 July 2006
5.	State of Design Authority	EASA
6.	Type Certificate Date	6 December 2006
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 17 July 2006 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993
- For IFR Certification: JAR 27 Appendix B, Issue 1, dated 6 September 1993
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: JAR 27 Appendix C, Issue 1, dated 6 September 1993
- JAA Interim HIRF Policy (INT/POL/278.29-1, dated 1 June 1997) applies for:
  -- Dual Pilot IFR certification with 3-axis SAS, Pitch-Damper and Avionique Nouvelle CPDS and FCDS
  -- Single Pilot/ Dual Pilot IFR certification with AFCS and Avionique Nouvelle CPDS and FCDS
- CS 27.25 (a) (1) and CS 27.143 (c)(1), Amdt. 2

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this

Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40.
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations — none

5. Equivalent Safety Findings

- Dual Pilot IFR certification concerning JAR 27 Appendix B, Para. IV (c) “Static Longitudinal Stability”
- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants.
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	n/a

7. Operational Suitability Data (OSD) — (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition
- EC135 Basic Master List Drawing No. L000M0007051
- Drawings of EC135 T2(CPDS) + L000M0021051 and following modifications
- EC635 Kit (Drawing No. W533M1700051)

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

Note: The variant EC635 T2+ corresponds to the EC135 T2+ plus structural reinforcement of cabin structure according to the drawing W533M1700051.

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1	Fuselage	Length:	5.87 m
		Width hull:	1.56 m
		Height:	3.35 m
4.2	Main Rotor	Diameter:	10.20 m
4.3	Tail Rotor	Diameter:	1.00 m

5. Engine

5.1	Model	Safran Helicopter Engines (former: Turbomeca) 2 x Model Arrius 2B2

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Gas generator rpm [min^{-1} (%)]	Power turbine rpm [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	54 117 (100)	104	897
AEO-MCP	2 x 69	53 576 (99)	104	879
30 sec OEI-TOP	1 x 128	56 823 (105.0)	104	1 024
2 min OEI-TOP	1 x 125	56 011 (103.5)	104	994
OEI-MCP	1 x 89.5	54 821 (101.3)	104	942

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel — Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2 Oil — Refer to approved RFM

7.3 Coolant System Capacity — n/a

8. Air Speed Limitations — V_{NE}: 155 KIAS at MSL
Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.

9. Rotor Speed Limitations

Power on:
Maximum 104 %
Minimum 97 %
Power off:
Maximum 106 %
Minimum 80 % (up to 1 900 kg)
Minimum 85 % (above 1 900 kg)
Transient: Refer to approved RFM

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW

10.2 Temperature — Refer to approved RFM

11. Operating Limitations — VFR day and night

		Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	2 910 kg <u>Note:</u> Operation of the aircraft with MTOW up to 2 950 kg is only permitted in accordance with RFMS 9.1-5, RFMS 9.1-6 and RFMS 9.1-7 from s/n 1055 and subsequent or after SB EC135-62-028.
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 180.0 mm aft of DP at 1 840 kg 4 227.3 mm aft of DP at 2 910 kg 4 229.3 mm aft of DP at 2 950 kg maximum rearward limit: 4 570.0 mm aft of DP at 1 500 kg 4 369.0 mm aft of DP at 2 910 kg 4 362.6 mm aft of DP at 2 950 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	1 cockpit, six cabin (or seven cabin, if the kit described in RFMS 9.2-31 is installed and operated)
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

<u>IV. Operating and Service Instructions</u>

1.	Flight Manual	EC635 T2+, initially EASA-approved, dated 6 December 2006, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual

- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice (from October 2008 onwards, before: Alert Service Information), Information Notice (from October 2008 onwards, before: Service Information), Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   1.1 s/n 0506, and subsequent

2. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR 27.
   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:
   - survival type emergency locator transmitter
   - life raft installation
   - life preserver.

* * *

SECTION 16: EC135 T3(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 T3
	1.3 Variant	EC135 T3(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	10 June 2011
5.	State of Design Authority	EASA
6.	Type Certificate Date	17 October 2014
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 10 June 2011 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503	
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505	
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509	
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519	

- For EASA approval 10050866: Certification Basis for the original product amended by additional airworthiness requirements 27.773, 27.777, , 27.1357, , at CS-27 Amdt. 2 and 29.1431 at CS-29 Initial Issue
- For IFR Certification: CS-27 Amdt. 2, Appendix B, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993. Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40"
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations none

5. Equivalent Safety Findings

- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557 (d) related to safety enhanced colour scheme (‘black&yellow’ in place of ‘red’) for the emergency exit handle cap.
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865 (a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition — TDD L0000M233400, Issue A

2. Description

Main rotor:	bearingless, 4 blades
Tail rotor:	Fenestron, 10 blades
Fuselage:	metal-composite structure
Landing gear:	skid-type
Powerplant:	2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length:	5.87 m
Width hull:	1.56 m
Height:	3.35 m

4.2 Main Rotor — Diameter: 10.40 m

4.3 Tail Rotor — Diameter: 1.00 m

5. Engine

5.1 Model — Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	86.1-100	106	897
AEO-MCP	2 x 69	85.3-99	106	879
30 sec OEI-TOP	1 x 128	91.7-104.80	106	1 024
2 min OEI-TOP	1 x 125	91.7-103.50	106	994
OEI-MCP	1 x 89.5	87.4-101.25	106	942

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres

		Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5% Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (up to 1 900 kg) Minimum 85 % (above 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	Maximum mass: Ramp and taxi mass: 3 000 kg Gross mass: 2 980 kg Minimum mass: Gross mass: 1 600 kg
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 152 mm aft of DP at 2 039 kg 4 201 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 555 mm aft of DP at 1 600 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin

19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T3, initially EASA-approved, dated 17 October 2014, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 Illustrated Parts Catalogue. All EC135 variants, except T3H/P3H

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:

   1.1 s/n 1155, and subsequent.
   1.2 any EC135 T2+ that has been upgraded to EC135 T3(CPDS) according to SB EC135-71T-045.

2. Night Vision Goggles Operational Capability:

   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.

   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:
“H135” is used as marketing designation for EC135 T3(CPDS) helicopters.

* * *

SECTION 17: EC635 T3(CPDS)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC635 T3
	1.3 Variant	EC635 T3(CPDS)
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	10 June 2011
5.	State of Design Authority	EASA
6.	Type Certificate Date	17 October 2014
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 10 June 2011 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS 27.0021	CS 27.0161	CS 27.0341	CS 27.0607	CS 27.0771	CS 27.1193	CS 27.1521
CS 27.0025	CS 27.0171	CS 27.0351	CS 27.0609	CS 27.0853	CS 27.1301	CS 27.1525
CS 27.0027	CS 27.0173	CS 27.0361	CS 27.0610	CS 27.0865	CS 27.1305	CS 27.1527
CS 27.0029	CS 27.0175	CS 27.0391	CS 27.0611	CS 27.0901	CS 27.1309	CS 27.1529
CS 27.0031	CS 27.0177	CS 27.0427	CS 27.0613	CS 27.0903	CS 27.1321	CS 27.1541
CS 27.0033	CS 27.0231	CS 27.0471	CS 27.0629	CS 27.0907	CS 27.1323	CS 27.1545
CS 27.0045	CS 27.0241	CS 27.0473	CS 27.0653	CS 27.0931	CS 27.1329	CS 27.1549
CS 27.0049	CS 27.0251	CS 27.0501	CS 27.0659	CS 27.0939	CS 27.1351	CS 27.1559
CS 27.0051	CS 27.0301	CS 27.0521	CS 27.0661	CS 27.1041	CS 27.1365	CS 27.1581
CS 27.0065	CS 27.0303	CS 27.0547	CS 27.0663	CS 27.1043	CS 27.1381	CS 27.1583
CS 27.0067	CS 27.0305	CS 27.0549	CS 27.0671	CS 27.1045	CS 27.1435	
CS 27.0075	CS 27.0307	CS 27.0561	CS 27.0672	CS 27.1091	CS 27.1501	
CS 27.0079	CS 27.0309	CS 27.0571	CS 27.0681	CS 27.1093	CS 27.1503	
CS 27.0141	CS 27.0321	CS 27.0601	CS 27.0683	CS 27.1141	CS 27.1505	
CS 27.0143	CS 27.0337	CS 27.0602	CS 27.0691	CS 27.1143	CS 27.1509	
CS 27.0151	CS 27.0339	CS 27.0603	CS 27.0695	CS 27.1187	CS 27.1519	

- For EASA approval 10050866: Certification Basis for the original product amended by additional airworthiness requirements 27.773, 27.777, , 27.1357, , at CS-27 Amdt. 2 and 29.1431 at CS-29 Initial Issue
- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008
- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993. Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements

3. Special Conditions

- No. SC 1 "Primary Structures Designed with Composite Material"
- No. SC 2 "Protection for Electrical and Electronic Systems from High Intensity Radiated Fields"; this Special Condition applies only for VFR and IFR certification with conventional instruments and for VFR certification with EFIS EFS 40."
- No. SC 3 "Electronic Flight Instrument Systems"
- No. SC 4 "Protection of air intake of EC135 against ingestion of foreign objects (Rain and Hail/Bird strike)"

4. Deviations none

5. Equivalent Safety Findings

- JAR 27.1549 (b) related to the installation of the Vehicle and Engine Multifunction Display (VEMD) in the CPDS variants
- CS 27.865 (c) related to dual activation device for the Primary Quick Release Subsystem (Cyclic Stick) for the Double Cargo Hook System
- CS 27.1557 (d) related to safety enhanced colour scheme (‘black&yellow’ in place of ‘red’) for the emergency exit handle cap.
- CS 27.571, 27.602 (b), 27.865 (f) for Hoist Installation on Helicopters
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) (For OSD elements see SECTION 20 below)

78.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

TDD L0000M233400, Issue A
+ EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
Tail rotor: Fenestron, 10 blades
Fuselage: metal-composite structure
Landing gear: skid-type
Powerplant: 2 independent freewheel turbines

Note: The variant EC635 T3 corresponds to the EC135 T3 plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)

2 x Model Arrius 2B2

5.2 Type Certificate

EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	86.1-100	106	897
AEO-MCP	2 x 69	85.3-99	106	879
30 sec OEI-TOP	1 x 128	91.7-104.80	106	1 024
2 min OEI-TOP	1 x 125	91.7-103.50	106	994
OEI-MCP	1 x 89.5	87.4-101.25	106	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

		Fuel tank capacity: 710.0 litres Usable fuel: 700.5 litres Self-sealing fuel tank (from s/n 0250) Fuel tank capacity: 701.0 litres Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (up to 1 900 kg) Minimum 85 % (above 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS For Ditching, see Note 3
12.	Maximum Mass	Maximum mass: Ramp and taxi mass: 3 000 kg Gross mass: 2 980 kg Minimum mass: Gross mass: 1 600 kg
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 152 mm aft of DP at 2 039 kg 4 201 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 555 mm aft of DP at 1 600 kg Lateral C.G Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7

18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T3, initially EASA-approved, dated 17 October 2014, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P1,P2,P3,T2,T2,T3 Aircraft Maintenance Manual (AMM)
- EC135 P1,P2,P3,T2,T2,T3 System Description Section (SDS)
- EC135 P1,P2,P3,T2,T2,T3 Wiring Diagram Manual (WDM)
- EC135 P1,P2,P3,T2,T2,T3 Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P1,P2,P3,T1,T2,T3, limited to CDS, CPDS, P2+, T2+. Chapter 05. Master Servicing Manual (MSM)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P1,P2,P3,T1,T2,T3 Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC635 Illustrated Parts Catalogue.

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 1155, and subsequent.

2. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-86 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a competent authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

3. The emergency floatation system in accordance with RFMS 9.2-67, is certified as ditching provision in accordance with JAR-27.
   The helicopter may be certificated for ditching provided the following additional equipment are fitted and approved in accordance with the relevant airworthiness requirements:

- survival type emergency locator transmitter
- life raft installation
- life preserver.

4. Designation:
“H135M” is used as marketing designation for EC635 T3(CPDS) helicopters.

* * *

SECTION 18: EC135 T3H

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC135 T3
	1.3 Variant	EC135 T3H
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	11 May 2012
5.	State of Design Authority	EASA
6.	Type Certificate Date	15 November 2016
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 May 2012 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008

- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements
- For EASA Approvals 10077342 and 10077343, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10
- For EASA Approval 10078010 see §V, Note 4.
- For EASA Approval 10080963 Rev.1 see §V, Note 5.

3. Special Conditions
   - “Protection from effects of HIRF”
   - “Lithium Battery Installations”

4. Deviations none

5. Equivalent Safety Findings
   - CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 “Engine Training Mode”
   - CS 27.1305, CS 27.1321 (a), CS 27.1351 (d1) and CS-27 Appendix C for CS 29.1305(a)(6) and (b)(1) “Part Time Display of Vehicle Parameters”
   - CS 27.1545 (b)(4), CS 27.1549(b) “Airspeed & Powerplant indication green marking”
   - CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1	Noise Requirements	see TCDSN EASA.R.009
6.2	Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) (For OSD elements see SECTION 20 below)

7.1	Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2	Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3	Simulation Data (SIMD)	*reserved*
7.4	Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition — TDD E0000M269800, Issue B

2. Description

Main rotor: bearingless, 4 blades
Tail rotor: Fenestron, 10 blades
Fuselage: metal-composite structure
Landing gear: skid-type
Powerplant: 2 independent freewheel turbines

3. Equipment — Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage
Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor — Diameter: 10.40 m

4.3 Tail Rotor — Diameter: 1.00 m

5. Engine

5.1 Model — Safran Helicopter Engines (former: Turbomeca)

2 x Model ARRIUS 2B2

5.2 Type Certificate — EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	100	106	897
AEO-MCP	2 x 69	99	106	879
30 sec OEI-TOP	1 x 128	104.8	106	1 024
2 min OEI-TOP	1 x 125	103.5	106	994
OEI-MCP	1 x 89.5	101.25	106	942

6. Fluids

6.1 Fuel — Refer to approved RFM

6.2 Oil — Refer to approved RFM

6.3 Additives — Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)
Fuel tank capacity: 710.0 litres
Usable fuel: 700.5 litres
Self-sealing fuel tank (from s/n 0250)
Fuel tank capacity: 701.0 litres
Usable fuel: 691.6 litres

7.2	Oil	Refer to approved RFM
7.3	Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (GM < 1 900 kg) Minimum 85 % (GM > 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
10.1	Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
10.2	Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFM or RFMS
12.	Masses	
12.1	Maximum gross mass	2 980 kg
12.2	Maximum ramp and taxi mass	3 000 kg
12.3	Minimum gross mass	1 700 kg
12.4	Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
12.5	Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 121 mm aft of DP at 2 150 kg 4 171 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 541 mm aft of DP at 1 700 kg Lateral C.G. Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01
16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg

		Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1.	Flight Manual	EC135 T3H, initially EASA-approved, dated 15 November 2016, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3.	Structural Repair Manual	EC135 P3H, T3H Structural Repair Manual (SRM)
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	EC135 P3H, T3H Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 2001, and subsequent
2. Designation:
   “H135” is used as marketing designation for EC135 T3H helicopters.
3. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.
4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b

CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

* * *

SECTION 19: EC635 T3H

I. General

1.	Type/ Model/ Variant	
	1.1 Type	EC135
	1.2 Model	EC635 T3
	1.3 Variant	EC635 T3H
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	See “Section: Administrative, II.3”
4.	Type Certification Application Date	11 May 2012
5.	State of Design Authority	EASA
6.	Type Certificate Date	15 November 2016
7.	Type Certificate n°	EASA.R.009
8.	Type Certificate Data Sheet n°	EASA.R.009

II. Certification Basis

1.	Reference Date for determining the applicable requirements	For Airworthiness and Environmental Protection: 11 May 2012 for OSD elements: Grandfathering date: 17 February 2014

2. Airworthiness Requirements

- JAR 27, Issue 1, dated 6 September 1993, supplemented by the following CS-27 Amdt. 2 requirements: CS 27.1(a) in connection with CS 27.2(b)(2)(i).

CS27.0021	CS27.0231	CS27.0501	CS27.0671	CS27.0931	CS27.1323	CS27.1503
CS27.0025	CS27.0241	CS27.0521	CS27.0672	CS27.0939	CS27.1325	CS27.1505
CS27.0027	CS27.0251	CS27.0547	CS27.0674	CS27.1019	CS27.1327	CS27.1509
CS27.0029	CS27.0301	CS27.0549	CS27.0681	CS27.1041	CS27.1329	CS27.1519
CS27.0031	CS27.0303	CS27.0561	CS27.0683	CS27.1043	CS27.1337	CS27.1521
CS27.0033	CS27.0305	CS27.0562	CS27.0685	CS27.1045	CS27.1351	CS27.1523
CS27.0045	CS27.0307	CS27.0571	CS27.0687	CS27.1091	CS27.1353	CS27.1525
CS27.0049	CS27.0309	CS27.0601	CS27.0691	CS27.1093	CS27.1357	CS27.1527
CS27.0051	CS27.0321	CS27.0602	CS27.0695	CS27.1141	CS27.1361	CS27.1529
CS27.0065	CS27.0337	CS27.0603	CS27.0771	CS27.1143	CS27.1365	CS27.1541
CS27.0067	CS27.0339	CS27.0605	CS27.0773	CS27.1145	CS27.1367	CS27.1543
CS27.0075	CS27.0341	CS27.0607	CS27.0777	CS27.1151	CS27.1381	CS27.1545
CS27.0079	CS27.0351	CS27.0609	CS27.0785	CS27.1187	CS27.1383	CS27.1547
CS27.0141	CS27.0361	CS27.0610	CS27.0831	CS27.1193	CS27.1385	CS27.1549
CS27.0143	CS27.0391	CS27.0611	CS27.0853	CS27.1301	CS27.1387	CS27.1555
CS27.0151	CS27.0395	CS27.0613	CS27.0855	CS27.1303	CS27.1401	CS27.1559
CS27.0161	CS27.0397	CS27.0629	CS27.0863	CS27.1305	CS27.1411	CS27.1581
CS27.0171	CS27.0399	CS27.0653	CS27.0865	CS27.1307	CS27.1435	CS27.1583
CS27.0173	CS27.0427	CS27.0659	CS27.0901	CS27.1309	CS27.1457	CS27.1585
CS27.0175	CS27.0471	CS27.0661	CS27.0903	CS27.1321	CS27.1459	CS27.1587
CS27.0177	CS27.0473	CS27.0663	CS27.0907	CS27.1322	CS27.1501	CS27.1589

- For IFR Certification: CS 27 Amdt. 2, Appendix B, dated 10 November 2008

- Category A Engine Isolation Requirements of JAR 29, Issue 1, dated 5 November 1993.
  Applicable paragraphs, selected from Appendix C to JAR 27, are:

29.861 (a)	Fire Protection of Structure, controls, and other parts
29.901 (c)	Powerplant: Installation
29.903 (b),(c),(e)	Engines
29.908 (a)	Cooling fans
29.917 (b),(c)(1)	Rotor Drive System: Design
29.927 (c)(1)	Additional tests
29.953 (a)	Fuel system independence
29.1027 (a)	Transmission and gearboxes
29.1045 (a)(1),(b),(c),(d),(f)	Climb cooling test procedures
29.1047 (a)	Take-off cooling test procedures
29.1181 (a)	Designated fire zones: regions included
29.1189 (c)	Shutoff means
29.1191 (a)(1)	Firewalls
29.1193 (e)	Cowling and engine compartment covering
29.1305 (a)(6),(b)	Powerplant instruments
29.1309 (b)(2)(i),(d)	Equipment, systems and installations
29.1331 (b)	Instruments using power supply
29.1351 (d)(2)	Electrical systems and equipment: General

- For CAT A Certification: CS-27 Amdt. 2, Appendix C requirements
- For EASA Approvals 10077342 and 10077343, both at revision 1: Certification Basis for the original product amended by additional airworthiness requirements 27.1319 and A27.5 at CS-27 Amdt. 7
- For EASA Approval 10084418: Certification Basis for the original product amended by additional airworthiness requirement 27.1458 at CS-27 Amdt. 10
- For EASA Approval 10078010 see §V, Note 4.
- For EASA Approval 10080963 Rev.1 see §V, Note 5.

3. Special Conditions
   - “Protection from effects of HIRF”
   - “Lithium Battery Installations”

4. Deviations none

5. Equivalent Safety Findings

- CS-27 Subpart B, CS 27.1305, CS 27.1309, CS 27.1549 “Engine Training Mode”
- CS 27.1305, CS 27.1321 (a), CS 27.1351 (d1) and CS-27 Appendix C for CS 29.1305 (a)(6) and (b)(1) “Part Time Display of Vehicle Parameters”
- CS 27.1545(b)(4), CS 27.1549(b) “Airspeed & Powerplant indication green marking”
- CS 27.601, 27.603, 27.865(a) for Hoist Installation on Helicopters

6. Environmental Protection Requirements

6.1 Noise Requirements	see TCDSN EASA.R.009
6.2 Emission Requirements	ICAO Annex 16, Volume II, Part II, Chapter 2, (CS-34, Initial Issue)

7. Operational Suitability Data (OSD) (For OSD elements see SECTION 20 below)

7.1 Master Minimum Equipment List (MMEL)	JAR-MMEL/MEL Section 1, Amdt. 1 CS-MMEL, Initial Issue, dated 31 January 2014, for the changes in Rev. 5
7.2 Flight Crew Data (FCD)	CS-FCD, Initial Issue, dated 31 January 2014
7.3 Simulation Data (SIMD)	*reserved*
7.4 Maintenance Certifying Staff Data (MCSD)	*reserved*

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

TDD E0000M269800, Issue B
+ EC635 Kit (Drawing No. W530M0700052)

2. Description

Main rotor: bearingless, 4 blades
Tail rotor: Fenestron, 10 blades
Fuselage: metal-composite structure
Landing gear: skid-type
Powerplant: 2 independent freewheel turbines
Note: The variant EC635 T3H corresponds to the EC135 T3H plus structural reinforcement of cabin structure according to the drawing W530M0700052.

3. Equipment

Basic equipment must be installed and operational prior to registration of the helicopter.

4. Dimensions

4.1 Fuselage

Length: 5.87 m
Width hull: 1.56 m
Height: 3.35 m

4.2 Main Rotor

Diameter: 10.40 m

4.3 Tail Rotor

Diameter: 1.00 m

5. Engine

5.1 Model

Safran Helicopter Engines (former: Turbomeca)

2 x Model ARRIUS 2B2

5.2 Type Certificate

EASA TC/TCDS n°: EASA.E.029

5.3 Limitations

Installed Engine Limitations and Transmission Torque Limits

	TQ limits [%]	Max N_1 speed (gas generator) [%]	Max N_2 speed (output shaft) [%]	Temperature TOT [°C]
AEO-TOP (5 min)	2 x 78	100	106	897
AEO-MCP	2 x 69	99	106	879
30 sec OEI-TOP	1 x 128	104.8	106	1 024
2 min OEI-TOP	1 x 125	103.5	106	994
OEI-MCP	1 x 89.5	101.25	106	942

6. Fluids

6.1 Fuel

Refer to approved RFM

6.2 Oil

Refer to approved RFM

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Standard fuel tank (up to s/n 0249)

Fuel tank capacity: 680.0 litres
Usable fuel: 670.5 litres

Self-sealing fuel tank (up to s/n 0249)

Fuel tank capacity: 673.4 litres
Usable fuel: 664.0 litres

Modified fuel tank (from s/n 0250, or SB EC135-28-007)

		Fuel tank capacity: 710.0 litres Usable fuel: 700.5 litres Self-sealing fuel tank (from s/n 0250) Fuel tank capacity: 701.0 litres Usable fuel: 691.6 litres
	7.2 Oil	Refer to approved RFM
	7.3 Coolant System Capacity	n/a
8.	Air Speed Limitations	V_{NE}: 150 KIAS at MSL, or as shown in the V_{NE}-tables, whichever is less. Refer to approved RFM for reduction in V_{NE} with altitude and other speed limitations.
9.	Rotor Speed Limitations	Power on: Maximum 105.5 % Minimum 97 % Power off: Maximum 107.5 % Minimum 80 % (GM < 1 900 kg) Minimum 85 % (GM > 1 900 kg) Transient: Refer to approved RFM
10.	Maximum Operating Altitude and Temperature	
	10.1 Altitude	20 000 ft (6 096 m) PA, refer to approved RFM for variation according to MTOW
	10.2 Temperature	Refer to approved RFM
11.	Operating Limitations	VFR day and night Non-icing conditions For IFR, Category A operation see additional equipment requirements and limitations in the relevant EASA-approved RFMS
12.	Masses	
	12.1 Maximum gross mass	2 980 kg
	12.2 Maximum ramp and taxi mass	3 000 kg
	12.3 Minimum gross mass	1 700 kg
	12.4 Alternative maximum gross mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
	12.5 Alternative maximum ramp and taxi mass	3 100 kg, operation permitted only in accordance with FMA 11-11 and EASA Approval 10075155
13.	Centre of Gravity Range	Longitudinal C.G. limits maximum forward limit: 4 121 mm aft of DP at 2 150 kg 4 171 mm aft of DP at 2 980 kg maximum rearward limit: 4 369 mm aft of DP at 2 980 kg 4 541 mm aft of DP at 1 700 kg Lateral C.G. Limits maximum deviation on right / left: 100 mm
14.	Datum	Longitudinal: the datum plane (STA 0) is located at 2 160 mm forward of the levelling point in the front door frame Lateral: fuselage median plane
15.	Levelling Means	See levelling procedure document No. L082M0801X01

16.	Minimum Flight Crew	1 pilot (right seat)
17.	Maximum Passenger Seating Capacity	7
18.	Passenger Emergency Exit	2, one on each side of the passenger cabin
19.	Maximum Baggage/ Cargo Loads	Cargo floor max load: 1 130 kg Cargo floor max unit load: 600 kg/m²
20.	Rotor Blade Control Movement	For rigging information refer to EC135 Aircraft Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	See approved Chapter 4, Airworthiness Limitation Section (ALS)

IV. Operating and Service Instructions

1. Flight Manual — EC635 T3H, initially EASA-approved, dated 15 November 2016, or later EASA-approved revisions, including the supplements for Special Operations RFMS 9.1 and Optional Equipment RFMS 9.2.

2. Maintenance Manual

- EC135 P3H, T3H Aircraft Maintenance Manual (AMM)
- EC135 P3H, T3H System Description Section (SDS)
- EC135 P3H, T3H Wiring Diagram Manual (WDM)
- EC135 P3H, T3H Corrosion and Erosion Control Guide (CECG)
- Standard Practices Manual
- EC135 P3H, T3H. Chapter 04. Airworthiness Limitation Section (ALS)
- EC135 P3H, T3H. Chapter 05. Master Servicing Manual (MSM)
- e-Dynamic Troubleshooting (eDTS)
- EC135 Avionic Manual (AVM)
- Engine documents as per Engine TCDS No. EASA.E.029

3. Structural Repair Manual — EC135 P3H, T3H Structural Repair Manual (SRM)

4. Weight and Balance Manual — Refer to approved RFM

5. Illustrated Parts Catalogue — EC635 P3H, T3H Illustrated Parts Catalogue

6. Service Letters and Service Bulletins

   Safety Information Notice, Information Notice, Alert Service Bulletin, Service Bulletin Repair Design Approval Sheets

7. Required Equipment

   Special equipment and kits necessary for intended kind of operations as defined in the (LBA)/EASA-approved Flight Manual Supplements RFMS 9.2, are permissible.

V. Notes

1. Manufacturer's eligible serial numbers:
   s/n 2001, and subsequent

2. Designation:
   “H135M” is used as marketing designation for EC635 T3H helicopters.

3. Night Vision Goggles Operational Capability:
   Night Vision Goggles aided operations are permitted according to Rotorcraft Flight Manual Supplement RFMS 9.2-16 in conjunction with a serial number specific Flight Manual Appendix FMA 11-x, when the rotorcraft is equipped accordingly, and a Competent Authority has granted operational authorisation only. The helicopter configuration containing NVIS lighting components

approved for the use with Night Vision Goggles is described in a serial number specific AHD NVIS Substantiation Report for operators having received an approval for their NVIS configuration.

4. For EASA Approval 10078010: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.ELS.010 -c	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.070-c
CS ACNS.D.AC.025-c	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f		CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g		CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030		CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035		CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045		CS ACNS.D.ADSB.105-a
		CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115
		CS ACNS.D.ADSB.120

5. For EASA Approval 10080963 REV. 1: The TCH has shown compliance with CS-ACNS Issue 3, as applicable to helicopter communications, navigation, and surveillance equipage criteria in reference to the associated paragraphs detailed below:

CS ACNS.A.GEN.010	CS ACNS.D.EHS.010	CS ACNS.D.ADSB.010
CS ACNS.A.GEN.015-a	CS ACNS.D.EHS.015-a	CS ACNS.D.ADSB.020-a
CS ACNS.A.GEN.015-b	CS ACNS.D.EHS.015-b	CS ACNS.D.ADSB.020-b
CS ACNS.A.GEN.020	CS ACNS.D.EHS.015-c	CS ACNS.D.ADSB.025-a
CS ACNS.D.AC.010-a	CS ACNS.D.EHS.020	CS ACNS.D.ADSB.025-b
CS ACNS.D.AC.010-b	CS ACNS.D.EHS.025	CS ACNS.D.ADSB.025-c
CS ACNS.D.AC.010-c	CS ACNS.D.ELS.010-a	CS ACNS.D.ADSB.030
CS ACNS.D.AC.010-d	CS ACNS.D.ELS.010-c	CS ACNS.D.ADSB.035
CS ACNS.D.AC.015-a	CS ACNS.D.ELS.010-d	CS ACNS.D.ADSB.040
CS ACNS.D.AC.015-b	CS ACNS.D.ELS.015-a	CS ACNS.D.ADSB.045
CS ACNS.D.AC.015-c	CS ACNS.D.ELS.015-b1	CS ACNS.D.ADSB.050
CS ACNS.D.AC.020 -a	CS ACNS.D.ELS.015-b2	CS ACNS.D.ADSB.060-a
CS ACNS.D.AC.020 -b	CS ACNS.D.ELS.020-a	CS ACNS.D.ADSB.060-b
CS ACNS.D.AC.020 -c	CS ACNS.D.ELS.020-b	CS ACNS.D.ADSB.070-a
CS ACNS.D.AC.025-a	CS ACNS.D.ELS.025-a	CS ACNS.D.ADSB.070-b
CS ACNS.D.AC.025-b	CS ACNS.D.ELS.025-b	CS ACNS.D.ADSB.070-c

CS ACNS.D.AC.025-c	CS ACNS.D.ELS.025-c	CS ACNS.D.ADSB.080
CS ACNS.D.AC.025-d	CS ACNS.D.ELS.030-a	CS ACNS.D.ADSB.085-a
CS ACNS.D.AC.025-e	CS ACNS.D.ELS.030-b	CS ACNS.D.ADSB.085-b
CS ACNS.D.AC.025-f	CS ACNS.D.ELS.040	CS ACNS.D.ADSB.090-a
CS ACNS.D.AC.025-g	CS ACNS.D.ELS.045	CS ACNS.D.ADSB.090-b
CS ACNS.D.AC.030	CS ACNS.D.ELS.055	CS ACNS.D.ADSB.100-a
CS ACNS.D.AC.035	CS ACNS.D.ELS.060-a	CS ACNS.D.ADSB.100-b
CS ACNS.D.AC.045	CS ACNS.D.ELS.060-b	CS ACNS.D.ADSB.105-a
	CS ACNS.D.ELS.065	CS ACNS.D.ADSB.110
		CS ACNS.D.ADSB.115

* * *

SECTION 20: OPERATIONAL SUITABILITY DATA (OSD)

The OSD elements listed below are approved by the European Union Aviation Safety Agency as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

OSD Elements

1. MMEL

Helicopter model/variant	MMEL revision	accepted/ approved by	Approval date
EC135 P1 (CDS) EC135 P1 (CPDS) EC135 P2 EC135 P2+ EC635 P2+ EC135 T1 (CDS) EC135 T1 (CPDS) EC635 T1 EC135 T2 EC135 T2+ EC635 T2+	Revision 0, or later EASA approved revisions	JAA (LBA)	18 October 2011
EC135 T3(CPDS) EC635 T3(CPDS)	Revision 3, or later EASA approved revisions	EASA	15 October 2014
EC135 P3(CPDS) EC635 P3(CPDS)	Revision 4, or later EASA approved revisions	EASA	23 April 2015
EC135 T3H EC135 P3H EC635 T3H EC635 P3H	Revision 5, or later EASA approved revisions	EASA	23 November 2017

2. Flight Crew Data

- Flight Crew Operational Suitability Data as per document OSD_L0000M403901 first Issue, EASA approval date 15 October 2015, or later approved revisions.
- Appendix 2: “Operator Difference Requirements (ODR) Tables & Master Difference Requirements (MDR) Table” to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.
- Appendix 3: “OSD EC135 Family – EASA OPS – Instruments and Equipment”, to the EASA Operational Suitability Data (OSD) – Flight Crew – EC135 Family, EASA approval date 15 October 2015, or later approved revisions.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

AEO	All Engines Operative	MSL	Mean Sea Level
AHD	Airbus Helicopters Deutschland GmbH	OEI	One Engine Inoperative
C.G.	Centre of Gravity	OSD	Operational Suitability Data
CDS	Cockpit Display System	PA	Pressure Altitude
CPDS	Central Panel Display System	PWR	Power
CR	(European) Commission Regulation	RFM	Rotorcraft Flight Manual
CRI	Certification Review Item	RFMS	Rotorcraft Flight Manual Supplement
DOA	Design Organisation Approval	s/n	Serial Number
HIRF	High Intensity Radiated Field	SC	Special Condition
IFR	Instrument Flight Rules	sec	Seconds
JAA	Joint Aviation Authorities	STA	Station
JAR	Joint Aviation Requirements	TOP	Take-Off Power
KIAS	Knots Indicated Air Speed	TQ	Torque
max	Maximum	VFR	Visual Flight Rules
MCP	Maximum Continuous Power	V_{NE}	Never Exceed Speed
min	Minute		

II. Type Certificate Holder Record

II.1 Type Certificate Holder (21.A.44)	**Period**
Eurocopter Deutschland GmbH Postfach 13 53, W-8850 Donauwörth, or, 86603 Donauwörth, or, 86607 Donauwörth, Germany	until 6 January 2014
Airbus Helicopters Deutschland GmbH Industriestrasse 4, 86609 Donauwörth, Germany	since 7 January 2014

II.2 Contracted DOA Holder (21.A.2)	**Period**
DOA Certificate No. EASA.21J.700 held by: Airbus Helicopters Aéroport International Marseille-Provence 13725 Marignane CEDEX, France	since 21 June 2016

II.3 Production Organisation Approval Holder (21.A.135)	**Period**
II.3.1 Manufacturer for all types and models	
Eurocopter Deutschland GmbH Postfach 13 53, W-8850 Donauwörth, or, 86603 Donauwörth, or, 86607 Donauwörth, Germany	until 6 January 2014
Airbus Helicopters Deutschland GmbH Industriestrasse 4, 86609 Donauwörth, Germany	until 31 December 2017
Airbus Helicopters Aéroport International Marseille Provence, 13725 Marignane, France	since 1 January 2018
II.3.2 Manufacturer for EC135 P2+ (Section 4), EC135 T2+ (Section 14) und EC635 T2+ (Section 15)	

II.3 Production Organisation Approval Holder (21.A.135)	**Period**
Alternative location: Eurocopter España S.A., Polígono de los Llanos, Carretera de las Penas (CM3203), Km 5.3, 02006 Albacete, España	until 31 December 2017

III. Change Record

Issue	**Date**	**Changes**	**TC issue**
Issue 1	23 May 2006	Initial issue of EASA TCDS, based on LBA TCDS 3061 and insertion of the EC135 P2+/T2+ variants	Initial Issue, 23 May 2006
Issue 2	6 Dec 2006	Implantation of the EC635 P2+/T2+ variants	Re-issued, 17 April 2007
Issue 3	10 Oct 2008	Equivalent Safety Finding concerning CS 27.865(c) related to dual activation device; Manufacturer: Eurocopter España S.A., Polígono de los Llanos, Carretera de las Penas (CM3203), Km 5.3, 02006 Albacete, Spain	- - -
Issue 4	27 Oct 2011	New EASA TCDS format and MTOM for 2 950 kg for the EC135/EC635 T2+/P2+	- - -
Issue 5	7 Jan 2014	Reissued mainly due to new branding to “Airbus Helicopters Deutschland”.	Re-issued, 7 January 2014
Issue 6	17 Oct 2014	Implantation of the EC135 T3(CPDS) and EC635 T3(CPDS) variants	Re-issued, 17 October 2014
Issue 7	18 Mar 2015	Implantation of the EC135 P3 (CPDS) and EC635 P3(CPDS)	Re-issued, 18 March 2015
Issue 8	21 May 2015	Typo correction of AEO-TOP torque limits for EC135 P2+ and EC635 P2+; typo in EC635 P3, Note 4; marginal bars from Issue 7 retained	- - -
Issue 9	3 Aug 2015	Increase of V_{NE} to 150 KIAS and max PWR-off rotor to 107.5% for EC135 P3/EC635 P3 and EC135 T3/EC635 T3; Operating Limitations extended for EC135 T3/EC635 T3; Section for OSD added (*reserved*); minor editorial corrections	- - -
Issue 10	16 Dec 2015	Inclusion reference to IFR requirements; rewording of CAT A requirements for EC135 P3/EC635 P3 and EC135 T3/EC635 T3; inclusion of OSD data.	- - -
Issue 11	21 Jun 2016	For T2+/P2+: III.12, reference to s/n 1055 corrected; For T3/P3: II.3, Special Conditions SC 2/SC 4 deleted; For all models: III.7.1, fuel tank volumes related to s/n specified; reference II.2 to contracted DOA added in Section: Administrative.	- - -
Issue 12	15 Nov 2016	Implantation of the EC135/EC635 T3H and EC135/EC635 P3H including Remark on OSD Elements (Section 20, II.); For P1(CPDS): doubly listed Equivalent Safety Finding concerning CS 27.865(c) corrected (II.6); For all models: Clarification of Maximum Cargo Loads (III.19); For EC135/635 T3/P3: Adaption of Environmental Protection Requirements (II.8).	Re-issued, 15 November 2016

Issue	Date	Changes	TC issue
Issue 13	13 Mar 2017	For T3/P3(CPDS) models in II.6.: Equivalent Safety Finding concerning CS 27.1557(d) Emergency Exit Handle colour added; For T models in III.5.5: 'Turbomeca' updated by 'Safran Helicopter Engines'	- - -
Issue 14	15 Jan 2018	For T3H/P3H: - V.: Note 3, NVG Operational Capability added - Section 20: I.2 and II.2 updated	- - -
Issue 15	18 Mar 2019	For all: reference to CRIs removed, editorial changes; II.6.: ESF 'Hoist Installation on Helicopters' added. For EC135 P3H, T3H: III.11, word 'RFM' added	- - -
Issue 16	5 Jul 2019	For Models P2/P3/T2/T3(CPDS) and P2+/T2+ in V. Note 1: eligible s/n stated with increased precision	- - -
Issue 17	14 Dec 2020	For EC135 P3H, T3H and EC635 P3H, T3H: III.12: alternative masses related to FMA 11-11 and EASA Approval 10075155 added.	- - -
Issue 18	27 Oct 2022	Section 1, II.2-II.7: adapted to TCDS format policy; Section 2, OSD I.1-I.3: moved to SECTION 1, II.7.; Section 8, 9, 18, 19, II.2: Certification Basis amended for EASA approvals10077342 and 10077343; Section 1, 2, 4, 5, 11, 12, 14, 15, III.12: editorial text change to MTOM; Section 5, editorial correction: V.1.2 deleted All: II.4 'Exemptions' removed and renumbered.	- - -
Issue 19	12 Jun 2024	For all Sections: I.3 reviewed. III.22 reviewed. IV.2, IV.3, IV.5 reviewed. Section 4, 5, 14, 15: II.2 updated. Section 6, 7, 16, 17: II.3 added Special Conditions SC2 and SC4 Section 8, 9, 18, 19: II.2: Certification basis updated. Added approvals 10078010 and 10080963; V. Notes: added notes 4 and 5. Section 8: II.3 added EASA Approval 10082775 Section 8, 9, 18, 19: II.2 added approval 10084418 Section 15: V. Note 1.2 deleted. Section 16, 17: II.2 added EASA approval 10050866 Section 18: II.1 date corrected.	- - -

- end of file -