SA 330 / AS 332 / EC 225

Issue: 16

Date: 26 July 2017



# TYPE CERTIFICATE DATA SHEET

No. EASA.R.002

for

SA 330 / AS 332 / EC 225

**Type Certificate Holder** 

**Airbus Helicopters** 

Aéroport International Marseille – Provence

13725 Marignane CEDEX

France

For Models: SA 330 J AS 332 C, AS 332 L, AS 332 C1, AS 332 L1, AS 332 L2 EC 225 LP



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Issu	e: 16	Date: 26 July 2017
SEC	TION 1: SA 330 J	
<u>I. G</u>	eneral	
1.	Type/ Model/ Variant	
	1.1 Туре	SA 330
	1.2 Model	SA 330 J (for memory of SA 330 F and SA 330 G, see Note 5)
	1.3 Variant	
2.	Airworthiness Category	Large Rotorcraft, Category A and B
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC FR	not recorded
5.	State of Design Authority	EASA (pre EASA: DGAC FR, France)
6.	Type Certificate Date by DGAC FR	29 April 1976
7.	Type Certificate n° by DGAC FR	56
8.	Type Certificate Data Sheet n° by DGAC FR	127 issue 9 dated September, 1994
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 <sup>nd</sup> bullet, 1 <sup>st</sup> indented bullet.
<u>II. C</u>	ertification Basis	
1.	Reference Date for determining the applicable requirements	not recorded
2.	Airworthiness Requirements	According to DGAC letter 02827 SFACT/TC, dated 30 March 1978: FAR 29, Amdts. 29-1 to 29-9 inclusive and the addition of FAR 29.951(c), 29.1183, 29.1305(a)(16) of Amdt. 29-10 for SA 330 J equipped with white anti-collision light.
3.	Special Conditions	DGAC-F CS n°1 – Icing; DGAC-F CS n°2 – Lightning
4.	Exemptions	none
5.	Deviations	For SA 330 J fitted with red anti-collision light FAR 29 Amdt. 29-7 is excluded
6.	Equivalent Safety Findings	none
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.R.002
	8.2 Emission Requirements	n/a
9.	Operational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.).



# III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	SA 330 J definition is obtained by applying modifications mentioned in note 330A.05.0065 to the definition of former SA 330 G model, which consisted itself of SA 330 F previous model with design changes as listed in note 330A.05.0060 (see also Note 5)
2.	Description	Large twin-engine helicopter; SA 330 J model is a derivative design of former SA 330 G, which is originally derived from SA 330 F model (see also Note 5.)
3.	Equipment	As per compliance with applicable FAR 29 airworthiness requirements and referenced in approved RFM
4.	Dimensions	
	4.1 Fuselage	Length: 14.82 m Width stabiliser: 3.00 m Height: 5.14 m
	4.2 Main Rotor	Diameter: 15.09 m (4 blades)
	4.3 Tail Rotor	Diameter: 3.04 m (5 blades)
5.	Engine	
	5.1 Model	Safran Helicopter Engines (former: Turbomeca) 2 x Model TURMO IV C
	5.2 Type Certificate	DGAC FR n°: M8 EASA TC/TCDS n°: EASA.E.074
	5.3 Limitations	
	5.3.1 Installed Engine Limits	Refer to approved RFM
	5.3.2 Transmission Torque Limits	Refer to approved RFM
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	Fuel tank capacity:1 565 litres (413 US gal)Usable fuel:1 544 litres (408 US gal)
	7.2 Oil	Engines: 2 x 12 litres MGB: 22 litres IGB: 0.75 litre TGB: 1.4 litre
	7.3 Coolant System Capacity	n/a
8.	Air Speeds Limits	VNE PWR ON: 310 km/h (167 kt) at ISA sea level for 4 000 kg. See RFM for other approved airspeed limits.
9.	Rotor Speed Limits	Power on: Nominal governed 265 rpm ± 7 rpm Minimum transient 220 rpm Power off: Maximum 310 rpm Minimum (< 108 KIAS) 220 rpm (> 108 KIAS) 240 rpm



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(> 108 KIAS) 240 rpm

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lssue	2: 16			Date: 26 July 2017
10.	Maximum Operating Altitude and Temperature			
	10.1 Altitude	TKOF/LDG: Enroute:	-1 650 ft to +16 500 ft	+13 000 ft PA PA
	10.2 Temperature	- 40°C to +	50°C	
11.	Operating Limitations	VFR day an	d night, IFR,	Non-icing conditions
12.	Maximum Mass	TKOF/LDG:	7 400 kg (1	6 300 lb)
13.	Centre of Gravity Range	Refer to ap	proved RFM	
14.	Datum	centreline		n) forward of main rotor try plane
15.	Levelling Means		-	side of the fuselage and mb line on cabin floor (left side
16.	Minimum Flight Crew	1 pilo	t in Category t + 1 crew m ts in Categor	ember in Category A
17.	Maximum Passenger Seating Capacity	19	is in categor	
18.	Passenger Emergency Exit	-	proved RFM	
19.	Maximum Baggage/ Cargo Loads	The cabin f with the st	loor (from + ructural stre	2.48 m to +7.63 m) is provided ngth required for a load of buted in cargo configuration
20.	Rotor Blade Control Movement	For rigging	information	refer to AMM
21.	Auxiliary Power Unit (APU)	n/a		
22.	Life-limited Parts	Refer to ap	proved Airw	orthiness Limitations Section
23.	Wheels and Tyres	Wheels:	NLG MLG each	Messier Bugatti C20525000 (two
		Tyres:	NLG	7.00-6 (two) 7.00-6 (two each side)
<u>IV. C</u>	Operating and Service Instructions			
1.	Flight Manual	DGAC FR <sup>(*)</sup> , revisions. (*) there ar various Eur	, or subseque re other Fligh ropean type	approved on 29 April 1976 by ent DGAC FR or EASA approved nt Manuals, which resulted from certifications, e.g. Flight Manual e E (CAA UK).
2.	Maintenance Manual	<ul> <li>Maintena</li> <li>Recommendaria</li> <li>Airworthic approved</li> </ul>	ance program endations (P iness Limitat I by DGAC FF REM (Transm	ions Section as PRE Chapter 05.99,
3.	Structural Repair Manual	SA 330 Stru	uctural Repa	ir Manual



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- 4. Weight and Balance Manual
- Illustrated Parts Catalogue 5.

not recorded

Refer to approved RFM

- Service Letters and Service Bulletins
- 6.

As published by Aérospatiale, Eurocopter or **Airbus Helicopters** 

- **Required Equipment** 7.
  - As per compliance with applicable FAR 29 requirements and in accordance with the original Type Design standard, refer also to the approved RFM;
  - Approved equipment items are covered by document No 330A.04.1155 dated 17 September 1970 updated to issue J on 26 March 1981;
  - Approved equipment items required for the flight in icing conditions are covered by document 330A.04.1483

## V. Notes

- 1. Manufacturer's serial numbers: S/N 1371, and subsequent of model SA 330 J are eligible.
- 2. The certified "optional" installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation if necessary.
- 3. Cabin Interior and Seating Configurations must be approved.
- 4. Commercial designation: PUMA
- 5. Upon Eurocopter request for its surrender, the Type Certificate of both models SA 330 G and SA 330 F has been revoked by EASA as of 12 November 2009 (see EASA Certification Information dated 16 November 2009).

\* \* \*



# SECTION 2: AS 332 C, C1, L, L1

# I. General

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1. Type/ Model/ Variant

	1.1 Type	AS 332
	1.2 Model	AS 332 C, AS 332 C1, AS 332 L, AS 332 L1
	1.3 Variant	
2.	Airworthiness Category	Large Rotorcraft, Category A and B
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC FR	AS 332 C:4 April 1978AS 332 L:16 July 1980AS 332 C1 and L1:18 June 1984
5.	State of Design Authority	EASA (pre EASA: DGAC FR, France)
6.	Type Certificate Date by DGAC FR	AS 332 C:24 April 1981AS 332 L:2 December 1981AS 332 C1 and L1:14 March 1985
7.	Type Certificate n° by DGAC FR	56
8.	Type Certificate Data Sheet n° by DGAC FR	127 issue 9 dated September, 1994
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 <sup>nd</sup> bullet, 1 <sup>st</sup> indented bullet.
<u>II. C</u>	ertification Basis	
1.	Reference Date for determining the applicable requirements	not recorded
2.	Airworthiness Requirements	For AS 332 C, C1, L, L1 <sup>(*)</sup> : FAR 29 with Amdts. 29-1 to 29-16 including. (*) according to DGAC letter 53.904, dated 18 August 1980 and document "Airworthiness Criteria for Helicopter Instrument Flight", dated 15 December 1978 for IFR flight.

3. Special Conditions

For AS 332 C, C1, L, L1 (\*):

- DGAC-F CS n°1 (Icing) and DGAC-F CS n°2 (Lightning) as applicable to previous SA 330 J model and notified by DGAC-F letter 02827 SFACT/TC, dated 30 March 1978

For AS 332 C1 and L1 equipped with AHCAS (commercial

reference AS 332 C1e and AS 332 L1e): according to CRI A-01, see Note 8.

- DGAC-F CS n°20.2, dated 11 May 1982 for category II, IFR flight.

For AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e) see Note 8:

- Minimum in flight experience (CRI B-01)
- Search and Rescue system (CRI B-02)
- Protection from the effects of High Intensity Radiated Fields (HIRF) (CRI F-02)
- 4. Exemptions

none



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5.	Deviations	none
6.	Equivalent Safety Findings	
	For AS 332 C, C1, L, L1 (*): Endurance Tests of redesigned Tail Rotor Hub	pitch change control assembly (MOD 07.66205) (CRI E-01)
	For AS332 C1 and L1 equipped with AHCAS (c see Note 8: - IFR Static Longitudinal Stability – Airspeed S - V <sub>NE</sub> aural warning (CRI F-01) - Airspeed indicator markings (CRI G-01) - Powerplant instrument markings (CRI G-02)	ommercial reference AS332C1e and AS332L1e), tability (CRI B-04)
7.	Requirements elected to comply	For AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 322 C1e and AS 332 L1e): see Note 8
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.R.002

8.2 Emission Requirementsn/a9. Operational Suitability Data (OSD)See SECTION 5 below

## III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	doc. 332A04.3269 For AS 332 L: as per doc. 332A04 For AS 332 C, L: as per doc. 332A04 For AS 332 C1, L1: as per doc. 332A04 For AS 332 C1 and	.0010 for 8 350 kg .3300 for 8 600 kg
2.	Description	type certified SA 33 - two fuselage lengt (standard for AS 33 - two engines config	32 C, C1; extended for AS 332 L, L1),
3.	Equipment		with applicable FAR 29 airworthiness referenced in approved RFM
4.	Dimensions		
	4.1 Fuselage	for AS 332 C, C1: Length: Width stabiliser: Height: for AS 332 L, L1: Length: Width stabiliser: Height:	15.53 m 3.79 m 4.94 m 16.29 m 3.79 m 4.95 m
	4.2 Main Rotor	Diameter:	15.60 m (4 blades)



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TCD	S No.: EASA.R.002	SA 330 / AS 332 / EC 225
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	4.3 Tail Rotor	Diameter: 3.05 m (5 blades)
5.	Engine	
	5.1 Model	Safran Helicopter Engines (former: Turbomeca) for AS 332 C, L: 2 x Model MAKILA 1A for AS 332 C1, L1: 2 x Model MAKILA 1A1
	5.2 Type Certificate	EASA TC/TCDS n°: EASA.E.072
	5.3 Limitations	
	5.3.1 Installed Engine Limits	Refer to approved RFM
	5.3.2 Transmission Torque Limits	Refer to approved RFM
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	For AS 332 C, C1:Standard configuration:1 556 litres (411 US gal)with optional internal 6th tank324 litres (86 US gal)with optional sponson tanks650 litres (172 US gal)Total available fuel:2 530 litres (669 US gal)For AS 332 L, L1:2 043 litres (540 US gal)Standard configuration:2 043 litres (540 US gal)with optional internal 6th tank324 litres (86 US gal)with optional internal 6th tank324 litres (86 US gal)with optional sponson tanks600 litres (158 US gal)Total available fuel:3 017 litres (738 US gal)Note to all models: see RFM for other approved optionalfuel tanks configurations and for unusable fuel quantities.
	7.2 Oil	Engines: 2 x 7.6 litres MGB: 19.6 litres IGB: 0.62 litre TGB: 1.44 litre
	7.3 Coolant System Capacity	n/a
8.	Air Speeds Limits	At ISA sea level for mass $\le 8350 \text{ kg}$ (18 410 lb): $V_{\text{NE PWR ON}$ : 310 km/h (167 kt) $V_{\text{NE PWR OFF}$ : 278 km/h (150 kt) At ISA sea level for mass $> 8350 \text{ kg}$ (18 410 lb): $V_{\text{NE PWR ON}$ : 278 km/h (150 kt) $V_{\text{NE PWR OFF}}$ : 268 km/h (145 kt)
9.	Rotor Speed Limits	Power on:Maximum275 rpmNominal265 rpmMinimum245 rpmMinimum transient220 rpmPower off:310 rpmMaximum transient (20 sec)310 rpmMaximum290 rpmMinimum (> 100 KIAS)245 rpmMinimum (< 100 KIAS)



10.	Maximum Operating Altitude and Temperature	
10.		
	10.1 Altitude	For AS 332 C, L: TKOF/LDG: 15 000 ft PA for mass ≤ 8 350 kg (18 410 lb)
		6 000 ft PA for mass > 8 350 kg (18 410 lb)
		Enroute: 20 000 ft PA
		For AS 332 C1, L1: TKOF/LDG: -1 640 ft PA / +15 000 ft DA
		Enroute: -1 640 ft/+25 000 ft PA
		for mass $\leq 8350 \text{ kg} (18410 \text{ lb})$
		-1 640 ft/9 500 ft PA for mass > 8 350 kg (18 410 lb)
	10.2 Temperature	-30°C to ISA +35°C, limited to 50°C.
		See relevant RFMS for colder operation down to -45°C.
11.	Operating Limitations	VFR day and night, IFR, Non-icing conditions
		Flight in full icing conditions is permitted on AS 332 C, L and L1 models only when equipment items listed in relevant flight manual supplement are installed. Flight in limited icing conditions is permitted on AS 332 L and L1 models only when equipment items listed in relevant approved RFMS are installed (see Note 6).
12.	Maximum Mass	TKOF/LDG for AS 332 C, L:
		8 350 kg (18 410 lb), prior SB 01.03 embodiment 8 600 kg (18 960 lb), after SB 01.03 embodiment
		TKOF/LDG for AS 332 C1, L1:
		8 600 kg (18 960 lb)
13.	Centre of Gravity Range	Refer to approved RFM
13. 14.	Centre of Gravity Range Datum	Refer to approved RFM Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane
		Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline
14.	Datum	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L:
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*)
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1:
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup>
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1:
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup> > 20 000 ft, 2 pilots
14. 15.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup> > 20 000 ft, 2 pilots IFR: 2 pilots (*) the qualified crew member is not required if, at least, one lane of each AP channel is in operation AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e): VFR: 1 pilot
14. 15.	Datum Levelling Means Minimum Flight Crew	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup> > 20 000 ft, 2 pilots IFR: 2 pilots (*) the qualified crew member is not required if, at least, one lane of each AP channel is in operation AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e): VFR: 1 pilot IFR: 2 pilots
14. 15. 16.	Datum Levelling Means	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup> > 20 000 ft, 2 pilots IFR: 2 pilots (*) the qualified crew member is not required if, at least, one lane of each AP channel is in operation AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e): VFR: 1 pilot
14. 15. 16.	Datum Levelling Means Minimum Flight Crew	Longitudinal: STA 0: 4.670 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door) For AS 332 C, L: VFR: 1 pilot + 1 qualified crew member(*) IFR: 2 pilots For AS 332 C1, L1: VFR: < 20 000 ft, 1 pilot + 1 qualified crew member <sup>(*)</sup> > 20 000 ft, 2 pilots IFR: 2 pilots (*) the qualified crew member is not required if, at least, one lane of each AP channel is in operation AS 332 C1 and L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e): VFR: 1 pilot IFR: 2 pilots For AS 332 C, C1: 19



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1.

2.

3. 4. 5. 6.

n/a

Wheels:

Tyres:

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with the structural strength required for a load of 800 kg/m<sup>2</sup> evenly distributed in cargo configuration

Refer to approved Airworthiness Limitations Section

NLG 7.00-6 (two)

each side)

NLG Messier Bugatti C20525000 (two) MLG Messier Bugatti C20147200 (one

MLG 615 x 225-10 (one each side)

For rigging information refer to AMM

20. Rotor Blade Control Movement 21. Auxiliary Power Unit (APU)

22. Life-limited Parts

23. Wheels and Tyres

## <u>IV. O</u>

Operating and Service Instructions	
Flight Manual	<ul> <li>AS 332 C:</li> <li>Flight Manual approved on 24 April 1981 by DGAC-F<sup>(*)</sup>, or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 L:</li> <li>Flight Manual approved on 2 December 1981 by DGAC-F</li> <li>(*), or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 C1:</li> <li>Flight Manual approved on 14 March 1985 by DGAC-F<sup>(*)</sup>, or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 L1:</li> <li>Flight Manual approved on 14 March 1985 by DGAC-F<sup>(*)</sup>, or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 L1:</li> <li>Flight Manual approved on 14 March 1985 by DGAC-F<sup>(*)</sup>, or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 L1:</li> <li>Flight Manual approved on 14 March 1985 by DGAC-F<sup>(*)</sup>, or subsequent DGAC-F, or EASA approved revisions</li> <li>AS 332 L1 equipped with AHCAS (commercial reference AS 332 L1e):</li> <li>Flight Manual approved on 14 June 2012 by EASA or subsequent.</li> <li>AS 332 C1 equipped with AHCAS (commercial reference AS 332 C1e):</li> <li>Flight Manual approved on 13 November 2013 by EASA or subsequent.</li> </ul>
	(*) there are other RFM, which resulted from various European type certifications, e.g. RFM with identification code E (CAA-UK), code D (LBA) or code F (ENAC).
Maintenance Manual	<ul> <li>Maintenance Programme:</li> <li>AS 332 C, C1, L, L1 Maintenance Servicing Recommendations (PRE),</li> <li>AS 332 C, C1, L, L1 Aircraft Maintenance Manual (AMM)</li> <li>AS 332 C, C1, L, L1 Overhaul Manual Airworthiness Limitations:</li> <li>AS 332C, C1, L, L1 Maintenance Servicing Recommendations, Chapter 05.99, approved by DGAC-F or EASA, or Master Servicing Manual Chapter 04 approved by EASA</li> </ul>
Structural Repair Manual	AS 332 C, C1, L, L1 Repair Manual
Weight and Balance Manual	Refer to approved RFM
Illustrated Parts Catalogue	AS 332 C, C1, L, L1 Illustrated Part Catalogue
Service Letters and Service Bulletins	As published by Aérospatiale, Eurocopter or Airbus Helicopters



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- 7. Required Equipment
  - As per compliance with applicable FAR 29 requirements and in accordance with the original Type Design standard;
  - Approved equipment items are covered by document No 332A.04.3254, dated 14 may 1981
  - Refer to approved Flight Manual, MMEL and also to Note 7 below

#### V. Notes

- 1. Manufacturer's serial numbers:
  - AS 332 C: s/n 2001, and subsequent;
  - AS 332 C1: see Note 2 for eligible serial numbers;
  - AS 332 L: s/n 2004; and subsequent;
  - AS 332 L1: s/n 2132, and subsequent;

are eligible.

- 2. Conversion from AS 332 C, L models to AS 332 C1, L1 models possible through SB 01.00.26.
- 3. The certified 'optional' installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation, if necessary.
- 4. Cabin Interior and Seating Configurations must be approved.
- Commercial designation 'SUPER PUMA Mk I' corresponds to AS 332 C, C1, L and L1 models. Commercial references AS 332 C1e and AS 332 L1e are used for AS 332 C1 and AS 332 L1 equipped with AHCAS system and modifications listed below in Note 8.
- 6. Flight in "icing conditions of limited severity":
  - permitted on AS 332 L and L1 models only, with relevant Flight Manual Supplement, formerly approved under code E (CAA-UK) at normal revision RNO, or subsequent DGAC-F or EASA approved issues;
  - such code E (CAA-UK) Flight Manual Supplement does not constitute operational approval and operations must be conducted in accordance with applicable operational regulation.
- 7. AS 332 C, L and L1 helicopters without MGB fire detection system are those modified by AMS 07-21653, design change resulting from CAA-UK's original type certification.
- 8. For AS 332 C1,L1 aircraft with the following Eurocopter modifications installed (commercial reference AS 332 C1e, AS 332 L1e), the design change was classified as 'significant' per 21.A.101 and the certification basis is listed below:
  - MOD 07.26640 Hydraulic and flight control adaptation for AFCS integration;
  - MOD 07.26641 VMS installation;
  - MOD 07.26642 AFCS installation;
  - MOD 07.26643 FDS installation;
  - MOD 07.26644 Primary references installation;
  - MOD 07.26645 Cockpit adaptation for AHCAS installation;
  - MOD 07.26646 Cockpit lighting;
  - MOD 07.26647 Electrical wiring and connections adaptation;
  - MOD 07.26648 Electrical power distribution modification;
  - MOD 07.26649 Warnings/Cautions and ancillaries adaptation;
  - MOD 07.26650 Equipment installation structure adaptation.

#### Affected Area

The affected area (primary design change) is aircraft avionics referring to the integration of the avionic systems on cockpit instrument panel: AFCS, VMS, MFD, ISIS, ADU and AHRS.

Installation of the avionic equipment includes the display of the information (vehicle parameters, engine parameters and piloting parameters, AFCS modes and upper modes as an option) through:

- MFD on instrument panel (part of the FDS integration);
- EID on instrument panel (part of the VMS integration);
- ISIS on instrument panel (part of the sensors integration).

For this affected area, CS-29 Amdt. 2, dated 17 November 2008, is applicable and the requirements



# V. Notes

impacted by are listed below (see reference CRI A-01):

CS 29.0771	Pilot compartment
CS 29.0773	Pilot compartment view
CS 29.0777	Cockpit controls
CS 29.1301	Function and installation
CS 29.1303	Flight and navigation instruments
CS 29.1305	Power plant instruments
CS 29.1309	Equipment, systems, and installations
CS 29.1321	Arrangement and visibility
CS 29.1327	Magnetic direction indicator
CS 29.1329	Automatic pilot system
CS 29.1333	Instrument systems
CS 29.1335	Flight director systems
CS 29.1543	Instrument markings: general
CS 29.1545	Airspeed indicator
CS 29.1547	Magnetic direction indicator
CS 29.1549	Power plant instruments

Appendix B Airworthiness Criteria For Helicopter Instrument Flight

**Special Condition:** 

- Minimum in flight experience (CRI B-01)Search and Rescue system (CRI B-02)
- Protection from the effects of High Intensity Radiated Fields (HIRF) (CRI F-02)

**Equivalent Safety Finding:** 

- IFR Static Longitudinal Stability Airspeed Stability (CRI B-04)
- V<sub>NE</sub> aural warning (CRI F-01)
- Airspeed indicator markings (CRI G-01)
- Powerplant instrument markings (CRI G-02)

#### Secondary Change

To integrate these systems on Super Puma MK1 AS 332 C1, L1, some secondary changes have to be applied:

- Electrical integration of the avionic systems,
- Mechanical integration of the avionic systems,
- Adaptation of hydraulic and flight controls systems,
- AFCS modifications.
- Cockpit lighting modifications,
- Other structural modifications of the airframe,
- Warnings and cautions modifications.

For these secondary changes, the certification basis to be applied is the existing certification basis for the AS 332 C1, L1.

Nevertheless, Eurocopter has elected to comply with the requirements of affected area, completed by the ones of CS-29 Amdt. 2 listed below.

Requirements elected to comply:

CS 29.0161	Trim control

CS 29.0671 Ge	eneral
---------------	--------

- CS 29.0672 Stability augmentation, automatic, and power-operated systems
- Warning, caution, and advisory lights CS 29.1322
- Instrument lights CS 29.1381
- CS 29.1523 Minimum flight crew
- CS 29.1525 Kinds of operation

### **Unaffected Area**

The existing certification basis (FAR 29 Amdt. 16 and DGAC special conditions) as listed in TCDS EASA.R.002, is applicable.



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V. Notes

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SECTION	3:	AS	332 I	2
SECTION	٠.	73	3321	~

## I. General

Issue: 16

1. Type/ Model/ Variant

	1.1 Type	AS 332
	1.2 Model	AS 332 L2
	1.3 Variant	
2.	Airworthiness Category	Large Rotorcraft, Category A and B
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC FR	3 March 1986
5.	State of Design Authority	EASA (pre EASA: DGAC FR, France)
6.	Type Certificate Date by DGAC FR	12 June 1991
7.	Type Certificate n° by DGAC FR	56
8.	Type Certificate Data Sheet n° by DGAC FR	127 issue 9 dated September, 1994
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 <sup>nd</sup> bullet, 1 <sup>st</sup> indented bullet.
<u>II. C</u>	ertification Basis	
1.	Reference Date for determining the applicable requirements	3 March 1986
2.	Airworthiness Requirements	FAR 29 with Amdts. 29-1 to 29-24 inclusive According to DGAC letters 53445/SFACT/TC, dated 27 April 1989, and 53610/SFACT/N.HE, dated June 1991
3.	Special Conditions	<ul> <li>Flight Endurance</li> <li>Bird and Foreign Object strikes</li> <li>Protection against external electro-magnetic disturbances</li> <li>30 Sec and 2 Min contingency ratings</li> <li>Maintenance assistance system (not applicable to basic type design definition)</li> </ul>
4.	Exemptions	none
5.	Deviations	<ul> <li>reversion to FAR 29 original requirements for 29.1, 29.605, 29.671 and 29.1323</li> <li>reversion to FAR 29 Amdt. 12 for 29.603</li> <li>reversion to FAR 29 Amdt. 14 for 29.1303</li> <li>reversion to FAR 29 Amdt. 14 for 29.1309 regarding equipment used on previous AS 332 versions</li> </ul>
6.	Equivalent Safety Findings	none
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.R.002
	8.2 Emission Requirements	n/a



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TCDS No.: EASA.R.002

Issue: 16

9. Operational Suitability Data (OSD)

See SECTION 5 below

9.	Operational Suitability Data (OSD)	See SECTION 5 below	
III. <sup>-</sup>	Fechnical Characteristics and Operational Limit	ations	
1.	Type Design Definition	Documents ref. 332 A 89 1	1031 and 332 A 89 1046
2.	Description	Large twin-engine helicopt type certified AS 332 mode	ter; derivative design of former els
3.	Equipment	As per compliance with ap requirements and reference	pplicable FAR 29 airworthiness ced in approved RFM
4.	Dimensions		
	4.1 Fuselage	Length:16.49Width stabiliser:3.38Height:4.97	m
	4.2 Main Rotor	Diameter: 16.20 r	m (4 blades)
	4.3 Tail Rotor	Diameter: 3.15	m (4 blades)
5.	Engine		
	5.1 Model	Safran Helicopter Engines 2 x Model MAKILA 1A2	(former: Turbomeca)
	5.2 Type Certificate	EASA TC/TCDS n°: EASA	.E.072
	5.3 Limitations		
	5.3.1 Installed Engine Limits	Refer to approved RFM	
	5.3.2 Transmission Torque Limits	Refer to approved RFM	
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 configuration: with optional internal 6th with optional sponson tan Total available fuel: <u>Note:</u> see RFM for other a configurations and for unu	ks <u>600 litres (158 US gal)</u> 2 967 litres (784 US gal) pproved optional fuel tanks
	7.2 Oil	Engines: 2 x 4.9 litres MGB: 24.0 litres IGB: 0.75 litre TGB: 1.50 litre	
	7.3 Coolant System Capacity	n/a	
8.	Air Speeds Limits	V <sub>NE PWR ON</sub> : 315 km/h (17( V <sub>NE PWR OFF</sub> : 278 km/h (15( Refer to RFM for other app	D kt)
9.	Rotor Speed Limits	Power on: Maximum Nominal Minimum	275 rpm 265 rpm 245 rpm



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Minimum

Minimum transient

245 rpm 220 rpm

		Power off: Maximum tra	nsient (20 se	c) 310 rpm
		Maximum	1010110 (20 00	290 rpm
		Minimum (> 1	loo kias)	245 rpm
		Minimum (< 1	LOO KIAS)	220 rpm
10.	Maximum Operating Altitude and Temperature			
	10.1 Altitude	TKOF/LDG: -2		
			2 000 ft to +2	
	10.2 Temperature	-30°C to ISA +	35°C, limited	to 50°C
11.	Operating Limitations	VFR day and r	night,	
		IFR, Non-icing con	ditions	
		-		itions is permitted when
		equipment ite	ems listed in	relevant approved Flight nstalled (see Note 5)
12.	Maximum Mass	TKOF/LDG: 9		
13.	Centre of Gravity Range	Refer to appro	oved RFM	
14.	Datum	Longitudinal:		
			m (183.86 in)	forward of main rotor
		centreline	<b>.</b> .	
		Lateral: aircra		
15.	Levelling Means		-	e of the fuselage and line on cabin floor (left side
		door)		
16.	Minimum Flight Crew	VFR: 1 pilot		
	-	IFR: 2 pilots		
17.	Maximum Passenger Seating Capacity	25		
18.	Passenger Emergency Exit	Refer to appro	oved RFM	
19.	Maximum Baggage/ Cargo Loads		-	8 m to +7.63 m) is provided
			-	h required for a load of
20.	Rotor Blade Control Movement	-	-	ed in cargo configuration
		For rigging inf		
21.	Auxiliary Power Unit (APU)	Optional; to b Refer to appro	-	ound only.
22.	Life-limited Parts	Refer to appre	oved Airwort	hiness Limitations Section
23.	Wheels and Tyres	Wheels:		essier Bugatti C20525000 (two)
			MLG M each side	essier Bugatti C20147200 (one
		Tyres:		=) 00-6 (two)
				.5 x 225-10 (one each side)
<u>IV. (</u>	Operating and Service Instructions			741
4	Elizabet Manager al		de la NAlessa Const. D	

1. Flight Manual

AS 332 L2 Flight Manual, DGAC-F<sup>(\*)</sup> approved on 2 April 1992, or subsequent DGAC-F or EASA approved revisions.

(\*) there are other RFM, which resulted from various European type certifications, e.g. RFM with identification



		code E (CAA-UK), code D (LBA) or code F (ENAC).
2.	Maintenance Manual	<ul> <li>Maintenance Programme:</li> <li>AS 332 L2 Maintenance Servicing Recommendations (PRE),</li> <li>AS 332 L2 Aircraft Maintenance Manual (AMM)</li> <li>AS 332 L2 Overhaul Manual</li> <li>Airworthiness Limitations:</li> <li>AS 332 L2 Maintenance Servicing Recommendations,</li> <li>Chapter 05.99, approved by DGAC-F or EASA, or Master</li> <li>Servicing Manual Chapter 04 approved by EASA</li> </ul>
3.	Structural Repair Manual	AS 332 L2 Structural Repair Manual
4.	Weight and Balance Manual	Refer to approved RFM
5.	Illustrated Parts Catalogue	AS 332 L2 Illustrated Part Catalogue
6.	Service Letters and Service Bulletins	As published by Aérospatiale, Eurocopter or

#### 7. Required Equipment

- As per compliance with applicable FAR 29 requirements and in accordance with the original Type Design standard;

**Airbus Helicopters** 

- Refer to approved Flight Manual, MMEL and also to Note 6 below

### V. Notes

- Manufacturer's serial numbers: S/N 2338, and subsequent of AS 332 L2 model are eligible.
- 2. The certified "optional" installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation if necessary.
- 3. Cabin Interior and Seating Configurations must be approved.
- 4. Commercial designation 'SUPER PUMA Mk II' corresponds to AS 332 L2 version.
- 5. Flight in 'icing conditions of limited severity':
  - permitted with relevant Flight Manual Supplement, formerly approved under code E (CAA-UK) at normal revision RNO, or subsequent EASA approved issues;
  - such code E (CAA-UK) Flight Manual Supplement does not constitute operational approval and operations must be conducted in accordance with applicable operational regulation.
- 6. The AS 332 L2 helicopters without MGB fire detection system are those modified by AMS 07-25208, design change resulting from CAA-UK's original type certification.

\* \* \*



SECTION	4:	EC 225 LP	

### I. General

Issue: 16

1. Type/ Model/ Variant

1.	Type/ Model/ Valiant	
	1.1 Туре	EC 225
	1.2 Model	EC 225 LP
	1.3 Variant	
2.	Airworthiness Category	Large Rotorcraft, Category A and B (see Note 6)
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC FR	7 November 2000
5.	State of Design Authority	EASA
6.	EASA Type Certification Date	27 July 2004
<u>II. C</u>	ertification Basis	
1.	Reference Date for determining the applicable requirements	7 November 2000
2.	Airworthiness Requirements	JAR 29, Change 1 effective 1 December 1999,
3.	Special Conditions	<ul> <li>Minimum in flight experience (CRI B-01)</li> <li>SAR (Search and Rescue) system (CRI B-02)</li> <li>Water Bombing System (CRI B-05)</li> <li>External loads, JAR 29.865 Amdt. 2 (CRI D-06)</li> <li>Protection from the effects of High Intensity Radiated Field (HIRF) (CRI F-02)</li> <li>Helicopter limited icing approval (CRI O-01)</li> </ul>
4.	Exemptions	<ul> <li>JAR 29.562 Emergency dynamic landing conditions (CRI C-02)</li> <li>JAR 29.952(a)(c)(d)(e)(f)(g) Fuel system crash resistance (CRI E-01)</li> <li>JAR 29.955(b) Fuel transfer (CRI E-05)</li> <li>partial exemption: JAR 29.963(b) Fuel tanks: general; Puncture resistance (CRI E-02)</li> </ul>
5.	Deviations	
	Reversion to FAR 29, Amdt. 24 as follows:	itions-general (CRI C-01)

- FAR 29.561(b)(3) Emergency landing conditions-general (CRI C-01) Partial reversions to FAR 29, Amdt. 24 as follows:

- FAR 29.571 Fatigue evaluation of structure (CRI C-03)
- FAR 29.785 Seat, berth, safety belts, and harnesses (CRI D-01)

JAR 29.785(a), Installation of side-facing seats (CRI D-09)

- JAR 29.562(a), Installation of side-facing seats (CRI D-09)
- 6. Equivalent Safety Findings
  - JAR 29.173, 175 Static longitudinal Stability (CRI B-03)
  - JAR 29 App B §IV IFR Static longitudinal Stability Airspeed stability (CRI B 04)
  - JAR 29.571 Fatigue evaluation of structure for changed metallic PSE (CRI C-04)
  - JAR 29.807(c)(1) Passenger emergency exits other than side-of-fuselage (CRI D-02)
  - JAR 29.813(a), 29.815 Emergency exit access Main aisle width (CRI D-03)
  - JAR 29. 807(d)(2) Ditching emergency exits for passengers (CRI D-07)



- JAR 29.923(a)(2) Rotor drive system and control mechanism tests (CRI E-03)
- JAR 29.1303(j) V<sub>NE</sub> aural warning (CRI F-01)
- JAR 29.1545(b)(4) Airspeed indicators markings (CRI G-01)
- JAR 29.1549(b) Powerplant instruments markings (CRI G-02)

7.	Requirements elected to comply	CS 29.1465 Amdt.3 - Vibration Health Monitoring for Airworthiness Credit (CRI F-09) – See Note 7
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.R.002 Compliant with ICAO Annex 16, Volume 1, Part II, Chapter 8 and Appendix 4 (CRI A-03), see RFM for measured noise levels
	8.2 Emission Requirements	Compliant with ICAO Annex 16 Volume 2 - Fuel Discharge (CRI A-04)
9.	Operational Suitability Data (OSD)	See SECTION 5 below

#### III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	For EC 225 LP Standard: Documents ref. 332 A 89 2120
		For EC 225 LP MPAI <sup>(*)</sup> equipped:
		when standard definition is completed with design
		change ref. AMS OP 23554
-	<b>a</b>	<u>Note:</u> (*) MPAI means Multi-Purpose Air Intakes
2.	Description	Large twin-engine helicopter; derivative design of former type certified AS 332 L2 model
		Standard configuration consists of grid -type engine air intakes installation, while MPAI configuration is optional and consists of Multi-Purpose Air Intakes
3.	Equipment	As required by JAR 29 and referenced within approved RFM
4.	Dimensions	
	4.1 Fuselage	Length: 16.49 m
	-	Width stabiliser: 3.96 m
		Height: 4.97 m
	4.2 Main Rotor	Diameter: 16.20 m (5 blades)
	4.3 Tail Rotor	Diameter: 3.15 m (4 blades)
5.	Engine	
	5.1 Model	Safran Helicopter Engines (former: Turbomeca)
		2 x Model MAKILA 2A, or,
		2 x Model MAKILA 2A1
	5.2 Type Certificate	EASA TC/TCDS n°: EASA.E.006
	5.3 Limitations	
	5.3.1 Installed Engine Limits	Refer to approved RFM
	5.3.2 Transmission Torque Limits	Refer to approved RFM
6.	Fluids (Fuel/ Oil/ Additives)	
	6.1 Fuel	Refer to approved RFM
	6.2 Oil	Refer to approved RFM



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TCD	5 No.: EASA.R.002	SA 330 / AS 332 / EC 225
Issue	2: 16	Date: 26 July 2017
	6.3 Additives	Refer to approved RFM
7.	Fluid capacities	
	7.1 Fuel	Standard configuration:2 588 litres (682 US gal)with optional internal 6th tank320 litres (84 US gal)Total available fuel:2 908 litres (766 US gal)Note: see RFM for other approved optional fuel tanks
		configurations and for unusable fuel quantities.
	7.2 Oil	Engines:2 x 4.92 litresMGB:27.0 litresIGB:0.62 litreTGB:1.50 litre
	7.3 Coolant System Capacity	n/a
8.	Air Speeds Limits	V <sub>NE PWR ON</sub> : 175 kt below 5 000 ft DA, above 5 000 ft: –3 kt/1 000 ft. V <sub>NE PWR OFF</sub> : 150 kt Refer to RFM for other approved airspeed limits.
9.	Rotor Speed Limits	Power on:Maximum275 rpmMinimum246 rpmMinimum transient220 rpmPower off:310 rpmMaximum transient (20 sec)310 rpmMaximum290 rpmMinimum (> 100 KIAS)246 rpmMinimum (< 100 KIAS)
10.	Maximum Operating Altitude and Temperat	ture
	10.1 Altitude	TKOF/LDG for EC 225 LP Standard: OAT from -45°C to -12°C: -6 000 ft DA to +7 400 ft DA OAT from -12°C to ISA +40°C (without exceeding +50°C): -2 000 ft PA to +7 400 ft DA
		TKOF/LDG for EC 225 LP MPAI equipped: OAT from -45°C to -12°C: -6 000 ft DA to +11 000 ft DA OAT from -12°C to ISA +40°C (without exceeding +50°C): -2 000 ft PA to +11 000 ft DA
		Enroute for EC 225 LP Standard/MPAI equipped: OAT from -45°C to -12°C: -6 000 ft DA to +20 000 ft PA OAT from -12°C to ISA +40°C (without exceeding +50°C): -2 000 ft PA to +20 000 ft PA
	10.2 Temperature	-30°C to ISA +40°C, limited to 50°C See RFMS SUPP 2 for lower temperature operation down to -45°C.
11.	Operating Limitations	VFR day and night, IFR, non-icing conditions
		Flight in full icing conditions is permitted only when other equipment items as listed in relevant approved RFMS are installed. Flight in limited icing conditions is permitted only when equipment items listed in relevant approved RFMS are



TCD	5 No.: EASA.R.002	SA 330 / AS 332 / EC 225
Issue	2: 16	Date: 26 July 2017
4.0		installed (see Note 5).
12.	Maximum Mass	TKOF/LDG: 11 000 kg (24 251 lb)
13.		Refer to approved RFM
14.	Datum	Longitudinal: STA 0: 4.67 m (183.86 in) forward of main rotor centreline Lateral: aircraft symmetry plane
15.	Levelling Means	Levelling plate on right side of the fuselage and graduated plate for plumb line on cabin floor (left side door)
16.	Minimum Flight Crew	VFR: 1 pilot IFR: 2 pilots <u>Note:</u> Pilot and suitably trained crew member in day VFR for water bombing operations.
17.	Maximum Passenger Seating Capacity	25
18.	Passenger Emergency Exit	one (1) door, the dimensions of which exceed those of Type II exit + two (2) Type IV exits on each side
19.	Maximum Baggage/ Cargo Loads	The cabin floor (from +2.48 m to +7.63 m) is provided with the structural strength required for a load of 800 kg/m <sup>2</sup> evenly distributed in cargo configuration
20.	Rotor Blade Control Movement	For rigging information refer to AMM
21.	Auxiliary Power Unit (APU)	Optional; to be used on ground only. Refer to approved RFMS.
22.	Life-limited Parts	Refer to approved Airworthiness Limitations Section
23.	Wheels and Tyres	Wheels: NLG Messier Bugatti C 20525 000 (two) MLG Messier Bugatti C 20147 200 (one each side)
		Tyres: NLG 466 x 173-10 (two) MLG 615 x 225-10 (one each side)
<u>IV. (</u>	Operating and Service Instructions	
1.	Flight Manual	For EC 225 LP Standard: EC 225LP Flight Manual, normal revision RNO (04-20), EASA approved 27 July 2004, or subsequent approved revisions. EC 225 LP MPAI equipped: EC 225LP MPAI Flight Manual, normal revision RN2 (04-44), EASA approved 21 December 2004, or subsequent approved revisions
2.	Maintenance Manual	Maintenance Programme: - EC 225 LP Maintenance Servicing Recommendations (PRE), - EC 225 LP Aircraft Maintenance Manual AMM)
		Airworthiness Limitations: EC 225 LP Maintenance Servicing Recommendations, Chapter 05.99 (or newly Chapter 04 approved by EASA), edition 2004.05.31, Rev. 000, EASA approved on 27 July 2004, or subsequent approved revisions
3.	Structural Repair Manual	EC 225 LP Structural Repair Manual



6.

not recorded

- 4. Weight and Balance Manual Refer to approved RFM
- 5. Illustrated Parts Catalogue

Service Letters and Service Bulletins

As published by Eurocopter or Airbus Helicopters

- 7. Required Equipment
  - As per compliance with applicable JAR 29 requirements and in accordance with the original Type Design standard;
  - Refer to approved Flight Manual and MMEL.

#### V. Notes

- Manufacturer's serial numbers: S/N 2600, and subsequent of EC 225 LP model are eligible.
- 2. The certified "optional" installations are each approved independently of the basic helicopter and an approved Flight Manual Supplement is associated to each optional installation if necessary (some optional installations are specific to the EC 225 LP equipped with MPAI and the relevant RFMS are approved for that particular EC 225 LP type design definition only).
- 3. Cabin Interior and Seating Configurations must be approved; passenger transport is not permitted in both operational and non-operational configurations of the Water Bombing System; except while performing Water Bombing operations, the EC 225 LP is not approved for the carriage of cargo only in the cabin.
- 4. Commercial designation 'SUPER PUMA Mk II+' or 'LP' corresponds to EC 225 LP model.
- Flight in limited icing conditions and water bombing operations: The relevant approved Flight Manual Supplements do not constitute operational clearance approvals and operations must be conducted in accordance with applicable operational regulation.
- 6. The EC 225 LP is certified as Category A rotorcraft with operating limitations as defined in the relevant approved RFMS.
- 7. For EC 225 LP helicopters equipped with M'ARMS (optional Vibration Health Monitoring system), the associated mandatory design change MOD 0726978 / 0726994 (defined as "M'ARMS MOD45 monitoring") is certified in compliance with CS 29.1465 of CS 29 Amdt.3 see above 'II.7. Requirement elected to comply'.

\* \* \*



## SECTION 5: OPERATIONAL SUITABILITY DATA (OSD)

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

### I. OSD Certification Basis

<u></u>	
I.1	Reference Date for determining the applicable OSD requirements
	Grandfathering date: 17 February 2014
1.2	MMEL - Certification Basis
	All models, except SA 330 J: JAR-MMEL/MEL Section 1, Subpart A and B, Amdt. 1, dated 1 August 2005
1.3	Flight Crew Data - Certification Basis
	All models, except SA 330 J: CS-FCD Initial Issue, dated 31 January 2014 (elect to comply as per EASA approval 10060827)
1.4	SIM Data - Certification Basis
	reserved
1.5	Maintenance Certifying Staff Data - Certification Basis
	reserved
1.6	Cabin Crew Data - Certification Basis
	reserved
<u>II. 09</u>	SD Elements
II.1	MMEL
	For SA 330 J: n/a
	For AS 332 C, L, C1, L1:

For AS 332 C, L, C1, L1: MMEL AS332 C-C1-L-L1 Normal Revision 3, Issue 2, Date Code 13-04, dated 13 June 2013, or later EASA approved revisions. For AS 332 C1, L1 equipped with AHCAS (commercial reference AS 332 C1e and AS 332 L1e): MMEL Supplement AS 332 C1-L1 Post MOD 07 26640 to 07 22650 Normal Revision 0 Issue 1 Date-Code 14-02, dated 27 January 2014, or later EASA approved revisions. For AS 332 L2: MMEL AS332 L2 Normal Revision 1, Issue 2, Date Code 10-10, dated 20 October 2010, or later EASA approved revisions. For EC 225 LP: MMEL EC225LP Normal Revision 4, Issue 2, Date Code 13-25, dated 24 October 2013, or later EASA approved revisions.

II.2 Flight Crew Data

All models, except SA 330 J: OSD-FCD Super Puma Fleet RN 2 Date Code 16-50, or later EASA approved revision.

- II.3 SIM Data
  - reserved
- II.4 Maintenance Certifying Staff Data

reserved

II.5 Cabin Crew Data - Certification Basis reserved

\* \* \*



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#### SECTION: ADMINISTRATIVE

## I. Acronyms and Abbreviations

Amdt.	Amendment	MMEL	Master Minimum Equipment List
AMM	Aircraft Maintenance Manual	MPAI	Multi-Purpose Air Intakes
AMS	Aircraft Modification	OSD	Operational Suitability Data
APU	Auxiliary Power Unit	P/N	Part number
C.G.	Centre of Gravity	PA	Pressure Altitude
DA	Density Altitude	RFM	Rotorcraft Flight Manual
HIRF	High Intensity Radiated Field	s/n	Serial Number
ICAO	International Civil Aviation Organisation	SIM	Simulator
IFR	Instrument Flight Rules	VFR	Visual Flight Rules
IPC	Illustrated Parts Catalogue	VNE	Never Exceed Speed
JAR	Joint Airworthiness Requirements		
KIAS	Knots Indicated Air Speed		
M'ARMS	EC225's Vibration Health Monitoring system		

## II. Type Certificate Holder Record

Type Certificate Holder	Period
Aérospatiale 37, Boulevard de Montmorency 75781 Paris CEDEX 16, France	From 29 April 1976 until 31 December 1991
Eurocopter France Aéroport International Marseille – Provence 13725 Marignane CEDEX, France	From 1 January 1992 until 30 May 1997
Eurocopter Aéroport International Marseille – Provence 13725 Marignane CEDEX, France	From 1 June 1997 until 6 January 2014
Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France	Since 7 January 2014

## III. Change Record

Issue	Date	Changes	TC issue
Issue 01	27 Jul 2004	Initial Issue; EC 225 LP model type certification	Initial EASA Issue 27 July 2004
Issue 02	21 Apr 2006	Legacy Models added (SA 330 and AS 332)	Re-issued on 21 April 2006
Issue 03	6 Oct 2009	EC 225 LP: Makila 2A1 engines added; update of altitude and temperature limitations	
Issue 04	13 Dec 2009	TC surrendering for SA 330 models F and G; EC 225 LP certification basis update for Water Bombing kit approval	
lssue 05	25 Feb 2010	Clarification of s/n applicability for former SA 330 F and G models converted into SA 330 J	
Issue 06	9 May 2010	Extended EC 225 LP take-off and landing altitude flight envelope	
Issue 07	4 Jan 2011	Extended EC 225 LP temperature envelope (very cold	



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Issue	Date	Changes	TC issue
		weather); error correction: AS 332 L2 hydraulic fluid capacity; new EC 225 LP icing envelope approval	
Issue 08	20 Jan 2011	Update on EASA engine TCDS EASA.E.072 reference	
lssue 09	14 Jun 2012	Updated to add AS 332 L1 with AHCAS commercial designation AS 332 L1e	
Issue 10	29 Jun 2012	TCDS format update; minor corrections	
lssue 11	10 Jul 2013	EC 225 LP certification basis update for "M'ARMS MOD45 monitoring" approval	
Issue 12	7 Jan 2014	TC Holder's name changed to "Airbus Helicopters"	Re-issued on 7 January 2014
Issue 13	25 Jun 2015	Updated to add AS 332 C1 with AHCAS commercial designation AS 332 C1e; new EC 225 CRI D-09 and new MSM Chapter 04 (previously 05.99).	
Issue 14	17 Jul 2015	1 <sup>st</sup> page updated – Section 5 for OSD added	
Issue 15	10 Dec 2015	OSD elements added in Section 5	
Issue 16XX Mar 2017Flight Crew Data and FCD Certification Basis updated based on EASA Approval 10060827; TCDS format updated; minor corrections			

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