TYPE CERTIFICATE

DATA SHEET

N° EASA.R.125

for

SA 341

Type Certificate Holder

Airbus Helicopters

Aéroport International Marseille – Provence

13725 Marignane CEDEX

France

For Models: SA 341 G, SA 342 J

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I. General

1.	Type/ Model/ Variant	
	1.1 Type	SA 341
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2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC	not recorded
5.	State of Design Authority	EASA (pre EASA: DGAC, France)
6.	Type Certificate Date by DGAC FR	7 June 1972
7.	Type Certificate n°	DGAC FR: n° 66 EASA: EASA.R.125
8.	Type Certificate Data Sheet n°	n° 136 (until issue 4, dated March 1993) EASA.R.123 (since 7 January 2014)
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	not recorded
2.	Airworthiness Requirements	FAR 27, edition dated 1 February 1965 (Amdt. 27-1 to 27-4 included) with the SGAC additional Special Conditions notified with letter SGAC n° 4986, dated 2 September 1971). For IFR version, it has been verified that the aircraft equipped according to Aerospatiale drawing ref 341 A/MR 0345 complies with document FAA EU 100 "Acceptable criteria for compliance with FAR 27.141 and 29.141 Instrument flight", dated 15 February 1971.
3.	Special Conditions	Refer to §1 certification basis (see II.2)
4.	Exemptions	none
5.	Deviations	none
6.	Equivalent Safety Findings	none
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	Complies with the essential requirements by virtue of early TC date, see also TCDSN N° EASA.R.125
	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 341 G basic SA 341 G definition

2. Description
Main rotor: three-bladed main rotor
Tail rotor: 'Fenestron' type tail rotor
Fuselage: airframe of conventional structure
Landing gear: skids
Powerplant: single turbine

3. Equipment — As per compliance with applicable airworthiness requirements defined here above and referenced within approved Rotorcraft Flight Manual.

4. Dimensions

4.1 Fuselage
Length: 9.53 m (31.27 ft), or,
Width: 2.04 m (6.69 ft) with narrow pads gear
Height: 3.19 m (10.47 ft)

4.2 Main Rotor — Diameter: 10.50 m (34.45 ft)

4.3 Tail Rotor — Diameter: 0.70 m (2.3 ft) 'Fenestron'

5. Engine

5.1 Model — SAFRAN Helicopter Engines (Turbomeca)
1 x Model Astazou III A

5.2 Type Certificate
EASA TC/TCDS n°: EASA.E.071
(DGAC-FR TC/TCDS n°: M6)

5.3 Limitations

5.3.1 Installed Engine Limitations

	PWR [kW]	Gas generator [min^{-1}]	Temperature T4 [°C]
Max rpm	---	43 500[1)]	---
Max PWR	440	---	---
Max T4 at engine start		---	T4 max + 150
Max T4		---	550
Max T4 continuous	---	---	550

Note: [1)] rpm ±400 rpm (transient loading ±1 500 rpm allowed)

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 for engine and gearboxes

6.3 Additives — Refer to approved RFM

6.4 Hydraulic — Refer to approved RFM

7. Fluid capacities

7.1 Fuel
Total fuel tank capacity: 457 litres (120.7 US gal)
Usable fuel: 455 litres (120.2 US gal)
Non-usable fuel: 2 litres (0.5 US gal)

7.2 Oil

Engine: 9.2 litres (2.4 US gal)
Main Gear Box: 3.5 litres (0.9 US gal)
Tail Gear Box: 0.3 litres (0.08 US gal)

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

VFR flight:
V_{NE} 310 km/h (167 kt) for 0 m < Zp < 500m and a decrease of 25 km/h (13.5 kt) must be applied for each 3 280 ft (1 000 m) increase of Zp.

IFR flight:
V_{NE} corresponding to the speed obtained at level flight for the 2nd pitch stop.

9. Rotor Speed Limitations

Maximum 420 rpm
Minimum 280 rpm
Max continuous 362 rpm

10. Maximum Operating Altitude and Temperature

10.1 Altitude

19 685 ft (6 000 m) PA for VFR flight
10 825 ft (3 300 m) PA for IFR flight

10.2 Temperature

Min: -50°C for VFR flight
+2°C for IFR flight
Max: +45°C for -500 m < Zp < +500 m
and a decrease of 10°C for each Zp = 1 000 m up to 6 000 m

11. Operating Limitations

VFR day and night
IFR

12. Maximum Mass

TKOF/LDG: 1 800 kg (3 968 lb)

13. Centre of Gravity Range

Longitudinal	Limit from reference point [mm]	
VFR flight	2 800	3 140
IFR flight	2 800	3 070

Lateral	Limit from reference point [mm]
LH	153
RH	135

14. Datum

Longitudinal:
3 000 mm (9.84 ft) forward of main rotor centre line
Lateral: aircraft symmetry plane

15. Levelling Means

3 levelling legs on the floor

16. Minimum Flight Crew

VFR/IFR: 1 pilot (RH seat at STA +1 440 mm)

17. Maximum Passenger Seating Capacity

Four
1 in LH seat at STA +1 440
3 in rear seats at STA +2 290

18. Passenger Emergency Exit

Refer to approved RFM

19. Maximum Baggage/ Cargo Loads

The floor of the cabin and the baggage hold has the structural strength necessary for a load uniformly distributed of 610 daN/m.²

20. Rotor Blade Control Movement

For rigging information refer to the Maintenance Manual

21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	The periods specified in the latest approved revision of the Airworthiness Limitations section of the Maintenance Manual must not be exceeded.

IV. Operating and Service Instructions

1.	Flight Manual	SA 341 G Flight Manual, original edition approved by DGAC, or later DGAC-FR or EASA approved revision.
2.	Maintenance Manual	SA 341 G Maintenance Manual
3.	Structural Repair Manual	not recorded
4.	Weight and Balance Manual	not recorded
5.	Illustrated Parts Catalogue	not recorded
6.	Miscellaneous Manuals	not recorded
7.	Service Letters and Service Bulletins	As published by Aérospatiale, Eurocopter or Airbus Helicopters

8. Required Equipment

As per compliance with applicable requirements and in accordance with the original Type Design standard; refer to approved RFM.

V. Notes

1. Manufacturer's eligible serial numbers:
   Each GAZELLE helicopter manufactured by Aérospatiale and complying with SA 341 G type.
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. Commercial designation:
   GAZELLE
4. SA 341 helicopters manufactured by other European aircraft manufacturers under licence agreement are not covered by Type Certificate EASA.R.125.

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SECTION 2: SA 342 J

I. General

1.	Type/ Model/ Variant	
	1.1 Type	SA 342
	1.2 Model	SA 342 J
	1.3 Variant	- - -
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	Airbus Helicopters Aéroport International Marseille – Provence 13725 Marignane CEDEX, France
4.	Type Certification Application Date to DGAC	not recorded
5.	State of Design Authority	EASA
6.	Type Certificate Date by DGAC FR	27 April 1976
7.	Type Certificate n°	DGAC FR: n° 66 EASA: EASA.R.125
8.	Type Certificate Data Sheet n°	n° 136 (until issue 4, dated March 1993) EASA.R.123 (since 7 January 2014)
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	not recorded
2.	Airworthiness Requirements	FAR 27, edition dated 1 February 1965 (Amdt. 27-1 to 27-4 included) with the SGAC additional Special Conditions notified with letter SGAC n° 4986, dated 2 September 1971). For IFR version, it has been verified that the aircraft equipped according to Aerospatiale drawing ref 341 A/MR 0345 complies with document FAA EU 100 "Acceptable criteria for compliance with FAR 27.141 and 29.141 Instrument flight", dated 15 February 1971.
3.	Special Conditions	Refer to §1 certification basis (see II.2)
4.	Exemptions	none
5.	Deviations	none
6.	Equivalent Safety Findings	none
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	Complies with the essential requirements by virtue of early TC date, see also TCDSN N° EASA.R.125
	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 342 J basic SA 342 J definition

2. Description
Main rotor: three-bladed main rotor
Tail rotor: 'Fenestron' type tail rotor
Fuselage: airframe of conventional structure
Landing gear: skids
Powerplant: single turbine

3. Equipment — As per compliance with applicable airworthiness requirements defined here above and referenced within approved Rotorcraft Flight Manual.

4. Dimensions

4.1 Fuselage
Length: 9.53 m (31.27 ft), or,
Width: 2.04 m (6.69 ft) with narrow pads gear
Height: 3.19 m (10.47 ft)

4.2 Main Rotor — Diameter: 10.50 m (34.45 ft)

4.3 Tail Rotor — Diameter: 0.70 m (2.3 ft) 'Fenestron'

5. Engine

5.1 Model — SAFRAN Helicopter Engines (Turbomeca)
1 x Model Astazou XIV H

5.2 Type Certificate
EASA TC/TCDS n°: EASA.E.075
(DGAC-FR TC/TCDS n°: M3)

5.3 Limitations

5.3.1 Installed Engine Limitations

	PWR [kW]	Gas generator [min^{-1}]	Temperature T4 [°C]
Max rpm	---	43 000[1)]	---
Max PWR	440	---	---
Max T4 at engine start (5 sec)		---	700
Max T4		---	550
Max T4 continuous	---	---	550

Note: [1)] rpm ±200 rpm (transient loading ±1 500 rpm allowed)

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 for engine and gearboxes

6.3 Additives — Refer to approved RFM

6.4 Hydraulic — Refer to approved RFM

7. Fluid capacities

7.1 Fuel
Total fuel tank capacity: 457 litres (120.7 US gal)
Usable fuel: 455 litres (120.2 US gal)
Non-usable fuel: 2 litres (0.5 US gal)

7.2 Oil

Engine: 9.2 litres (2.4 US gal)
Main Gear Box: 3.5 litres (0.9 US gal)
Tail Gear Box: 0.3 litres (0.08 US gal)

7.3 Coolant System Capacity

n/a

8. Air Speed Limitations

VFR flight:
V_{NE} 310 km/h (167 kt) for 0 m < Zp < 500m and a decrease of 25 km/h (13.5 kt) must be applied for each 3 280 ft (1 000 m) increase of Zp.

IFR flight:
V_{NE} corresponding to the speed obtained at level flight for the 2nd pitch stop.

9. Rotor Speed Limitations

Maximum regulated: 387 rpm (powered flight)
Maximum: 430 rpm (Autorotation)
415 rpm for t < 15 °C and Zp<9 842 ft (3 000 m)
400 rpm for t < -30 °C
Minimum 310 rpm for Zp < 3 280 ft (1 000 m)
for Zp > 3280 ft (1 000 m) add 10 rpm for each 3 280 ft (1 000 m) increase of Zp.

10. Maximum Operating Altitude and Temperature

10.1 Altitude

19 685 ft (6 000 m) PA for VFR flight
10 825 ft (3 300 m) PA for IFR flight

10.2 Temperature

Min: -40°C for VFR flight
+2°C for IFR flight
Max: +50°C for -500 m < Zp < +500 m
and a decrease of 10°C for each Zp = 1 000 m up to 6 000 m

11. Operating Limitations

VFR day and night
IFR

12. Maximum Mass

TKOF/LDG: 1 900 kg (4 189 lb)

13. Centre of Gravity Range

Longitudinal	Limit from reference point [mm]	
VFR flight	2 800	3 140
IFR flight	2 800	3 070

Lateral	Limit from reference point [mm]
LH	153
RH	135

14. Datum

Longitudinal:
3 000 mm (9.84 ft) forward of main rotor centre line
Lateral: aircraft symmetry plane

15. Levelling Means

3 levelling legs on the floor

16. Minimum Flight Crew

VFR/IFR: 1 pilot (RH seat at STA +1 440 mm)

17. Maximum Passenger Seating Capacity

Four
1 in LH seat at STA +1 440
3 in rear seats at STA +2 290

18. Passenger Emergency Exit

Refer to approved RFM

19.	Maximum Baggage/ Cargo Loads	The floor of the cabin and the baggage hold has the structural strength necessary for a load uniformly distributed of 610 daN/m.²
20.	Rotor Blade Control Movement	For rigging information refer to the Maintenance Manual
21.	Auxiliary Power Unit (APU)	n/a
22.	Life-limited Parts	The periods specified in the latest approved revision of the Airworthiness Limitations section of the Maintenance Manual must not be exceeded.

IV. Operating and Service Instructions

1.	Flight Manual	SA 342 J Flight Manual, original edition approved by DGAC, or later DGAC-FR or EASA approved revision.
2.	Maintenance Manual	SA 342 J Maintenance Manual
3.	Structural Repair Manual	not recorded
4.	Weight and Balance Manual	not recorded
5.	Illustrated Parts Catalogue	not recorded
6.	Miscellaneous Manuals	not recorded
7.	Service Letters and Service Bulletins	As published by Aérospatiale, Eurocopter or Airbus Helicopters

8. Required Equipment

As per compliance with applicable requirements and in accordance with the original Type Design standard; refer to approved RFM.

V. Notes

1. Manufacturer's eligible serial numbers:
   Each GAZELLE helicopter manufactured by Aérospatiale and complying with SA 342 J type.
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. Commercial designation:
   GAZELLE
4. SA 342 helicopters manufactured by other European aircraft manufacturers under licence agreement are not covered by Type Certificate EASA.R.125.

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SECTION 3: ADMINISTRATIVE

I. Acronyms and Abbreviations

°C	Degree Celsius	RFM	Rotorcraft Flight Manual
C.G.	Centre of Gravity	rpm	Rounds per minute
CR	(European) Commission Regulation	s/n	Serial Number
EU	European Union	sec	Seconds
LDG	Landing	STA	Station
Max	Maximum	TC	Type Certificate
n/a	not applicable	TCDS	Type Certificate Data Sheet
n°	Number	TKOF	Take-Off
OSD	Operational Suitability Data	VFR	Visual Flight Rules
PA	Pressure Altitude	V_{NE}	Never Exceed Speed
PWR	Power		

II. Type Certificate Holder Record

Type Certificate Holder	**Period**
Aérospatiale 37, Boulevard de Montmorency 75781 Paris CEDEX 16, France	From 1 January 1970 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 Jan 2010	Initial issue of EASA TCDS	Re-issued on 27 January 2010
- - -	7 Jan 2014	The company name has been changed to AIRBUS HELICOPTERS	Re-issued on 7 January 2014
Issue 02	14 Feb 2017	New TCDS template, reference to OSD, minor editorial corrections	- - -

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