

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

H6EU
Revision 6
Airbus Helicopters
Gazelle
SA341G
SA342J
January 10, 2014

TYPE CERTIFICATE DATA SHEET NO. H6EU

This data sheet which is a part of Type Certificate No. H6EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Airbus Helicopters
Aéroport International Marseille Provence
13725 - Marignane - Cedex
France

TC Holder Record: Eurocopter France changed name to Airbus Helicopters on January 1, 2014.

I - Model SA341G "Gazelle" (Normal Category), approved September 18, 1972

Engine 1 Turbomeca Astazou IIIA

Oil

Engine Oil	SPECIFICATION (Latest Amendment)				REMARKS
	FRENCH	NATO	USA	UK	
Normal Oil	AIR 3513	0.148	MIL-L-7808		Synthetic Oil
	AIR 3514	0.150			
Alternate Oils		0.156	MIL-L-23699		Synthetic Oil
	AIR 3515	0.135	Aeroshell Turbine Oil 3	D. Eng. RD. 2490	Mineral Oil
			Esso Aviation Utility Oil F		
			Caltex Jet Engine Oil Medium Heavy		
		0.149		D. Eng. RD. 2487	Synthetic Oil

CAUTION: With the exception of AIR 3513 and AIR 3514 oils which may be mixed without restriction, do not mix different oils. Flush the system when changing from one system to another.

Engine Limits Maximum speed: 43,500 r.p.m., held constant by governor within -0 r.p.m. +400
(Transient variations of $\pm 1,500$ r.p.m. are permissible).
Rating maximum continuous) At sea level standard day
Rating takeoff (5 min.)) 592 hp. 43,500 r.p.m.) conditions (59°F - 29.92 in. Hg.)
Maximum continuous exhaust gas temperature (T4))
Maximum takeoff (5 min.) exhaust gas temperature (T4)) 550°C

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I - Model SA341G "Gazelle" (Normal Category), approved September 18, 1972 (Cont'd)

Rotor Speed	<p>In autorotation: Maximum: 430 r.p.m. 415 r.p.m. if OAT is below - 15°C and pressure altitude below 3,000m (9,900 ft.); 400 r.p.m. if OAT is below -30°C and pressure altitude below 3,000m (9,900 ft.) Minimum 310 r.p.m. up to 1,000m (3,300 ft.) density altitude; thereafter increasing 10 r.p.m. per 1,000 m (3,300 ft.) increase in density altitude. In power-on flight: 378 ± 12 r.p.m.</p>
Maximum Weight	3,970 lb.

II. Model SA342J "Gazelle" (Normal Category), approved June 14, 1977

Engine 1 Turbomeca Astazou XIVH

Oil

Engine Oil	SPECIFICATION (Latest Amendment)				REMARKS
	FRENCH	NATO	USA	UK	
Normal Oil	AIR 3513	0.148	MIL-L-7808		Synthetic Oil
	AIR 3514	0.150			
		0.156	MIL-L-23699		Synthetic Oil
Alternate Oils	AIR 3515	0.135	Aeroshell Turbine Oil 3	D.Eng. RD.2490	Mineral Oil
			Esso Aviation Utility Oil F		
			Caltex Jet Engine Oil Medium Heavy		

Caution: With the exception of AIR 3513 and AIR 3514 oils which may be mixed without restriction, do not mix different oils. Flush the system when changing from one system to another.

Engine Limits

Maximum speed: 43,500 r.p.m., held constant by governor within +200 r.p.m. (Transient variations of ± 1,500 r.p.m. are permissible).
Rating maximum continuous) At sea level standard day
Rating takeoff (5 min.) 592 hp. 43,500 r.p.m.) conditions (59°F - 29.92 in. Hg.)
Maximum continuous exhaust gas temperature (T4) : 500°C
Maximum takeoff (5 min.) exhaust gas temperature (T4) : 550°C
Engine gearbox limitations:
Maximum Continuous)
Takeoff) 592 hp.

Transmission Limits

Maximum takeoff power : 570 hp.) (Torque: 100%)
Maximum continuous power : 570 hp.)

Helicopter Limits

Maximum takeoff power : 570 hp.
Maximum continuous power : 570 hp.

II. Model SA342J "Gazelle" (Normal Category), approved June 14, 1977 (Cont'd)

Rotor Speed	<p>In autorotation: Maximum: 430 r.p.m. if OAT is below - 15°C and pressure altitude below 3,000m (9,900 ft.); 400 r.p.m. if OAT is below -30°C and pressure altitude below 3,000m (9,900 ft.) Minimum 310 r.p.m. up to 1,000m (3,300 ft.) density altitude; thereafter increasing 10 r.p.m. per 1,000 m (3,300 ft.) increase in density altitude. In power-on flight: 387 ± 12 r.p.m.</p>
Maximum Weight	4,190 lb.

DATA PERTINENT TO ALL MODELS

Fuel Authorized without restrictions

Type of Fuel	NATO Symbol	SPECIFICATION (To be used at the latest amendment and dash- number)			Anti-Icing
		USA	UK	France	
Kerosene 50 JP1 (AVTUR FS.11)	F34		D.Eng.RD 2453	AIR 3405	Incorporated
	F35	ASTM JET A	D.Eng.RD 2494		Not Incorporated
Kerosene		ASTM JET A			Not Incorporated
Aviation Fuel JP4(AVTAG FS11)	F40		D.Eng.RD 2454	AIR 3407	Incorporated
Aviation Fuel JP4 (AVTAG)	F45	MIL T 5624 (JP4)	D.Eng.RD 2486		Not Incorporated
Aviation Fuel		ASTM JET B			Not Incorporated
High Flash Point JP5 (AVCAT)	F42			AIR 3404	AIR 3404 Incorporated
					F42 Not Incorporated
	F44	MIL T 5642 JP5	D.Eng.RD 2498		Not Incorporated

DATA PERTINENT TO ALL MODELS (Cont'd)Authorized with restrictions

Type of Fuel	NATO Symbol	SPECIFICATIONS (To be used at the latest amendment and dash-number)			Restrictions
Aviation Gasoline (AVGAS)	F12	USA MIL G 5572 Grade 80/87	UK	France AIR 3401 80/87	Operating limitations: +30°C and 2000 m(6,500 ft). Maximum operation time on gasoline during any period between overhaul 25 hours. Add 1 to 2% of lubricating oil by volume (mineral if possible)
	F18	MIL G 5572 Grade 100/130	D.Eng.RD 2485	AIR 3401 100/130	
	F22	MIL G 5572 Grade 115/145		AIR 3401 115/145	
Automotive Gasoline	F46	MIL G 3056	DEF.2401	DCEA/ 2DMT80	
Automotive Diesel Oil	F54	VVF 800 DF2	TS 10.003	DCEA/ 21 C	Not to be used at OAT below -5°C
		VVF 800 DF1			Not to be used at OAT below -15°C
Artic Diesel Oil	F56	VVF 800 DFA			Not to be used at OAT below -20°C
Fuel Oil "O"	F75	MIL F 16884	DEF 2402	7120 STM 47/0 DIESO	Not to be used at OAT below -5°C
Fuel Oil "20"	F76		DEF 2402	7120 STM 47/20 DIESO	Not to be used at OAT below 0°C
Parafin (Illuminating Oil)	F58	VVK 211	DEF 2403	DCEA/11C	Not to be used at OAT below -15°C

NOTE 1: Refer to current issues and amendments.

NOTE 2: The use of an approved anti-icing additive is mandatory, if none is contained in the fuel, at OAT below +5°C.

NOTE 3: For starting, when using the various diesel oils prescribed in the above chart, an approved auxiliary priming unit containing one of the fuels marked thus * is:

- recommended in all cases
- necessary if temperature is below +20°C

The following additives are approved for use:

- Phillips PFA/55MB, MIL-I-27686 (as revised), French AIR 3652 (as revised), or D.Eng.RD 2451 anti-icing additive in quantity up to 0.15 percent in volume (with or without glycerine)
- Shell ASA.3 antistatic additive in quantity up to 0.0001 percent in volume.

Rotor Low-Speed
Warning

Visual and aural at 360 r.p.m.

Airspeed Limits

Never-exceed-speed 168 knots IAS at sea level, decreasing with altitude 4 knots per 1,000 ft. pressure altitude.

C.G. Range

Longitudinal : +110.2 in. to + 123.6 in.
 Lateral : right 5.3 in.
 : left 6.0 in.

Empty Weight C.G. Range

None

DATA PERTINENT TO ALL MODELS (Cont'd)

Datum	118.1 in. forward of main rotor hub center.
Leveling Means	Three plates on the left side of transmission support platform.
Minimum Crew	1 pilot at 56.7 in.
Maximum Passengers	4 (1 at 56.7 in. 3 at 90.2 in.)
Maximum Baggage	125 lb/ft ²
Fuel Capacity	1 . US gallons (120.7) - Usable 1 . US gallons. 23.7 additional usable US gallons (120.7) with Auxiliary Fuel Tank Installation 341A-82-1720.01 and -1721.1 (See NOTE 1 for data on unusable fuel).
Oil Capacity	Engine max. 2.4 US gallons at 154 (See NOTE 1 for data on undrainable oil) MGB max. 0.9 US gallon at 121 TGB max. 0.1 US gallon at 348
Rotor Blades and Control Movements	For rigging information, refer to the Gazelle-Maintenance Manual.
Serial Nos. Eligible	The French Government "Certificat de Navigabilite pour Exportation" endorsed as noted below under "Import Requirements" must be submitted for each individual aircraft for which application for FAA certification is made.
Certification basis	FAR 21.29 and FAR 27 effective 1 February 1965 plus Amendments 27-1 through 27-4 plus Conditions Speciales Techniques Complementaires notified to FAA by SGAC in letter 4987/DTA.M dated 2 September 1971, plus FAA Special Conditions No. 27-45-EU-13 dated 14 September 1972. Type Certificate No. H6EU issued 18 September 1972. Date of application for type certificate: 28 January 1971. The French Direction Generale de l'Aviation Civile (DGAC) originally type certificated this rotorcraft under its type certificate TC 66. The FAA validated this product under U.S. Type Certificate Number H6EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the DGAC.
Import Requirements	The FAA can issue a U.S. airworthiness certificate based on a National Aviation Authority (NAA) Export Certificate of Airworthiness (Export C of A) signed by a representative of the French Generale de l'Aviation Civile (DGAC) on behalf of the European Community. The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to comply with the type design approved under U.S. Type Certificate Number H6EU and to be in a condition for safe operation."
Service Information	

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the French Generale de l'Aviation Civile (DGAC). Any such documents are accepted by the FAA and are considered FAA approved.

- Service Bulletin,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

This applies only to the acceptance of the type design data.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the helicopter for certification.

In addition, the following item of equipment is required:

DGAC-approved Rotorcraft Flight Manual (Code B), approved
December 1974 for Model SA341G and April 1976 for Model SA342J.

NOTES

- NOTE 1. Current weight and balance report including loading instructions and list of equipment included in the certificated empty weight, must be provided for each helicopter at the time of original certification. The certification empty weight and corresponding center of gravity location must include undrainable oil of 3.3 lb. at 154, and unusable fuel of 3.5 lb., at (+138 in.) with and without auxiliary fuel tank.
- In order to obtain the most consistent weight and balance results, all helicopters should be weighed on jackpoints rather than on wheels and floats. When changes are made to the helicopter which affect the weight and balance, refer to the Flight Manual for instructions.
- NOTE 2. The following placard must be displayed in clear view of the pilot:
- "THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING
LIMITATIONS SPECIFIED IN THE APPROVED ROTORCRAFT FLIGHT MANUAL."
- "THE AIRWORTHINESS LIMITATIONS SECTION OF THE ROTORCRAFT MAINTENANCE
MANUAL MUST BE COMPLIED WITH".
- The other placards as indicated in the Rotorcraft Flight Manual must be installed in the appropriate location.
- NOTE 3. Information essential to the proper maintenance of the helicopter is contained in the Manufacturer's Gazelle Maintenance Manual provided with each helicopter, which specifies that service life limited parts be retired in accordance with Chapter 5 approved by DGAC.
- Note 4. Effective January 1, 2014, Eurocopter France name was changed to Airbus Helicopters.

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