DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H1EU
Revision 2
SUD-AVIATION
SA 321 F
February 15, 2007

TYPE CERTIFICATE DATA SHEET NO. H1EU

This data sheet which is a part of type certificate No. H1EU prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Air Regulations.

Type Certificate Holder — EUROCOPTER FRANCE
Aeroport International Marseille Provence
13725 - Marignane - Cedex
France

I - Model SA 321 F (Transport Helicopter - Category A), Approved August 29, 1968

Engines — 3 Turbomeca TURMO III C5

Fuel — Aviation Kerosene - JP4 or JP5

Approved fuels and anti-icing additives limitations are specified in the Rotorcraft Flight Manual (See NOTE 5).

Engine Limits — Sea level static - standard day conditions.

	Shaft HP	Power Turbine RPM	Gas Generator RPM	Power Turbine Inlet temp °C
Takeoff (5 min)	1350	5915	33.150	745
One engine inoperative (30 min)	1350	5915	33.150	745
One engine inoperative (2 1/2 min) (See NOTE 3)	1450	5915	33.550	775
Maximum continuous	1230	5915	32.500	720
Maximum transient (30 seconds)	-	-	-	800
Starting (30 seconds)	-	-	-	750
Allowable maximum overspeed	-	6344	33.700	-

Takeoff and maximum continuous horsepower ratings are normally obtained at a power turbine speed of 5915 rpm.

Total power for three engine operation is limited to 3750 HP for takeoff and 3380 HP maximum continuous.

Rotor Limits — Maximum 232 rpm.
Minimum 180 rpm.

Airspeed limits — Never exceed 130 knots CAS at max. weight.

Variation of V_{ne} with weight and altitude is in the Rotorcraft Flight Manual.

C.G. Range — (+244.09) to (+259.84)

Empty Weight C.G. Range — None

Datum	255.905 inches forward of main rotor centroid.
Leveling Means	Leveling plates on left side of front fuselage.
Maximum weight	27,560 lb.
Minimum Crew	Two (2)
Maximum Passengers	39 limited by emergency exit requirements.
Maximum Baggage	2320 lb (1160 lb in each external side sponsons). The cabin floor area between station +95.67 and +464.96 is structurally satisfactory for an uniformly distributed loading of 143.5 p.s.f. when used for cargo purposes.
Fuel capacity	618 gallons. 206 gal. at (+ 190.31) 206 gal. at (+ 224.53) 206 gal. at (+ 302.79) Unusable fuel 28 gal. (9.4 gal. for each tank)
Oil capacity	9.51 gallons (2 tanks 3.17 gal. each at (+ 145.00) (1 tank 3.17 gal. at (+ 361.06)
Rotor Blade and Control Movements	For rigging information, refer to Maintenance Manual.
Serial Nos. Eligible	The French Government Certificate of Airworthiness for Export 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 - FAR 29 effective February 1, 1965, including Amendments 29-1 and 29.1323 of Amendment 29-3, plus Special Conditions notified by the U.S. Government to the Government of France in FAA letters of January 29, 1968 and June 4, 1968. Type Certificate No. H1EU issued August 29, 1968. Date of Application for Type Certificate: September 28, 1966. The French Direction Generale de l'Aviation Civile (DGAC) originally type certificated this rotorcraft under its type certificate TC 46. The FAA validated this product under U.S. Type Certificate Number H1EU. 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 H1EU 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 items of equipment are required:

(a) S.G.A.C. approved Rotorcraft Flight Manual.
(b) Dual body control system hydraulic servos S.A.M.M. Co. P/N 7112.

NOTE 1. (a) Current weight and balance report including list of required equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each helicopter at the time of original certification.

(b) Unusable fuel, oil and all hudraulic fluid must be included in the certificated empty weight.

NOTE 2. The following placard must be displayed in front and in clear view of the pilot.

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED ROTORCRAFT FLIGHT MANUAL".

NOTE 3. Engine controls must be set for these ratings for vertical operation.

NOTE 4. Information essential to the proper maintneance of the helicopter is contained in the Manufacturer's Maintenance Manual provided with each helicopter, which specifies that service life limited parts be retired in accordance with its S.G.A.C. approved Chapter 5.

NOTE 5. To prevent icing of fuel system components, all fuel in the tanks before takeoff must contain anti-icing additives in accordance with Flight Manual, when route forecast air temperatures are less than 5°C.

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