

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

H9EU
Revision 17
Eurocopter France
AS350C
AS350D
AS350D1
AS350B
AS350B1
AS350B2
AS350BA
AS350B3
EC130 B4
February 15, 2007

TYPE CERTIFICATE DATA SHEET NO. H9EU

This data sheet which is a part of Type Certificate No. H9EU 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.                      EUROCOPTER FRANCE  
Aeroport International Marseille Provence  
13725 - Marignane - Cedex  
France

I. Model AS-350C "ASTAR" (Normal Category) Helicopter, approved December 21, 1977.
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Engine.    1.            Lycoming LTS 101 600A with Bendix power turbine governor  
Lycoming P/N 4.301.101.04

Fuel.    - Normal fuels:     Kerosene, MIL-T-5624 (JP5); ASTM D1655 jet A and A1  
- Wide Cut:           MIL-T-5624 (JP4); STM D1655 Jet B  
- Emergency Fuel:  
(Maximum viscosity: 12 centistokes (See corresponding limitations in Lycoming installation manual under "Installation Instructions").

Oil.     - Automotive Diesel Fuel:     ASTM D975 (N° 2D) or lighter  
- Synthetic oil (5 Cst)            MIL.L.23699  
- Synthetic oil (3 Cst)            MIL.L.7808  
Mixing of these oils are not permitted.

Engine Limits.                                - Power Ratings (Sea Level, ISA)  
    Takeoff (5 mn)     592 shp.  
    Max. Continuous   505 shp.  
- Gas Generator Speeds  
    Takeoff (5 mn)     48,825 rpm (102%)  
    Max. Continuous   48,060 rpm (100.4%)  
    Transient            49,685 rpm (103.8%)  
- Engine Gear Box Limitations  
    Takeoff               592 shp.  
    Max. Continuous   505 shp.

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Engine Limits. (Cont'd)

- Exhaust Gas Temperature (T4)	
Takeoff	706°C
Max. Continuous	732°C
Transient	843°C
Starting Max.*	899°C

\* Time Limit 12 seconds above 799°C

Transmission Limits.

	<u>TORQUE</u>	<u>SHP.</u>	<u>KW.</u>
Maximum takeoff power (5 mn)	101%	531	396
Maximum continuous	101%	531	396

Helicopter Limits.

Maximum takeoff (5 mn)	101%	531	396
Maximum continuous	96%	505	377

Maximum Weight.

4300 lb. (see NOTE 6)

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**II. Model AS-350D "ASTAR" (Normal Category) Helicopter, approved July 6, 1978.**


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Same as Model AS-350C except for more powerful LTS 101 600A2 engine.

Engine.

## 1. Lycoming LTS 101-600A-2

- Normal Fuels: Kerosene; MIL-T-5624 (JP5); ASTM D1655 Jet A and A1
- Wide Cut: MIL-T-5624 (JP4); ASTM D1655 Jet B
- Emergency Fuel:
- Automotive Diesel Fuel: ASTM D975 (N° 2D) of lighter.
- Synthetic oil (5 Cst) MIL.L.23699
- Synthetic oil (3 Cst) MIL.L.7808

Mixing of these oils is not permitted.

Engine Limits.

- Power Ratings (Sea Level , ISA)
 

Takeoff (5 min.)	615 shp.
Max. Continuous	590 shp.
- Gas Generator Speeds
 

Takeoff (5 mn)	49,638 rpm
Max. Continuous	49,159 rpm
Transient	50,548 rpm
- Exhaust Gas Temperature (T4)
 

Takeoff	771°C
Max. Continuous	760°C
Transient Max. *	843°C
Starting Max. *	899°C

\* Time limit 12 seconds above 818°C

Transmission Limits.

	<u>TORQUE</u>	<u>SHP</u>	<u>KW</u>
Maximum takeoff power (5 min)	101%	531	396
Maximum Continuous	101%	531	396

Helicopter Limits.

- Torque : Same as transmission limits
- Other Limits : Same as engine limits except for:

    Max. continuous gas generator speed 48,930 r.p.m. (102.2%)  
 Max. continuous gas temperature 744°C

Maximum Weight.

4300 lb (See NOTE 6).

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**III. Model AS-350D1 "ASTAR" (Normal Category) Helicopter, approved August 4, 1978.**


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Same as Model AS 350D except for maximum weight.

Maximum Weight. 4000 lb (See NOTE 5)

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**IV. Model AS-350B "ECUREUIL" (Normal Category) Helicopter, approved November 9, 1978.**


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Engine. 1 TURBOMECA Arriel 1B

Fuel.

- Normal Fuels: Kerosene; MIL-T-83133; ASTM D1655 Jet A1, Jet A
- Wide Cut (JP4), MIL-T-5624; ASTM D1655 Jet B
- High flash point (JP 5); MIL-T-5624
- Emergency Fuel See NOTE

Oil.

- Synthetic oil (5 Cst) MIL.L.23699
- Synthetic oil (3 Cst) MIL.L.7808
- Synthetic oil (3 Cst)
- Synthetic oil (3.9 Cst) Aeroshell Turbine Oil 390

Mixing of these oils is not permitted.

Engine Limits.

- Power Ratings (Sea Level, ISA)
  - Takeoff (5 min) 641 shp.
  - Max. Continuous 590 shp.
- Gas Generator Speeds (Sea Level), ISA
  - Takeoff 51,800 rpm (100%)
  - Max. Continuous 50,750 rpm ( 98%)
  - Transient 54,400 rpm (105%)
- Engine Gear Box Limitations
  - Max. torque stabilized 109% (100% corresponds to 641 shp at 6,000 rpm power shaft speed)
- Exhaust Gas Temperature (T4)
  - Takeoff 810°C
  - Max. Continuous 775°C
  - Starting max. 840°C

<u>Transmission Limits.</u>		<u>TORQUE</u>	<u>SHp</u>	<u>KW</u>
Maximum takeoff power (5 min)		83%	531	396
Maximum continuous		83%	531	396

<u>Helicopter Limits.</u>	Maximum takeoff (5 min)	83%	531	396
	Maximum continuous	83%	531	396

Maximum Weight. 4300 lb (see NOTE 6)

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**V. Model AS 350B1 "ECUREUIL" (Normal Category) Helicopter, approved February 13, 1987.**


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Similar to AS 350B except Turbomeca Arriel 1D engine, main and tail rotors as AS 355F1, maximum weight, other changes.

Engine. 1 TURBOMECA ARRIEL 1D.

Fuel. Refer to Flight Manual AS 350B1 for approved and additive specification.

Oil. Refer to Flight Manual AS 350B1 for approved and additive specification.

Engine Limits.

- Power Ratings (Sea Level, ISA)
  - Takeoff (5 min) 684 shp.
  - Max. Continuous 603 shp.
- Gas Generator Speeds (Sea Level, ISA)
  - Takeoff 52,215 (100.8%)
  - Max. Continuous 50,764 ( 98%)
  - Transient 54,650 (105.5%)
- Engine Gear Box Limitations
  - Max. torque stabilized 109.2% (100% corresponds to 641 shp at 6000 rpm power shaft speed)
- Exhaust Gas Temperature (T4)
  - Takeoff 845°C
  - Max. Continuous 795°C
  - Starting Max. 865°C

Helicopter Limits.

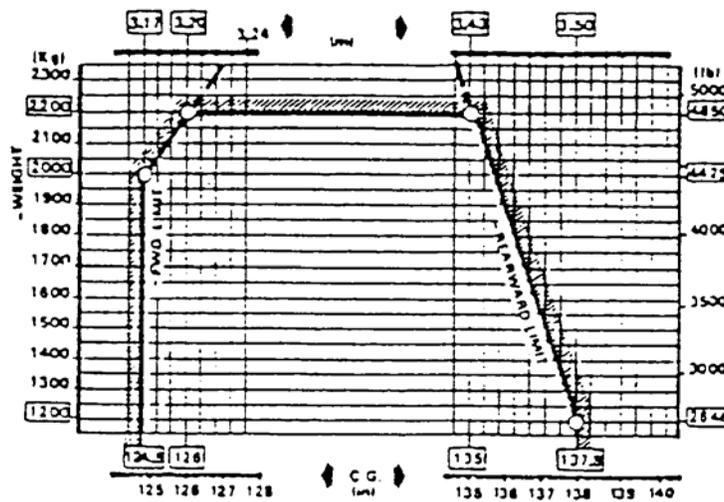
	<u>TORQUE</u>	<u>KW</u>
Maximum torque = IAS 40 knots or higher	94%	450
IAS below 40 knots 100%	478	

Maximum Weight.

4850 lb (See NOTE 6)

C.G. Range.

Longitudinal



Lateral

Right 5.51 in  
Left 7.08 in

Rotor Speeds.

In autorotation

Maximum 430 rpm  
Minimum 320 rpm

In power-on flight

390 + 4 rpm  
- 5 rpm

Rotor Low Speed Warning.

Aural at 360 rpm.

Airspeed Limits. Never exceed speed  $V_{NE}$  power on:  
155 Kt at Zero pressure altitude

Never exceed speed  $V_{NE}$  power-off:  
125 Kt at Zero pressure altitude  
See Rotorcraft Flight Manual for decrease of these values with altitude and temperature.

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VI. Model AS 350B2 "ECUREUIL" (Normal Category) Helicopter, approved June 8, 1990.

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Similar as to AS350B1 except Turbomeca ARRIEL 1D1 engine, maximum weight, other changes.

Engine. 1 TURBOMECA ARRIEL 1D1

Fuel. Refer to Flight Manual AS 350B2 for approved and additive specification.

Oil. Refer to Flight Manual AS 350B2 for approved and additive specification.

Engine Limits.

- Power Ratings (Sea Level, ISA)
 

Takeoff (5 min)	712 shp.
Max. Continuous	625 shp.
- Gas Generator Speeds (Sea Level, ISA)
 

Takeoff	52,784	(101.9%)
Max. Continuous	50,764	( 98%)
Transient	54,650	(105.5%)
- Engine Gear Box Limitations  
Max. torque stabilized 109.2% (100% corresponds to 641 shp at 6000 rpm power shaft speed)
- Exhaust Gas Temperature (T4)
 

Takeoff	845°C
Max. Continuous	795°C
Starting Max.	865°C

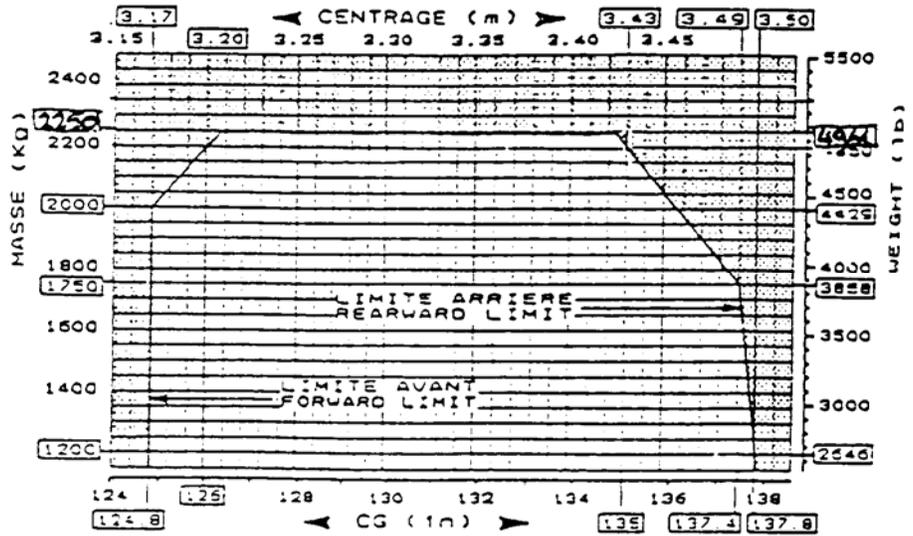
Helicopter Limits.

	<u>TORQUE</u>	<u>SHP</u>
Maximum torque = IAS 40 knots or higher	94%	
IAS below 40 knots 100%		641

Maximum Weight. 4961 lb (See NOTE 6)

C.G. Range.

Longitudinal



Lateral

Right 5.51 in  
 Left 7.08 in

Rotor Speeds.

In autorotation

Maximum 430 rpm  
 Minimum 320 rpm

In Power-on flight

390 + 4 rpm  
 - 5 rpm

Rotor Speed Warning.

Aural at 360 rpm and 410 rpm

Airspeed Limits.

Never exceed speed  $V_{NE}$  power on:  
 155 Kt at zero pressure altitude

Never exceed speed  $V_{NE}$  power off:  
 125 Kt at zero pressure altitude

See Rotorcraft Flight Manual for decrease of these values with altitude and temperature.

VII. Model AS 350BA "ECUREUIL" (Normal Category) Helicopter, approved March 11, 1992.

Same as Model AS 350B except for 355 type main rotor blades.

Other Changes.

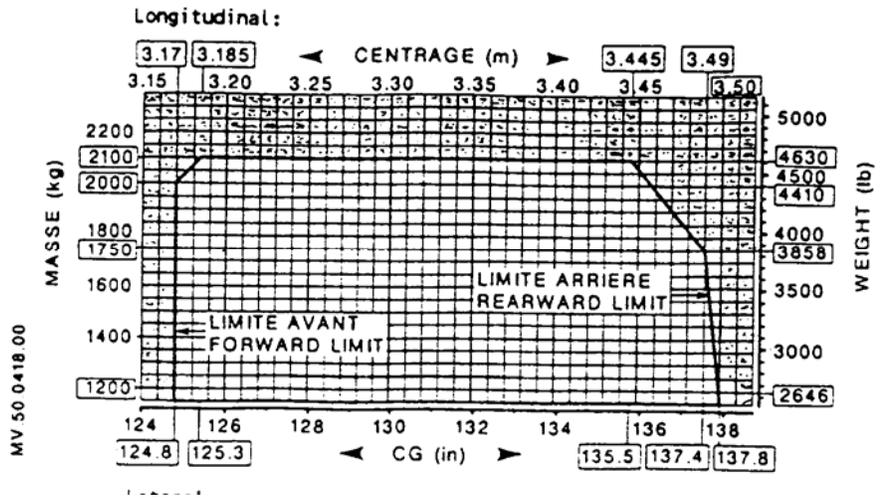
Helicopter Limits	Vi (I.A.S.)	Torque	Kw	RPM
Maximum torque limit	<40 Kt	88%		
Maximum continuous torque	>40 Kt	83%	396	386
Reference		100%	478	386

Maximum Weight.

4630 lb (See NOTE 6).

C.G. Range.

Longitudinal



Lateral:

Right Limit: 5.51 in.  
 Left Limit: 7.08 in.

Rotor Speeds.

The same as 350B1.

Rotor Low Speed Warning.

The same as AS350B1.

Airspeed Limits.

The same as AS350B1. See Rotorcraft Flight Manual for decrease of the values with altitude and temperature.

Versions 350B, C, D and D1 Common Particulars

Rotor Speeds.

In Autorotation  
 Maximum 424 rpm  
 Minimum 320 rpm

In power-on Flight  
 385 + 1 rpm  
 - 5 rpm

Rotor Low-Speed Warning.

Aural at - 335 rpm (See NOTE 8)

Airspeed Limits.

Never-exceed-speed: 147 kt from S.L. to 1000 feet, then decreasing with altitude 3.5 kt for each 1000 feet density altitude above 1000 feet. For operations below -30°C ambient temperature, decrease above V<sub>NE</sub> schedule by 10 kts.

C.G. Range.

Fwd Limit  
Longitudinal

124.8 in.

Aft Limit

139.7 in. to 2,865 lb.  
 135.0 in. to 4,190 lb.  
 Linear variation between points shown.  
 135.0 in. from 4,190 lb. to 4,300 lb.

Lateral

Right 3.14 in.  
 Left 5.90 in.



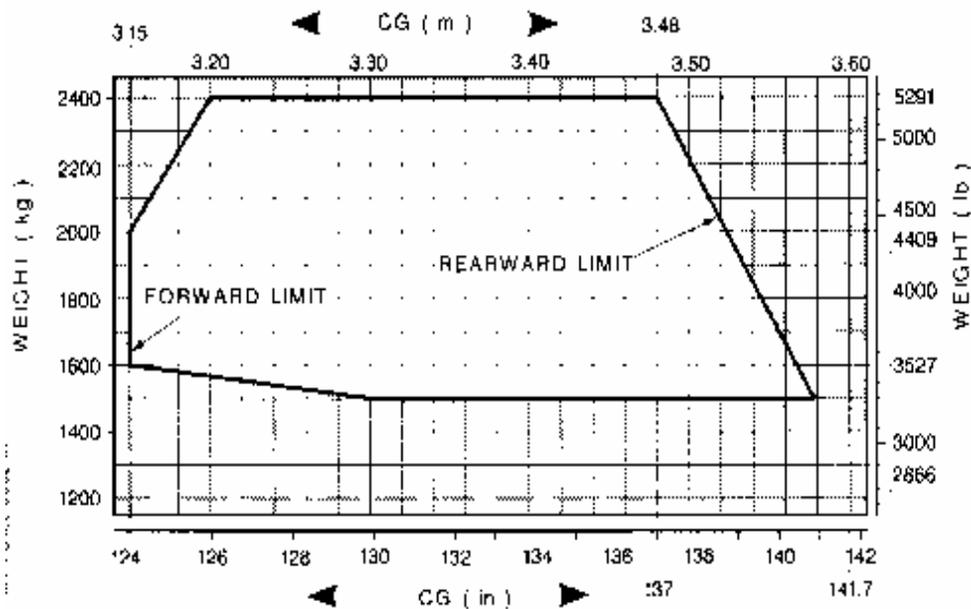
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**IX. Model EC 130 B4 (Normal Category) Helicopter, approved December 21, 2000.**


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Similar as to AS350B3 except a gross weight increase to 2400 kg, enlarged fuselage structure utilizing some standard EC 120B components, and an EC 135 type fenestron anti-torque system.

<u>Engine</u>	1 TURBOMECA ARRIEL 2B1																		
<u>Fuel</u>	Refer to Flight Manual EC 130B4 for approved fuels and additive specification.																		
<u>Oil</u>	Refer to Flight Manual EC 130B4 for approved oils and additive specification.																		
<u>Engine Limits</u>	<p>- Power Ratings (Sea Level, ISA)</p> <table> <tr> <td>Takeoff (5 min)</td> <td>747 shp.</td> </tr> <tr> <td>Max. Continuous</td> <td>728 shp.</td> </tr> </table> <p>- Gas Generator Speeds (Sea Level, ISA)</p> <table> <tr> <td>Takeoff</td> <td>101.1%</td> </tr> <tr> <td>Max. Continuous</td> <td>97.1%</td> </tr> <tr> <td>Maximum transient</td> <td>102.3%</td> </tr> </table> <p>(note 100%= 52110 RPM)</p> <p>- Engine Gear Box Limitations Refer to Engine TCDS E00054EN</p> <p>- Exhaust Gas Temperature (T4)</p> <table> <tr> <td>Takeoff (5 min.)</td> <td>915°C</td> </tr> <tr> <td>Max. Continuous</td> <td>849°C</td> </tr> <tr> <td>Starting transient (10 sec)</td> <td>865°C</td> </tr> <tr> <td>Continuous starting</td> <td>750°C</td> </tr> </table>	Takeoff (5 min)	747 shp.	Max. Continuous	728 shp.	Takeoff	101.1%	Max. Continuous	97.1%	Maximum transient	102.3%	Takeoff (5 min.)	915°C	Max. Continuous	849°C	Starting transient (10 sec)	865°C	Continuous starting	750°C
Takeoff (5 min)	747 shp.																		
Max. Continuous	728 shp.																		
Takeoff	101.1%																		
Max. Continuous	97.1%																		
Maximum transient	102.3%																		
Takeoff (5 min.)	915°C																		
Max. Continuous	849°C																		
Starting transient (10 sec)	865°C																		
Continuous starting	750°C																		
<u>Transmission Limits</u>	<p>Maximum takeoff torque – 100%</p> <p>Maximum continuous torque – 92.7%</p> <p>Maximum Transient (5 second) – 104%</p> <p>(100% based on 536 Kw at 6000 engine RPM and 386 main rotor RPM)</p>																		
<u>Maximum Weight</u>	2400 Kg (5291 lbs)																		
<u>Minimum Crew</u>	1 pilot in left or right seat																		
<u>Maximum Passengers</u>	6 (2 in front, four in rear)																		
<u>Maximum Baggage.</u>	<p>Right Baggage Compartment : 287 lb. (max distribution 62.5 lb/sq ft)</p> <p>Left Baggage Compartment : 342 lb. (max distribution 62.5 lb/sq ft)</p> <p>Rear Baggage Compartment : 176 lb. (max distribution 30 lb/sq ft)</p> <p>Main Cabin (on rear floor) : 1091 lb. (max distribution 62.5 lb/sq ft)</p> <p>(on LH fwd floor) : 893 lb. (max distribution 62.5 lb/sq ft)</p>																		
<u>Fuel Capacity.</u>	<p>Total : 142.7 U.S. Gallons</p> <p>Usable : 142.3 U.S. Gallons</p>																		
<u>Oil Capacity.</u>	<p>Engine Tank Max. 1.64 U.S. Gallons</p> <p>MGB Max. 1.93 U.S. Gallons (includes filter)</p> <p>TGB Max. 0.13 U.S. Gallons</p>																		
<u>Rotor Blades and Control Movements.</u>	For rigging information, refer to the EC 130B4 Maintenance Manual.																		

C.G. RangeLongitudinalLateral

Right 0.10 m  
Left 0.10 m

Datum

Longitudinal - 3.4 m (133.8 in) forward of main rotor head  
Lateral - Symmetrical plane of the aircraft

Leveling Means

Mechanical floor

Rotor Speeds

In autorotation  
Maximum 430 rpm  
Minimum 320 rpm

In Power-on flight  
375 to 405 RPM

Rotor Speed Warning

Aural at 360 rpm and 410 rpm

Airspeed Limits

Never exceed speed  $V_{NE}$  power on:  
155 Kt at sea level

Never exceed speed  $V_{NE}$  power off:  
125 Kt at sea level  
See Rotorcraft Flight Manual for decrease of these values with altitude and temperature.

Maximum Altitude

23,000 feet pressure altitude

Serial Numbers

S/N's 3358 and subsequent

DATA PERTINENT TO ALL MODELS EXCEPT EC 130B4

<u>Empty Weight CG Range.</u>	None
<u>Datum.</u>	Longitudinal : 133.8 in. forward of main rotor hub center. Lateral : Vertical plane passing longitudinally through main rotor hub center.
<u>Leveling Means.</u>	Transmission support platform
<u>Minimum Crew.</u>	1 pilot at 60.62 in. 350BA included.
<u>Maximum Passengers.</u>	(5) 4 at 98.42 in. 350BA included. 1 at 60.62 in.
<u>Maximum Baggage.</u>	Right Baggage Compartment : 220 lb. at 125.98 in. 350BA included Left Baggage Compartment : 264 lb. at 125.98 in. “ Rear Baggage Compartment : 176 lb. at 181.10 in. “ Main Cabin (on rear : 682 lb. at 88.58 in. “ (on LH fwd. : 330 lb. at 61.02 in. “
<u>Fuel Capacity.</u>	Total : 143 U.S. Gallons at 136.8 in. Usable : 142.67 U.S. Gallons at 136.8 in. (post AMS 07.0289) For 350BA version AMS 07.0289 is applied. (See NOTE 1 for data on unusable fuel)
<u>Oil Capacity.</u>	Engine Tank Max. 1.37 U.S. Gallons at 144.76 in. for AS 350B, AS350BA and AS 350B1 1.00 U.S. Gallons at 144.76 in. for other models (See NOTE 1 for data on undrainable oil) MGB Max. 1.72 U.S. Gallons at 134.4 in. TGB Max. 0/08 U.S. Gallons at 379.5 in.
<u>Rotor Blades and Control Movements.</u>	For rigging information, refer to the appropriate AS-350 Maintenance Manual.
<u>Production Basis:</u>	Production Certificate No. <b>343CE</b> . The manufacturer (American Eurocopter) is authorized to issue airworthiness certificates under 14 CFR 21.183 (a). NOTE: These models listed on the American Eurocopter Production Limitation Record are being produced under Licensing Agreement between Eurocopter of France and American Eurocopter, Columbus, Mississippi, dated March 2005.
<u>Serial Numbers Eligible.</u>	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.  For rotorcraft produced by American Eurocopter in Columbus, Mississippi: Model AS350B2 S/N 3951 and subsequent, and Model AS350B3 S/N 3995 and subsequent.
<u>Certification Basis.</u>	FAR 21.29 and FAR 27 effective February 1, 1965 plus Amendments 27-1 through 27-10, plus FAA Special Conditions No. 27-79-EU-23, dated August 13, 1977.  Equivalent safety, in lieu of direct compliance, found with respect to FAR 27.1189, Shutoff Means. Equivalent Safety, in lieu of direct compliance, found with respect to FAR 27.923(b), Rotor drive system and control mechanism test for Model AS-350B1.

FAA Special Condition No. 27-001-SC for FADEC HIRF and Equivalent level of Safety found with respect to FAR 27.1549(b) for the Model AS350B3.

Type Certificate No. H9EU.

Date of application for Type Certificate: April 6, 1976.

EC 130B4 Certification Basis

FAR Part 21.29 and FAR Part 27 Amendment 27-1 through Amendment 27-32 except FAR 27.952 is not adopted.

FAR 36 Appendix H through Amendment 20

Special Condition 27-009-SC for HIRF

Equivalent Level of Safety Findings

- FAR 27.1549(b) Powerplant Instrument Markings
- FAR 27.1027(b)(2) Main Gearbox Oil Filter Bypass

The French Direction Generale de l'Aviation Civile (DGAC) originally type certificated this rotorcraft under its type certificate TC 84. The FAA validated this product under U.S. Type Certificate Number H9EU. 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 H9EU and to be in a condition for safe operation."

A U.S. Airworthiness Certificate may be issued on the basis of a certificate of airworthiness for export signed by a representative of the Centro Tecnico Aeroespacial (CTA), the Brazilian civil airworthiness authority which states in the English language:

"The helicopter covered by this certificate has been examined, tested, and found to conform to the Type design approved under FAA Type Certificate No. H9EU and to be in a condition for safe operation"

Major modifications to the imported aircraft must be FAA approved. (See Notes 10 and 11)

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 . Eurocopter France Report No. 350A.04.4320 lists required and optional equipment for the helicopter.

In addition, the following equipment is required:

DGAC-approved Rotorcraft Flight Manual identified as Code B, approved as follows:

For Model AS-350B	: Approved November 9, 1978.
For Model AS-350C	: Approved December 21, 1977, including Rev. No. 2 approved December 8, 1978.
For Model AS-350D	: Approved July 5, 1978.
For Model AS-350D1	: Approved July 4, 1978.
For Model AS-350B1	: Approved February 11, 1987. Rev. 0 plus rush Rev. 1A and 1B and specific pages marked B or later approved revisions.
For Model AS-350B2	: Approved June 8, 1990 - Rev. 0 plus Rev. 1 plus Sup 0 Rev. 2
For Model AS-350BA	: Approved March 11, 1992.
For Model AS-350B3	: Approved December 24, 1997 plus rapid Revision RR 1A for aircraft equipped with Arriel 2B engine or approved July 16, 2004 for aircraft equipped with Arriel 2B1 engine.
For Model EC 130B4	: Approved November 29, 2000 plus ITR 1A and ITR 1B dated May 17, 2001 (B code not applicable)

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 certificated empty weight and corresponding center of gravity location must include unusable fuel of 19.4 lb., at 136.8 in., and undrainable oil of 1.8 lb., at 171.0 in. For Models AS350B/C/D after embodiment of modification AMS 07.0289 and for Models AS350B1 and BA, the unusable fuel is 2.2 lb.
- 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 Weight and Balance Appendix for instructions.
- NOTE 2. All placards 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 AS-350 Maintenance Manual provided with each helicopter. Life-limited components and associated retirement times are presented in Chapter 5, Section CD 5.99, and must be replaced in accordance therewith.
- NOTE 4. For compliance with applicable powerplant ice protection requirements, the helicopter must be equipped during all operations with engine air inlet conforming with Eurocopter France Dwg. No. 350A58-1607 for AS 350B, B1, B2, B3 and BA and with Dwg. No. 350A58-1608 for all other models.
- NOTE 5. Except for difference in maximum certificated empty weight, the model AS 350D and AS 350D1 are identical to each other.
- NOTE 6. A. When operating at maximum weights above, 4,190 pounds DGAC-approved Rotorcraft Flight Manuals, identified as Code B, approved as follows, are required:
- 1) for Model AS-350B: Issue 1, amendment 3, approved May 10, 1979.
  - 2) for Model AS-350C: Issue 1, amendment 4, approved May 10, 1979.
  - 3) for Model AS-350D: Issue 1, amendment 1, approved May 10, 1979.
- B. For models AS-350B, AS-350C, AS-350D for cargo sling or cargo swing operations the maximum weight, including the external load, may be 4,630 pounds provided:
- 1) at least 330 pounds of the external load are releasable, and
  - 2) the rotorcraft is operated in accordance with the appropriate Rotorcraft Flight Manual in part A of this note and,
    - a) Eurocopter France Supplement No. 2 to that DGAC-approved Manual, dated May 10, 1979 for the cargo sling or,
    - b) Eurocopter France Supplement 2A to that DGAC-approved Manual, dated May 18, 1979 for the cargo swing.
- C. For AS 350B1 model for cargo sling or cargo swing operations the maximum weight including the external load, may be 5,402 pounds provided:
- 1) at least 552 pounds of the external load are releasable, and
  - 2) the rotorcraft is operated in accordance with the appropriate RFM and
    - a) Eurocopter France supplement 10-1 to that DGAC approved Manual, dated January 9, 1986 for the cargo swing or
    - b) Eurocopter France supplement 10-2 to that DGAC approved Manual, dated January 9, 1986 for the cargo sling.

D. For AS 350B2 model for cargo sling or cargo swing operations the maximum weight including the external load, may be 5,512 pounds provided:

- 1) at least 551 pounds of the external load are releasable, and
- 2) the rotorcraft is operated in accordance with the appropriate RFM and
  - a) Eurocopter France supplement 11 to that DGAC-approved Manual, dated April 26, 1989 for the cargo swing or,
  - b) Eurocopter France supplement 12 to that DGAC approved Manual, dated April 26, 1989 for the cargo sling.

E. For AS 350BA model for cargo sling or cargo swing operations the maximum weight including the external load may be 4961 lb.

- 1) at least 331 pounds of the external load are releasable and
- 2) the rotorcraft is operated in accordance with the appropriate RFM and
  - a) Eurocopter France supplement 11 to that DGAC approved Manual, dated November 26, 1991 for the cargo swing or
  - b) Eurocopter France supplement 12 to that DGAC approved Manual, dated November 26, 1991 for the cargo sling.

F. For AS 350B3 model for cargo sling or cargo swing operations the maximum weight including the external load may be 6173 lb.

- 1) at least 1212 pounds of the external load are releasable and
- 2) the rotorcraft is operated in accordance with the appropriate RFM and
  - a) Eurocopter France supplement 11 to that DGAC approved Manual, dated December 24, 1997 for the cargo swing or
  - b) Eurocopter France supplement 12 to that DGAC approved Manual, dated December 24, 1997 for the cargo sling.
  - c) Eurocopter France supplement 13 to that DGAC approved Manual, dated February 16, 1998 for the cargo swing.

NOTE 7.

Emergency fuels:

- A. Use of aviation gasoline MIL-G-5572, Grade 80/87; Grade 110/130 and Grade 115/145 is limited to 25 hours maximum within one overhaul period and should have 2% mineral lubricating oil added, if possible. In addition the use of Grade 115/145 is limited operations below 1500 feet pressure altitude.
- C. Use of automotive gasoline MIL-G-3056 is limited to a fuel temperature up to 30°C.

NOTE 8.

For AS 350B, the aural warning sounds when the rotor speed drops below:

335 rpm before embodiment of modification AMS 07.1891

360 rpm before embodiment of modification ASM 07.1891

For AS350BA, AMS 07.1891 is applied.

NOTE 9.

The model AS350B3 and EC 130B4 rotorcraft employs electronic engine controls, commonly named Full authority Digital Engine Controls (FADEC) and is recognized to be more susceptible to Electromagnetic Interference (EMI) than rotorcraft that have only manual (non-electronic) controls. (EMI may be the result of radiated or conducted interference.) For this reason modifications that add or change systems that have the potential for EMI, must either be qualified to a standard acceptable to the FAA or tested at the time of installation for interference to the FADEC. This type of testing must employ the particular FADEC's diagnostic techniques and external diagnostic techniques. The test procedure must be FAA approved.

## Note 10

Helibras (Brazil) has signed with Eurocopter (France) a technical cooperation agreement contract to manufacture in Brazil the AS 350 BA, AS 350 B2 and AS 350 B3 models using kits produced by Eurocopter, in conformity to the DGAC France approved Type design. Helibras helicopters are produced under the Helibras Production Certificate, assembled and tested in accordance with procedures approved under the French Type design by Eurocopter and accepted by the Centro Tecnico Aeroespacial (CTA) under the terms and conditions of the Helibras Production Certificate.

Helicopter serial numbers produced by Helibras as the manufacturer are identified in Eurocopter document number L102 001, entitled "List of serial numbers of stage 2 helicopters produced by Helibras" referenced in both the French and the Brazilian Type Certificate Data Sheets (See Import Requirements).

## Note 11

Helicopters with a model prefix of "HB" as in "HB 350 B" are not eligible for airworthiness certification in the U.S.

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