



## Technical Data





#### SINGLE ENGINE

## ECUREUIL (Civil Version)

#### **TWIN ENGINE**



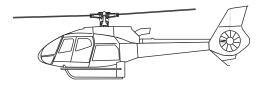
Ecureuil AS350 B2



Ecureuil AS350 B3



**Ecureuil AS355 NP** 



Ecureuil EC130 B4

# **FENNEC** (Military Version)



Multi purpose military version

Utility or armed aircraft

Fennec AS550 C3



Armed naval version torpedo

Fennec AS555 SN





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# Manufacturers notice

## Attention!

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This document cannot thus be taken as an offer or serve as an appendix to a contract without a prior check as to its validity and prior written agreement of EUROCOPTER.

The operational or certification regulations, as defined by the local authorities, can make compulsory the installation of some of the equipment and recommended solutions, listed in this document. This list does not claim to cover the whole of the worldwide operational requirements nor the equipment not specifically related to the helicopter (for example: life jacket) or necessary for particular missions (for example: supplemental oxygen). The operator is responsible for ascertaining with his local authorities that the planned configuration of the helicopter complies with regulatory requirements for the area(s) of operations and the type(s) of mission(s) considered.





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#### 1- Foreword



The single engine AS350 B2, powered with a TURBOMECA ARRIEL 1D1 engine of 732 shp (546 kW) has proven track record. Its flexibility and low acquisition cost has made it a very sought-after helicopter to perform a wide range of missions:

- Passenger transport,
- Aerial work,
- Training,
- Observation,
- Fire fighting,

The AS350 B2 moves today in harmony with the other members of the ECUREUIL family:

- It offers from now on a large instrument panel similar to the one of the AS350 B3, with the replacement of the dedicated indicators by the VEMD (Vehicle and Engine Multifunction Display), integrated instrumentation, which allows the pilot to see at a glance the main parameters of the vehicle and the engine, presented on a dual LCD screen and it delivers also audio warnings through the ICS, thus alleviating pilot's workload,
- It shares with the EC130 B4 a new technology of control panel installed in console and circuit-breakers replace the fuses.

Taking benefit since 2003 from the concept "Ready to fly" resulting from the last-born child of the family, the AS350 B2 can operate in flight VFR day and night in the majority of the countries and its capacity to download the data recorded by the VEMD enables him to comply with the European rules JAR OPS 3.

This aircraft is specially known for its passenger transport activity such as business and tourist flights. Its spacious and comfortable cabin can accommodate up to 7 passengers. Its wide cabin with panoramic view ensures optimum visibility for all the passengers and the crew. The AS350 B2 is also an excellent utility helicopter able to carry under-slung loads of more than 1 ton (2,200 lb). Thanks to its high useful load, it is well suited to all missions requiring various mission equipment for police, medical transport and/or utility operations. A single aircraft is able to complete various missions even in the same day thanks to its very short reconfiguration time (less than one hour).





#### 2- General Characteristics

## Lay-Out

- Passenger-transport
  - 1 pilot + 5 passengers in standard version
  - 1 pilot + 4 or 5 passengers in "comfort" version
  - 1 pilot + 6 passengers in "high density" version
- Casualty-evacuation
  - 1 pilot + 1 stretcher patient + 2 doctors
- Cargo carrying
  - 1 pilot + 3 m³ (105.9 ft³) load in cabin

## Weights

Note : Empty weight accuracy : within $\pm$ 2 %	kg	lb
<ul><li>Empty weight, standard aircraft (including engine oil and unusable fuel)</li></ul>	1,225 <b>1</b>	2,700
■ Useful load	1,025	2,260
■ Maximum all-up weight	2,250	4,960
■ Maximum cargo-swing load	1,160	2,557
<ul> <li>Maximum all-up weight in external load configuration</li> </ul>	2,500	5,512

## **Power plant**

#### 1 TURBOMECA ARRIEL 1D1 turbine engine

## **Engine ratings**

Thermodynamic Power, in standard atmosphere, at sea level:	kW	ch	shp
■ Take-off power	546	742	732
■ Maximum continuous power	466	634	625

## **Usable Fuel capacities**

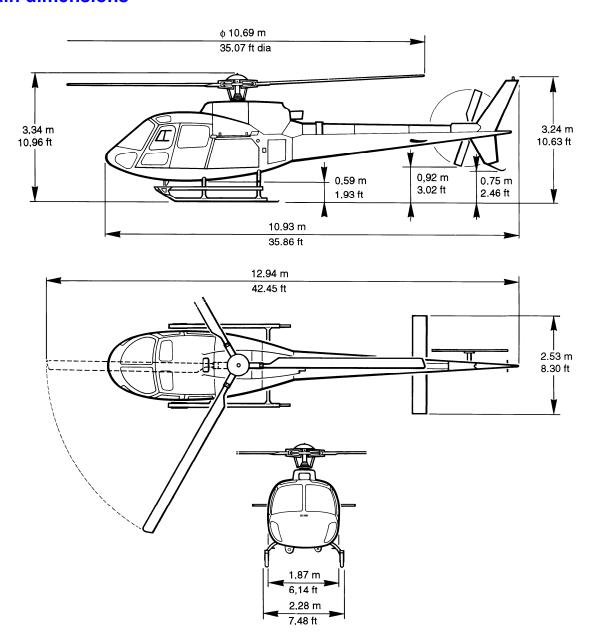
		litres	US gal.	kg	lb
•	Standard fuel tank	540	143	426	939
	Auxiliary fuel tank (option)	475	125	375	827

<sup>1</sup> Refer to pages 9 to 10 for features included in standard aircraft weight. Preliminary value, that may be modified after the analysis of a representative statistical sample.

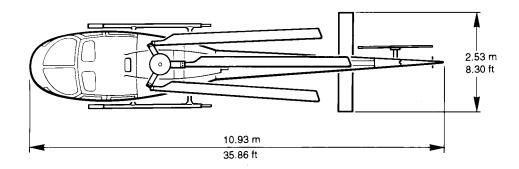




## **Main dimensions**



## **Dimensions with blades folded**







## **Configurations**



**Standard lay-out** 

Internal cargo load transport lay-out

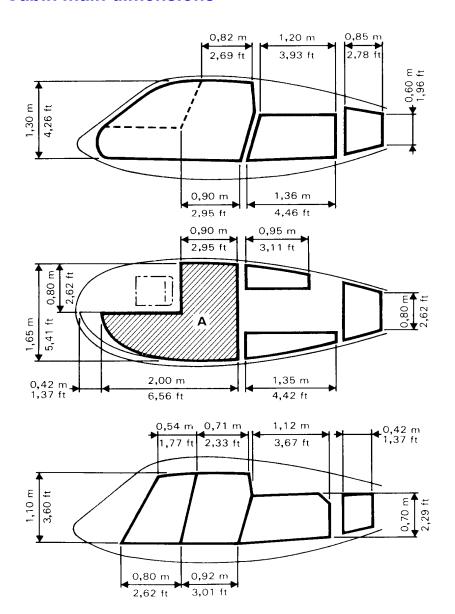






## **Dimensions of compartments and accesses**

#### **Cabin main dimensions**



CA	BIN
Surface <b>A</b>	2.60 m² 27.98 ft²
Volume	3.000 m³ 105.94 ft³

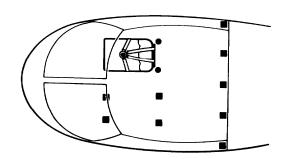
LH HOLD			
Surface	0.43 m² 4.62 ft²		
Volume	0.235 m³ 8.29 ft³		

RH H	IOLD
Surface	0.35 m² 3.76 ft²
Volume	0.200 m³ 7.06 ft³

REAR HOLD				
Surface	0.55 m²			
	5.92 ft²			
Volume	0.565 m³			
	19.95 ft³			

TOTAL HOLDS				
Surface	1.33 m² 14.3 ft²			
Volume	1.000 m³ 35.30 ft³			

#### **Cabin floor**



- Pilot's safety belt attachment and freight-tie-down rings
- Passenger safety belt or freight tie-down rings





#### Other characteristics

#### **TURBOMECA ARRIEL 1D1 turbine engine**



- 732 shp (546 kW) take-off power
- Mechanical governor
- Modular design
- Fully proven and reliable

#### STARFLEX ROTOR HEAD



- Extensive use of composite material
- Corrosion immunity
- Impact resistance
- Easier servicing
- "On condition" maintenance

#### **VEMD**

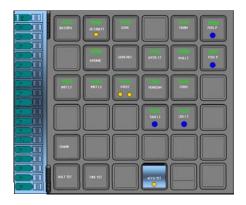


- Full color LCD display
- Duplex equipment
- Self monitoring at one glance
- First Limitation Indication (FLI) with aural warning
- Mission parameters calculation
- Engine cycle counting
- Fuel flow and estimated remaining time to fly (option)
- Maintenance functions, including capability of data downloading (softwares and connection wire available as option).



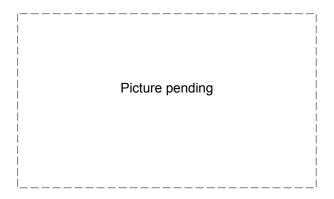


#### Control panel and circuit-breakers panel



- New control panel on the console
- Redesign of the functions and positions of the control buttons
- New technology of the control button (similar to the *ECUREUIL EC130 B4*)
- Replacement of the fuses by circuit-breakers

#### **Enlarged instrument panel**



- The instrument panel is enlarged while placing the VEMD in a central position and presents a layout in harmony with the ECUREUIL AS350 B3.
- A wider space is then made available for customisations and for the later installation of specific mission equipments.

#### Versatility enhancement

Since year 2001, *EUROCOPTER* leads a policy of enhancement of the standard definition of the helicopter *ECUREUIL* in order to improve its versatility.

A first stage was to equip the *ECUREUIL* single-engined aircraft with general equipment and capabilities for mission equipment, most usually selected by the operators.

The second stage was an extension of the "Ready to fly" concept of the last-born child of the family the *EC130 B4* to the whole of the *ECUREUIL* single-engined aircraft in 2003. The result is that, a helicopter in standard definition can operate in flight VFR day and night in the majority of the countries.

The set of instruments and radiocommunication / radionavigation equipment is thus integrated in the standard definition since 2003 is :

- 1 Gyro-horizon
- 1 Gyro-directional
- 1 Turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 Course Deviation Indicator
- 1 VHF/VOR/LOC/GS/GPS
- 1 Transponder (mode A+C)
- 1 Altitude encoder
- 1 ELT (2 frequencies)
- 1 ICS + passenger interphone





#### 3- AS350 B2 ECUREUIL - Standard Aircraft Definition

The helicopter in the definition, presented hereafter, meets the certification standards for day and night VFR operations, set by the following airworthiness authorities: EASA, FAA, TC. This list is not restrictive and the status of approval by other airworthiness authorities must be checked. Additional equipment item may be required by the relevant operational regulation (most of them are available in catalogue).

#### **GENERAL**

- Fuselage comprising the cabin and 3 luggage holds, with floor, tie-down nets and access doors
- Tail boom with stabilizer, anti-torque rotor and fin
- High skid landing gear capable of taking handling wheels with long footsteps (on right side and on left side)
- Lifting points
- Upper mooring fixtures
- Structural reinforcements for wire strike protection system
- Interior signs and markings: available in either French or English, any other language on request
- Capabilities for :
  - LH landing-light (swivelling in elevation and azimuth)
  - cargo swing
  - 2<sup>nd</sup> battery kit
  - hourmeter
  - electric external mirror
  - electrical hoist
  - front energy-absorbing seats
- External paint: fuselage according to standard paint schemes.
   Unless modified by optional item, the main rotor head cover and the skid landing gear are painted in grey.
- Internal paint : grey

#### **CABIN**

- Cabin floor in light-alloy sheet-metal with tie-down rings
- 2 pilot and copilot high-back seats, adjustable in reach, removable, complete with cushions, safety belts and dual-strap shoulder harnesses
- 2 two-place rear bench-seats, foldable separately, complete with cushions, safety belts and single-strap shoulder harnesses
- 2 pilot and copilot jettisonable doors each fitted with a sliding window and with improved side-visibility window
- Rear right door-extension for passengers and cargo
- 1 rear left sliding door

- 2 tinted upper panes
- 1 double-wall ceiling housing the ventilation and air conditioning ducts
- Fixed parts for pilot and copilot windshield wipers
- 1 pilot map case
- Demisting system for pilot and copilot front panes
- Cabin heating
- 1 fire-extinguisher
- Flight Manual
- Interior harmony according to design in force

#### INSTRUMENTS

- Instruments units : available in either metric or English units
- Enlarged instrument panel
- 1 airspeed indicator
- 1 altimeter
- 1 rate-of-climb indicator
- 1 rotor and free turbine tachometer dual indicator
- 1 clock
- 1 warning panel
- 1 magnetic compass
- 1 heated pitot head
- 1 I.C.S. connection to audio warning issued from VEMD®
- Capabilities for VEMD<sup>®</sup> data download (including maintenance plug)
- 1 LCD Dual screen Vehicle and Engine Multifunction Display (VEMD®) providing the following information:
  - First limitation indicator (FLI)
    - ♦ torquemeter
    - exhaust gas temperature (T4)
    - gas generator tachometer (Ng, delta Ng)
  - Engine oil temperature/pressure
  - Fuel quantity
  - Fuel flow and estimated remaining time to fly (option)
  - Ammeter and voltmeter
  - Outside Air Temperature (OAT)
  - Enhanced usage monitoring functions
    - ♦ IGE/OGE performance calculations
    - engine cycles counting
    - overlimits display
  - VEMD<sup>®</sup> and peripheral maintenance information





#### **AVIONICS**

- 1 Avionics master switch
- 1 Gyro-horizon
- 1 Gvro-directional
- 1 Turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 Course deviation indicator

- 1 VHF/VOR/LOC/GS/GPS
- 1 Transponder (mode A+C)
- 1 Altitude encoder
- 1 Emergency locator transmitter (2 frequencies)
- 1 ICS + passenger interphone

#### **POWER PLANT**

- 1 Turboméca ARRIEL 1D1 546 kW (742 ch 732 shp) turbine engine complete with starting, fuel supply and governing systems, and fitted with a magnetic plug and a chip detector
- 1 fuel system including 1 tank of 540 litres (143 US gal.) total capacity
- 1 engine lubrication and oil cooling system
- 1 fire detection system
- 1 air-intake screen
- 1 torque-measurement pick-up
- Capabilities for sand-filter

#### TRANSMISSION SYSTEM

- 1 main gearbox, anti-vibration mounted, with oil sight gauge, chip detector, oil temperature and pressure switches, port for endoscope and self-sealing valve for oil sampling and draining
- 1 main gearbox oil cooling system
- 1 engine to main gearbox coupling shaft
- 1 rotor brake

- 1 main rotor r.p.m. sensor and high and low r.p.m warning device
- 1 tail drive carried by five anti-friction bearings
- 1 tail gearbox with oil sight gauge, chip detector and port for endoscopic inspection

#### **ROTORS AND FLYING CONTROLS**

- 1 main rotor with 3 composite-material blades around a STARFLEX® head fitted with spherical thrust bearings
- 1 anti-torque rotor with 2 composite-material blades
- 3 main rotor hydraulic servo units
- 1 tail rotor hydraulic servo unit and a load compensator

#### **ELECTRICAL INSTALLATION**

- One 150 A, 28 V DC starter-generator APC
- One 15 A.h cadmium-nickel battery
- 1 ground power receptacle
- 3 position lights
- 1 flashing anti-collision light

- 2 fixed landing light
- 2 cabin dome lights
- 1 instrument-panel lighting system
- 1 control panel with circuit-breakers panel
- One 28 V DC cabin power outlet

#### **AIRBORNE KIT (\*)**

- 1 pitot head cover
- 2 static port stoppers
- 1 engine air-intake blanking cover
- 1 tail-pipe plug
- 2 ground handling bogies c/w hydraulic jacking system
- 1 GHW modification kit

- 1 lifting ring
- 2 upper mooring rings
- 3 main-blade socks
- 1 tail rotor locking device
- 1 document holder
- 1 airborne kit stowage bag

(\*) (weight not included in standard aircraft empty weight)





## 4- Optional equipment

Symbol A shown beside an item denotes some constraint (see table on page 21)

Note: value of the weight breakdown is given for information and shall not be considered as contractual.

#### **General equipment**

	Document reference	Commercial reference	Name	kg	lb
Â	05-02004-A	05-02004-00-CI	Extra-charge for customized external paint - level 1 1 - 2	4.0	8.8
A	05-02005-A	05-02005-00-CI	Extra charge for customized external paint - level 2 1 - 3	4.0	8.8
<u> </u>	05-02006-A	05-02006-00-CI	Extra-charge for customized external paint, apart from levels 1 and 2 1 - 4	On re	quest
	05-21003-A	05-21003-00-CI	Wire strike protection 5	7.0	15.4
	05-23003-A	05-23003-00-CI	Engine flushing device without removal of cowlings	8.0	1.8
	05-24003-A	05-24003-00-CI	High visibility main rotor blades	0.1	0.2
A	05-24004-A	05-24004-00-CI	Tail rotor arch	1.5	3.3
	05-25003-B	05-25003-01-CI	Sand prevention filter, dynamic type 6 - 7	7.0	15.4
	05-25006-A	05-25006-00-CI	Re-inforced sand-erosion protection strip on main rotor blades	0.2	0.4
	05-25007-A	05-25007-00-CI	Re-inforced sand-erosion protection strip on tail rotor blades	0.1	0.2
	05-31003-A	05-31003-00-CI	Tinted window for standard and optional configuration	0.0	0.0
	05-31004-A	05-31004-01-CI	Bulged window on copilot front door (LH side) 8	-0.5	-1.1
	05-31004-A	05-31004-02-CI	Bulged window on right rear door	0.1	0.2
	05-31004-A	05-31004-03-CI	Bulged window on left rear door	0.1	0.2
	05-31007-A	05-31007-00-CI	Large cabin floor window (right side) 9	3.0	6.6
	05-32001-A	05-32001-00-CI	Pilot's windshield wiper	2.6	5.7
Δ	05-32003-A	05-32003-00-CI	Copilot's windshield wiper	2.6	5.7

The data set forth in this document are general in nature and for information purposes only.

<sup>1</sup> The paint scheme must be approved at the latest 3 months before the delivery of the helicopter.

Paint scheme comprising a basic shade and 2 or 3 additional shades, with straight separation lines, apart from standard paint schemes.

<sup>3</sup> Paint scheme comprising a basic shade and up to 3 additional shades, with separation lines not straight or tangled up, with graduated shades or complicated emblem or logo to be hand-painted.

Sophisticated paint scheme with numerous shades, complex graduated shades, or complicated emblem or logo.

Structural reinforcements are included in standard aircraft.

<sup>6</sup> Capabilities included in standard aircraft.

<sup>7</sup> The sand-prevention filter lifts the flight limitations in falling snow conditions.

<sup>8</sup> Removes the sliding window on copilot front door.

<sup>9</sup> Removes the standard pilot map case.





#### **General equipment (continued)**

	Document reference	Commercial reference	Name	kg	lb
Â	05-37007-A	05-37007-00-CI	Dual controls	2.2	4.9
⚠	05-37012-A	05-37012-00-CI	On floor control quadrant protection	On re	equest
Â	05-37014-A	05-37014-00-CI	Fuel flow twist grip on the pilot and copilot sticks	6.5	14.3
A	05-42002-A	05-42002-00-CI	Air conditioning system 1	61.3	135.1
	05-61007-A	05-61007-01-CI	2nd battery kit 2	17.0	37.5
	05-62001-A	05-62001-00-CI	250 VA AC generation system	4.3	9.5
	05-63005-A	05-63005-01-CI	Thales Avionics starter-generator instead of APC standard one	-0.6	-1.3
Â	05-70001-A	05-70001-01-CI	Hydraulic ground power receptacle	1.5	3.3
	05-72001-A	05-72001-00-CI	Power take-off on MGB 3	2.5	5.5
	05-82016-A	05-82016-00-CI	Fuel tank self-sealing protection	15.6	34.4
<u>^</u>	05-84001-A	05-84001-00-FP 05-84001-00-RP	Ferrying tank - Fixed Parts Ferrying tank - Removable Parts	0.3 27.6	0.7 60.8
	05-85002-B	05-85002-01-CI	Remaining fuel flowmeter	1.6	3.3
Â	05-92001-A	05-92001-00-FP 05-92001-00-RP	Folding of main rotor blades - Fixed Parts 4 Folding of main rotor blades - Removable Parts 5	1.8	4.0
	05-93001-A	05-93001-00-CI	Mooring kit (ground or ships) 6	0.8	1.8
	05-93002-A	05-93002-00-CI	Marine gripping system	1.0	2.2
S	pecific mi	ssion equipme	ent		
A	06-11008-A	06-11008-00-CI	Surfair Skis	27.0	59.5
	06-11012-A	06-11012-00-CI	Settling protectors	4.1	9.0
	06-11017-A	06-11017-00-CI	Skid wearing plates	1.3	2.9
⚠	06-12011-A	06-12011-01-CI	Low skid landing gear with 2 single footsteps 7	-16.9	-37.3
A	06-12012-A	06-12012-01-CI	Low skid landing gear with 2 short footsteps 7	-9.0	-19.8
⚠	06-12014-A	06-12014-01-CI	High skid landing gear with 2 short footsteps 7	-0.9	-2.0

Availability: cycle + 2 months.

Recommended for start-up in cold weather.

Availability = cycle + 8 months.

<sup>2</sup> 3 4 5 For rough weather conditions.

The removable parts are delivered as Ground Support Equipment. Tool weight = 32.2 kg - 71 lb.

<sup>6</sup> 7 Recommended for transport by land, air and sea (when not in a container).

Replaces the standard type of landing gear.





#### **Specific mission equipment (continued)**

	Document reference	Commercial reference	Name	kg	lb
	06-21001-A	06-21001-00-FP	Air Equipement electrical hoist (136 kg - 300 lb, 40 m – 131 ft cable) - Fixed Parts	2.4	5.3
A		06-21001-00-RP	Air Equipement electrical hoist (136 kg – 300 lb, 40 m – 131 ft cable) - Removable Parts	37.8	83.3
A	06-24001-A	06-24001-00-CI	Rappelling installation (without rope)	3.2	7.1
A	06-25001-A	06-25001-00-CI	Drip tub (sea rescue) 1	-0.8	-1.8
Â	06-26003-A	06-26003-00-CI	RH side external mirror 2	2.9	6.4
Â	06-26004-A	06-26004-00-CI	RH side electric and de-iced external mirror 2	2.8	6.2
A	06-27004-A	06-27004-00-FP	Cargo sling with dynamometer	3.1	6.8
Â		06-27004-00-RP	(750 kg - 1,654 lb) - Fixed Parts Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	3.2	7.1
Â	06-27009-A	06-27009-00-CI	Capabilities for extended cargo sling	1.2	2.6
A	06-27018-A	06-27018-00-FP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Fixed Parts	4.0	8.8
A		06-27018-00-RP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Removable Parts <b>3</b>	13.4	29.5
<u> </u>	06-31005-A	06-31005-00-CI	Integrated hailers	11.0	24.3
	06-42005-A	06-42005-00-CI	LH landing light (swiveling in elevation and azimuth) 4	2.5	5.5
A	06-47002-A	06-47002-01-FP 06-47002-01-RP	Spectrolab SX 16 search-light - Fixed Parts Spectrolab SX 16 search-light - Removable Parts		quest quest
Â	06-61002-A	06-61002-00-FP 06-61002-00-RP	Emergency floatation gear - Fixed Parts 4 Emergency floatation gear - Removable Parts	5.4 64.1	11.9 141.3

The weight figure includes the removal of the cushions of the two standard two-place rear bench-seats and seat belts (bench seats folded).

<sup>2</sup> Recommended for sling/swing work.

<sup>3</sup> With Onboard Systems TALON hook.

<sup>4</sup> May be a mandatory equipment, required by local airworthiness authorities or operational regulations.





## Interior cabin layout

	Document reference	Commercial reference	Name	kg	lb
Â	07-00008-A	07-00008-00-CI	Comfort layout	33.0	72.8
<u> </u>	07-00010-A	07-00010-00-CI	Comfort lay-out with sound-proofing	47.0	103.6
A	07-00012-A	07-00012-00-CI	"Executive" lay-out	60.0	132.3
A	07-00019-A	07-00019-00-CI	Alternate fabrics for seats	On re	quest
A	07-00020-A	07-00020-00-CI	Leather upholstery for seats	On re	quest
A	07-15010-A	07-15010-00-CI	Energy-absorbing front seats	3.0	6.6
A	07-15010-A	07-15010-01-CI	Lengthened rails for energy-absorbing front seats	2.0	4.4
	07-24003-A	07-24003-00-FP	Left side two-place front bench seat (pilot on right side) - Fixed Parts	2.0	4.4
A	07-24003-A	07-24003-00-RP	Left side two-place front bench seat (pilot on right side) - 1 Removable Parts	3.2	7.1
A	07-25001-A	07-25001-00-CI	3 places instead of 4 places transformation kit 2	4.4	9.7
⚠	07-40003-A	07-40003-00-CI	Velvet carpeting	On re	quest
<u> </u>	07-40004-A	07-40004-00-CI	Washable floor covering	On re	quest
A	07-50002-A	07-50002-02-CI	Improved side-visibility in LH large front door	3.0	6.6
Â	07-50004-A	07-50004-00-CI	Left rear hinged door instead of the standard one 3	-6.4	-14.1
	07-50005-A	07-50005-00-CI	Right rear sliding door	3.4	7.5
A	07-50006-A	07-50006-00-CI	Sliding window, on rear LH sliding door	1.1	2.4
A	07-50007-A	07-50007-00-CI	Sliding window, on rear RH sliding door	1.1	2.4
⚠	07-71001-A	07-71001-00-FP	Lower casualty carrying installation with stretcher - Fixed Parts	0.3	0.7
Â		07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts <b>4</b>	-4.5	-9.9
Â	07-71003-A	07-71003-00-FP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Fixed Parts	1.3	2.9
A		07-71003-00-RP	Lower casualty-carrying installation with stretcher adapted to	-4.5	-9.9

The front bench-seat replaces the copilot's standard seat.

Including mainly 4 arm-rests and a fifth harness.

<sup>2</sup> A large front door with map case replaces the standard small front door with improved side-visibility.

The weight figure includes the complete removal of one two-place rear bench seat and copilot seat.





#### **Avionics**

#### VFR day and night Package, included in standard definition

Thales H321EHM - Gyro-horizon 1
AIM 205-1BL - Gyro-directional
UI 9560 - Turn and Bank indicator
Honeywell KX165A - VHF/VOR/LOC/GS
Garmin GI106A - Course Deviation Indicator
Garmin GNS430 - VHF/VOR/LOC/GS/GPS 2
Garmin GTX327 - Transponder (mode A+C)
Shadin 8800T - Altitude Encoder
Kannad 121AF-H - Emergency Locator Transmitter 3
Garmin GMA340H - ICS 4 - 5

#### Equipment that can replace a standard equipment

	Document reference	Commercial reference	Name	kg	lb
	06-67031-A	06-67031-00-CI	KANNAD 406AF-H - Emergency Locator Transmitter 6 - 7 instead of KANNAD 121AF-H - Emergency Locator Transmitter	0.1	0.2
	08-22019-A	08-22019-00-CI	Garmin GTX330 - Transponder (mode S) 7 - 8 instead of Garmin GTX327 - Transponder (mode A+C)	0.6	1.3
A	08-51018-B	08-51018-02-CI	Thales H140 BHM2 - Gyro-horizon instead of Thales H321EHM - Gyro-horizon	0.5	1.1
	08-51019-A	08-51019-00-CI	Thales H321EHM - Stand-by gyro-horizon <b>7</b> instead of UI 9560 - Turn and Bank indicator	3.0	6.6
	08-51020-A	08-51020-00-CI	Thales H140JAM1 - Gyro horizon instead of Thales H321EHM - Gyro-horizon	0.6	1.3
	08-52012-A	08-52012-00-CI	Honeywell KCS55A - Gyro Compass 9 with Honeywell KI525A - Horizontal Situation Indicator instead of AIM 205-1BL - Gyro-directional and Garmin GI106A - Course Deviation Indicator	3.8	8.4

The standard aircraft definition includes an avionics package as defined hereabove. Brands and models are given for information exclusively. EUROCOPTER reserves the rights to modify any brand or model constantly according to its policy in force.

The data set forth in this document are general in nature and for information purposes only.

<sup>1</sup> With slip indicator included when the Turn and Bank indicator is replaced by the stand-by gyro-horizon.

<sup>2</sup> Delivered with EUROPE map. Subscription to be made by the customer.

<sup>3 2</sup> frequencies: 121.5 MHz, 243 MHz. Compliant with ED 62 and TSO C91A.

<sup>4</sup> Includes the passenger interphone function.

<sup>5</sup> I.C.S. compatible only with High level / High impedance headsets.

<sup>3</sup> frequencies: 121.5 MHz, 243 MHz, 406 MHz. Compliant with ED 62 and TSO C91A. The Programming Data Sheet must be filled and communicated by the customer two months at the latest before the helicopter's delivery.

<sup>7</sup> May be a mandatory equipment, required by local airworthiness authorities or operational regulations.

<sup>8</sup> The mode S identification must be communicated by the customer two months at the latest before the delivery.

<sup>9</sup> With a selector switch for NAV1/NAV2 selection.





# Additional equipment that <u>can be added</u> depending on operational needs or the requirements of the authorities in certain countries if not included in the standard package

	Document reference	Commercial reference	Name	kg	lb
Â	08-10006-A	08-10006-01-CI	Collins – HF9X00 – HF/SSB	15.7	34.6
	08-18024-A	08-18024-00-CI	Headset extension cord	0.1	0.2
	08-18035-A	08-18035-00-CI	David Clark - H10-13H - Headset 1	0.5	1.1
	08-18037-A	08-18037-00-CI	Additional ICS jacks and power connectors for Bose X headsets	1.0	2.2
	08-21008-A	08-21008-00-CI	Thales AHV16 - Radio altimeter 2	5.6	12.3
Â	08-24011-B	08-24011-03-CI	Honeywell KR87 + KI227 - ADF	3.7	7.7
Â	08-24011-B	08-24011-04-CI	Honeywell KR87 + KI229 – ADF + RMI	6.2	13.7
	08-25003-A	08-25003-00-CI	Honeywell KN63 - DME	4.3	9.5
	08-46001-A	08-46001-00-CI	GPS moving map 3	On re	quest
⚠	08-70003-A	08-70003-00-CI	Sagem 85T31 - 3-Axis autopilot with failure passivation unit	26.0	57.3
	08-83017-A	08-83017-00-CI	VEMD data download kit 4 - 5	_	_
	08-91004-A	08-91004-00-CI	Hourmeter	0.1	0.2

The radio/com/nav. equipment weight figures included in this chapter are average values. As the installation of those equipment may vary from one a/c to an other, the weight of a complete configuration with multiple items may not be the simple sum of all individual weights.

<sup>1</sup> High level / High impedance headset.

<sup>2</sup> May be a mandatory equipment, required by local airworthiness authorities or operational regulations.

<sup>3</sup> The model currently certified is Avalex AMS 7000. Other models can be proposed according to customer's operational needs.

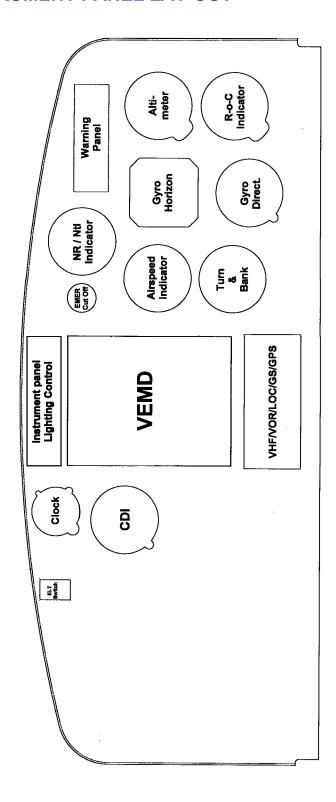
<sup>4</sup> Delivered in addition to the airborne kit, this kit includes two softwares and a connection wire.

<sup>5</sup> Allows compliance to JAR OPS 3 Amendment 3 requirement, as defined in Appendix 1 to JAR OPS 3.517 (a) and (b)(5)(i).





#### STANDARD INSTRUMENT PANEL LAY-OUT



Note: Layout given for information only and that can be modified later.





#### **Vendor mission equipment**

The purpose of this list is to specify some mission equipments that may be installed on the *AS350 B2* helicopter in order to fulfil specific operational needs. These equipments are not certified by *EUROCOPTER* and thus are not part of *EUROCOPTER*'s list of optional items. This list is provided for information purposes only, and is not to be considered as *EUROCOPTER*'s recommendation for one type of mission equipment. Unless otherwise specified, these equipments must be purchased directly from the related vendor, installed and used in accordance with the vendor's instructions. *EUROCOPTER* does not provide any warranty and disclaims any liability including, without limitation, in relation to the installation, conformity, performance and certification of such mission equipments.

Vendor	Name	kg	lb
Simplex	Fire-fighting installation, SIMPLEX 310 system, 1000 liters or 1200 liters	Refer to S	IMPLEX
Simplex	Crop-spraying installation, SIMPLEX 5100 system	Refer to S	IMPLEX
Air Ambulance Technology	EMS kit	Refer to	AAT





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## 5- Table of Constraints

**EXL** Impossibility of simultaneous fitment of the fixed parts of 2 items of equipment

NSF Total or partial incompatibility of simultaneous fitment of the removable parts of two items of equipment

NSU Possibility of simultaneous fitment on the same aircraft, but impossible to use simultaneously

**REQ** Requires the fitting of

Document	Commercial	Installation			e of stra		Commercial	Installation	Document
Reference	Reference	motunation	EXL	NSF	NSN	REQ	Reference	mstanation	Reference
05-02004-A	05-02004-00-CI	Extra charge for customized external paint - level 1	X				05-02005-00-CI	Extra charge for customized external paint - level 2	05-02005-A
			X				05-02006-00-CI	Extra charge for customized external paint, apart from levels 1 and 2	05-02006-A
05-02005-A	05-02005-00-CI	Extra charge for customized external paint - level 2	X				05-02004-00-CI	Extra charge for customized external paint - level 1	05-02004-A
			X				05-02006-00-CI	Extra charge for customized external paint, apart from levels 1 and 2	05-02006-A
05-02006-A	05-02006-00-CI	Extra charge for customized external paint, apart from levels 1 and 2	X				05-02004-00-CI	Extra charge for customized external paint - level 1	05-02004-A
			X				05-02005-00-CI	Extra charge for customized external paint - level 2	05-02005-A
05-24004-A	05-24004-00-CI	Tail rotor arch	X				08-10006-01-CI	Collins - HF 9X00 - HF/SSB	08-10006-A
05-32003-A	05-32003-00-CI	Copilot's windshield wiper	X				05-42002-00-CI	Air conditioning system	05-42002-A
05-37007-A	05-37007-00-CI	Dual controls		X			07-24003-00-RP	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24003-A
				X			07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Removable Parts	07-71003-A
05-37012-A	05-37012-00-CI	On floor control quadrant shield	X	X	X			Being studied	
05-37014-A	05-37014-00-CI	Fuel flow twist grip on the pilot and copilot sticks		X			07-24003-00-RP	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24003-A
				X			07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Removable Parts	07-71003-A
					I	X	05-37007-00-CI	Dual controls	05-37007-A





Document	Commercial	lootellation.		ture ons		the int	Commercial	Installation	Document
Reference	Reference	Installation	EXL	NSF	NSN	REQ	Reference	Installation	Reference
05-42002-A	05-42002-00-CI	Air conditioning system	X				05-32003-00-CI	Copilot's windshield wiper	05-32003-A
			X				05-70001-01-CI	Hydraulic ground power receptacle	05-70001-A
			X				07-71001-00-FP	Lower casualty carrying installation with stretcher - Fixed Parts	07-71001-A
			X				07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
			X				07-71003-00-FP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Fixed Parts	07-71003-A
			X				07-71003-00-RP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Removable Parts	07-71003-A
05-70001-A	05-70001-01-CI	Hydraulic ground power receptacle	X				05-42002-00-CI	Air conditioning system	05-42002-A
05-84001-A	05-84001-00-FP	Ferrying tank - Fixed Parts	X				07-00008-00-CI	"Comfort" lay-out	07-00008-A
			X				07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
			X				07-00012-00-CI	"Executive" lay-out	07-00012-A
	05-84001-00-RP	Ferrying tank - Removable Parts	X				07-00008-00-CI	"Comfort" lay-out	07-00008-A
			X				07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
			X				07-00012-00-CI	"Executive" lay-out	07-00012-A
				X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
				X			07-24003-00-RP	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24003-A
				X			07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher adapted to the mountain rescue - Removable Parts	07-71003-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					x		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
			I		X	I	06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
			I			X	05-84001-00-FP	Ferrying tank - Fixed Parts	05-84001-A
05-92001-A	05-92001-00-RP	Folding of main rotor blades - Removable Parts				X	05-92001-00-FP	Folding of main rotor blades - Fixed Parts	05-92001-A





Document Reference	Commercial Reference	Installation	Co	ons	of train	nt	Commercial Reference	Installation	Document Reference
06-11008-A	06-11008-00-CI	Surfair Skis	Û	X	×	RE	06-61002-00-RP	Emergency floatation gear -	06-61002-A
						X	06-12011-01-CI	Removable Parts Low landing gear with 2 single footsteps	06-12011-A
						X	or 06-12012-01-CI	or Low skid landing gear with 2 short footsteps	06-12012-A
						X	or 06-12014-01-CI	or High skid landing gear with 2 short footsteps	06-12014-A
06-12011-A	06-12011-01-CI	Low landing gear with 2 single footsteps	X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
			X				06-12014-01-CI	High skid landing gear with 2 short footsteps	06-12014-A
			X				06-26003-00-CI	RH side external mirror	06-26003-A
			X				06-26004-00-CI	RH side electric and de-iced external mirror	06-26004-A
			X				06-27004-00-FP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Fixed Parts	06-27004-A
			X				06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
			X				06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
			X				06-27018-00-FP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Fixed Parts	06-27018-A
			X				06-27018-00-RP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Removable Parts	06-27018-A
06-12012-A	06-12012-01-CI	Low skid landing gear with 2 short footsteps	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12014-01-CI	High skid landing gear with 2 short footsteps	06-12014-A
			X				06-26003-00-CI	RH side external mirror	06-26003-A
			X				06-26004-00-CI	RH side electric and de-iced external mirror	06-26004-A
			X				06-27004-00-FP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Fixed Parts	06-27004-A
			X				06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
			X				06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
			X				06-27018-00-FP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Fixed Parts	06-27018-A
			X				06-27018-00-RP	Cargo swing with dynamometer (1,160 kg - 2,557 lb) - Removable Parts	06-27018-A
			X				06-61002-00-FP	Emergency floatation gear – Fixed Parts	06-61002-A
			X				06-61002-00-RP	Emergency floatation gear – Removable Parts	06-61002-A
06-12014-A	06-12014-01-CI	High skid landing gear with 2 short footsteps	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A





Document	Commercial	Installation			of trai		Commercial	Installation	Document
Reference	Reference	installation	EXF	<b>NSF</b>	<b>NSN</b>	REQ	Reference	nistanation	Reference
06-21001-A	06-21001-00-RP	Air Equipement electrical hoist			X		05-84001-00-RP	Ferrying tank - Removable Parts	05-84001-A
		(136 kg – 300 lb,40 m – 131 ft cable) -			X		06-24001-00-CI	Rappelling installation	06-24001-A
		Removable Parts			X		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
					X		06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) Removable Parts	06-27018-A
					X		06-61002-00-RP	Emergency floatation gear – Removable Parts 1	06-61002-A
					X		07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable Parts	07-24003-A
					X		07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
					X		07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
					X		07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
						X	06-21001-00-FP	Air Equipement electrical hoist (136 kg – 300 lb,40 m – 131 ft cable) – Fixed Parts	06-21001-A
06-24001-A	06-24001-00-CI	Rappelling installation (without rope)	X				07-50004-00-CI	Left rear hinged door instead of the standard one	07-50004-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					X		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
					X		06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
					X		06-61002-00-RP	Emergency floatation gear - Removable Parts 2	06-61002-A
						X	07-50005-00-CI	Right rear sliding door	07-50004-A
06-25001-A	06-25001-00-CI	Drip tub (sea rescue)	X				07-00008-00-CI	"Comfort" lay-out	07-00008-A
			X				07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
			x				07-00012-00-CI	"Executive" lay-out	07-00012-A
				X			05-84001-00-RP	Ferrying tank - Removable parts	05-84001-A
				X			07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A

<sup>1</sup> Hoisting remains possible when the floats are folded.

<sup>2</sup> Rappelling remains possible when the floats are folded.





Document	Commercial			ture		the int	Commercial		Document
Reference	Reference	Installation	EXL	NSF	NSN	REQ	Reference	Installation	Reference
06-26003-A	06-26003-00-CI	RH side external mirror	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
06-26004-A	06-26004-00-CI	RH side electric and de-iced external mirror	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
06-27004-A	06-27004-00-FP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Fixed Parts	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
	06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
				X			06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
					X		05-84001-00-RP	Ferrying tank - Removable Parts	05-84001-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					X		06-24001-00-CI	Rappelling installation (without rope)	06-24001-A
					X		07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable parts	07-24003-A
					X		07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
					X		07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
						X	06-27004-00-FP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Fixed Parts	06-27004-A
06-27009-A	06-27009-00-CI	Capabilities for extended cargo sling	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
				X			06-47002-01-RP	Spectrolab SX 16 search-light - fixed parts	06-47002-A
					x		05-84001-00-RP	Ferrying tank - Removable parts	05-84001-A
					x		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					x		07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable Parts	07-24003-A
					x		07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
					X		07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A





Document	Commercial	Installation			e of strai		Commercial	Installation	Document
Reference	Reference	installation	EXL	NSF	NSN	REQ	Reference	installation	Reference
06-27018-A	06-27018-00-FP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Fixed Parts	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
						X	07-15010-00-CI	Energy-absorbing front seats 1	07-15010-A
06-27018-A	06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	X				06-12011-01-CI	Low landing gear with 2 single footsteps	06-12011-A
			X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
				X			06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
				X			06-47002-01-RP	Spectrolab SX 16 search-light – Removable parts	06-47002-A
					X		05-84001-00-RP	Ferrying tank - Removable parts	05-84001-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					X		06-24001-00-CI	Rappelling installation (without rope)	06-24001-A
					X		07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable parts	07-24003-A
					X		07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable parts	07-71001-A
					X		07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable parts	07-71003-A
						X	06-27018-00-FP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Fixed Parts	06-27018-A
06-31005-A	06-31005-00-CI	Integrated hailers	X				06-61002-00-FP	Emergency floatation gear - Fixed Parts	06-61002-A
			X				06-61002-00-RP	Emergency floatation gear - Removable Parts	06-61002-A
				X	X			Being studied	
06-47002-A	06-47002-01-RP	Spectrolab SX 16 search-light – Removable Parts		X			06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
				X			06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
						X	06-47002-01-FP	Spectrolab SX 16 search-light - Fixed Parts	06-47002-A
06-61002-A	06-61002-00-FP	Emergency floatation gear - Fixed Parts	X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
			X				06-31005-00-CI	Integrated hailers	06-31005-A
	06-61002-00-RP	Emergency floatation gear - Removable Parts	X				06-12012-01-CI	Low skid landing gear with 2 short footsteps	06-12012-A
			X		1		06-31005-00-CI	Integrated hailers	06-31005-A
				X			06-11008-00-CI	Surfair Skis	06-11008-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg – 300 lb,40 m – 131 ft cable) - Removable Parts 2	06-21001-A
			1		X		06-24001-00-CI	Rappelling installation (without rope) 3	06-24001-A
						X	06-61002-00-RP	Emergency floatation gear - Removable Parts	06-61002-A

If optional item 07-00012-00-CI is fitted. 1

<sup>2</sup> Hoisting remains possible when the floats are folded.

Rappelling remains possible when the floats are folded.





Document	Commercial	Installation			of t		Commercial	Installation	Document
Reference	Reference	installation	EXL	NSF	NSN	REQ	Reference	installation	Reference
07-00008-A	07-00008-00-CI	"Comfort" lay-out	X				05-84001-00-FP	Ferrying tank - Fixed parts	05-84001-A
			x				05-84001-00-RP	Ferrying tank - Removable Parts	05-84001-A
			x				06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
			x				07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
			x				07-00012-00-CI	"Executive" lay-out	07-00012-A
07-00010-A	07-00010-00-CI	"Comfort" lay-out with sound-proofing	X				05-84001-00-FP	Ferrying tank - Fixed Parts	05-84001-A
			x				05-84001-00-RP	Ferrying tank - Removable Parts	05-84001-A
			x				06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
			x				07-00008-00-CI	"Comfort" lay-out	07-00008-A
			x				07-00012-00-CI	"Executive" lay-out	07-00012-A
07-00012-A	07-00012-00-CI	"Executive" lay-out	X				05-84001-00-FP	Ferrying tank – Fixed Parts	05-84001-A
			x				05-84001-00-RP	Ferrying tank – Removable Parts	05-84001-A
			X				06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
			X				06-27018-00-FP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Fixed Parts <b>1</b>	06-27018-A
			X				06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts <b>1</b>	06-27018-A
			x				07-00008-00-CI	"Comfort" lay-out	07-00008-A
			x				07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
			x				07-00019-00-CI	Alternate fabrics for seats	07-00019-A
			x				07-00020-00-CI	Leather upholstery for seats	07-00020-A
			x				07-40003-00-CI	Velvet carpeting	07-40003-A
						X	07-15010-00-CI	Energy-absorbing front seats 2	07-15010-A
07-00019-A	07-00019-00-CI	Alternate fabrics for seats	X				07-00012-00-CI	"Executive" lay-out	07-00012-A
			x				07-00020-00-CI	Leather upholstery for seats	07-00020-A
07-00020-A	07-00020-00-CI	Leather upholstery for seats	X				07-00012-00-CI	"Executive" lay-out	07-00012-A
			x				07-00019-00-CI	Alternate fabrics for seats	07-00019-A
						X	07-00008-00-CI or	"Comfort" lay-out	07-00008-A
						x	07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
07-15010-A	07-15010-01-CI	Lengthened rails for energy-absorbing front seats				X	07-15010-00-CI	Energy-absorbing front seats	07-15010-A

<sup>1</sup> The incompatibility is cancelled if the optional item 07-15010-00-CI is fitted.

If optional item 06-27018-00-FP is fitted.





Document	Commercial	lundalladia u			of trai		Commercial	Installation	Document
Reference	Reference	Installation	EXL	NSF	NSN	REQ	Reference	Installation	Reference
07-24003-A	07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable Parts		X			05-37007-00-CI	Dual controls	05-37007-A
		,		X			05-37014-00-CI	Fuel flow twist grip on the pilot and copilot sticks	05-37014-A
				X			05-84001-00-RP	Ferrying tank – Removable Parts	05-84001-A
				X			07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg – 300 lb,40 m – 131 ft cable) - Removable Parts	06-21001-A
					X		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
					X		06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
						X	07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Fixed Parts	07-24003-A
07-25001-A	07-25001-00-CI	3 places instead of 4 places		X			05-84001-00-RP	Ferrying tank – Removable Parts	05-84001-A
		transformation kit		X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
				X			07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg – 300 lb,40 m – 131 ft cable) - Removable Parts	06-21001-A
07-40003-A	07-40003-00-CI	Velvet carpeting	X				07-00012-00-CI	"Executive" lay-out	07-00012-A
				X			07-40004-00-CI	Washable floor covering	07-40004-A
				X			07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
						X	07-00008-00-CI or	"Comfort" lay-out or	07-00008-A
						X	07-00010-00-CI	"Comfort" lay-out with sound-proofing	07-00010-A
07-40004-A	07-40004-00-CI	Washable floor covering		X			07-40003-00-CI	Velvet carpeting	07-40003-A
				X			07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable parts	07-71001-A
				X			07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
07-50002-A	07-50002-02-CI	Improved side-visibility in LH large front door				X	07-50004-00-CI	Left rear hinged door instead of the standard one	07-50004-A
07-50004-A	07-50004-00-CI	Left rear hinged door instead of the	X				06-24001-00-CI	Rappelling installation (without rope)	06-24001-A
		standard one	X				07-50006-00-CI	Sliding window, on rear LH sliding door	07-50006-A





Document	Commercial	Installation	Nature of the Constraint			Commercial	Installation	Document Reference	
Reference	Reference	Installation		EXL NSF NSU		REQ	Reference		installation
07-50006-A	07-50006-00-CI	Sliding window, on rear LH sliding door	X				07-50004-00-CI	Left rear hinged door instead of the standard one	07-50004-A
07-50007-A	07-50007-00-CI	Sliding window, on rear RH sliding door				X	07-50005-00-CI	Right rear sliding door	07-50005-A
07-71001-A	07-71001-00-FP	Lower casualty-carrying installation	X				05-42002-00-CI	Air conditioning system	05-42002-A
		with stretcher - Fixed Parts	X				07-71003-00-FP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Fixed Parts	07-71003-A
			X				07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
07-71001-A	07-71001-00-RP	Lower casualty-carrying installation	X				05-42002-00-CI	Air conditioning system	05-42002-A
		with stretcher - Removable Parts	X				07-71003-00-FP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Fixed Parts	07-71003-A
			X				07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	07-71003-A
				X			05-37007-00-CI	Dual controls	05-37007-A
				X			05-37014-00-CI	Fuel flow twist grip on the pilot and copilot sticks	05-37014-A
				X			05-84001-00-RP	Ferrying tank – Removable Parts	05-84001-A
				X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
				X			07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable Parts	07-24003-A
				X			07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			07-40003-00-CI	Velvet carpeting	07-40003-A
				X			07-40004-00-CI	Washable floor covering	07-40004-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					X		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
					X		06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
						X	07-71001-00-FP	Lower casualty carrying installation with stretcher - Fixed Parts	07-71001-A





Document Reference	Commercial Reference	Installation	C	ons	stra		Commercial Reference	Installation	Document Reference
07-71003-A	07-71003-00-FP	Lower casualty-carrying installation	X				05-42002-00-CI	Air conditioning system	05-42002-A
		with stretcher, adapted to the mountain rescue - Fixed Parts	X				07-71001-00-FP	Lower casualty-carrying installation with stretcher - Fixed Parts	07-71001-A
			X				07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
	07-71003-00-RP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Removable Parts	X				05-42002-00-CI 07-71001-00-FP	Air conditioning system Lower casualty-carrying installation with stretcher - Fixed Parts	05-42002-A 07-71001-A
			X				07-71001-00-RP	Lower casualty-carrying installation with stretcher - Removable Parts	07-71001-A
				X			05-37007-00-CI	Dual controls	05-37007-A
				X			05-37014-00-CI	Fuel flow twist grip on the pilot and copilot sticks	05-37014-A
				X			05-84001-00-RP	Ferrying tank – Removable Parts	05-84001-A
				X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
				X			07-24003-00-RP	Left side two-place front bench seat (pilot on RH side) - Removable Parts	07-24003-A
				X			07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			07-40003-00-CI	Velvet carpeting	07-40003-A
				X			07-40004-00-CI	Washable floor covering	07-40004-A
					X		06-21001-00-RP	Air Equipement electrical hoist (136 kg - 300 lb,40 m - 131 ft cable) - Removable Parts	06-21001-A
					X		06-27004-00-RP	Cargo sling with dynamometer (750 kg - 1,654 lb) - Removable Parts	06-27004-A
					X		06-27009-00-CI	Capabilities for extended cargo sling	06-27009-A
					X		06-27018-00-RP	Cargo swing with dynamometer (1160 kg - 2,557 lb) - Removable Parts	06-27018-A
						X	07-71003-00-FP	Lower casualty-carrying installation with stretcher, adapted to the mountain rescue - Fixed parts	07-71003-A
08-10006-B	08-10006-01-CI	Collins – HF9X00 – HF/SSB	X				05-24004-00-CI	Tail rotor arch	05-24004-B
08-24011-B	08-24011-03-CI	Honeywell KR87 + KI227 - ADF	X				08-24011-04-CI	Honeywell KR87 + KI229 - ADF + RMI	08-24011-B
08-24011-B	08-24011-04-CI	Honeywell KR87 + KI229 - ADF + RMI	X			x	08-24011-03-CI 08-52012-00-CI	Honeywell KR87 + Kl227 - ADF Honeywell KCS55A - Gyro Compass with Honeywell KI525A - Horizontal Situation Indicator instead of AIM 205-1BL - Gyro- directional and Garmin GI106A - Course Deviation Indicator	08-24011-B 08-52012-A
08-51018-B	08-51018-02-CI	Thales H140 BHM2 - Gyro-horizon instead of Thales H 321 EHM - Gyro-horizon	X				08-70003-00-CI	Sagem 85T31 - 3-Axis autopilot with failure passivation unit	08-70003-A
08-70003-A	08-70003-00-CI	Sagem 85T31 - 3-Axis autopilot with failure passivation unit	X				08-51018-02-CI	Thales H140 BHM2 - Gyro-horizon instead of Thales H321EHM - Gyro-horizon	08-51018-B
					1	X	05-62001-00-CI	250 VA AC generation system	05-62001-A
						X	08-51020-00-CI	Thales H140JAM1 - Gyro horizon instead of	08-51020-A
						x	08-52012-00-CI	Thales H321EHM - Gyro-horizon Honeywell KCS55A - Gyro Compass with Honeywell KI525A - Horizontal Situation Indicator instead of AIM 205-1BL - Gyro- directional and Garmin GI106A - Course Deviation Indicator	08-52012-A





## 6- Main performance

The following performance values and figures refer to an **AS350 B2**, equipped with a **new engine**. Unless otherwise specified, the values and figures refer to a **clean helicopter** equipped with the optional item Low skid landing gear with 2 single footsteps at **Sea Level** (SL), in **International Standard Atmosphere** (ISA) and **zero wind** condition.

#### **Performance**

Gross Weight	kg	1,600	1,800	2,000	2,200	2,250
	lb	3,530	3,968	4,409	4,850	4,960
■ Maximum speed, VNE	km/hr	287	287	287	287	287
	kts	155	155	155	155	155
■ Fast cruise speed (at MCP)	km/hr	261	258	253	248	246
	kts	141	139	137	134	133
■ Recommended cruise speed	km/hr	242	240	235	228	226
	kts	131	130	127	123	122
■ Fuel consumption at recommended cruise speed	kg/hr	147	147	147	147	147
	lb/h	324	324	324	324	324
■ Rate-of-climb	m/sec	11.1	10.6	9.9	8.9	8.5
	ft/min	2,185	2,085	1,950	1,750	1,675
<ul><li>Hover ceiling I.G.E. at Take-off power</li><li>ISA</li></ul>	m	6,100	5,050	4,100	3,200	3,000
	ft	20,000	16,550	13,450	10,500	9,850
• ISA + 20°C	m	5,450	4,400	3,350	2,350	2,150
	ft	17,900	14,450	11,000	7,650	7,050
<ul><li>Hover ceiling OGE at Take-off power</li><li>ISA</li></ul>	m	5,400	4,400	3,450	2,550	2,300
	ft	17,700	14,450	11,300	8,350	7,550
• ISA + 20°C	m	4,750	3,700	2,650	1,600	1,300
	ft	15,600	12,150	8,700	5,250	4,250
■ Service ceiling (1 m/sec., 200 ft/min.)	m	6,100	6,100	5,700	4,800	4,600
	ft	20,000	20,000	18,700	15,750	15,100
■ Range (without reserve at recommended cruise speed)	km	476	693	688	671	666
	nm	257	374	371	362	360
■ Endurance without reserve at 100 km/hr – 54 kts	hr : min	3h34	5h00	4h46	4h28	4h24





### Effect of external equipment on performance

Part of equipment included in the standard aircraft has an impact on given performance as follows:

Effect on Performance	Fast or Recommended cruise speed	Range	Rate of climb	Hourly fuel consumption
High skid landing gear instead of low LG	– 2 kt / – 4 km/h	<b>–</b> 1.5 %	/	1
Long footsteps on high landing gear	– 2 kt / – 4 km/h	<b>–</b> 1.5 %	<b>–</b> 2.5 %	1
Total	– 4 kt / – 8 km/h	- 3%	<b>-</b> 2.5 %	1

#### **Operating limitations**

The helicopter is cleared to be operated within the following altitude and temperature limitations (according to Flight Manual). For complementary information, refer to Flight Manual.

Maximum altitude : 6,100 m - 20,000 ft (PA)
 Maximum temperature : ISA + 35°C limited to + 50° C

■ Minimum temperature : - 40° C

#### **Abbreviations**

IGE: In Ground Effect Sea Level SL: International Standard Atmosphere True Air Speed ISA: TAS MCP: Maximum Continuous Power TOP: Take-Off Power OGE: Out of Ground Effect VNE: **Never Exceed Speed** 

PA: Pressure Altitude Vz: Rate-of-climb

#### Units

nm: nautical miles hr:min: hours:minutes kilogramms kts: knots kg: pounds ft/min: feet per minute lb: m/sec: meters per second km: kilometers °C: degrees Celsius





#### **Performance charts**

The performance charts presented hereafter apply to an aircraft as per the standard definition, equipped with the optional Low landing gear.

•	Take-off weight in hover IGE, (height 5 ft, Maximum TOP, no wind)	Page 34
-	Take-off weight in hover OGE, (Maximum TOP, no wind)	Page 35
-	Fast cruise speed (ISA)	Page 36
-	Fast cruise speed (ISA+ 20°C)	Page 37
-	Recommended cruise speed (ISA)	Page 38
-	Recommended cruise speed (ISA + 20°C)	Page 39
•	Rate of climb in oblique flight (ISA)	Page 40
-	Rate of climb in oblique flight (ISA + 20°C)	Page 41
-	Hourly fuel consumption at fast cruise speed (ISA, ISA + 20°C)	Page 42
-	Hourly fuel consumption at recommended cruise speed (ISA, ISA + 20°C)	Page 43
•	Internal Payload Versus Range (ISA, recommended cruise speed, without reserve)	Page 44

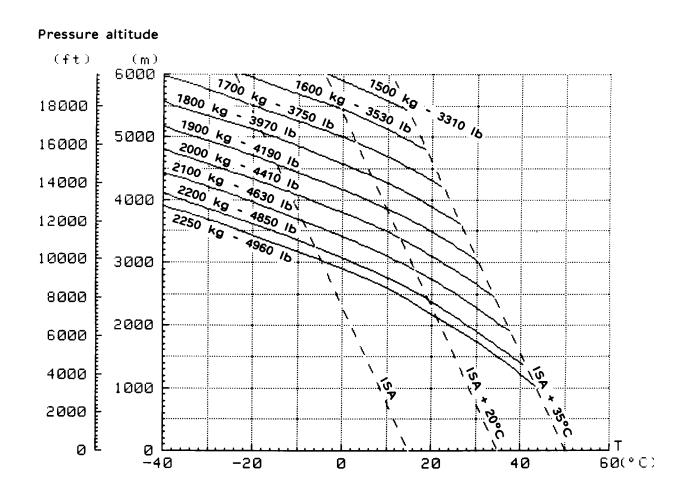




#### **HOVER CEILING I.G.E.**

## at maximum TOP

(Height 5 ft)



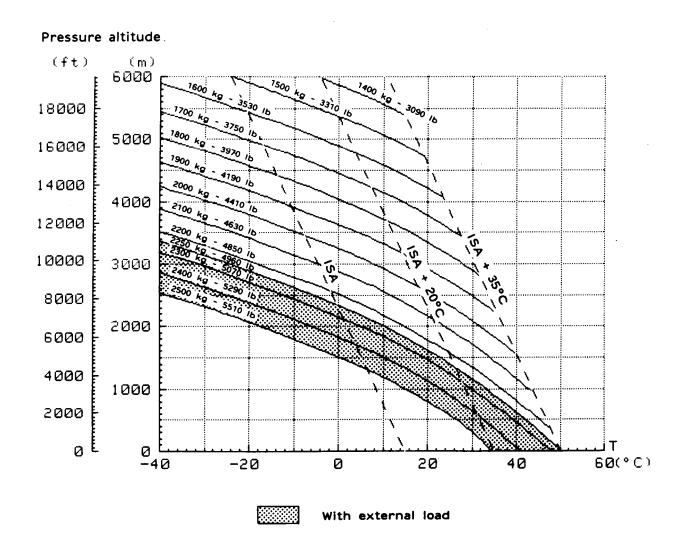
Note: Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual.





# **HOVER CEILING O.G.E.**

#### at maximum TOP



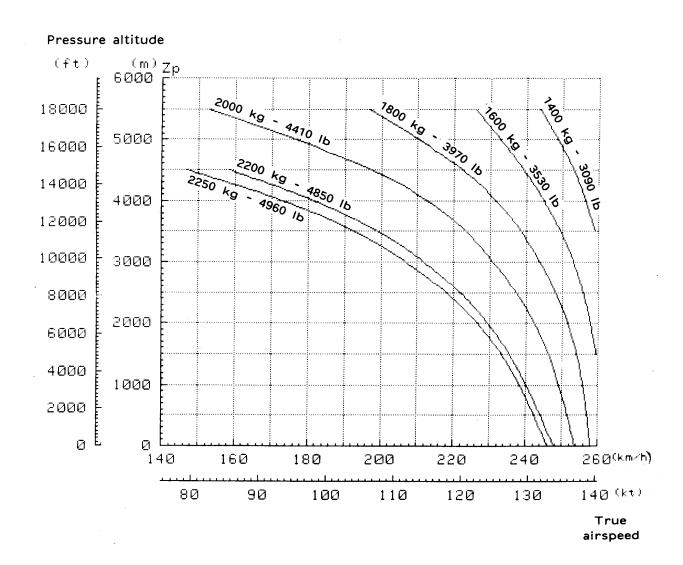
Note: Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual.





# **FAST CRUISE SPEED**

**ISA** 

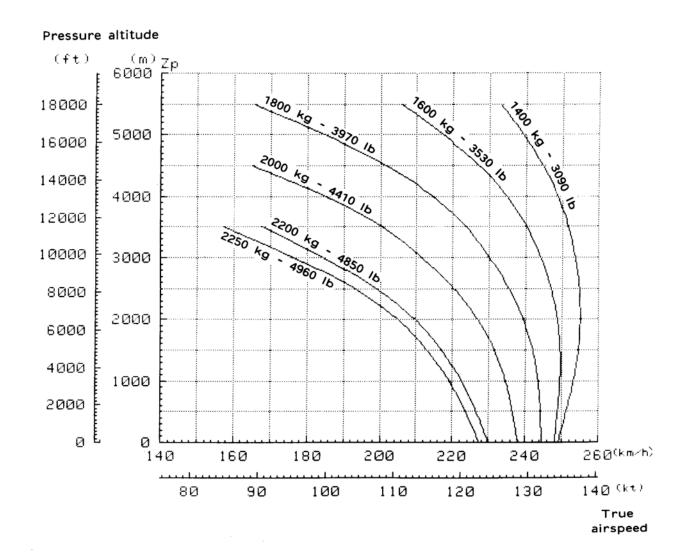






# **FAST CRUISE SPEED**

ISA + 20°C

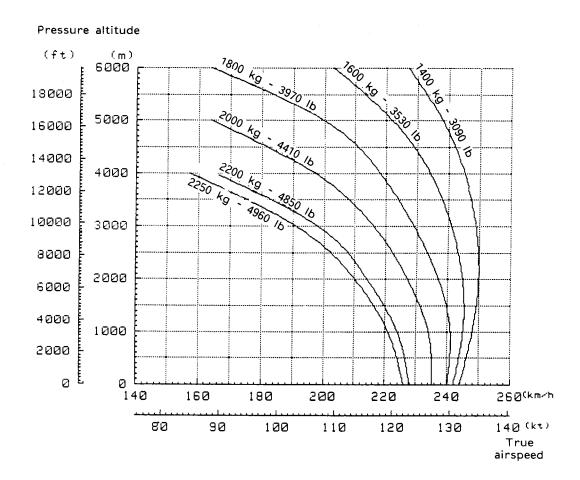






# **RECOMMENDED CRUISE SPEED**

ISA

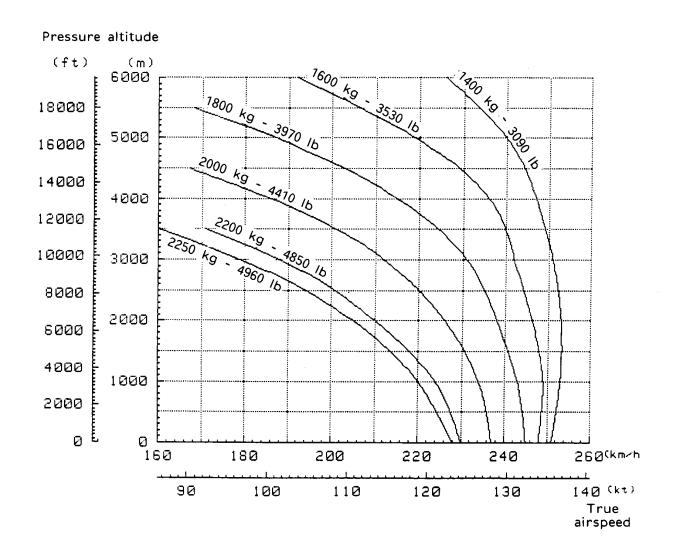






# **RECOMMENDED CRUISE SPEED**

ISA + 20° C

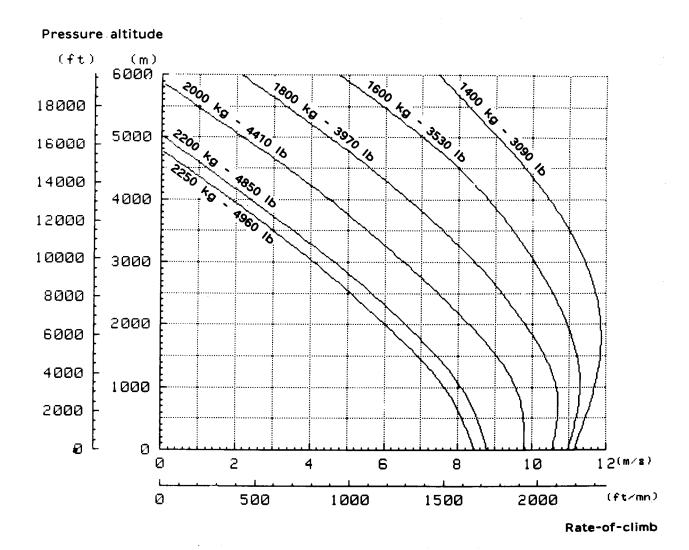






# RATE OF CLIMB IN OBLIQUE FLIGHT

**ISA** 



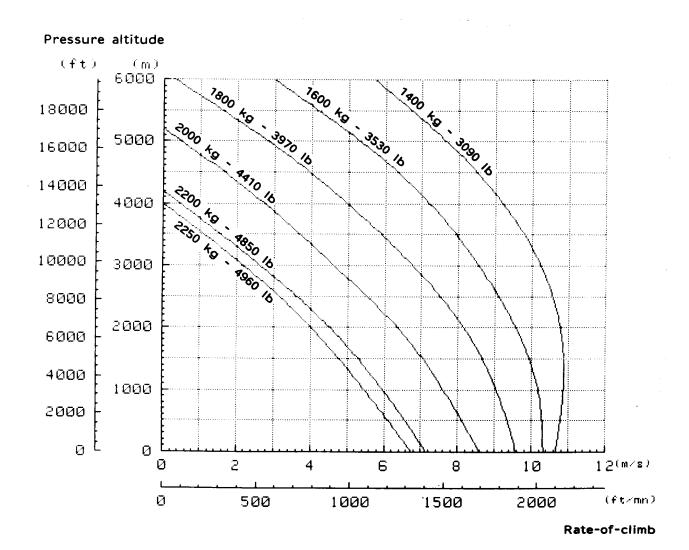
Note: Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual for a clean standard aircraft equipped with the optional Low landing gear (see page 32).





# RATE OF CLIMB IN OBLIQUE FLIGHT

ISA + 20° C



Note: Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual for a clean standard aircraft equipped with the optional Low landing gear (see page 32).

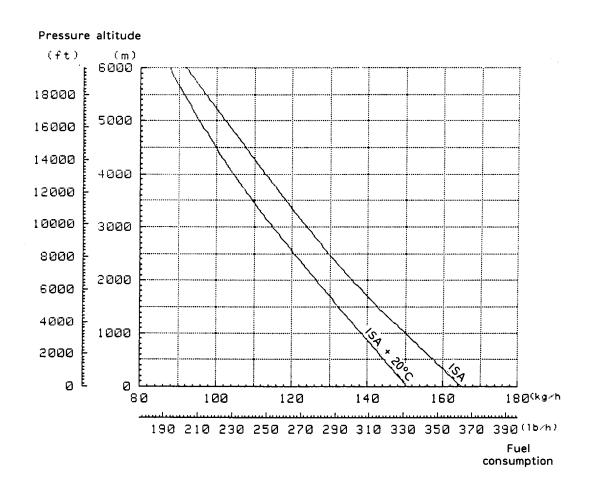




# **HOURLY FUEL CONSUMPTION**

#### at fast cruise speed

ISA, ISA + 20° C



Note: Typical consumption with clean standard aircraft and new engine.

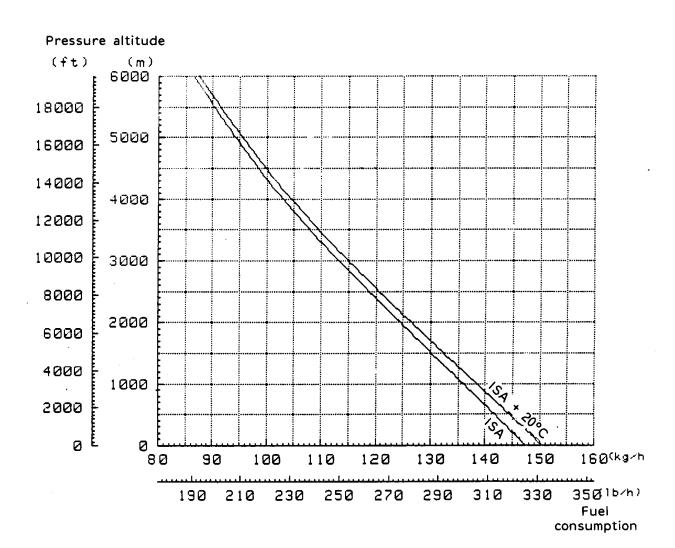




# **HOURLY FUEL CONSUMPTION**

#### at recommended cruise speed

ISA, ISA + 20° C



Note: Typical consumption with clean standard aircraft and new engine.



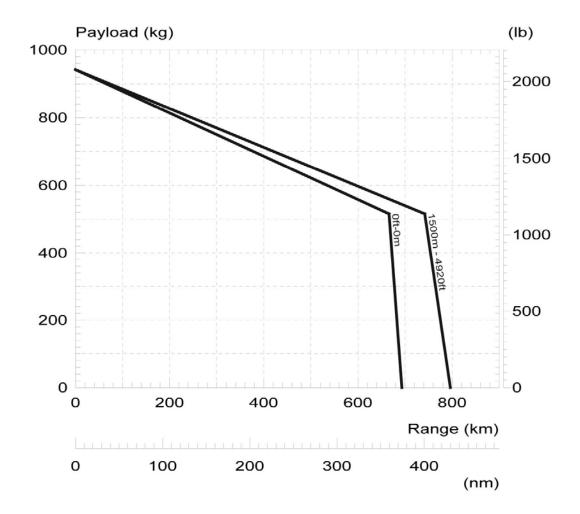


# **PAYLOAD / RANGE**

#### **ISA**

#### Recommended cruise speed

Empty weight equipped a/c + 1 pilot : 1,300 kg - 2,866 lb 1



Note: Typical mission without reserve, with clean aircraft equipped with the optional Low landing gear (see page 32) and new engine.

Aircraft equipped and approved for VFR day and night operations (avionics included in empty weight).





# 7- Customer Service Overview

# **Assets**

- Possibility to perform maximum of maintenance tasks by operators through modular exchange,
- Low required manhours on the scheduled maintenance,
- Maintenance simple and easy to perform thanks to optimized accessibility to dynamic components and equipment that is confirmed by Ecureuil large experience (more than 13 million flight hours),
- Among innovative equipment providing flight information, the "Vehicle and Engine Multifunction Display" (*VEMD*) also offers maintenance information (failure data recording and troubleshooting information). Usage data may be downloaded on a laptop, for fleet data management, in accordance with some operational requirements,
- Limited number of tools,
- No test bench,
- Among technical publications, the Manual Maintenance Program has been written in such a manner that it can be directly used as a maintenance tasks repertory in the workshop,
- Customer Services network through numerous and experienced service stations thanks to large Ecureuil fleet (nearly 4000 A/C) flying all over the world.

# Maintenance and maintainability data

"Scheduled" and "unscheduled" maintenance are considered in manhour figures given hereafter.

# Scheduled maintenance

- Possibility to perform maintenance tasks according to each operator needs :
  - blocked whole inspection (helicopter unavailable during all the inspection duration),

or

• "splitted" inspection (helicopter available for flight since the inspection is performed in several batches of maintenance operations, in respect with the limitations and periodicities defined in the Maintenance Program.





# Estimated Mean Man Hour per Flying Hour (MMH/FH) 1 (standard aircraft – 300 Flying hour/year – 2 flights per day)

**0.71 MMH/FH 2** (Scheduled + unscheduled + SB implementation)

# **Detail**

#### ■ Basic

■ Daily checks :	Pilot's task
■ 100 flight hrs periodicity tasks Including average "corrective" works	3.7 MMH <b>3</b>
■ 500 flight hrs or 24 months periodicity tasks Including average "corrective" works	121 MMH

Unscheduled (reliability cause)

0.29 MMH/FH

■ SB implementation

0.05 MMH/FH

■ 12 years inspections requiring 330 MMH

The data set forth in this document are general in nature and for information purposes only.

For performance data and operating limitations, reference must be made to the approved flight manual and all appropriate documents.

Preliminary values, that may be modified after the analysis of a representative statistical sample.

<sup>2</sup> MMH/FH: Mean Man Hour per Flight Hour.

<sup>3</sup> MMH : Mean Man Hour.





# Time Between Overhaul (TBO)/Service Life Limit (SLL)

Major assemblies		TBO (h)	SLL (h)
Main Blade			20000
Rear Blade			4000
MGB	Epicyclic reduction gear	3500	
	Bevel Reduction gear	3500	
	Oil pump	3500	
Complete engine		3000	
TGB		3000	
Main servo-unit (TRW type)		3000	
Tail servo-unit (TRW type)		3000	

#### **Documentation**

Eurocopter AS350 B2 technical documentation, pleasant and easy to consult, is basically supplied:

■ On an Interactive Electronic Support (CD-ROM OPEN 350) provided free of charge, with a twice a year update, that includes the whole documentation: Operating (except Flight Manual), Maintenance, Identification and Specific documents.

The CD-ROM product presents great advantages such as:

- ♦ More efficiency in maintenance thanks to :
  - Direct and instantaneous access to manuals and data by "hypertext" navigation
  - Easy search by keywords and multiple criteria
  - Highly portable technical publications in an extremely compact format
- Quick updating without insertion mistake risk.

#### and

### On paper

- Flight Manual
- Other documents: Maintenance Program, Service Bulletins. (also included in the CD-ROM OPEN 350)

Note: 1. As an option, the whole documentation is available on paper.

2. Turbomeca Arriel 1D1 engine documentation is available both under CD-ROM and paper format.

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