EUROCOPTER

EC130 B4

Technical Data

eurocopter
an EADS Company

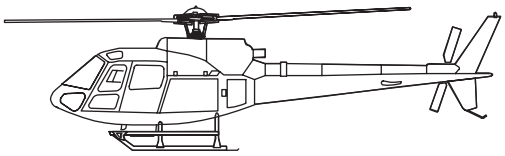
helicopters you can count on

130 B4 07.101.01 E

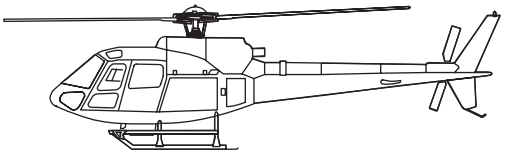
SINGLE ENGINE

TWIN ENGINE

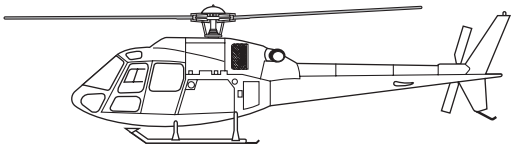
ECUREUIL
(Civil Version)



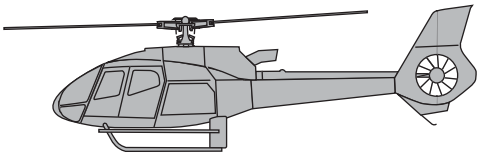
Ecureuil AS350 B2



Ecureuil AS350 B3

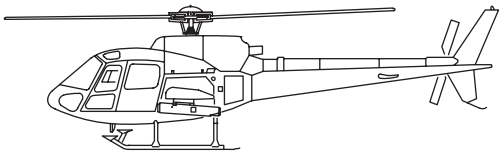


Ecureuil AS355 NP

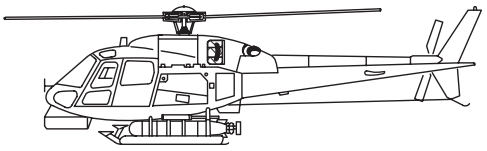


Ecureuil EC130 B4

FENNEC
(Military Version)



Multi purpose military version
=
Utility or armed aircraft
Fennec AS550 C3



Armed naval version
torpedo
Fennec AS555 SN

Contents

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.

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.

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1- Foreword

The light single-engine EC130 B4 *is the last member of the successful* ECUREUIL *family.*
The ultra-quiet EC130 B4 *integrates the latest technological advances of* EUROCOPTER's *new generation helicopters : a new 7/8 seats enlarged cabin with enhanced comfort, a new tailboom with quiet* FENESTRON *shrouded tail rotor, a dual channel FADEC unit plus a third independent and automatic channel for engine control, an automatic variable rotor speed control for noise reduction, a dual hydraulic system. The main rotor head, main gearbox and engine are those of the* AS350 B3, *ensuring the* EC130 B4 *an high level of performance.*
It is fully equipped with VFR day-time radio navigation (standard "ready to fly" package) associated with an integrated instrument panel (double color screen VEMD, *GPS with color map display) and has the capability of night-time VFR flight.*
Component community with EUROCOPTER *light helicopters' range results in a helicopter respectful of the environment, easy and affordable to maintain, offering the same world-beating performance parameters, as the* AS350 B3.
The EC130 B4 *plays in the passengers transport register and answers to the public transport, corporate and tourism market segments thanks to its enlarged cabin, its modern technology, its comfort, and its "ready-to-fly" concept. It is used as well, as a "light truck" for utility, EMS and parapublic missions thanks to its low external noise signature, large cabin volume and high performance level, and is considered by some military forces as replacement of former* ALOUETTE III.

2- General Characteristics

Layout

- **Passenger-transport**
  - 1 pilot + 6 passengers in standard version *1*
  - 1 pilot + 7 passengers in "medium density" version
- **Casualty-evacuation**
  - 1 pilot + 1 or 2 stretcher patients + 2 medical attendants
  - 2 pilots + 1 stretcher patient + 2 medical attendants
- **Cargo carrying**
  - 1 pilot + 3.7 m³ (130.7 ft³) load in cabin
- **Equipment**

  Complete 7 seats interior + trims + carpets included in standard
  Ready to operate radio package included in standard :
  - 2 VHF
  - 2 VOR / LOC / GLIDE
  - 1 GPS
  - 1 ELT
  - 1 XPD mode A + C
  - 1 ICS capable of 8 outlets
  - 1 ADI
  - 1 HSI

Weights

Note : Empty weight accuracy : within ± 2 %	kg	lb
Empty weight, standard aircraft (including engine oil and unusable fuel)	1,376 *2*	3,034
Useful load	1,051	2,316
Maximum all-up weight	2,427	5,351
Maximum cargo-swing load	1,160	2,557
Maximum all-up weight in external load configuration	2,800	6,172

1 *If required by the local airworthiness authorities, the capacity can be limited to 1 pilot + 5 passengers.*
2 *Empty weight according to standard aircraft definition, as defined in pages 11 and 12, including the avionics suite.*

Power plant

1 **TURBOMECA ARRIEL 2B1** turbine engine

Engine ratings

Thermodynamic Power, in standard atmosphere, at sea level :	kW	ch	shp
■ **Take-off power**	632	860	847
■ **Maximum continuous power**	543	739	728

Usable Fuel capacities

	litres	US gal.	kg	lb
■ **Standard fuel tank**	540	143	426	939

External noise

In accordance with ICAO annex 16, chapter 8

■ Average value	86,8	EPNdB	(- 7.0 dB / average ICAO limit)
■ Overflight	84,3	EPNdB	(- 8.5 dB / ICAO limit)
			(- 0.5 dB / GCNP [1] noise rule 6 PAX)
			(- 1.2 dB / GCNP noise rule 7 PAX)

Internal noise

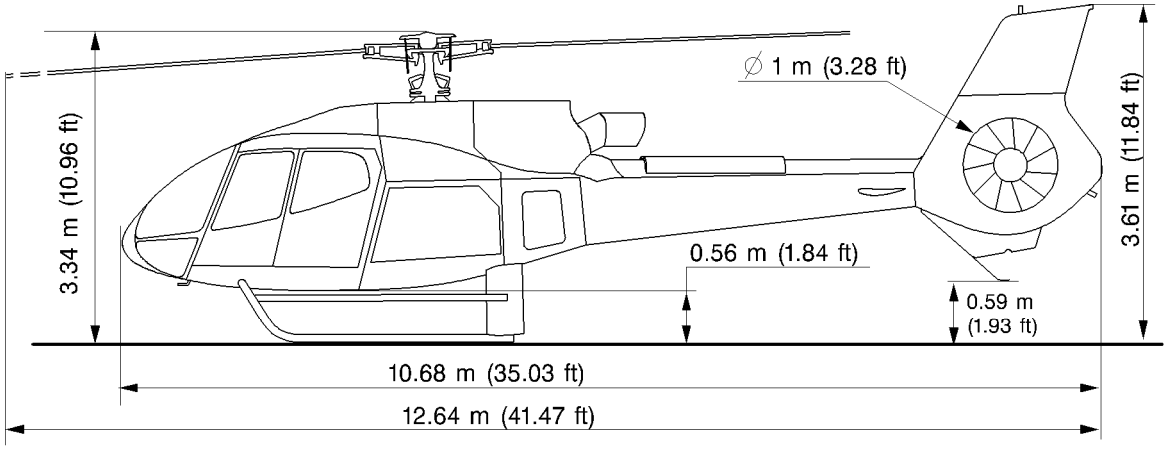
The noise in the cabin is also improved in order to increase pilot and passengers comfort.
Measures have been realised on a standard aircraft and give the following mean levels :

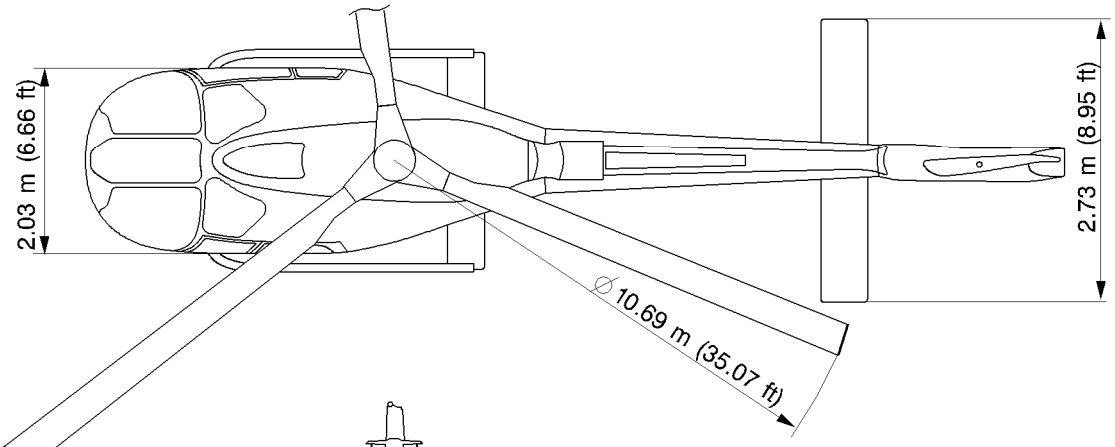
- 81.3 dB SIL4 [2] in hover inside ground effect
- 86.1 dB SIL4 in cruise flight at 120 kts

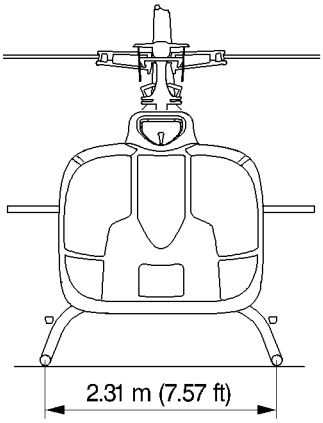
1 *GCNP = Grand Canyon National Park.*

2 *The method of sound level measurement used is Speech Interference Level (dB SIL4). This is the arithmetic average of 4 octave (0.5, 1.0, 2.0 and 4.0 kHz) levels specified in dBlin (linear decibels). This particular set of octaves corresponds to the human voice frequency range and thus allows to evaluate the interference with passenger communication.*

Main dimensions

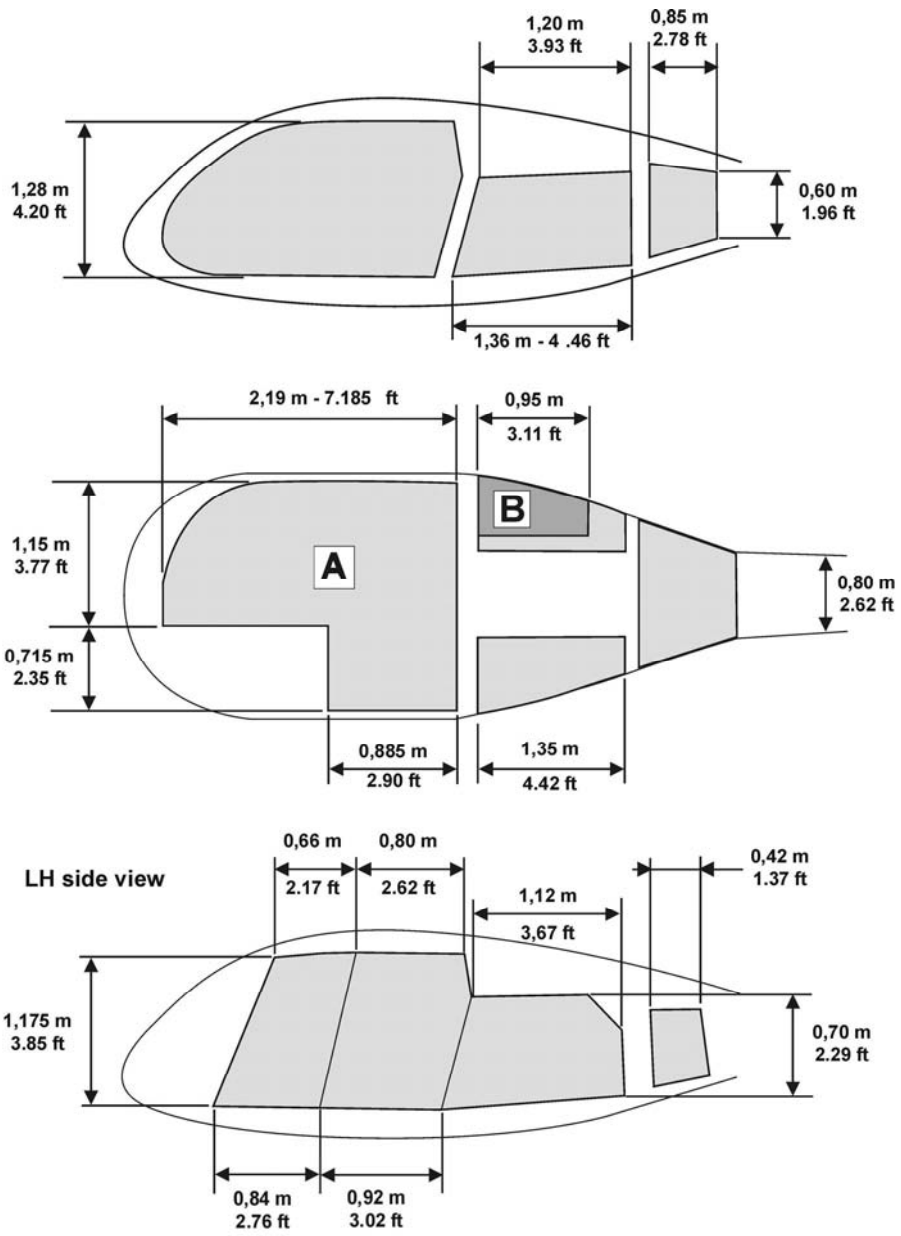






Dimensions of compartments and accesses

Cabin main dimensions



CABIN	
Surface **A**	3,00 m² 32.3 ft²
Volume	3.7 m³ 130.7 ft³

LH HOLD	
Surface	0.52 m² 5.60 ft²
Volume	0.285 m³ 10.06 ft³

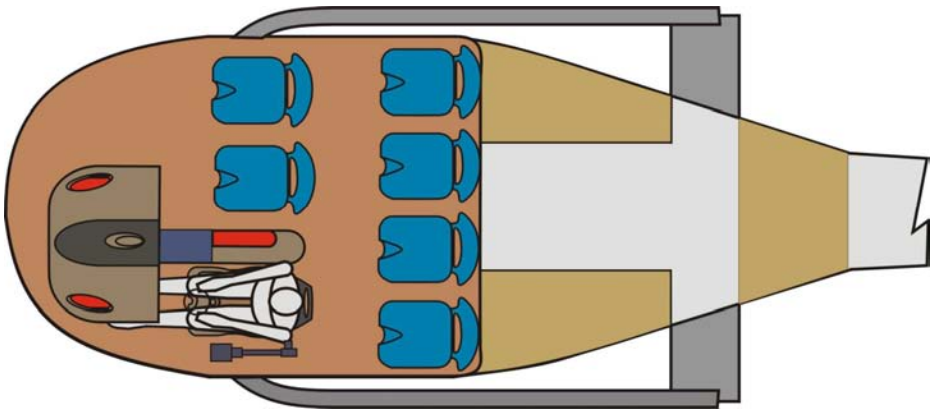
RH HOLD	
Surface **B**	0.43 m² 4.63 ft²
Volume	0.245 m³ 8.65 ft³

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

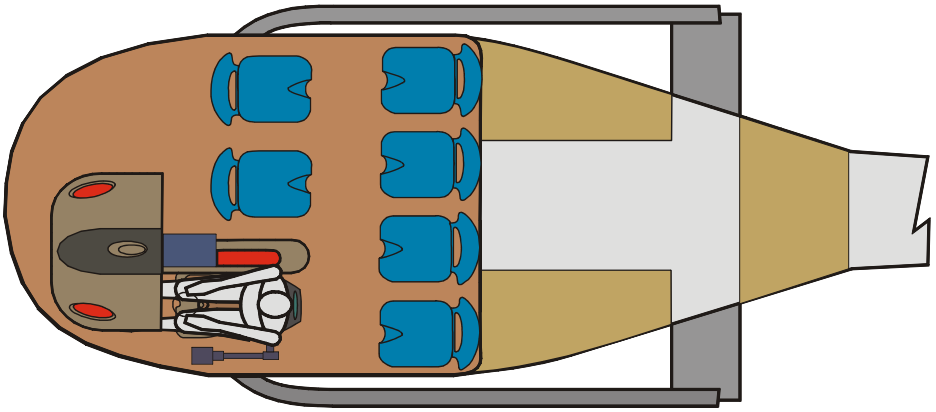
TOTAL HOLDS	
Surface	1.50 m² 16.15 ft²
Volume	1.095 m³ 38.66 ft³

Configurations

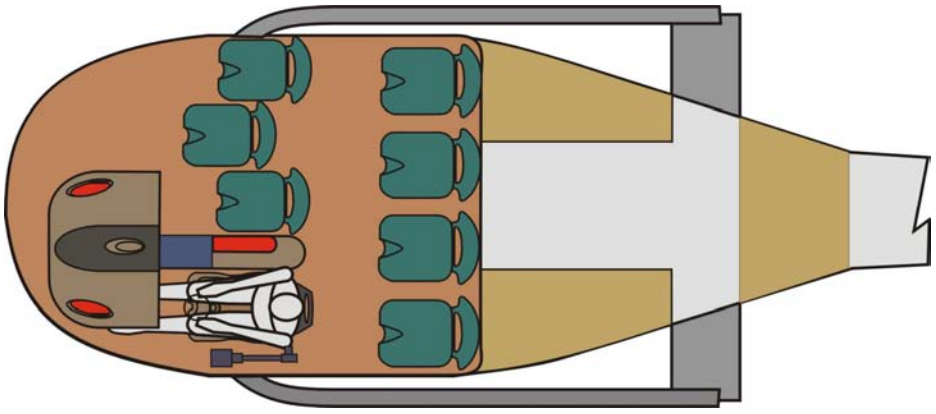
Standard Layout



Club seating Layout



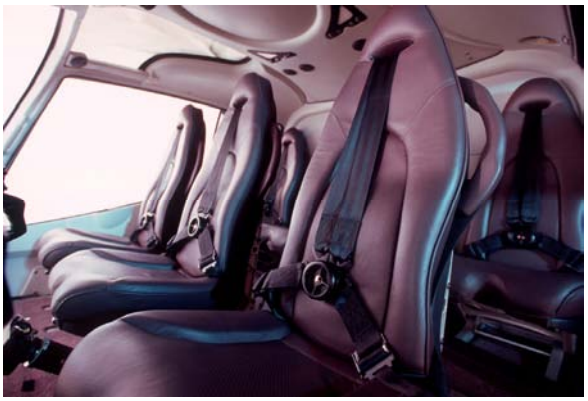
Medium density Layout



Standard Cabin Lay-out and upholstery

The EC130 B4 *offers an enlarged cabin floor, allowing comfortable accommodation for the pilot and 6 passengers on individual energy-absorbing seats. The rear seats are slightly elevated to offer a better visibility to the passengers.*

STYLENCE Cabin Lay-out and upholstery (optional)



Note: EC130 B4 *in* STYLENCE *upholstery configuration.*

Enlarged cargo holds

Other characteristics

TURBOMECA ARRIEL 2B1 turbine engine

- 847 shp (632 kW) take-off power
- Triple engine control : one dual channel FADEC (Full Authority Digital Engine Control) unit plus a third independent and automatic back up channel
- Optimized engine ratings according to outside operations conditions thanks to electronic governing system (FADEC)
- Optimized engine monitoring through the *VEMD*
- Automatic starting sequence

VEMD (Vehicle and Engine Multifunction Display)

- Full colour LCD display
- Fully duplex equipment
- Self monitoring at one glance
- First Limitation Indication (FLI) with aural warning
- Mission parameters calculation
- Engine cycle counting
- Engine health monitoring

Noise reduction

The outstanding noise reduction is given by :

- Automatic variable rotor speed control
- quiet *FENESTRON* shrouded tail rotor

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3- *EC130 B4 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, *FENESTRON*® type anti torque rotor, and tail skid
- Tubular skid landing gear, with replaceable skid shoes, with long footsteps, profiler on rear tube, capable of floats and handling wheels
- Lifting points
- Upper mooring fixtures
- External paint : fuselage according to standard paint schemes. Unless modified by optional item, the main rotor head and tail rotor covers are painted in grey, the skid landing gear in dark grey and the *FENESTRON*® duct in light grey
- Internal paint : light grey
- Interior signs and markings : available in either French or English, any other language on request

CABIN

- Cabin floor in light-alloy sheet-metal with hard points
- 2 pilot and copilot high-back energy-absorbing seats, adjustable in reach, removable, complete with cushions, safety belts and dual-strap shoulder harnesses
- 1 passenger high-back energy-absorbing seat (front right), removable, complete with cushions, safety belt and dual shoulder strap harness
- 4 passenger high-back energy-absorbing seats (rear row), removable, complete with cushions, safety belts and dual shoulder strap harnesses) fitted on a removable frame bolted on the cabin floor
- 1 set of controls for pilot in command on left side
- 1 twist grip on pilot side (for engine reduction in case of tail rotor failure and autorotation training)
- 2 tinted upper panes
- 1 roof panel, housing cabin lighting, 7 air ventilation outlets, and controls (ventilation controls, rotor brake and fuel cut-off)
- Capabilities for mandatory optional item : air conditioning or ventilation systems
- 1 heating circuit (outlets in cabin floor)
- 1 demisting circuit
- Doors trim panels
- Floor carpet
- Rear bulkhead and lateral rear trims
- Interior harmony according to definition in force

DOORS

- Cabin
  - 1 right large hinged / jettisonable door,
  - 1 left sliding door,
  - 1 left small hinged / jettisonable door,
- Locks on every access to cabin and luggage compartments
- Lock on fuel cap
- Luggage
  - 2 lateral luggage holds door, horizontal hinge and 2 gas struts)
  - 1 rear luggage door (vertical forward hinge), with ventilation grid)

WINDOWS

- Tinted windows (but windscreen)
- 1 sliding door window on pilot side

POWER PLANT

- 1 Turboméca ARRIEL 2B1 632 kW (850 ch - 847 shp) turbine engine complete with starting, fuel supply and dual channel digital engine control system (FADEC), and fitted with a magnetic plug and chip detector
- 1 fuel system including 1 tank of 540 liters (143 US gal.) total capacity
- 1 back-up fuel control box that automatically controls the engine in case of a total failure of the 2 digital channels of the FADEC
- 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, electric 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 *FENESTRON*® rotor
- 3 main rotor hydraulic servo units (duplex servos)
- 2 independent hydraulic generations

ELECTRICAL INSTALLATION

- One 150 A, 28 VDC 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 lights
- 2 cabin light sets, each with 2 reading lights for 2 rear passengers and 1 dome light
- 1 instrumentation lighting system (with integrated emergency lighting)
- 1 control panel with circuit-breakers panel
- 1 reading map light on upper canopy strut for pilot
- One 28 V DC cabin power outlet

INSTRUMENTS

- Instruments units : available in either metric or English units
- 1 airspeed indicator with heated pitot head
- 1 altimeter
- 1 rate-of-climb indicator
- 1 LCD dual RPM tachometer (rotor tachometer and Nf tachometer)
- 1 clock
- 1 warning panel
- 1 magnetic compass
- 1 overlay on the left side of the instrument panel for instruments lighting and additional warnings
- 1 ICS connection to audio warning issued from *VEMD*®
- Capabilities for *VEMD*® 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, gas generator tachometer
  - Engine oil temperature, pressure,
  - Fuel quantity and fuelflow and estimated remaining time to fly
  - Ammeter and voltmeter
  - Outside air temperature
  - Enhanced usage monitoring functions, IGE / OGE performance calculations, engine cycles counting, engine power check, overlimits display
  - *VEMD*® and peripheral maintenance information

AVIONICS

- 1 avionics master switch
- 1 gyro-horizon
- 1 gyro-compass with
- 1 horizontal Situation Indicator
- 1 turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 VHF/VOR/LOC/GS/GPS
- 1 transponder (mode A+C)
- 1 altitude encoder
- 1 emergency Locator Transmitter (2 frequencies)
- 1 ICS + passenger interphone

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 lifting ring
- 2 upper mooring rings
- 3 main-blade socks
- 1 document holder
- 1 airborne kit stowage bag
- Manuals (CD ROM)

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

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4- Optional equipment

4-1 Mission package

EUROCOPTER proposes one mission package, specially designed for passenger transport, offering an high level of finishing.

This package must be regarded as a whole and its content cannot be modified nor sold separately.

All the optional items listed in chapter 4-2 can be installed as equipment complementary to this package, in accordance with the table of constraints presented in chapter 5.

Document reference	**Commercial reference**	Name
00-50015-B	**00-50015-02-CI**	***STYLENCE* package**

Extra charge for customized external paint – level 2 ***1***

Sun protected upper windows

Air conditioning system with reinforced front air distribution

ICS installation compatible with Bose Aviation X headset

Layout ***STYLENCE***, including mainly

- Light grey internal paint
- Front seats upholstered in leather, with casing made of carbon fiber and leather storage pouch
- Rear seats upholstered in leather with fairing of the lower part
- Integrated door case covered with light grey leather
- Cabin carpet with additional foam
- Carpet edge protection
- Carpet protective mat
- Upholstery panels on the front structure
- New demisting ramp
- Console upholstery
- Lateral upholstery panels on the ceiling
- Rear partition covered with light grey leather
- New rear bulkhead ledge
- Carpet baggage bay floor covering
- Protection covers for seats
- Protection cover for carpet

The STYLENCE layout is available in 6 colour schemes :

❒ Brick ❒ Aubergine ❒ Camel ❒ Graphite ❒ Chocolate ❒ Marine

***EC130 B4 STYLENCE* configuration empty weight : 1,482 kg - 3,267 lb**

The aircraft equipped empty weight is correct to ± 2 %. According to aircraft equipment, ballast may be required to accommodate various mission configurations.

1 *Sophisticated paint scheme with finishing of superior quality, possibility of varnished finishing.*

4-2 List of optional equipment

Symbol ⚠ shown beside an item denotes some constraint (see table on page 20).

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
⚠	05-02007-A	05-02007-00-CI	Extra charge for customized external paint - level 1 ***1 - 2***	5.0	11.0
⚠	05-02008-A	05-02008-00-CI	Extra charge for customized external paint - level 2 ***1 - 3***	5.0	11.0
⚠	05-02009-A	05-02009-00-CI	Extra charge for highly customized external paint ***1 - 4***	On request	
	05-02010-A	05-02010-00-CI	Extra charge for varnished external paint	On request	
⚠	05-03003-A	05-03003-00-CI	First aid kit ***5***	1.8	4.0
⚠	05-21002-A	05-21002-00-CI	Wire strike protection system	5.3	11.7
	05-23005-A	05-23005-00-CI	Engine wash	0.8	1.8
	05-24005-A	05-24005-00-CI	High visibility blades paint scheme	0.1	0.2
	05-25002-B	05-25002-01-CI	Sand prevention filter ***6***	7.5	16.5
	05-27001-A	05-27001-00-CI	Cabin fire-extinguisher ***7***	1.7	3.7
⚠	05-30001-A	05-30001-00-CI	Copilot's map-reading light	0.3	0.7
	05-31002-A	05-31002-00-CI	Sliding window on RH front door	0.1	0.2
⚠	05-31033-A	05-31033-00-CI	Sun protected upper windows	2.0	4.4
⚠	05-37015-A	05-37015-00-CI	Dual controls	2.6	5.7
⚠	05-37020-A	05-37020-00-CI	Full option pilot cyclic control stick	1.0	2.2
⚠	05-37021-A	05-37021-00-CI	Full option copilot cyclic control stick	1.0	2.2
⚠	05-42025-A	05-42025-01-CI	Air conditioning system with reinforced front air distribution ***8***	40.0	88.2
⚠	05-44004-A	05-44004-00-CI	Cabin ventilation system ***8***	5.8	12.8
	05-61008-A	05-61008-00-CI	2nd battery kit ***9***	On request	
	05-63002-A	05-63002-01-CI	APC 200 A starter-generator	1.6	3.5
	05-63002-A	05-63002-02-CI	Thales Avionics 200 A starter-generator	1.1	2.4
	05-63005-A	05-63005-00-CI	Thales Avionics starter-generator instead of APC standard one	-0.6	-1.3
	05-92016-A	05-92016-00-CI	Folding of main rotor blades ***9***	On request	

1 *The paint scheme must be approved at the latest 3 months before the delivery of the helicopter.*
2 *Paint scheme comprising a basic shade and 2 or 3 additional shades, with straight separation lines, apart from standard paint schemes.*
3 *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.*
4 *Sophisticated paint scheme with numerous shades, complex graduated shades, or complicated emblem or logo.*
5 *Recommended for public transport mission. Its content is the buyer's responsibility as it may vary according to geographical region or applicable regulations.*
6 *Capabilities included in standard aircraft. The sand filter authorises the flight under falling snow.*
7 *If type is accepted by local regulations.*
8 *It is mandatory to select one of the two optional items 05-42025-01-CI or 05-44004-00-CI.*
9 *Availability and impact on delivery schedule : to be checked.*

Specific mission equipment

	Document reference	Commercial reference	Name	kg	lb
	06-11006-A	**06-11006-00-CI**	Heavy duty skid shoes	**2.5**	**5.5**
	06-26002-A	**06-26002-00-CI**	External electric mirror	**2.6**	**5.7**
	06-27002-B	**06-27002-01-FP**	Cargo sling 750 kg - 1,654 lb - Fixed Parts	**2.4**	**5.3**
⚠	06-27002-B	**06-27002-01-RP**	Cargo sling 750 kg - 1,654 lb - Removable Parts *1*	**2.0**	**4.4**
	06-27003-A	**06-27003-00-FP**	Cargo swing 1,160 kg – 2,557 lb - Fixed Parts	**5.1**	**11.2**
⚠		**06-27003-00-RP**	Cargo swing 1,160 kg – 2,557 lb - Removable Parts *1*	**11.5**	**25.4**
	06-27016-A	**06-27016-00-FP**	Cargo swing 1,350 kg – 2,976 lb - Fixed Parts *2*	**On request**	
⚠		**06-27016-00-RP**	Cargo swing 1,350 kg – 2,976 lb - Removable Parts *2*	**On request**	
	06-42017-A	**06-42017-00-CI**	Landing light adjustable in site and azimuth *3*	**4.3**	**9.5**
	06-61006-A	**06-61006-00-FP**	Emergency floatation gear - Fixed Parts *3* - *4*	**3.6**	**7.9**
⚠		**06-61006-00-RP**	Emergency floatation gear - Removable Parts *3*	**57.4**	**126.5**
	06-74007-A	**06-74007-00-CI**	NVG compatible lighting for cockpit and standard avionics suite *2*	**On request**	

Interior cabin layout

⚠	07-24005-A	**07-24005-00-CI**	8 Energy-absorbing seats layout *5* - *6*	**23.4**	**51.6**
⚠	07-40013-A	**07-40013-00-CI**	Carpet edge protection	**0.6**	**1.3**

1 *With Onboard Systems TALON hook.*
2 *Availability and impact on delivery schedule : to be checked.*
3 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations.*
4 *When the removable parts are not fitted on the aircraft, a part of the fixed parts representing 2 kg - 4.4 lb can be easily dismounted (less than one working day).*
5 *When the aircraft is delivered with 8 seats, the rails for installing 7 seats are provided as loose equipment.*
6 *According to the aircraft configuration, ballast may be required to accommodate both pilot alone and one pilot + 7 passengers. The weight figure includes a ballast's average value of 4.8 kg - 10.6 lb (maximum value 12.8 kg -28.2 lb).*

Avionics

Single pilot VFR day and night Package included in standard definition

Thales H321EGM - Gyro-horizon *1*

Honeywell KCS55A - Gyro Compass with
Honeywell KI525A - Horizontal Situation Indicator *2*

UI 9560 - Turn and Bank indicator

Honeywell KX165A - VHF/VOR/LOC/GS

Garmin GNS430 - VHF/VOR/LOC/GS/GPS *3*

Garmin GTX327 - Transponder (mode A+C)

Shadin 8800T - Altitude Encoder

Kannad 121AF-H - Emergency Locator Transmitter *4*

Garmin GMA340 - ICS *5 - 6*

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.*

Equipment that can replace a standard equipment

	Document reference	**Commercial reference**	Name	**kg**	**lb**
	06-67031-A	**06-67031-01-CI**	Kannad 406AF-H - Emergency Locator Transmitter *7 - 8* instead of Kannad 121AF-H - Emergency Locator Transmitter	**0.1**	**0.2**
	08-22019-A	**08-22019-01-CI**	Garmin GTX330 - Transponder (mode S) *8 - 9* instead of Garmin GTX327 - Transponder (mode A+C)	**0.6**	**1.3**
⚠	*08-51019-A*	**08-51019-01-CI**	Thales H321EGM - Stand-by gyro-horizon *8 - 10* instead of UI 9560 - Turn and Bank indicator	**3.0**	**6.6**

1 *With slip indicator included when the Turn and Bank indicator is replaced by the stand-by gyro-horizon.*
2 *With a selector switch for NAV1/NAV2 selection.*
3 *Delivered with EUROPE map. Subscription to be made by the customer.*
4 *2 frequencies : 121.5 MHz, 243 MHz. Compliant with ED 62 and TSO C91A.*
5 *Includes the passenger interphone function.*
6 *I.C.S. compatible only with High level / High impedance headsets.*
The headsets of the passengers should be of the same mark and the same model.
7 *3 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.
8 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations.*
9 *The mode S identification must be communicated by the customer two months at the latest before the delivery.*
10 *Fitted with independent battery.*

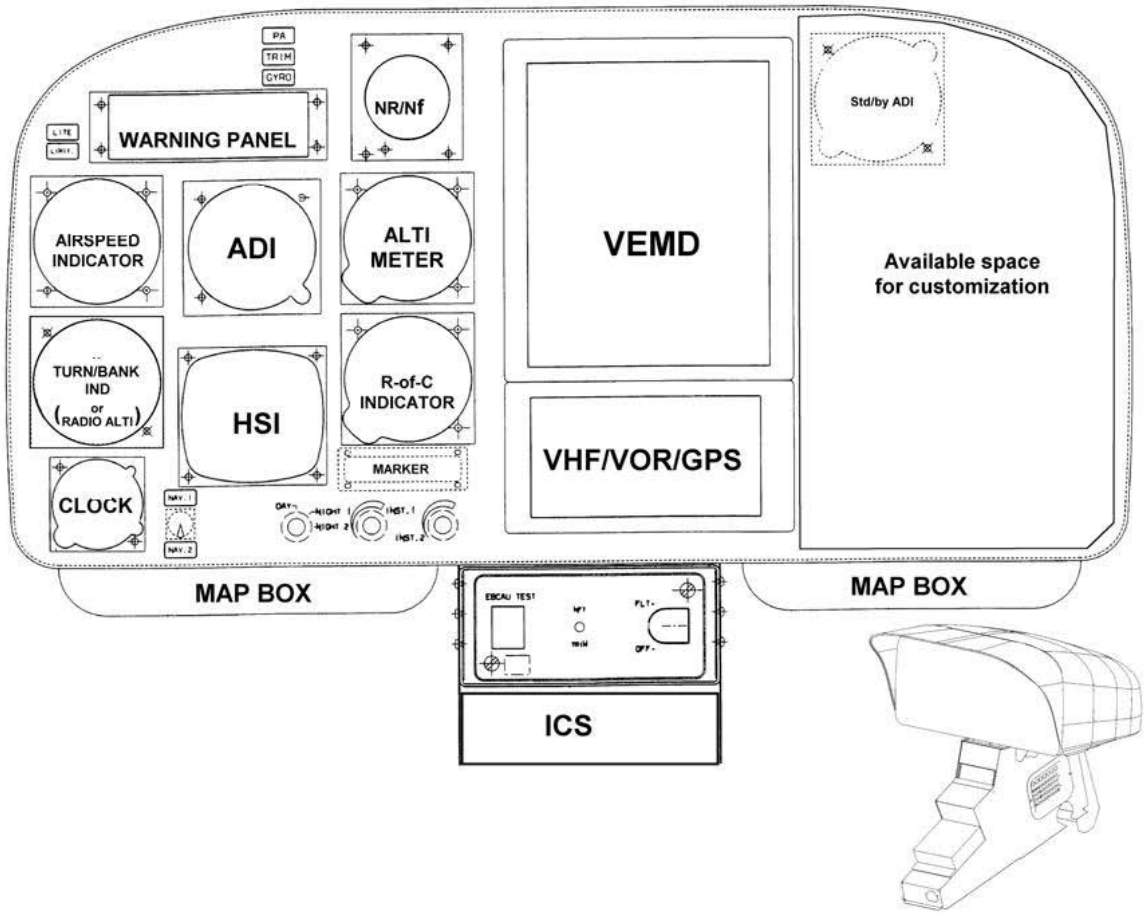
Additional Avionic equipment that can be added depending on operational needs or the requirements of the authorities in certain countries if not included in the standard package

	Document reference	Commercial reference	Name	kg	lb
	08-10018-A	**08-10018-01-CI**	HF/SSB *1*	**On request**	
	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 *2*	**0.5**	**1.1**
	08-18037-A	**08-18037-00-CI**	ICS installation compatible with Bose Aviation X headset *3*	**1.0**	**2.2**
⚠	08-18043-A	**08-18043-00-CI**	Bose Aviation X headset	**0.5**	**1.1**
⚠	08-21008-A	**08-21008-01-CI**	Thales AHV16 - Radio altimeter *4*	**5.6**	**12.3**
	08-24011-B	**08-24011-06-CI**	Honeywell KR87 + KI229 - ADF + RMI	**On request**	
	08-25001-A	**08-25001-00-CI**	Honeywell KN62A - DME	**On request**	
⚠	08-51015-B	**08-51015-01-CI**	Thales H321EGM - Stand-by gyro-horizon *5* - *6*	**3.8**	**8.4**
	08-83017-A	**08-83017-00-CI**	*VEMD* data download kit *7* - *8*	**—**	**—**

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.

1 *Model to be defined.*
2 *High level / High impedance headset.*
3 *Includes ICS stereo jacks : in addition to the standard jacks for pilot and copilot and in replacement of the standard jacks for passengers. Provides electrical supply for the use of Bose X headset without battery pack.*
4 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations.*
5 *Fitted with independent battery.*
6 *In addition to the standard Turn and bank indicator.*
7 *Allows compliance to JAR OPS 3 Amendment 3 requirement, as defined in Appendix 1 to JAR OPS 3.517 (a) and (b)(5)(i). Requires absolute time data, given through a compatible connection with serviceable GPS equipment (Compliance achieved with the standard aircraft as defined on pages 11 and 12).*
8 *Delivered in addition to the airborne kit, the kit includes two softwares and a connection wire.*

STANDARD INSTRUMENT PANEL LAYOUT



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

Equipment that may be required by operational regulations

The purpose of the following table is to summarise a list of available optional items of equipment — which may supplement the sales standard aircraft definition — in order to comply with the relevant operational regulations depending on the type of operations. This list must be considered as a reminder and does not claim to cover all operational requirements.

	Document reference	**Commercial reference**	Name	**kg**	**lb**
⚠	*05-03003-A*	**05-03003-00-CI**	First aid kit ***1***	**1.8**	**4.0**
	05-27001-A	**05-27001-00-CI**	Cabin fire-extinguisher ***2***	**1.7**	**3.7**
	06-42017-A	**06-42017-00-CI**	Landing light adjustable in site and azimuth	**4.3**	**9.5**
	06-61006-A	**06-61006-00-FP**	Emergency floatation gear - Fixed Parts ***3***	**3.6**	**7.9**
		06-61006-00-RP	Emergency floatation gear - Removable Parts	**57.4**	**126.5**
	06-67031-A	**06-67031-01-CI**	Kannad 406AF-H - Emergency Locator Transmitter ***4*** instead of Kannad 121AF-H - Emergency Locator Transmitter	**0.1**	**0.2**
	08-10018-A	**08-10018-01-CI**	HF/SSB ***5***	**On request**	
	08-18035-A	**08-18035-00-CI**	David Clark H10-13H - Headset ***6***	**0.5**	**1.1**
⚠	*08-21008-A*	**08-21008-01-CI**	Thales AHV16 - Radio altimeter	**5.6**	**12.3**
	08-22019-A	**08-22019-01-CI**	Garmin GTX330 - Transponder (mode S) ***7*** instead of Garmin GTX327 - Transponder (mode A+C)	**0.6**	**1.3**
	08-25001-A	**08-25001-00-CI**	Honeywell KN62A - DME	**On request**	
⚠	*08-51015-B*	**08-51015-01-CI**	Thales H321EGM - Stand-by gyro-horizon ***8*** - ***9***	**3.8**	**8.4**
	08-51019-A	**08-51019-01-CI**	Thales H321EGM - Stand-by gyro-horizon ***8*** instead of UI 9560 - Turn and Bank indicator	**3.0**	**6.6**
	08-83017-A	**08-83017-00-CI**	*VEMD* data download kit ***10*** - ***11***	**—**	**—**

1 *Recommended for public transport mission. Its content is the buyer's responsibility as it may vary according to geographical region or applicable regulations.*

2 *If type is accepted by local regulations.*

3 *When the removable parts are not fitted on the aircraft, a part of the fixed parts representing 2 kg - 4.4 lb can be easily dismounted (less than one working day).*

4 *3 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.

5 *Model to be defined.*

6 *High level / High impedance headset.*

7 *The mode S identification must be communicated by the customer two months at the latest before the delivery.*

8 *Fitted with independent battery.*

9 *In addition to the standard Turn and bank indicator.*

10 *Allows compliance to JAR OPS 3 Amendment 3 requirement, as defined in Appendix 1 to JAR OPS 3.517 (a) and (b)(5)(i). Requires absolute time data, given through a compatible connection with serviceable GPS equipment (Compliance achieved with the standard aircraft as defined on pages 11 and 12).*

11 *Delivered in addition to the airborne kit, the kit includes two softwares and a connection wire.*

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 Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
00-50015-B	00-50015-02-CI	*STYLENCE* package *1*	X				05-02007-00-CI	Extra charge for customized external paint - level 1	05-02007-A
			X				05-02008-00-CI	Extra charge for customized external paint - level 2	05-02008-A
			X				05-03003-00-CI	First aid kit	05-03003-A
			X				05-31033-00-CI	Sun protected upper windows	05-31033-A
			X				05-42025-01-CI	Air conditioning system with reinforced front air distribution	05-42025-A
			X				05-44004-00-CI	Cabin ventilation system	05-44004-A
			X				07-24005-00-CI	8 Energy-absorbing seats layout	07-24005-A
			X				07-40013-00-CI	Carpet edge protection	07-40013-A
05-02007-A	05-02007-00-CI	Extra charge for customized external paint - level 1	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
			X				05-02008-00-CI	Extra charge for customized external paint - level 2	05-02008-A
			X				05-02009-00-CI	Extra charge for highly customized external paint	05-02009-A
05-02008-A	05-02008-00-CI	Extra charge for customized external paint – level 2	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
			X				05-02007-00-CI	Extra charge for customized external paint – level 1	05-02007-A
			X				05-02009-00-CI	Extra charge for highly customized external paint	05-02009-A
05-02009-A	05-02009-00-CI	Extra charge for highly customized external paint	X				05-02007-00-CI	Extra charge for customized external paint – level 1	05-02007-A
			X				05-02008-00-CI	Extra charge for customized external paint – level 2	05-02008-A
05-03003-A	05-03003-00-CI	First aid kit	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
05-21002-A	05-21002-00-CI	Wire strike protection system	X				05-30001-00-CI	Copilot's map-reading light	05-30001-A
05-30001-A	05-30001-00-CI	Copilot's map-reading light	X				05-21002-00-CI	Wire strike protection system	05-21002-A
05-31033-A	05-31033-00-CI	Sun protected upper windows	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
05-37015-A	05-37015-00-CI	Dual controls		X			07-24005-00-CI	8 Energy-absorbing seats layout	07-24005-A
05-37015-A and 05-37020-A	05-37015-00-CI and 05-37020-00-CI	Dual controls and Full option pilot cyclic control stick				X	05-37021-00-CI	Full option copilot cyclic control stick	05-37021-A
05-37021-A	05-37021-00-CI	Full option copilot cyclic control stick		X			07-24005-00-CI	8 Energy-absorbing seats layout	07-24005-A
						X	05-37015-00-CI	Dual controls	05-37015-A
						X	05-37020-00-CI	Full option pilot cyclic control stick	05-37020-A

1 *Although technically feasible, the optional item 8 energy-absorbing seats layout is not recommended with the* STYLENCE *package.*

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
05-42025-A	05-42025-01-CI	Air conditioning system with reinforced front air distribution	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
			X				05-44004-00-CI	Cabin ventilation system	05-44001-A
05-44004-A	05-44004-00-CI	Cabin ventilation system	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
			X				05-42025-01-CI	Air conditioning system with reinforced front air distribution	05-42025-A
06-27002-B	06-27002-01-RP	Cargo sling 750 kg - 1,654 lb - Removable Parts		X			06-27003-00-RP	Cargo swing 1,160 kg – 2,557 lb - Removable Parts	06-27003-A
				X			06-27016-00-RP	Cargo swing 1,350 kg – 2,976 lb - Removable Parts	06-27016-A
						X	06-27002-01-FP	Cargo sling 750 kg - 1,654 lb - Fixed Parts	06-27002-B
06-27003-A	06-27003-00-RP	Cargo swing 1,160 kg – 2,557 lb - Removable Parts		X			06-27002-01-RP	Cargo sling 750 kg - 1,654 lb - Removable Parts	06-27002-B
				X			06-27016-00-RP	Cargo swing 1,350 kg – 2,976 lb - Removable Parts	06-27016-A
						X	06-27003-00-FP	Cargo swing 1,160 kg – 2,557 lb - Fixed Parts	06-27003-A
06-27016-A	06-27016-00-RP	Cargo swing 1,350 kg – 2,976 lb - Removable Parts		X			06-27002-01-RP	Cargo sling 750 kg - 1,654 lb - Removable Parts	06-27002-B
				X			06-27003-00-RP	Cargo swing 1,160 kg – 2,557 lb - Removable Parts	06-27003-A
						X	06-27016-00-FP	Cargo swing 1,350 kg – 2,976 lb - Fixed Parts	06-27016-A
06-61006-A	06-61006-00-RP	Emergency floatation gear - Removable Parts				X	06-61006-00-FP	Emergency floatation gear - Fixed Parts	06-61006-A
07-24005-A	07-24005-00-CI	8 Energy-absorbing seats layout *1*	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
				X			05-37015-00-CI	Dual controls	05-37015-A
				X			05-37021-00-CI	Full option copilot cyclic control stick	05-37021-A
07-40013-A	07-40013-00-CI	Carpet edge protection	X				00-50015-02-CI	*STYLENCE* package	00-50015-B
08-18043-A	08-18043-00-CI	Bose Aviation X headset				X	08-18037-00-CI	ICS installation compatible with Bose Aviation X headset	08-18037-A
08-21008-A	08-21008-01-CI	Thales AHV16 - Radio altimeter	X				08-51015-01-CI	Thales H321EGM - Stand-by gyro-horizon	08-51015-B
						X	08-51019-01-CI	Thales H321EGM - Stand-by gyro-horizon instead of UI 9560 - Turn and Bank indicator	08-51019-A
08-51015-B	08-51015-01-CI	Thales H321EGM - Stand-by gyro-horizon	X				08-21008-01-CI	Thales AHV16 - Radio altimeter	08-21008-A
			X				08-51019-01-CI	Thales H321EGM - Stand-by gyro-horizon instead of UI 9560 - Turn and Bank indicator	08-51019-A
08-51019-A	08-51019-01-CI	Thales H321EGM - Stand-by gyro-horizon instead of UI 9560 - Turn and Bank indicator	X				08-51015-01-CI	Thales H321EGM - Stand-by gyro-horizon	08-51015-B

1 *Although technically feasible, the optional item 8 energy-absorbing seats layout is not recommended with the* STYLENCE *package.*

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.

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6- Main performance

The following performance values and figures refer to an ***EC130 B4***.
Unless otherwise specified, the values and figures refer to a **clean helicopter,** equipped with a **new engine,** at **Sea Level** (SL), in **International Standard Atmosphere** (ISA) and **zero wind** condition.

Note : The following data are extracted from the approved flight manual which is the reference for performance computation.

Performance

Gross Weight	**kg** **lb**	**1,800** **3,968**	**2,000** **4,409**	**2,200** **4,850**	**2,300** **5,071**	**2,400** **5,291**	**2,427** **5,351**
■ Maximum Speed, VNE	**km/hr** **kts**	287 155	287 155	287 155	287 155	287 155	287 155
■ Fast cruise speed (at MCP)	**km/hr** **kts**	250 135	248 134	244 132	242 131	240 130	240 130
■ Recommended cruise speed	**km/hr** **kts**	222 120	222 120	222 120	222 120	222 120	222 120
■ Fuel consumption at fast cruise speed	**kg/hr** **lb/h**	175 386	175 386	175 386	175 386	175 386	175 386
■ Fuel consumption at recommended cruise speed	**kg/hr** **lb/h**	149 328	151.5 334	154 340	155.5 343	157 346	157.5 347
■ Rate-of-climb	**m/sec** **ft/min**	11.6 2,290	10.9 2,155	10.1 1,995	9.6 1,905	9.1 1,805	9.0 1,770
■ Hover ceiling IGE at Take-off power							
● ISA	**m** **ft**	5,865 19,255	4,920 16,140	4,035 13,240	3,615 11,865	3,210 10,530	3,100 10,165
● ISA + 20°C	**m** **ft**	5,145 16,880	4,175 13,710	3,275 10,750	2,840 9,320	2,420 7,940	2,305 7,575
■ Hover ceiling OGE at Take-off power							
● ISA	**m** **ft**	5,360 17,590	4,400 14,435	3,505 11,505	3,075 10,090	2,650 8,695	2,535 8,325
● ISA + 20°C	**m** **ft**	4,610 15,130	3,630 11,915	2,705 8,875	2,260 7,415	1,830 6,000	1,715 5,630
■ Service ceiling (0.5 m/sec., 100 ft/min.)							
● ISA	**m** **ft**	>7,010 >23,000	6,505 21,345	5,665 18,585	5,265 17,275	4,870 15,980	4,770 15,655
● ISA + 20°C	**m** **ft**	6,645 21,805	5,675 18,625	4,755 15,605	4,300 14,120	3,855 12,655	3,735 12,260
■ Range (without reserve, at recommended cruise speed)	**km** **nm**	644 347	635 343	625 337	620 334	615 332	610 329
■ Endurance (without reserve)	**hr : min**	04:07	04:01	03:54	03:51	03:48	03:47

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 — 7,010 m - 23,000 ft (PA)
- Maximum temperature — ISA + 35 °C limited to + 50 °C
- Minimum temperature — – 40 °C

Abbreviations

IGE :	In Ground Effect	SL :	Sea Level
ISA :	International Standard Atmosphere	TAS :	True Air Speed
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
kts :	knots	kg :	kilograms
ft/min :	feet per minute	lb :	pounds
m/sec :	meters per second	km :	kilometers
° C :	degrees Celsius		

Performance charts

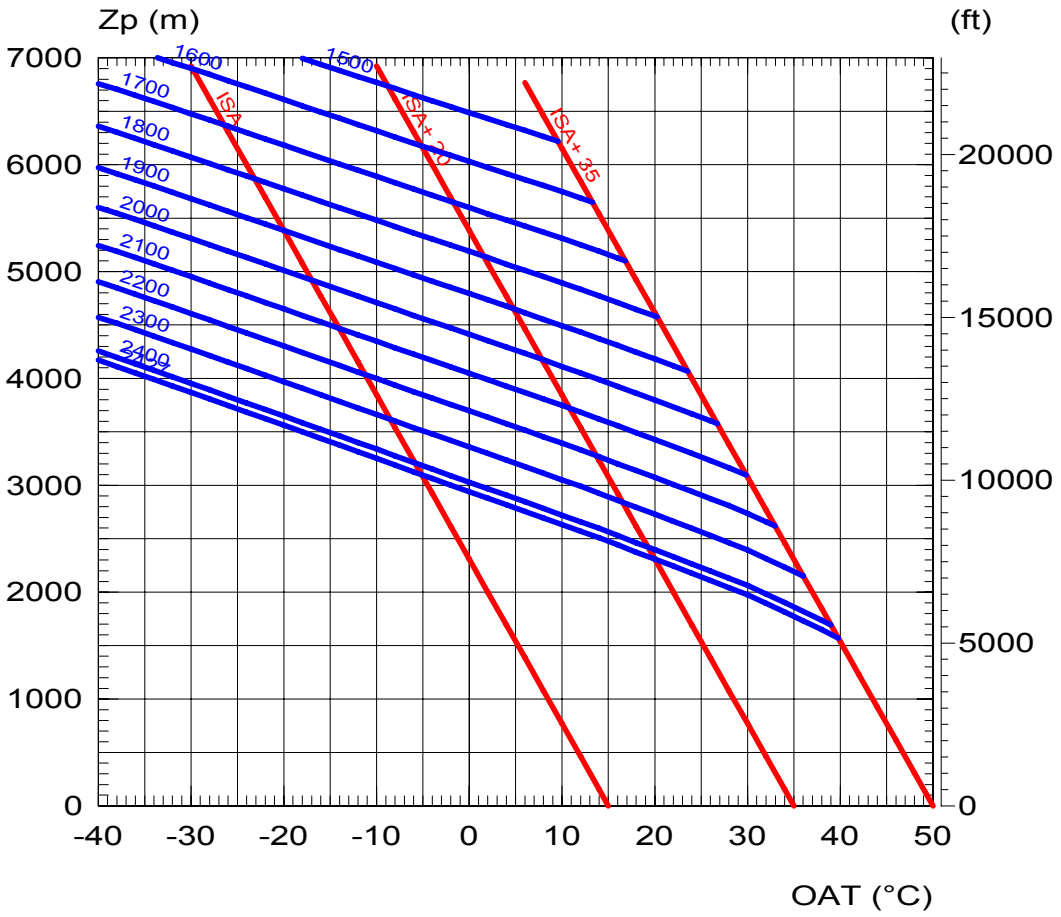
The performance charts presented hereafter apply to an aircraft as per the standard definition.

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.

HOVER CEILING I.G.E.

at maximum TOP

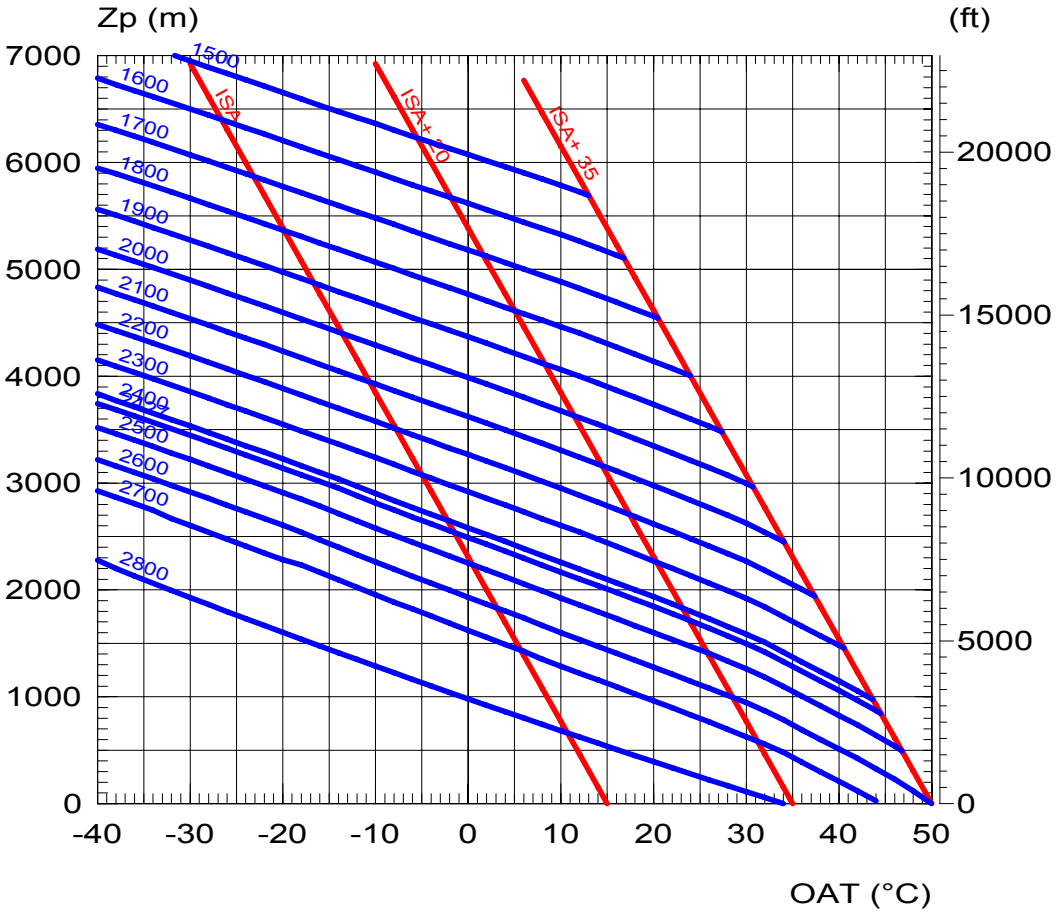
(Height 5 ft)



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

HOVER CEILING O.G.E.

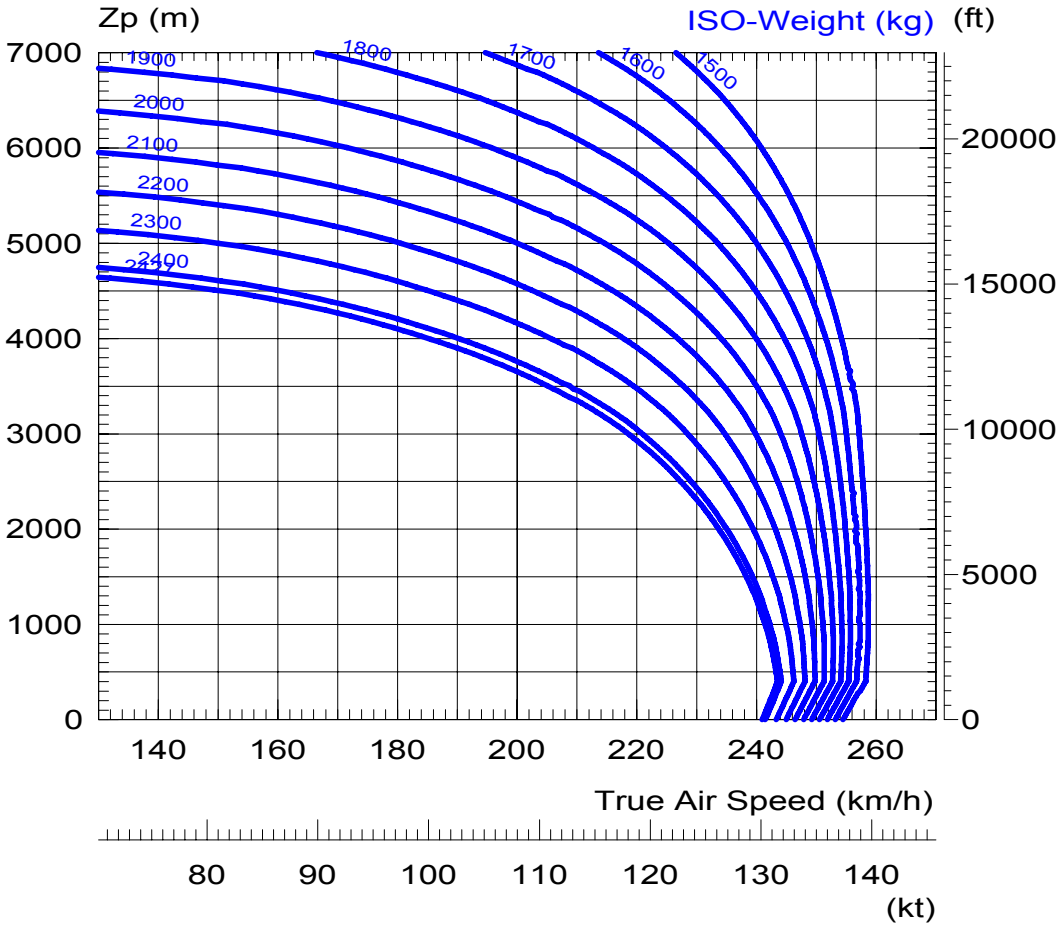
at maximum TOP



Note : ISO weight curves from 2,427 to 2,800 kg are curves with external load.
Note : Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual.

FAST CRUISE SPEED

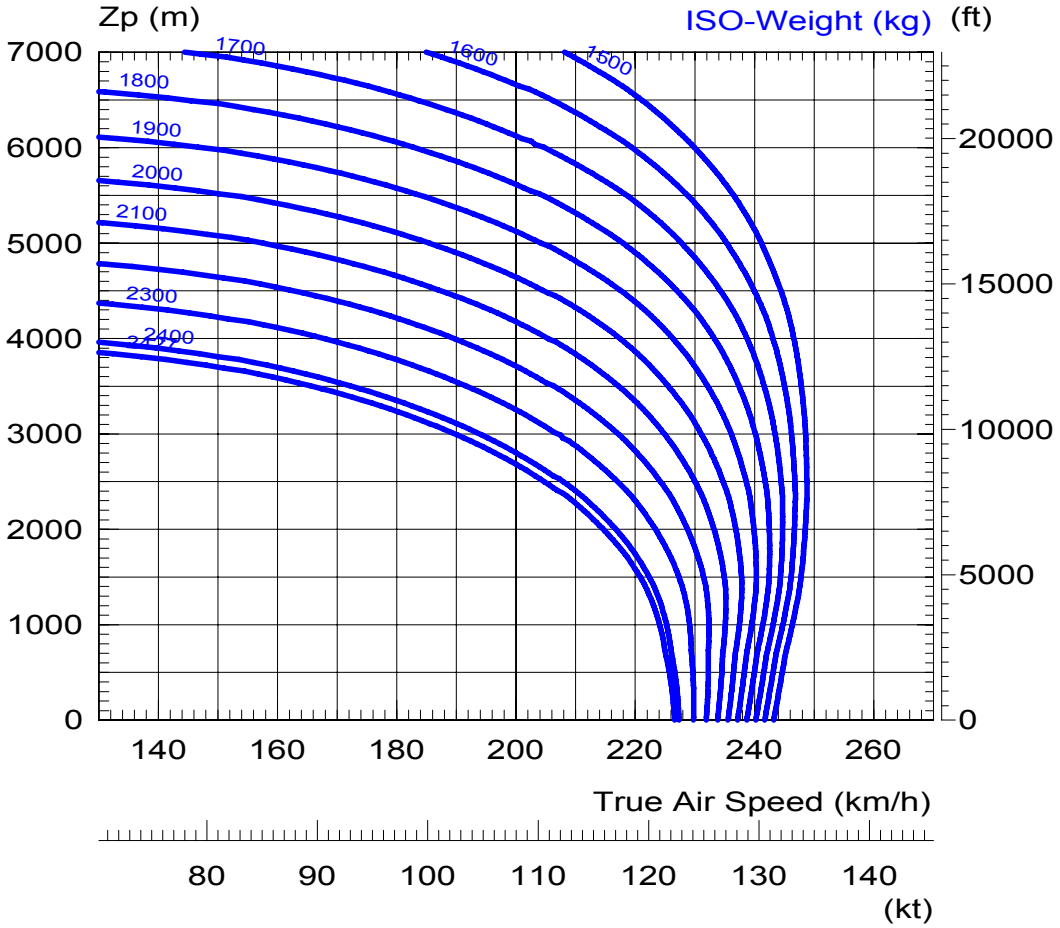
ISA



Note : Typical performance, with clean standard aircraft and new engine.

FAST CRUISE SPEED

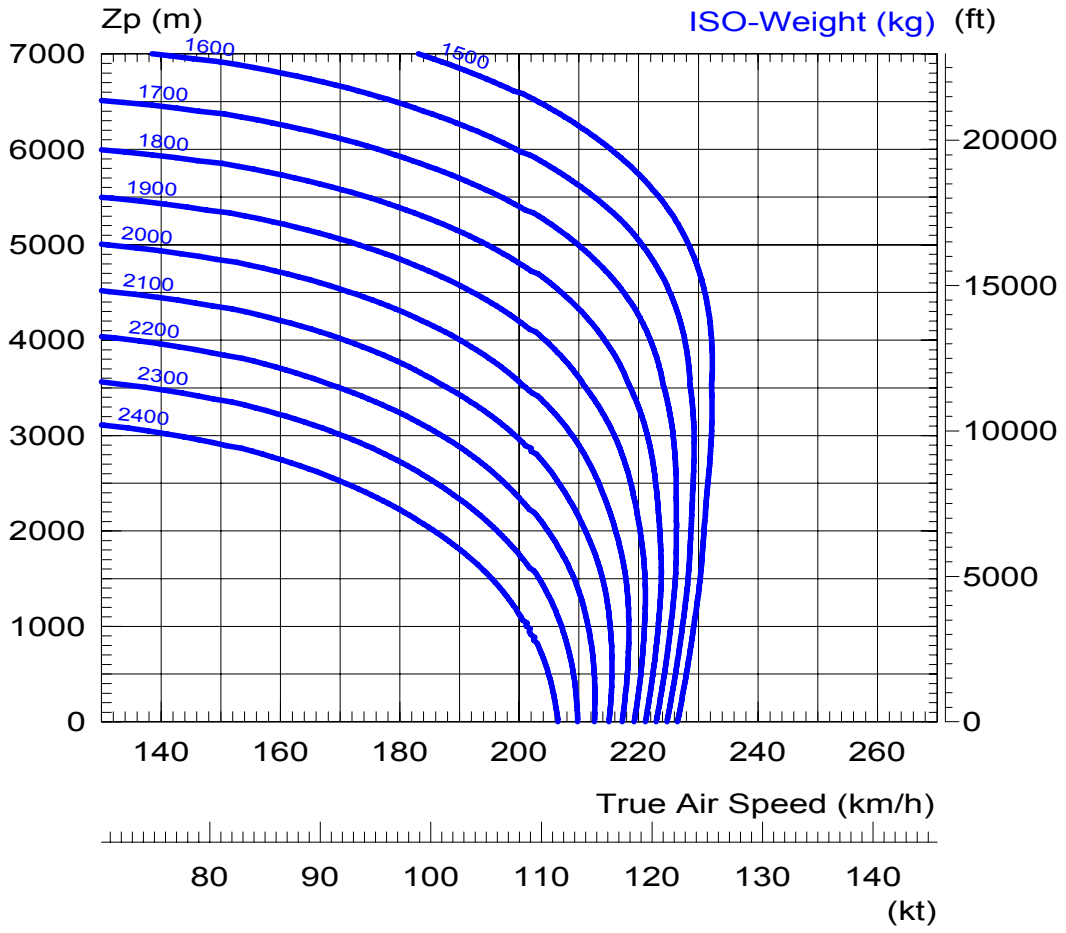
ISA+20°C



Note : Typical performance, with clean standard aircraft and new engine.

FAST CRUISE SPEED

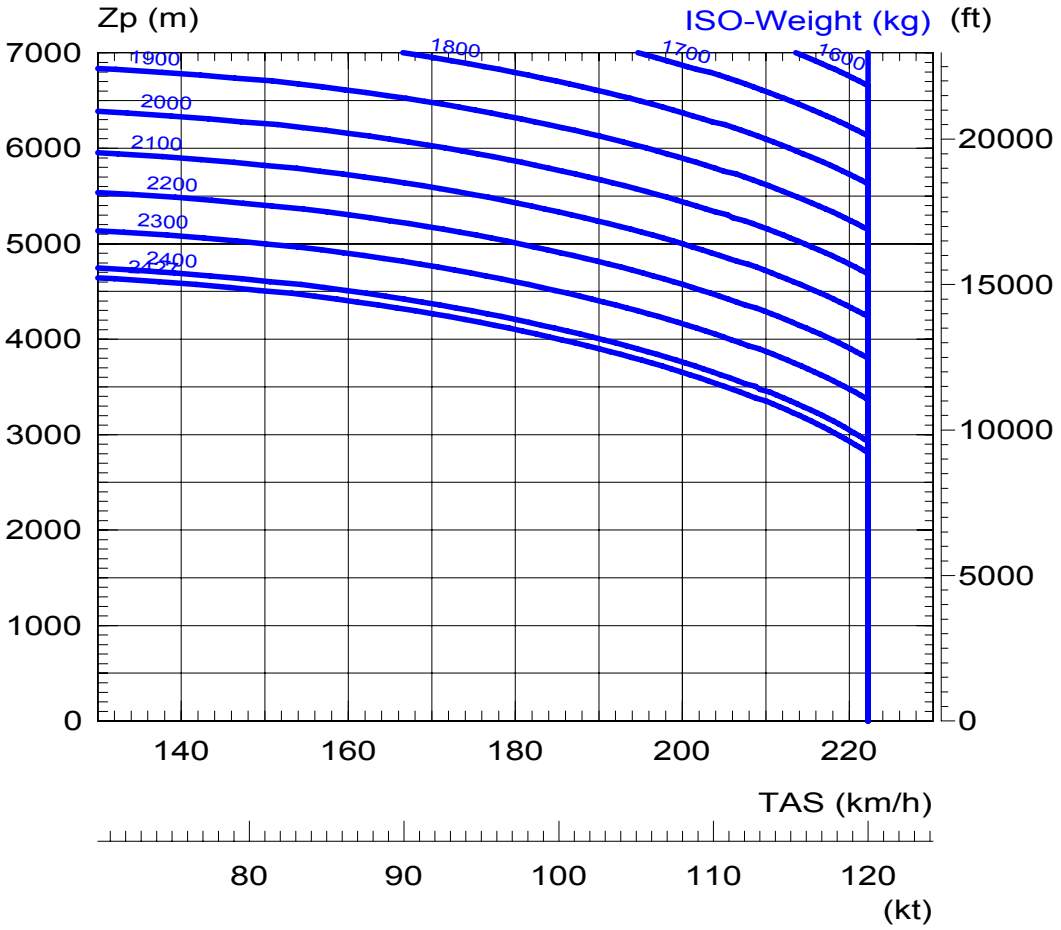
ISA+35°C



Note : Typical performance, with clean standard aircraft and new engine.

RECOMMENDED CRUISE SPEED

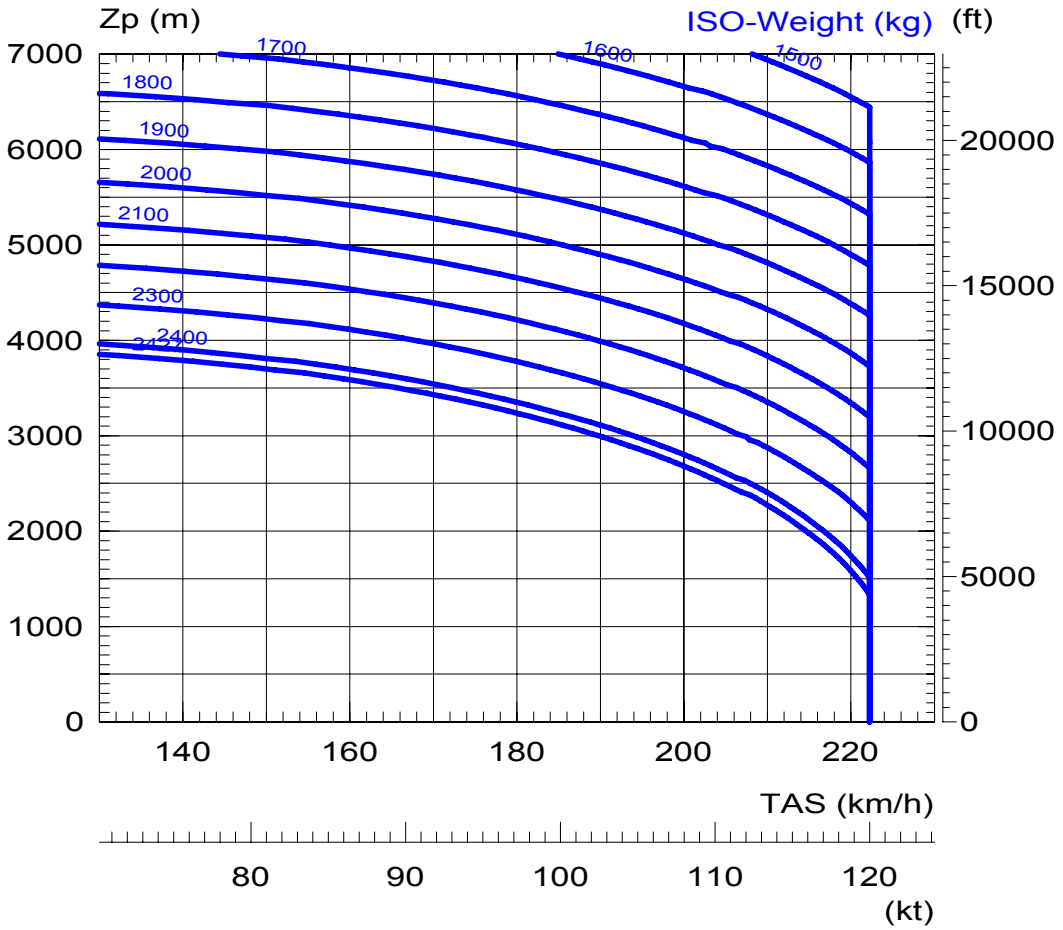
ISA



Note : Typical performance, with clean standard aircraft and new engine.

RECOMMENDED CRUISE SPEED

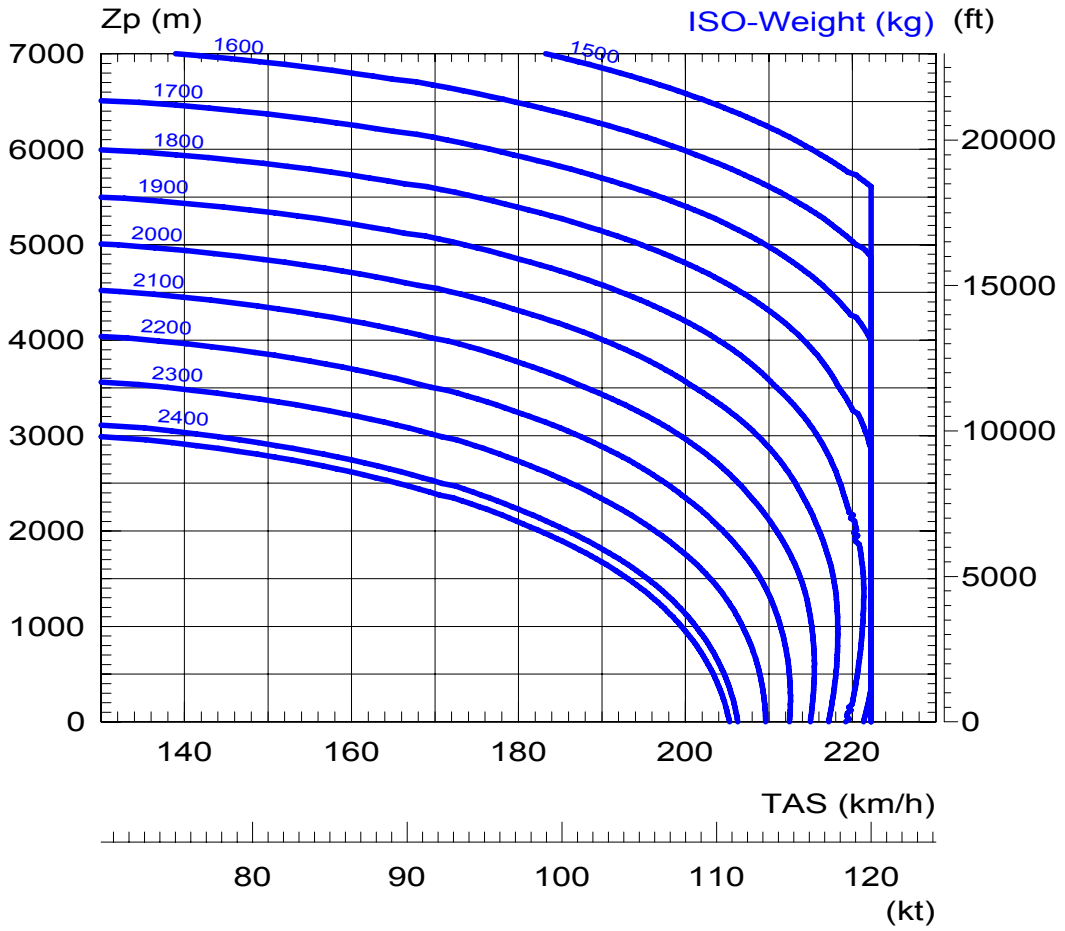
ISA+20°C



Note : Typical performance, with clean standard aircraft and new engine.

RECOMMENDED CRUISE SPEED

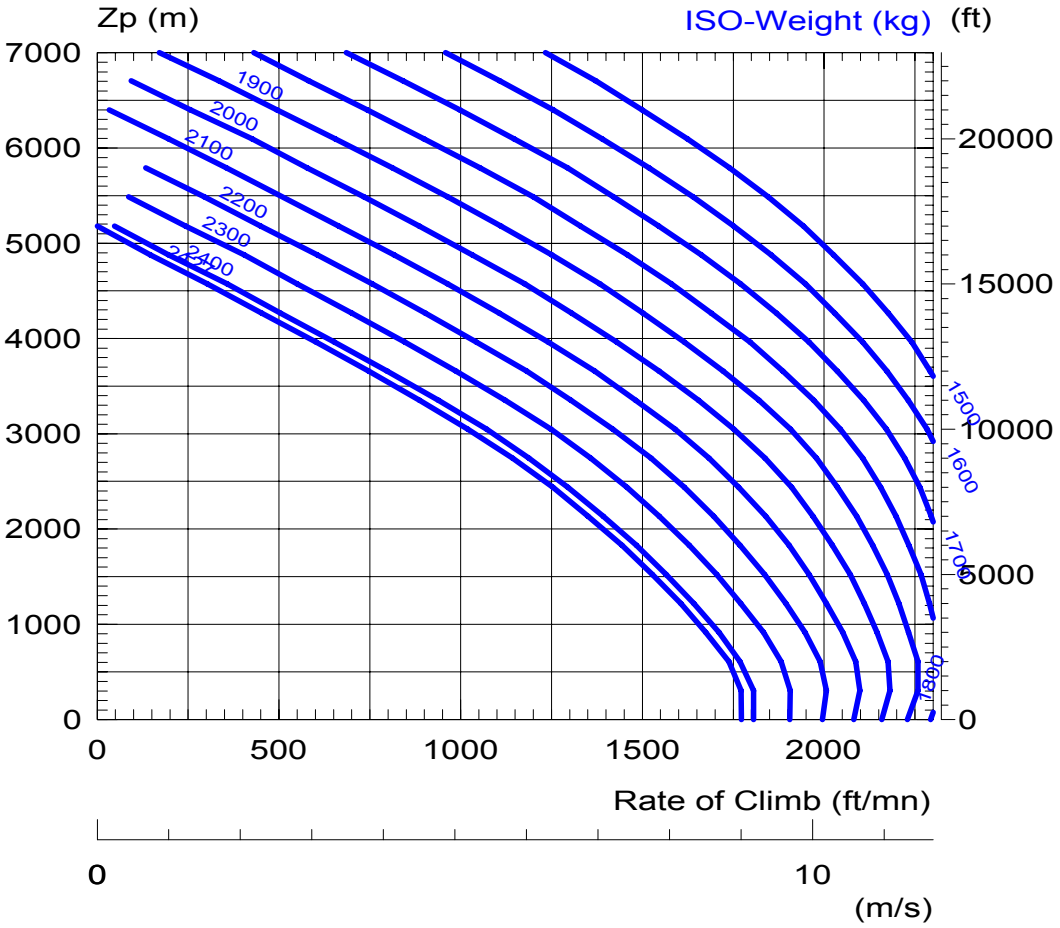
ISA+35°C



Note : Typical performance, with clean standard aircraft and new engine.

RATE OF CLIMB IN OBLIQUE FLIGHT

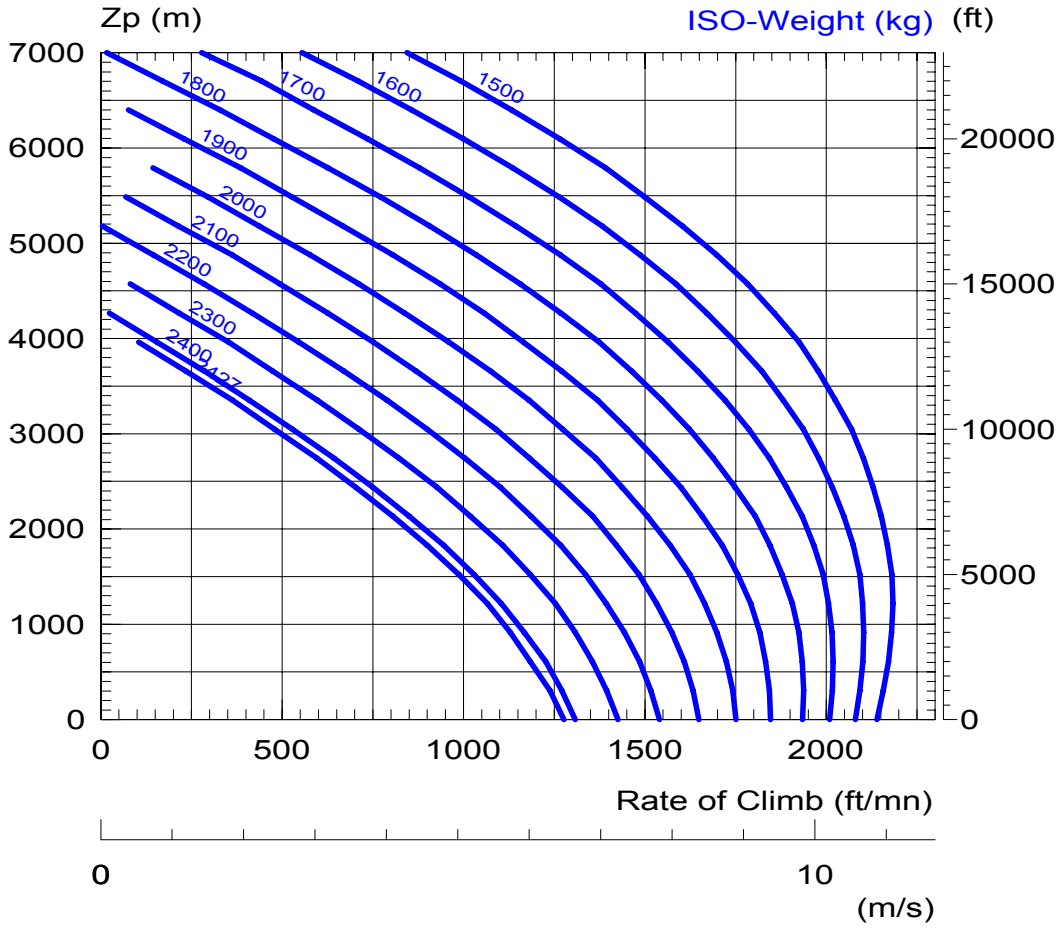
ISA



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

RATE OF CLIMB IN OBLIQUE FLIGHT

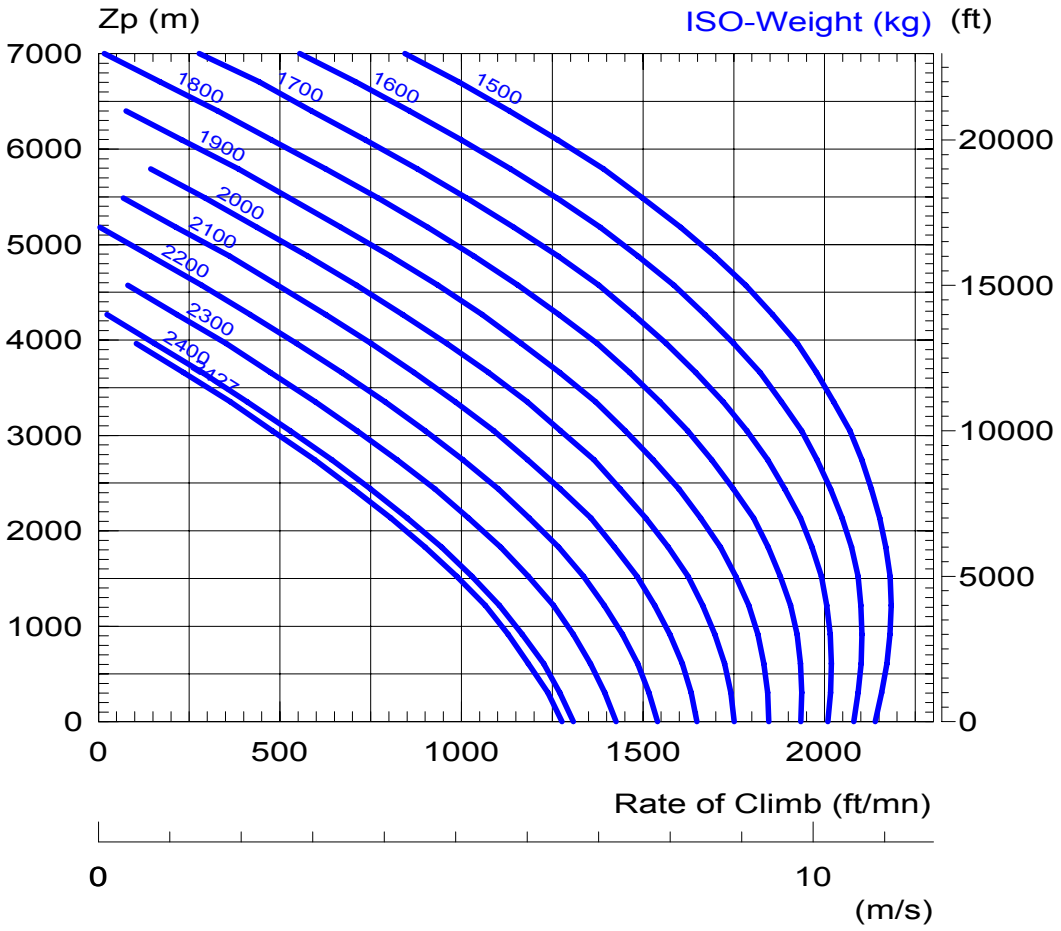
ISA + 20°C



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

RATE OF CLIMB IN OBLIQUE FLIGHT

ISA + 35°C

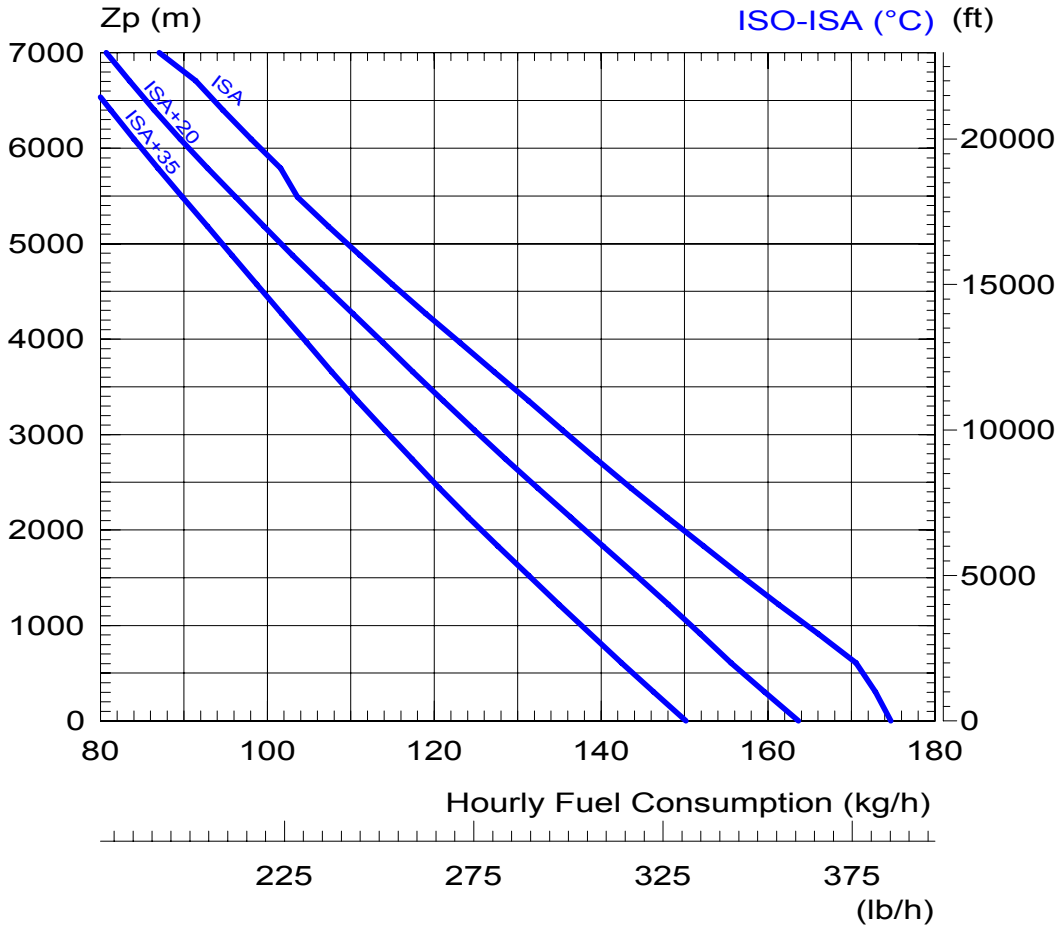


Note : Approved performance, as long as the engine meets the power check criteria, as defined in the Flight Manual.

HOURLY FUEL CONSUMPTION

at fast cruise speed

ISA, ISA + 20°C, ISA + 35°C

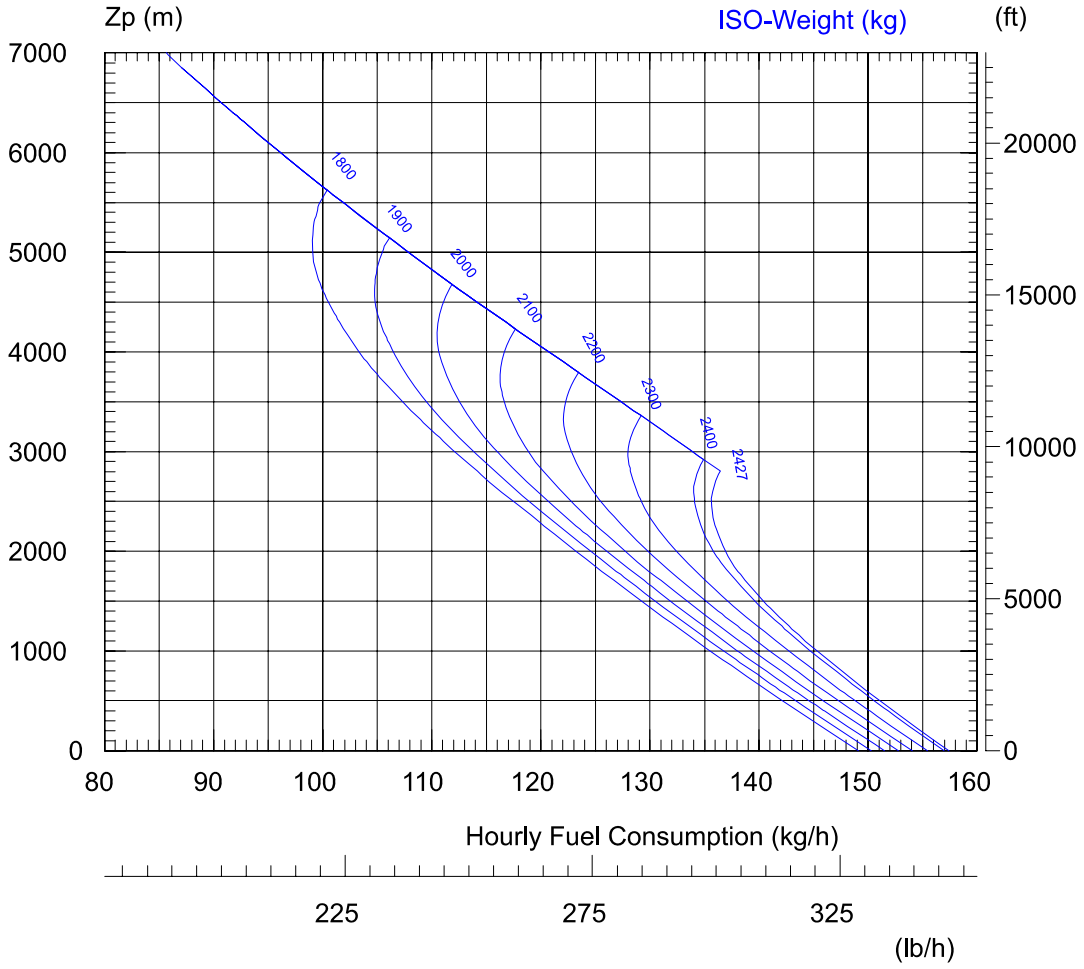


Note : Typical consumption with clean standard aircraft and new engine.

HOURLY FUEL CONSUMPTION

at recommended cruise speed

ISA

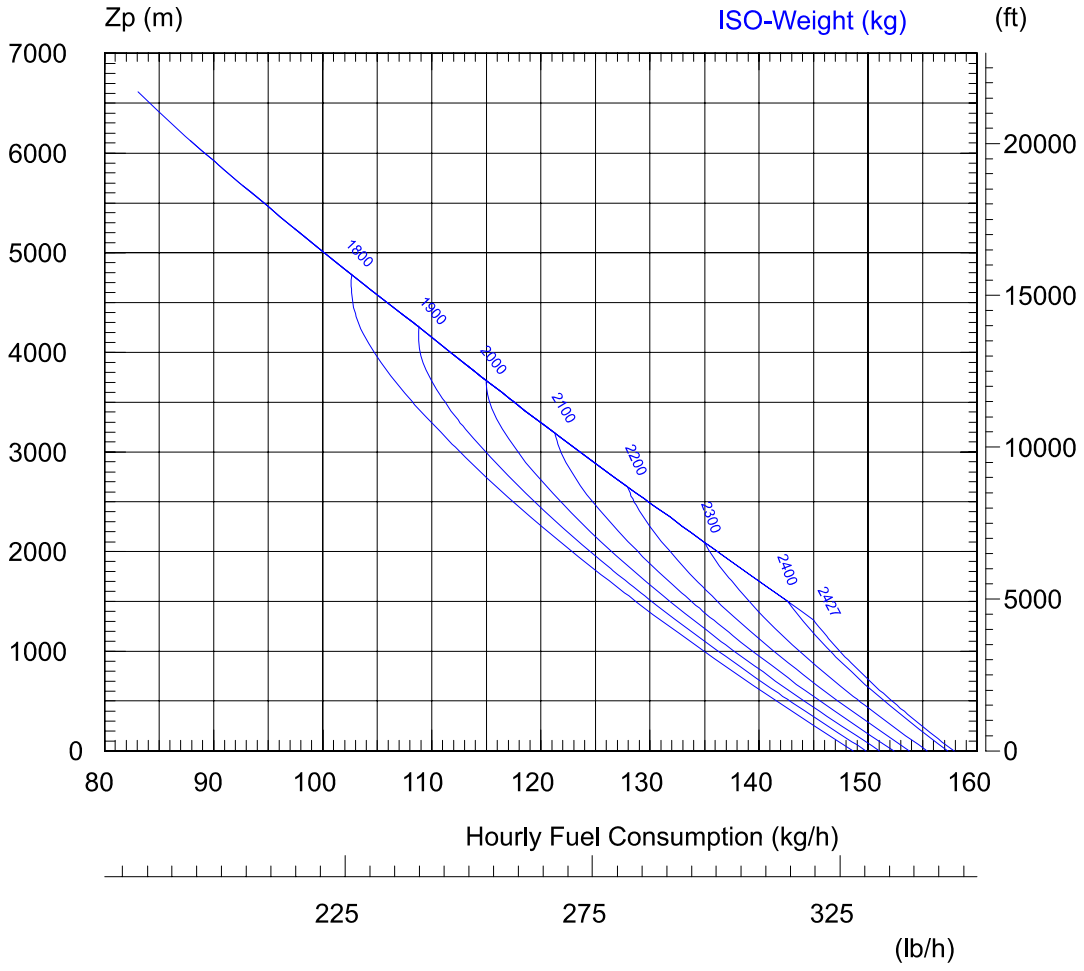


Note : Typical consumption with clean standard aircraft and new engine.

HOURLY FUEL CONSUMPTION

at recommended cruise speed

ISA + 20°C

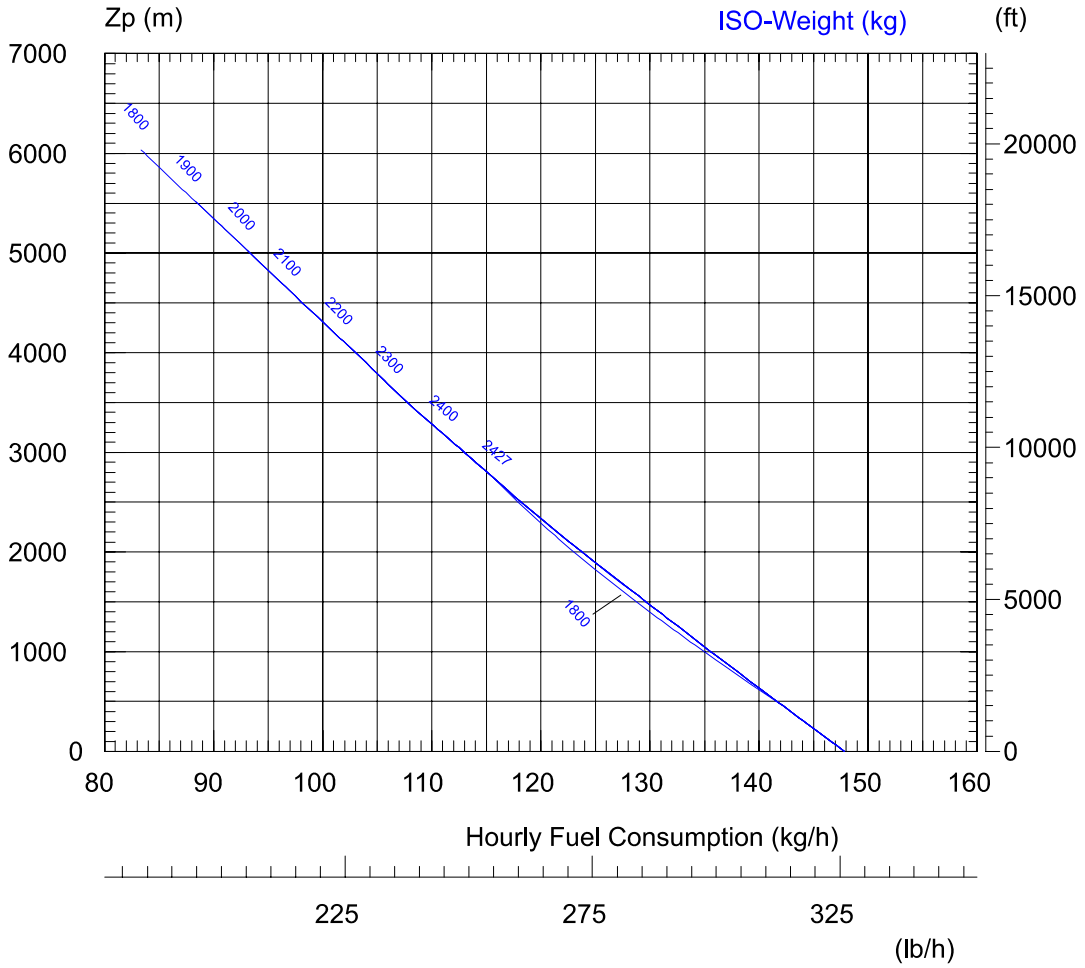


Note : Typical consumption with clean standard aircraft and new engine.

HOURLY FUEL CONSUMPTION

at recommended cruise speed

ISA + 35°C



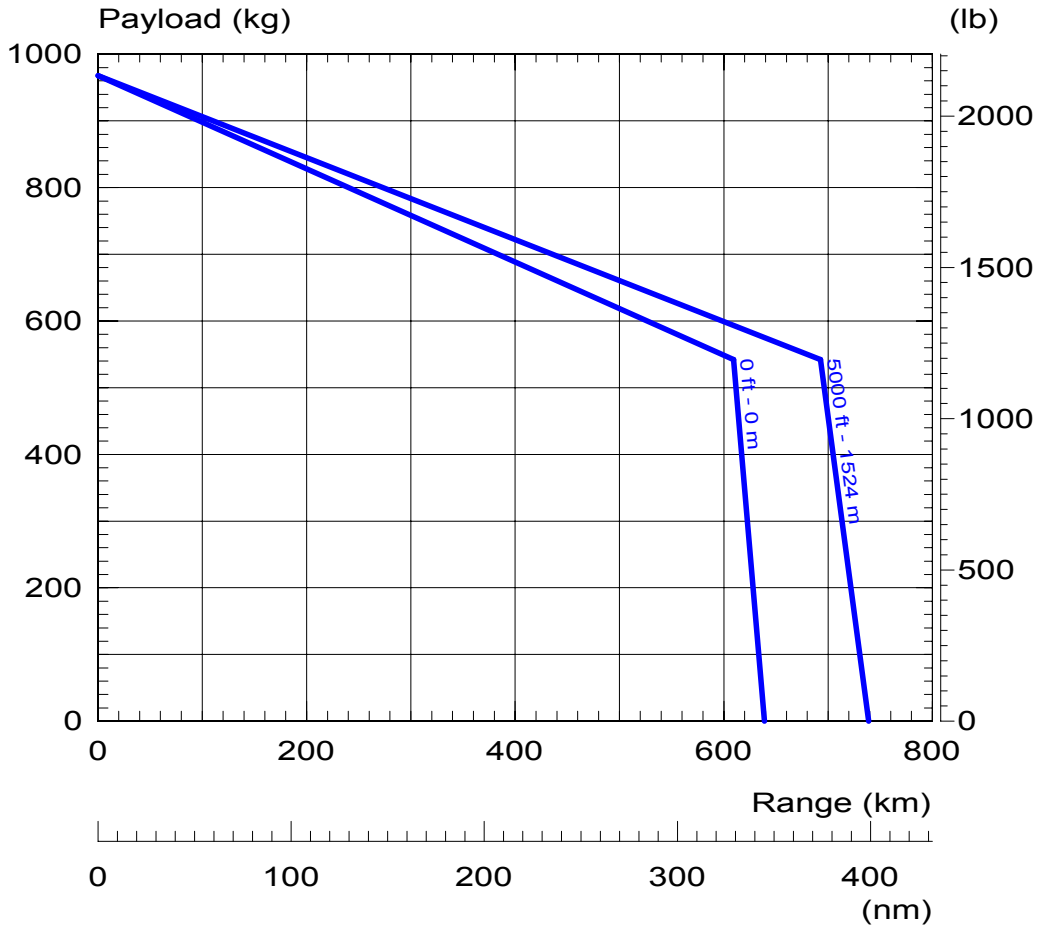
Note : Typical consumption with clean standard aircraft and new engine.

PAYLOD RANGE

ISA

Recommended cruise speed

Empty weight equipped a/c + 1 pilot : 1,459 kg - 3,217 lb *1*



Note : Typical mission without reserve, with clean standard aircraft and new engine.

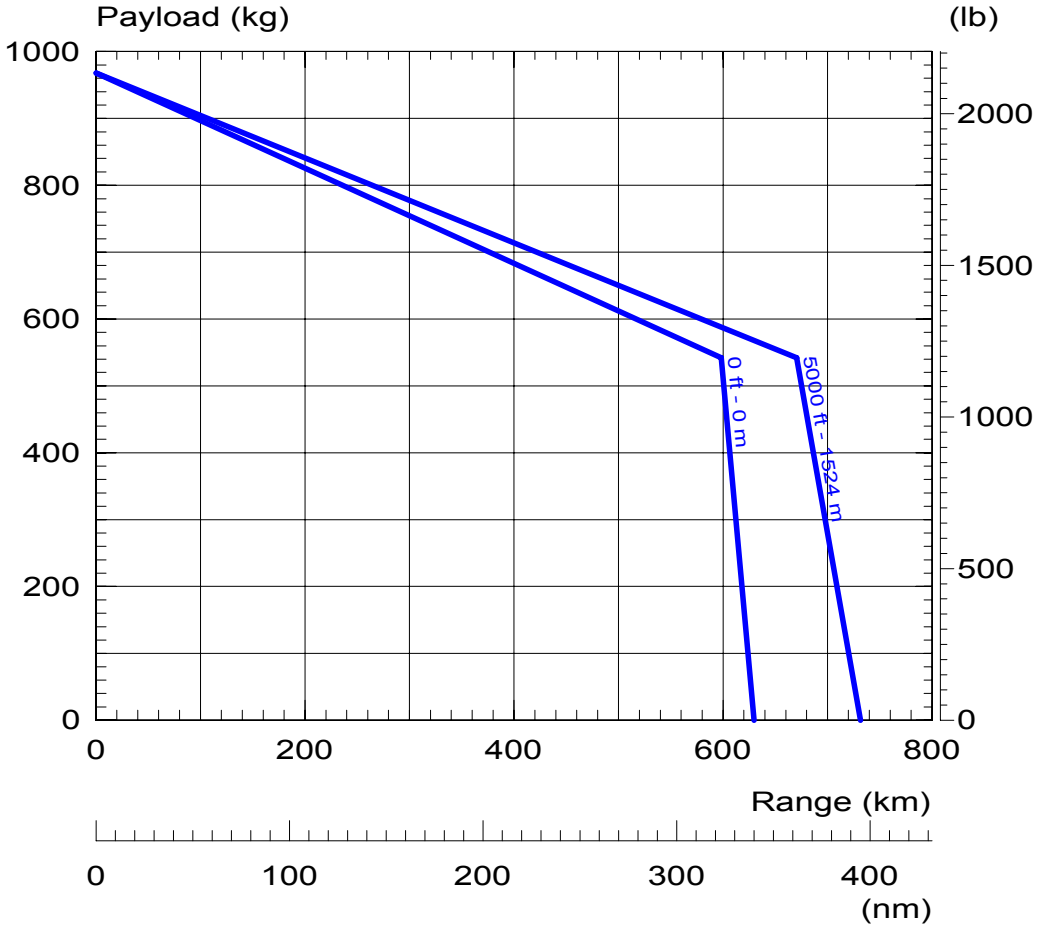
1 *Aircraft equipped and approved for VFR day and night operations (avionics included in empty weight).*

PAYLOD RANGE

ISA + 35°C

Recommended cruise speed

Empty weight equipped a/c + 1 pilot : 1,459 kg - 3,217 lb *1*



Note : Typical mission without reserve, with clean standard aircraft and new engine.

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

7- Customer Service Overview

Assets

Proven reliability and availability based on experience

EUROCOPTER's helicopter production programs have developed a strong reputation world-wide for being fully committed to providing customers with operational, capable aircraft that achieve high availability combined with cost-effective support systems. To achieve this record of performance, *EUROCOPTER* has stressed the importance of working together with its customers to ensure constant feedback on their demonstrated in-service Reliability, Availability and Maintainability/Testability (RAM) data. The main objective is to reach the most optimized operational cost ensuring the highest flight safety.

EUROCOPTER has built and delivered *EC130 B4* since 2001. There are 173 helicopters in service world-wide. The total flight hours accumulated at this date are about 207,500 hours. The "lead the fleet" aircraft has accumulated 6,900 flight hours.

Inspection Program

The Maintenance Program specifies the intervals between maintenance operations that are recommended by Eurocopter, irrespective of whether they are mandatory or not.

The program can:
– either be used as is,
– or be adapted by each operator to suit his own specific organization, provided he complies with the maximum intervals.

The following table provides an overview of all inspections. Scheduled inspections with shorter time intervals have to be added to those with longer time intervals.

Scheduled Airframe Inspection	**Estimated Man Hour**
Daily checks :	Pilot's task
100 flight hrs or 12 months periodicity tasks	2,36 MMH
500 flight hrs or 24 months periodicity tasks	75 MMH
Airframe Major Inspection	**Estimated Man Hour**
12 years periodicity tasks	200 MMH

Scheduled Engine Inspection **ARRIEL 2B1**	**Estimated Man Hour**
30 flight hrs periodicity tasks	0,0348 MMH per FH
300 flight hrs periodicity tasks	
600 flight hrs periodicity tasks	

MMH: Mean Man Hour
FH : Flight Hour

Note : All the "hands-on" aircraft values mentioned here above are given on the basis of a 20 000 flight hours life cycle. They refer only to the scheduled inspections for the standard helicopter without optional equipment in accordance with the Master Servicing Manual (MSM).
The announced Man Hours are without incoming flight, work preparation, reworking, servicing, Service Bulletin implementation and unscheduled maintenance.

Main components
Time Between Overhaul (TBO) / Service Life Limit (SLL) 1

Main Components	TBO (h) as per MSM rev R007	TBO (h) Target Value *	SLL (h) as per MSM rev R009 RT 008C
MAIN ROTOR BLADE			20000
SLEEVE			4400
MAIN ROTOR SHAFT UNIT			20000 / 72000 cycles
STARFLEX HUB			1800
SPHERICAL THRUST BEARING			4600
BEVEL REDUCTION GEAR	2500	3000	
EPICYCLIC REDUCTION GEAR	2500	3000	
TAIL GEARBOX	3000	5000	
BLADE,TAIL ROTOR			10000
TAIL ROTOR SHAFT FRONT SECTION			20000
TAIL ROTOR SHAFT CENTER SECTION			3000
SERVO CONTROL, MAIN ROTOR	3000		

"*": Target value within the Maturity Plan under progress.

Engine	TBO (h)	TBO (h) Target Value	SLL (h)
ARRIEL 2B1	3500		

Time Between Overhauls (TBO):
The component in question must be removed at each interval that corresponds to the value indicated, in order to undergo the operations in a specialized workshop that will enable it to be put back into service for the next interval. A TBO is granted with a 10 % operational margin, limited at +300 hours. Some subcomponents may have a Service Life limit, rated above the TBO limit.

Service Life Limited (SLL):
The service life limit is an airworthiness limit. The component in question must be removed from service when it reaches the limit indicated.

1 *Main component values are given for information purposes only. The reference document is the aircraft Master Servicing Manual.*

EUROCOPTER Maintenance Support Programs

EUROCOPTER offers its clients a comprehensive array of repair and overhaul services to ensure availability and costs control. This array of services ranges from basic OEM repair and overhaul services up to comprehensive Parts By the Hour (PBH) maintenance programs.

The different services are each tailored for one different user profiles and demands, such as customers:

- with a high number of flight hours,
- with a low number of flight hours,
- looking for immediate component availability,
- that wish budget control,
- …

To respond to the different customers' demands *EUROCOPTER* offers the following flexible and modular services:

- Classical Support
- Standard exchange
- Repair with guaranteed Turn Around Times (TAT)
- Guaranteed Direct Maintenance Costs (DMC)
- Unscheduled Maintenance Insurance Plan
- Parts by the Hour service

Classical Support

The classical support consists of a comprehensive Initial Provisioning package to sustain aircraft operation. This package includes Spare Parts, Tools, Test Equipment, etc..

The required level of operational availability determines the quantity and therefore the investment required. With this support package the Customer bears the responsibility to monitor their repair; manage obsolescence and to procure the right mix and quantity of components and spare parts.

Standard Exchange

The Standard Exchange consists in replacing a defective part with a serviceable and interchangeable part within 48 hours subject to availability. This service is available for equipment, blades and dynamic components.

Repair with Guaranteed TAT

EUROCOPTER offers for some components a repair with commitment on guaranteed TAT. When this lead time is exceeded for the repair, *EUROCOPTER* provides the customer with a standard part exchange delivery at the same price as agreed for the repair.

Guaranteed DMC

The Guaranteed DMC services offers guaranteed repair and overhaul TATs as well as guaranteed prices. This addition to the classical repair and overhaul enables the customer to best size its inventory. Price for this service is calculated per flight hour, thus enabling the customer to spread and predict both his scheduled as unscheduled maintenance expenses. The guaranteed DMC service is available for dynamic components, blades and basic equipment

Unscheduled Maintenance Insurance Plan (UMIP)

With the UMIP, *EUROCOPTER* gives the customer the option to secure unscheduled maintenance costs while remaining responsible for the scheduled events (overhaul, life limited part replacement). Price for this service is calculated per flight hour.

The UMIP service includes component unscheduled repairs and guaranteed parts replacement within 24H through Standard Exchange based on a dedicated inventory. This service is available for dynamic components, blades and basic equipment

Parts By the Hour (PBH)

The Parts by the Hour (PBH) service is a comprehensive program that offers and balances at the same time guaranteed maintenance costs, reduced inventory and minimized helicopter downtime. This service is intended for Customers looking for total cost control and high level of aircraft readiness. Price for this service is calculated per flight hour.

The PBH service includes component unscheduled repairs component overhauls as well as Life Limited part replacement. Parts replacement is guaranteed within 24H through Standard Exchange based on a dedicated inventory. This service is available for dynamic components, blades and basic equipment.

Price charge is defined per flight hour.

Engine Maintenance program

Always looking to maximize your efficiency and reduce your costs, Turbomeca, the engine manufacturer has developed an improved service offering.

Turbomeca has 32 Repair Centers across the globe, supplemented by several new factory-authorized service facilities strategically located near to you

Turbomeca range of services covers:

- Classical Repair and Overhaul
- Standard Exchange
- AOG services
- Support By the Hour (SBH) services

Within the Support By the Hour® coverage Turbomeca developed specific maintenance packages, as summarized hereafter.

Standard Coverage : “Classic” SBH®

The “classic” Support by the Hour (SBH®) is a global support service offered to operators to enable them to maintain the best availability of their engines fleet through a contract arrangement paid by running hours.
The Support by the Hour (SBH®) is operated mainly through Standard Exchange supported by Turbomeca dedicated Corporate Pool.

Customized Coverage : SBH® “ Mission”

The new service, Support By the Hour® Mission, offers a modular series of comprehensive service and engine management packages whereby Turbomeca undertakes to guarantee its operator's engine availability and care.

From basic engine support requirement to fully comprehensive range of additional services, three different types of packages are offered to operators : Pro, Prime and Privilege.

Turbomeca Internet Web Site - TOOLS

Turbomeca Operator On-Line Support (TOOLS site) is entirely dedicated to helping customers. With 24/7 availability, operators can access important information when they want to from where they want to, winning precious time and staying head. TOOLS at www.turbomeca-support.com

Training

With more than 50 years of experience, the *EUROCOPTER* training centers provide the most comprehensive, coherent and highest standard helicopter training in the world for pilots and technicians, whether civilian or military.

Qualification training, allowing operators to comply with regulatory requirements, and services training, more mission oriented and tailored to the customers' operational needs, are addressed.

All training courses are established according to the relevant civil aviation authorities' requirements. The centers are approved by the relevant airworthiness authorities (EASA, FAA, DGAC, LBA, CAA…). We are certified ISO 9001: V2000 and regularly audited by independent organisms such as Véritas, AFAQ…

EUROCOPTER training centers provide a wide range of courses and services, from basic training up to preparation for the most sophisticated civil and military missions.
As part of the full range of services on offer, *EUROCOPTER* also plays an active role in helicopter pilot development through its Ab Initio programs.

Centers are equipped with multimedia classrooms. This includes computers overhead projectors and state-of-the-art means such as Computer Aided Instruction (CAI), Computer Based Training (CBT). Some centers also have self-learning laboratories.

EUROCOPTER has set up a network of 14 training centers. For detailed information refer to *EUROCOPTER* specific publication.

EC130 B4 - Example of basic training course

COURSE TYPE	COURSE REFERENCE	THEORETICAL INSTRUCTION	FLIGHT INSTRUCTION	
			TR1	TR2
Pilot	Type rating	4 days	5 hours	3 hours
	Instructor pilot conversion (1)	-	5 hours	
	Refresher	1 day	1,5 hours	
COURSE TYPE	**COURSE REFERENCE**	**THEORETICAL INSTRUCTION**		
Mechanics	Type rating (Airframe + Engine)	3 weeks		
	Refresher	1 week		
Blades	Maintenance and repair	Up to 2 weeks		

Pilot already qualified on *EC130* (15 hours mini, within last 12 months, not included in type rating)

TR1: For pilot non already qualified on single engine turbine
TR2: For pilot already qualified on single engine turbine.

Note: Length is given as information and depends on pilot or technician qualification or experience. Complementary courses may be required.

Engine Training Courses

Training courses dedicated to Engine Maintenance is also organized by Turbomeca training schools and approved centers the world over

Up-to-date course calendars, on-line tests and e-learning modules are also available on the Turbomeca Operator On-Line Support (TOOLS site)

Technical publications

EUROCOPTER provides all the technical publications necessary for safely operating and maintaining its aircraft cost effectively.

EUROCOPTER technical publications are available on an interactive electronic medium as a standard or in hard copies as an option.

The INDOC DVD-ROM includes the Aircraft Maintenance Manual (AMM), System Description Section (SDS), Master Servicing Manual (MSM), Illustrated Parts Catalogue (IPC) and the Wiring Diagram Manual (WDM).

The component maintenance manual (CMM) is available on DVD-ROM or hard copy, depending on the Vendor.

Along with the INDOC DVD-ROM, *EUROCOPTER* provides a hard copy of the Airworthiness Technical Publication (Flight Manual, Pilots Check List, Master Servicing Manual …) as well as the Service Bulletin Catalogue.

The DVD ROM is available in English or French; it includes the latest information and is updated every 6 - 9 months.

T.I.P.I. (Technical Information Publication on Internet)

Description

T.I.P.I. website is entirely dedicated to provide a real-time issuing service for the following publications:

- Télex Alert, Télex Information, Service Bulletin, Service Letter, Service Information, Technical Information Letter
- List of Applicable Publications (LOAP)
- List of Master Minimum Equipment List (MMEL)

Main features

- Each time a publication is issued, the customer is automatically informed by an e-mail.
- The download of the publication in pdf format is possible either directly from the e-mail or after logging on the T.I.P.I. website.
- A keywords search tool is provided (aircraft family, type of publication, date of edition...).

Address: www.eurocopter.com/services/technical publications/T.I.P.I.
The publications are available in English, French or German depending on the case.

- A small summary, already included in the e-mail, helps the customer to understand quickly the subject.
- Small icons allow the customer to identify immediately the type of information received.

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