EUROCOPTER

AS355 NP

Technical Data

eurocopter
an EADS Company

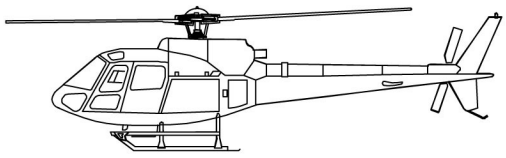
helicopters you can count on

355 NP 06.101.01 E

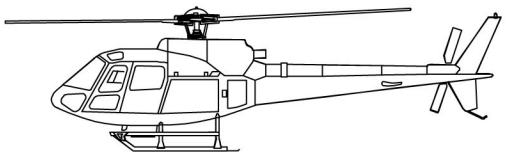
SINGLE ENGINE

TWIN ENGINE

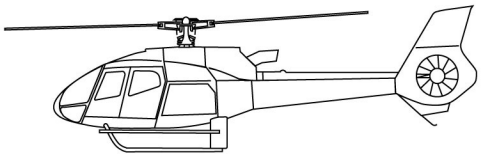
ECUREUIL
(Civil Version)



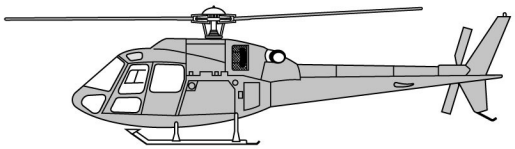
Ecureuil AS350 B2



Ecureuil AS350 B3

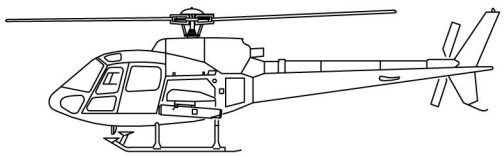


Ecureuil EC130 B4



Ecureuil AS355 NP

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 !

Eurocopter's policy is one of on-going product enhancement which means that alterations in definition, pictures, weights, dimensions or performance may be made at any time without notice being included in those documents that have already been issued.

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 twin engine version AS355 NP *is the latest version of the successful* ECUREUIL *family. Powered with 2 TURBOMECA ARRIUS 1A1 engines of 415 kW – 556 shp each, it relies on the FADEC system (Full Authority Digital Engine Control) for the engine control and monitoring. Compared to the* AS355 N *and its engines ARRIUS 1A, the ARRIUS 1A1 engines on the* AS355 NP *offer new OEI (One Engine Inoperative) ratings for the same Direct Maintenance Cost. For this new variant TURBOMECA will pursue the target of a higher TBO for the mature engine with direct effect on maintenance cost. An upgraded Main Gear Box, derived from the MGB of the famous single engine version* AS350 B3 *(500 kW – 670 shp), allows increasing by 200 kg at sea level the Maximum Take Off Weight of the* ECUREUIL AS355 NP *in external load configuration. A new frontal dual air intake is the visible external sign of a new engine / MGB cooling system. Like the other helicopters within* EUROCOPTER's *range, the* ECUREUIL AS355 NP *is now characterised by the integration of the well-known* VEMD *(Vehicle and Engine Multifunction Display), which makes piloting easier and safer. It shares with the* ECUREUIL *family a standard avionics suite, designed for day and night VFR operations, including mainly GPS color map display and redundant COM/NAV. Its wide instrument panel can simply be upgraded for IFR operations (single pilot or dual pilot) or with specific equipment such as weather radar, video display,…etc. The* ECUREUIL AS355 NP *takes advantage of the experience logged on the* ECUREUIL *family (1.1 million of flight hours per year) and features reduced operation and maintenance costs. When operated within a mixed fleet, maintenance costs may be optimized thanks to the high level of component communality with the single engine versions. Certified "Category A equivalent" and compliant with stringent operational requirements, the* ECUREUIL AS355 NP *is the most affordable twin engine helicopter on the market whether it wears a* STYLENCE *livery to transport VIP, performs aerial work missions in urban or hostile areas or ensures safe harbour pilot transportation.*

2- General Characteristics

Lay-Out

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

Weights

Note : Empty weight accuracy : within ± 2 %	kg	lb
Empty weight, standard aircraft (including engine oil and unusable fuel)	1,490 *1*	3,285
Useful load	1,110	2,447
Maximum all-up weight	2,600	5,732
Maximum cargo-swing load	1,134	2,500
Maximum all-up weight in external load configuration	2,800	6,172

Power plant

2 **TURBOMECA ARRIUS 1A1** turbine engines

Engine ratings

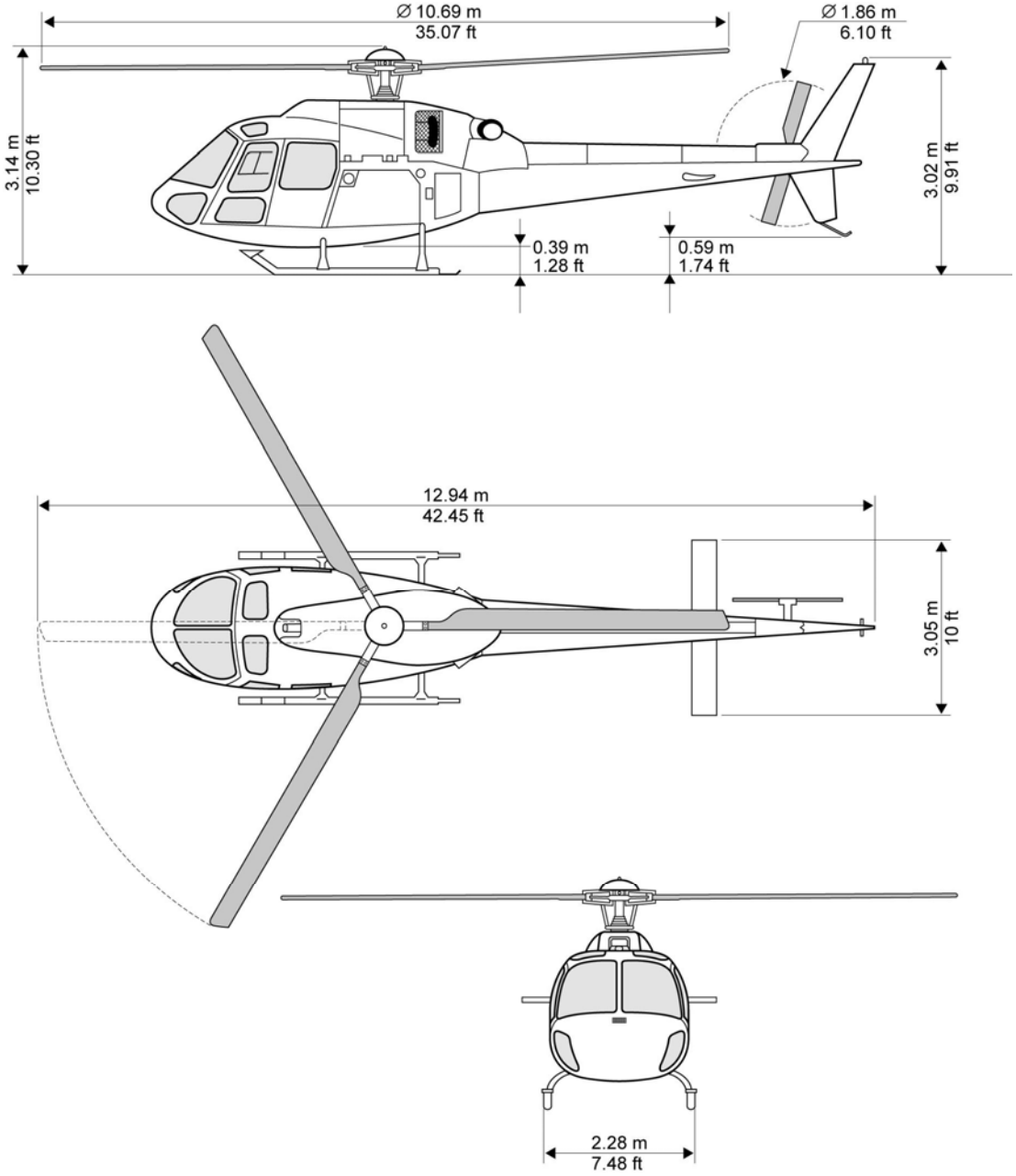
Thermodynamic Power, in standard atmosphere, at sea level :	kW	ch	shp
Maximum emergency power (OEI 2½min.)	415	564	556
OEI continuous power	386	525	518
Take-off power	343	466	460
Maximum continuous power	305	415	409

Usable Fuel capacities

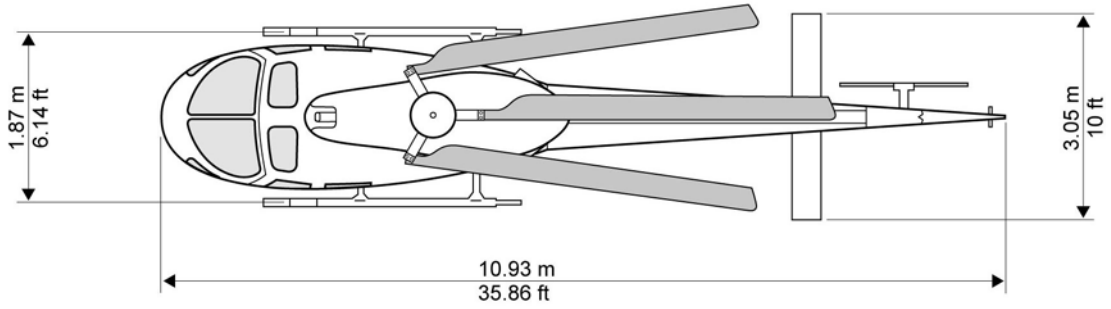
	litres	US gal.	kg	lb
Standard fuel tanks	730	193	577	1,272
Auxiliary fuel tank (option)	475	125	375	827

1 *Empty weight according to Standard Aircraft Definition, as defined in pages 12 and 13, including in particular, the Avionics suite described in page 9.*

Main dimensions



Dimensions with blades folded



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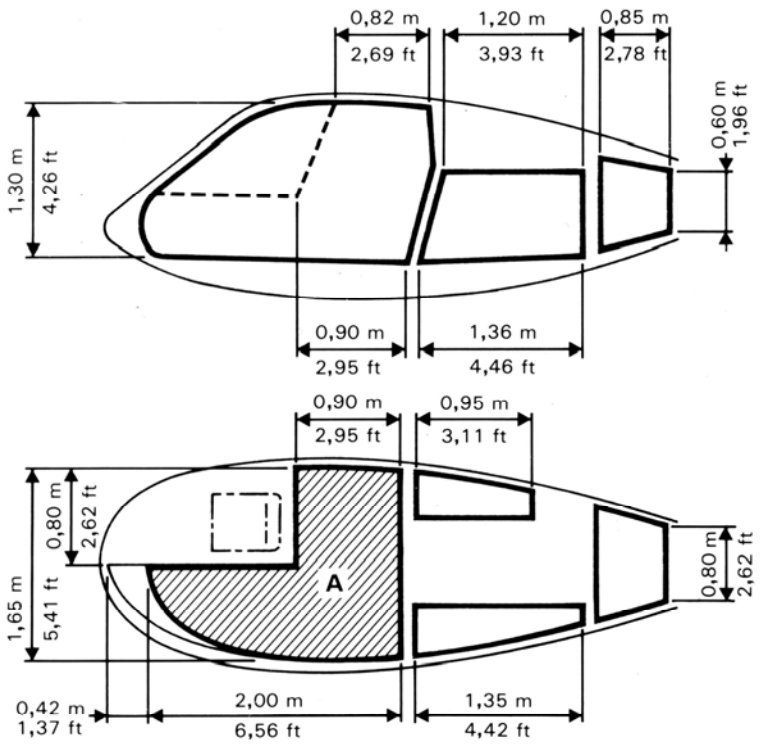
Configurations

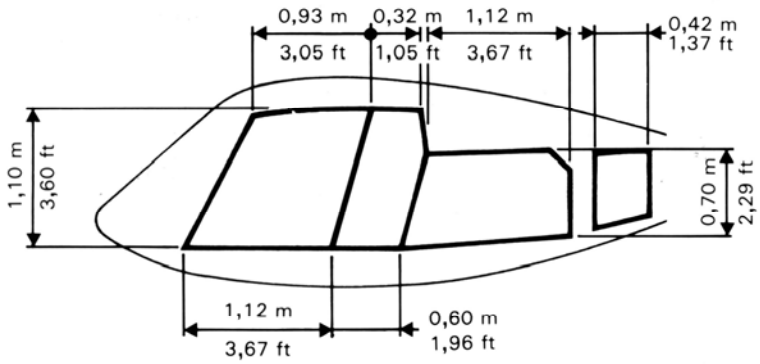
Standard lay-out

STYLENCE
lay-out

Dimensions of compartments and accesses

Cabin main dimensions





CABIN	
Surface **A**	2.60 m² 27.98 ft²
Volume	3.000 m³ 105.94 ft³

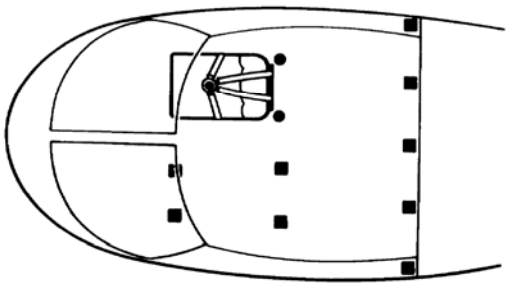
LH HOLD	
Surface	0.43 m² 4.62 ft²
Volume	0.235 m³ 8.29 ft³

RH HOLD	
Surface	0.35 m² 3.76 ft²
Volume	0.200 m³ 7.06 ft³

REAR HOLD	
Surface	0.55 m² 5.92 ft²
Volume	0.496 m³ 17.50 ft³

TOTAL HOLDS	
Surface	1.33 m² 14.3 ft²
Volume	0.931 m³ 32.85 ft³

Cabin floor



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

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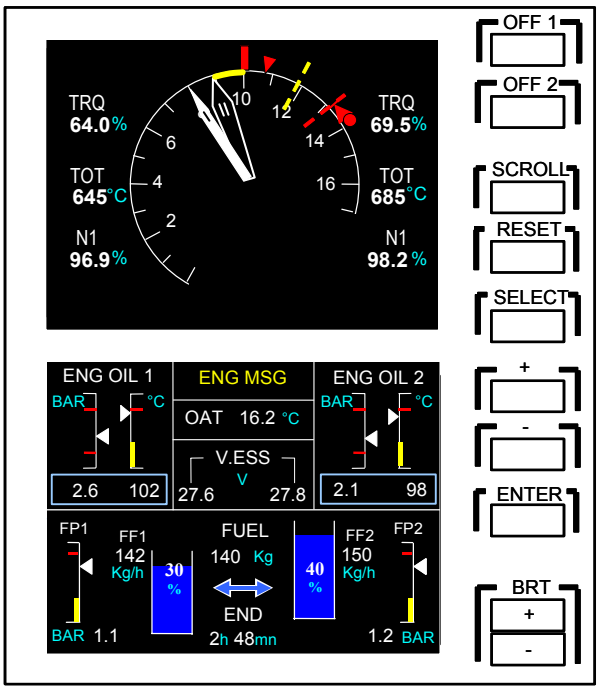
Other characteristics

VEMD (Vehicle and Engine Multifunction Display)



- Full colour, dual screens LCD display
- Duplex equipment
- Self monitoring at one glance
- First Limitation Indication (FLI) for both engines, with aural warning
- Engines fuel flows and estimated remaining time (optional)
- Engines cycles and OEI duration counting
- Limits overriding monitoring
- Maintenance functions, including capability of data downloading

TURBOMECA ARRIUS 1A1 turbine engines

- 556 shp (415 kW) maximum contingency power
- Enhanced OEI ratings
- Electronic governing system (FADEC) with new software for optimized engine ratings, including engine cycle counting (displayed on *VEMD*)
- TBO target for mature engine at 3000 H
- Modular design
- Design relying on fully proven ARRIUS 1A engine

Standard day and night VFR avionics suite

- Thales H321EHM - Gyro-horizon

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

(not represented)

- UI 9560 - Turn and Bank indicator

- Honeywell KX165A - VHF/VOR/LOC/GS

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

- Garmin GTX330 - Transponder (mode S)

(Blind encoder, not represented)

- Shadin 8800 T - Altitude Encoder

- Kannad 121AF-H - Emergency Locator Transmitter

- Garmin GMA340H - ICS

Mission ability and operational regulations

The *ECUREUIL AS355 NP* is :

- certified according to FAR Part 27
- compliant with the FAR Part 29 requirements for CAT.A engine insulation
- compliant with the JAR Part 29 requirements, as clarified in IEM-OPS 3480
- equipped with the "Engines fire-extinguishing system" in its standard definition

and thus has the Category A equivalence as per JAR-OPS 3.480, which is mandatory for operations in Performance class 1 and 2.

All the conditions relating to the helicopter that are required for the JAR-OPS 3 Performance Class 1 operations are met by the *ECUREUIL AS355 NP* as soon as :

1. The weight conditions and procedures are respected as per Flight Manual Supplement "Equivalent Category A operations".
2. All other equipment items, required by the local flight regulations of the country concerned, are installed and serviceable.

Passenger transport mission

When playing in the passenger transports register, the *STYLENCE* package will meet expectations in terms of comfort (cabin heating and air conditioning), cabin layout (*STYLENCE* leather interior) and high level of finishing without penalizing its mission ability. Its high level of performance makes the *ECUREUIL AS355 NP* particularly suited for corporate transport, able to operate in Category A at Maximum Gross Weight from helipads in various climatic conditions, that represents transporting 4 passengers on a typical distance of 450 km with 30 minutes of fuel reserve in ISA, sea level conditions, thus one passenger more than the *ECUREUIL AS355 N*.

Utility mission

Thanks to improved OEI (One Engine Inoperative) ratings, the *ECUREUIL AS355 NP* is also the perfect tool for utility applications.

It can perform aerial work missions in urban or hostile areas, with external load on the hook. The *ECUREUIL AS355 NP* can transport an additional external load of 200 kg compared to the *AS355 N* in ISA, sea level conditions.

It can ensure safe harbour pilot transportation with hoist and floats, and permits to transport one more harbour pilot or additional 30 minutes of fuel compared to the 2+1 people on board and 1 hour of fuel loaded in the *AS355 N* version.

3- *AS355 NP ECUREUIL* - Standard Aircraft Definition

The helicopter in the definition, presented hereafter, meet the certification standards for day and night VFR, Category A equivalent operations, set by the following airworthiness authorities : EASA. 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). According to the type of operations considered (single or two-pilot IFR), this definition must be supplemented in agreement with the regulation in force.

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
- Low skid landing gear capable of taking handling wheels
- Lifting points
- Upper mooring fixtures
- 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.
- Interior signs and markings : available in either French or English, any other language on request

CABIN

- Cabin floor in light-alloy sheet-metal with tie-down rings, capable of energy-absorbing seats
- 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
- 2 rear door-extensions for passengers and cargo
- 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 system
- 1 fire-extinguisher
- 1 Flight Manual.

INSTRUMENTS

- Instruments units : available in either metric or English units
- 1 airspeed indicator
- 1 altimeter
- 1 rate-of-climb indicator
- 1 triple tachometer (N rotor - free turbines 1 & 2)
- 1 clock
- 1 warning panel
- 1 magnetic compass
- 1 heated pitot head
- Capabilities for *VEMD*® data downloading (including maintenance plug)
- 1 LCD Dual screen Vehicle and Engine Multifunction Display (*VEMD*®) providing the following information:
  - First limitation indicator (FLI)
    - ♦ torquemeter (Engines 1 & 2 output torque)
    - ♦ exhaust gas temperature (Engines 1 & 2 TOT)
    - ♦ gas generator tachometer (Engines 1 & 2 N1, delta N1)
  - Engines 1 & 2 oil temperatures and pressures
  - Fuel pressures and quantities
  - Ammeter and voltmeter
  - Outside Air Temperature (OAT)
  - Enhanced usage monitoring functions
    - ♦ engines cycles counting
    - ♦ OEI duration
    - ♦ limits overriding display and storage
  - *VEMD*® and peripheral maintenance information

AVIONICS

- 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 S)
- 1 Altitude encoder
- 1 Emergency Locator Transmitter (2 frequencies)
- 1 ICS + passenger interphone

POWER PLANT

- 2 Turboméca ARRIUS 1A1 turbine engines, developing 415 kW (564 ch – 556 shp) max. emergency power (one engine inoperative), complete with starting, fuel supply, fuel reheating, digital engine control (DEC) with manual back-up governing, overspeed protection, in-flight restart systems and fitted with 2 chip detectors.
- 2 fuel systems including 2 independent tanks of 730 litres (193 US gal.) total capacity
- 2 engine lubrication and oil cooling systems
- 4 fire detection systems
- 2 air-intake protective grids
- 2 torque-measurement pick-ups.
- Engines fire-extinguishing system

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 combination box
- 1 main gearbox oil cooling system
- 2 engine to main gearbox coupling shafts
- 1 rotor brake
- 1 main rotor r.p.m. sensor and high and low r.p.m. warning device
- 1 tail drive carried by six ball 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
- 2 hydraulic generation systems
- 3 dual-body main rotor hydraulic servo units
- 1 tail rotor hydraulic servo-unit and a load compensator
- Flying controls with provisions for the autopilot.

ELECTRICAL INSTALLATION

- Two 150 A, 28 V DC starter-generators, supplying two independent bus bars
- One 15 A/h cadmium-nickel battery
- 1 ground power receptacle
- 3 position lights
- 1 flashing anti-collision light
- 1 LH landing light (swivelling in elevation and azimuth)
- 1 RH fixed landing light
- 2 cabin dome lights
- Wide instrument-panel, ceiling-panel and console lighting
- One 28 V DC cabin power outlet.

AIRBORNE KIT (*)

- 2 pitot head covers
- 2 static vent blanks
- 1 radiator air-intake cover
- 2 engine air-intake covers
- 2 tail-pipe covers
- 2 twin-wheel units c/w hydraulic jacking system
- 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

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.

The cabin layout offers transportation ability for one pilot and one passenger at the front and for 3 passengers at the rear. An optional transformation kit allows transporting 4 rear passengers.

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
00-50023-A	**00-50023-00-CI**	***STYLENCE* package**

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

Tinted windows

Air conditioning system

Low skid landing gear with 2 short footsteps

Layout *STYLENCE*, including mainly

- Light grey internal paint
- Energy absorbing front seats upholstered in leather, with casing made of carbon fiber and leather storage pouch
- 3-place rear bench seats upholstered in leather with fairing of the lower part
- Integrated door case covered with light grey leather on large RH front door
- Left rear sliding door
- Cabin carpet with one set of over-carpets
- Carpet edge protection
- Upholstery panels on cabin ceiling and rear partition with sound-proofing
- Leather insert on rear partition
- 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

***AS355 NP STYLENCE* configuration empty weight : 1623 kg – 3578 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.*

Blank

4-2 Recommended list for UTILITY mission

The purpose of this recommended list is to partially match typical operational requirements. It proposes a batch of options and must be considered as a basis for a quick approach of the functions required in operation.

		Name
355 NP 06.100.01 E		**Standard aircraft, equipped with :**
Document reference	**Commercial reference**	
05-37008-A	**05-37008-00-CI**	Dual controls
06-12013-A	**06-12013-02-CI**	High skid landing gear with 2 double footsteps
06-26003-A	**06-26003-00-CI**	RH side external mirror
06-27006-A	**06-27006-00-FP** **06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Fixed Parts Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts
06-42006-A	**06-42006-00-CI**	RH landing light (swivelling in elevation)

AS355 NP UTILITY configuration empty weight : 1507 kg – 3321 lb

The aircraft equipped empty weight is correct to ± 2 % and takes into account the operational removal of the rear bench-seats (-21.2 kg).

4-3 List of optional equipment

Symbol ⚠ shown beside an item denotes some constraint (see table on page 29)

General equipment

	Document reference	Commercial reference	Name	kg	lb
	05-02004-A	**05-02004-00-CI**	Extra-charge for customized external paint - level 1 ***1*** - ***2***	**4.0**	**8.8**
	05-02005-A	**05-02005-00-CI**	Extra-charge for customized external paint - level 2 ***1*** - ***3***	**4.0**	**8.8**
	05-02006-A	**05-02006-00-CI**	Extra-charge for customized external paint, apart from levels 1 and 2 ***1*** - ***4***	**On request**	
	05-21004-A	**05-21004-00-CI**	Wire strike protection system ***5***	**8.7**	**19.2**
	05-23002-A	**05-23002-00-CI**	Engines flushing device without removal of cowlings	**0.7**	**1.5**
	05-24003-A	**05-24003-00-CI**	High visibility main rotor blades	**0.1**	**0.2**
	05-25004-B	**05-25004-00-CI**	Sand-prevention filters, dynamic type	**18.1**	**39.9**
	05-25006-A	**05-25006-00-CI**	Reinforced sand-erosion protection strip on main rotor blades	**0.2**	**0.4**
	05-25007-A	**05-25007-00-CI**	Reinforced 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) ***6***	**-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**
	05-32001-A	**05-32001-00-CI**	Pilot's windshield wiper	**2.6**	**5.7**
⚠	05-32003-A	**05-32003-00-CI**	Copilot's windshield wiper	**2.6**	**5.7**
⚠	05-37008-A	**05-37008-00-CI**	Dual controls	**4.7**	**10.4**
⚠	05-42004-B	**05-42004-03-CI**	Air conditioning system, standard layout	**76.5**	**168.7**
⚠	05-42004-B	**05-42004-04-CI**	Air conditioning system, Comfort layout	**55.0**	**121.3**
	05-61007-A	**05-61007-03-CI**	2nd battery kit ***7***	**17.5**	**38.6**

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 *This optional item has to be fitted in production line.*
6 *Removes the sliding window on copilot front door.*
7 *Recommended for start-up in cold weather.*

General equipment (continued)

	Document reference	Commercial reference	Name	kg	lb
⚠	*05-62002-A*	**05-62002-00-CI**	250 VA AC 1st generation system	**4.7**	**10.4**
⚠	*05-62003-A*	**05-62003-00-CI**	250 VA AC 2nd generation system	**4.2**	**9.3**
	05-70001-A	**05-70001-00-CI**	Hydraulic ground power receptacle	**1.7**	**3.7**
	05-82017-A	**05-82017-00-CI**	Fuel tanks self-sealing protection	**24.7**	**54.4**
	05-84002-A	**05-84002-00-FP**	Ferrying tank - Fixed Parts	**0.3**	**0.7**
⚠		**05-84002-00-RP**	Ferrying tank - Removable Parts	**15.2**	**33.5**
	05-85003-B	**05-85003-01-CI**	Remaining fuel flow meter ***1***	**2.1**	**4.6**
	05-92001-A	**05-92001-00-FP**	Folding of main rotor blades - Fixed Parts ***2***	**1.8**	**4.0**
⚠		**05-92001-00-RP**	Folding of main rotor blades - Removable Parts ***3***	**—**	**—**
	05-93001-A	**05-93001-00-CI**	Mooring kit (ground or ships) ***4***	**0.8**	**1.8**
	05-93002-A	**05-93002-00-CI**	Marine gripping system	**1.0**	**2.2**

Specific mission equipment

⚠	*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**
⚠	*06-12012-A*	**06-12012-00-CI**	Low skid landing gear with 2 short footsteps ***5***	**7.9**	**17.4**
⚠	*06-12013-A*	**06-12013-02-CI**	High skid landing gear with 2 double footsteps ***5***	**10.7**	**23.6**
⚠	*06-12014-A*	**06-12014-02-CI**	High skid landing gear with 2 short footsteps ***5***	**16.0**	**35.3**
⚠	*06-12015-A*	**06-12015-01-CI**	High skid landing gear with 2 long footsteps ***5***	**16.9**	**37.3**
⚠	*06-21002-A*	**06-21002-00-FP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Fixed Parts	**4.0**	**8.8**
⚠		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	**37.8**	**83.3**
⚠	*06-21006-A*	**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	**10.3**	**22.7**
⚠		**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	**51.8**	**114.2**
⚠	*06-21018-A*	**06-21018-00-CI**	Support for Breeze electrical hoist	**5.4**	**11.9**

1 *Fuel flows and estimated remaining time are displayed on the VEMD.*
2 *Capable of rough weather conditions.*
3 *The removable parts are delivered as Ground Support Equipment. Tool weight = 32.2 kg - 71 lb.*
4 *Recommended for transport by land, air and sea (when not in a container).*
5 *Replaces the standard type of landing gear.*

Specific mission equipment (continued)

	Document reference	Commercial reference	Name	kg	lb
⚠	*06-24001-A*	**06-24001-00-CI**	Rappelling installation (without rope)	**3.2**	**7.1**
⚠	*06-25001-A*	**06-25001-00-CI**	Drip tub (sea rescue) ***1***	**-0.8**	**-1.8**
⚠	*06-26003-A*	**06-26003-00-CI**	RH side external mirror ***2*** - ***3***	**2.9**	**6.4**
⚠	*06-27006-A*	**06-27006-00-FP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Fixed Parts	**4.5**	**9.9**
⚠		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	**13.2**	**29.1**
⚠	*06-31006-A*	**06-31006-00-CI**	Integrated hailers	**7.4**	**16.3**
	06-42006-A	**06-42006-00-CI**	RH landing light (swivelling in elevation)	**1.5**	**3.3**
	06-47002-A	**06-47002-00-FP**	Spectrolab SX 16 search-light - Fixed Parts	**5.1**	**11.2**
⚠		**06-47002-00-RP**	Spectrolab SX 16 search-light - Removable Parts	**29.0**	**64.0**
⚠	*06-61004-A*	**06-61004-00-FP**	Emergency floatation gear - Fixed Parts ***4***	**10.0**	**22.0**
⚠		**06-61004-00-RP**	Emergency floatation gear - Removable Parts	**64.1**	**141.3**
⚠	*06-74018-A*	**06-74018-00-CI**	Internal and avionics lighting adaptation for night-time missions with NVG	**To be defined**	

Interior cabin layout

	Document reference	Commercial reference	Name	kg	lb
⚠	*07-00009-A*	**07-00009-00-CI**	Comfort layout	**38.0**	**83.8**
⚠	*07-15010-A*	**07-15010-00-CI**	Energy-absorbing front seats	**3.0**	**6.6**
⚠	*07-15010-A*	**07-15010-01-CI**	Lengthened rails for energy-absorbing front seats	**2.0**	**4.0**
⚠	*07-24004-A*	**07-24004-00-FP**	Left side two-place front bench seat (pilot on right side) - Fixed Parts	**3.6**	**7.9**
⚠		**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	**3.2**	**7.1**
⚠	*07-25001-A*	**07-25001-00-CI**	3 places instead of 4 places transformation kit ***5***	**4.4**	**9.7**
⚠	*07-25004-A*	**07-25004-00-CI**	4 places instead of 3 places transformation kit ***6***	**10.0**	**22.0**
⚠	*07-40003-A*	**07-40003-00-CI**	Velvet carpeting ***7***	**On request**	
⚠	*07-40004-A*	**07-40004-00-CI**	Washable floor covering	**On request**	

1 *The weight figure includes the removal of the cushions of the two standard two-place rear bench-seats and seat belts (bench seats folded).*
2 *Recommended for sling/swing work.*
3 *The optional item 06-42006-00-CI "RH swivelling landing light" is recommended for simultaneous use.*
4 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations.*
5 *Including mainly 4 arm-rests and a fifth harness.*
6 *Applicable to an aircraft equipped with "STYLENCE package" option 00-50023-00-CI.*
It deteriorates the look of the rear panel's uphosltery set (seat base and seat back) + 2 harnesses (comptability 3 and 4 places layouts).
Conversion estimated time : less than 30 minutes.
7 *Option available for the optional item 07-00009-00-CI "Comfort lay-out".*

Interior cabin layout (continued)

⚠	*07-50002-A*	**07-50002-01-CI**	Improved side-visibility in RH large front door	**3.0**	**6.6**
⚠	*07-50002-A*	**07-50002-02-CI**	Improved side-visibility in LH large front door	**3.0**	**6.6**
⚠	*07-50003-A*	**07-50003-00-CI**	Left rear sliding door ***1***	**3.4**	**7.5**
⚠	*07-50005-A*	**07-50005-00-CI**	Right rear sliding door ***1***	**3.4**	**7.5**
⚠	*07-50006-A*	**07-50006-00-CI**	Sliding window, on rear LH sliding door	**1.1**	**2.4**
⚠	*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**
⚠		**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts ***2***	**-4.5**	**-9.9**
⚠	*07-71005-A*	**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts ***3***	**0.5**	**1.1**
⚠		**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts ***2***	**-2.9**	**-6.4**

1 *Improved side visibility in the corresponding front door included in the optional equipment.*

2 *Each weight figure includes the complete removal of one two-place rear bench seat and copilot seat. When the removable parts of lower and upper casualty carrying installations are installed simultaneously, the total weight supplement for both removable parts is 12.8 kg – 28.2 lb.*

3 *Includes the modification (cut-out) of the instrument panel.*

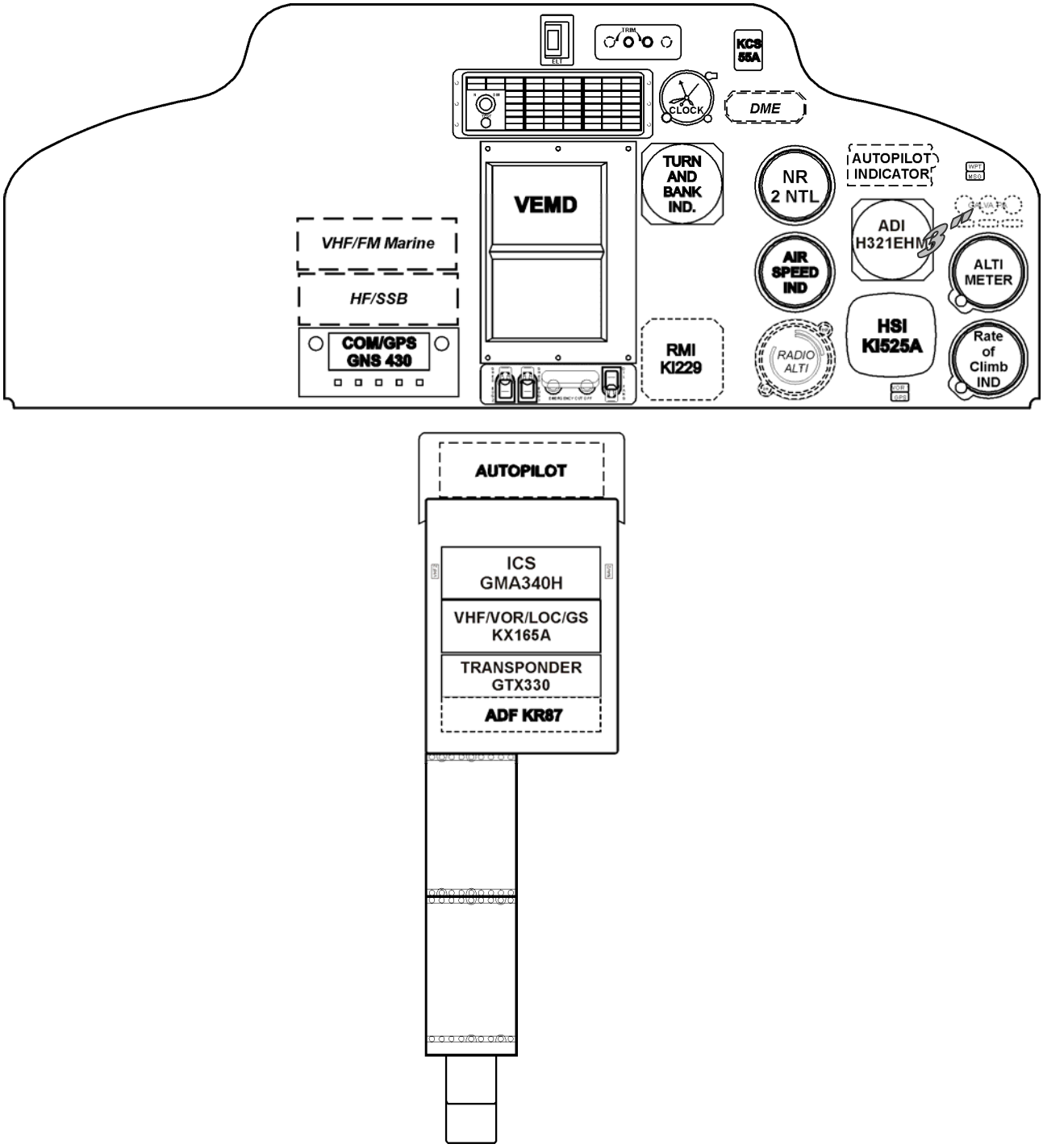
Avionics

VFR day and night package, included in standard definition

Thales H321EHM - Gyro-horizon *1*
Honeywell KCS 55 A – Gyro Compass
with Honeywell KI 525 A – Horizontal Situation Indicator *2*
UI 9560 – Turn and Bank indicator
Honeywell KX165A – VHF/VOR/LOC/GS
Garmin GNS 430 – VHF/VOR/LOC/GS/GPS *3*
Garmin GTX 330 – Transponder (mode S) *4*
Shadin 8800 T – Altitude Encoder
Kannad 121 AF-H – Emergency Locator Transmitter *5*
Garmin GMA340H – ICS *6* - *7*

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 *The mode S identification must be communicated by the customer two months at the latest before the delivery.*
5 *2 frequencies : 121.5 MHz, 243 MHz. Compliant with ED 62 and TSO C91A.*
6 *I.C.S. compatible only with High level / High impedance headsets.*
7 *Includes the passenger interphone function and Marker beacon receiver.*

STANDARD VFR INSTRUMENT PANEL LAYOUT



This layout shows in dotted lines the positions already reserved for optional items, frequently selected in VFR configuration.

Refer to the table of constraints in chapter 5 for possible combinations posssibilities.

Single pilot IFR operations

This package includes all avionics equipment generally required for Single Pilot IFR operations, that must be added to the standard VFR day and night avionics package.

Document reference	Commercial reference	Name	kg	lb
08-01022-A	**08-01022-00-CI**	**Single Pilot IFR avionics package**	**51**	**112**

Including

Second anemo-barometric circuit

Thales H 140 CJM1 - Flight director gyro-horizon instead of standard Thales H321EHM gyro-horizon

Thales H 321 EHM - Stand-by gyro-horizon instead of UI 9560 - Turn and Bank indicator

Rate-of-climb indicator with setter in place of the standard one

Honeywell KNI 582 Radio Magnetic Indicator with two needles and twin switching

Honeywell KI204 - VOR/LOC/GS indicator

Honeywell KR 87 - ADF

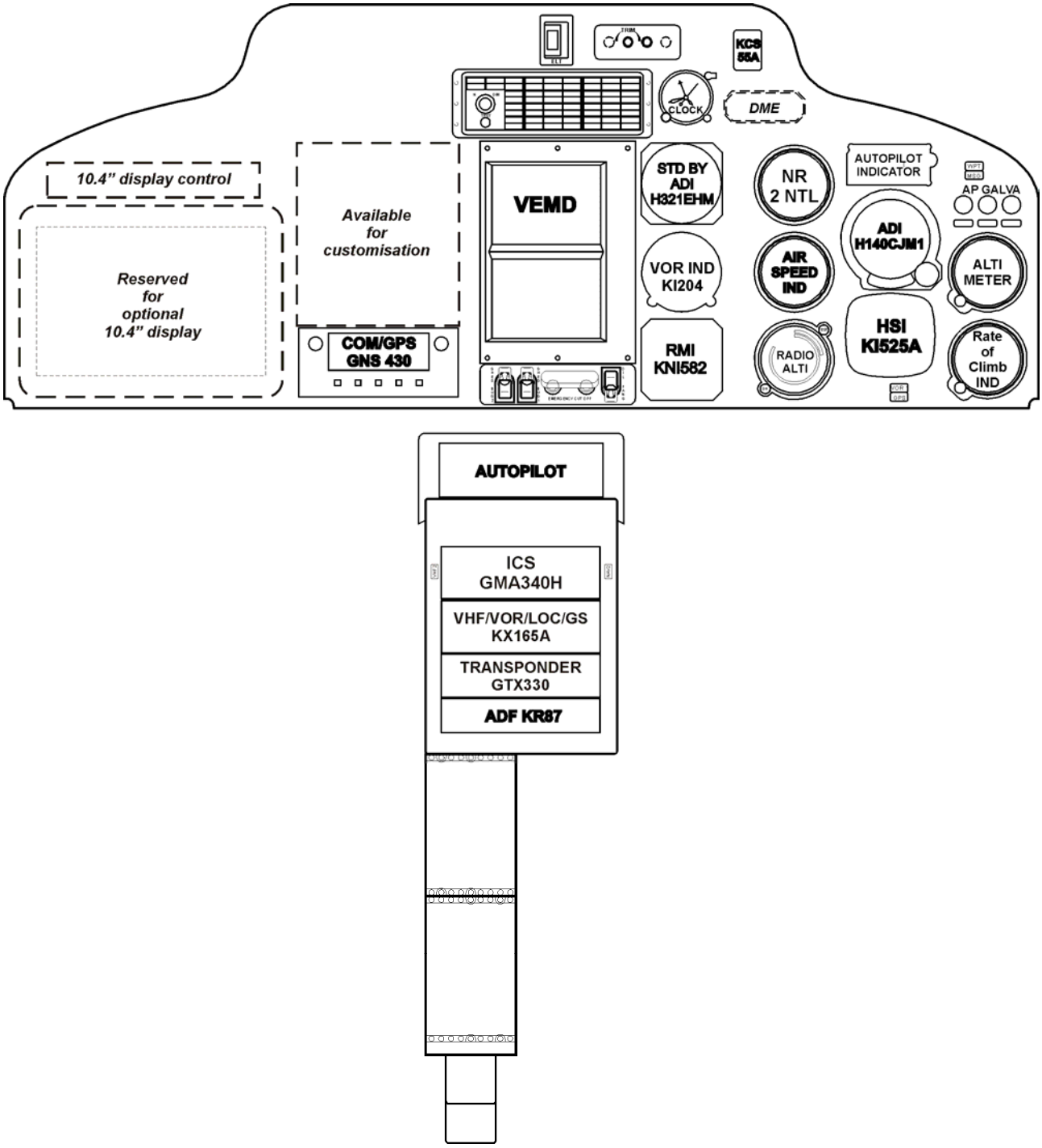
Thales AHV 16 - Radio altimeter

Sagem 85 T 31 + Sagem CDV 85 T 3 - 3-axis autopilot + Flight Director Coupler, VFR & IFR, with failure passivation unit

In complement of SPIFR avionics package, Single Pilot IFR operations require the selection of the following items of equipment.

05-32001-A	**05-32001-00-CI**	Pilot's windshield wiper	**2.6**	**5.7**
05-32003-A	**05-32003-00-CI**	Copilot's windshield wiper	**2.6**	**5.7**
05-62002-A	**05-62002-00-CI**	250 VA AC 1st generation system	**4.7**	**10.4**
05-62003-A	**05-62003-00-CI**	250 VA AC 2nd generation system	**4.2**	**9.3**
06-42006-A	**06-42006-00-CI**	RH landing light (swivelling in elevation)	**1.5**	**3.3**

SINGLE PILOT IFR INSTRUMENT PANEL LAYOUT



This layout shows in dotted lines the positions already reserved for optional items, frequently selected in SPIFR configuration.

Refer to the table of constraints in chapter 5 for possible combination posssibilities.

Dual pilot IFR operations

This package includes all avionics equipment generally required for Dual Pilot IFR operations, that must be added to the standard VFR day and night and option SPIFR packages.

Document reference	Commercial reference	Name	kg	lb
08-01023-A	**08-01023-00-CI**	**Dual Pilot IFR avionics package**	**23.0**	**50.0**

Including

2nd set of instruments for dual pilot IFR :

- Altimeter (3"),
- Airspeed indicator (2"),
- Rate-of-climb indicator (2"),
- Triple tachometer (N rotor and free turbines 1&2) (3")
- Autopilot indicating panel.
- Copilot clock (2")

Honeywell KCS 55 A - Gyro Compass with
Honeywell KI 525 A - Horizontal Situation Indicator

Thales H140JAM1 – Copilot Gyro-horizon

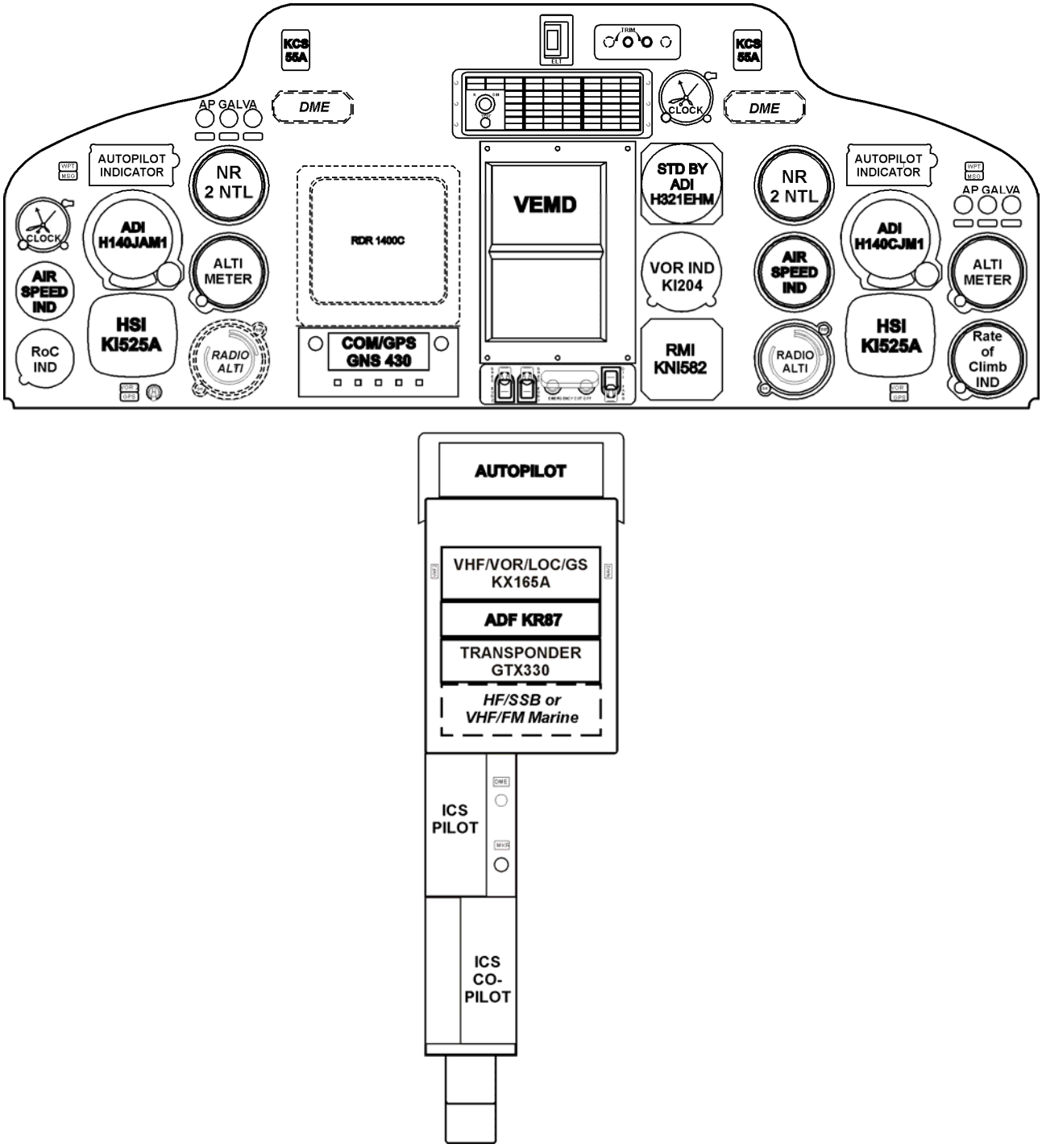
Honeywell KR21 – Marker Beacon Receiver

ICS – 2 control boxes and Passenger Interphone instead of
Garmin GMA340H – ICS

In complement of DPIFR avionics package, Dual Pilot IFR operations require the selection of the following items of equipment.

05-37008-A	**05-37008-00-CI**	Dual controls	**4.7**	**10.4**

DUAL PILOT IFR INSTRUMENT PANEL LAYOUT



This layout show in dotted lines the positions already reserved for optional items, frequently selected in DPIFR configuration.

Refer to the table of constraints in chapter 5 for possible combination posssibilities.

Replacement Equipment

Document reference	**Commercial reference**	Name	**kg**	**lb**
06-67031-A	**06-67031-02-CI**	KANNAD 406AF-H - Emergency Locator Transmitter ***1*** - ***2*** instead of KANNAD 121AF-H - Emergency Locator Transmitter	**0.1**	**0.2**
08-22039-A	**08-22039-00-CI**	Garmin GTX 327 - Transponder (mode A+C) instead of Garmin GTX 330 – Transponder (mode S)	**-0.6**	**-1.3**
08-51019-A	**08-51019-02-CI**	Thales H321EHM - Stand-by gyro-horizon instead of UI 9560 - Turn and Bank indicator	**3.0**	**6.6**
08-51021-A	**08-51021-00-CI**	Thales H140JAM1 - Gyro-horizon instead of standard Thales H321EHM - Gyro-horizon	**0.4**	**0.9**

1 *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.*

2 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations.*

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

	Document reference	Commercial reference	Name	kg	lb
⚠	*08-10006-A*	**08-10006-02-CI**	Collins – HF 9X00 – HF/SSB	**15.7**	**34.6**
⚠	*08-12012-A*	**08-12012-00-CI**	NAT NPX 138N - VHF/FM marine	**2.5**	**5.5**
	08-18024-A	**08-18024-00-CI**	Headset extension cord	**0.1**	**0.2**
	08-18035-A	**08-18035-00-CI**	David Clark - H 10-13H - Headset ***1***	**0.5**	**1.1**
	08-18036-A	**08-18036-00-CI**	David Clark - H10-66 - Headset ***2***	**0.5**	**1.1**
⚠	*08-21008-A*	**08-21008-00-CI**	Thales AHV 16 - Radio altimeter ***3***	**5.0**	**11.0**
⚠	*08-21017-A*	**08-21017-00-CI**	2nd indicator IND201 for Thales AHV 16 - Radio altimeter	**0.9**	**2.0**
⚠	*08-24011-B*	**08-24011-05-CI**	Honeywell KR 87 + KI 229 - ADF + RMI	**8.4**	**18.5**
	08-25003-A	**08-25003-01-CI**	Honeywell KN 63 - DME	**2.7**	**6.0**
⚠	*08-25017-A*	**08-25017-00-CI**	2nd indicator for Honeywell KN 63 - DME	**0.4**	**0.9**
⚠	*08-31023-A*	**08-31023-00-CI**	Telephonics RDR 1400 C - Colour Weather Radar	**19.2**	**42.3**
	08-31024-A	**08-31024-00-CI**	Honeywell RDR 2000 - Colour Weather Radar ***4***	**On request**	
	08-38003-A	**08-38003-00-CI**	BFGoodrich WX1000 - Stormscope ***4***	**On request**	
	08-46001-A	**08-46001-00-CI**	GPS moving map ***5***	**On request**	
⚠	*08-65019-A*	**08-65019-00-CI**	Video display 10.4"	**On request**	
⚠	*08-70005-A*	**08-70005-00-CI**	Sagem 85 T 31 - 3-axis autopilot, VFR, with failure passivation unit	**23.6**	**52.0**
	08-83024-A	**08-83024-00-CI**	VEMD data download kit ***6*** - ***7***	**—**	**—**
	08-91005-A	**08-91005-00-CI**	Hourmeter	**0.2**	**0.4**

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 *High level / High impedance headset.*
2 *Dual level / High impedance headset.*
3 *May be a mandatory equipment, required by local airworthiness authorities or operational regulations..*
4 *Availability to be checked.*
5 *The model currently certified is AVALEX AMS 7000. Other models can be proposed according to customer's operational needs.*
6 *Delivered in addition to the airborne kit, this kit includes two softwares and a connection wire.*
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).*

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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 removal 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			
00-50023-A	**00-50023-00-CI**	*STYLENCE* package	X				**07-00009-00-CI**	Comfort layout	07-00009-A
			X				**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
			X				**06-25001-00-CI**	Drip tub	06-25001-A
			X				**07-40003-00-CI**	Velvet carpeting	07-40003-A
			X				**07-40004-00-CI**	Washable floor covering	07-40004-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				**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
			X				**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
05-32003-A	**05-32003-00-CI**	Copilot's windshield wiper	X				**05-42004-03-CI**	Air conditioning system, standard layout	05-42004-B
			X				**05-42004-04-CI**	Air conditioning system, Comfort layout	05-42004-B
05-42004-B	**05-42004-03-CI**	Air conditioning system, standard layout	X				**05-32003-00-CI**	Copilot's windshield wiper	05-32003-A
			X				**05-42004-04-CI**	Air conditioning system, Comfort layout	05-42004-B
			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				**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
			X				**07-71005-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71005-A
05-42004-B	**05-42004-04-CI**	Air conditioning system, Comfort layout	X				**05-32003-00-CI**	Copilot's windshield wiper	05-32003-A
			X				**05-42004-03-CI**	Air conditioning system, standard layout	05-42004-B
			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				**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
			X				**07-71005-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71005-A
						X	**07-00009-00-CI**	Comfort layout	07-0009-A

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
05-37008-A	**05-37008-00-CI**	Dual controls		X			**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
				X			**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
05-84002-A	**05-84002-00-FP**	Ferrying tank - Fixed parts	X				**07-00009-00-CI**	Comfort layout	07-00009-A
05-84002-A	**05-84002-00-RP**	Ferrying tank - Removable parts	X				**07-00009-00-CI**	Comfort layout	07-00009-A
				X			**06-25001-00-CI**	Drip tub	06-25001-A
				X			**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
				X			**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
				X			**07-25004-00-CI**	4 places instead of 3 places transformation kit	07-25004-A
				X			**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
					X		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
						X	**05-84002-00-FP**	Ferrying tank - Fixed parts	05-84002-A
06-11008-A	**06-11008-00-CI**	SURFAIR skis	X				**06-12015-01-CI**	High skid landing gear with 2 long footsteps	06-12015-A
				X			**06-61004-00-RP**	Emergency floatation gear - Removable Parts	06-61004-A
06-12012-A	**06-12012-00-CI**	Low skid landing gear with 2 short footsteps	X				**06-61004-00-FP**	Emergency floatation gear - Fixed Parts	06-61004-A
			X				**06-61004-00-RP**	Emergency floatation gear - Removable Parts	06-61004-A
06-12015-A	**06-12015-01-CI**	High skid landing gear with 2 long footsteps	X				**06-11008-00-CI**	SURFAIR skis	06-11008-A
06-21002-A	**06-21002-00-FP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Fixed parts	X				**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	06-21006-A
06-21002-A	**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	X				**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	06-21006-A
					X		**05-84002-00-RP**	Ferrying tank - Removable parts	05-84002-A
					X		**06-24001-00-CI**	Rappelling installation (without rope)	06-24001-A
					X		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
					X		**06-61004-00-RP**	Emergency floatation gear - Removable Parts ***1***	06-61004-A
					X		**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
					X		**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
					X		**07-25004-00-CI**	4 places instead of 3 places transformation kit	07-25004-A

1 *Hoisting remains possible when the floats are folded.*

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
06-21002-A	**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts *(continued)*			X		**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
					X		**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
						X	**06-21002-00-FP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Fixed Parts	06-21002-A
06-21006-A	**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	X				**06-21002-00-FP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Fixed parts	06-21002-A
06-21006-A	**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	X				**06-21002-00-FP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Fixed parts	06-21002-A
			X				**06-21018-00-CI**	Support for Breeze electrical hoist	06-21018-A
					X		**05-84002-00-RP**	Ferrying tank - Removable parts	05-84002-A
					X		**06-24001-00-CI**	Rappelling installation (without rope)	06-24001-A
					X		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
					X		**06-61004-00-RP**	Emergency floatation gear - Removable Parts ***1***	06-61004-A
					X		**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
					X		**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
					X		**07-25004-00-CI**	4 places instead of 3 places transformation kit	07-25004-A
					X		**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
					X		**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
						X	**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	06-21006-A
06-21018-A	**06-21018-00-CI**	Support for Breeze electrical hoist	X				**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
						X	**06-21006-00-FP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Fixed Parts	06-21006-A
06-24001-A	**06-24001-00-CI**	Rappelling installation (without rope)			X		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
					X		**06-61004-00-RP**	Emergency floatation gear - Removable Parts	06-61004-A
						X	**07-50003-00-CI**	Left rear sliding door	07-50003-A
						X	**07-50005-00-CI**	Right rear sliding door	**07-50005-A**

1 *Hoisting remains possible when the floats are folded.*

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
06-25001-A	**06-25001-00-CI**	Drip tub (sea rescue)	X				**00-50023-00-CI**	*STYLENCE* package	00-50023-A
				X			**05-84002-00-RP**	Ferrying tank - Removable Parts	05-840002-A
				X			**07-00009-00-CI**	Comfort layout	07-00009-A
				X			**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
				X			**07-25004-00-CI**	4 places instead of 3 places transformation kit	07-25004-A
				X			**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
06-27006-A	**06-27006-00-RP**	Cargo swing with dynamometer (1134 kg - 2,500 lb) - Removable parts		X			**06-47002-00-RP**	SPECTROLAB SX 16 searchlight - Removable parts	06-47002-A
					X		**05-84002-00-RP**	Ferrying tank - Removable parts	05-84002-A
					X		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		**06-24001-00-CI**	Rappelling installation (without rope)	06-24001-A
					X		**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
					X		**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
					X		**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
						X	**06-27006-00-FP**	Cargo swing with dynamometer (1134 kg - 2,500 lb) - Fixed Parts	06-27006-A
06-31006-A	**06-31006-00-CI**	Integrated hailers	X				**06-61004-00-FP**	Emergency floatation gear - Fixed Parts	06-61004-A
			X				**06-61004-00-RP**	Emergency floatation gear - Removable Parts	06-61004-A
06-47002-A	**06-47002-00-RP**	SPECTROLAB SX 16 searchlight - Removable parts		X			**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
06-61004-A	**06-61004-00-FP**	Emergency floatation gear - Fixed parts	X				**06-12012-00-CI**	Low skid landing gear with 2 short footsteps	06-12012-A
			X				**06-31006-00-CI**	Integrated hailers	06-31006-A
06-61004-A	**06-61004-00-RP**	Emergency floatation gear - Removable parts	X				**06-12012-00-CI**	Low skid landing gear with 2 short footsteps	06-12012-A
			X				**06-31006-00-CI**	Integrated hailers	06-31006-A
				X			**06-11008-00-CI**	SURFAIR skis	06-11008-A
					X		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		**06-21006-00-RP**	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		**06-24001-00-CI**	Rappelling installation (without rope)	06-24001-A
						X	**06-61004-00-FP**	Emergency floatation gear - Fixed parts	06-61004-A
06-74018-A	**06-74018-00-CI**	Internal and avionics lighting adaptation for night-time missions with NVG					Being studied		

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
07-00009-A	07-00009-00-CI	Comfort layout	X				00-50023-00-CI	*STYLENCE* package	00-50023-A
			X				05-84002-00-FP	Ferrying tank - Fixed parts	05-84002-A
			X				05-84002-00-RP	Ferrying tank - Removable parts	05-84002-A
				X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
07-24004-A	07-24004-00-RP	Left side two-place front bench seat (pilot on right side) - Removable Parts		X			05-37008-00-CI	Dual controls	05-37008-A
				X			05-84002-00-RP	Ferrying tank - Removable parts	05-84002-A
				X			07-71001-00-RP	Lower casualty carrying installation with stretcher - Removable Parts	07-71001-A
				X			07-71005-00-RP	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
					X		06-21002-00-RP	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		06-21006-00-RP	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		06-27006-00-RP	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
						X	07-24004-00-FP	Left side two-place front bench seat (pilot on right side) - Fixed Parts	07-24004-A
07-25001-A	07-25001-00-CI	3 places instead of 4 places transformation kit	X				00-50023-00-CI	*STYLENCE* package	00-50023-A
			X				07-25004-00-CI	4 places instead of 3 places transformation kit	07-25004-A
				X			05-84002-00-RP	Ferrying tank - Removable parts	05-84002-A
				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			07-71005-00-RP	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
					X		06-21002-00-RP	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		06-21006-00-RP	BREEZE electrical hoist (204 kg – 450 lb, 50 m – 164 ft cable) - Removable Parts	06-21006-A
07-25004-A	07-25004-00-CI	4 places instead of 3 places transformation kit	X				07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			05-84002-00-RP	Ferrying tank - Removable parts	05-84002-A
				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			07-71005-00-RP	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
					X		06-21002-00-RP	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		06-21006-00-RP	BREEZE electrical hoist (204 kg – 450 lb, 50 m – 164 ft cable) - Removable Parts	06-21006-A
						X	00-50023-00-CI	*STYLENCE* package	00-50023-A
07-40003-A	07-40003-00-CI	Velvet carpeting	X				00-50023-00-CI	*STYLENCE* package	00-50023-A
07-40004-A	07-40004-00-CI	Washable floor covering	X				00-50023-00-CI	*STYLENCE* package	00-50023-A

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
07-50002-A	**07-50002-01-CI**	Improved side-visibility in RH large front door	X				**07-50005-00-CI**	Right rear sliding door	07-50005-A
07-50002-A	**07-50002-02-CI**	Improved side-visibility in LH large front door	X				**07-50003-00-CI**	Left rear sliding door	07-50003-A
07-50003-A	**07-50003-00-CI**	Left rear sliding door	X				**07-50002-02-CI**	Improved side-visibility in LH large front door	07-50002-A
			X				**06-24001-00-CI**	Rappelling installation (without rope)	06-24001-A
07-50005-A	**07-50005-00-CI**	Right rear sliding door	X				**07-50002-01-CI**	Improved side-visibility in RH large front door	07-50002-A
07-71001-A	**07-71001-00-FP**	Lower casualty carrying installation with stretcher - Fixed Parts	X				**00-50023-00-CI**	*STYLENCE* package	00-50023-A
			X				**05-42004-03-CI**	Air conditioning system, standard layout	05-42004-B
			X				**05-42004-04-CI**	Air conditioning system, Comfort layout	05-42004-B
07-71001-A	**07-71001-00-RP**	Lower casualty carrying installation with stretcher - Removable Parts	X				**00-50023-00-CI**	*STYLENCE* package	00-50023-A
			X				**05-42004-03-CI**	Air conditioning system, standard layout	05-42004-B
			X				**05-42004-04-CI**	Air conditioning system, Comfort layout	05-42004-B
				X			**05-37008-00-CI**	Dual controls	05-37008-A
				X			**05-84002-00-RP**	Ferrying tank - Removable parts	05-84002-A
				X			**06-25001-00-CI**	Drip tub (sea rescue)	06-25001-A
				X			**07-24004-00-RP**	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
				X			**07-25001-00-CI**	3 places instead of 4 places transformation kit	07-25001-A
				X			**07-25004-00-CI**	4 places instead of 3 places transformation kit	07-25004-A
					X		**06-21002-00-RP**	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		**06-21006-00-RP**	BREEZE electrical hoist (204 kg – 450 lb, 50 m – 164 ft cable) - Removable Parts	06-21006-A
					X		**06-27006-00-RP**	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
						X	**07-71001-00-FP**	Lower casualty carrying installation with stretcher - Fixed Parts	07-71001-A
07-71005-A	**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts	X				**00-50023-00-CI**	*STYLENCE* package	00-50023-A
			X				**05-42004-03-CI**	Air conditioning system, standard layout	05-42004-B
			X				**05-42004-04-CI**	Air conditioning system, Comfort layout	05-42004-B
			X				**08-01023-00-CI**	Dual Pilot IFR avionics package	08-01023-A
			X				**08-65019-00-CI**	Video display 10.4"	08-65019-A

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
07-71005-A	07-71005-00-RP	Upper casualty carrying installation with stretcher - Removable Parts	X				00-50023-00-CI	*STYLENCE* package	00-50023-A
			X				05-42004-03-CI	Air conditioning system, standard layout	05-42004-B
			X				05-42004-04-CI	Air conditioning system, Comfort layout	05-42004-B
			X				08-01023-00-CI	Dual Pilot IFR avionics package	08-01023-A
			X				08-65019-00-CI	Video display 10.4"	08-65019-A
				X			05-37008-00-CI	Dual controls	05-37008-A
				X			05-84002-00-RP	Ferrying tank - Removable parts	05-84002-A
				X			06-25001-00-CI	Drip tub (sea rescue)	06-25001-A
				X			07-24004-00-RP	Left side two-place front bench seat (pilot on right side) - Removable Parts	07-24004-A
				X			07-25001-00-CI	3 places instead of 4 places transformation kit	07-25001-A
				X			07-25004-00-CI	4 places instead of 3 places transformation kit	07-25004-A
					X		06-21002-00-RP	AIR EQUIPEMENT electrical hoist (136 kg - 300 lb, 40 m - 131 ft cable) - Removable Parts	06-21002-A
					X		06-21006-00-RP	BREEZE electrical hoist (204 kg - 450 lb, 50 m - 164 ft cable) - Removable Parts	06-21006-A
					X		06-27006-00-RP	Cargo swing with dynamometer (1,134 kg - 2,500 lb) - Removable Parts	06-27006-A
						X	07-71005-00-FP	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
08-01022-A	08-01022-00-CI	Single Pilot IFR avionics package	X				08-21008-00-CI	Thales AHV 16 - Radio altimeter	08-21008-A
			X				08-24011-05-CI	Honeywell KR 87 + KI 229 - ADF + RMI	08-24011-B
			X				08-70005-00-CI	SAGEM 85 T 31 - 3-axis autopilot, VFR, with failure passivation unit	08-70005-A
						X	05-32001-00-CI	Pilot's windshield wiper	05-32001-A
						X	05-32003-00-CI	Copilot's windshield wiper	05-32003-A
						X	05-62002-00-CI	250 VA AC 1st generation system	05-62002-A
						X	05-62003-00-CI	250 VA AC 2nd generation system	05-62003-A
						X	06-42006-00-CI	RH landing light (swivelling in elevation)	06-42006-A
08-01023-A	08-01023-00-CI	Dual Pilot IFR avionics package	X				08-65019-00-CI	Video display 10.4"	08-65019-A
			X				07-71005-00-FP	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
			X				07-71005-00-RP	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
						X	08-01022-00-CI	Single Pilot IFR avionics package	08-01022-A
						X	05-37008-00-CI	Dual controls	05-37008-A
08-21008-A	08-21008-00-CI	Thales AHV 16 - Radio altimeter	X				08-01022-00-CI	Single Pilot IFR avionics package	08-01022-A
08-21017-A	08-21017-00-CI	2nd indicator IND201 for Thales AHV 16 - Radio altimeter					08-21008-00-CI	Thales AHV 16 - Radio altimeter	08-21008-A
						X	or	or	or
							08-01022-00-CI	Single Pilot IFR avionics package	08-01022-A
08-24011-B	08-24011-05-CI	Honeywell KR 87 + KI 229 - ADF + RMI	X				08-01022-00-CI	Single Pilot IFR avionics package	08-01022-A
			X				08-01023-00-CI	Dual Pilot IFR avionics package	08-01023-A
08-25017-A	08-25017-00-CI	2nd indicator for Honeywell KN 63 - DME					08-25003-01-CI	Honeywell KN 63 - DME	08-25003-A
						X	and	and	and
							08-01023-00-CI	Dual Pilot IFR avionics package	08-01023-A

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
08-65019-A	**08-65019-00-CI**	Video display 10.4"	X				**08-01023-00-CI**	Dual Pilot IFR avionics package	08-01023-A
			X				**07-71005-00-FP**	Upper casualty carrying installation with stretcher - Fixed Parts	07-71005-A
			X				**07-71005-00-RP**	Upper casualty carrying installation with stretcher - Removable Parts	07-71005-A
08-70005-A	**08-70005-00-CI**	SAGEM 85 T 31 - 3-axis autopilot, VFR, with failure passivation unit	X				**08-01022-00-CI**	Single Pilot IFR avionics package	08-01022-A
						X	**08-51021-00-CI**	Thales H140JAM1 - Gyro-horizon instead of standard Thales H321EHM - Gyro-horizon	08-51021-A
						X	**05-62002-00-CI**	250 VA AC 1st generation system	05-62002-A

Specific constraints in Dual Pilot IFR configuration

Document Reference	Commercial Reference	Installation	Nature of the Constraint				Commercial Reference	Installation	Document Reference
			EXL	NSF	NSU	REQ			
08-10006-A	**08-10006-02-CI**	Collins – HF 9X00 – HF/SSB	X				**08-31023-00-CI** **and** **08-12012-00-CI**	Telephonics RDR 1400 C - Colour Weather Radar and NAT NPX 138N - VHF/FM marine	08-31023-A and 08-12012-A
08-12012-A	**08-12012-00-CI**	NAT NPX 138N - VHF/FM marine	X				**08-31023-00-CI** **and** **08-10006-02-CI**	Telephonics RDR 1400 C - Colour Weather Radar and Collins – HF 9X00 – HF/SSB	08-31023-A and 08-10006-A
08-31023-A	**08-31023-00-CI**	Telephonics RDR 1400 C - Colour Weather Radar	X				**08-12012-00-CI**	NAT NPX 138N - VHF/FM marine	08-12012-A
08-10006-A and 08-12012-A	**08-10006-02-CI** **and** **08-12012-00-CI**	Collins – HF 9X00 – HF/SSB and NAT NPX 138N - VHF/FM marine	X				**08-31023-00-CI**	Weather Radar Telephonics RDR 1400 C - Colour	08-31023-A
08-10006-A and 08-31023-A	**08-10006-02-CI** **and** **08-31023-00-CI**	Collins – HF 9X00 – HF/SSB and Telephonics RDR 1400 C - Colour Weather Radar	X				**08-12012-00-CI**	NAT NPX 138N - VHF/FM marine	08-12012-A
08-12012-A and 08-31023-A	**08-12012-00-CI** **and** **08-31023-00-CI**	NAT NPX 138N - VHF/FM marine and Telephonics RDR 1400 C - Colour Weather Radar	X				**08-10006-02-CI**	Collins – HF 9X00 – HF/SSB	08-10006-A

6- Main performance

The following performance values and figures refer to an ***AS355 NP.***
Unless otherwise specified, the values and figures refer to a **clean helicopter,** equipped with **new engines**, at **Sea Level** (SL), in **International Standard Atmosphere** (ISA) and **zero wind** condition.

Performance on 2 engines

Gross Weight	**kg** **lb**	**2,000** **4,409**	**2,200** **4,850**	**2,400** **5,291**	**2,600** **5,732**	**2,800** *1* **6,172**
■ Maximum speed, VNE	**km/hr** **kts**	278 150	278 150	278 150	278 150	— —
■ Fast cruise speed (at MCP)	**km/hr** **kts**	244 132	237 128	230 124	222 120	— —
■ Recommended cruise speed	**km/hr** **kts**	241 130	233 126	226 122	218 117	— —
■ Fuel consumption at recommended cruise speed	**kg/hr** **lb/h**	185 408	185 408	185 408	185 408	— —
■ Rate-of-climb at MCP	**m/sec** **ft/min**	10.0 1,964	8.9 1,744	7.7 1,521	6.6 1,296	5.4 1,065
■ Hover ceiling IGE (at TOP, height 6 ft)						
● ISA	**m** **ft**	5,035 16,520	4,170 13,680	3,370 11,060	2,610 8,560	— —
● ISA + 20°C	**m** **ft**	4,200 13,790	3,315 10,880	2,415 7,930	1,530 5,030	— —
■ Hover ceiling OGE (at TOP)						
● ISA	**m** **ft**	4,640 15,220	3,770 12,370	2,955 9,700	2,185 7,180	805 2,640
● ISA + 20°C	**m** **ft**	3,770 12,380	2,850 9,350	1,885 6,190	935 3,080	see note
■ Service ceiling (1 m/s, 200 ft/min)	**m** **ft**	>6,096 >20,000	5,645 18,520	4,860 15,950	4,125 13,530	— —
■ Range (without reserve, at recommended cruise speed)	**km** **nm**	559 302	759 410	739 399	716 386	— —
■ Endurance (without reserve, at 102 km/hr – 55kts TAS)	**hr : min**	3h25 *2*	4h37	4h29	4h20	—

Note : In ISA+20 conditions, the Hover Ceiling Outside Ground Effect performance is achieved at a Maximum Gross Weight equal to 2793 kg – 6157 lb.

1 *With external load on cargo hook.*
2 *Take off weight with 72 % of fuel on board.*

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.

Performance on 1 engine

Gross Weight	kg lb	2,000 4,409	2,200 4,850	2,400 5,291	2,600 5,732	2,800[1] 6,172
■ Rate of climb at OEI continuous power	m/sec ft/min	6.4 1,260	5.4 1,060	4.3 850	3.2 635	— —
■ Service ceiling (1 m/sec., 200 ft/min.) at OEI continuous power						
● ISA	m ft	4,190 13,750	3,280 10,770	2,445 8,030	1,670 5,490	— —
● ISA + 20°C	m ft	3,490 11,450	2,545 8,350	1,585 5,210	671 2,200	— —
■ Maximum Temperature for CAT A take-off from clear heliport, at OEI continuous power, at SL	°C	> 50	> 50	> 50	41	— —
■ Maximum Temperature for CAT A take-off from helipad, at maximum contingency power, at SL	°C	> 50	> 50	38	24	— —

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 : 6,096 m - 20,000 ft (PA)
- Maximum temperature : ISA + 35°C limited to + 50°C
- Minimum temperature : – 40°C

Abbreviations

AEO :	All Engines Operative
IGE :	In Ground Effect
ISA :	International Standard Atmosphere
MCP :	Maximum Continuous Power
OEI :	One Engine Inoperative
OGE :	Out of Ground Effect
PA :	Pressure Altitude
SL :	Sea Level
TAS :	True Air Speed
TOP :	Take-Off Power
VNE :	Never Exceed Speed
Vz :	Rate-of-climb

Units

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

1 *With external load on cargo hook.*

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.

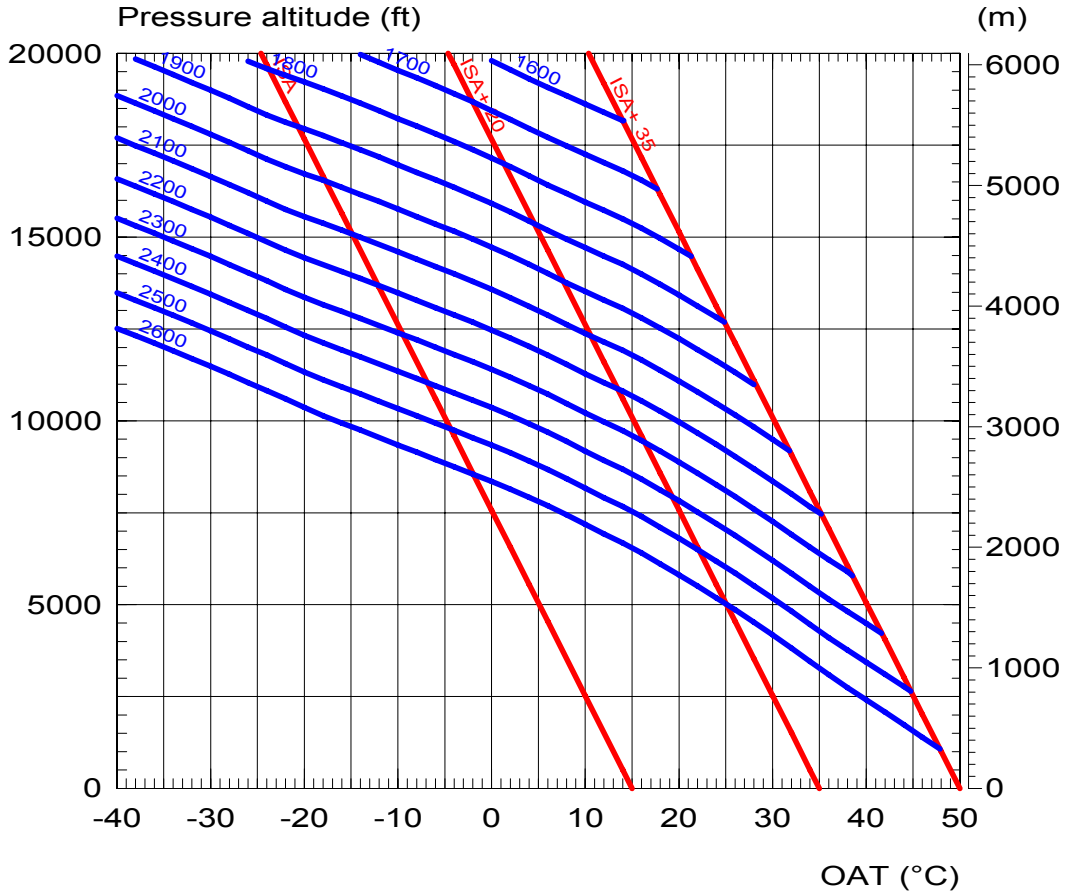
Performance charts

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

TAKE-OFF WEIGHTS IN HOVER IGE

on two engines at maximum TOP

(Height 6 ft)

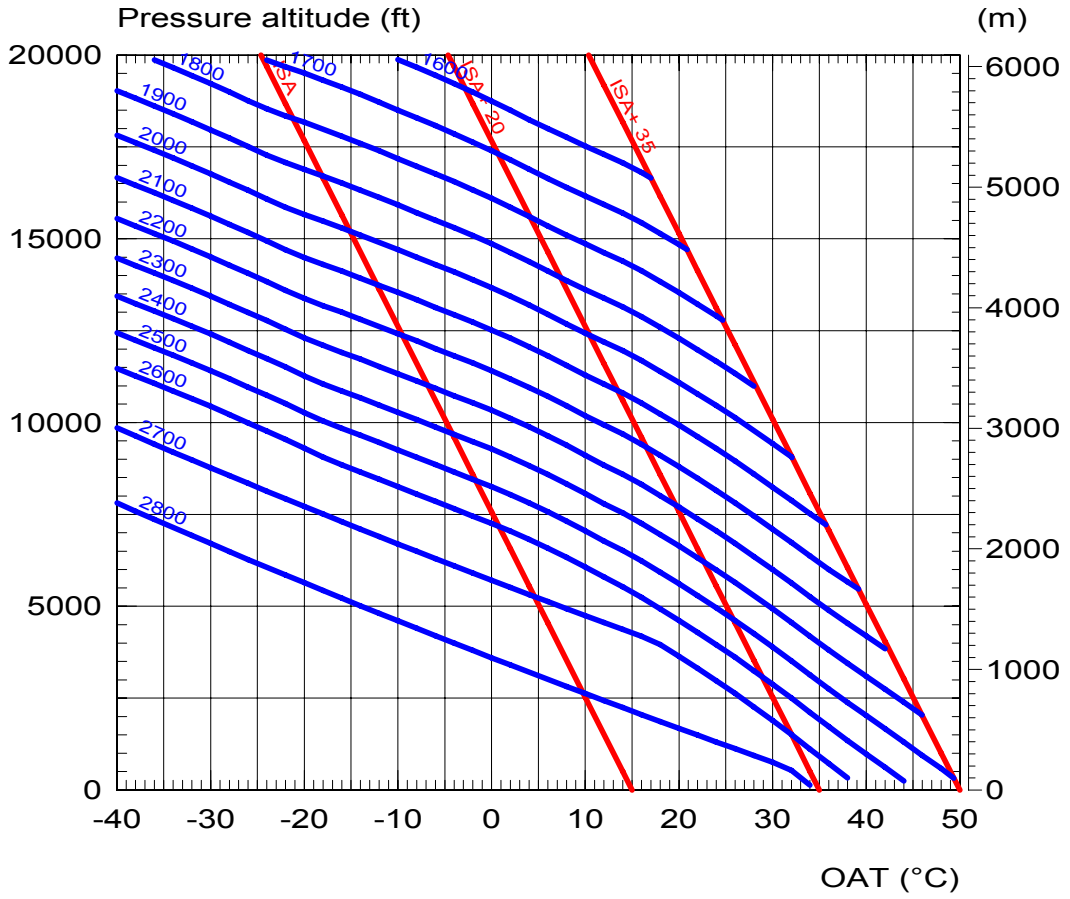


Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

TAKE-OFF WEIGHTS IN HOVER OGE

on two engines

at maximum TOP



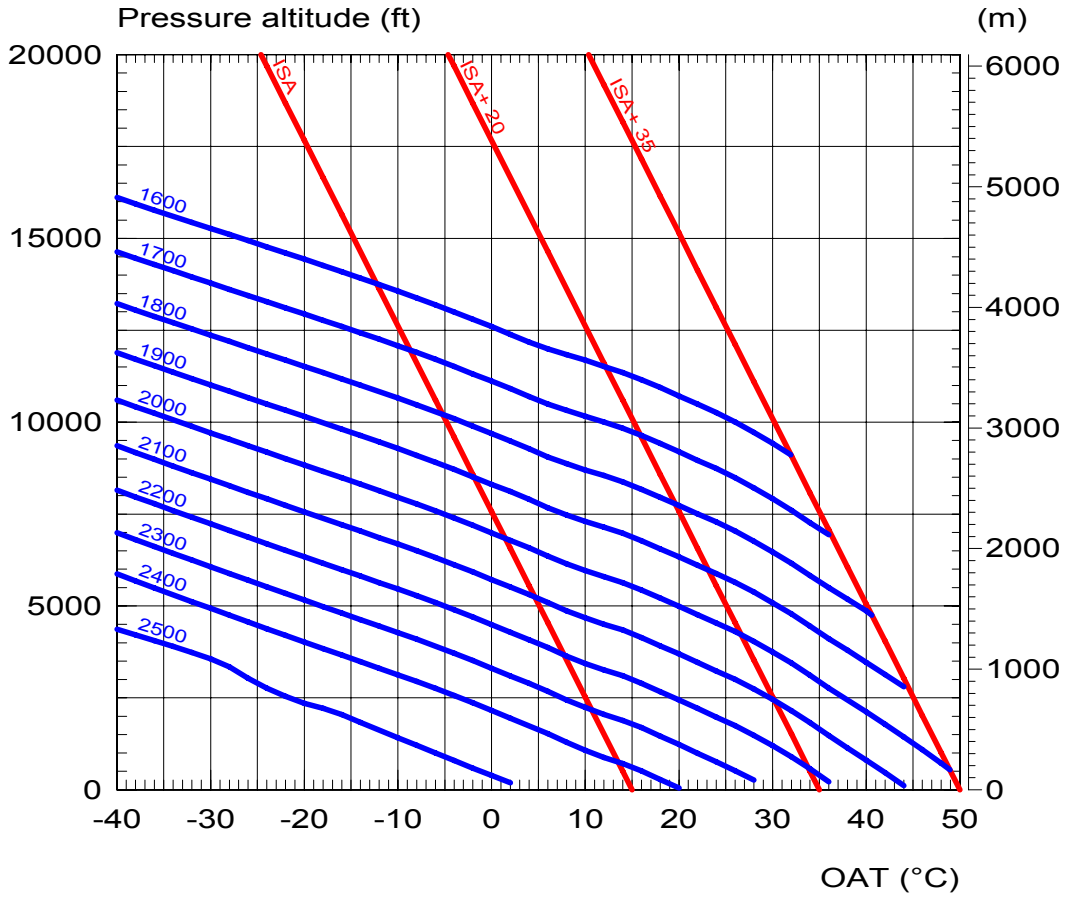
Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

TAKE-OFF WEIGHTS IN HOVER IGE

on 1 engine

at maximum contingency power

(O.E.I. 2½ min)



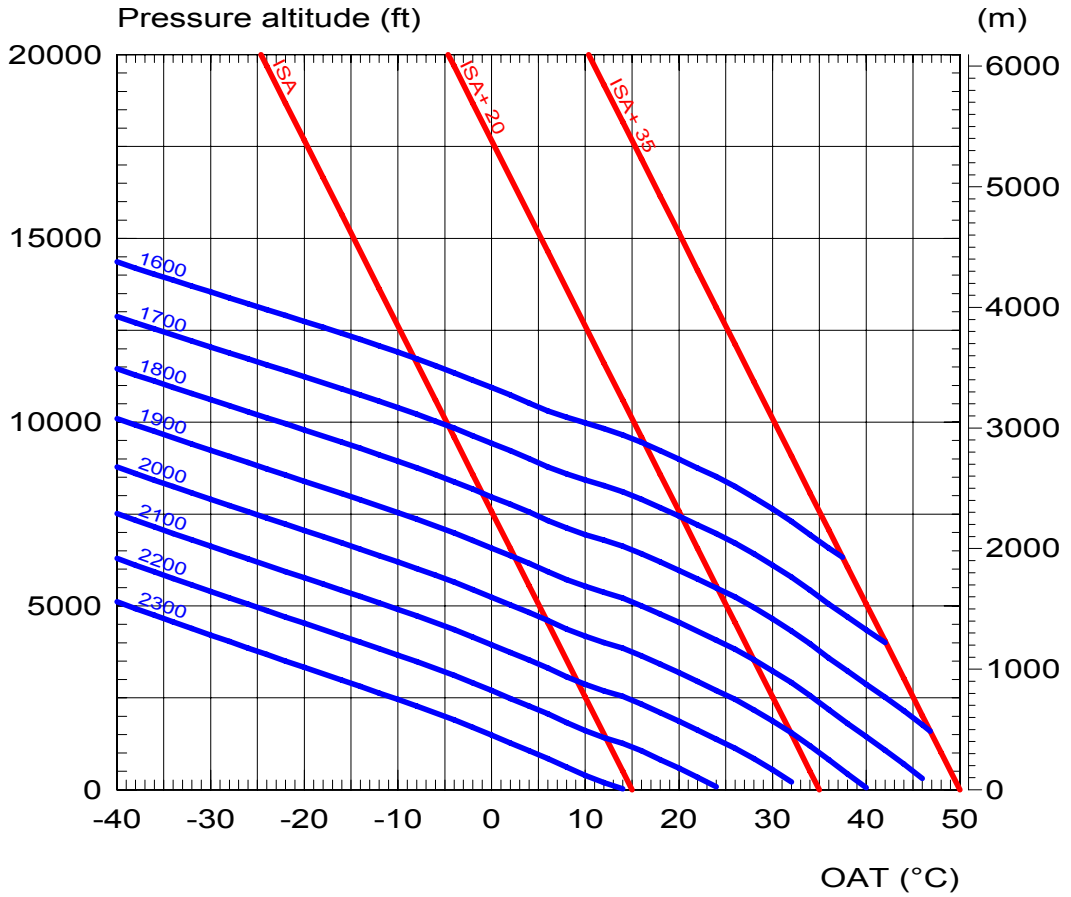
Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

TAKE-OFF WEIGHTS IN HOVER OGE

on 1 engine

at maximum contingency power

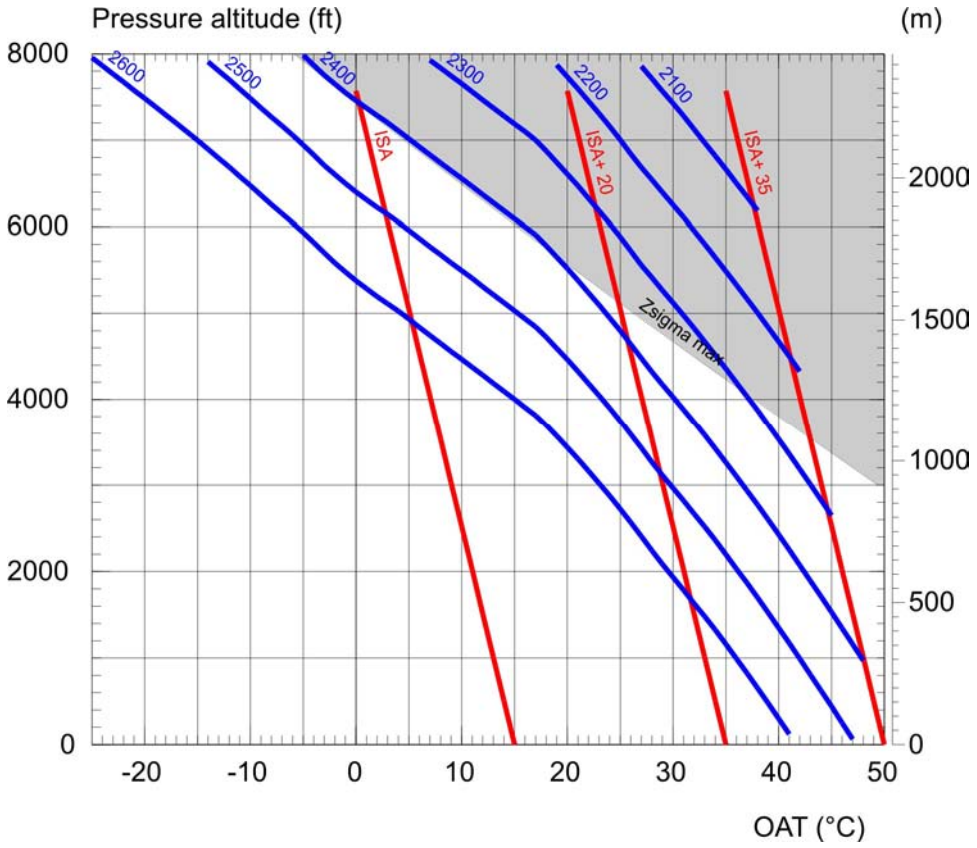
(O.E.I. 2½ min)



Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

TAKE-OFF WEIGHTS FROM A CLEAR HELIPORT (CAT. A)

at O.E.I. continuous power



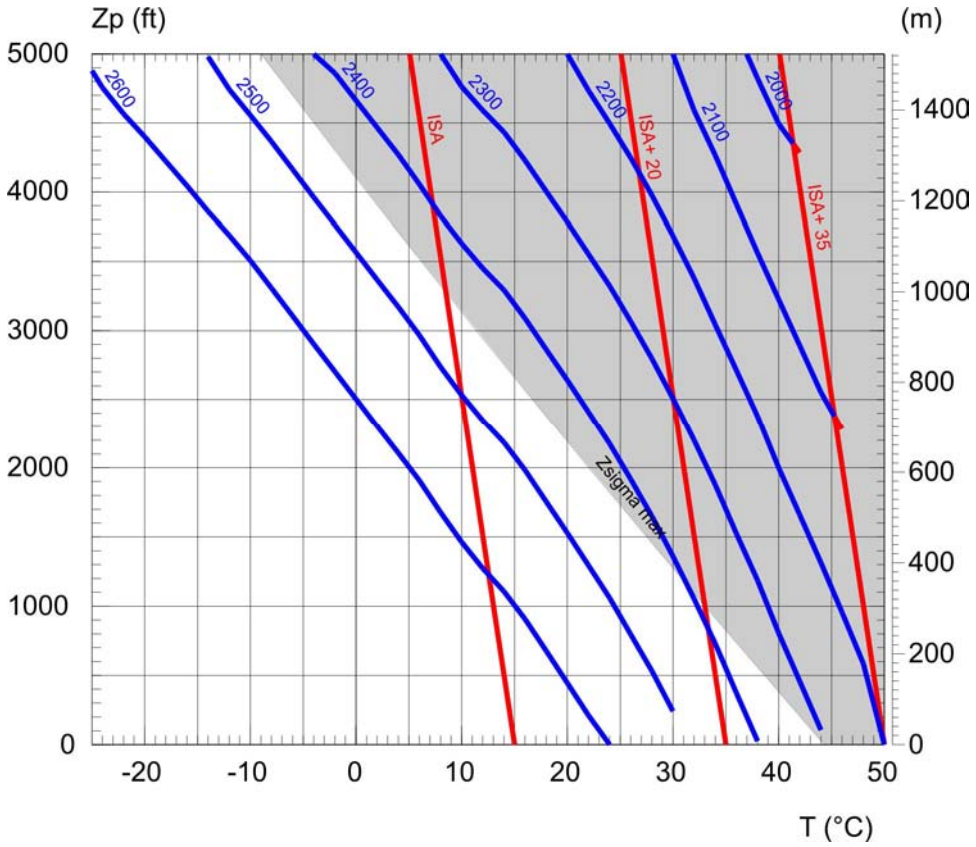
For CAT A operations from clear heliport, the density-altitude is preliminary limited at 2,255 m - 7,400 ft and will be extended after further high altitude flight tests campaign.

Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

TAKE-OFF WEIGHTS FROM A HELIPAD (CAT. A)

at maximum contingency power

(O.E.I. 2½ min)

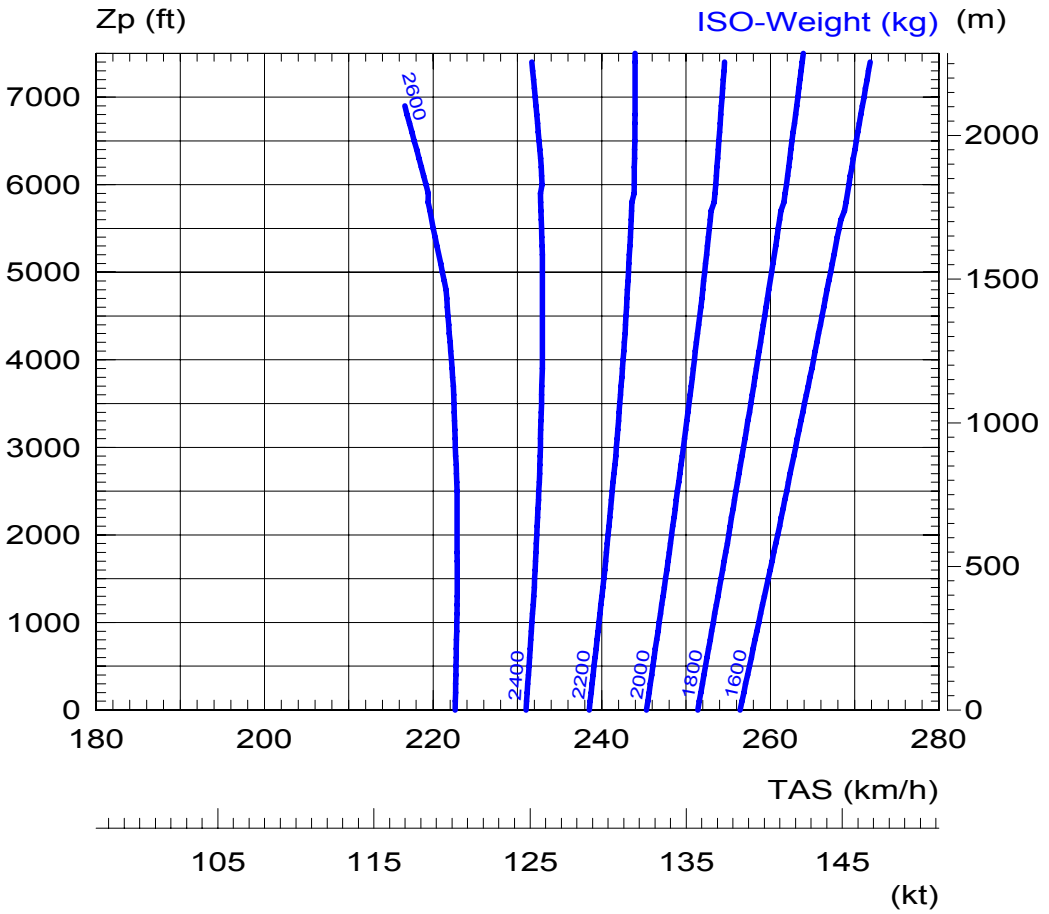


For CAT A operations from helipad, the density-altitude is preliminary limited at 998 m - 3,274 ft and will be extended after further high altitude flight tests campaign.

Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

FAST CRUISE SPEED

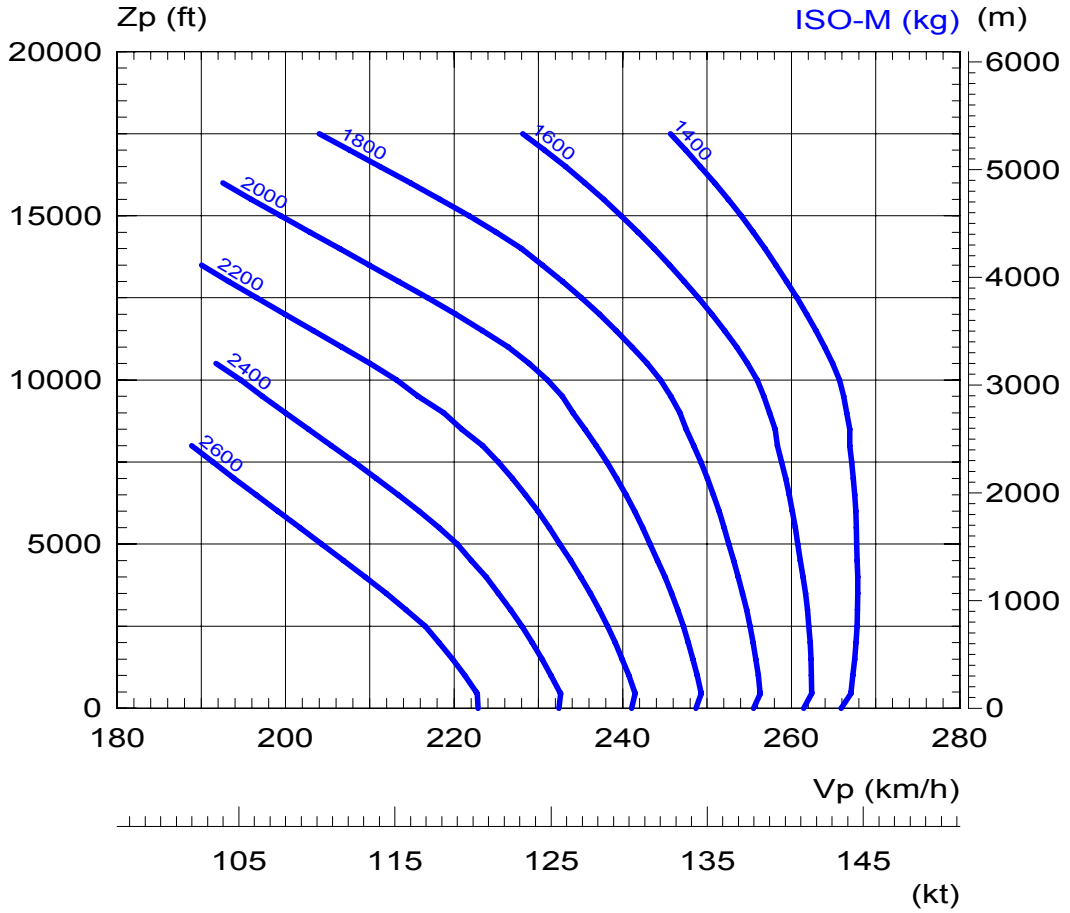
ISA



Note : Typical performance with clean standard aircraft and new engines.

FAST CRUISE SPEED

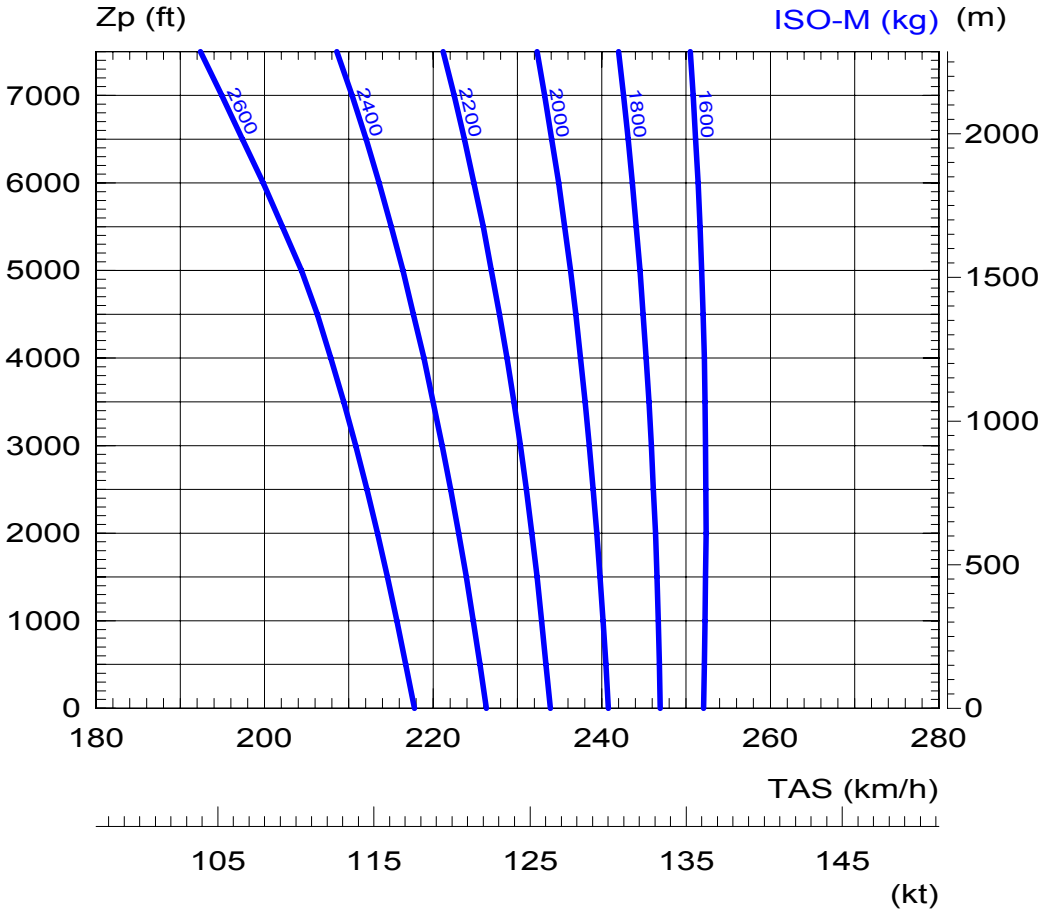
ISA + 20°C



Note : Typical performance with clean standard aircraft and new engines.

RECOMMENDED CRUISE SPEED

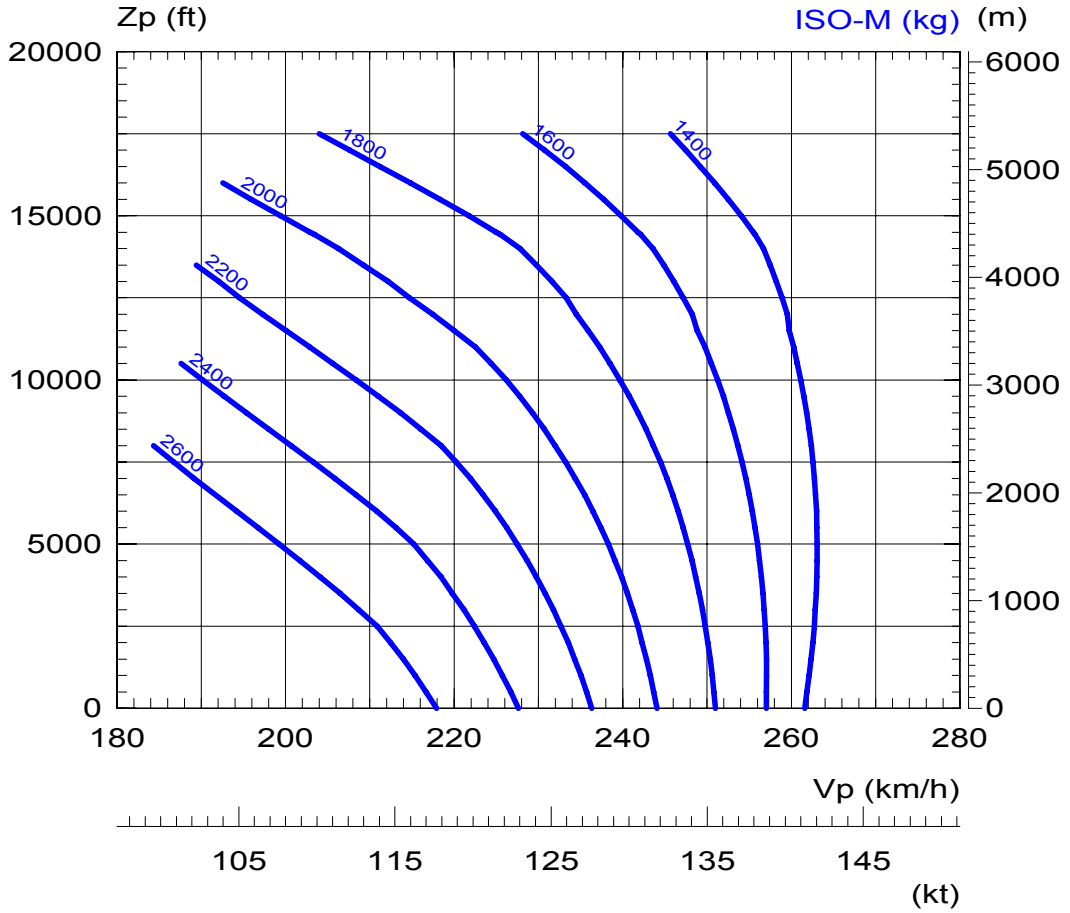
ISA



Note : Typical performance with clean standard aircraft and new engines.

RECOMMENDED CRUISE SPEED

ISA + 20°C

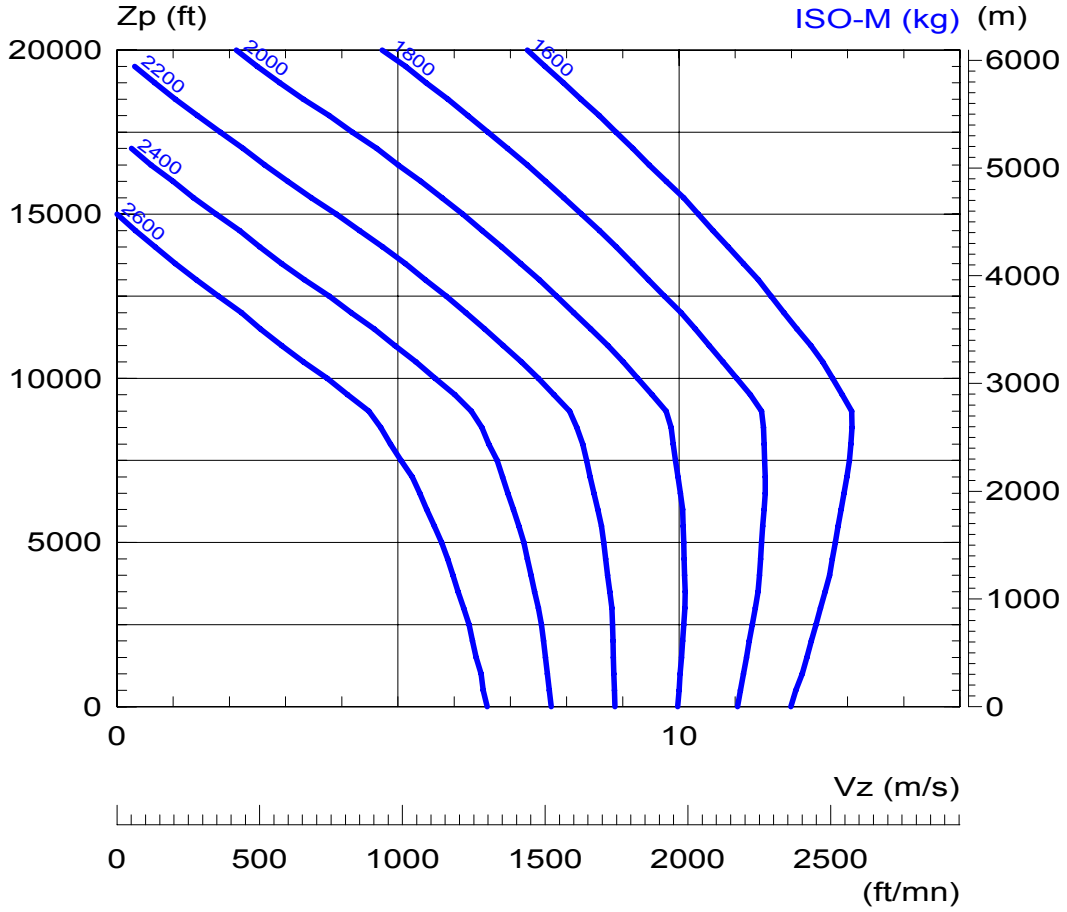


Note : Typical performance with clean standard aircraft and new engines.

RATE OF CLIMB IN OBLIQUE FLIGHT

on 2 engines at MCP

ISA

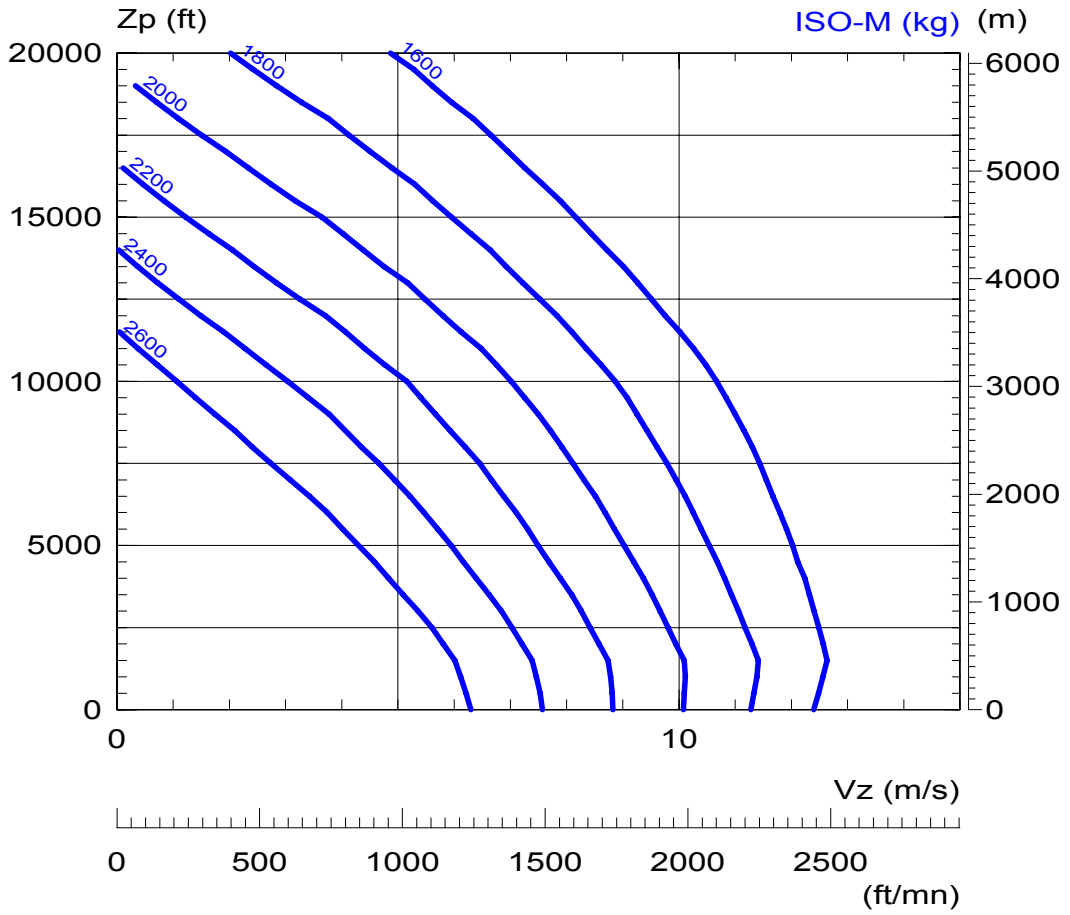


Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

RATE OF CLIMB IN OBLIQUE FLIGHT

on 2 engines at MCP

ISA + 20°C



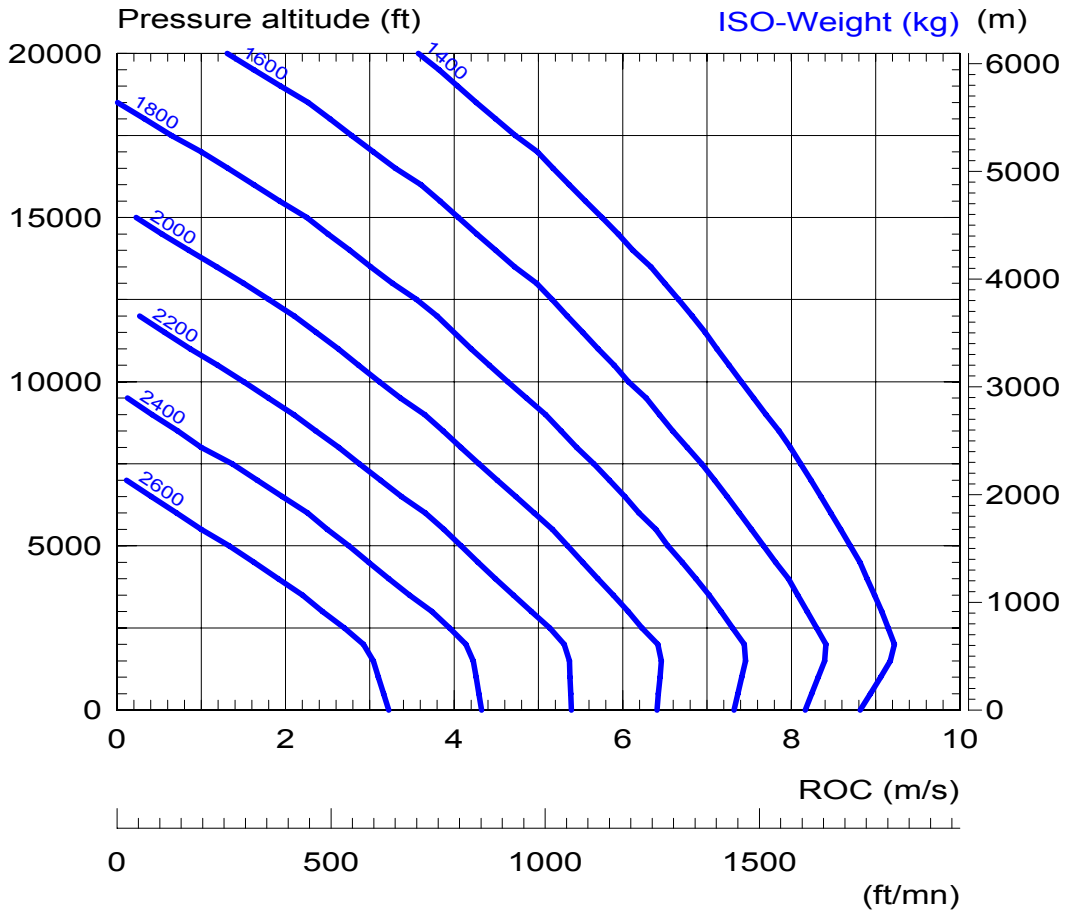
Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

RATE OF CLIMB IN OBLIQUE FLIGHT

on 1 engine

at OEI continuous power

ISA



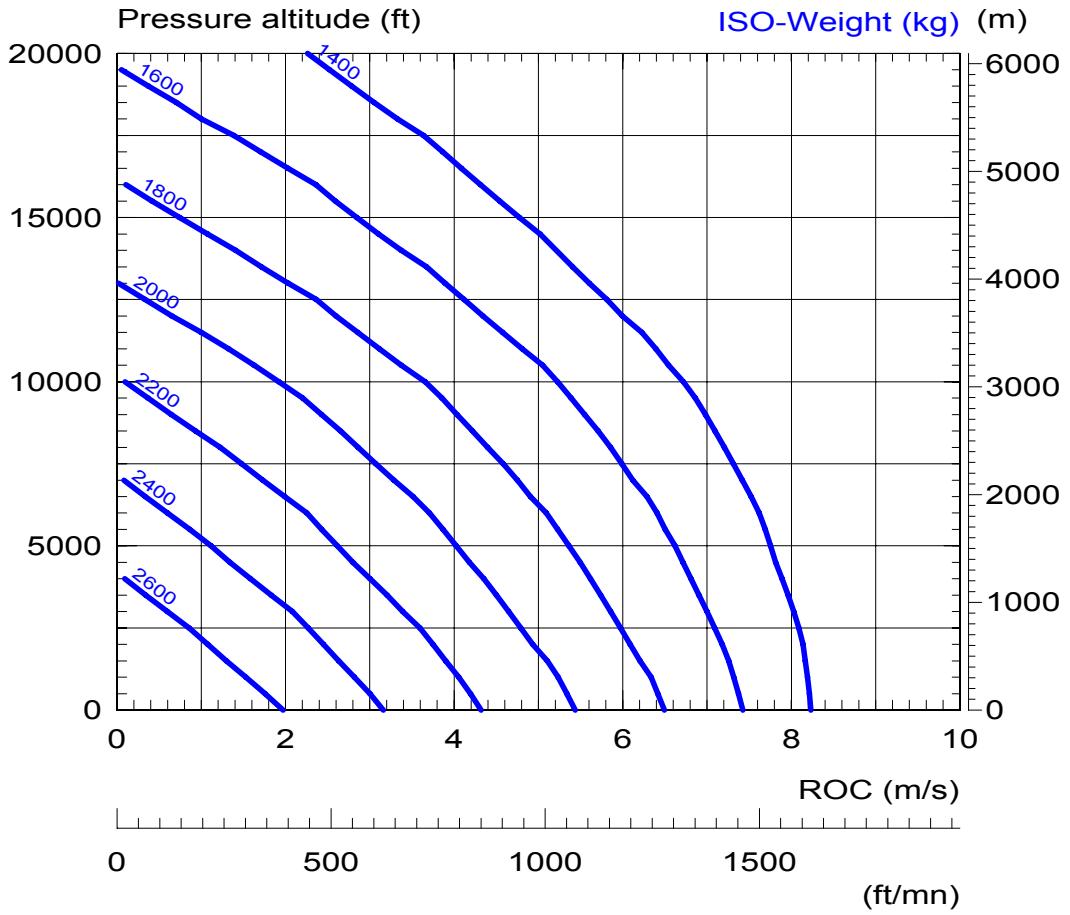
Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

RATE OF CLIMB IN OBLIQUE FLIGHT

on 1 engine

at OEI continuous power

ISA + 20°C

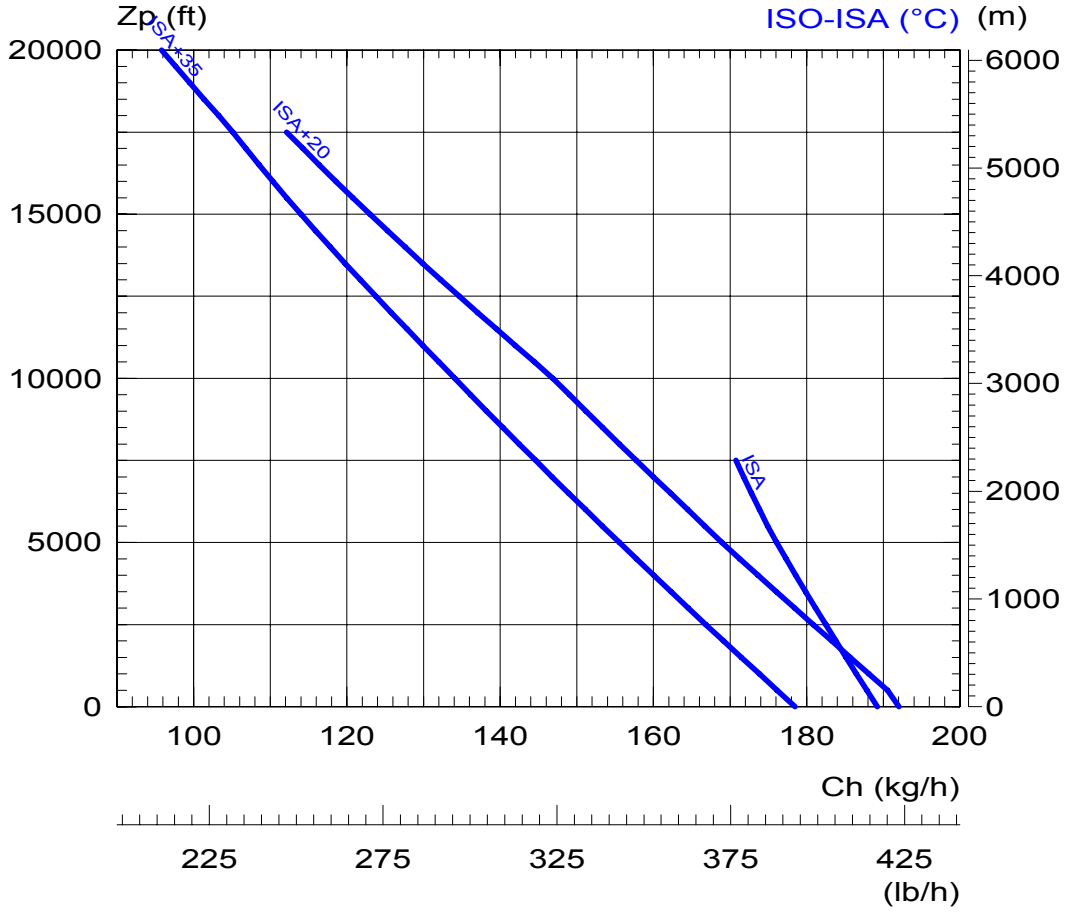


Note : Approved performances, as long as the engines meet the power check criteria, as defined in the Flight Manual.

HOURLY FUEL CONSUMPTION

at fast cruise speed

ISA, ISA + 20°C, ISA + 35°C

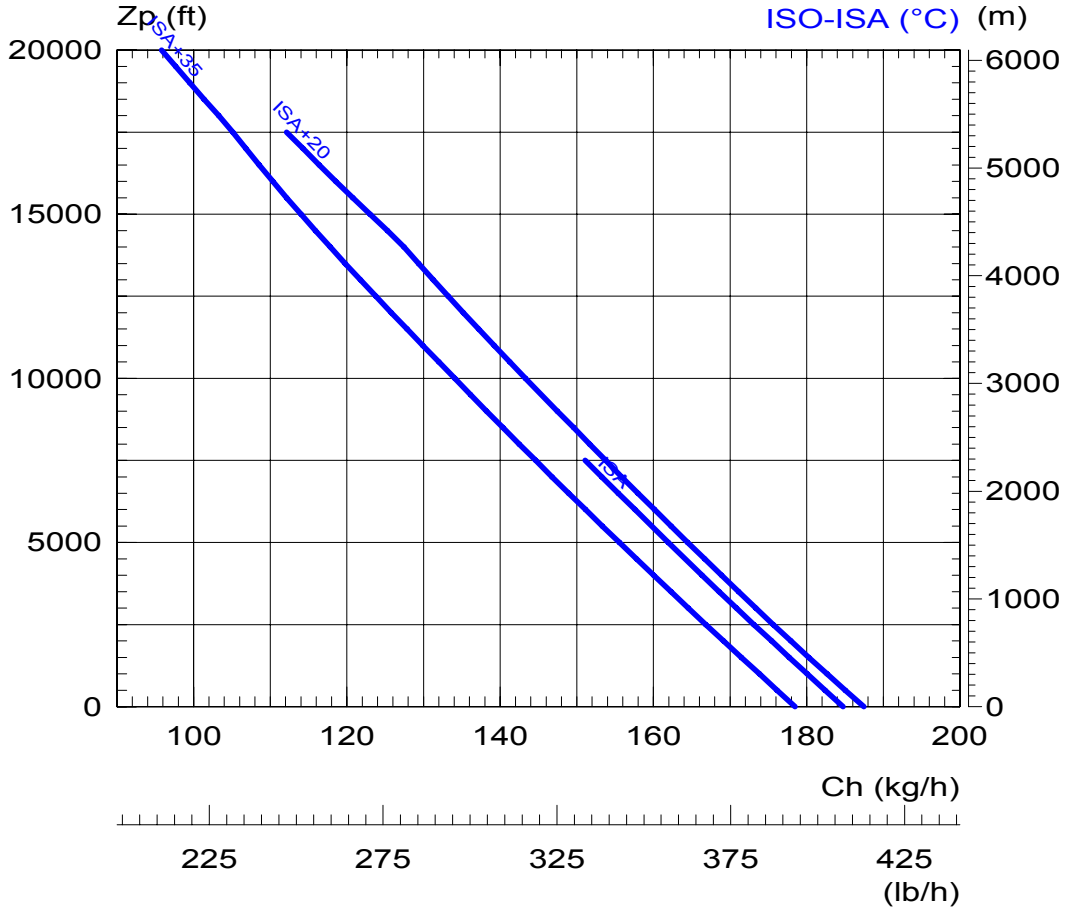


Note : Typical consumption with clean standard aircraft and new engines.

HOURLY FUEL CONSUMPTION

at recommended cruise speed

ISA, ISA + 20°C, ISA + 35°C



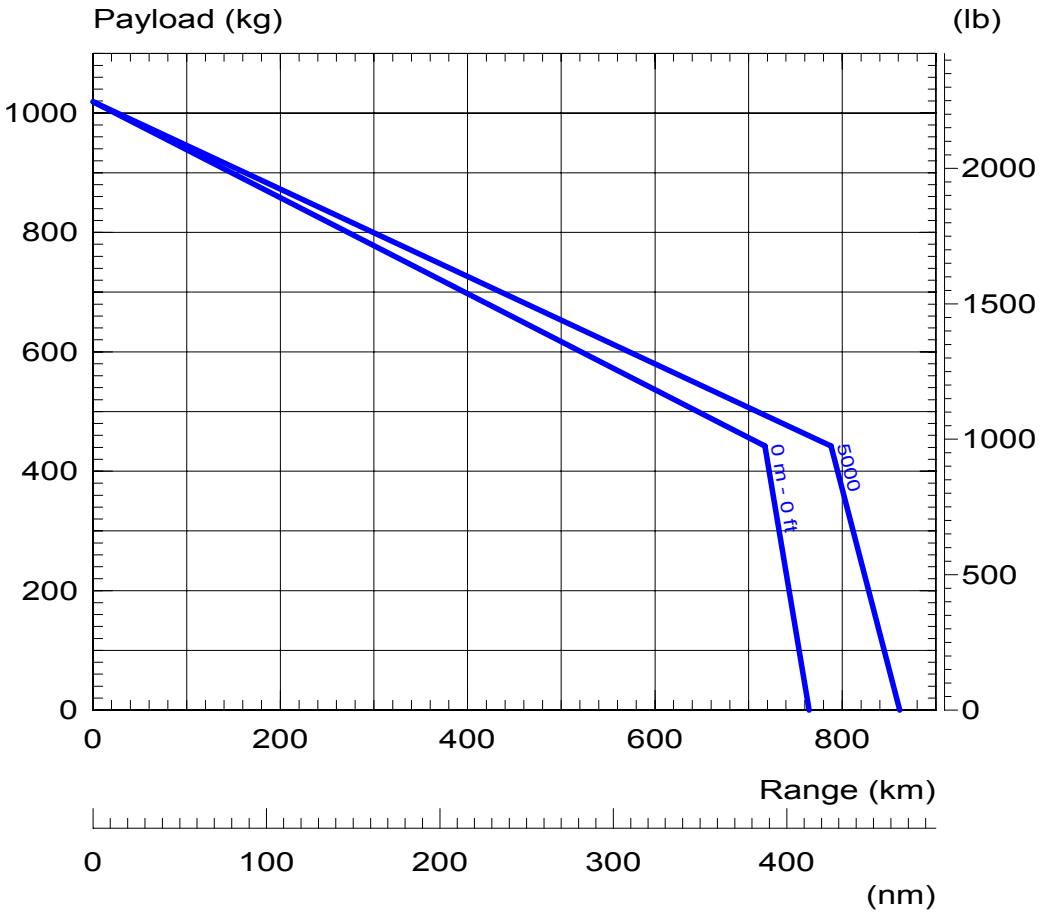
Note : Typical consumption with clean standard aircraft and new engines.

PAYLOAD / RANGE

ISA

Recommended cruise speed

Empty weight equipped a/c + 1 pilot : 1580 kg – 3483 lb



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

7- Customer Service Overview

Assets

- Possibility to perform maximum of maintenance tasks by operators through modular exchange,
- Low required man-hour 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 (nearly 16 millions 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, Master Servicing Recommendation 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 man-hour 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 Master Servicing Recommendation).

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

0.80 MMH/FH *1* (Scheduled + unscheduled + SB implementation)

Detail

- **Basic**

■ Daily checks :	Pilot's task
■ 100 flight hrs periodicity tasks Including average "corrective" works	4.3 MMH *2*
■ 500 flight hrs or 24 months periodicity tasks Including average "corrective" works	148 MMH

- **Unscheduled (reliability cause)** **0.32 MMH/FH**
- **SB implementation** **0.05 MMH/FH**
- **12 years inspections requiring 335 MMH**

1 *MMH/FH : Mean Man Hour per Flight Hour.*
2 *MMH : Mean Man Hour.*

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

Major assemblies		TBO (h)	SLL (h)
Main Blade			20 000
Rear Blade			4 000
MGB	Epicyclic reduction gear box	3000	
	Reduction gear tapered	3000	
	Oil pump	3500	
Complete engine		3000 *1*	
TGB		3000 *2*	
Main servo-unit (TRW type)		3000	
Tail servo-unit (TRW type)		3000	

Documentation

Eurocopter *AS355 NP* technical documentation, pleasant and easy to consult, is basically supplied :

- **On an Interactive Electronic Support (CD-ROM OPEN 355), 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 : Master Servicing Recommendation, Service Bulletins.

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

2. Turbomeca Arrius 1A1 engine documentation is available both under CD-ROM and paper format.

1 *Target value for mature engine.*
2 *Target value for mature helicopter.*

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