

technical data



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sa 365 n



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DIVISION HÉLIOPTÈRES 2 à 20, Avenue MARCEL CACHIN - 93126 La COURNEUVE CEDEX - FRANCE

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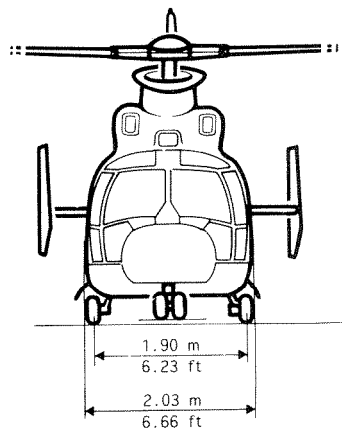
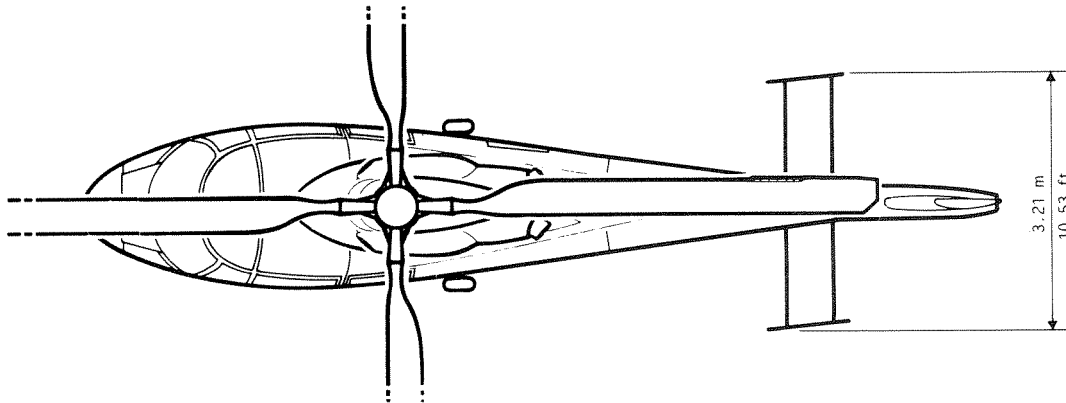
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DIVISION HÉLICOPTÈRES

Technical drawing of the Sikorsky UH-60 Black Hawk helicopter in profile, showing dimensions in meters and feet.

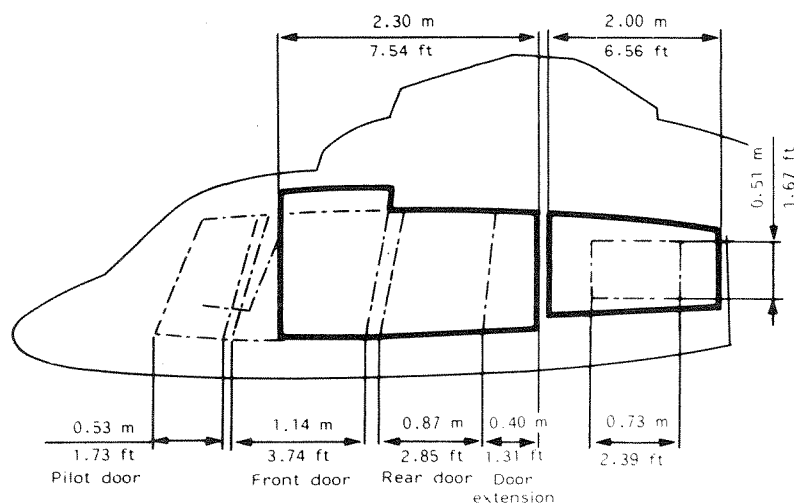
Dimensions (meters and feet):

- Overall length: 13.46 m (44.15 ft)
- Length to tail boom: 11.93 m (39.13 ft)
- Height to rotor hub: 3.51 m (11.51 ft)
- Height to tail boom: 2.75 m (9.02 ft)
- Height to tail rotor hub: 4.01 m (13.16 ft)
- Height to landing gear: 0.34 m (1.11 ft)
- Height to tail rotor hub: 0.78 m (2.56 ft)
- Length to main rotor hub: 1.04 m (3.41 ft)
- Length to tail boom: 3.61 m (11.84 ft)
- Length to tail rotor hub: 11.44 m (37.53 ft)
- Main rotor diameter: Ø 0.90 m (2.95 ft dia)

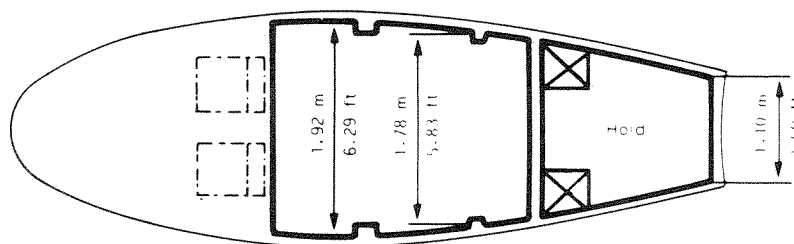


Top-down view of the Space Shuttle Challenger. The overall length is 32.53 m (106 ft 10 in) and the width is 11.44 m (37 ft 10 in).

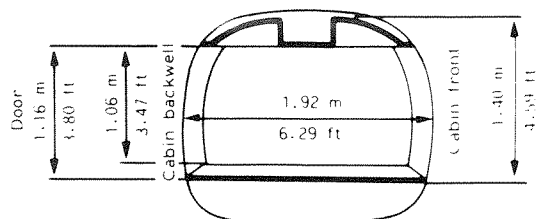
DIMENSIONS OF COMPARTMENTS AND ACCESSES



CABIN	
Area	4.20 m ² 45.20 sq.ft
Volume	5.00 m ³ 176.57 cu.ft

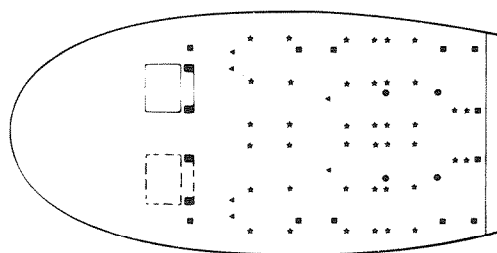


HOLD :	
Area and volume available for luggage	
Area	1.20 m ² 12.91 sq.ft
Volume	0.60 m ³ 21.18 cu.ft



CABIN FLOOR

- ▲ Tie-down rings usable for stretchers
- Fixtures for ferrying tank
- Tie-down rings
- ★ Seat-attachment point



GENERAL CHARACTERISTICS

ARRANGEMENT

- Passenger-transport :
- 1 or 2 pilots + 8 passengers with comfort seats or with utility folding seats
 - 1 or 2 pilots + 11 passengers with comfort seats
 - 1 or 2 pilots + 12 passengers with utility folding seats
- Casualty-transport :
- 1 or 2 pilots + 4 stretcher-patients + 1 seat for medical attendant (or 2 stretcher-patients and 4 seats)

WEIGHT

Empty weight, standard aircraft (including engine oil and unusable fuel)

Useful load

Max. all-up weight

Max. load on cargo sling

Max. all-up weight in external load configuration

kg	lb
2,047	4,513
1,953	4,305
4,000	8,818
1,600	3,527
4,100	9,039

ENGINE RATING

2 TURBOMECA ARRIEL 1 C free turbine engines.

Power per engine in standard atmosphere, at sea level

Max. emergency power

Intermediate emergency power

Take-off power

Max. continuous power

kW	ch	HP
522	710	700
512	696	686
492	669	660
437	594	586

FUEL CAPACITY (usable fuel)

Standard tanks (2 groups)

Additional tanks (on option)

Auxiliary fuel tank

Ferrying tank

litres	US gal.	kg	lb
1,145	302	905	1,995
180	48	142	313
475	125	375	827

CERTIFICATION

The SA 365 N is certified by the DGAC, the FAA and the CAA for VFR flight in day- and night-time and for IFR flight with 1 or 2 pilots.

DEFINITION OF THE STANDARD AIRCRAFT

GENERAL

Fuselage comprising the cabin and luggage hold with floor, tie-down net and access-door
Tail boom with stabilizer fitted with 2 lateral fins and terminated by a shrouded tail rotor built in the main fin
Retractable tricycle landing gear with castering nose wheel unit and differential brakes on pilot's side
Built-in foot-steps (2 on each side) for access to transmission deck

Hoist and cargo-sling attachment points
Jacking, hoisting, mooring and gripping points
Provisions for emergency floatation gear
Interior paint : cream ; exterior : as per standard colour chart (scheme and colours, gloss or matt polyurethane finish).

POWER PLANT

2 TURBOMECA ARRIEL 1C turbine engines each developing 522 kW (710 ch - 700 HP) take-off power complete with starting, fuel supply and governing systems and fitted with a magnetic plug and a chip detector c/w tell-tale light on warning panel
2 fuel systems including 2 groups of tanks with a total usable capacity of 1145 litres' (302 US gal.) and fuel jettison capability

1 bleed hydraulic control for the whole fuel system
2 engine lubrication and oil cooling systems
2 fire detection and extinguishing systems
2 anti-icing air-intake grids
2 hydraulic sensors for torque meters built into the engines.
2 tail pipes

INSTRUMENTS

1 airspeed indicator
1 altimeter
1 rate-of-climb indicator
1 gyro-horizon SFENA H 140-ATM
1 gyro-compass SFIM CG 130 with RMI
1 bank indicator
2 heated pitot heads
1 dual torque meter
2 tail pipe temperature indicators
2 engine oil pressure and temperature indicators
2 fuel pressure indicators
1 main gearbox oil pressure and temperature indicator
2 hydraulic pressure-gauges
1 voltmeter
1 ammeter

1 dual fuel contents gauge
1 fuel circuit control and inspection panel
1 electrical control panel
1 landing gear position selector and indicator
1 stop watch
1 triple tachometer for rotor and engines 1 and 2 free wheel r.p.m.
2 engine gas generator tachometers
1 stand-by magnetic compass
1 outside air temperature indicator
1 warning panel
1 master alarm light
2 fire warning lights and 2 dual extinguishing controls for engine bays.
Spare space for radar screen and radio com/nav equipment

CABIN

1 cabin floor capable of the various seating arrangements up to 14 seats
2 removable pilot and copilot high back-rest bucket-type seats, adjustable in reach, each fitted with a safety belt
8 comfort (bucket) seats c/w seat belts and cushions and covers in one of 4 matched colours
2 pilot and copilot jettisonable doors each with a bad weather window
4 hinged and jettisonable passenger doors
2 rear door-extensions
4 retractable foot-steps
2 upper tinted panes

Cabin upholstery with soundproofing
Solo flying controls with dual-control capability Engine controls
Rotor brake control
1 heating/demisting/ventilation system, with air-conditioning capability
1 windshield wiper on pilot's side
6 ash-trays
1 fire-extinguisher
1 first-aid kit recess
1 flight manual
1 data case.

TRANSMISSION SYSTEM

1 main gearbox, anti-vibration mounted, with oil sight gauge, magnetic plug, oil pressure and temperature pick-up, thermal-switch, rotor tachometer drive, and hole for passing of endoscope and sampling of oil	1 main gearbox oil cooling system
1 tail gearbox with oil sight gauge and oil temperature pick-up	2 engine/main gearbox coupling shafts
	1 rotor brake
	2 free wheel integral with main gearbox.

ROTOR AND FLYING CONTROLS

1 main rotor with 4 glass- and carbon-fibre blades with Starflex head fitted with droop stops, mast fitted with rotor r.p.m. phonic-wheel and provisions for blade folding	1 flying control system, fitted with 3 dual-chamber/dual-body main servo-units (on cyclic and collective pitch channels) and 1 single-chamber/single-body rear servo-unit (on tail rotor pitch control channel), capable of accommodating the autopilot
1 tail rotor with 13 metal blades built into the fin	

ELECTRICAL INSTALLATION

2 250 VA, 115/26 V, 400 Hz 1-phase static inverters	2 cabin dome-lights
2 4.8 kW starter-generators	1 hold dome-light
1 15 amp./hr cadmium-nickel battery with temperature detector	3 position lights
1 external D.C. power receptacle	1 landing light, adjustable in elevation
1 instrument white/blue lighting system	1 anti-collision light.
1 cabin extension light	1 28 V D.C. cabin power outlet

HYDRAULIC GENERATIONS

2 independent hydraulic systems feeding the servo-units and the landing gear actuation system	1 stand-by hydraulic system with electro-pump for actuating the landing gear and providing hydraulic assistance on the ground with rotor stopped.
Self-sealing hydraulic ground coupling	

AIRBORNE KIT *

2 pitot head covers	5 mooring rings
2 static vent blanks	Main blade tie-down
2 engine air-intake blanks	1 airborne kit stowing bag
2 engine tail pipe blanks	

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

OPTIONAL EQUIPMENT

GENERAL ITEMS OF EQUIPMENT

Extras on the standard aircraft for CAA certification

Retractable second landing light, adjustable in elevation and azimuth

Instrument lighting for storm condition flight

Supplement for harnesses instead of the seat-belts on the front seats

Icing detector (ROSEMOUNT)

Fuel anti-icing system

Regulated heating with extreme cold weather capacity

Freon type, air conditioning system

Tinted plexiglass panes (in addition to the upper ones)

36 amp./hr battery (instead of 15 amp./hr)

Hourmeter

Engine flushing device without removal of cowlings

Nose wheel casterlock

Assisted brakes at pilot and copilot stations (this item also includes the differential brakes on the copilot side)

Customized outside paint

INSTRUMENTS AND FLYING AIDS

Single-pilot IFR kit

VFR copilot kit

IFR copilot kit

Autopilot without coupler

Autopilot with flight director coupler

Remaining fuel flowmeter

INTERIOR CABIN ARRANGEMENTS

8 folding utility seats

Comfort upholstery with improved sound-proofing and carpeting (4 possible colour assortments)

VIP 5-seat layout with enhanced sound-proofing

Supplement for 11-seat comfort lay-out (1 single-place seat and one 4-place bench-seat)

12-utility folding seats

Weight supplement	
kg	lb
54.2	119.5
6.5	14.3
0.3	0.7
3.3	7.3
1.3	2.9
3.5	7.7
3.4	7.5
52.0	114.6
0.0	0.0
19.0	41.8
0.3	0.7
1.1	2.4
1.1	2.4
5.0	11.0
0.0	0.0
90.6	199.7
16.3	35.9
15.0	33.9
27.0	59.5
included in single-pilot IFR kit	
2.2	4.8
-4.0	-8.8
45.0	99.2
235.0	518.0
17.0	37.5
7.1	16.0

SPECIFIC MISSION EQUIPMENT

Orange screens for instrument-flying training
(c/w blue goggles)

Emergency floatation gear

Life-boats installation ARZ 428 type (2 life-boats)

Sand-prevention filters, dynamic type

Re-inforced sand-erosion protection strip, (1 set)

Skis

Ferrying tank
(475 litres - 125 US gal.)

Auxiliary fuel tank (in luggage hold)
(180 litres - 48 US gal.)

Fuel jettison system

Sling with dynamometer and outside mirror
(1,600 kg - 3,527 lb)

AIR EQUIPEMENT electrical hoist
(272 kg-600 lb - 90 m-295 ft cable)

BREEZE electrical hoist
(272 kg-600 lb - 74 m-245 ft cable)

Sliding left rear door

Sliding right rear door
(hoisting installation implies the
fitting of this equipment)

Drip tub (sea rescue)

Casualty-carrying installation
(4 stretchers) (without stretchers)

Stretcher

Medevac installation

LOCATOR search-light

Flare installation (without flares)

Hailers

Main rotor hub gust stops
(mandatory for strong wind operations)

GROUND HANDLING AND PICKETTING

Blade folding system (4 blades rearwards)
(requires installation of the gust stops)

Rough weather mooring kit

Gripping system

Weight supplement	
kg	lb
4.7	10.4
65.9	145.3
66.5	146.6
16.2	35.7
0.6	1.3
71.3	157.2
20.7	45.6
25.9	57.1
6.8	15.0
24.6	54.2
62.9	138.7
59.9	132.0
9.0	19.8
9.0	19.8
2.4	5.3
11.8	26.0
8.5	18.7
172.0	379.2
11.3	24.9
4.6	10.1
28.0	61.7
5.7	12.5
0.4	0.9
0.8	1.8
1.0	2.2

RADIOCOMMUNICATION AND RADIONAVIGATION EQUIPMENT

CIVIL USE - VFR CERTIFICATION (single or two pilots)

MINIMUM ITEMS OF EQUIPMENT	Solution 1	Solution 2
VHF/AM No. 1 VHF/AM No. 2 VOR/ILS A.D.F. I.C.S. (2 control boxes)	COLLINS VHF 20 A COLLINS VHF 20 A COLLINS VIR 31 H COLLINS ADF 60 TEAM TB 31	KING KTR 908 KING KTR 908 KING KNR 634 KING KDF 806 TEAM TB 31
Weight supplement	30.3 kg	24.5 kg

VFR COPILOT KIT includes (in addition to the instruments on the standard aircraft) :	<input type="checkbox"/> 1 dual controls <input type="checkbox"/> 1 windshield wiper <input type="checkbox"/> 1 extension light <input type="checkbox"/> 1 master warning light <input type="checkbox"/> 1 limit warning light <input type="checkbox"/> 1 altimeter <input type="checkbox"/> 1 rate-of-climb indicator	<input type="checkbox"/> 1 airspeed indicator <input type="checkbox"/> 1 rotor tachometer <input type="checkbox"/> 1 stop-watch <input type="checkbox"/> 1 gyro horizon SFENA H 140 <input type="checkbox"/> 1 RMI coupled to standard gyro compass
Weight supplement	16.3 kg	

ADDITIONAL EQUIPMENT DEPENDING ON THE OPERATIONAL NEEDS OR THE REQUIREMENTS OF THE AUTHORITIES IN CERTAIN COUNTRIES	Solution 1	kg	Solution 2	kg
3-AXIS AUTOPILOT	SFIM PA 155 D	27.0	SFIM PA 155 D	27.0
I.C.S. 3rd control box Same functions as for pilot & copilot boxes or Passenger interphone (8 connectors) Conference mode + reception only	3rd control box for TEAM TB 31	1.5	3rd control box for TEAM TB 31	1.5
HF/SSB	TEAM BA 1920	1.1	TEAM BA 1920	1.1
EMERGENCY LOCATOR TRANSMITTER	COLLINS HF 230	17.7	KING KHF 950	15.8
	JOLLIET JE 2	1.5	JOLLIET JE 2	1.5
	or LEIGH CP 113	6.9	or LEIGH CP 113	6.9

HEADSETS	SILEC 4449-1 or ELNO 247 SP 395	0.4 0.6	SILEC 4449-1 or ELNO 247 SP 395	0.4 0.6
or	or		or	
HELMETS	GUENEAU- SILEC 459	1.2	GUENEAU- SILEC 459	1.2

CIVIL USE - IFR CERTIFICATION (single or two pilots)

MINIMUM ITEMS OF EQUIPMENT	Solution 3	Solution 4	Solution 5
SINGLE PILOT IFR KIT*			
3-AXIS AUTOPILOT WITH NAVIGATION COUPLER	SFIM PA 155 D + SFIM CDV 85 D3	SFIM PA 155 D + SFIM CDV 85 D3	SFIM PA 155 D + SFIM CDV 85 D3
VHF/AM No. 1	COLLINS VHF 20 A	KING KTR 908	EAS TR 800 R
VHF/AM No. 2	COLLINS VHF 20 A	KING KTR 908	EAS TR 800 R
VOR/ILS	COLLINS VIR 31 H	KING KNR 634	EAS NR 810 R
A.D.F.	COLLINS ADF 60	KING KDF 806	EAS AD 851 CR
TRANSPONDER	COLLINS TDR 90	KING KXP 756	EAS AT 880
ENCODING ALTIMETER	BADIN-CROUZET 39600	BADIN-CROUZET 39600	BADIN-CROUZET 39600
RADIO ALTIMETER (with 1 indicator)	TRT AHV 8	TRT AHV 8	TRT AHV 8
I.C.S. (2 control boxes)	TEAM TB 31	TEAM TB 31	TEAM TB 31
Weight supplement	90.6 kg	86.2 kg	91.0 kg

* SINGLE PILOT IFR KIT	TWO-PILOT IFR COPILOT KIT
<p>Single pilot IFR kit includes (in addition to the instruments on the standard aircraft) :</p> <ul style="list-style-type: none"> <input type="checkbox"/> 2nd gyro-compass SFIM CG 130 <input type="checkbox"/> 1 gyro horizon SFENA H 140-CAM <input type="checkbox"/> 1 stand-by horizon SFENA H 140-AUM <input type="checkbox"/> 1 horizontal situation indicator EAS HSI 651 <input type="checkbox"/> 1 digital airspeed indicator in replacement of the standard one <input type="checkbox"/> 1 BADIN-CROUZET pre-set rate of climb or descent indicator in replacement of the standard one <input type="checkbox"/> 1 RMI EAS IVA 557 with two needles and twin switching in place of the standard one 	<p>Two-pilot IFR copilot kit includes (in addition to the instruments on the standard aircraft and those of the IFR single pilot instrument kit) :</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1 dual controls <input type="checkbox"/> 1 windshield wiper <input type="checkbox"/> 1 extension light <input type="checkbox"/> 1 master warning light <input type="checkbox"/> 1 limit warning light <input type="checkbox"/> 1 flight director announcer panel <input type="checkbox"/> 1 altimeter <input type="checkbox"/> 1 rate-of-climb indicator <input type="checkbox"/> 1 digital airspeed indicator <input type="checkbox"/> 1 rotor tachometer <input type="checkbox"/> 1 stop-watch <input type="checkbox"/> 1 pictorial navigation system EAS HSI 651
Weight supplement : included in minimum items of equipment	Weight supplement : 15.0 kg

CIVIL USE - IFR CERTIFICATION (single or two pilots) (continued)

ADDITIONAL EQUIPMENT DEPENDING ON THE OPERATIONAL NEEDS OR THE REQUIREMENTS OF THE AUTHORITIES IN CERTAIN COUNTRIES	Solution 3	kg	Solution 4	kg	Solution 5	kg
VHF/AM HOMING ¹	CHELTON SYSTEM 7	2.7	CHELTON SYSTEM 7	2.7	CHELTON SYSTEM 7	2.7
2nd VOR/ILS	COLLINS VIR 31 H	7.4	KING KNR 634	6.3	EAS NR 810 H	7.1
2nd A.D.F.	COLLINS ADF 60	6.4	KING KDF 806	5.8	EAS AD 851 CR	7.4
I.C.S. 3rd control box Same functions as for pilot & copilot boxes or Passenger interphone (8 connectors) Conference mode + reception only	3rd control box for TEAM TB 31	1.5	3rd control box for TEAM TB 31	1.5	3rd control box for TEAM TB 31	1.5
	TEAM BA 1920	1.1	TEAM BA 1920	1.1	TEAM BA 1920	1.1
D.M.E. with 1 indicator	COLLINS DME 40	5.5	KING KDM 706	4.4	EAS DM 870 R	4.1
2nd indicator D.M.E.	COLLINS DME 40	0.7	KING KDM 706	0.6	EAS DM 870 R	0.7
HF/SSB	COLLINS HF 230	17.7	KING KHF 950	14.5	COLLINS HF 230	17.7
EMERGENCY LOCATOR TRANSMITTER	JOLLIET JE 2 or LEIGH CP 113	1.5 6.9	JOLLIET JE 2 or LEIGH CP 113	1.5 6.9	JOLLIET JE 2 or LEIGH CP 113	1.5 6.9
2nd indicator for RADIO ALTIMETER	TRT AHV 8	2.0	TRT AHV 8	2.0	TRT AHV 8	2.0
WEATHER RADAR	BENDIX RDR 1400 C color vision or SPERRY PRIMUS 500	23.0 24.4	BENDIX RDR 1400 C color vision or SPERRY PRIMUS 500	23.0 24.4	BENDIX RDR 1400 C color vision or SPERRY PRIMUS 500	23.0 24.4
VLF/NAV. SYSTEM	COLLINS LRN 85 T	23.2	COLLINS LRN 85 T	23.2	COLLINS LRN 85 T	23.2
-----or-----	-----or-----	-----or-----	-----or-----	-----or-----	-----or-----	-----or-----
OMEGA NAV. SYSTEM	CROUZET ONS 200	14.0	CROUZET ONS 200	14.0	CROUZET ONS 200	14.0
VOICE RECORDER ²	FAIRCHILD A 100 31	13.9	FAIRCHILD A 100 31	13.9	FAIRCHILD A 100 31	13.9
FLIGHT RECORDER	SFIM A 213	10.1	SFIM A 213	10.1	SFIM A 213	10.1

HEADSETS	SILEC 4449-1 or ELNO 247 SP 395	0.4 0.6	SILEC 4449-1 or ELNO 247 SP 395	0.4 0.6	SILEC 4449-1 or ELNO 247 SP 395	0.4 0.6
-----or-----	-----or-----	-----or-----	-----or-----	-----or-----	-----or-----	-----or-----
HELMETS	GUENEAU- SILEC 459	1.2	GUENEAU- SILEC 459	1.2	GUENEAU- SILEC 459	1.2

¹ This equipment entails operational restrictions in high-activity VHF surroundings
Compatibility of this homer has been checked out only with the JOLLIET JE 2 beacon

² Includes an under water beacon

FUELS WHICH MAY BE USED

Designation	French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols
KEROSENE	AIR 3405 TR.0	DERD 2453	MIL T 83 133 JP 8	F.34
		DERD 2494	ASTM D 1655 Jet A 1	F.35
	-	-	ASTM D 1655 Jet A	-

ENGINE LUBRICANTS

French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols	Remarks
AIR 3513	-	MIL L 7808	0.148	Synthetic oil
AIR 3514	-	-	0.150	
-	-	MIL L 23699	0.156	

Note : Use suffixes and amendments in force.

MECHANICAL COMPONENT OILS

French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols	Remarks
AIR 3525	DTD 581	MIL L 6086	0.155	Mineral oil
-	-	MIL L 23699	0.156	Synthetic oil

Note : Use suffixes and amendments in force.

MAIN PERFORMANCE

The following performance figures are values obtained with new engines. Unless otherwise stated, they apply for a clean aircraft, equipped with autopilot, heating off, in zero wind at sea level, under standard atmosphere conditions.

PERFORMANCE ON 2 ENGINES

Take-off weight	kg lb	3,200 7,055	3,400 7,495	3,600 7,935	3,800 8,378	4,000 8,818
VNE	km/hr mph kts	315 196 170	315 196 170	306 190 165	306 190 165	297 185 160
Fast cruise speed	km/hr mph kts	305 190 165	302 188 163	299 186 161	296 184 160	292 181 158
Recommended cruise speed	km/hr mph kts	260 161 140	260 161 140	260 161 140	260 161 140	260 161 140
Fuel consumption at recommended cruise speed	kg/km lb/st.m lb/n.m	0.93 3.30 3.80	0.95 3.37 3.88	0.97 3.44 3.96	0.99 3.51 4.04	1.01 3.58 4.12
Rate-of-climb in oblique flight	m/sec. ft/min.	11.2 2,204	10.1 1,988	9.2 1,811	8.4 1,653	7.5 1,476
Maximum range without fuel reserve at recommended cruise speed						
with standard tanks	km st.m n.m	1,006 625 543	989 615 534	973 605 525	956 594 516	937 582 506
with auxiliary tank	km st.m n.m	1,168 726 631	1,154 717 623	1,134 704 612	1,116 694 603	1,094 680 591
Maximum endurance without fuel reserve, at 140 km/hr (87 mph or 75 kts)						
with standard tanks	hr	4.8	4.7	4.6	4.5	4.4
with auxiliary tank	hr	5.6	5.5	5.4	5.3	5.2
Hover ceiling IGE at take-off power						
ISA	m ft	2,950 9,676	2,300 7,544	1,750 5,740	1,200 3,940	600 1,970
ISA + 20°C	m ft	2,150 7,050	1,550 5,085	1,000 3,280	450 1,440	3,950 kg Zp=0
Hover ceiling OGE at take-off power						
ISA	m ft	2,950 9,680	2,300 7,544	1,750 5,740	1,200 3,940	600 1,970
ISA + 20°C	m ft	2,000 6,560	1,350 4,430	650 2,135	3,800 kg Zp=0	3,800 kg Zp=0
Service ceiling (1 m/sec., 200 ft/min.)	m ft	>6,100 >20,000	>5,900 >19,355	>5,300 >17,385	4,750 15,580	4,150 13,615

PERFORMANCE ON 1 ENGINE

Take-off weight	kg lb	3,200 7,055	3,400 7,495	3,600 7,935	3,800 8,378	4,000 8,818
Rate-of-climb at intermediate emergency rating	m/sec. ft/min.	4.5 886	3.8 748	3.2 630	2.7 526	2.1 413
Service ceiling at intermediate emergency rating (0.5 m/sec. - 100 ft/min.)	m ft	3,800 12,468	2,900 9,515	2,500 8,203	2,000 6,562	1,500 4,921

Take-off at 4,000 kg (8,818 lb) M.A.U.W., sea level, up to :
 ISA + 18.5°C in category A, clear heliport
 ISA + 17°C in group A, clear heliport

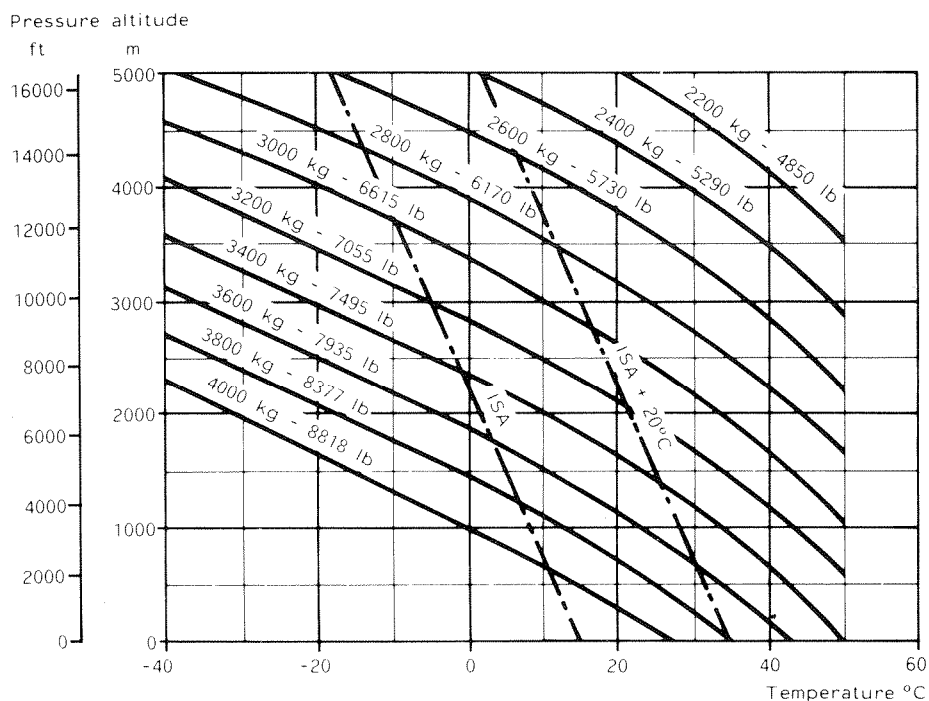
OPERATING LIMITATIONS

The aircraft is cleared to operate within the following altitude and temperature limitations :

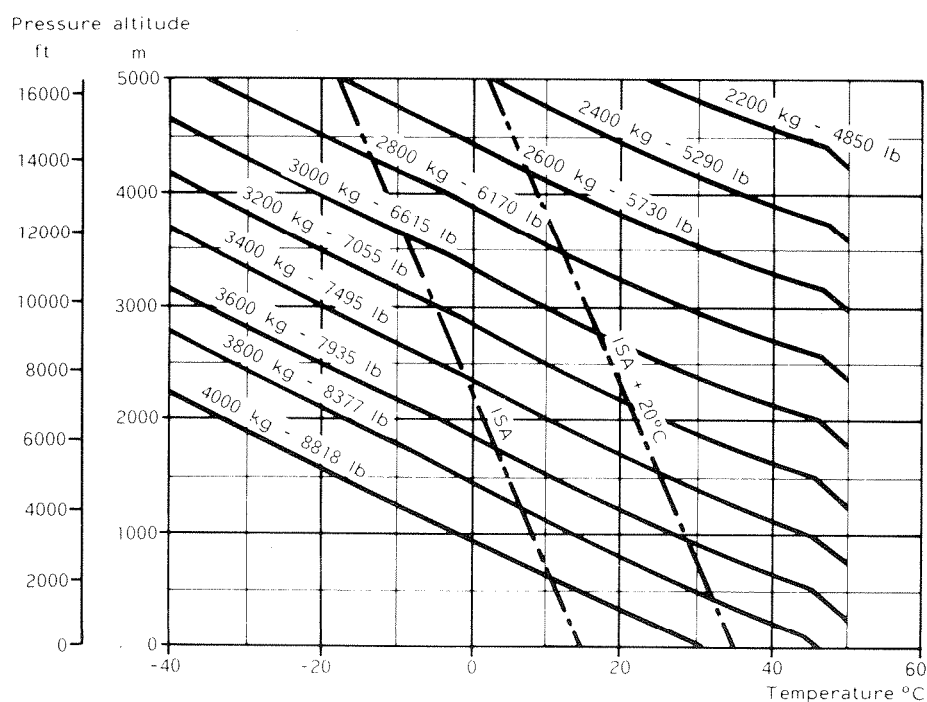
maximum pressure altitude	6,100 m - 20,000 ft
maximum temperature	ISA + 35°C
minimum temperature	- 40°C
landing and take-off limited to	15,000 ft density-altitude

The performance figures given in this chapter are those of the standard aircraft, in clean configuration. They should, when necessary, be modified to take into account the effect of the items of optional equipment.

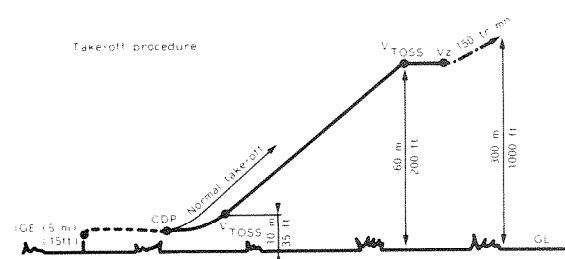
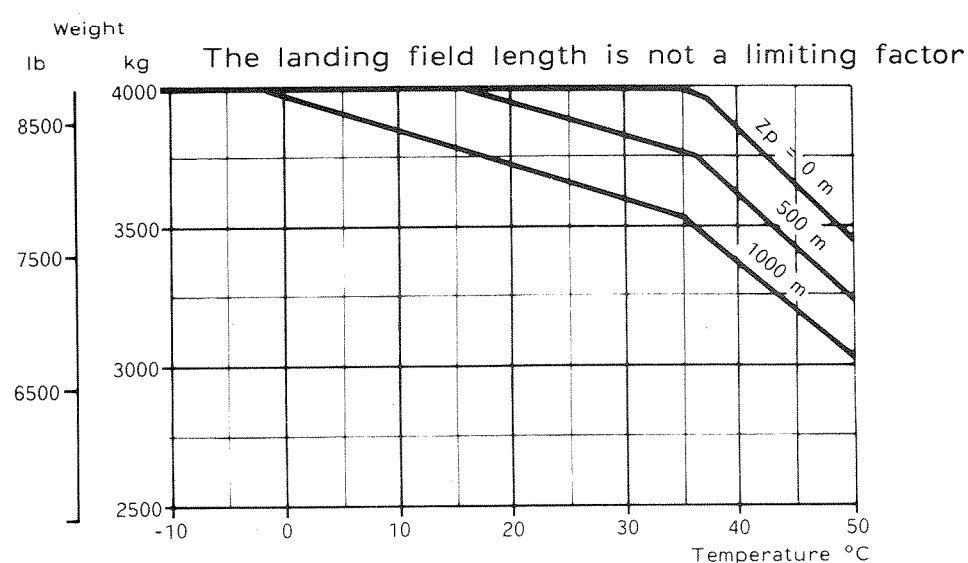
TAKE-OFF WEIGHT IN HOVER O.G.E. ON 2 ENGINES AT TAKE-OFF POWER



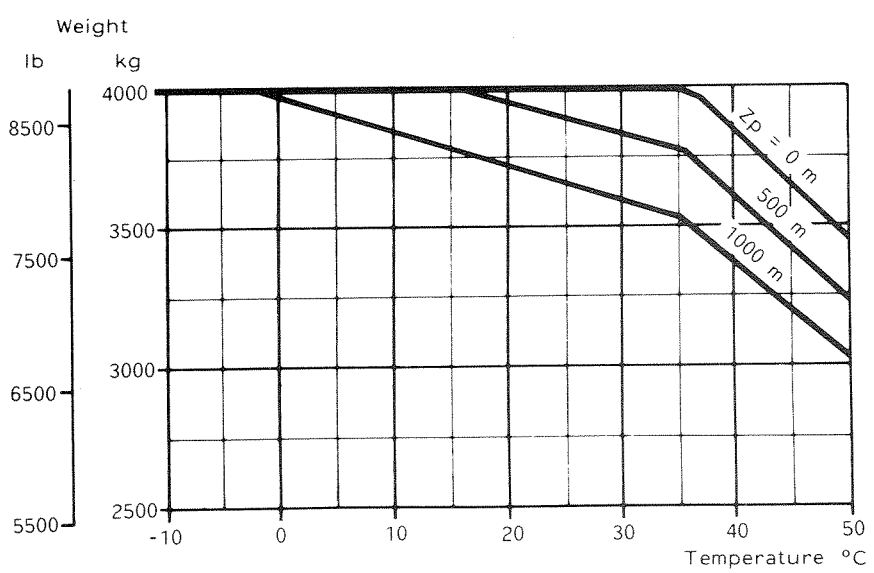
TAKE-OFF WEIGHT IN HOVER I.G.E. ON 2 ENGINES AT TAKE-OFF POWER



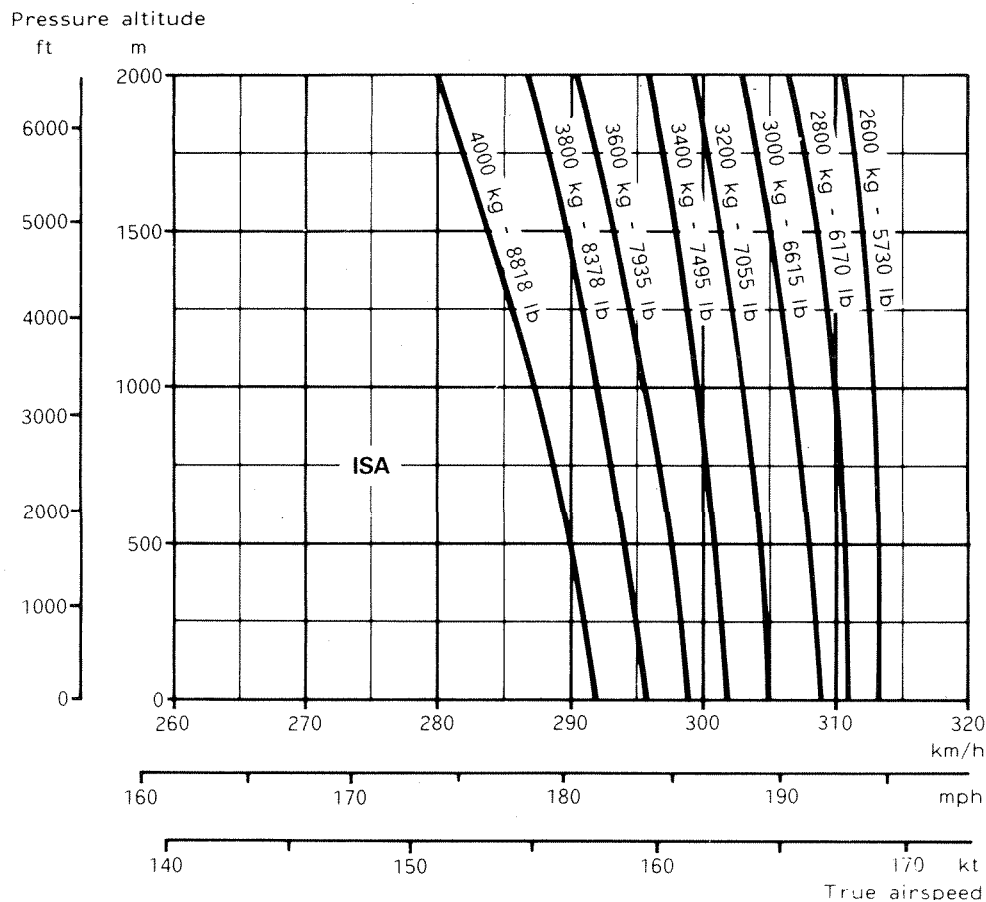
**MAXIMUM PERMISSIBLE GROSS WEIGHT ON TAKE-OFF
FROM A CLEAR HELIPORT
Category A (DGAC - FAA) VTOSS = 75 kts**



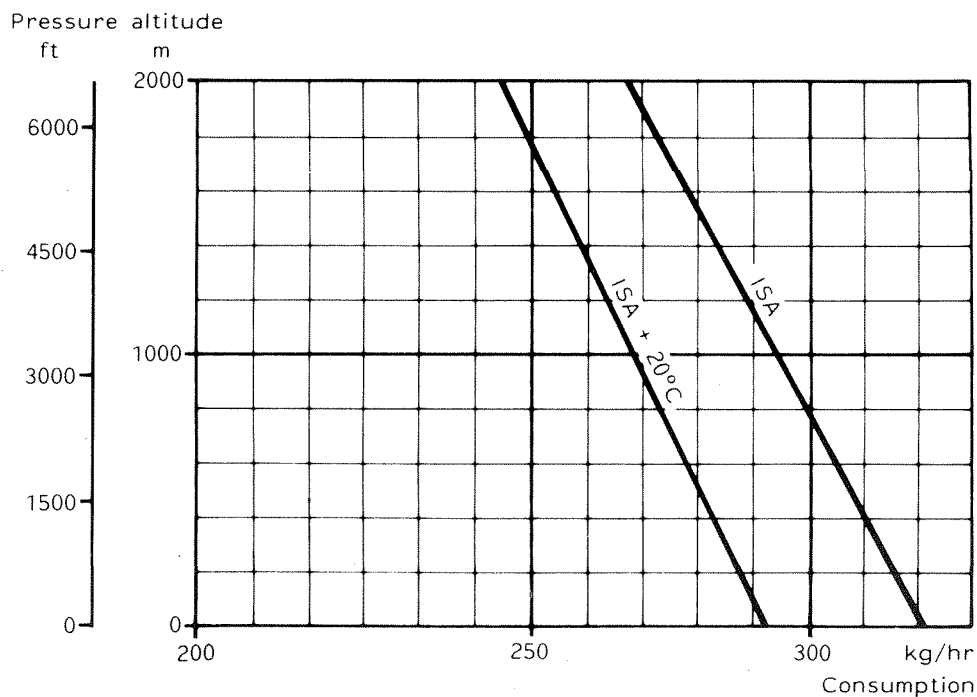
**MAXIMUM PERMISSIBLE GROSS WEIGHT ON TAKE-OFF
FROM A CLEAR HELIPORT
GROUP A (CAA) - VTOSS = 75 kts**



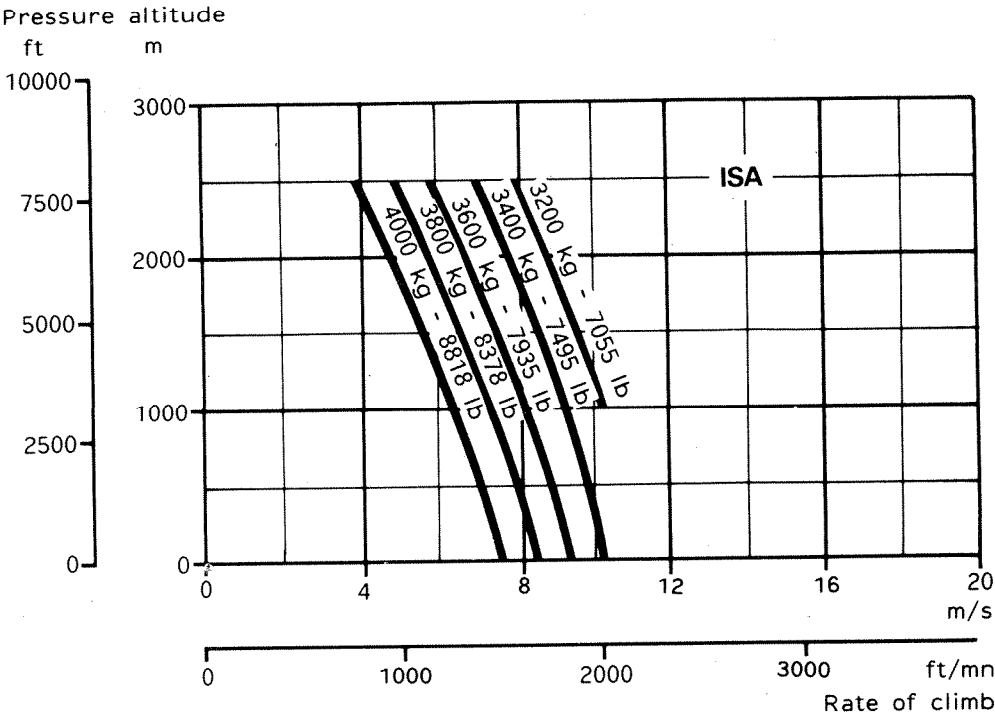
FAST CRUISE SPEED ON 2 ENGINES AT MAXIMUM CONTINUOUS POWER



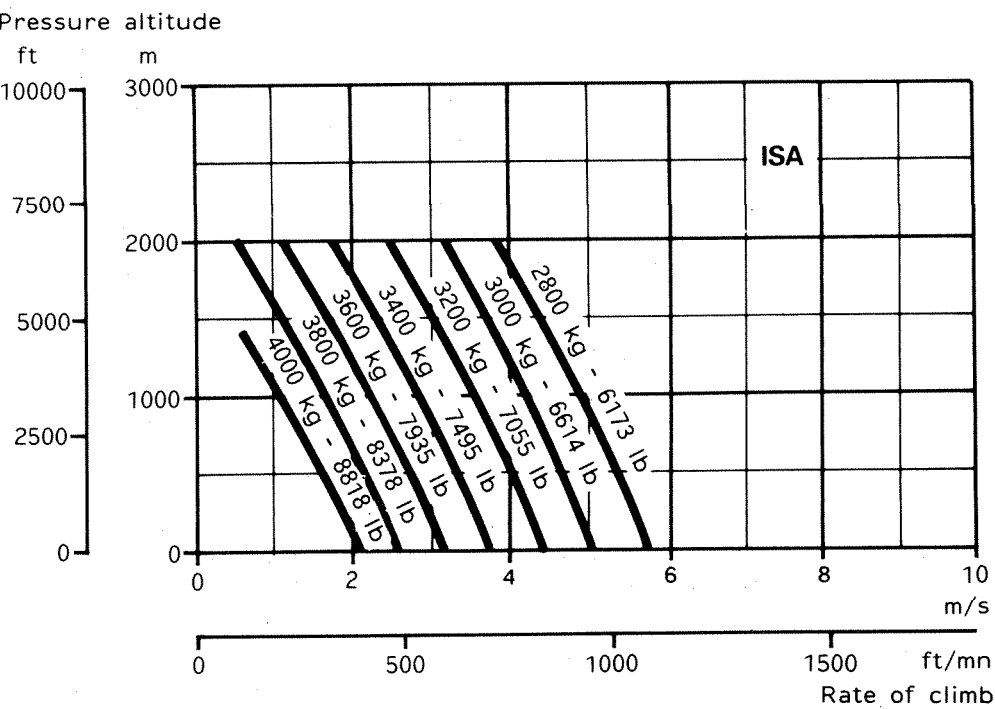
HOURLY FUEL CONSUMPTION AT FAST CRUISE SPEED (for all weights)



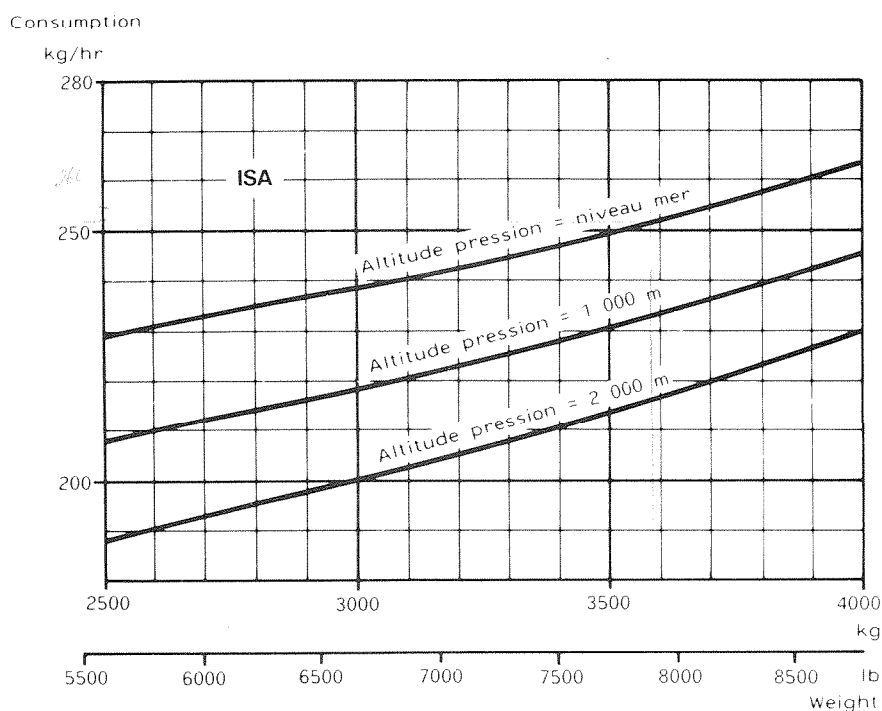
**RATE-OF-CLIMB IN OBLIQUE FLIGHT ON 2 ENGINES
AT MAXIMUM CONTINUOUS POWER (T.A.S. = 75 kts)**



**RATE-OF-CLIMB IN OBLIQUE FLIGHT ON 1 ENGINE
AT INTERMEDIATE EMERGENCY POWER (T.A.S. = 75 kts)**



HOURLY FUEL CONSUMPTION IN LEVEL FLIGHT AT RECOMMENDED CRUISE SPEED OF 260 kph



PAYLOAD VERSUS RANGE

