

technical data



dauphin 2 sar 365 n1

365 N1 08.101.02 A



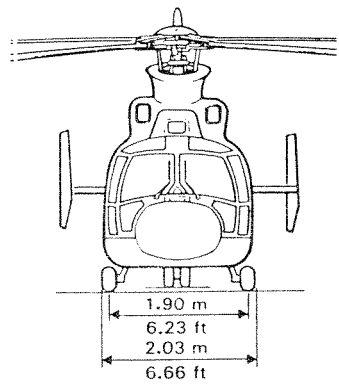
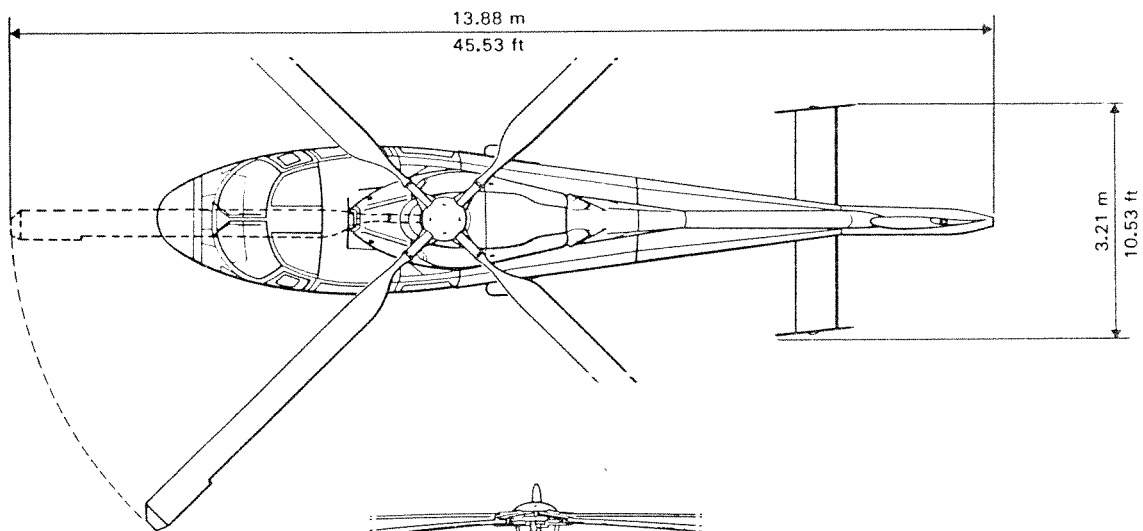
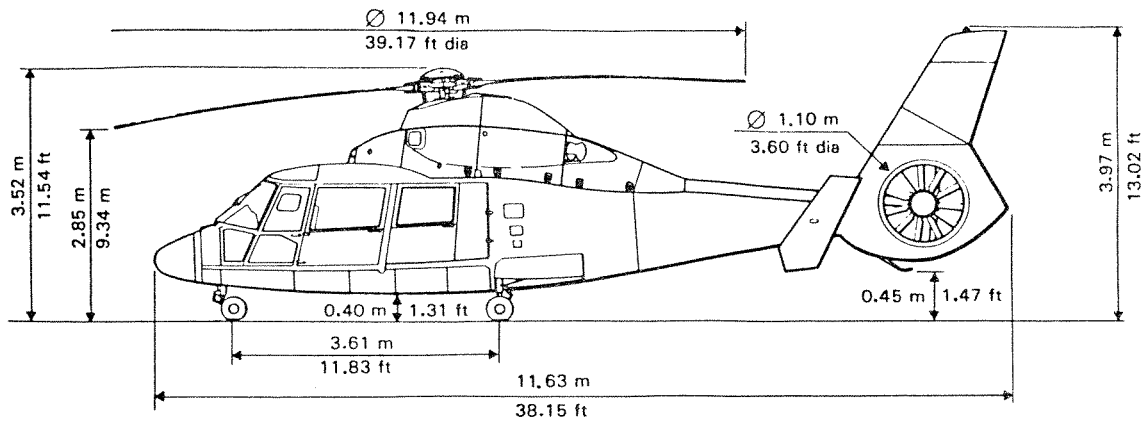
aerospatiale

DIVISIONE HELICOPTERI - S.p.A. - Viale MARCELLINO, 1 - 20139 MILANO - ITALIA

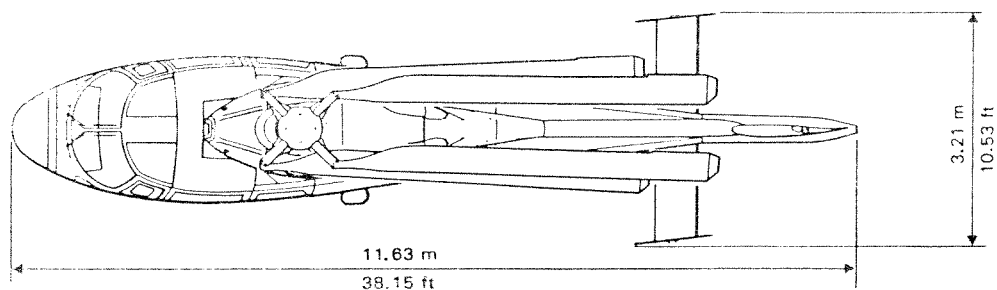
Aerospatiale reserves the right to make configuration and data changes at any time without notice.

The facts and figures contained in this document and expressed in good faith do not constitute any offer or contract with Aerospatiale.

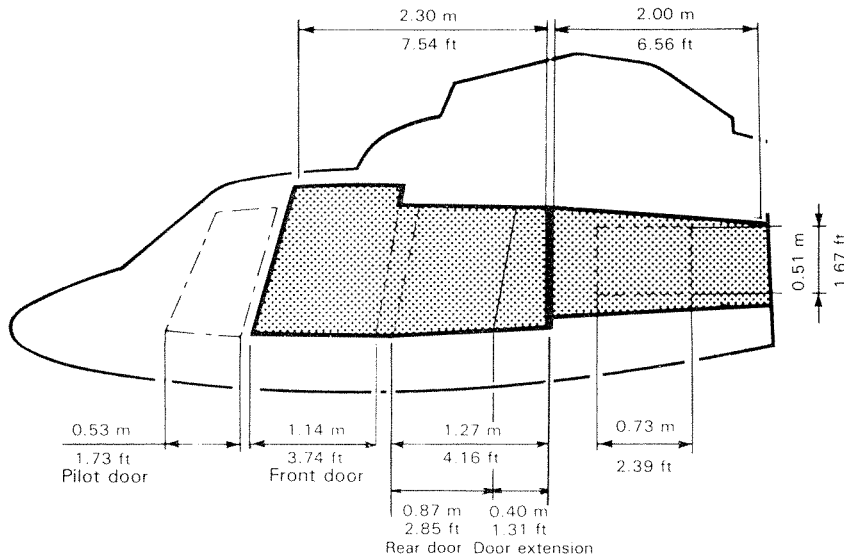
MAIN DIMENSIONS



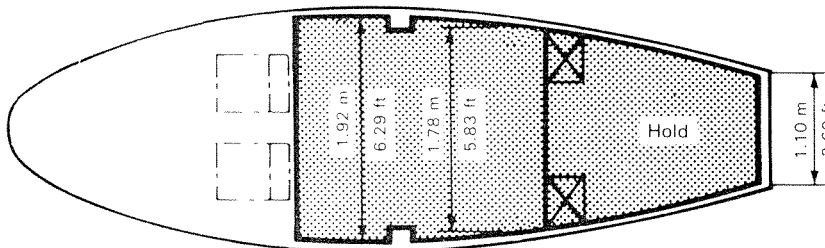
DIMENSIONS WITH BLADES FOLDED



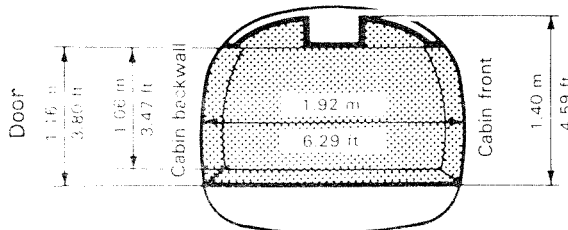
DIMENSIONS OF COMPARTMENTS AND ACCESSES



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



HOLD	
Area	1.20 m ² 12.91 sq. ft
Volume	0.60 m ³ 21.18 cu.ft



GENERAL CHARACTERISTICS

LAY-OUT

- 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 non usable fuel)
- Useful load
- Maximum all-up weight
- Maximum load on cargo sling
- Maximum all-up weight in external load configuration

	kg	lb
Empty weight, standard aircraft (including engine oil and non usable fuel)	2,251	4,963
Useful load	1,849	4,077
Maximum all-up weight	4,100	9,040
Maximum load on cargo sling	1,600	3,527
Maximum all-up weight in external load configuration	4,100	9,040

POWER PLANT

2 TURBOMECA ARRIEL 1C1 free turbine engines.

Power per engine in standard atmosphere, at sea level :

- Maximum emergency power
- Intermediate emergency power
- Take-off power
- Maximum continuous power

	kW	ch	shp
Maximum emergency power	540	734	724
Intermediate emergency power	526	715	705
Take-off power	526	715	705
Maximum continuous power	437	594	586

SA 365 N1 DAUPHIN

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 vertical main fin

Retractable tricycle landing gear with axially-lockable castering nose wheel unit and assisted differential brakes on pilot's and copilot's side

Built-in foot-steps (2 on each side) for access to transmission deck

Fixed parts for blade-folding system

Provisions for hoist fitting

Cargo-sling attachment points

Jacking, hoisting, mooring and gripping points

Provisions for emergency floatation gear

Interior paint : cream

Exterior paint : as per standard colour chart (scheme and colours, gloss or matt polyurethane finish)

POWER PLANT

2 TURBOMECA ARRIEL 1C1 turbine engines each developing 540 kW (734 ch - 724 shp) maximum emergency 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

1 fuel system including 5 tanks split into 2 groups, with a total usable capacity of 1135 litres (300 US gal),

4 immersed booster pumps, 1 transfer pump and an indication of low levels

1 hydraulic bleed 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

Engine flushing device (without removing cowlings)

INSTRUMENTS

2 airspeed indicators with digital speed display

2 altimeters

2 rate-of-climb indicators with provisions for rate-of-climb pre-set on pilot's side

2 SFENA H 140 gyro-horizons with provisions for flight director

2 SFIM CG 130 gyro-compasses

2 ASTRONAUTICS 4" horizontal situation indicators

1 Selector switch for gyro compass 1 or 2

1 RMI on pilot's side

1 SFENA H140 stand-by gyro-horizon

2 heated pitot heads

1 dual torque meter on pilot's side

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

2 stop watches

1 triple tachometer for rotor and engines 1 and 2 free turbine r.p.m., on pilot's side

1 rotor tachometer, on copilot's side

2 engine gas-generator tachometers

1 stand-by magnetic compass

1 outside air temperature indicator

1 warning panel

2 master alarm lights

2 manoeuvre limit warning lights

2 power loss warning lights

2 fire warning lights and 2 dual fire extinguishing controls for engine bays

1 "L/G not extended" warning lights

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 seats, adjustable in reach, each fitted with a harness and a safety belt

8 comfort seats c/w seat belts and cushions and covers in one of 4 matched colours, as per customer's choice

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

Dual flight controls

Engine controls

Rotor brake control

1 heating/demisting/ventilation system

2 windshield wipers

6 ash-trays

1 fire-extinguisher

1 first-aid kit recess

1 flight manual

TRANSMISSION SYSTEM

1 main gearbox, anti-vibration mounted, with oil sight gauge, magnetic plug, oil pressure and temperature pick-up, lubrication system, thermal-switch, rotor tachometer drive, holes for endoscope and oil sampling and alternator drive take-off (optional) 1 tail gearbox with oil sight gauge and magnetic plug	1 main gearbox oil cooling system 2 engine/main gearbox coupling shafts 1 rotor brake 2 free wheels integral with main gearbox
---	---

ROTORS AND FLIGHT CONTROLS

1 main rotor with 4 glass- and carbon-fibre blades with Starflex head fitted with gust and droop stops, mast fitted with rotor r.p.m. phonic-wheel 1 tail rotor with 11 composite material blades built into the vertical fin	1 flying control system, fitted with 3 dual-chamber/dual-body main servo-units (on cyclic and collective pitch channels) and 1 dual-chamber/dual-body rear servo-unit (on tail rotor pitch control channel) 1 SFIM PA 155 D Duplex-type auto-pilot with provisions for a navigation coupler
--	--

ELECTRICAL INSTALLATION

2 250 VA, 115/26 V, 400 Hz 1-phase static inverters 2 4.8 kW starter-generators 1 43 amp./hr cadmium-nickel battery with temperature detector 1 external D.C. power receptacle 1 instrument white/blue lighting system 2 cabin extension lights 1 cabin dome-light	4 light ramps 1 hold dome-light 3 position lights 1 landing light, adjustable in elevation 1 anti-collision light 1 28V D.C. cabin power outlet 1 emergency battery for automatic lighting of the dome-lights and signs
--	---

HYDRAULIC GENERATORS

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

AIRBORNE KIT*

2 pitot head covers 2 static vent blanks 2 engine air-intake blanks 2 engine tail pipe blanks 5 mooring rings 2 rough weather tie-down rings	2 gripping rings Main blade tie-down kit 1 set of jacking pads 1 airborne kit stowing bag 1 data case
---	---

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

OPTIONAL EQUIPMENT

GENERAL ITEMS OF EQUIPMENT

- CAA kit
- Retractable second landing light, adjustable in elevation and azimuth
- Instrument lighting for flight in stormy conditions
- Front panes in glass instead of plexiglass
- Icing detector (ROSEMOUNT)
- De-icing of panes in front of the crew (1)
- Fuel anti-icing system
- Regulated heating with extreme cold weather capacity
- Freon type, air conditioning system with electrical supply (1)
- AC generation system
- Tinted plexiglass panes
- Hourmeter
- Pilot and copilot seats adjustable in height
- Customized outside paint

INSTRUMENTS AND FLYING AIDS

- Remaining fuel flowmeter (graduation in litres or US gal.)
- SFIM CDV 85 D3 Flight Director Coupler
- Orange screens for instrument-flying training (c/w 1 pair of blue goggles)

weight supplement	
kg	lb
to be defined	
4.5	9.9
0.3	0.7
10.9	24.0
1.3	2.9
12.2	26.9
4.0	8.8
3.4	7.5
*52.3	*115.3
*17.4	*38.4
0.0	0.0
0.3	0.7
14.4	31.7
0.0	0.0
1.8	4.0
8.7	19.2
4.9	10.8

(1) Makes it necessary to fit the AC generation system

* Estimated weight

SPECIFIC MISSION EQUIPMENT

- Emergency floatation gear
- Life-raft installation ARZ 428 type (2 life-rafts)
 - with comfort upholstery
 - with standard upholstery
- Nets for life jackets
 - with standard comfort lay-out
 - with 11-seat comfort lay-out
- Sand prevention filters, dynamic type
- Re-inforced sand-erosion protection strips for main rotor blades
- Skis
- Ferrying tank (475 litres - 126 US gal.)
- Auxiliary fuel tank (180 litres - 48 US gal.)
- Rear sliding door (s) per door⁽¹⁾
- 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)
- Drip tub (sea rescue)

weight supplement	
kg	lb
55.0	121.2
57.6	127.0
61.4	135.4
1.2	2.6
1.6	3.5
14.8	32.6
0.4	0.9
71.5	157.6
5.5	12.1
26.0	57.3
3.0	6.6
6.6	14.6
25.8	56.9
69.4	153.0
67.0	147.7
-0.7	-1.5

⁽¹⁾ the right rear sliding door is required with the hoisting installation



SPECIFIC MISSION EQUIPMENT (cntd)

- Casualty-carrying installation (4 stretchers) (without stretchers)
- Stretcher
- Ambulance installation (2 ambulance type-stretchers)
 - Casualty evacuation kit
 - Medical equipment for transport of one stretcher patient under medical surveillance
 - Complement for a second stretcher patient under medical surveillance
- LOCATOR search light
- Flare installation (without flares)
- Hailers

INTERIOR CABIN LAY-OUTS

- Supplement for 11-seat comfort lay-out
- 12 folding utility seats
- Comfort upholstery with improved sound-proofing and carpeting (4 possible colour assortments)
- VIP 5-seat lay-out with enhanced sound-proofing

GROUND-HANDLING & PICKETTING

- Blade folding system

* Estimated weight

weight supplement	
kg	lb
11.6	25.6
8.5	18.7
49.0	108.0
109.0	240.3
57.0	125.7
12.5	27.6
4.6	10.1
*30.0	*66.1
11.2	24.7
10.9	24.0
49.8	109.8
172.0	379.2
0.6	1.3

FUELS

USABLE CAPACITIES

□ Standard fuel tanks (2 groups)

□ Additional fuel tanks (option)

- Auxiliary fuel tank
- Ferrying fuel tank

	litres	US gal.	kg	lb
Standard fuel tanks (2 groups)	1,135	300	895	1,973
Additional fuel tanks (option)				
• Auxiliary fuel tank	180	47	142	313
• Ferrying fuel tank	475	126	375	826

FUELS WHICH MAY BE USED

Designation	French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols
KEROSENE F.34	AIR 3405* F.34	D.ENG.RD 2453*	MIL T 83-133* JP 8	F.34
KEROSENE F.35 Jet A1	AIR 3405 F.35	D.ENG.RD 2494	ASTM D-1655 Jet A1	F.35
KEROSENE Jet A	-	-	ASTM D-1655 Jet A	-
WIDE CUT JP 4 (TR4)	AIR 3407*	D.ENG.RD 2454*	MIL T 5624* Grade JP 4	F.40
WIDE CUT AVTAG JP 4	-	D.ENG.RD 2486	-	F.45
WIDE CUT	-	-	ASTM-D-1655 Jet B	-
HIGH FLASH POINT TR5 F.43	AIR 3404 F.43	D.ENG.RD 2498 AVCAT	-	F.43
HIGH FLASH POINT TR5	AIR 3404* F.44	D.ENG.RD 2452* AVCAT	MIL T 5624* Grade JP 5	F.44

(*) Fuels including anti-icing additives

ENGINE LUBRICANTS

Normal lubricant

French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols	Remarks
-	DERD 2499	MIL L 23699	0.156	Synthetic oil

Alternative lubricants

French Specifications	U.K. Specifications	U.S. Specifications	NATO Symbols	Remarks
-	-	MIL L 7808	0.148	Synthetic oil
AIR 3514	-	-	0.150	
-	DERD 2497	-	0.160	

MECHANICAL COMPONENT OILS

Normal lubricant

French specifications	British specifications	American specifications	NATO symbols	Remarks
-	DERD 2499	MIL L 23699	0.156	Synthetic oil

Alternative lubricants

French specifications	British specifications	American specifications	NATO symbols	Remarks
-	DERD 2497	-	0.160	Synthetic oil
AIR 3514	-	-	0.150	Synthetic oil
-	-	MIL L 7808	0.148	Synthetic oil
AIR 3525	DTD 581 C	MIL L 6086	0.155	Mineral oil

Note : Use suffixes and amendments in force.

CIVIL USES - V F R CERTIFICATION (single pilot and/or two pilots)

Passenger or load transport missions

1/ MINIMUM ITEMS OF EQUIPMENT

	Solution 1	Solution 2
VHF/AM No.1	COLLINS 22 A	KING KTR 908
VHF/AM No.2	COLLINS 22 A	KING KTR 908
VOR/ILS	COLLINS VIR 32	KING KNR 634
A.D.F.	COLLINS ADF 60	KING KDF 806
I.C.S. (2 control boxes)	TEAM TB 31	TEAM TB 31
Weight supplement	28.7 kg	24.7 kg

2/ EQUIPMENT THAT CAN BE ADDED DEPENDING ON THE OPERATIONAL NEEDS OR THE REQUIREMENTS OF THE AUTHORITIES IN CERTAIN COUNTRIES

	Solution 1	kg	Solution 2	kg
I.C.S. 3rd control box	3rd control box for TEAM TB 31	1.7	3rd control box for TEAM TB 31	1.7
Passenger interphone (8 connectors)	TEAM BA 1920	1.3	TEAM BA 1920	1.3
HF/SSB	COLLINS HF 230	17.4	KING KHF 950	15.6
EMERGENCY LOCATOR TRANSMITTER	JOLLIET JE 2	1.6	JOLLIET JE 2	1.6
	LEIGH CPI 113	6.9	LEIGH CPI 113	6.9

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

CIVIL USES - I F R CERTIFICATION (single pilot or two pilots)

A/ Passenger or load transport mission

1/ MINIMUM ITEMS OF EQUIPMENT

DESIGNATION	Solution 3	Solution 4	Solution 5
FLIGHT DIRECTOR COUPLER	SFIM CDV 85 D3	SFIM CDV 85 D3	SFIM CDV 85 D3
VHF/AM No.1	COLLINS 22 A	KING KTR 908	EAS TR 800 R
VHF/AM No.2	COLLINS 22 A	KING KTR 908	EAS TR 800 R
VOR/ILS	COLLINS VIR 32	KING KNR 634	-
VOR/LOC	-	-	EAS RNA 820 H
MARKER	-	-	SOCRAT RR-152 A
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 (2 indicators)	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	47.8 kg	44.2 kg	51.0 kg

CIVIL USES - I F R CERTIFICATION (single pilot or two pilots)

A/ Passenger or load transport mission

 2/ EQUIPMENT THAT CAN BE ADDED DEPENDING ON THE OPERATIONAL NEEDS
 OR THE REQUIREMENT OF THE AUTHORITIES IN CERTAIN COUNTRIES

DESIGNATION	Solution 3	kg	Solution 4	kg	Solution 5	kg
VHF/AM HOMER ⁽¹⁾	CHELTON SYSTEM 7	3.0	CHELTON SYSTEM 7	3.0	CHELTON SYSTEM 7	3.0
2nd VOR/ILS	COLLINS VIR 32	5.0	KING KNR 634	4.3	-	
2nd VOR/LOC	-		-		EAS RNA 820 H	6.8
2nd A.D.F.	COLLINS ADF 60	6.4	KING KDF 806	5.6	EAS AD 851 CR	7.4
I.C.S. 3rd control box	3rd control box for TEAM TB 31	1.7	3rd control box for TEAM TB 31	1.7	3rd control box for TEAM TB 31	1.7
Passenger interphone	TEAM BA 1920	1.3	TEAM BA 1920	1.3	TEAM BA 1920	1.3
D.M.E. 1 or 2 indicators	COLLINS DME 42 1 indicator 2 indicators	4.1 4.7	KING KDM 706 A 1 indicator 2 indicators	4.2 4.8	EAS DM 870 R 1 indicator 2 indicators	3.9 4.6
HF/SSB	COLLINS HF 230	17.4	KING KHF 950	15.6	COLLINS HF 230	17.4
EMERGENCY LOCATOR TRANSMITTER	JOLLIET JE 2 LEIGH CPI 113	1.6 6.9	JOLLIET JE 2 LEIGH CPI 113	1.6 6.9	JOLLIET JE 2 LEIGH CPI 113	1.6 6.9
WEATHER RADAR Color vision	BENDIX RDR 1400 C SPERRY PRIMUS 500	19.0 21.8	BENDIX RDR 1400 C SPERRY PRIMUS 500	19.0 21.8	BENDIX RDR 1400 C SPERRY PRIMUS 500	19.0 21.8
RADAR/NAV. ⁽²⁾ INTERFACE UNIT	BENDIX IU 2023 B	3.6	BENDIX IU 2023 B	3.6	BENDIX IU 2023 B	3.6
VLF/OMEGA NAV. SYSTEM	COLLINS LRN 85 T CROUZET ONS 230 AV	24.3 15.0	COLLINS LRN 85 T CROUZET ONS 230 AV	24.3 15.0	COLLINS LRN 85 T CROUZET ONS 230 AV	24.3 15.0
VOICE RECORDER ⁽³⁾	FAIRCHILD A 100 31	17.1	FAIRCHILD A 100 31	17.1	FAIRCHILD A 100 31	17.1
FLIGHT RECORDER	SFIM A 213	14.9	SFIM A 213	14.9	SFIM A 213	14.9
HEADSETS	SILEC 4449-1 ELNO 247 SP 395	0.4 0.6	SILEC 4449-1 ELNO 247 SP 395	0.4 0.6	SILEC 4449-1 ELNO 247 SP 395	0.4 0.6
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 2 beacons above

⁽²⁾ This interface unit allows communication between RDR 1400C and LRN 85 T or ONS 230 AV.

⁽³⁾ Includes an under water beacon.

B/ Search and Rescue missions (2 pilots)
1/ MINIMUM ITEMS OF EQUIPMENT

	Solution 6	Solution 7	Solution 8
VHF/AM No.1	COLLINS 22 A	KING KTR 908	EAS TR 800 R
VHF/AM No.2	COLLINS 22 A	KING KTR 908	EAS TR 800 R
VOR/ILS	COLLINS VIR 32	KING KNR 634	-
VOR/LOC	-	-	EAS RNA 820 H
MARKER	-	-	SOCRAT RR-152 A
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 No.1 (1 indicator)	TRT AHV8	TRT AHV8	TRT AHV8
RADIO ALTIMETER No.2 (1 indicator)	TRT AHV8	TRT AHV8	TRT AHV8
I.C.S. (3 control boxes)	TEAM TB 31	TEAM TB 31	TEAM TB 31
NAVIGATION & AUTOMATIC TRANS. HOVER COUPLER	SFIM CDV 155	SFIM CDV 155	SFIM CDV 155
NAVIGATION & MISSION COMPUTER UNIT *	ESD CINA B doppler radar + CROUZET NADIR MK 2-300 computer + BCP 44	ESD CINA B doppler radar + CROUZET NADIR MK 2-300 computer + BCP 44	ESD CINA B doppler radar + CROUZET NADIR MK 2-300 computer + BCP 44
A.C. GENERATION SYSTEM	2 static inverters 2 x 750 VA	2 static inverters 2 x 750 VA	2 static inverters 2 x 750 VA
VERTICAL GYROS	2 x SFIM GV 76	2 x SFIM GV 76	2 x SFIM GV 76
D.M.E. (1 indicator and interface for display on HSI)	COLLINS DME 42	KING KDM 706 A	EAS DM 870 R
WEATHER RADAR	BENDIX RDR 1400 C	BENDIX RDR 1400 C	BENDIX RDR 1400 C
INTERFACE UNIT with CRT display	SFIM interface unit with symbol generator and 6½" x 6½" display	SFIM interface unit with symbol generator and 6½" x 6½" display	SFIM interface unit with symbol generator and 6½" x 6½" display
Weight supplement	191.2 kg	187.9 kg	195.0 kg

* Including 1 hovermeter

B/ Search and Rescue missions (2 pilots)

2/ POSSIBLE COMPLEMENT TO THE NON-DIVISIBLE SAR PACKAGE

	Solution 6	kg	Solution 7	kg	Solution 8	kg
VHF/AM Homer ⁽¹⁾	CHELTON SYSTEM 7	3.0	CHELTON SYSTEM 7	3.0	CHELTON SYSTEM 7	3.0
2nd VOR/ILS	COLLINS VIR 32	5.0	KING KNR 634	4.3	-	
2nd VOR/LOC	-		-		EAS RNA 820 H	6.8
HF/SSB	COLLINS HF 230	17.4	KING KHF 950	15.6	COLLINS HF 230	17.4
EMERGENCY LOCATOR TRANSMITTER	JOLLIET JE 2	1.6	JOLLIET JE 2	1.6	JOLLIET JE 2	1.6
	LEIGH CPI 113	6.9	LEIGH CPI 113	6.9	LEIGH CPI 113	6.9
VLF/OMEGA NAV. SYSTEM	CROUZET ONS 130 AV	14.7	CROUZET ONS 130 AV	14.7	CROUZET ONS 130 AV	14.7
VOICE RECORDER ⁽²⁾	FAIRCHILD A 100 31	17.1	FAIRCHILD A 100 31	17.1	FAIRCHILD A 100 31	17.1

(1) This equipment entails operational restrictions in high-activity VHF surroundings
 Compatibility of this homer has been checked out only with emergency locator transmitter above

(2) Includes an under water beacon.



MAIN PERFORMANCE

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

Performance on 2 engines

		3,300	3,500	3,700	3,900	4,100
Take-off weight	kg lb	3,300 7,275	3,500 7,715	3,700 8,155	3,900 8,600	4,100 9,040
VNE	km/hr	315	305	305	296	296
	mph	196	190	190	184	184
	kts	170	165	165	160	160
Fast cruise speed	km/hr	295	292	290	287	283
	mph	183	181	180	178	176
	kts	159	158	156	155	153
Recommended cruise speed	km/hr	260	260	260	260	260
	mph	162	162	162	162	162
	kts	140	140	140	140	140
Fuel consumption at recommended cruise speed	kg/km	1.02	1.04	1.05	1.06	1.08
	lb/st.m	3.62	3.69	3.72	3.76	3.83
	lb/n.m	4.16	4.25	4.29	4.33	4.41
Rate-of-climb in oblique flight	m/sec.	10.7	9.5	8.5	7.5	6.5
	ft/min	2,105	1,870	1,675	1,475	1,300
Maximum range without fuel reserve at recommended cruise speed						
□ With standard tanks	km	905	895	885	870	855
	st.m	560	555	550	540	530
	n.m	490	485	480	470	460
□ With auxiliary tank	km	1,050	1,040	1,025	1,010	995
	st.m	650	645	640	630	620
	n.m	565	560	555	545	540
Maximum endurance, without fuel reserve at 140 km/hr (87 mph or 75 kts)						
□ With standard tanks	hr	4.75	4.75	4.70	4.65	4.60
□ With auxiliary tank	hr	5.50	5.50	5.45	5.40	5.35
Hover ceiling IGE at take-off power						
□ ISA	m	4,210	3,650	3,100	2,600	2,100
	ft	13,810	11,975	10,170	8,530	6,890
□ ISA + 20°C	m	3,500	2,850	2,200	1,700	1,150
	ft	11,485	9,350	7,220	5,575	3,775
Hover ceiling OGE at take-off power						
□ ISA	m	3,400	2,800	2,250	1,700	1,100
	ft	11,155	9,185	7,380	5,575	3,610
□ ISA + 20°C	m	2,600	1,950	1,300	700	100
	ft	8,530	6,400	4,265	2,295	330
Service ceiling (1 m/sec. - 200 ft/min.)	m	5,800	5,200	4,700	4,100	3,600
	ft	19,030	17,060	15,420	13,450	11,810

Performance on 1 engine

Take-off weight	kg lb	3,300 7,275	3,500 7,715	3,700 8,155	3,900 8,600	4,100 9,040
Rate-of-climb at emergency intermediate power	m/sec. ft/min	4.2 825	3.5 690	2.7 530	2.1 415	1.5 295
Service ceiling (0.5 m/sec. - 100 ft/min) at emergency intermediate power	m ft	3,450 11,320	2,850 9,350	2,300 7,545	1,750 5,740	1,250 4,100

Take-off at 4,100 kg (9,040 lb) M.A.U.W, at sea level
 up to : 28.5°C in category A, clear heliport
 26.5°C in group A, clear heliport

Operating limitations

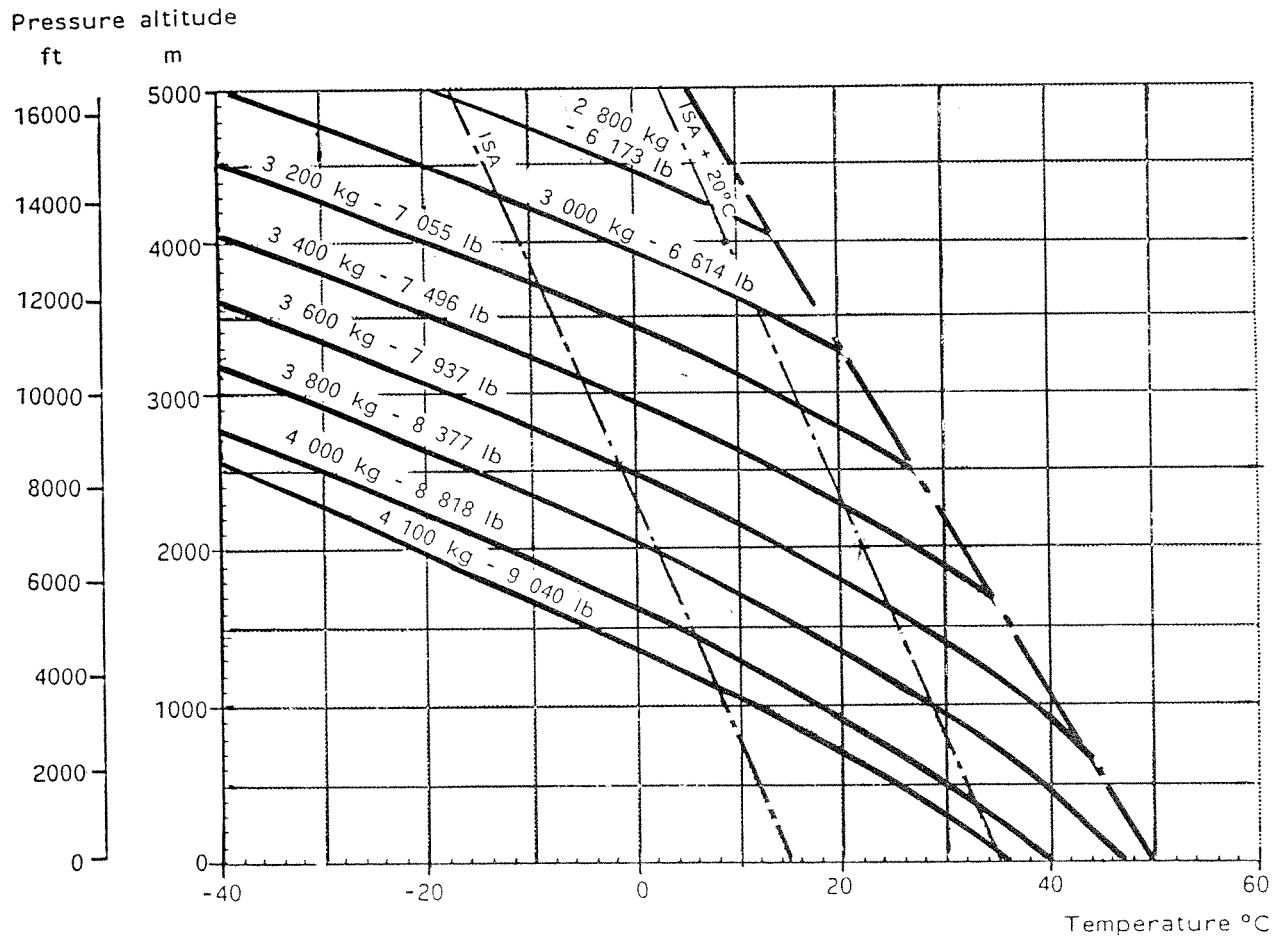
The aircraft is cleared to operate within the following altitude and temperature limitations :

- Maximum pressure altitude 6,100 m - 20,000 ft
- Maximum temperature { + 50°C at sea level
 { - 5°C at 6,100 m - 20,000 ft
- Minimum temperature - 40°C
- Landing and take-off limited to : 4,575 m - 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. This effect, where applicable, appears on the corresponding descriptive leaflet.

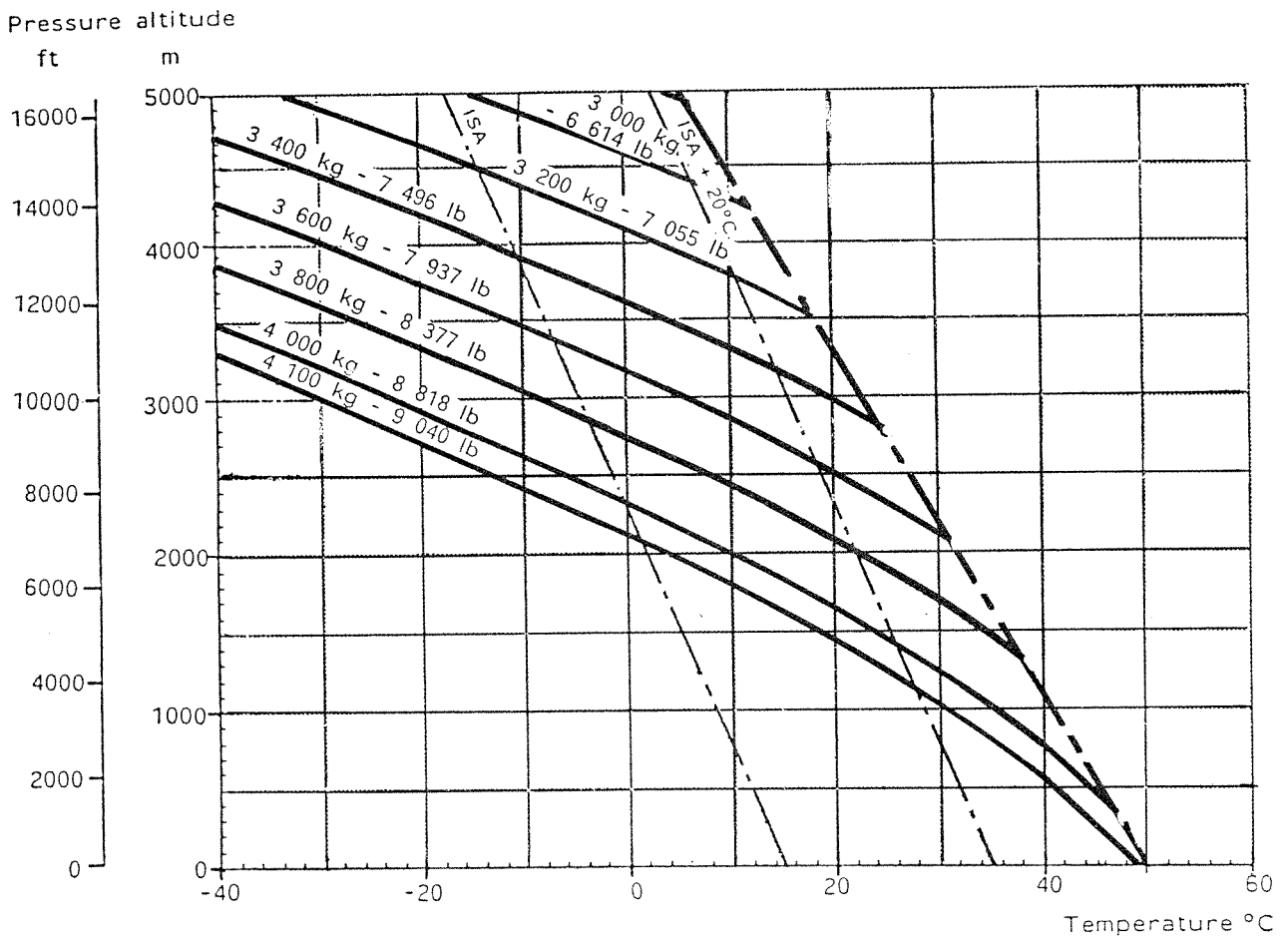
TAKE-OFF WEIGHT IN HOVER OGE

on 2 engines at take-off power



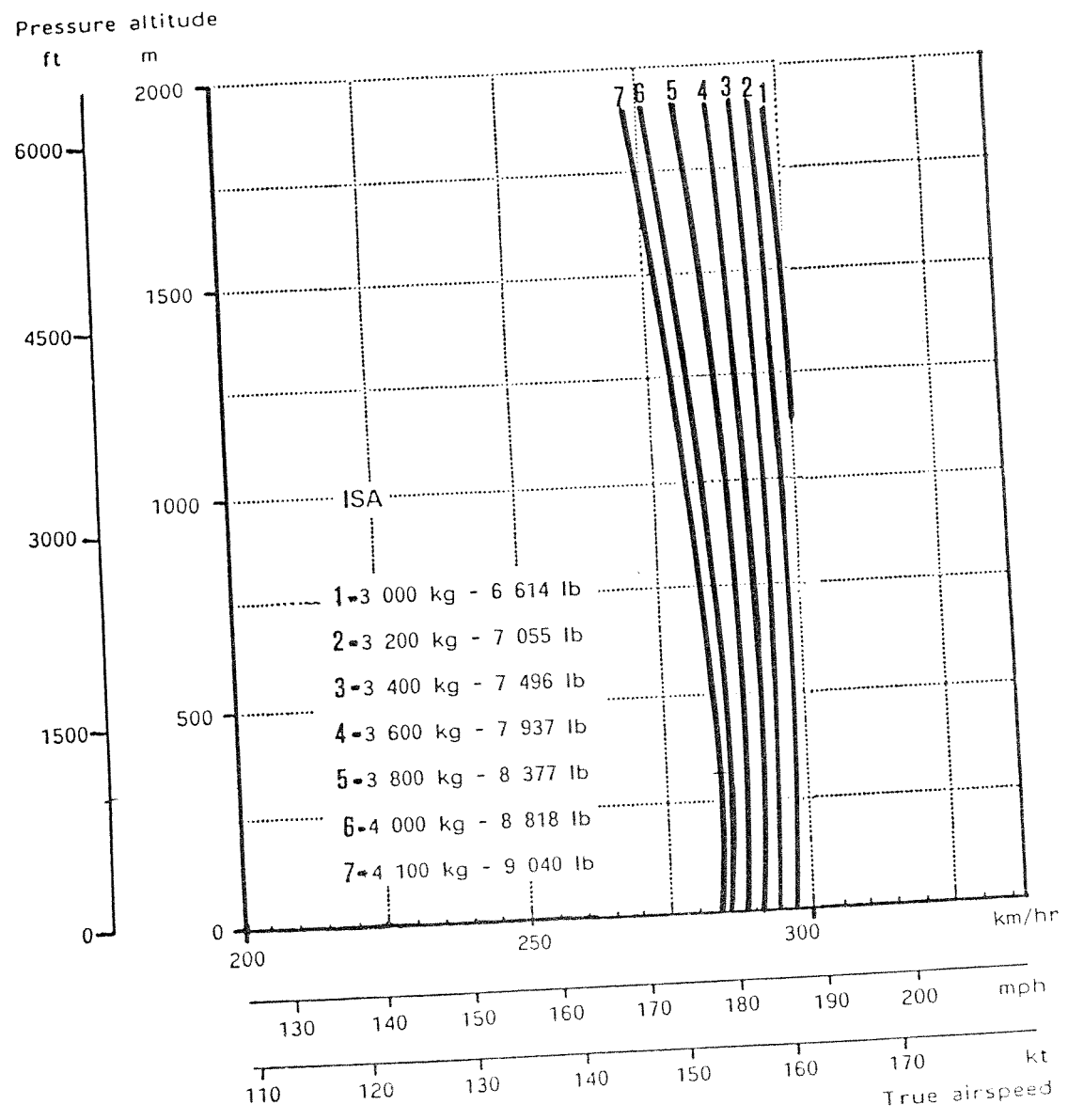
TAKE-OFF WEIGHT IN HOVER IGE

on 2 engines at take-off power



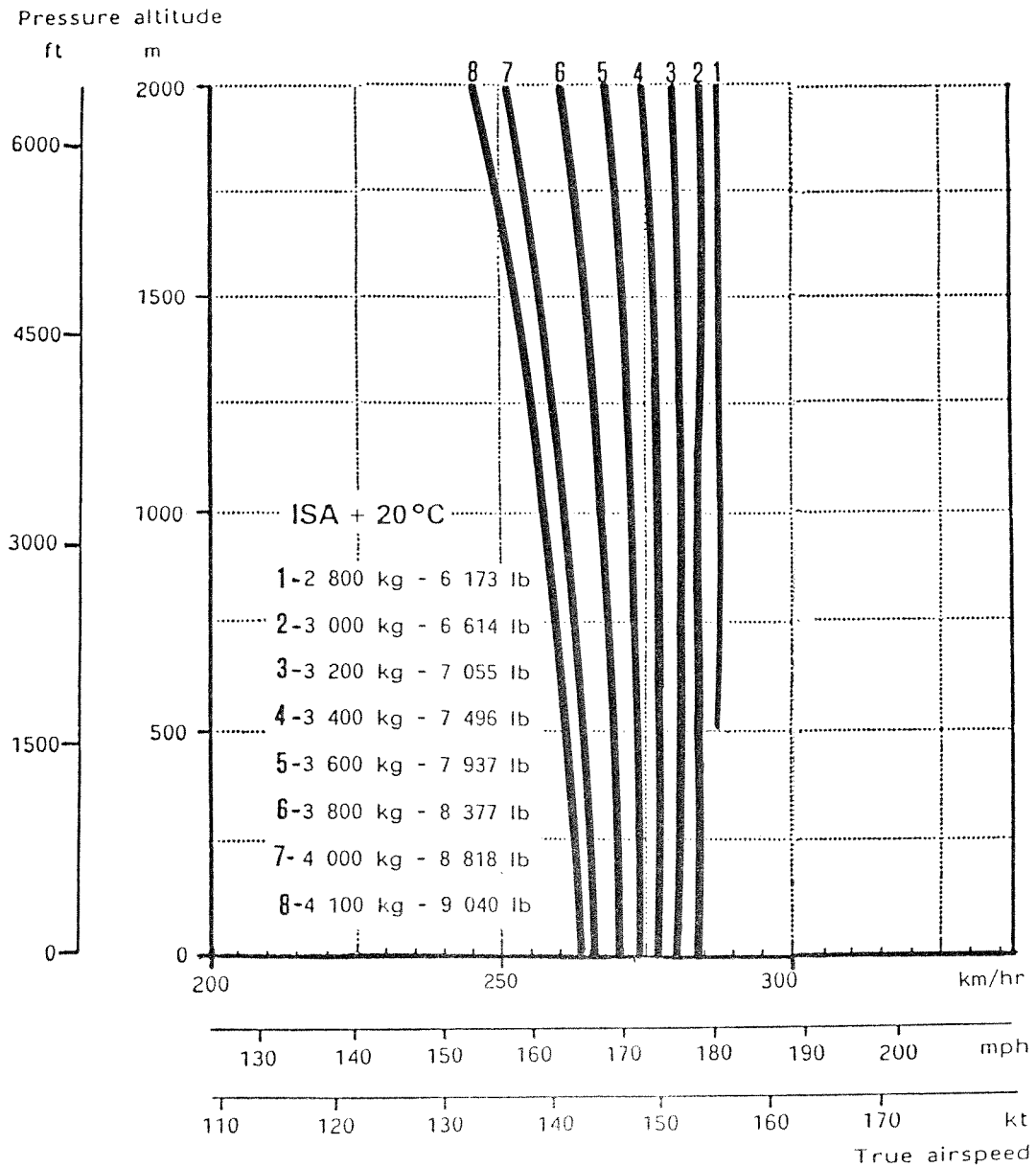
FAST CRUISE SPEED

on 2 engines at maximum continuous power (ISA)



FAST CRUISE SPEED

on 2 engines at maximum continuous power (ISA + 20°C)

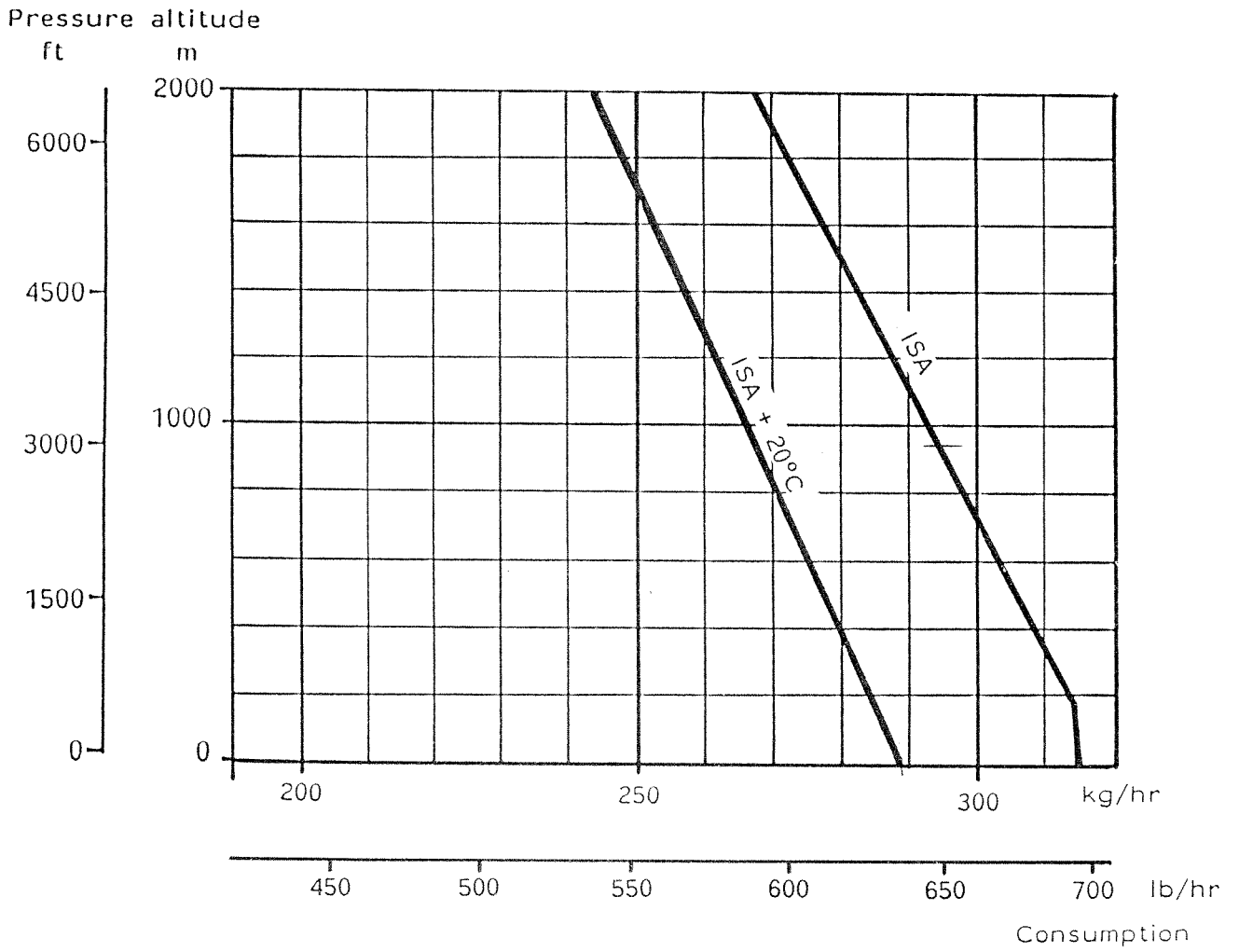




Blank

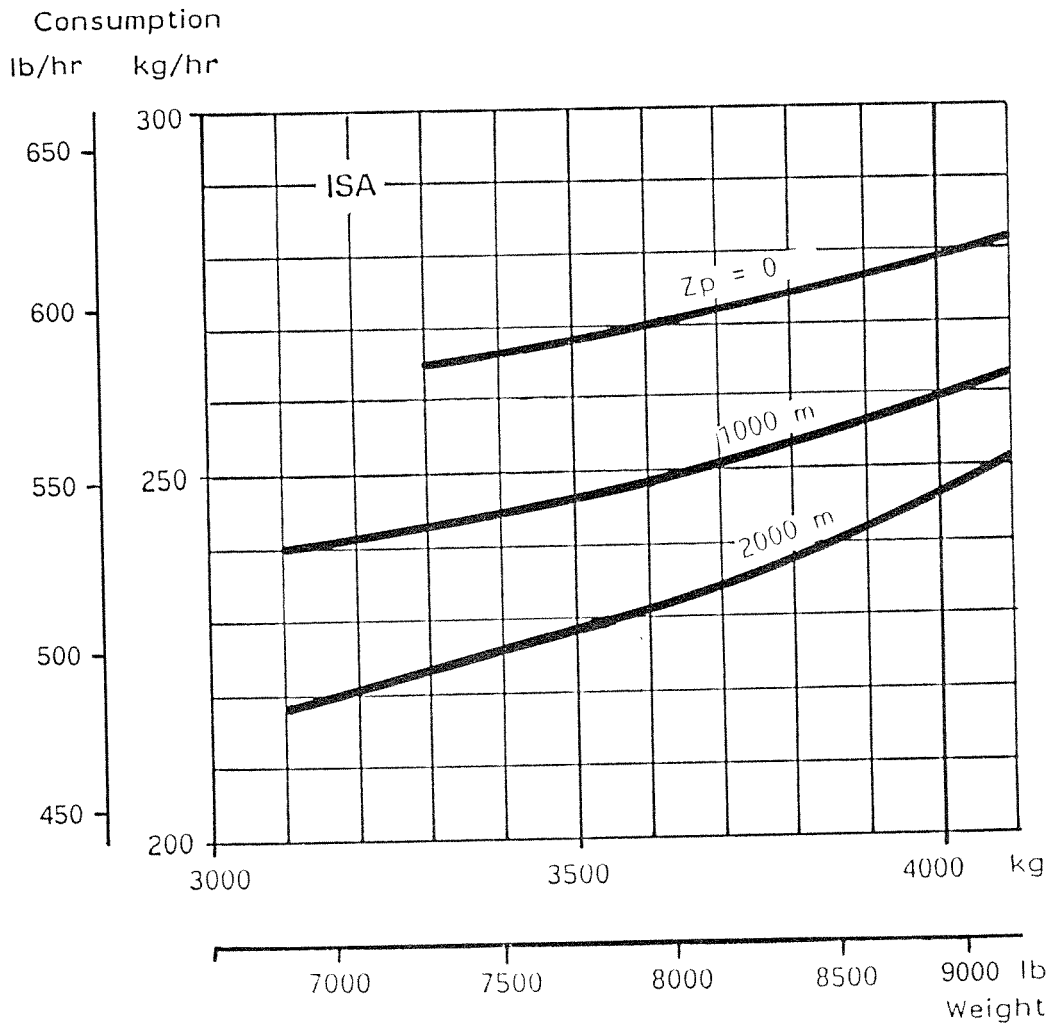
HOURLY FUEL CONSUMPTION

at fast cruise speed (ISA and ISA + 20°C)



HOURLY FUEL CONSUMPTION

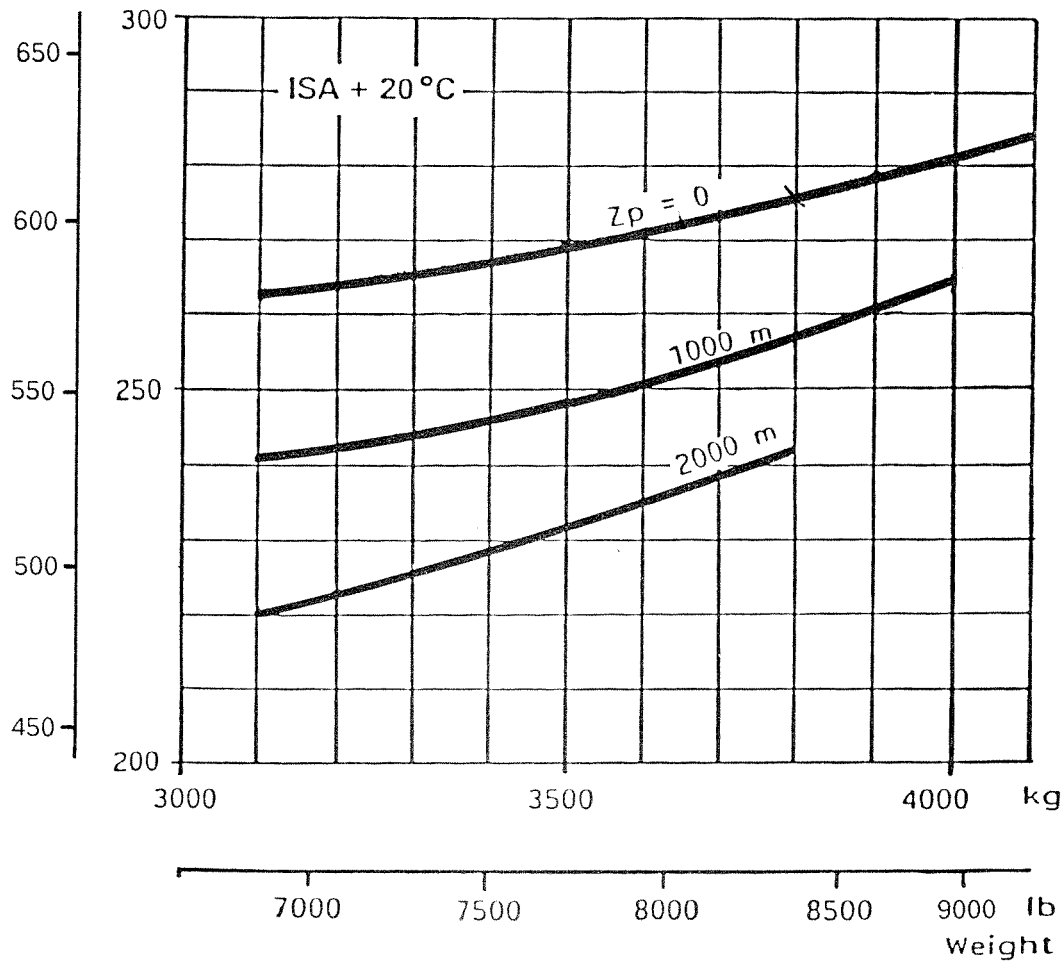
at recommended cruise speed of 260 km/hr (ISA)



HOURLY FUEL CONSUMPTION

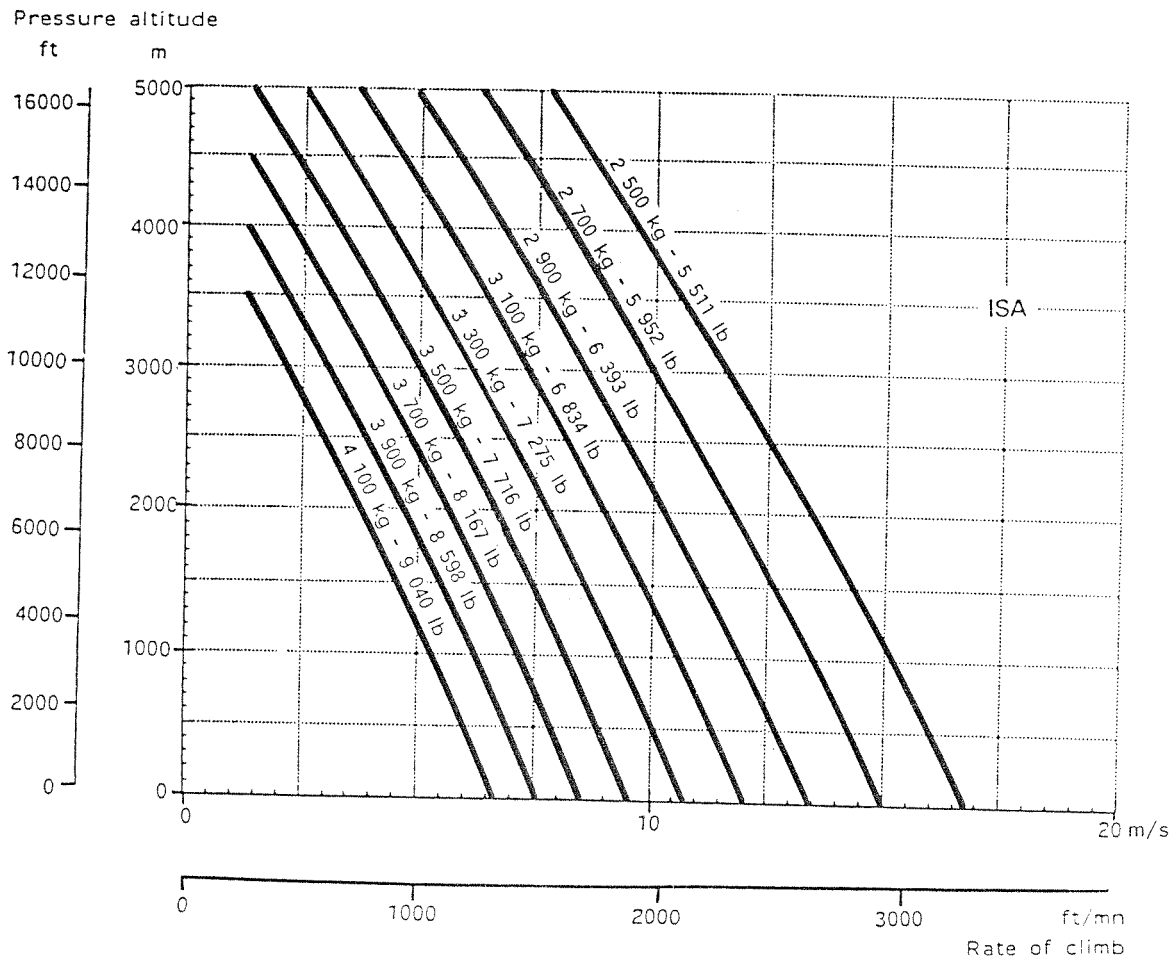
at recommended cruise speed of 260 km/hr (ISA + 20°C)

Consumption
lb/hr kg/hr



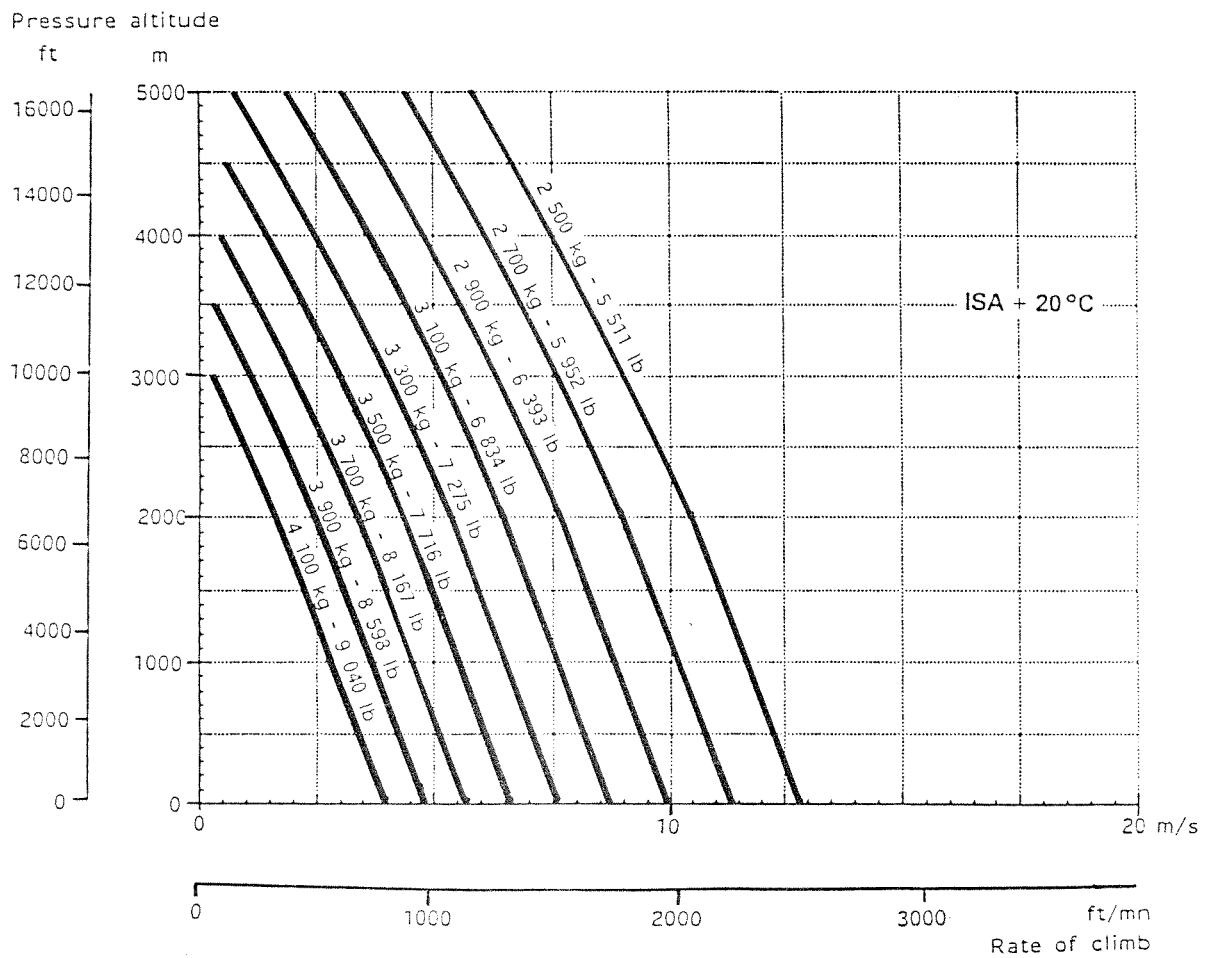
RATE OF CLIMB IN OBLIQUE FLIGHT

on 2 engines at maximum continuous power (ISA)



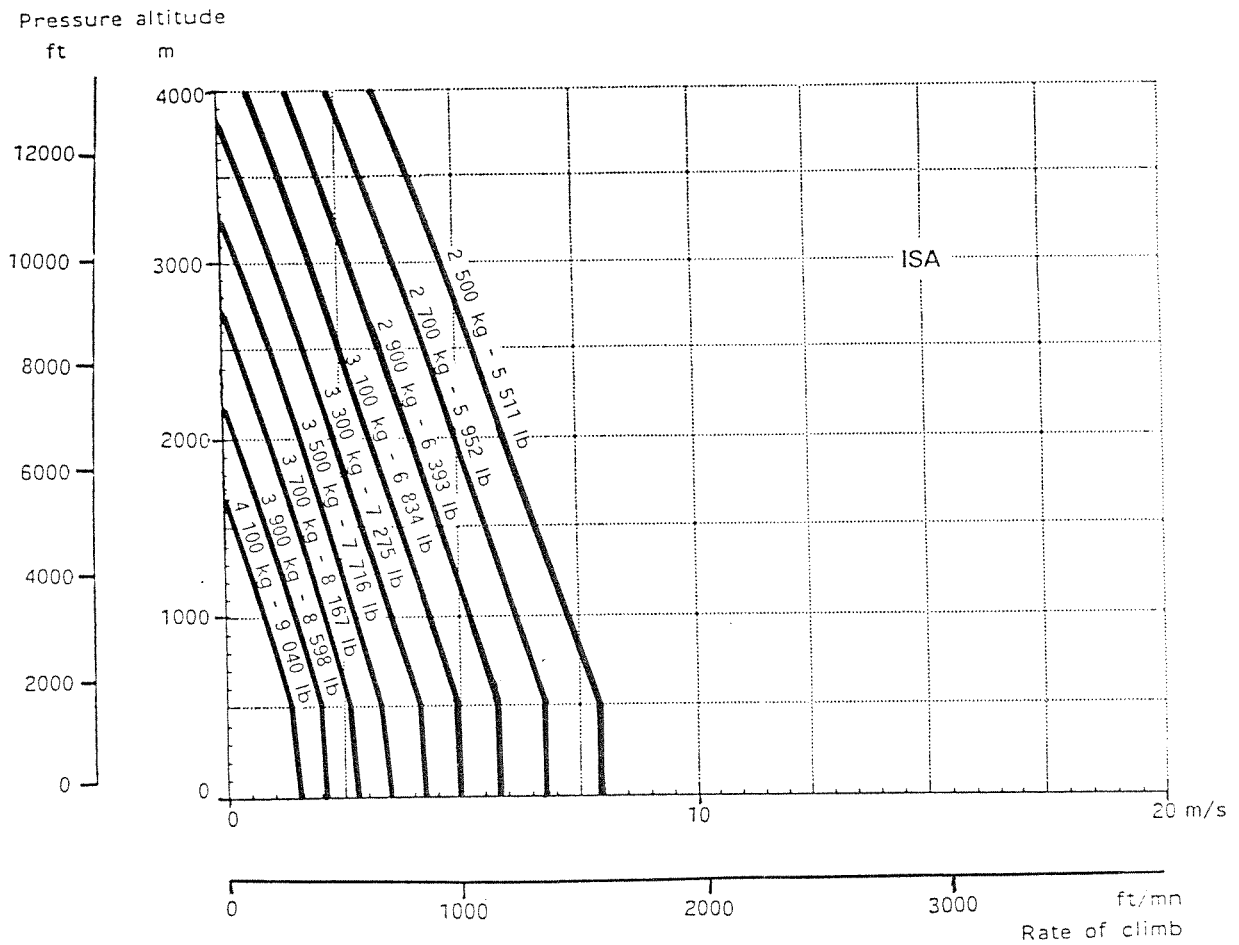
RATE OF CLIMB IN OBLIQUE FLIGHT

on 2 engines at maximum continuous power (ISA + 20°C)



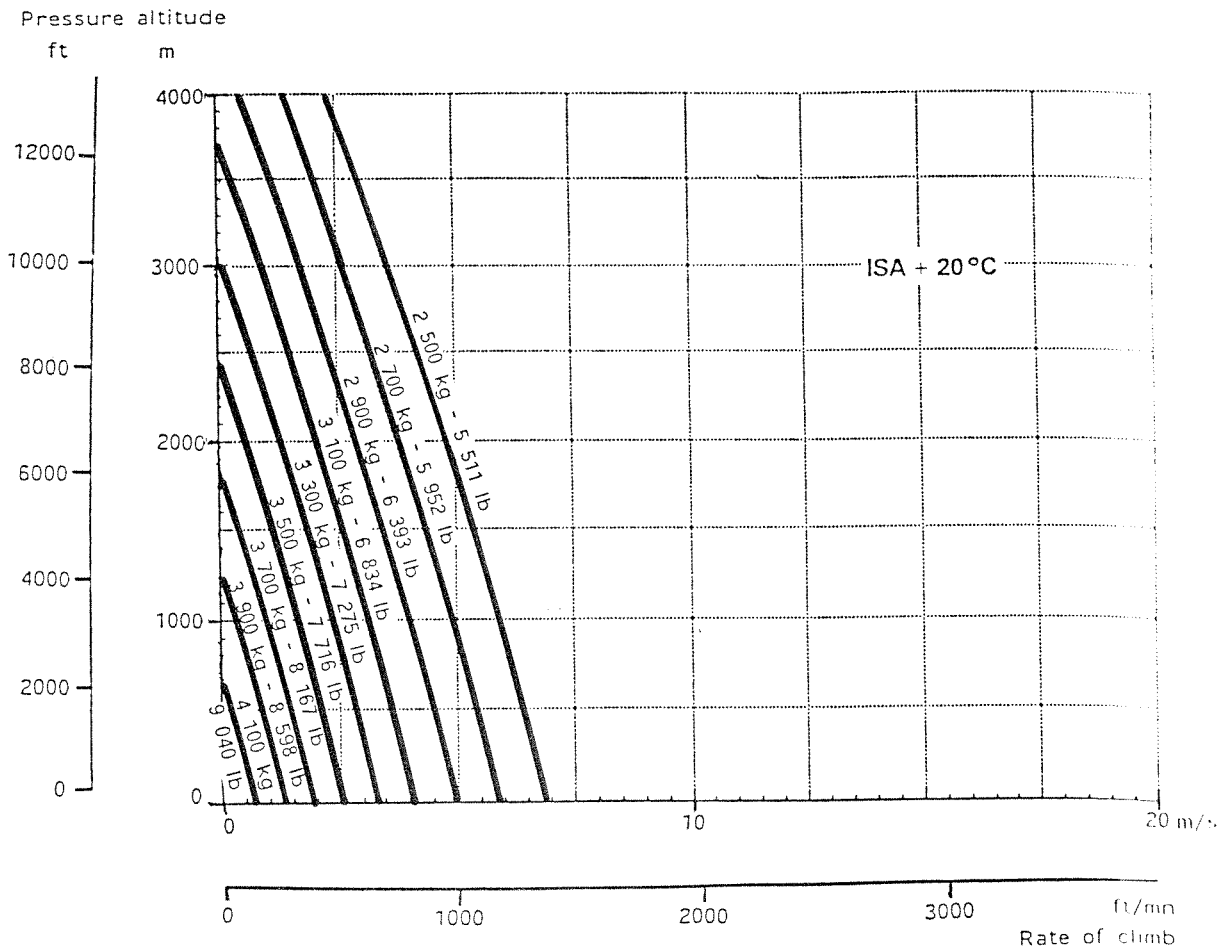
RATE OF CLIMB IN OBLIQUE FLIGHT

on 1 engine at intermediate emergency power (ISA)



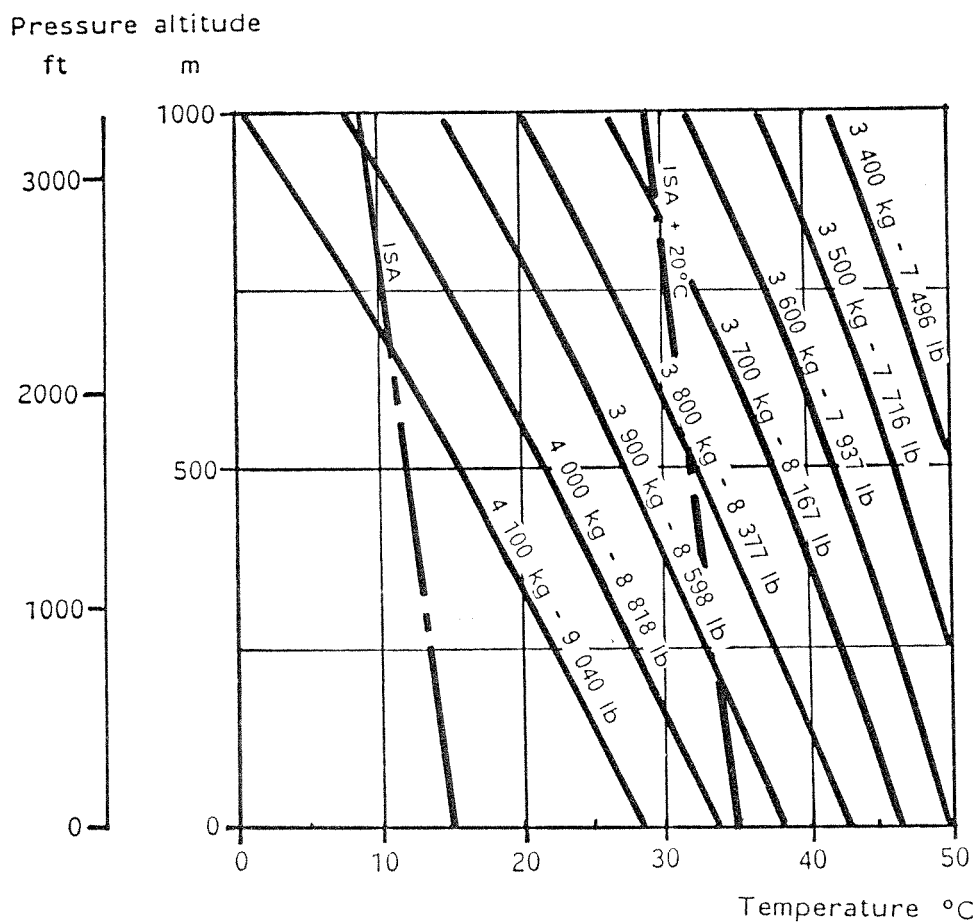
RATE OF CLIMB IN OBLIQUE FLIGHT

on 1 engine at intermediate emergency power (ISA + 20°C)



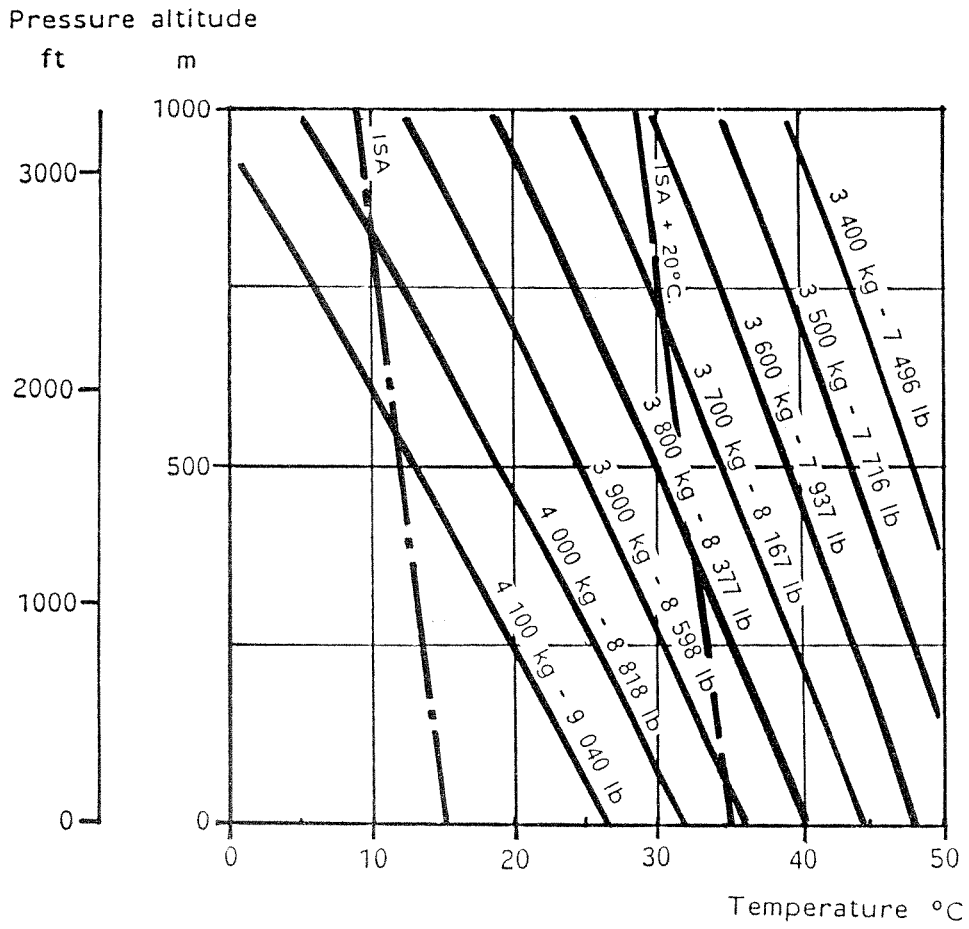
MAXIMUM PERMISSIBLE GROSS WEIGHT ON TAKE-OFF
FROM CLEAR HELIPORT

Category A (DGAC-FAA)



**MAXIMUM PERMISSIBLE GROSS WEIGHT ON TAKE-OFF
 FROM CLEAR HELIPORT**

Group A (CAA)



Blank

PAYLOAD VERSUS RANGE

