CONTENTS

		Page
1.	DIMENSIONS	3
2.	GENERAL CHARACTERISTICS	5
3.	FUEL AND LUBRICANT TYPES	7
4.	EC 135 - STANDARD AIRCRAFT CONFIGURATION	9
5.	WEIGHT SUPPLEMENT	13
5.1	OPTIONAL EQUIPMENT	13
5.2	VIP PACKAGES	20
5.3	EMS PACKAGES	20
6.	COMMUNICATION / NAVIGATION EQUIPMENT	21
6.1	AVIONICS PACKAGES OVERVIEW	21
6.2	PACKAGE DESCRIPTIONS	26
6.3	MANDATORY ADD-ONS FOR SPECIAL OPERATIONS	27
6.4	ADDITIONAL EQUIPMENT	27
7.	MAIN PERFORMANCE	29

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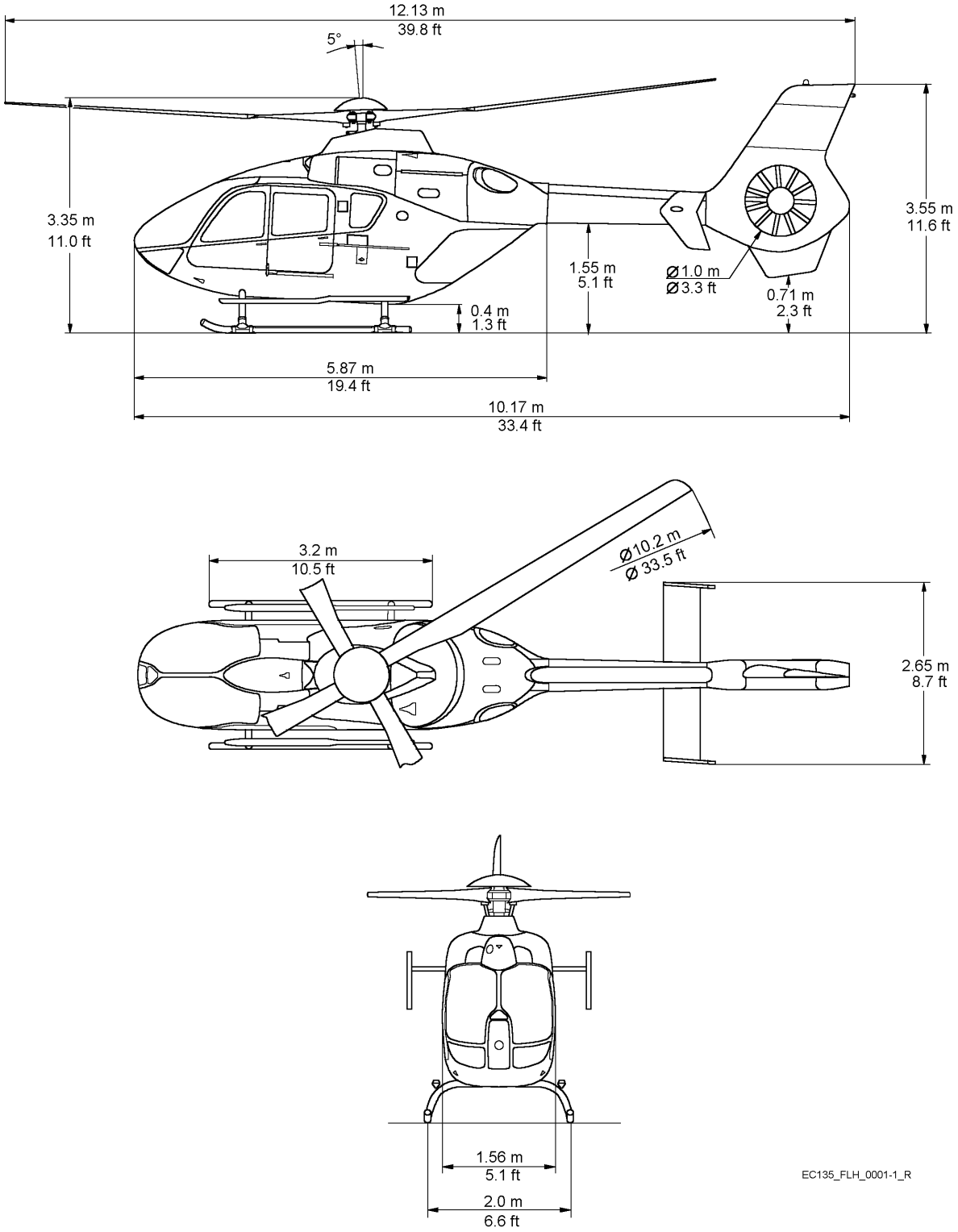
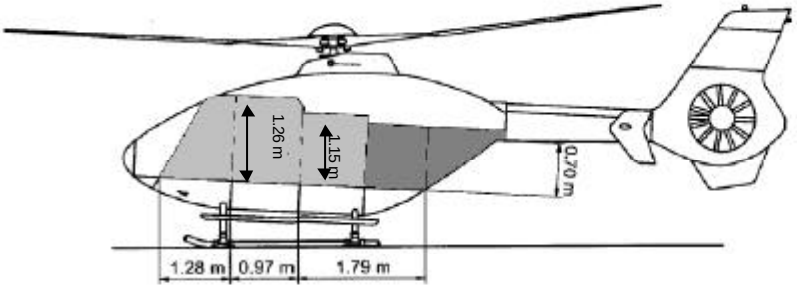
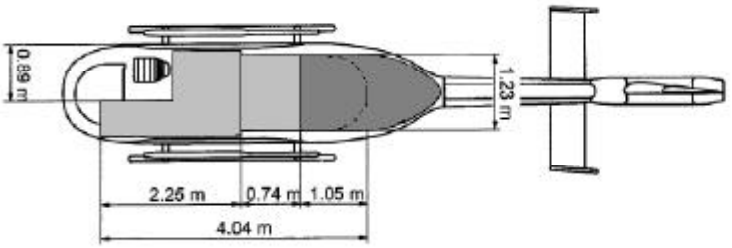
1. DIMENSIONS

EXTERNAL DIMENSIONS



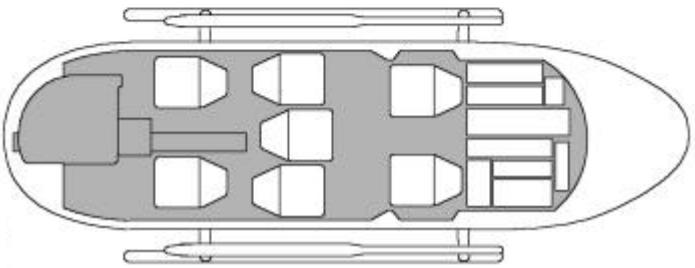
INTERNAL DIMENSIONS





Floor area		
Cabin	3.15 m²	33.91 ft²
Cockpit (pilot side)	1.15 m²	12.38 ft²
Baggage compartment	1.14 m²	12.27 ft²
Total (undivided)	**5.44 m²**	**58.56 ft²**

Volume		
Cabin	3.80 m³	134.20 ft³
Cockpit (pilot side)	1.00 m³	35.31 ft³
Baggage compartment	1.30 m³	45.91 ft³
Total (undivided)	**6.10 m³**	**215.42 ft³**



2. GENERAL CHARACTERISTICS

LAYOUT (Alternatives)

- Passenger transport:
  - 1 or 2 pilots + 6 or 5 passengers (standard version)
  - 1 or 2 pilots + 5 or 4 passengers (VIP-version)
  - 1 or 2 pilots + 7 or 6 passengers (option)
- Casualty evacuation:
  - 1 pilot + 1 litter + 3 seats for doctor and attendants (2nd litter in stowed position possible)
  - 1 Pilot + 2 litters + 2 seats for doctor and attendant
  - 2 pilots + 1 litter + 3 seats for doctor and attendants (2nd litter in stowed position possible)
  - 2 pilots + 2 litters + 2 seats for doctor and attendant

WEIGHTS

	kg	lb
Empty weight, basic version, wet	1,490	3,285
Pilot	80	176
Useful load	1,265	2,789
Maximum take-off weight	2,835	6,250
Maximum take-off weight with external load	2,900	6,400

ENGINES

- 2 Pratt & Whitney Canada turbine engines

  New PW206B2 with 30 sec-rating (available from May 2001 onwards).

or

- 2 Turbomeca turbine engines
  - ARRIUS 2B1A_1 version. Higher OEI-2.5 min rating (mechanical torque limit at 128%), compared to ARRIUS 2B1 engine (mechanical torque limit at 100% torque).
    The EC135 with ARRIUS 2B1A_1 will be certified in April 2001.
  - ARRIUS 2B2 under development. Certification scheduled for mid 2002.
    Same rating structure as PW206B2; similar helicopter performance predicted.

Engine ratings (thermodynamic limits per engine at SL, ISA):

PW206B2	kW	ch	shp
• One Engine Inoperative (OEI), 30 sec power	609	828	816
• One Engine Inoperative (OEI), 2.0 min power	580	789	777
• One Engine Inoperative (OEI), MCP	528	718	708
• Take-Off Power (TOP)	463	630	621
• Maximum Continuous Power (MCP)	419	570	562

ARRIUS 2B1A_1	kW	ch	shp
• One Engine Inoperative (OEI), 2.5 min power	560	762	750
• One Engine Inoperative (OEI), MCP	500	680	670
• Take-Off Power (TOP)	452	615	606
• Maximum Continuous Power (MCP)	425	578	570

MAIN TRANSMISSION

Main transmission ratings

	kW	ch	shp
Single engine operation			
• 30 sec OEI-power (for PW206B2 and TURBOMECA Arrius 2B2 when available)	1 x 526	1 x 715	1 x 705
• 2,0 min OEI-power (for PW206B2 and TURBOMECA Arrius 2B2 when available)	1 x 513	1 x 698	1 x 687
• 2,5 min OEI-power (for ARRIUS 2B1A_1 engines, only)	1 x 526	1 x 715	1 x 705
• Maximum continuous OEI-power	1 x 353	1 x 480	1 x 473
Twin engine operation			
• Take-Off Power (TOP)	2 x 308	2 x 419	2 x 413
• Maximum Continuous Power (MCP)	2 x 283	2 x 385	2 x 380

3. FUEL AND LUBRICANT TYPES

Fuel Capacities

	Usable Fuel			Unusable Fuel		Total	
	(lb)	**(kg)**	**(l)**	(lb)	(kg)	(lb)	(kg)
Main Tank	**989.0**	**448.6**	**560.8**	7.5	3.4	996.5	452.0
Supply Tank	**193.6**	**87.8**	**109.8**	9.3	4.2	202.8	92.0
Total	**1182.6**	**536.4**	**670.5**	16.8	7.6	1199.3	544.0

Note: Fuel density used is 0.8 kg/liter.

Fuel Types

Type of Fuel	NATO Symbol	Specification Primary Fuels				
		USA	**UK**	**CAN**	**F**	**CIS**
Kerosene-50 (AVTUR FS II) JP-8	F 34	MIL-T-83 133 JP-8	D.ENG.RD 2453	-	AIR 3405-F-34	-
Kerosene-50 (AVTUR) JET A-1	F 35	ASTM-D-1655 JET A-1	D.ENG.RD 2494	2.3.23	AIR 3405-F-35	-
Kerosene	-	ASTM-D-1655 JET A	-	-		-
High flash point Kerosene JP-5 (AVCAT)	F 43	-	D.ENG.RD 2493	-	AIR 3404-F-43	-
High flash point Kerosene JP-5 (AVCAT-FS II)	F 44	MIL-T-5624 JP-5	D.ENG.RD 2452	-	AIR 3404-F-44	-
[1)] Kerosene T-1, TS-1 and T-2	-	-	-	-	-	GOST 10227/86

[1)] primary fuel for engine Pratt & Whitney PW206B2, only

Type of Fuel	NATO Symbol	Specification Secondary Fuels				
		USA	UK	CAN	F	CIS
Wide-cut JP-4 (AVTAG FS II)	F 40	MIL-T-5624 JP-4	D.ENG.RD 2454	2.3.24	AIR 3407	-
Wide-cut JP-4 (AVTAG)	F 45	-	D.ENG.RD 2486	-	-	-
Wide-cut	-	ASTM-D-1655 JET B	-	-	-	-
[2)] Kerosene T-1, TS-1 and T-2	-	-	-	-	-	GOST 10227/86

[2)] secondary fuel for Turbomeca ARRIUS 2B1A_1 / 2B2 engine, only

Using these secondary fuels, the engine shall operate satisfactorily between -30°C and + 43°C and up to 10,000 ft for Turbomeca ARRIUS2B1A_1 / 2B2 or up to 15,000 ft for Pratt & Whitney PW206B2.

When operating at fuel temperatures below -30°C icing protection has to be provided with anti-icing additives according to the relevant Maintenance Manual.

Lubricants

	Content	Specification				
		NATO-Code	USA	UK	D	F
Engine Pratt & Whitney PW206B2 Turbomeca ARRIUS 2B1A_1 / 2B2	2 x 5.12 lt. 2 x 4.85 lt.	O-156	MIL-L-23699	DERD 2499	MIL-L-23699	-
Main transmission	8.0 lt.	O-156	MIL-L-23699	DERD 2499	MIL-L-23699	-
Fenestron gearbox Synthetic oil Mineral oil	0.5 lt.	O-156 O-155	MIL-L-23699 MIL-L-6086 C	DERD 2499 DTD 581 C	MIL-L-23699 MIL-L-6086 C	- AIR 3525 B

Hydraulic Fluid

	Content	Specification				
		NATO-Code	USA	UK	D	F
Hydraulic system System I System II	1.0 lt. 1.2 lt.	H-515	MIL-H-5606F	DEF STAN 91-451 GRADE OM 15	TL 9150-020	AIR 3520

4. EC 135 - STANDARD AIRCRAFT CONFIGURATION

General

Crashworthy fuselage
Tail boom with fixed horizontal stabilizer and two end-plates
Vertical fin with faired-in Fenestron
Upper deck with fittings for main gearbox, engines, hydraulic and cooling system
Cowlings for main transmission and engines
Skid-type landing gear with skid protectors, capable of taking ground-handling wheels
Long boarding steps, LH and RH
Maintenance built-in steps and grips
Exterior painting (single color)

Cockpit, Cabin and Cargo Compartment

One-level cabin and cargo compartment floor with integrated rails
Glazed canopy
Two hinged cockpit doors (with sliding window and map case in pilot's door)
Two wide passenger sliding doors
Two rear hinged clam-shell doors
Longitudinally adjustable crash resistant pilot and copilot seat with head rest and adjustable 4-point safety belts with automatic locking system
Five upholstered crash resistant passenger seats with head rests and three-point safety belts with automatic locking system (three seats facing aft and two seats facing forward)
Boarding grips (LH and RH)
Interior paneling with integrated basic sound insulation
Flight controls (pilot side)
Engine controls with manual engine back-up system at pilot's collective pitch lever
Instrument panel with extension on pilot's side and glare shield
Ram-air and electrical ventilating system for cockpit and cabin
Headset holder in the cockpit, rotatable
Headset holder in the cabin
Portable fire extinguisher
Stowage net for first aid kit at the LH rear clam-shell door
Flash light (torch)
Mobile tie-down rings (4ea)

Basic Instrumentation

Central Panel Display system (CPDS), consisting of:

- Caution Advisory Display (CAD) with digital indication of:
  * Caution and advisory lights
  * Fuel quantity indication
- Vehicle and Engine Management Display (VEMD) with digital indication of:
  * Torque
  * Engine parameters (N1-RPM. Oil pressure, oil temperature, turbine outlet
  * Temperature (TOT), Engine/FADEC rep EEC MEM, FAIL, PARA codes)
  * FLI (first limit indicator) TQ, TOT, N1 (for P&W) or ΔN1 (for TM)
  * Main transmission parameters (oil pressure, oil temperature)
  * Dual ampere meter (generator/battery)
  * Dual voltmeter
  * Ambient temperature
  * Engine cycle counter
  * Parameters of optional equipment (e.g. mast moment)

Clock (2")

Magnetic compass

Triple tachometer (2")

Encoding altimeter (3")

Airspeed indicator (3")

Vertical speed indicator (3")

Warning unit:

- Engine fire warning with fuel emergency shut-off
- Warning lights
- Aural warning (for each warning, rotor RPM, fire warning)

Main switch panel:

- DC power control
- Digital engine control (FADEC)

Pitot/static system with electrical heated pitot tube, pilot side

Static pressure crossover system.

Power Plant

Two PRATT & WHITNEY CANADA PW206B2 turbine engines (available from May 2001 onwards)

or

Two TURBOMECA ARRIUS 2B1A_1 turbine engines (certification scheduled for April 2001) or ARRIUS 2B2 (certification scheduled for mid 2002)

complete with:

- fire detectors
- electronic engine control (FADEC)
- chip detectors with quick disconnectable plugs

Oil cooling and lubricating system with thermostatic valve

Crashworthy fuel system with a flexible bladder-type fuel main tank and supply tank (split into two sections)

Automatically controlled variable rotor speed system

Fuel tank filler flap, lockable

Transmission System

Flat-shaped main gearbox with two stages

Electrical chip detector system with quick disconnectable plug (main gearbox)

Redundant oil cooling and lubrication system

Main gearbox attachment with Anti-Resonance Isolation System (ARIS)

Free wheel assemblies in the engine input drives

Tail rotor drive shaft

Fenestron gearbox with splash lubrication and oil level sight gauge

Electrical chip detector system with quick disconnectable plug (Fenestron gearbox)

Rotor and Flight Controls

Bearingless Main Rotor system (BMR), consisting of:

- Rotor head/mast in one piece
- Four fiber-reinforced composite main rotor blades with anti-erosion strips, control cuff, Elastomeric lead-lag dampers and special blade tip painting

Main rotor control system with dual hydraulic boost system

Electrical trim system (cyclic)

Basic provisions for an easy integration of a track and balance system

Fenestron-type tailrotor with ten metal blades with asymmetric blade spacing and stator

Fenestron gearbox cover

Tail rotor control system with flexball cable and single hydraulic booster

Yaw-SAS (Stability Augmentation System)

Electrical Installation

Power generation system:

- Two starter/generators (2 x 160 A, 28 VDC)
- Nickel-Cadmium battery, (24 V, 17 Ah)
- External power connector (STANAG 3302)

Power distribution system:

- Two primary busbars
- Two shedding busbars
- Two essential busbars
- Two high load busbars (80 A) - for optional equipment only
- Two high power busbars (200 A)
- Battery bus

Lighting:

- Anti-collision warning light (red flashing)
- Fixed, nose-mounted landing light (250 W)
- Three position lights (red, green, white)
- Adjustable instrument lighting
- One utility light in the cockpit
- Lights in the cabin and cargo compartment

Ground Handling Kit *

Two ground-handling wheels
Basic aircraft covers (short time)
Oil drain hoses
Fuel tank drain device
Keys for cockpit doors, cabin doors, baggage compartment doors and tank flap (one-key system)
Battery key
Compass compensation key
Lifting points

Documentation

Flight Manual ♣
Pilots-Checklist ♣
Logbook
Battery Manual *
Maintenance Manual ♣ *
- Part 1: System Descriptions - Part 2: Maintenance Procedures
Illustrated Parts Catalogue incl. type relevant Ground Support Equipment ♣ *
Wiring Diagram Manual ♣ *
List Of Applicable Publications (LOAP) ♣ *
Service Bulletins Catalogue ♣ *
Engine Documentation * including: - Maintenance Manual - Illustrated Parts Catalogue (IPC) - Service Bulletins
Avionics Manual (if avionics are installed by Eurocopter) *

Choosable Optional Equipment (Free of Charge)*

Two starter/generators (2x200 A, 28 VDC) instead of the two standard starter/generators (2x 160 A, 28 VDC)
Slant panel
Multifunction handle at main gearbox cowling LH and RH

* not included in the standard helicopter empty weight.

♣ documents revision service is available.

5. WEIGHT SUPPLEMENT

5.1 Optional Equipment

		Weight	
Cockpit, Cabin and Cargo Compartment Equipment		kg	lb
L1111-002-00	Two-color external painting (according to customer's definition), instead of single color painting	≈ 1.5	≈ 3.3
L1111-004-00	Special external painting (multi-color painting according to customer's definition), instead of single color painting	≈ 5.0	≈ 11.0
L2122-001-00	Ventilation extruder without copilot I-panel extension	1.5	3.3
L2512-002-11	Pilot seat safety harness with manual lock	0.1	0.2
L2512-002-02	Reversed copilot seat installation kit (position change on ground)	1.9	4.2
L2512-002-21	Copilot seat safety harness with manual lock	0.1	0.2
L2512-003-10	Pilot seat with height setting capability, adjustable lumbar support, adjustable headrest and manual lock of safety harness, instead of standard pilot seat	+ 3.1	+ 6.8
L2512-003-20	Copilot seat with height setting capability, adjustable lumbar support, adjustable headrest and manual lock of safety harness, instead of standard copilot seat	+ 3.1	+ 6.8
L2512-006-00	Winch operator seat, turnable in flight (incompatible with copilot controls), instead of standard copilot seat	+ 14.1	+ 31.1
L2513-004-40	Floor covering, cabin with quick detachable carpet	3.0	6.6
L2513-200-00	Floor covering, cockpit, washable	4.2	9.3
L2513-210-00	Floor covering, cargo compartment, washable	2.9	6.4
L2513-220-00	Floor covering, cockpit, cabin and cargo compartment, washable	11.8	26.0
L2513-300-00	Floor covering, cockpit and cabin with carpet	7.0	15.4
L2513-310-00	Floor covering, cockpit, cabin and cargo compartment with carpet	9.2	20.3
L2514-002-00	Tinted sun shades for cockpit windshield roof section, pilot and copilot side, complete	1.9	4.2
L5621-001-00	Tinted cockpit door windows (light grey only)	0.0	0.0
L5632-001-00	Tinted cabin windows (grey)	0.0	0.0
L2514-003-01	Map case integrated in copilot door	0.5	1.1
L2522-004-10	Utility seat arrangement for 3 rear passengers, fixed provisions	1.2	2.6
L2522-004-20	Utility seat arrangement for 3 rear passengers, detachable parts (in addition to standard seat arrangement)	+ 8.7	+ 19.2
L2522-004-30	Utility seat arrangement for 3 rear passengers, detachable parts (instead of standard seat arrangement)	+ 8.7	+ 19.2

		Weight	
Cockpit, Cabin and Cargo Compartment Equipment (contd.)		kg	lb
L2524-001-00	Pax/cargo compartment separation wall including smoke detector, compatible with installed avionics rack	3.8	8.4
L2524-002-00	Cockpit/cabin separation curtain	3.0	6.6
L2524-021-00	Cabin/cargo compartment curtain, compatible with avionics rack (incl. smoke detector)	2.2	4.9
L2524-030-10	IFR - training screen, fixed provisions	0.1	0.2
L2524-030-20	IFR - training screen, detachable parts	1.5	3.3
L2525-102-81	Executive kit comprising: • Copilot door map case • Retractable coat hooks in the rear cabin ceiling (2ea) • Ashtrays in the cabin (if demanded) • Ashtrays in pilot's and copilot's door (if demanded) • Covers for sliding door fairing LH/RH • Variable tie-down web for luggage securing in the cargo compartment • Map cases on I-panel glare shield (soft cases) • Map case in sliding door LH/RH	5.4	11.9
L2562-001-00	First aid kit	1.3	2.9
L2562-001-10	First aid kit for DGAC certification	3.0	6.6
L2566-001-00	Emergency hammer	0.2	0.4
L2576-001-00	Avionics compartment	6.2	13.7
L2581-001-00	Enhanced sound proofing kit	9.8	21.6
L2625-003-00	2nd portable fire extinguisher	2.3	5.1
L3111-001-00	Copilot instrument panel extension 10" with glare shield	3.0	6.6
L3111-001-01	Copilot instrument panel extension 11" with glare shield	3.8	8.4
L3111-001-03	Copilot instrument panel extension 7“ with glare shield	2.7	6.0
L3111-001-10	Map cases on instrument panel glare shield (soft cases)	0.4	0.9
L3113-001-00	Slant panel	0.7	1.5
L3113-004-00	Center console (incl. map case on LH side and if possible, stowage case at the rear)	2.6	5.8
L8514-001-00	Multipurpose attachment hardpoints integrated in the cabin	1.8	4.0
L2104-003-00	Bleed air heating system for EMS-version	7.0	15.4
L2104-100-00	Bleed air heating system (autom. controlled)	6.6	14.6
L2105-001-00	Air conditioning/cooling system (Vapor cycle)	58.0	127.9
L2105-001-10	Air conditioning/cooling system (Vapor cycle) for tropical environment	62.0	136.7

		Weight	
Landing Gear and Associated Equipment		kg	lb
L3215-001-10	Emergency floats, fixed provisions incl. special boarding steps	2.0	4.4
L3215-001-20	Emergency floats, detach. parts (delivered together with std. skids)	44.3	97.7
L3215-001-21	Emergency floats, detachable parts (delivered instead of std. skids)	44.3	97.7
L3216-001-00	High skid landing gear (delivered together with std. landing gear)	+27.0	+59.5
L3216-001-10	High skid landing gear (delivered instead of std. landing gear)	+27.0	+59.5
L3217-001-10	Reinforced rear landing gear cross tube	2.0	4.4
L3272-001-10	Snow skids, fixed provisions	0.1	0.2
L3272-001-20	Snow skids, detachable parts	19.5	43.0
L3273-001-00	Lengthened standard skids	8.3	18.3
L3274-001-10	Settling protectors, fixed provisions	2.1	4.6
L3274-001-20	Settling protectors, detachable parts	10.2	22.5
Landing and Search Lights incl. Illumination Equipment			
L3322-001-00	Boarding step illumination	0.2	0.4
L3343-003-00	Landing & searchlight, 450 W, (RH, fwd. nose shell)	3.2	7.1
L3343-006-00	Landing & searchlight, 400/200 W, (fwd. nose shell), NVG compatible	4.1	9.0
L3344-001-00	Strobe lights (white flash lights)	1.0	2.2
L3346-100-10	Nightsun SX16, front installation, fixed provisions (incl. std. landing light relocation)	7.9	17.4
L3346-100-20	Nightsun SX16, front installation, detachable parts (without vendor parts)	4.8	10.6
L3346-300-10	Nightsun SX16, LH multi function step mounted, fixed provisions	3.8	8.4
L3346-300-20	Nightsun SX16, LH multi function step mounted, detachable parts, (without vendor parts)	9.1	20.1
L3346-500-10	Nightsun SX16, vendor parts	20.4	45.0
L3346-500-20	Nightsun SX16, with infrared filter, vendor parts	25.8	56.9
L3353-005-00	Emergency lights (incl. boarding step illumination and exit lights with battery pack)	3.3	7.3
L3353-006-20	Illuminated signs "NO SMOKING/FASTEN SEAT BELT"	0.4	0.9
L3353-007-00	Illuminated sign „SWITCH-OFF MOBILE PHONE“	0.2	0.4

General Mission Equipment		Weight kg	Weight lb
L2212-001-00	Digital Automatic Flight Control System DAFCS, for Dual/Single Pilot (VFR/IFR) operation	38.5	84.9
L2212-300-00	MEGHAS Sensor Kit, consisting of: • AHRS (1st and 2nd system) • Air Data System (1st and 2nd system) • Rack	15.9	35.1
L2217-001-10	VFR Pitch/Roll Stability Augmentation System (SAS)	8.0	17.6
L2217-001-50	IFR Pitch/Roll Stability Augmentation System (SAS)	10.0	22.0
L2420-002-00	AC system, including inverter	3.2	7.1
L2420-003-00	Dual AC system, including 2nd inverter	6.3	13.9
L2432-001-00	Starter/generator (2 x 200 A, 28 V DC), instead of standard generator 2 x 160 A, 28 V DC	+ 3.6	+ 7.9
L2433-001-00	Battery 25 Ah, 24 V, instead of std. battery 17 Ah, 24 V	+ 8.0	+ 17.6
L2433-002-00	Battery, type "Saft", 26 Ah, 24 V, instead of std. battery 17 Ah, 24 V	+ 9.0	+ 19.8
L2433-005-00	Battery 40 Ah, 24 V, instead of std. battery 17 Ah, 24 V	+ 19.3	+ 42.5
L2621-001-00	Engine fire extinguishing system	3.8	8.4
L2812-001-00	Self sealing fuel supply tanks	4.2	9.3
L2818-100-10	Internal long range fuel tank system, fixed provisions	4.0	8.8
L2818-100-20	Internal long range fuel tank, detachable parts	30.0	66.1
L3042-001-00	Windshield wiper system	4.9	10.8
L3043-001-00	Windshield wiper system with windscreen washing device	8.9	19.6
L3411-001-00	Copilot pitot static system (electrically heated pitot tube)	1.3	2.6
L5211-001-00	Copilot door sliding window	0.1	0.2
L5211-002-00	Sliding doors sliding windows	0.1	0.2
L5211-004-10	Special copilot door securing device for complete opening	0.5	1.1
L5211-004-20	Special pilot door securing device for complete opening	0.5	1.1
L5213-001-11	Intermediate and max. position sliding door fastener, LH	1.1	2.4
L5213-001-12	Sliding door fastener, max. position, LH	0.4	0.9
L5213-001-21	Intermediate and max. position sliding door fastener, RH	1.1	2.4
L5213-001-22	Sliding door fastener, max. position, RH	0.4	0.9
L5231-001-00	Clam-shell doors, one-hand latching system	1.5	3.3
L5231-002-00	Clam-shell doors, extended opening fasteners	0.2	0.4
L5633-001-10	Clam-shell door windows, LH	0.6	1.3
L5633-001-20	Clam-shell door windows, RH	0.6	1.3

		Weight	
General Mission Equipment (contd. 1)		kg	lb
L6201-001-30	Accelerometers (for track and balancing system)	0.0	0.0
L6201-002-10	Optical tracker, fixed provisions	0.1	0.2
L6201-002-20	Optical tracker, detachable parts	0.7	1.5
L6344-001-00	Mast moment indication	1.0	2.2
L6351-001-00	Rotor brake system with control lever	4.8	10.6
L6701-001-00	Dual controls, copilot collective with manual engine back-up and additional switches	7.1	15.7
L6721-001-00	Copilot controls cover	0.5	1.1
L7161-001-00	Sand filter system, complete	37.1	81.8
L7165-002-00	Engine compressor washing device	2.4	5.3
L7924-001-00	Fuzz burner, engines	1.0	2.2
L8511-001-10	Cargo hook system, fix beam type, fixed provisions	2.9	6.4
L8511-001-30	Cargo hook system, fix beam type, detachable parts	16.2	35.7
L8511-002-10	Cargo hook mirror, fixed provisions	0.6	1.3
L8511-002-20	Cargo hook mirror, detachable parts	4.2	9.3
L8512-001-10	External hoist, fixed provisions incl. adapter kit	9.6	21.2
L8512-001-20	External hoist, detachable parts, incl. operator safety belt, and hoist accessories kit (incl. 1 week winch operator training)	63.2	139.4
L8522-320-00	Folding stretcher (16 G), type Bucher-Leichtbau	12.1	26.7
L8522-350-00	Stretcher retainer system for one Bucher-Leichtbau-type folding stretcher (16 G)	5.0	11.0
L8525-002-20	Litter installation device for one FERNO/Aerolite-type litter, model SRFW 12-2 / 16 G modified	7.0	15.4
L8525-003-00	FERNO/Aerolite-type foldable litter, model SRFW 12-2 / 16 G mod.	14.0	30.9
L8531-001-00	External loudspeaker system, type NAT, with two loudspeaker cones and with integrated siren system, complete	11.1	24.5
L8532-002-30	Multifunction step LH instead of standard boarding step (compatibility with external hoist)	+ 6.7	+14.8
L8532-002-40	Multifunction step RH instead of standard boarding step	+ 3.7	+ 8.2
L8541-001-10	Wire strike protection system, fixed provisions	3.3	7.3
L8541-001-20	Wire strike protection system, detachable parts	8.2	18.1
Handling and Picketing Equipment			
L2551-003-00	Additional 4 tie-down fittings for the cabin floor integrated attachment rails	0.6	1.3
L5232-001-00	Multifunction handle at the main gear box cowling (LH and RH)	0.6	1.3
L6611-001-10	Main rotor blade folding kit, basic kit	2.3	5.1
L6611-001-20	Main rotor blade folding kit, fixed provisions for ground handling kit	0.7	1.5
L6611-001-30	Main rotor blade folding kit, ground handling equipment	GSE	GSE
L8544-001-00	Lashing points suitable for normal wind speeds	2.7	6.0
L8544-002-00	Lashing points incl. mooring kit suitable for high wind speeds (weight of GSE: 24.9 kg)	0.7	1.5

The following listed items can be offered at **customer's request** but are not necessarily kept on stock. Availability, certification status and compatibility with other equipment items must be checked individually.

		Weight	
Customer Request Equipment		kg	lb
L1111-005-00	Special detail paintings (markings, letters, logos)	on request	
L1111-006-00	Matching painting (other than standard) of externally installed optional equipment	on request	
L2321-007-00	M'ARMS™ Cockpit Voice and Flight Data Recorder (CVFDR), JAR OPS III compliant	14.0	30.8
L2321-009-00	M'ARMS™ Cockpit Voice and Flight Data Recorder (CVFDR) and Usage Monitoring System (UMS), JAR OPS III compliant	15.0	33.0
L3171-001-00	M'ARMS™ Usage Monitoring System (UMS), JAR OPS III compliant, for the ground station see Customer Support Price List	5.3	11.7
L8503-001-10	Fire extinguishing bucket attachment, fixed provisions (only in combination with cargo hook system)	0.7	1.5
L8534-000-11	Rope-down device for 2 persons, LH, fixed provisions	3.1	6.8
L8534-000-12	Rope-down device for 2 persons, LH, detachable parts [1)]	8.5	18.7
L8534-000-21	Rope-down device for 2 persons, RH, fixed provisions	3.1	6.8
L8534-000-22	Rope-down device for 2 persons, RH, detachable parts [1)]	8.5	18.7
L8551-001-10	Light armor protection kit, cockpit and cabin, fixed provisions	2.0	4.4
L8551-001-20	Light armor protection kit, cockpit and cabin, detachable parts	127.0	280.0

Broadcast, Thermal Imaging and TV Surveillance Equipment

Several different systems are available on request.

1) not civil certified.

NVG Compatible Equipment		Weight kg	Weight lb
L2524-003-00	Cockpit/cabin separation curtain, NVG specific version	4.0	8.8
L3312-003-00	NVG compatible cockpit layout in combination with CPDS (incl. cockpit utility light)	1.1	2.4
L3347-002-00	Additional NVG compatible external lighting kit, comprising position and anticollision lights	1.5	3.3

Note:

For NVG compatible landing and searchlights, refer to § 5.1 Landing and Search Lights.

General remarks about NVG

If NVG flights are requested, three important factors must be considered:

- The switching-off of non-NVG compatible lights and instrumentation (crash risks).
- The non-compliance with local civil regulations (NVG flights may be forbidden).
- The different level of vision provided by NVG compatible lighting.

Requirements and checklist for building up a NVG compatible configuration

- **General compatibility requirements**

  A NVG compatible cockpit is possible only with a MEGHAS avionics solution.

- **Checklist for NVG compatible configuration**

  The following points **must** be checked and fulfilled:

  ✓ The **cockpit** must be fully NVG compatible, which means
  - The avionics solution must be NVG compatible,
  - The NVG compatible cockpit layout (option L3312-003-00) is required,
  - The customer must be advised about NVG compatibility status of its BFE (Buyer Furnished Equipment).

  ✓ The **cabin lighting** must not negatively affect NVG compatibility, which means
  - The NVG compatible cockpit/cabin separation curtain (option L2524-003-00) is required. Otherwise, the customer must be advised that all cabin lighting must be switched off during NVG flights.

  ✓ The **external lights** must be fully NVG compatible, which means
  - The additional NVG compatible external lighting kit (option L3347-001-00) is required. Otherwise, the customer must be advised that all non-NVG compatible lighting must be switched off during NVG flights.

  ✓ If the customer lands in NVG mode, the NVG compatible **landing & searchlight, 400/200 W** (option L3343-006-00) is required.

  ✓ If the customer needs a NVG compatible **SX16 searchlight**, the SX16 with infrared filter (option L3346-500-20) is required.

5.2 VIP Packages

For further information as well as description of the content of the different packages please refer to the EC135 VIP-Brochure (135 VIP 01.101.01 E).

		Weight [1]	
		kg	lb
L2526-100-00	EC135 VIP Package 1 (basic package, 5-seat arrangement)	+ 43.7	+ 96.5
L2526-200-00	EC135 VIP Package 2 (advanced package; 4-seat arrangement)	+ 74.7	+ 165.3
---	Additional VIP Outfit for the EC135 VIP Packages	refer to VIP-Brochure	

Note:
In any case the packages **replace** the standard seating arrangement. The **standard seats** are **not included**, not even as separate items.

5.3 EMS Packages

For further information as well as description of the content of the different packages please refer to the EC135 EMS-Brochure (135 EMS 01.101.01 E).

		Weight [2]	
		kg	lb
L8524-000-02	EMS Outfit Package I	83.0	183.0
---	Additional Suitable EMS Equipment and Apparatus for Individual Choice	refer to EMS-Brochure	
L8523-000-02	EMS Outfit Package II	150.0	331.0
---	Additional Suitable EMS Equipment and Apparatus for Individual Choice	refer to EMS-Brochure	
L8522-000-02	EMS Outfit Package III	152.0	335.0
---	Additional Suitable EMS Equipment and Apparatus for Individual Choice	refer to EMS-Brochure	
L8521-000-03	EMS Outfit Package IV	130.0	287.0
---	Additional Suitable EMS Equipment and Apparatus for Individual Choice	refer to EMS-Brochure	
L8521-000-04	EMS Outfit Package V	132.0	291.0
---	Additional Suitable EMS Equipment and Apparatus for Individual Choice	refer to EMS-Brochure	

Note:
In any case the packages **replace** the standard seating arrangement. The **standard seats** are **not included**, not even as separate items.

[1] in addition to standard helicopter empty weight.

[2] for all EMS-packages the complete standard passenger seating weight (60.5 kg / 133.4 lb) has to be subtracted.

6 COMMUNICATION / NAVIGATION EQUIPMENT

For further and detailed information as well as description of the content of the different packages please refer to the brochure "EC 135 AVIONICS Mission Packages" (135 AVIONICS 01.101.01 E).

6.1 Avionics Packages Overview

Following possible avionics packages according to LBA and FAA requirements are available on request.

6.1.1 Single pilot VFR packages

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
SP VFR with SAS capability Conventional instrumentation	Silver Crown	**Avionics solution 1**	**L2300-001-20**	**16.0**	**35.3**
		AC system including inverter	L2420-002-00	3.2	7.1
		Slant panel	L3113-001-00	0.7	1.5
		VFR pitch/roll SAS	L2217-001-10	8.0	17.6
SP VFR with SAS capability Conventional instrumentation	Gold Crown	**Avionics solution 2**	**L2300-002-00**	**24.2**	**53.4**
		AC system including inverter	L2420-002-00	3.2	7.1
		Slant panel	L3113-001-00	0.7	1.5
		Avionics compartment	L2576-001-00	6.2	13.7
		VFR pitch/roll SAS	L2217-001-10	8.0	17.6

6.1.2 Dual Pilot VFR packages

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
DP VFR with SAS capability Conventional instrumentation	Silver Crown	**Avionics solution 1**	**L2300-001-20**	**16.0**	**35.3**
		AC system including inverter	L2420-002-00	3.2	7.1
		Slant panel	L3113-001-00	0.7	1,5
		VFR pitch/roll SAS	L2217-001-10	8.0	17.6
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 10" [1)]	L3111-001-00	3.0	6.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Copilot instrumentation	***See below***		
DP VFR with SAS capability Conventional instrumentation	Gold Crown	**Avionics solution 2**	**L2300-002-00**	**24.2**	**53.4**
		AC system including inverter	L2420-002-00	3.2	7.1
		Slant panel	L3113-001-00	0.7	1.5
		Avionics compartment	L2576-001-00	6.2	13.7
		VFR pitch/roll SAS	L2217-001-10	8.0	17.6
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 10" [1)]	L3111-001-00	3.0	6.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Copilot instrumentation	***See below***		

[1)] or bigger, if combination of others optional equipment should require it.

Details of copilot instrumentation

For solutions 1 and 2	Type		Reference	Weight (kg)	Weight (lb)
4" artificial horizon, 2nd system	GH 14 - 391 (HONEYWELL)		L3425-091-02	2.8	6.2
RMI / CDI	KI 229 / KI 204		L3166-091-04 / L3167-091-02	2.6 (total)	5.7 (total)
2nd indicators System packages [1)]	**3" instruments** (UNITED INSTRUMENTS)		L3412-002-00	2.5 (total)	5.5 (total)
		2" instruments (THOMMEN)	L3412-003-00	1.6 (total)	3.5 (total)
Airspeed indicator	8000L-B.709	5A58.32.18K.28.1.BG			
Encoding altimeter	5035 P2 P42	3A43.32.20F.28.1.CL			
Vertical speed ind.	7060L-C.179	4A58.32.60F.28.1.BM			

1) instrument size depends on selected additional equipment (standard size is 3").

6.1.3 Dual pilot IFR packages

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
DP IFR with SAS Conventional instrumentation	Silver Crown	**Avionics solution 3**	**L2300-003-00**	**44.2**	**97.5**
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 10“ [1)]	L3111-001-00	3.0	6.6
		Slant panel	L3113-001-00	0.7	1.5
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2)]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Copilot door sliding window	L5211-001-00	0.1	0.2
		Windscreen wiper	L3042-001-00	4.9	10.8
		25 Ah battery [1)]	L2433-001-00	8.0	17.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		Dual AC system	L2420-003-00	3.2	7.1
		IFR pitch/roll SAS	L2217-001-50	10.0	22.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		Map case in copilot door	L2514-003-01	0.5	1.1

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
DP IFR with SAS Conventional instrumentation	Gold Crown	**Avionics solution 4**	**L2300-004-00**	**55.2**	**121.7**
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 10“ [1)]	L3111-001-00	3.0	6.6
		Avionics compartment	L2576-001-00	6.2	13.7
		Slant panel	L3113-001-00	0.7	1.5
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2)]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Copilot door sliding window	L5211-001-00	0.1	0.2
		Windscreen wiper	L3042-001-00	4.9	10.8
		25 Ah battery [1)]	L2433-001-00	8.0	17.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		Dual AC system	L2420-003-00	6.3	13.9
		IFR pitch/roll SAS	L2217-001-50	10.0	22.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		Map case in copilot door	L2514-003-01	0.5	1.1

[1)] or bigger, if combination of others optional equipment should require it.

[2)] to be replaced by option L2104-003-00 (7.0 kg / 15.4 lb) for EMS helicopters.

6.1.4 Dual or single/dual pilot IFR packages

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
SP/DP IFR or DP IFR with PFD/ND MEGHAS instrumentation NVG-modified version available on request	Gold Crown	**Avionics solution 7**	**L2300-007-00**	**60.0**	**132.3**
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 7”	L3111-001-03	2.7	6.0
		Avionics compartment	L2576-001-00	6.2	13.7
		Slant panel	L3113-001-00	0.7	1.5
		Centre console	L3113-004-01	2.1	4.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Copilot door sliding window	L5211-001-00	0.1	0.2
		Windscreen wiper	L3042-001-00	4.9	10.8
		40 Ah battery	L2433-005-00	19.3	42.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		AC system	L2420-002-00	3.2	7.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		Map case in copilot door	L2514-003-01	0.5	1.1
		MEGHAS sensor kit	L2212-300-00	15.9	35.1
	For DP only	IFR pitch/roll SAS [3]	L2217-001-50	10.0	22.1
	For SP/DP	Digital AFCS (DAFCS)	L2212-001-00	38.5	84.9
		Radar altimeter KRA 405B	L3441-090-04	2.6	5.7

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
SP/DP IFR or DP IFR with PFD/ND MEGHAS instrumentation NVG-modified version available on request	Chelton Series III	**Avionics solution 8**	**L2300-008-00**	**67.0**	**147.7**
		Dual controls, copilot	L6701-001-00	7.1	15.7
		Copilot I-panel extension 7”	L3111-001-03	2.7	6.0
		Avionics compartment	L2576-001-00	6.2	13.7
		Slant panel	L3113-001-00	0.7	1.5
		Center console	L3113-004-01	2.1	4.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Copilot door sliding window	L5211-001-00	0.1	0.2
		Windscreen wiper	L3042-001-00	4.9	10.8
		40 Ah battery	L2433-005-00	19.3	42.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		AC system	L2420-002-00	3.2	7.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		Map case in copilot door	L2514-003-01	0.5	1.1
		MEGHAS sensor kit	L2212-300-00	1.9	35.1
	For DP only	IFR pitch/roll SAS [3]	L2217-001-50	10.0	22.1
	For SP/DP	Digital AFCS (DAFCS)	L2212-001-00	38.5	84.9
		Radar altimeter KRA 405B	L3441-090-04	2.6	5.7

[2] to be replaced by option L2104-003-00 (7.0 kg / 15.4 lb) for EMS helicopters.

[3] or DAFCS (at least pitch/roll SAS is required).

6.1.5 Single pilot IFR packages

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
SP IFR with PFD/ND MEGHAS instrumentation NVG-modified version available on request	Gold Crown	**Avionics solution 9**	**L2300-009-00**	**56.0**	**123.5**
		Avionics compartment	L2576-001-00	6.2	13.7
		Slant panel	L3113-001-00	0.7	1.5
		Centre console	L3113-004-01	2.1	4.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2)]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Windscreen wiper	L3042-001-00	4.9	10.8
		40 Ah battery	L2433-005-00	19.3	42.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		AC system	L2420-002-00	3.2	7.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		MEGHAS sensor kit	L2212-300-00	15.9	35.1
		Digital AFCS (DAFCS)	L2212-001-00	38.5	84.9

Package	Radio line	Minimum equipment list	Reference	Weight (kg)	Weight (lb)
SP IFR **PFD/ND Meghas instrumentation** NVG-modified version available on request	Chelton Series III	**Avionics solution 10**	**L2300-010-00**	**64.0**	**141.1**
		Avionics compartment	L2576-001-00	6.2	13.7
		Slant panel	L3113-001-00	0.7	1.5
		Centre console	L3113-004-01	2.1	4.6
		Copilot pitot static system	L3411-001-00	1.3	2.9
		Bleed air heating [2)]	L2104-100-00	6.6	14.6
		2nd landing light (450W)	L3343-003-00	3.2	7.1
		Windscreen wiper	L3042-001-00	4.9	10.8
		40 Ah battery	L2433-005-00	19.3	42.6
		200 A starter / generators	L2432-001-00	3.6	7.9
		AC system	L2420-002-00	3.2	7.1
		Map case on I-panel glare shield	L3111-001-10	0.4	0.9
		MEGHAS sensor kit	L2212-300-00	15.9	35.1
		Digital AFCS (DAFCS)	L2212-001-00	38.5	84.9

[2)] to be replaced by option L2104-003-00 (7.0 kg / 15.4 lb) for EMS helicopters.

6.2 Package Descriptions

For detailed information about the different packages, please refer to paragraph 6.2 in the brochure "EC 135 AVIONICS Mission Packages" (135 AVIONICS 01.101.01 E).

6.3 Mandatory Add-Ons for Special Operations

Operation / Equipment	Reference	SP VFR (conventional) Solutions 1-2	SP/DP VFR (conventional) Solutions 1-2	DP IFR (conventional) Solutions 3-4	SP/DP IFR (MEGHAS) Solutions 7-8	SP IFR (MEGHAS) Solutions 9-10	Weight (kg)	Weight (lb)
CAT A								
Engine fire extinguishing system	L2621-001-00	X	X	X	X	X	3.8	8.4
Radar altimeter KRA 405 B / KNI 416	L3441-002-00	X	X	X			2.8	6.2
or KRA 405 B	L3441-090-04				X Std for SP		2.6	5.7
2nd Artificial horizon (2")	T.b.d.	X	Function included				1.7	3.7
CAT A / IFR								
2nd directional gyro C 14 D (HONEYWELL)	L3421-091-01			X	Function included		T.b.d.	T.b.d.
JAR-OPS III								
	To be defined							
JAR-OPS III Night VFR								
2" std-by horizon AI 804, Goodrich (with battery)	L3425-090-09	X	X	Function included			5.6	12.3
2nd altimeter (encoding) 5035 P2 P42 (3")	L3412-001-10	X	Function included				1.0	2.2

6.4 Additional Equipment

6.4.1 – 6.4.5

For detailed information about additional equipment, please refer to chapters 6.4.1 through 6.4.5 in the brochure "EC 135 AVIONICS Mission Packages" (135 AVIONICS 01.101.01 E).

6.4.6 Optional Headsets

The equipment listed below applies to any of the avionics packages described in chapter 6.1.

Manufacturer	Reference	Linear Wire	Spiral Wire	Low Imp.	High Imp.	ANR [1)]	Type	Weight (kg)	Weight (lb)
HOLMBERG	L2315-001-60		•	•			90-04-08022-10	0.7	1.5
HOLMBERG	L2315-001-61		•		•		90-04-06025-10	0.7	1.5
ELNO	L2315-001-30	•		•			247 SP 165	0.5	1.1
ELNO	L2315-001-31	•			•		247 SP 167	0.5	1.1
DAVID CLARK	L2315-001-10		•	•			H 10-76	0.5	1.1
DAVID CLARK	L2315-001-11		•		•		H 10-56	0.5	1.1
DAVID CLARK	L2315-001-12		•		•	•	H 20-10HX	0.5	1.1
SENNHEISER	L2315-001-52	•		•		•	HMEC 222 III	0.4	0.9
BOSE	L2315-001-70		•		•	•	011697	0.45	1.0
BOSE	L2315-001-71		•	•		•	019580	0.45	1.0

6.4.7 Optional Helmets

The equipment listed below applies to any of the avionics packages described in chapter 6.1.

Manufacturer	Reference	Linear Wire	Spiral Wire	Low Imp.	High Imp.	ANR [1)]	Type	Weight (kg)	Weight (lb)
GENTEX	L2315-002-10	•		•			SPH 5	1.3	2.4

[1)] ANR: Active Noise Reduction headsets.

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7. MAIN PERFORMANCE

The following performance values and figures refer to an EC135, equipped with average production engines.

Unless otherwise specified, the values and figures refer to a clean helicopter at Sea Level (SL), in International Standard Atmosphere (ISA) and zero wind condition.

NOTE: The limitations for gross weight above 2,720 kg, in particular for 2,835 kg will be reduced during the year 2001.

PERFORMANCE ON 2 ENGINES		**Pratt & Whitney PW206B2**		**Turbomeca Arrius 2B1A_1**	
Gross Weight	kg	2,720	2,835	2,720	2,835
	lb	6,000	6,250	6,000	6,250
▪ Maximum speed VNE	km/h	278	259	278	259
	kts	150	140	150	140
▪ Maximum cruising speed	km/h	257	256	257	256
	kts	139	138	139	138
▪ Recommended cruising speed	km/h	226	227	234	235
	kts	122	123	126	127
▪ Rate of climb (TOP)	m/s	8.4	7.6	8.4	7.6
	ft/min	1,650	1,500	1,650	1,500
▪ Hover ceiling IGE (TOP), no wind (4 ft AGL), ISA	m	4,140	1,520 [1)]	4,040	1,520 [1)]
	ft	13,600	5,000 [1)]	13,250	5,000 [1)]
▪ Hover ceiling IGE (TOP), no wind (4 ft AGL), ISA + 20°C	m	2,830	820 [1)]	2,740	820 [1)]
	ft	9,300	2,700 [1)]	9,000	2,700 [1)]
▪ Hover ceiling OGE (TOP), ISA	m	3,260	2,190	3,100	2,190
	ft	10,700	7,200	10,200	7,200
▪ Hover ceiling OGE (TOP), ISA + 20°C	m	1,640	1,100	1,525	1,005
	ft	5,400	3,600	5,000	3,300
▪ Service ceiling, MCP, (climb reserve 200 ft/min), ISA	m	5,180	3,045 [2)]	5,225	3,045 [2)]
	ft	17,000	10,000 [2)]	17,150	10,000 [2)]
▪ Range with maximum standard fuel capacity at economical cruise speed (no reserve)	km	630	620	620	615
	nm	340	335	335	332
▪ Endurance with maximum standard fuel capacity at 65 KIAS (no reserve)	h:min	3:39	3:33	3:27	3:24

[1)] 5,000 ft density altitude is the current certification limitation for gross weight above 2,720 kg (see also note above).

[2)] 10,000 ft pressure altitude is the current certification limitation for gross weight above 2,720 kg (see also note above).

PERFORMANCE ON 1 ENGINE		Pratt & Whitney PW206B2		Turbomeca Arrius 2B1A_1	
Gross Weight	kg lb	2,720 6,000	2,835 6,250	2,720 6,000	2,835 6,250
▪ Single engine service ceiling with 100 ft/m climb reserve (MCP OEI-power)	m ft	3,250 10,650	2,580 9,350	3,370 11,050	3,020 9,900
▪ Maximum rate of climb (MCP at SL)	m/s ft/min	1.4 280	1.0 200	1.4 280	1.0 200
▪ Max. temperature for CAT A take-off from clear heliport at SL	°C	+40°C [1)]	T.b.d.	+40°C [1)]	T.b.d.
▪ Hover ceiling OGE, SL, ISA, OEI (PW: 30-sec-power / 2.0 min-power; TM: 2.5 min-power)	kg lb	2,685 / 2,640 5,919 / 5,820		2,635 5,809	
▪ Hover ceiling OGE, SL, ISA + 20°C, OEI (PW: 30-sec-power / 2.0 min-power; TM: 2.5 min-power)	kg lb	2,610 / 2,455 5,754 / 5,412		2,420 5,335	
▪ CAT A, VTOL, SL, ISA	kg lb	2,835 6,250		2,835 6,250	
▪ CAT A, VTOL, SL, ISA + 10°C	kg lb	2,835 6,250		2,770 6,107	

1) certification limitation for CAT A is ISA + 25°C

OPERATING LIMITATIONS

The helicopter can be operated within the following altitude and temperature limitations (according to the Flight Manual):

NOTE: The limitations for gross weight above 2,720 kg, in particular for 2,835 kg will be reduced during the year 2001.

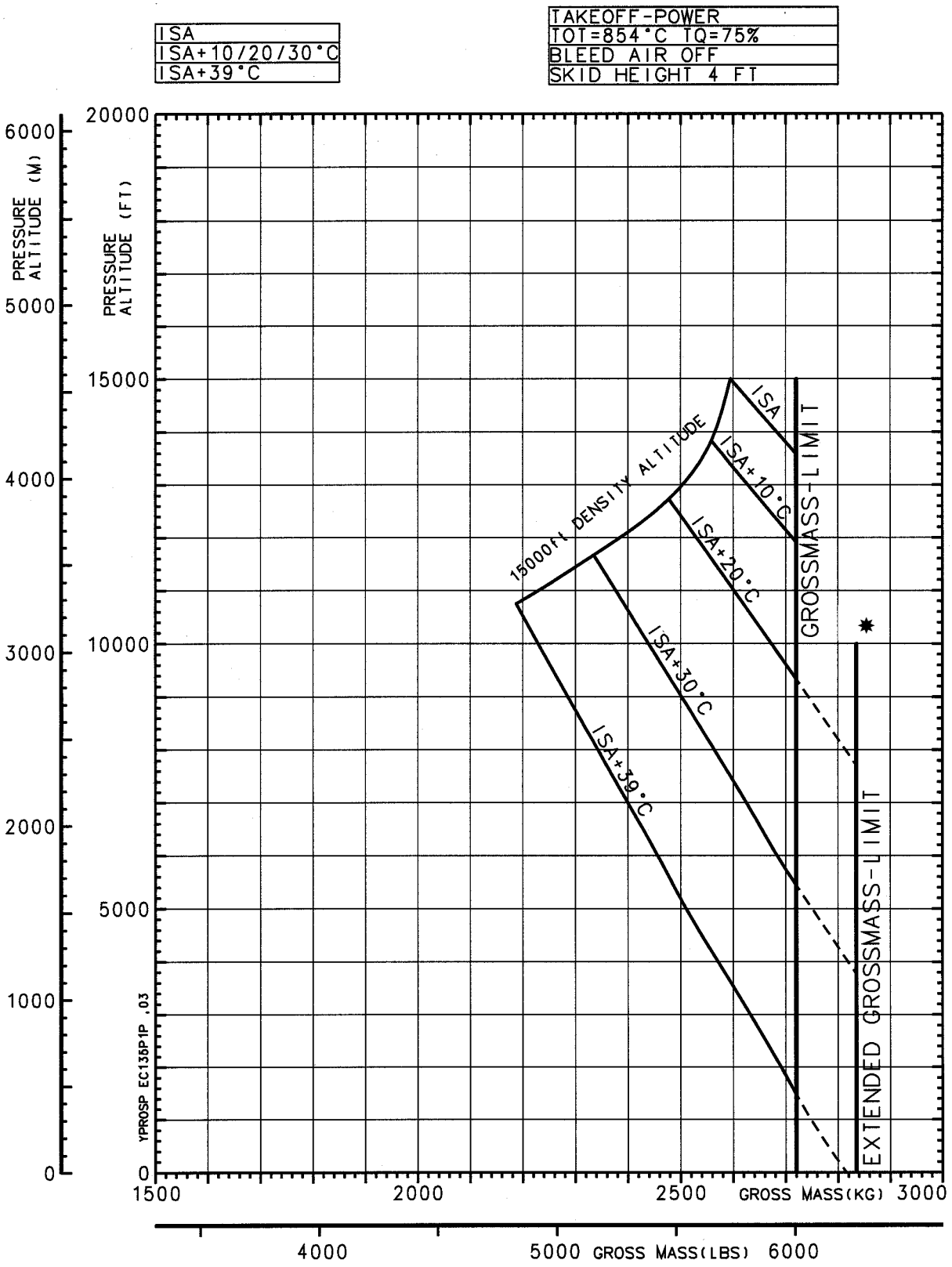
Gross Weight	**2,720 kg 6,000 lb**	**2,835 kg 6,250 lb**
▪ Maximum operating altitude	6,100 m PA 20,000 ft PA	3,048 m PA 10,000 ft PA
▪ Maximum operating altitude for hover in ground effect, takeoff and landing	4,570 m DA 15,000 ft DA	1,524 m DA 5,000 ft DA
▪ Minimum temperature	- 30°C (- 22°F)	- 30°C (- 22°F)
▪ Maximum temperature	ISA + 39°C (max. + 50°C/ + 122°F)	+ 30°C (+ 86°F)

ABBREVIATIONS

AGL : Above Ground Level
DA : Density Altitude
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
TOP : Take-Off Power
VNE : Never-Exceed Speed
VTOL: Vertical Take-Off and Landing

Hover In Ground Effect (HIGE, TOP, no wind)

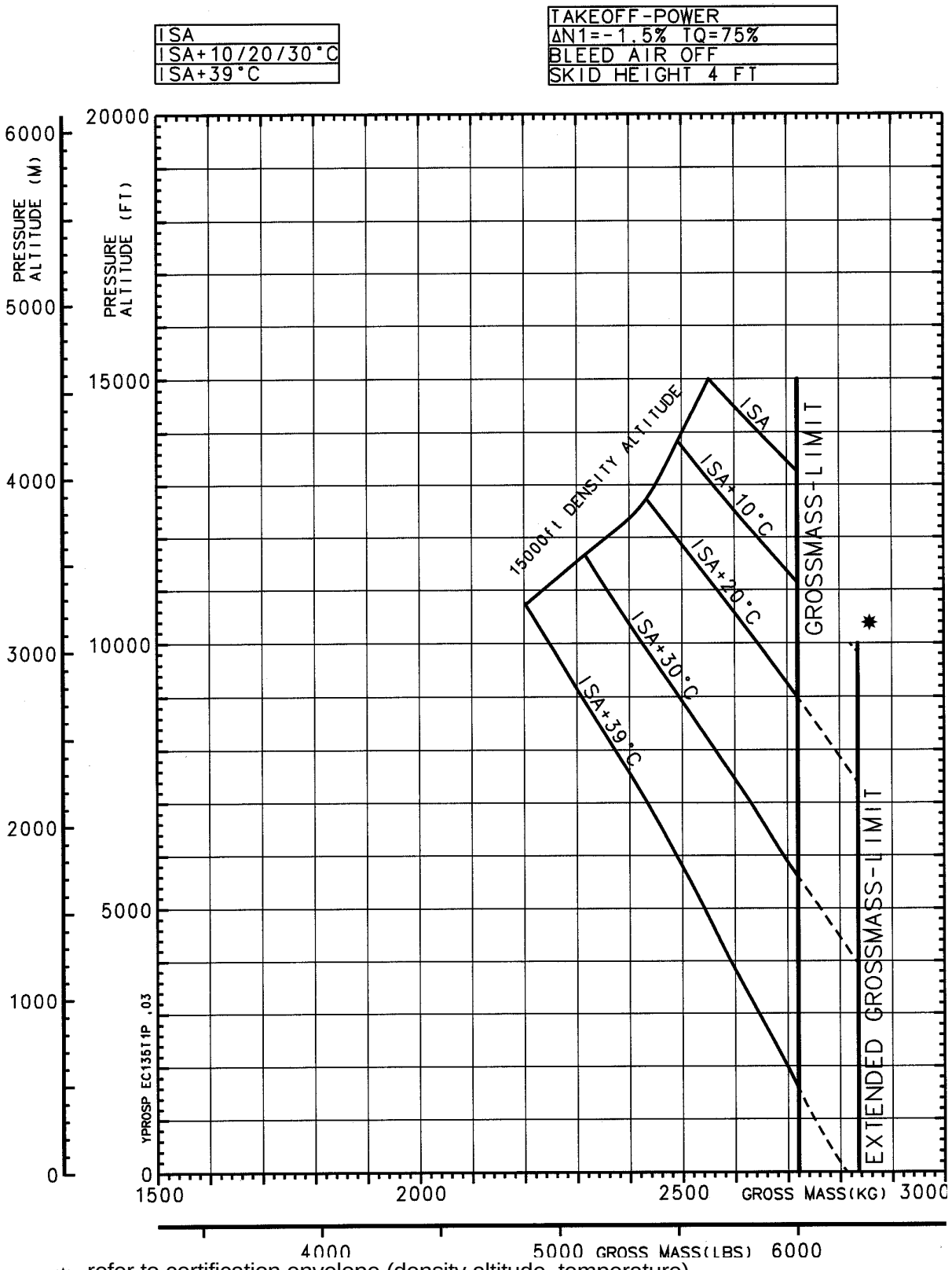
with two PW206B2 engines



✸ refer to certification envelope (density altitude, temperature)

Hover In Ground Effect (HIGE, TOP, no wind)

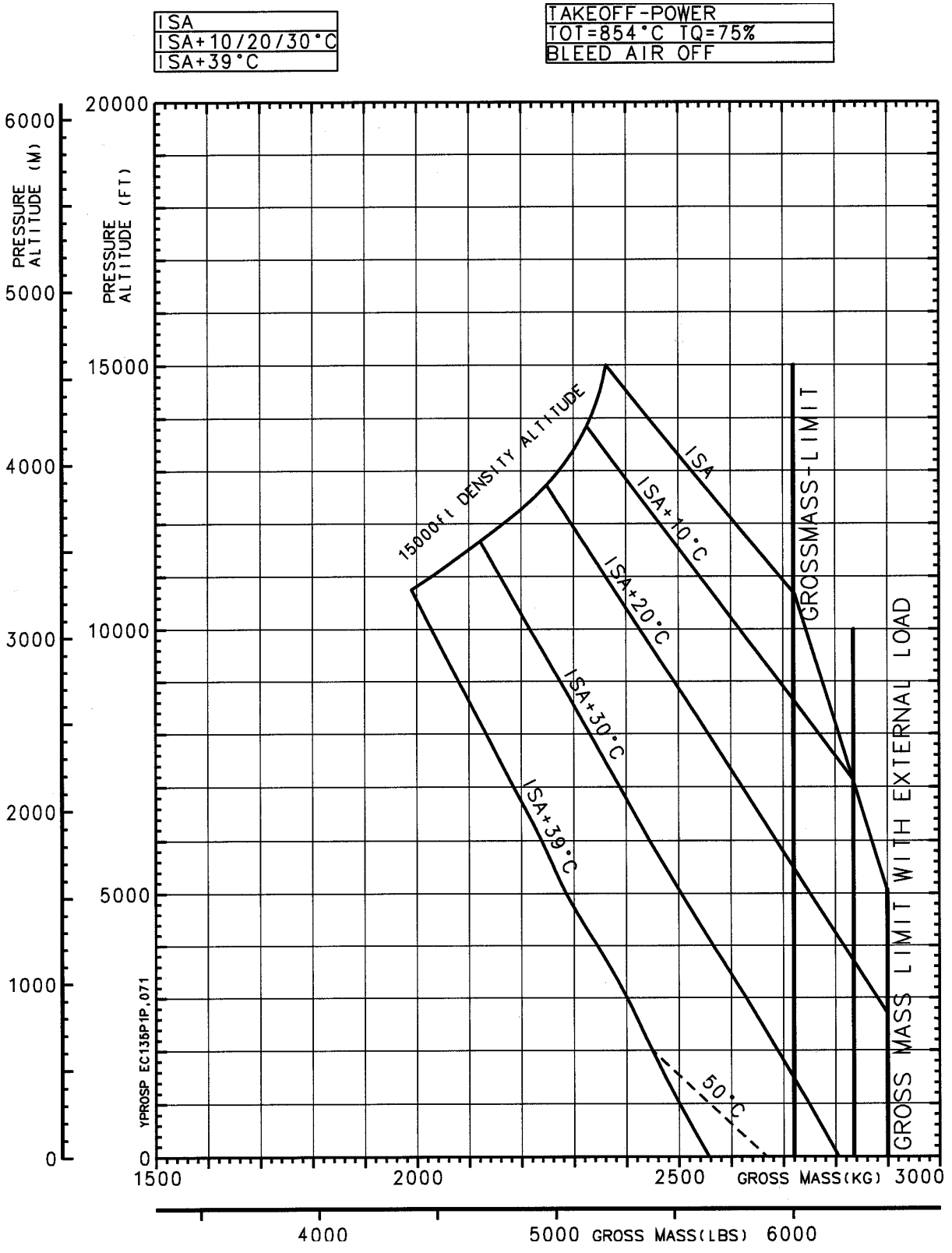
with two ARRIUS 2B1A_1 engines



✸ refer to certification envelope (density altitude, temperature)

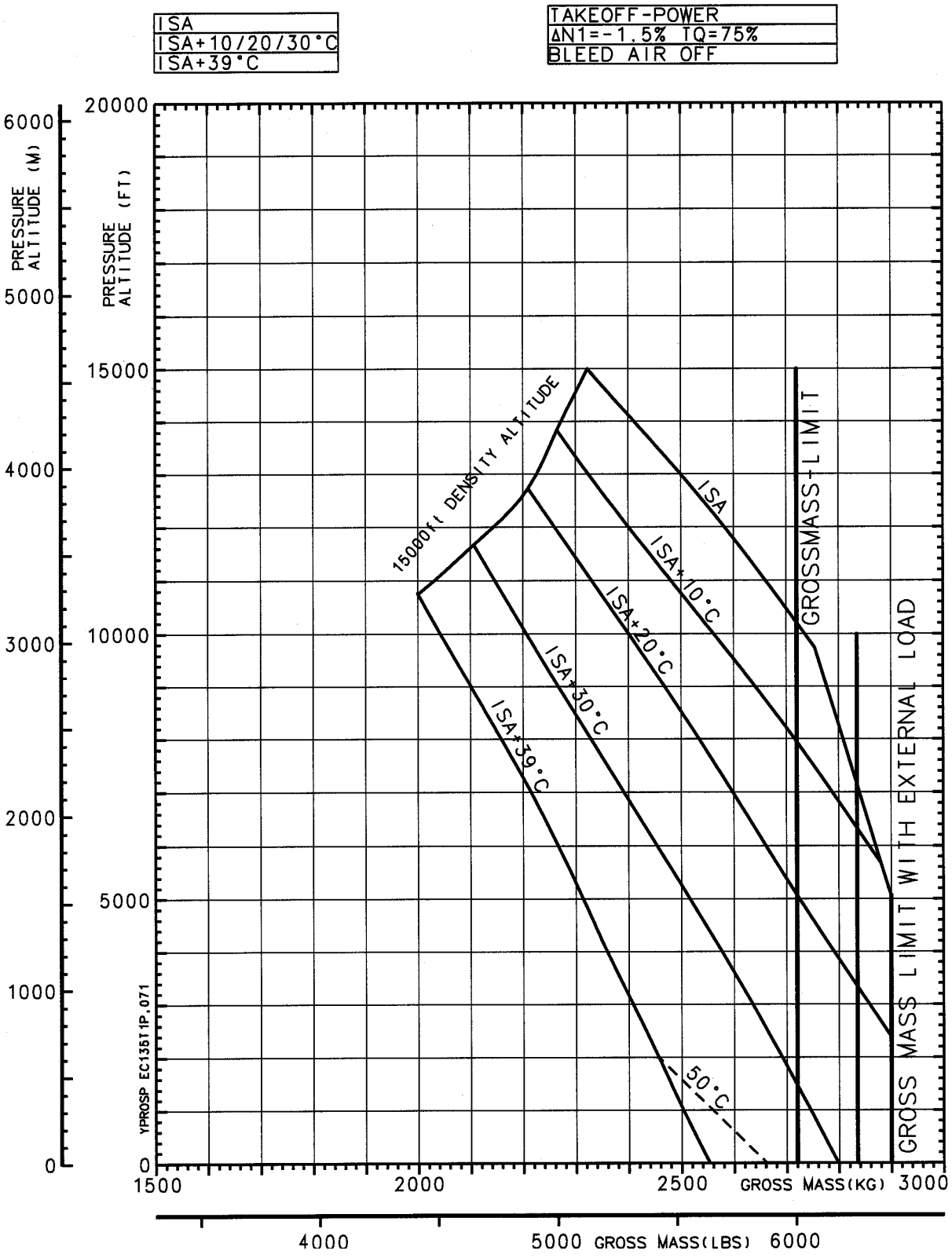
Hover Out Of Ground effect (HOGE, TOP)

with two PW206B2 engines



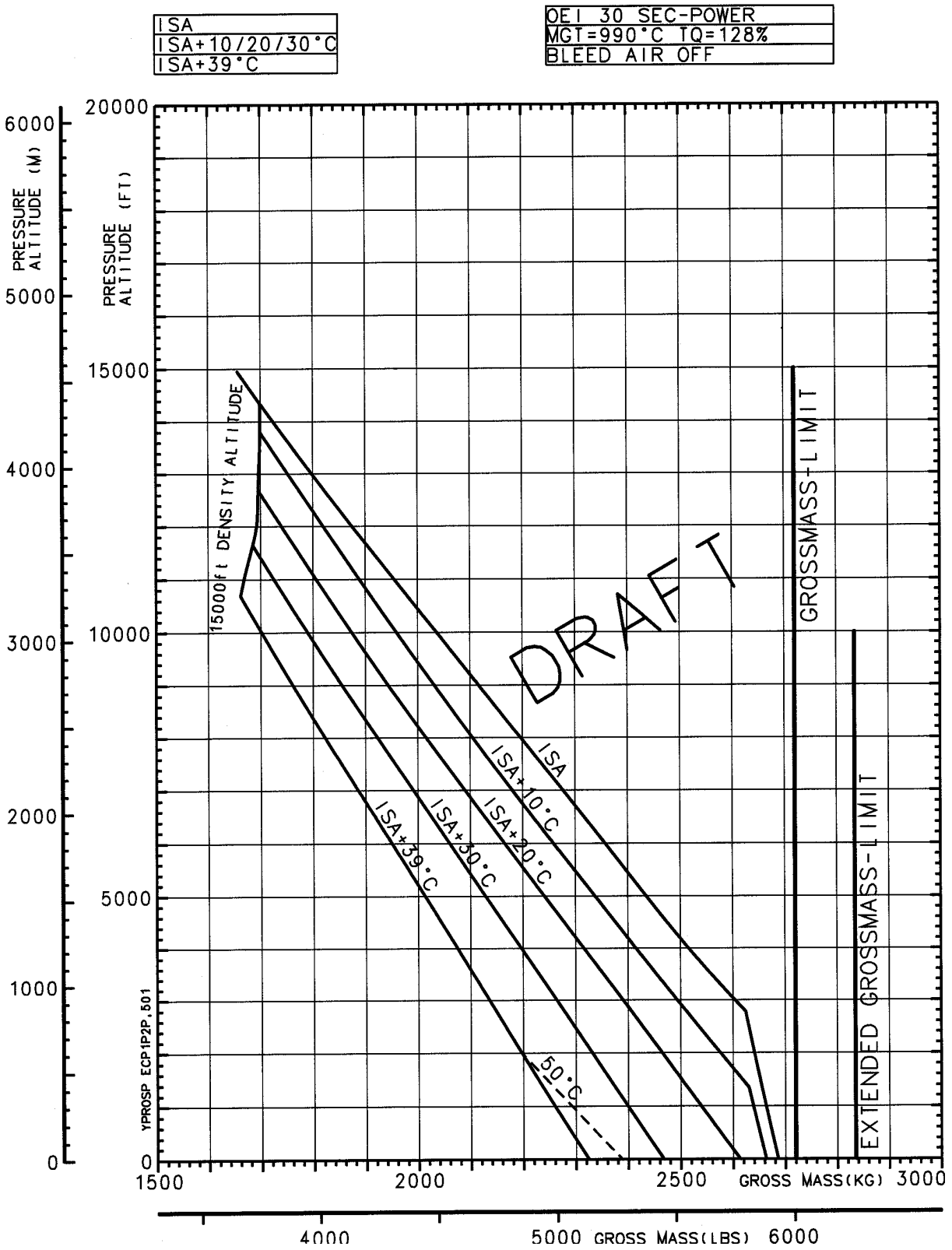
Hover Out Of Ground Effect (HOGE, TOP)

with two ARRIUS 2B1A_1 engines



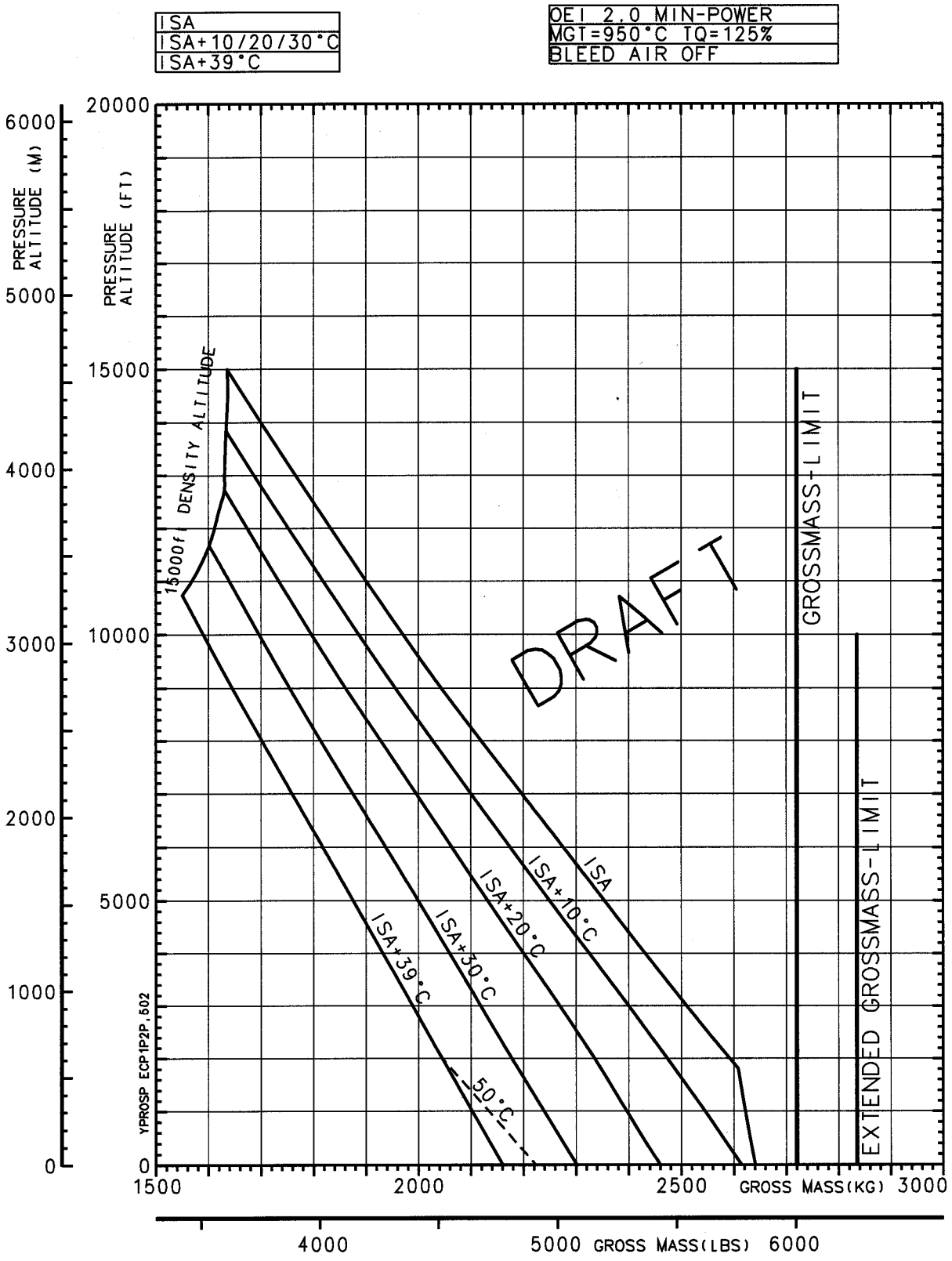
Hover Out Of Ground effect (HOGE, OEI, 30 sec-power)

with one PW206B2 engine



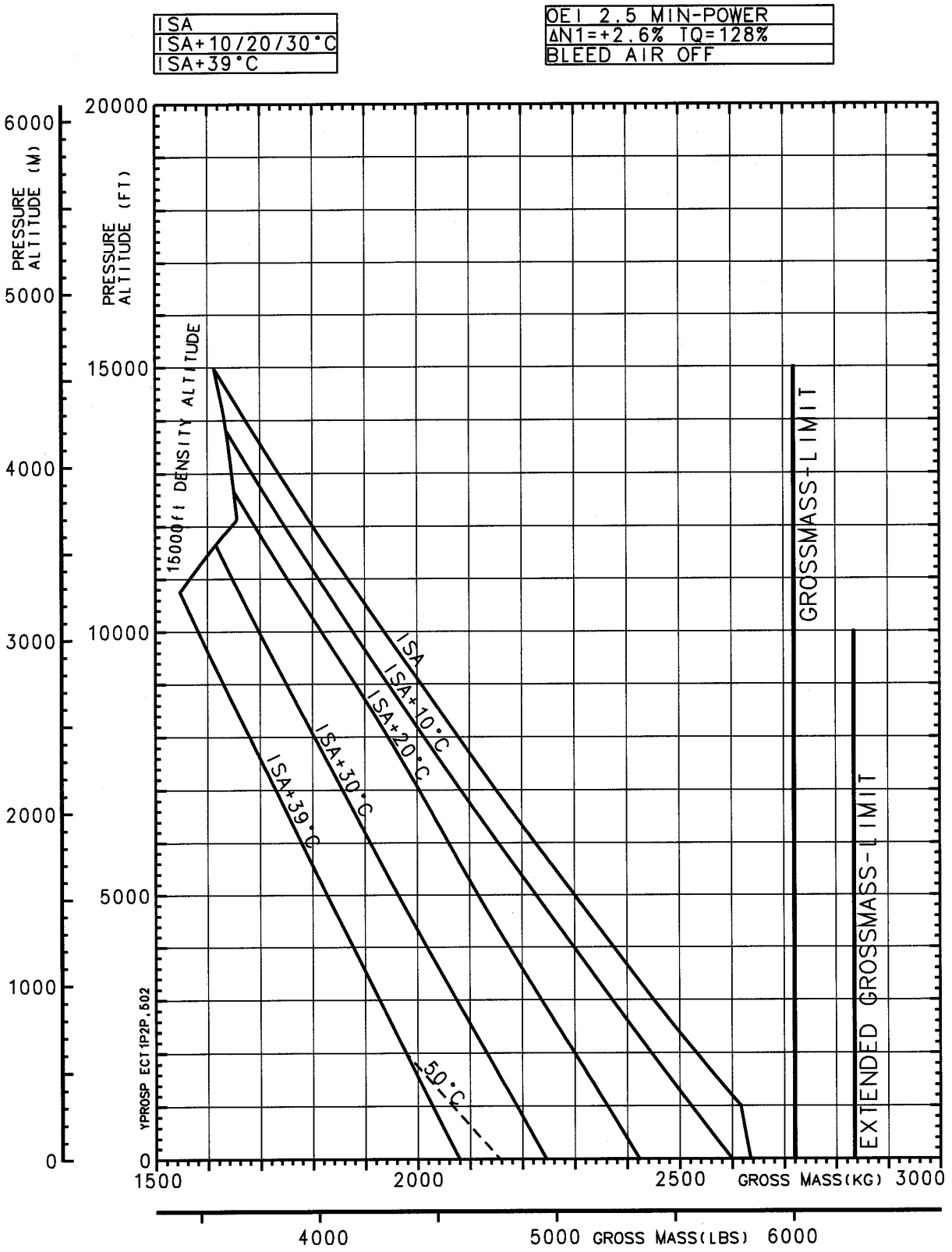
Hover Out Of Ground effect (HOGE, OEI, 2.0 min-power)

with one PW206B2 engine



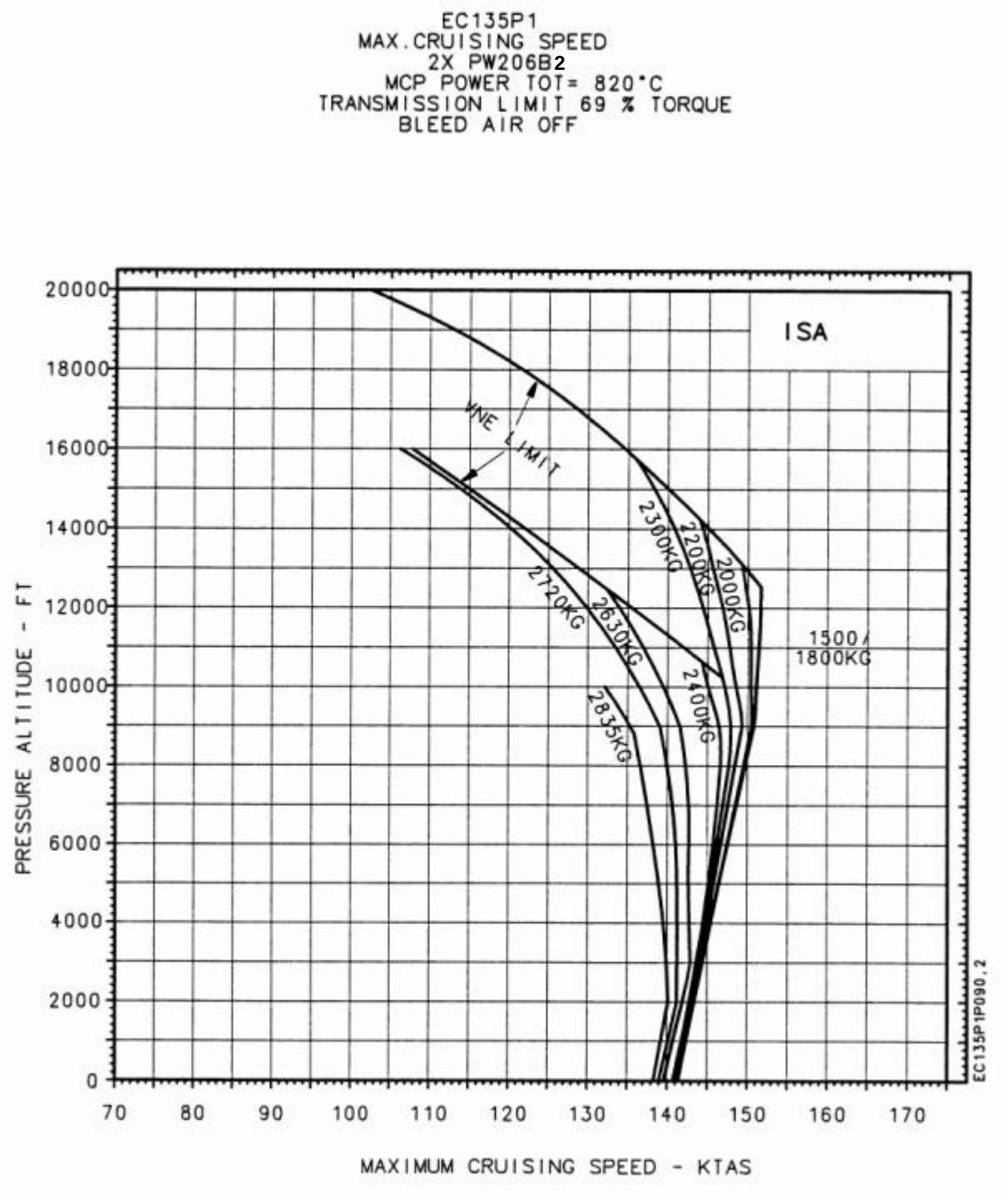
Hover Out Of Ground Effect (HOGE, OEI, 2.5 min-power)

with one ARRIUS 2B1A_1 engine



Maximum Cruising Speed

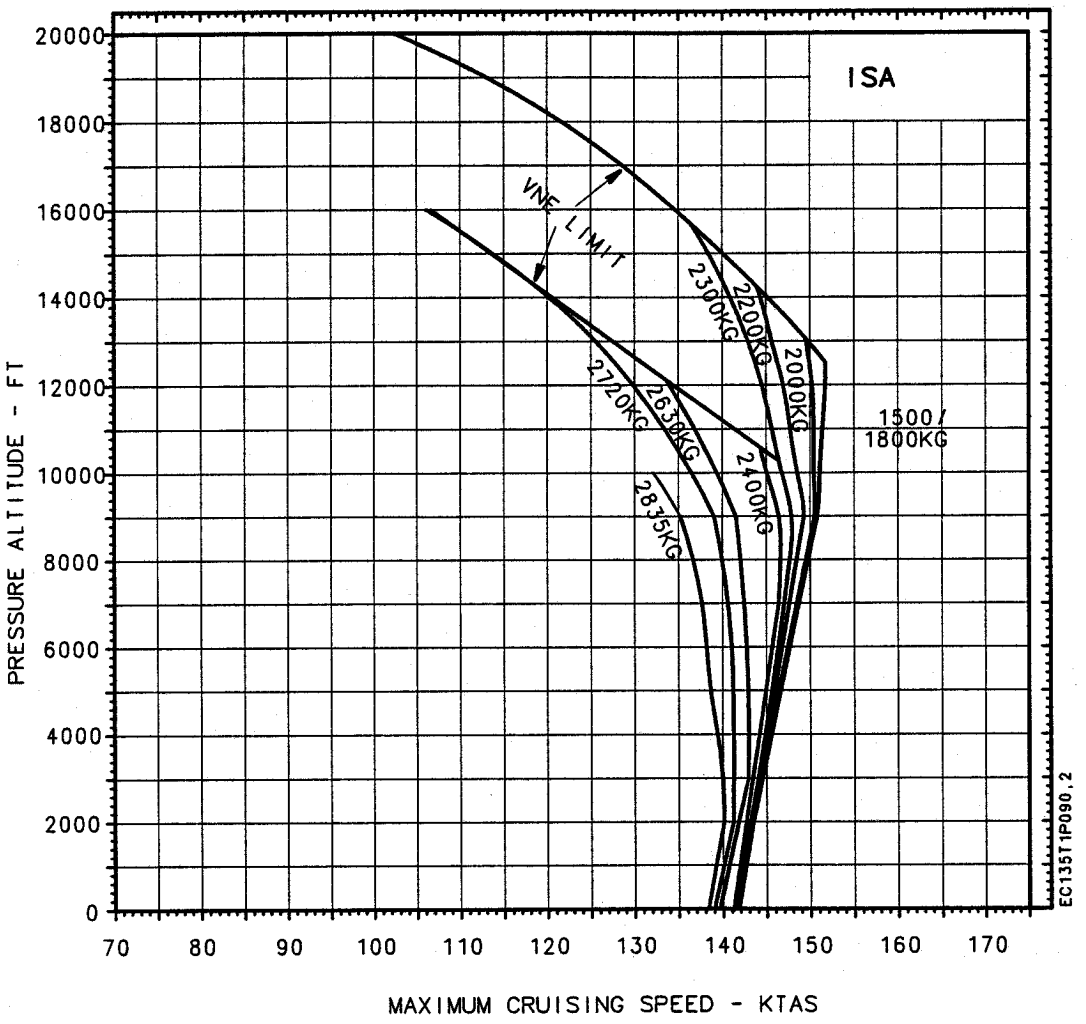
with two PW206B2 engines



Maximum Cruising Speed

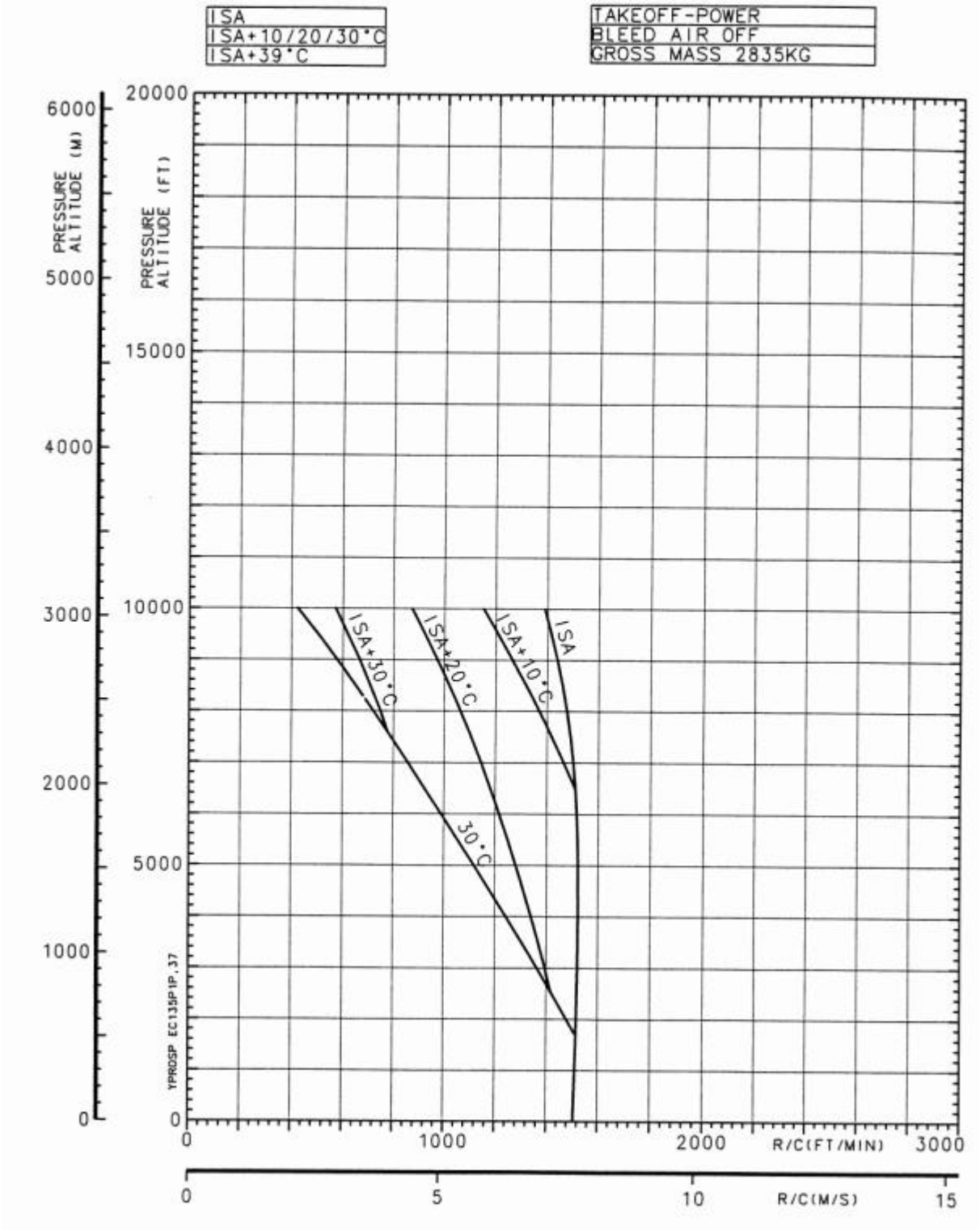
with two ARRIUS 2B1A_1 engines

EC135 T1
MAX.CRUISING SPEED
2 X TURBOMECA ARRIUS 2B1A_1
MCP POWER ΔN1=-2.4%
TRANSMISSION LIMIT 69 % TORQUE
BLEED AIR OFF



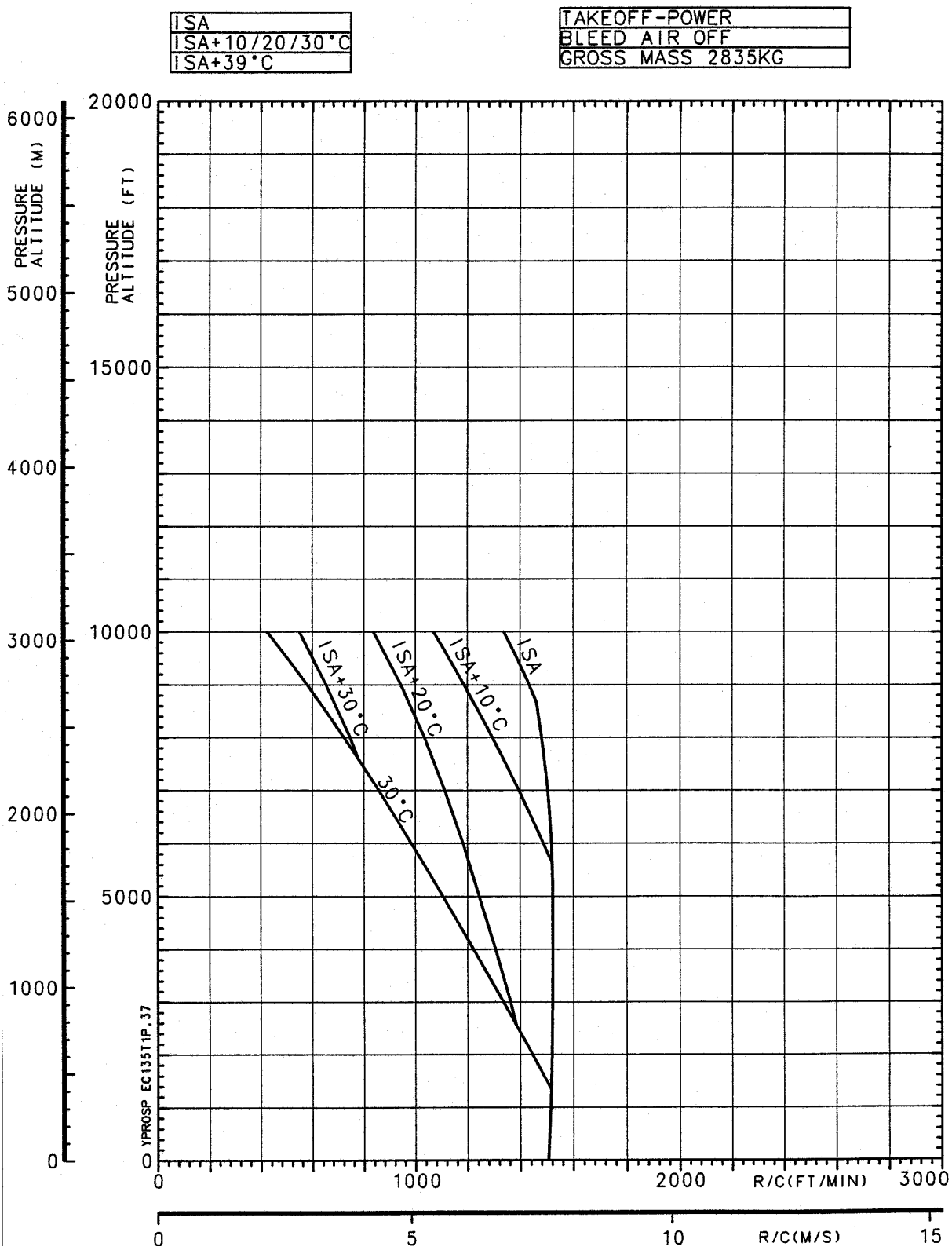
Maximum Rate Of Climb, TOP

with two PW206B2 engines, MTOW: 2835 kg



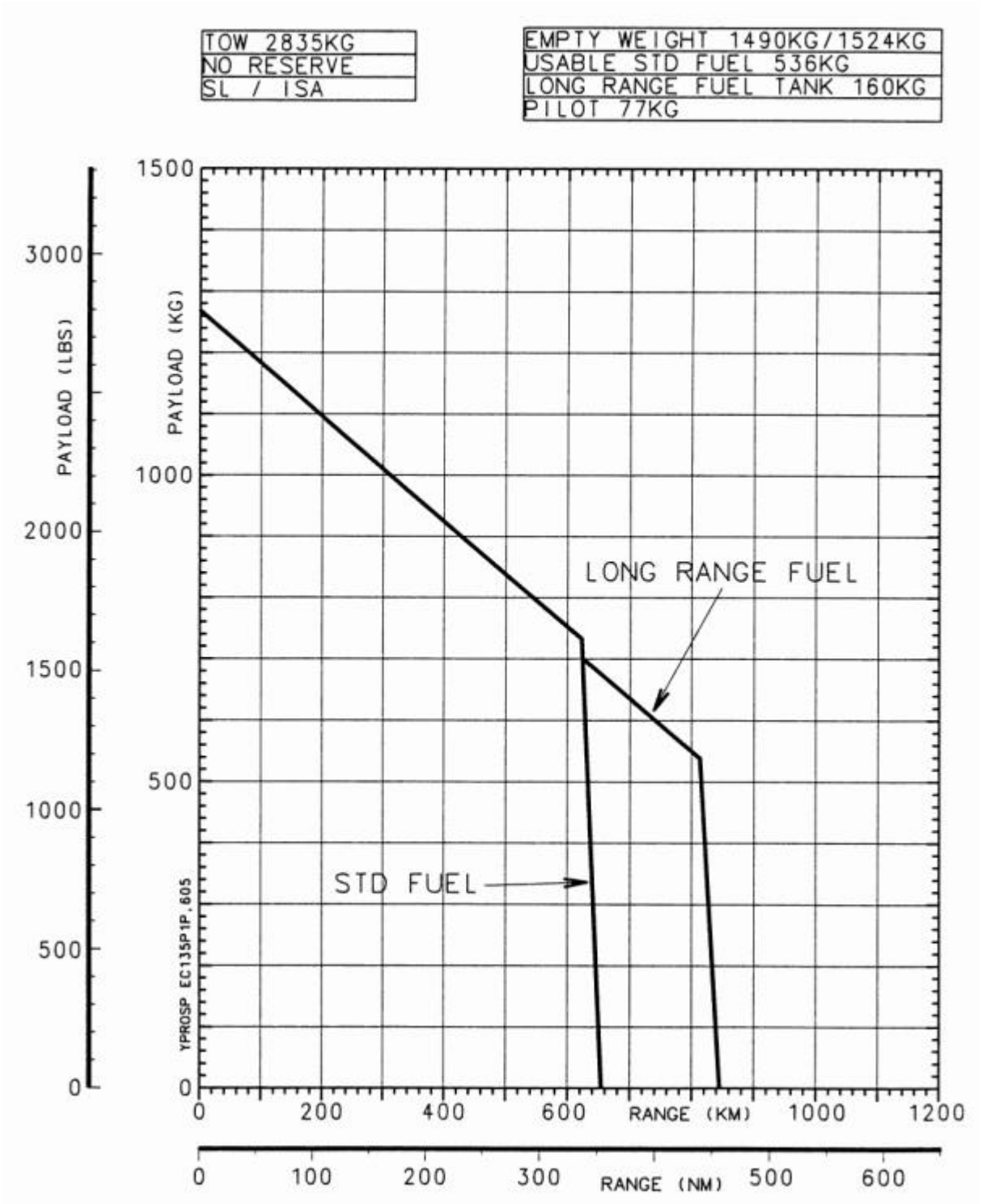
Maximum Rate Of Climb, TOP

with two ARRIUS 2B1A_1 engines, MTOW: 2835 kg



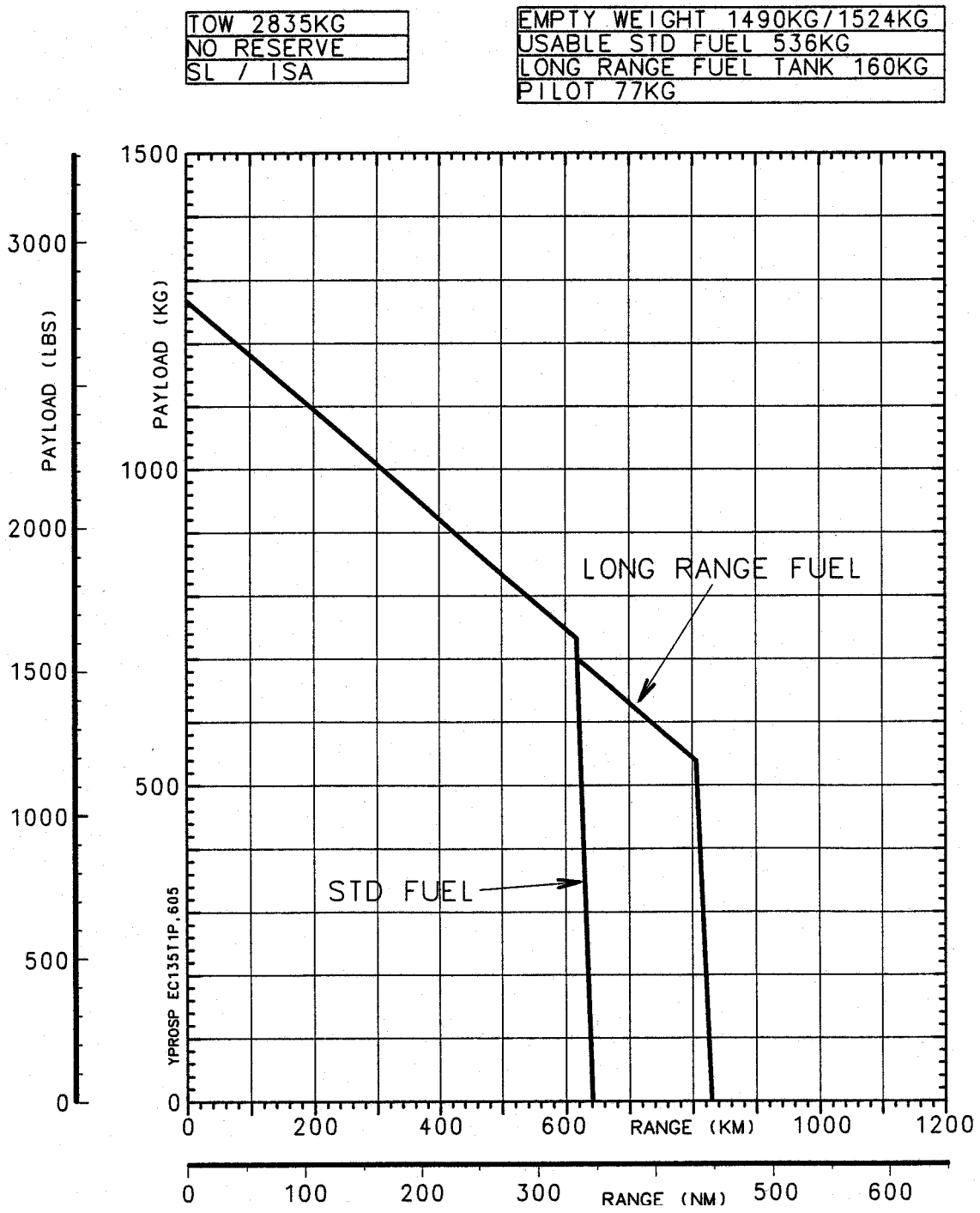
Payload/Range

with two PW206B2 engines



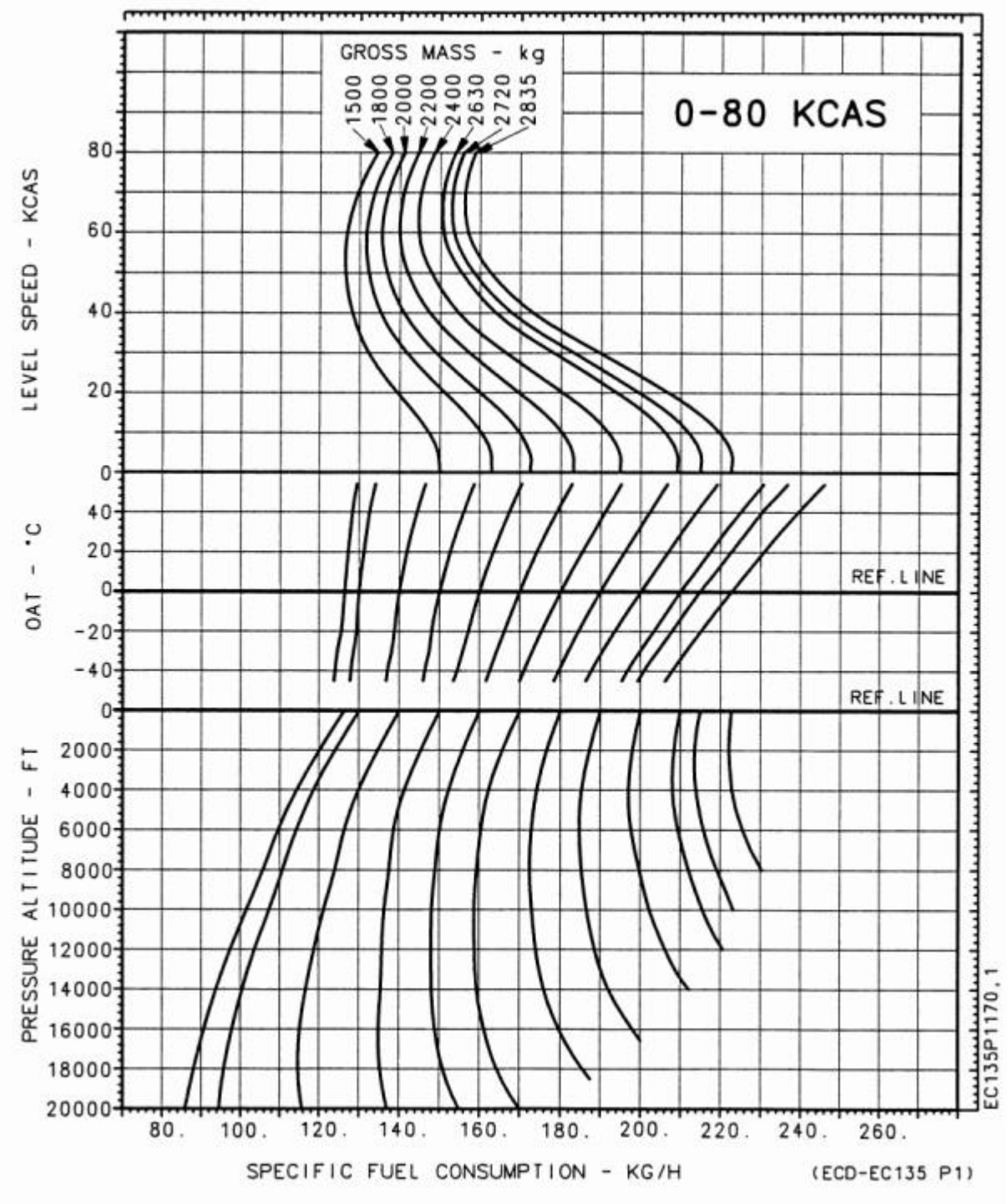
Payload/Range

with two ARRIUS 2B1A_1 engines



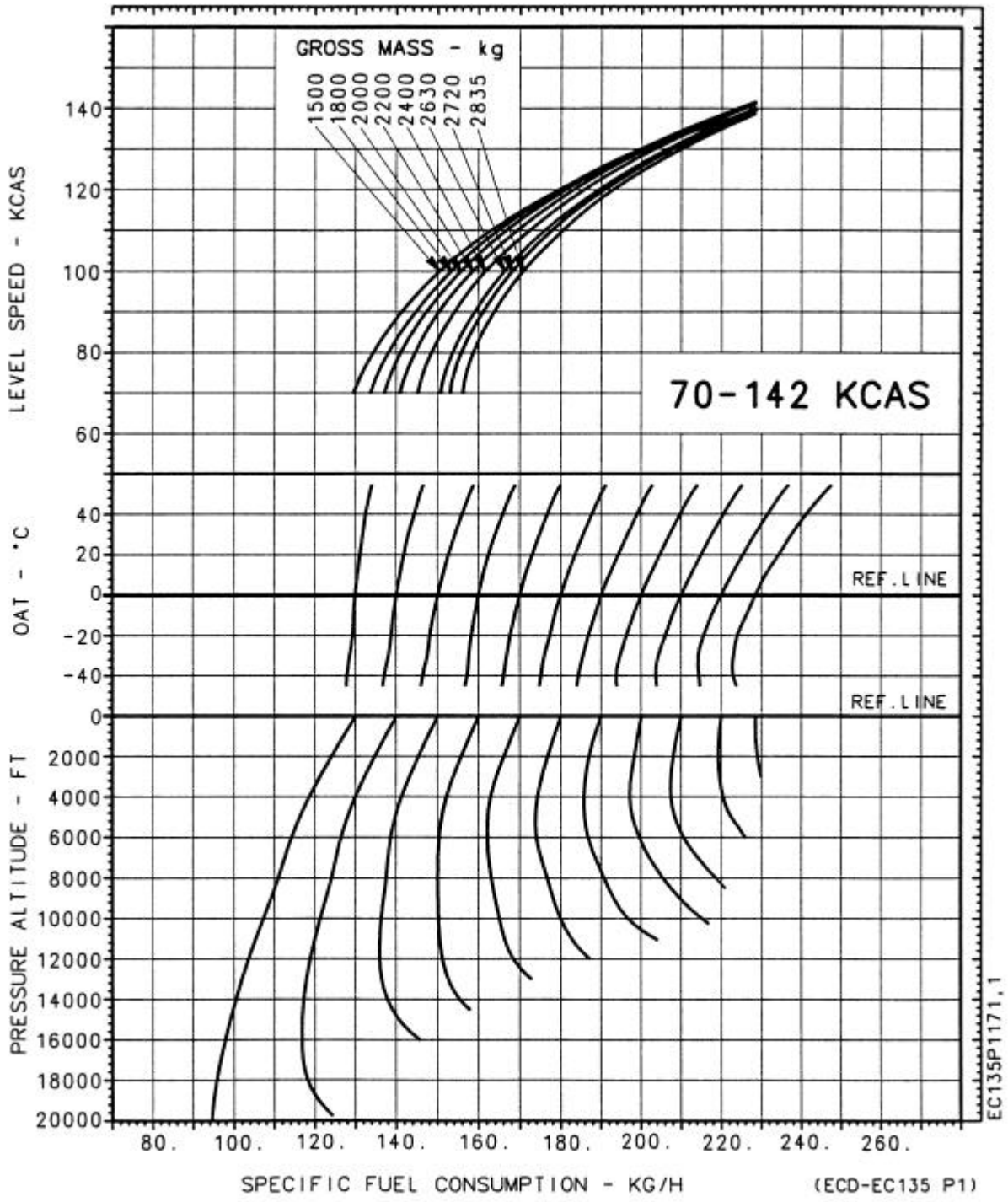
Fuel Consumption

with two PW206B2 engines



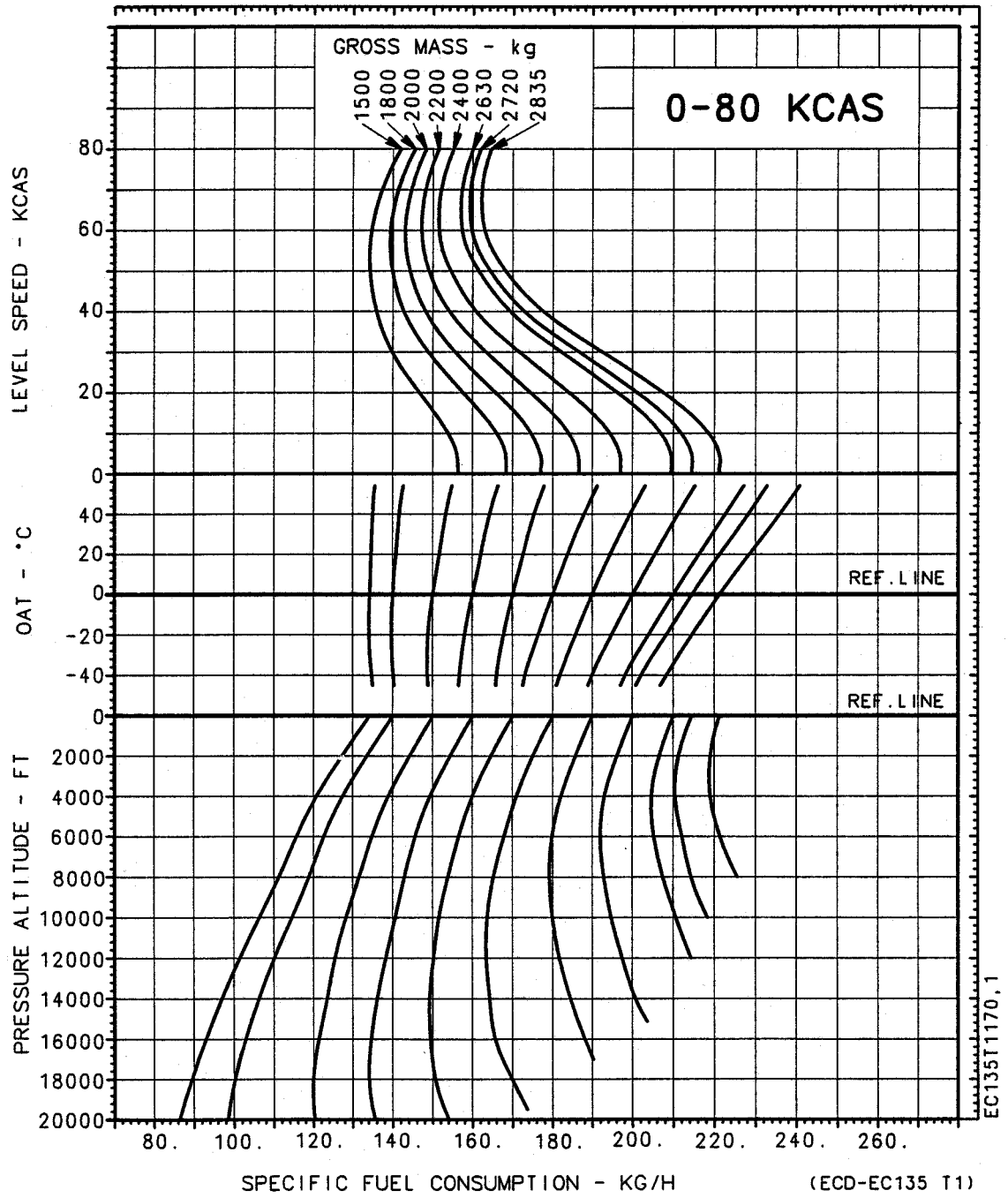
Fuel Consumption

with two PW206B2 engines



Fuel Consumption

with two ARRIUS 2B1A_1 engines



Fuel Consumption

with two ARRIUS 2B1A_1 engines