



**Bell** 206L4

*On a Mission.*

**Bell** Helicopter®  
A Textron Company

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## Table of Contents

Publisher's Notice.....	1
Exterior Dimensions .....	2
Cabin Dimensions .....	4
Door Dimensions .....	4
Specification Summary (U.S. Units).....	6
Specification Summary (Metric Units) .....	7
Bell 206L4 Seating .....	8
Base Aircraft Configuration.....	10
Standard Configuration.....	11
Optional Accessories .....	12
Helicopter Performance Charts .....	15
Fuel Flow vs. Airspeed .....	23
Cost of Operations.....	35
Limited Life Components.....	38
Paint Schemes .....	39
Training.....	40

## Publisher's Notice

The data presented in this document are general in nature, and have been compiled from Bell Helicopter Textron Inc. (BHTI) source materials including but not limited to: *The Approved Rotorcraft Flight Manual*, *Maintenance Manual*, *Illustrated Parts Catalog*, and other engineering design specifications.

This document is intended for the use of BHTI employees, and BHTI independent representatives (international dealers), and for prospective customers as an aid in determining estimated weight and performance of the helicopter when configured with equipment for specific missions.

Disclosure, reproduction, or use of any material in this document by persons other than BHTI employees, and BHTI independent representatives, and prospective customers are forbidden without written permission from Bell Helicopter Textron Inc.

The listings of Optional Equipment ("Kits") are subject to revision and change, and also may be different for specific serial number helicopters or special custom configurations. Please consult the "Notes" column found in the optional equipment list tables for equipment compatibility. The continuing product improvement process of BHTI may cause some components, equipment, and compatibility to be changed or replaced.

The specifications, weights, dimensions, and performance data shown in this document are subject to change without notice.

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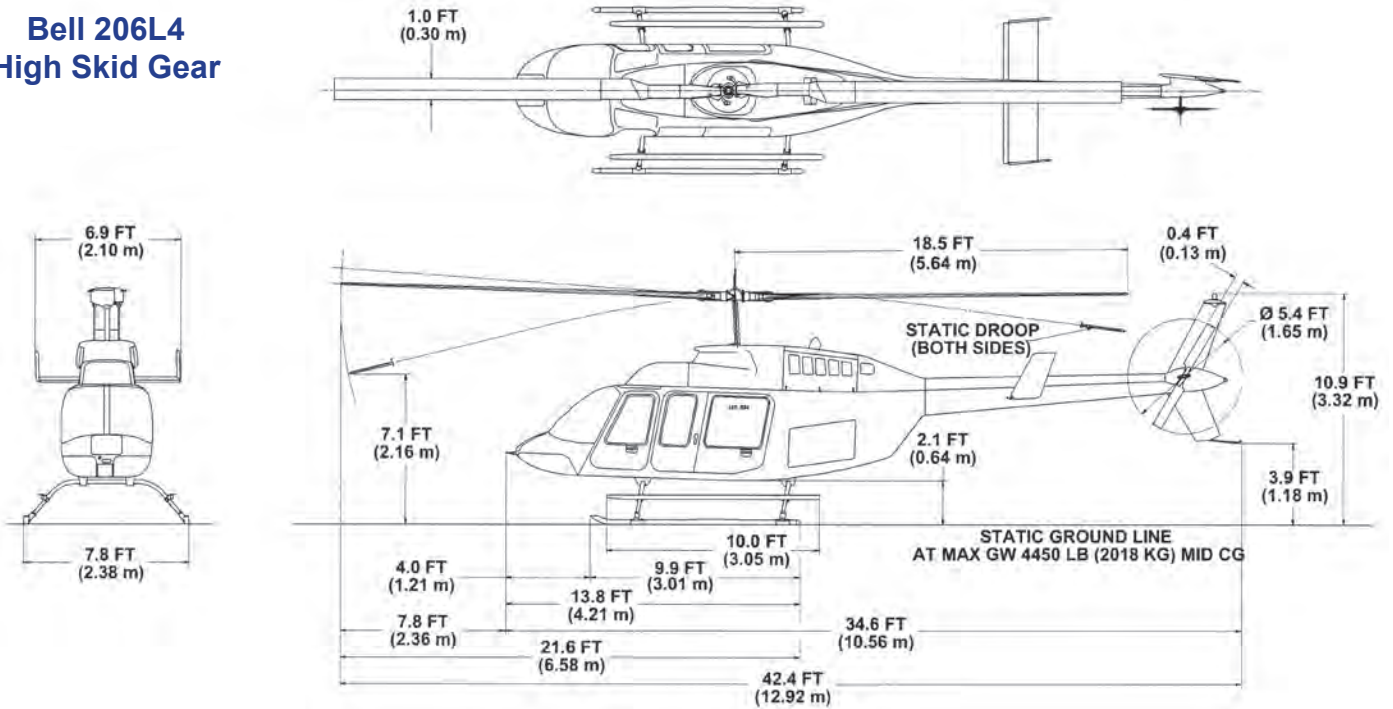
**Specifications subject to change without notice.**



## Exterior Dimensions

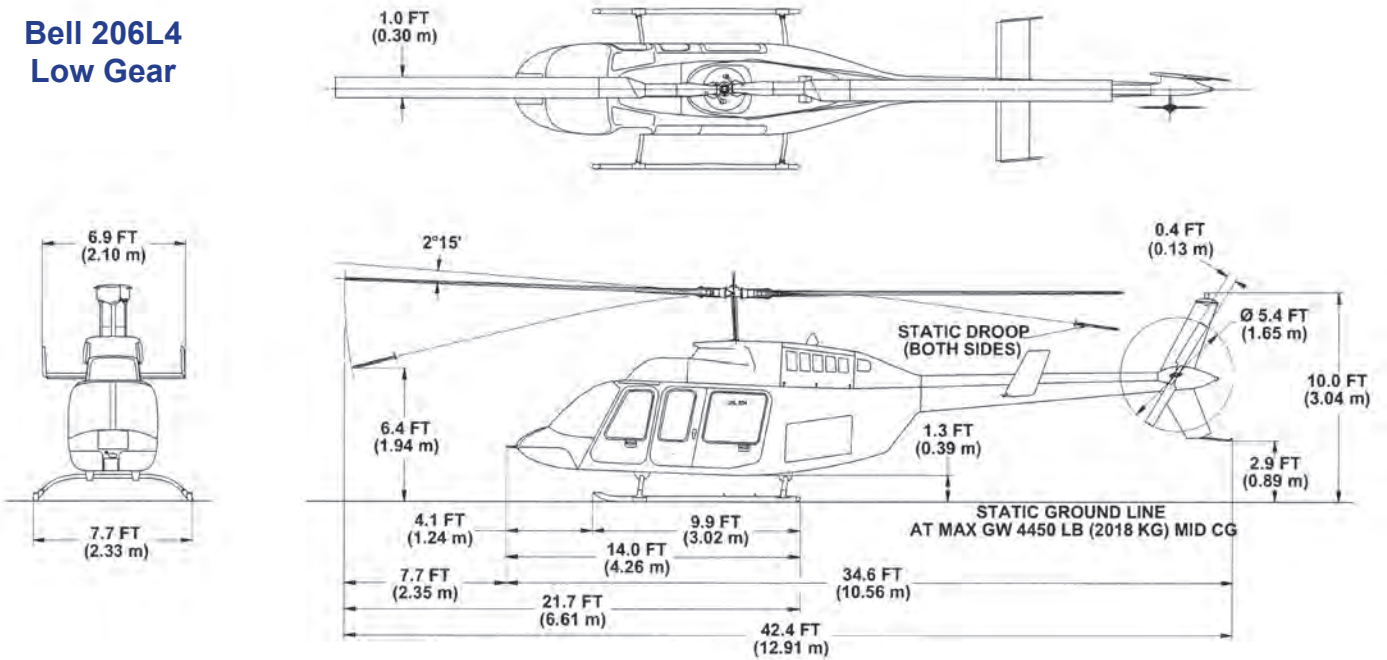
### HIGH SKID GEAR WITH AA FLITESTEP®

#### Bell 206L4 High Skid Gear



### LOW SKID GEAR

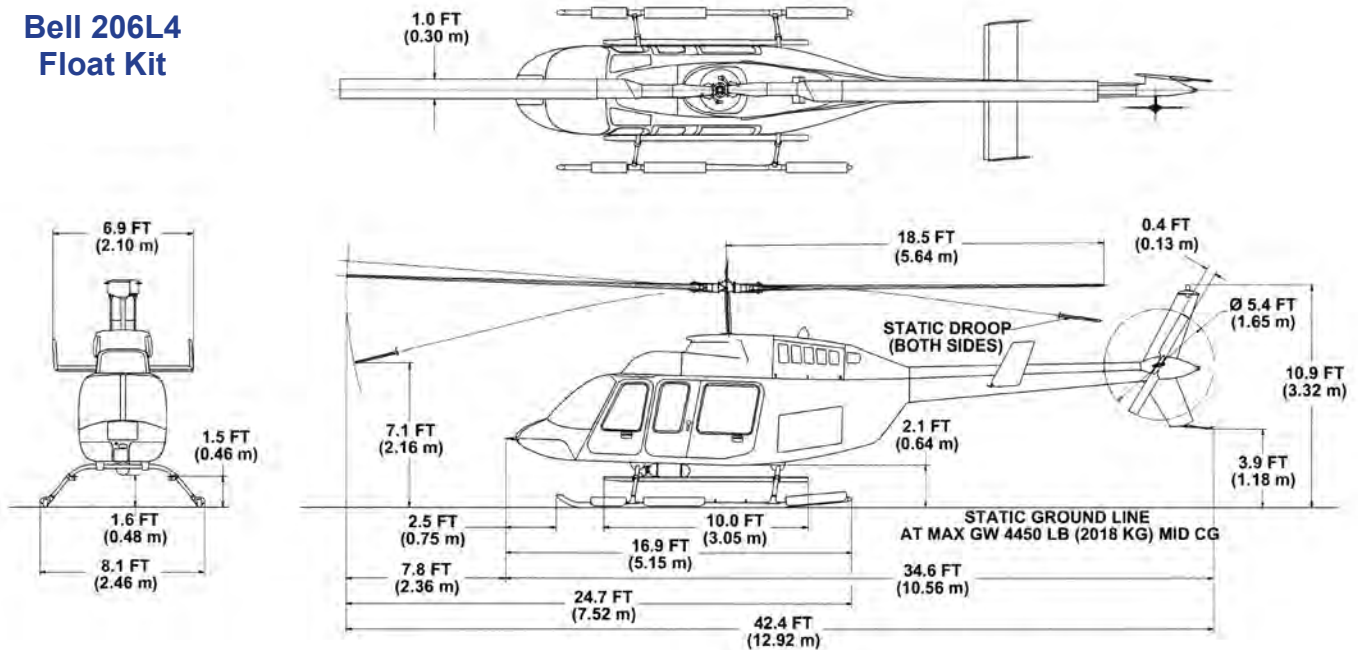
#### Bell 206L4 Low Gear



## Exterior Dimensions

### EMERGENCY FLOAT GEAR WITH AA FLOATSTEP™

#### Bell 206L4 Float Kit

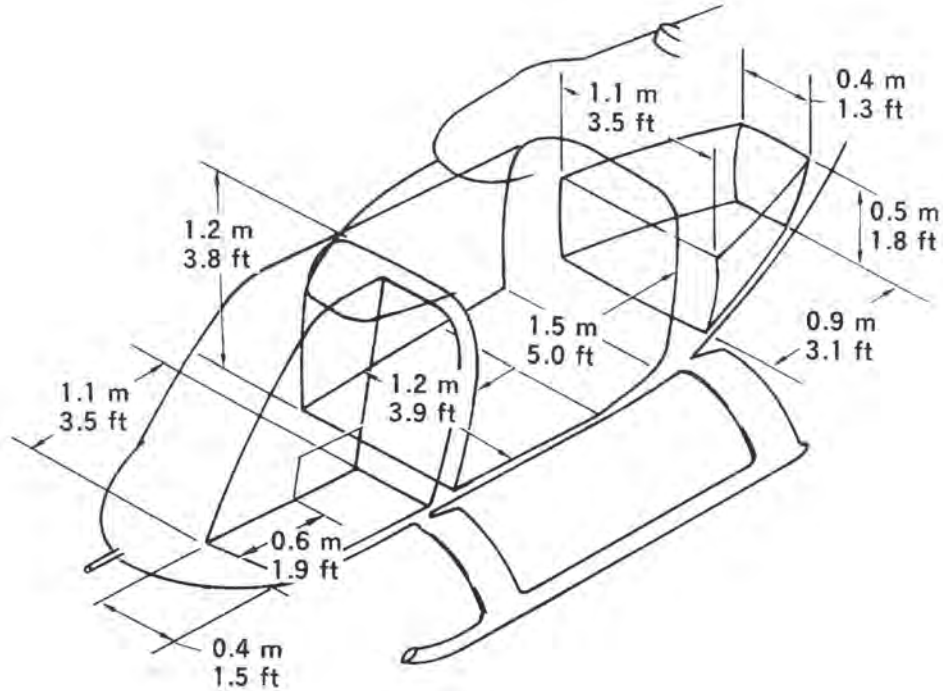


#### Minimum Hanger Size\*

8.1 ft x 42.5 ft  
(2.5 m x 13.0 m)

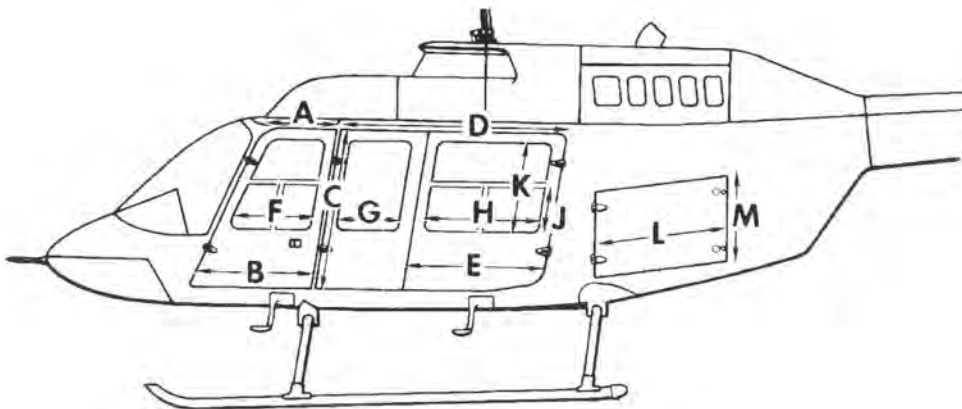
- \* Allowance should be made for high skid gear, ground wheels, empty fuel condition and door lip when considering hangar door width and height

### Cabin Dimensions



Approximate Cargo Space		
Aft Cabin	2.2 cubic meters	(80 cubic feet)
Left front	0.6 cubic meters	(20 cubic feet)
Baggage compartment	0.45 cubic meters	(16 cubic feet)
Floor Loading		
Cabin	3.7 kg/sq. meter	(75 lb/ sq. foot)
Baggage	4.2 kg/sq. meter	(86 lb/sq. foot)
Max Baggage weight	113 kg	(250 pounds)

### Door Dimensions



	cm	in
<b>A</b>	49.5	19.5
<b>B</b>	78.7	31
<b>C</b>	104	41
<b>D</b>	152.4	60

	cm	in
<b>E</b>	91.4	36
<b>F</b>	43.2	17
<b>G</b>	36.8	14.5
<b>H</b>	76.2	30

	cm	in
<b>J</b>	27.9	11
<b>K</b>	70	24
<b>L</b>	94	37
<b>M</b>	58.4	23

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## Specification Summary (U.S. Units)

Weights	lb
Empty Weight (Base Aircraft) <sup>[1]</sup>	2,331
Maximum Gross Weight (Internal)	4,450
Maximum Gross Weight (External Load)	4,550
Useful Load (Internal Aircraft Base)	2,119
Cargo Hook Capacity	2,000

Performance Summary (International Standard Day Except as Noted)					
Takeoff, Gross Weight		lb	3,600	4,000	4,450
IGE Hovering Ceiling <sup>[2]</sup> (2.5 ft skid height)	ISA	ft	20,000+	17,600	10,000
	ISA+20 °C	ft	18,340	15,110	7,730
	ISA+30 °C	ft	16,560	13,150	6,660
OGE Hovering Ceiling <sup>[2]</sup>	ISA	ft	16,500	13,490	6,510
	ISA+20 °C	ft	13,850	10,420	4,240
	ISA+30 °C	ft	11,530	7,750	3,170
Service Ceiling (MCP), 100 ft/min	ISA	ft	20,000+	20,000+	10,000
	ISA+20 °C	ft	20,000+	19,280	7,730
	ISA+30 °C	ft	20,000+	17,250	6,660
Maximum Cruise Speed (True Airspeed)	SL, ISA	ktas	115	113	109
	SL, ISA+20 °C	ktas	118	115	111
	4,000 ft, ISA	ktas	120	116	112
	4,000 ft, ISA+20 °C	ktas	121	118	109
Range at Long Range Cruise (LRC) Speed (Average Gross Weight, Standard Fuel, No Reserve)	SL, ISA	nmi	336	331	325
		ktas	116	115	113
	4,000 ft, ISA	nmi	373	365	352
		ktas	119	118	115
Endurance at Loiter Speed (57 kias) (Standard Fuel, No Reserve)	SL, ISA	hr	3.9	3.8	3.7
	4,000 ft, ISA	hr	4.4	4.2	4.0

Engine Power Ratings		
(Rolls-Royce 250-C30P) Uninstalled Thermodynamic Rating Takeoff	SHP	726
Maximum Continuous,	SHP	630
Transmission Rating		
Takeoff (5 Minutes)	SHP	490
Maximum Continuous	SHP	370
Fuel Capacity (Usable)		
Type	Aviation Turbine	
Standard	110.7 US Gallons	

**Notes:** [1] Includes thirteen (13.0) pounds of engine oil. Ballast is not included in base aircraft weight (ballast is a function of installed equipment).

[2] Refer to demonstrated takeoff and landing and maximum operating altitude notes on the performance charts.

The data set forth on this document are general in nature and may vary with conditions.

For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.



## Specification Summary (Metric Units)

Weights	kg
Empty Weight (Base Aircraft) <sup>1</sup>	1,057
Maximum Gross Weight (Internal)	2,018
Maximum Gross Weight (External Load)	2,064
Useful Load (Base Aircraft)	961
Cargo Hook Capacity	907

Performance Summary (International Standard Day Except as Noted)					
Takeoff, Gross Weight		kg	1,633	1,814	2,064
IGE Hovering Ceiling <sup>[2]</sup> (0.8 m skid height)	ISA	m	6,096+	5,364	3,048
	ISA+20 °C	m	5,590	4,606	2,356
	ISA+30 °C	m	5,047	4,008	2,030
OGE Hovering Ceiling <sup>[2]</sup>	ISA	m	5,029	4,112	1,984
	ISA+20 °C	m	4,221	3,176	1,292
	ISA+30 °C	m	3,514	2,362	966
Service Ceiling (MCP), 0.5 M/S	ISA	m	6,096+	6,096+	3,048
	ISA+20 °C	m	6,096+	5,877	2,356
	ISA+30 °C	m	6,096+	5,258	2,030
Maximum Cruise Speed (True Airspeed)	SL, ISA	km	213	210	203
	SL, ISA+20 °C	km/h	218	213	206
	1,220 m, ISA	km/h	221	215	207
	1,220 m, ISA+20 °C	km/h	224	218	201
Range at Long Range Cruise (LRC) Speed (Average Gross Weight, Standard Fuel, No Reserve)	SL, ISA	km	622	613	602
		km/h	216	213	209
	1,220 m, ISA	km	691	677	653
		km/h	220	219	214
Endurance at Loiter Speed (57 kias) (Standard Fuel, No Reserve)	SL, ISA	hr	3.9	3.8	3.7
	1,220 m, ISA	hr	4.4	4.2	4.0

Engine Power Ratings		
(Rolls-Royce 250-C30P) Uninstalled Thermodynamic Rating Takeoff	kW	541
Maximum Continuous	kW	470
Transmission Rating		
Takeoff	kW	365
Maximum Continuous	kW	276
Fuel Capacity (Usable)		
Type	Aviation Turbine	
Standard	419 Liters	

**Notes:** [1] Includes 5.9 kilograms of engine oil. Ballast is not included in base aircraft weight (ballast is a function of installed equipment).

[2] Refer to demonstrated takeoff and landing and maximum operating altitude notes on the performance charts.

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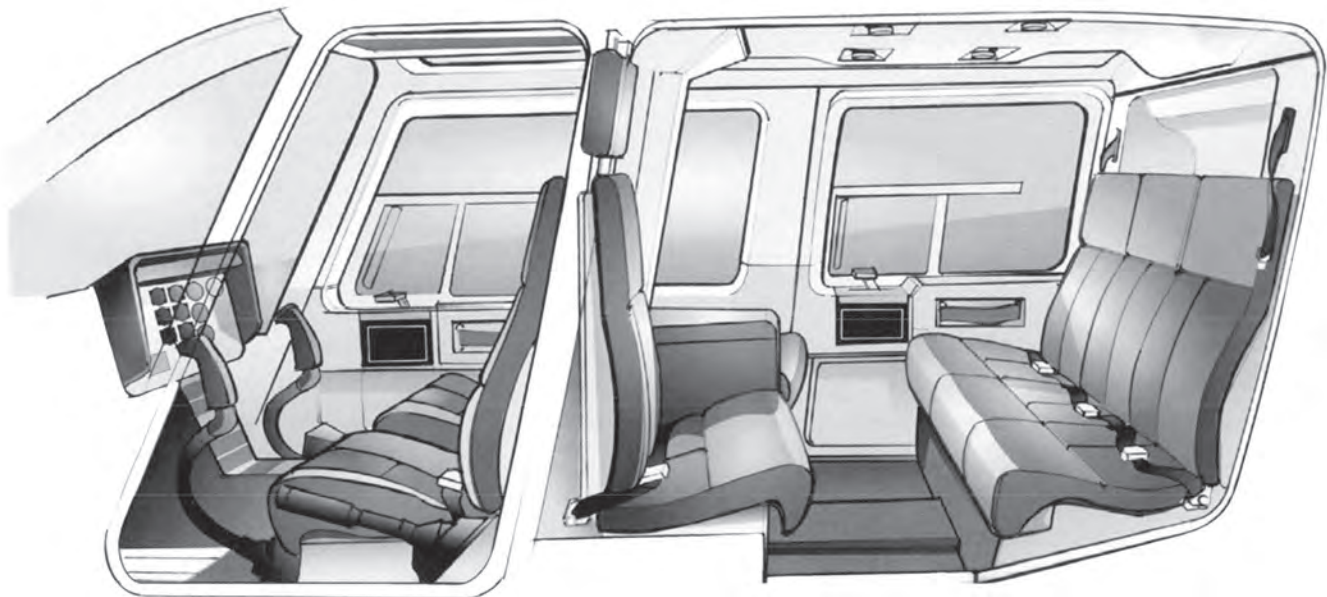
## Bell 206L4 Seating

### CREW SEATING

Two individual ergonomically designed seats with adjustable lumbar support, each equipped with seat belt, double strap shoulder harness and inertia reel, are located in the cockpit. The color and upholstery material for the seats, and interior trim of the cockpit match that which is selected for the cabin. The seat belts are black.

### STANDARD SEATING AND INTERIOR TRIM

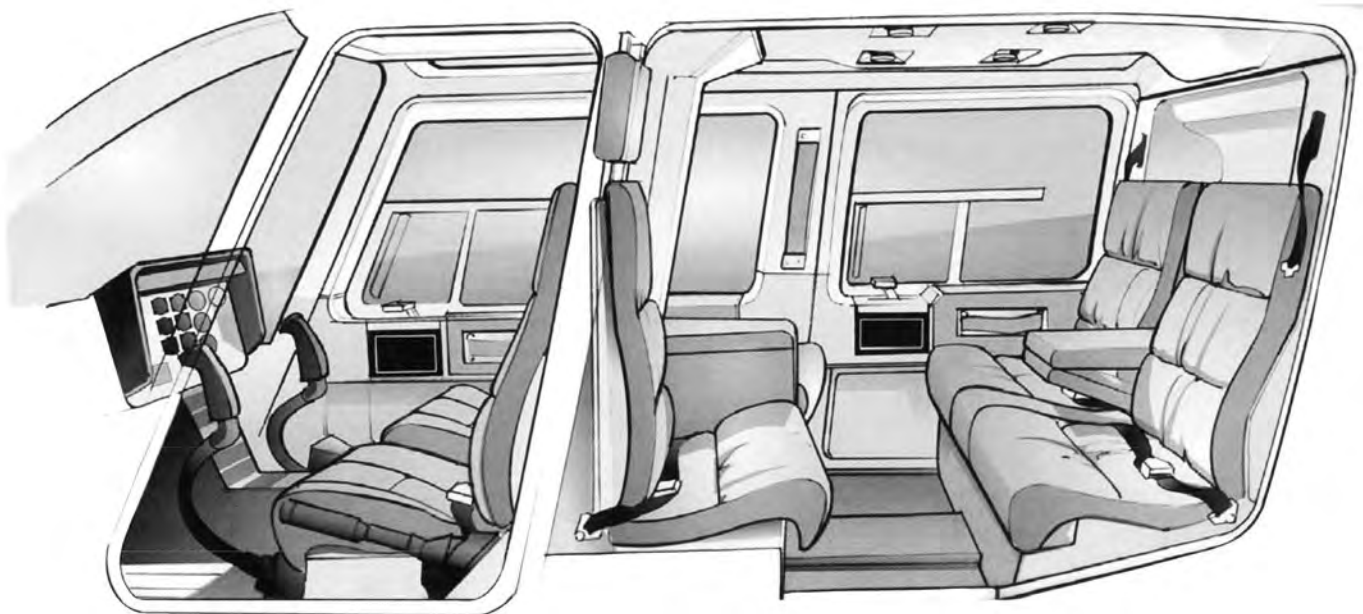
The standard cabin seating consists of five ergonomically designed seats with individual seat belts and single strap shoulder harness, arranged with three equal width forward facing seats across the rear of the cabin and two individual rearward facing seats aft of the cockpit. Available with Grey, Blue, Red, or Tan upholstery with Black seat belts. The Standard Seats are upholstered in fabric. All vinyl, or fabric/vinyl is available as an extra cost option. The standard interior trim consists of full plastic closeouts on all airframe areas, vinyl covered arm rests, and molded plastic outboard headliners. The floor is covered in low loop blend carpet. The standard seating and interior trim are included in the basic aircraft weight.



**Specifications subject to change without notice.**

## CORPORATE SEATING AND INTERIOR TRIM

The corporate cabin seating consists of five 'Overstuffed Style' seats with individual seat belts and single strap shoulder harness, arranged with two extra wide forward facing outboard seats and a middle seat for occasional use across the rear of the cabin (with a fold down arm rest between the outboard seats) and two individual rearward facing seats aft of the cockpit. Available with Pewter, Mushroom, Dark Blue, Saddle, Burgundy, Smoke Grey, and Forest Green upholstery with color coordinated seat belts (Crew seat belts are black). Seats can be all fabric (basic ship), optional leather with fabric inserts or all leather with perforated leather inserts. The corporate interior trim consists of full plastic closeouts on all airframe areas, fabric covered outboard headliner blankets, and armrests covered with color coordinated leather. Carpet is 100% wool cut pile. The corporate seating (and soundproofing) increase the basic aircraft empty weight 17.3 lb (7.8 kg).



**Specifications subject to change without notice.**

## Base Aircraft Configuration (Items Included in List Price)

<b>AIRFRAME</b>	<b>ROTORS AND CONTROLS (continued)</b>
Cabin; bonded aluminum honeycomb, and semi-monocoque structure	Tail rotor; semi-rigid, two-bladed, see-saw type
Doors (five), one hinged double door and copilot door on left side, pilot door and passengers door on right side	Hydraulic boost system (pump and reservoir module)
Landing gear, tubular skid type with replaceable skid shoes	Mechanical flight control linkages throughout
Locks for cabin doors and luggage compartment	Pilots Cyclic Grip has provisions for Optional Equipment Control
Luggage compartment with Composite Door	<b>TRANSMISSION DRIVE SYSTEM</b>
Provisions for mooring, jacking and single point lifting	Focused pylon mounted with nodal beam
Tailboom, monocoque structure with vertical fin and fixed stabilizer with synchronized elevator	Freewheeling unit (between engine and main transmission)
Tail skid (tail rotor guard)	Kaflex (non-lubricated) input drive shaft
Windshield (and Chin Windows), clear plexiglass	Gearbox, tail rotor with 2.3:1 spiral bevel gear reduction
Windows, blue tinted plexiglass with sliding panels in doors, Crew "Wedge" Windows, Bulged Panel Windows, Passenger Cabin "Wedge" Windows	Hydraulic pump (for cyclic and collective boost controls)
Three color exterior paint schemes	Main transmission 2 stage 15.22:1 planetary reduction
Rain gutters	Oil cooler
<b>INTERIOR</b>	Oil filter with replaceable type cartridge
Standard 7-place interior with soundproofing, carpeting, ash trays and data case. Color options available for upholstery and carpet	Oil pump, constant pressure
7-place shoulder harnesses, dual straps in cockpit, single strap in cabin	<b>FLIGHT AND ENGINE INSTRUMENTS</b>
Fire extinguisher, cabin	Clock, Digital Quartz Crystal Chronometer
First aid kit	Compass, magnetic
Parcel shelf (behind aft seat)	Dual tachometer (rotor and engine)
Ram air ventilation system	Inclinometer
<b>POWERPLANT</b>	Indicator, airspeed
Rolls-Royce Model 250-C30P gas turboshaft engine	Indicator, altimeter
Fuel control, Bendix	Indicator, engine oil pressure/temperature
Fuel filter (eliminates anti-ice additive requirement)	Indicator, free air temperature
Fuel pump, engine mounted	Indicator, fuel quantity with forward cell quantity switch
Fuel boost pumps (2 canister type) submerged in main fuel tank	Indicator, fuel pressure/generator load meter
Fuel system	Indicator, torque meter pressure
Oil system	Indicator, transmission oil pressure/ temperature
Compressor wash provisions	Indicator, turbine outlet temperature with over temp light
<b>ROTORS AND CONTROLS</b>	Hour meter
Main rotor, semi-rigid, two-bladed, see-saw type with precone and underslung feathering axis. All metal blades that are moisture proofed and epoxy encapsulated. Flap restraints.	<b>MONITORING SYSTEM</b>
	Caution indication lights:
	Baggage Door Open
	Fuel boost pump inoperative, left and right
	Engine failure warning
	Fuel filter by-pass indicator
	Transmission oil pressure
	Transmission oil temperature
	Tail rotor gearbox chip detector

Specifications subject to change without notice.

## Base Aircraft Configuration

<b>MONITORING SYSTEM (continued)</b>
Engine chip detectors
Transmission chip detector
Freewheeling unit
Battery temperature sensor
Battery hot
Engine out and low rotor RPM warning lights and horn with mute switch (Low RPM or engine out)
Fuel Low Warning
Generator failure
<b>ELECTRICAL</b>
28 volt DC system
Battery, 17 amp-hr nickel-cadmium
External power and grounding receptacle
Lights:
Anti-collision strobe
Cockpit/map
Instrument
Aft cabin
Landing (two 250 watt)
Position
Starter-generator (180 ampere)
Voltage regulator
28 volt outlet in cabin
Heated pitot tube

<b>MISCELLANEOUS</b>
Covers, turbine inlet and exhaust stack
Cover pitot tube
Flight bag
Ground handling wheels with lift tube
Operating manuals:
Aircraft log book
Engine log book
Engine operating manual
Engine parts manual
Flight manual
Illustrated parts catalog
Maintenance and overhaul manual
Tie-down assemblies, main rotor and ail rotor

## Standard Configuration

<b>Additional kits included in Standard Configuration</b>		
Dual Controls		
Rotor Brake		
Markings for High Visibility Main Rotor Blades		
High Skid Gear (including AAI Flitestep®)		
<b>Standard Configuration Empty Weight (Items included in Price List)</b>	<b>Wt (lb)</b>	<b>Wt (kg)</b>
	2,407	1,092

Specifications subject to change without notice.



## Optional Accessories

Refer to notes for kit compatibility

Additional kits and STC items may be available for factory installation.

Please consult sales or contract personnel regarding special needs prior to selection of final configuration.

Kit Description	Wt (lb)	Wt (kg)	Notes
<b>AIRFRAME</b>			
Emergency Floats - Light Weight (including Floatstep™)	190.4	86.4	1, 10
Skid Gear Fairings - Low Skid Only	10.3	4.7	2
High Altitude Tail Rotor Kit	13	5.9	1, 4
<b>AVIONICS</b>			
Flight Instruments	10.5	4.8	7
Blind Encoding Altimeter	1.9	0.9	3
<b>ENGINE</b>			
Particle Separator	13.5	6.1	1
<b>ENVIROMENT</b>			
Headliner - Standard with AC Ducting	6.2	2.8	1
<b>INTERIOR</b>			
Passenger and Crew Seats - Corporate	4.3	2	1, 8
Soundproofing	13	5.9	
<b>EQUIPMENT</b>			
Snow Baffles	4.9	2.2	
Cargo Hook Equipment	16.7	7.6	
Cargo Hook Provisions	3.6	1.6	
Litter Provisions and Equipment	23	10.4	9
Litter Provisions and Equipment with Air Splint Mod(SKI)	25.6	11.6	5, 9
<b>VENDOR KITS - STC</b>			
Wire Strike Protection System	16.2	7.3	6
<b>CREDITS</b>			
No Ground Handling Wheels	0	0	
No Directional Gyro	3.6	1.6	
No Exterior Paint	-16.7	-7.6	
White Paint Only	0	0	
Standard Low Skid Gear	-52	-23.6	

**Specifications subject to change without notice.**

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## Optional Accessories

### OPTIONAL ACCESSORIES EXPLANATORY NOTES:

All equipment kits require Provision Kits prior to installation list.

1. Price and/or weight includes credit for standard aircraft hardware.
2. Only compatible with low skid gear.
3. Blind Encoder required to enable Mode C or Mode S Altitude reporting. Customer is responsible for obtaining Aircraft ID code for Mode S.
4. Requires installation of Encoding Altimeter or Blind Encoder.
5. When the Air Splint Mod is installed in the elevated position, the upper litter may NOT be used. If the Air Splint Mod is in the normal position, both upper and lower litters may be used.
6. The Wire Strike Kit is a RECOMMENDED extra cost option. The customer must specify on the Purchase Agreement for the WSPS Kit NOT to be installed (15.7 lb [7.1 kg] if the Low Skid Gear is installed).
7. Flight Instruments Less D. G. requires a Sales Order Amendment (Kit number is the SAME).
8. Material to be called out on Sales Order. Can be Leather, Fabric/Leather, or Fabric.
9. Delta weight shown includes removing the Copilot's Seat, L/H Aft-facing, L/H Forward-facing, and Center Forward-facing Passenger seats.
10. The High Skid Gear (including AA Flitestep®) included in the Standard Configuration Empty Weight, is not required when a float landing gear is installed, therefore remove 52 lb (23.6 kg).

**STC Kits** - Select Supplemental Type Certificated Optional Equipment Kits are available for installation at the Bell Helicopter Textron factory. Please contact your Bell Helicopter Sales Representative for availability and pricing information.

**P.O.R.** - Priced On Request.

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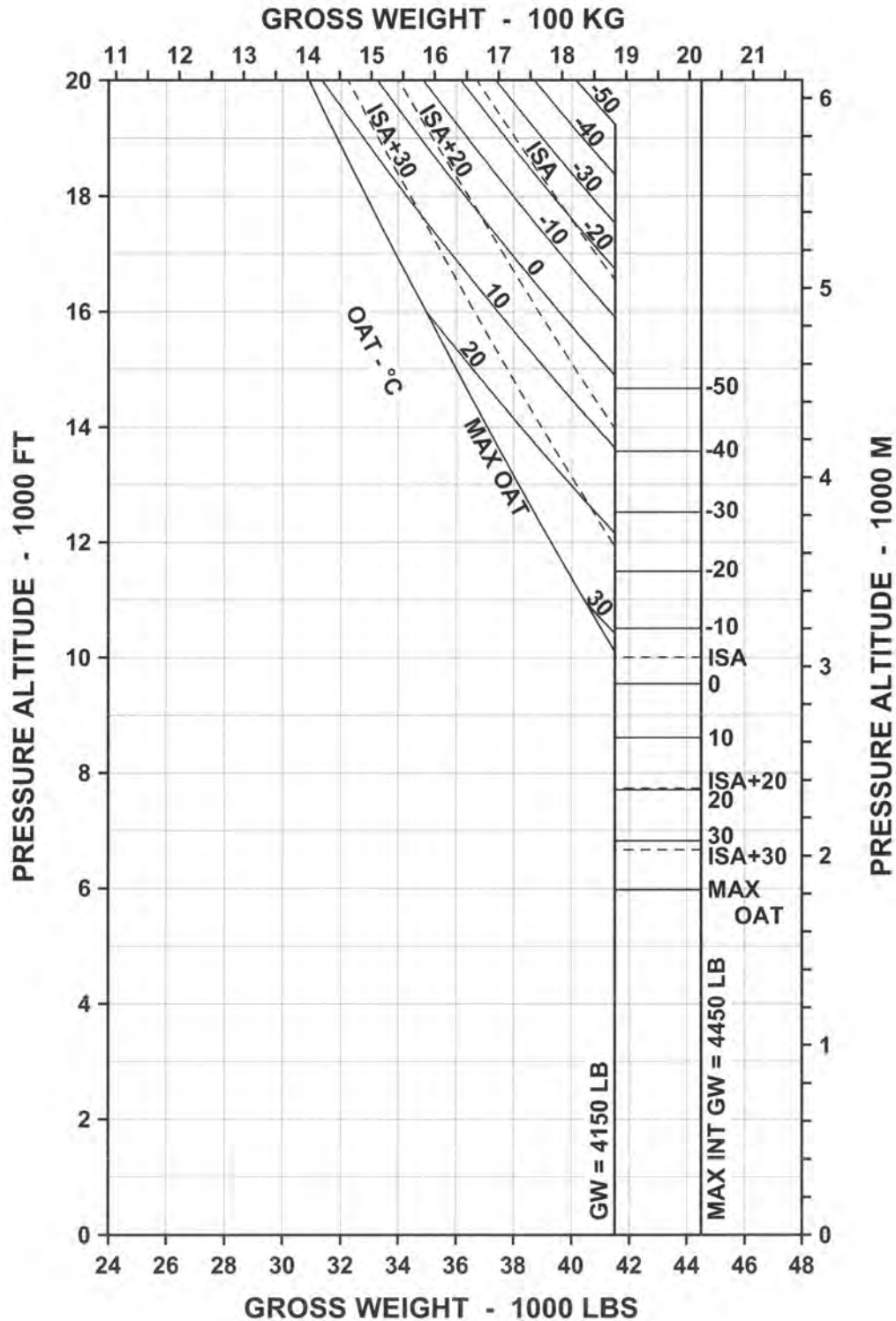
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# ***Helicopter Performance Charts***

***IGE & OGE HOVER, SERVICE CEILING  
ROLLS-ROYCE 250-C30P ENGINE FOR  
STANDARD AND HIGH ALTITUDE TAIL ROTOR  
BASIC INLET INSTALLED  
MINIMUM SPEC. ENGINE***

**Hovering Ceiling IGE - 2.5 ft Skid Height**

**Rolls-Royce 250-C30P Engine at Takeoff Power  
Standard Tail Rotor**



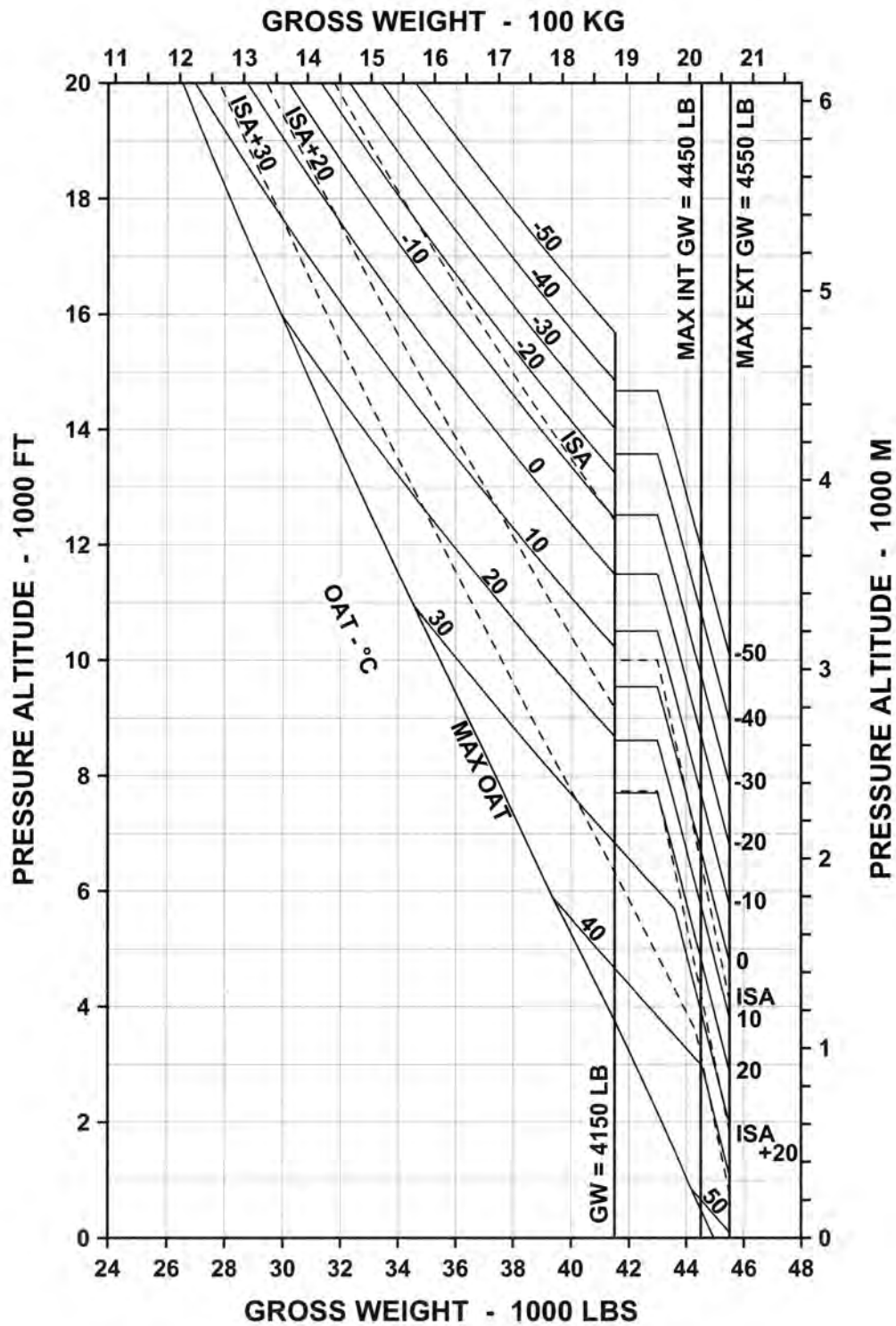
**Note:** Takeoff and landing has not been demonstrated and is not approved above 15,000 feet / 4,572 meters density altitude.

The data set forth on this document are general in nature and may vary with conditions. For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.



## Hovering Ceiling OGE

Rolls-Royce 250-C30P Engine at Takeoff Power  
Standard Tail Rotor

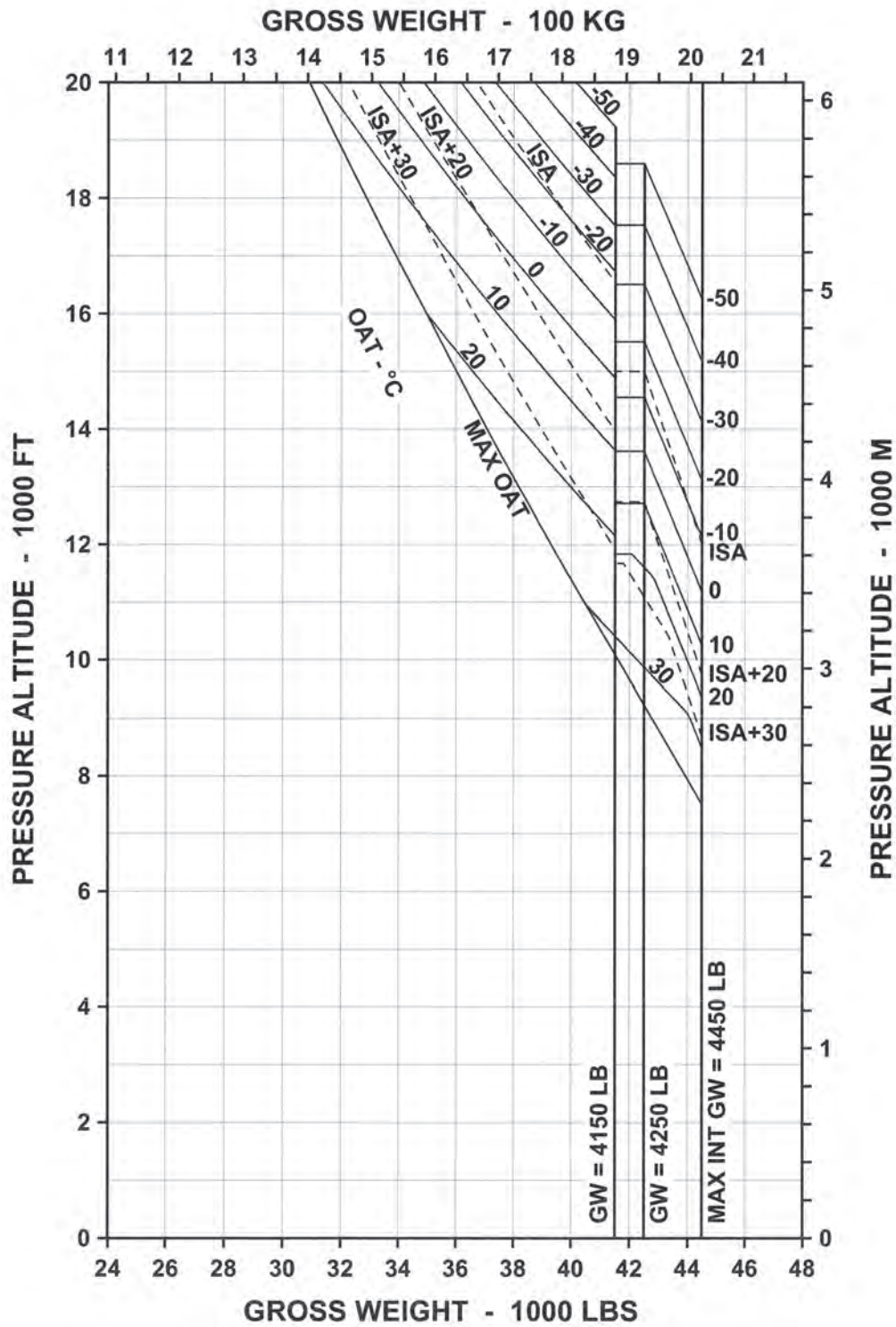


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**Hovering Ceiling IGE - 2.5 ft Skid Height**

**Rolls-Royce 250-C30P Engine at Takeoff Power  
High Altitude Tail Rotor**

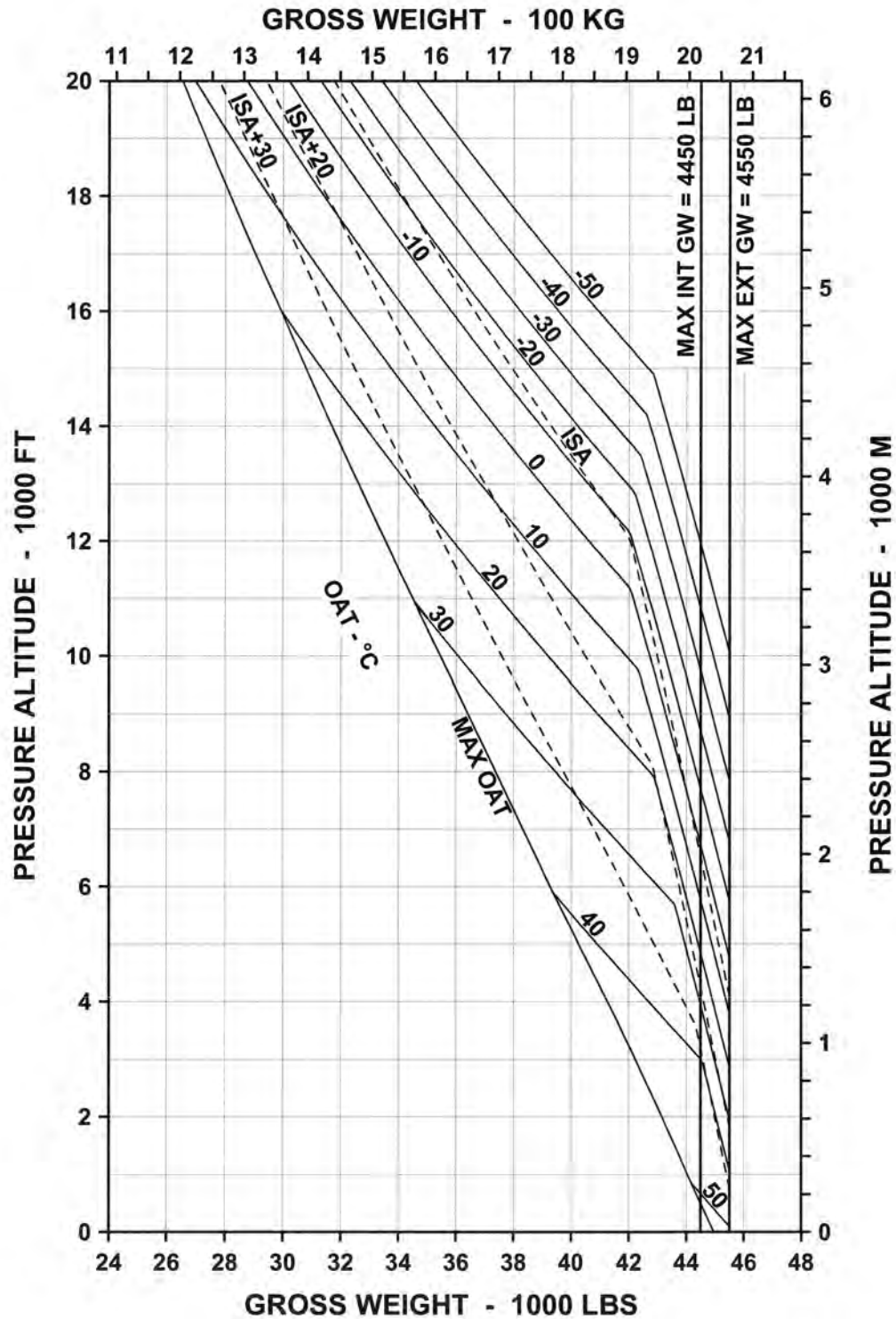


**Note:** Takeoff and landing at gross weights above 4,150 pounds/1,882 kilograms is subject to density altitude limitation, see the FAA approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-19.

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## Hovering Ceiling OGE

Rolls-Royce 250-C30P Engine at Takeoff Power  
High Altitude Tail Rotor

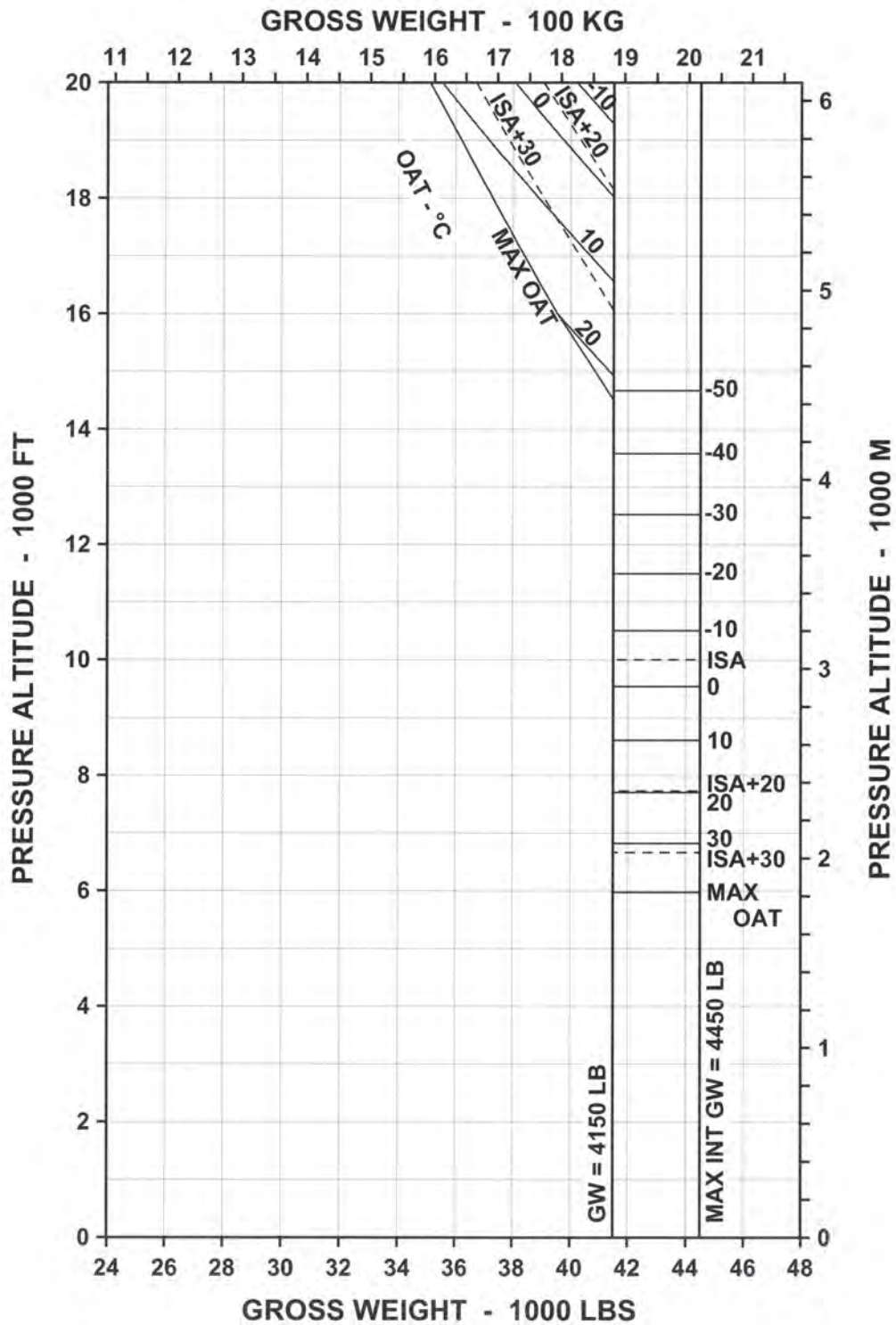


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**SERVICE CEILING, STANDARD TAIL ROTOR**

**Rolls-Royce 250-C30P Engine at MCP  
100 FPM (0.5 M/S) Rate of Climb**



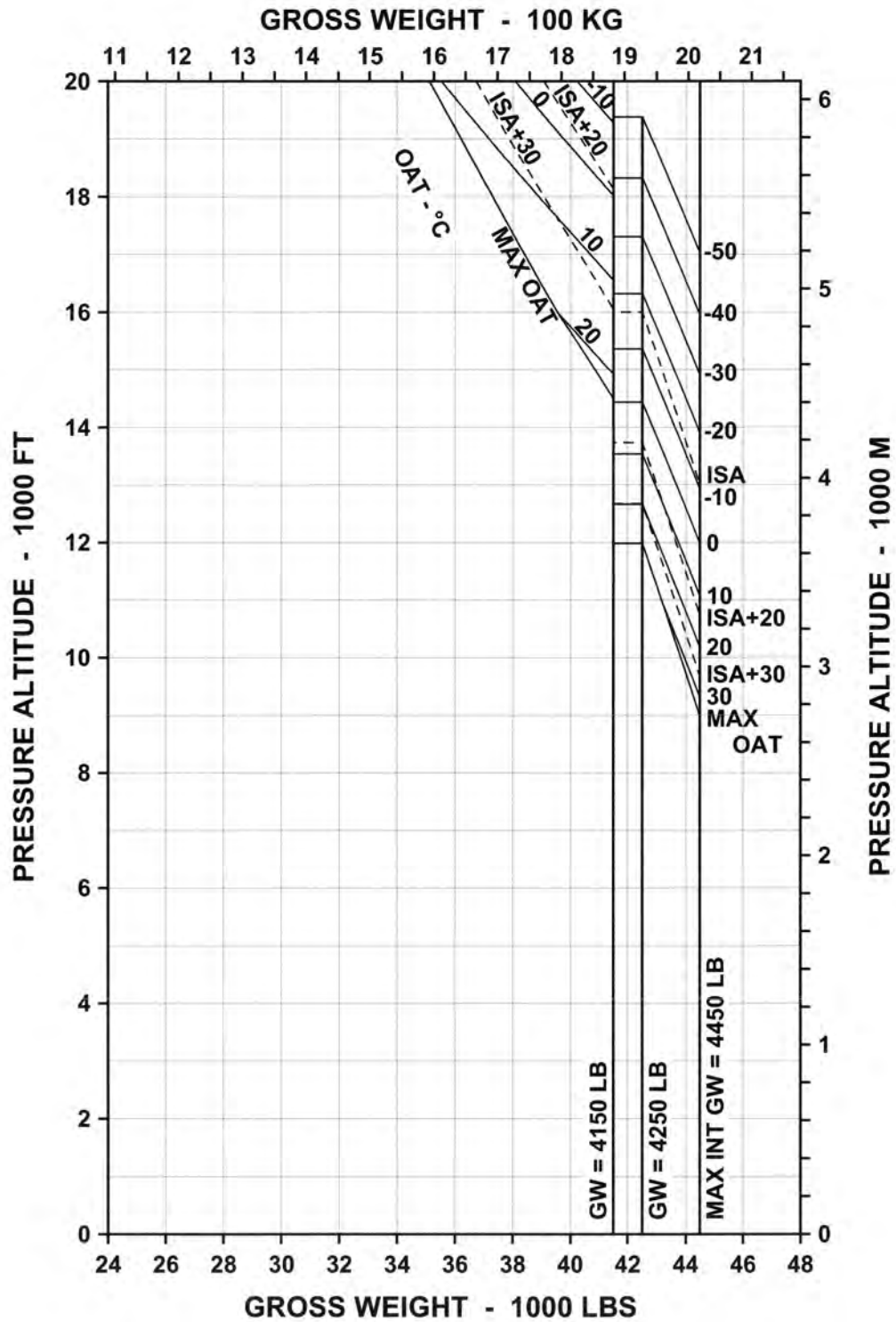
**Note:** Maximum operating altitude with standard tail rotor for gross weights above 4,150 pounds/1,882 kilograms is 10,000 feet / 3,050 meters density altitude.

The data set forth on this document are general in nature and may vary with conditions. For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.



## SERVICE CEILING, HIGH ALTITUDE TAIL ROTOR

Rolls-Royce 250-C30P Engine at MCP  
100 FPM (0.5 M/S) Rate of Climb



**Note:** Maximum operating altitude for gross weights above 4,150 pounds/1,882 kilograms is subject to density altitude limitation, see the FAA approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-19.

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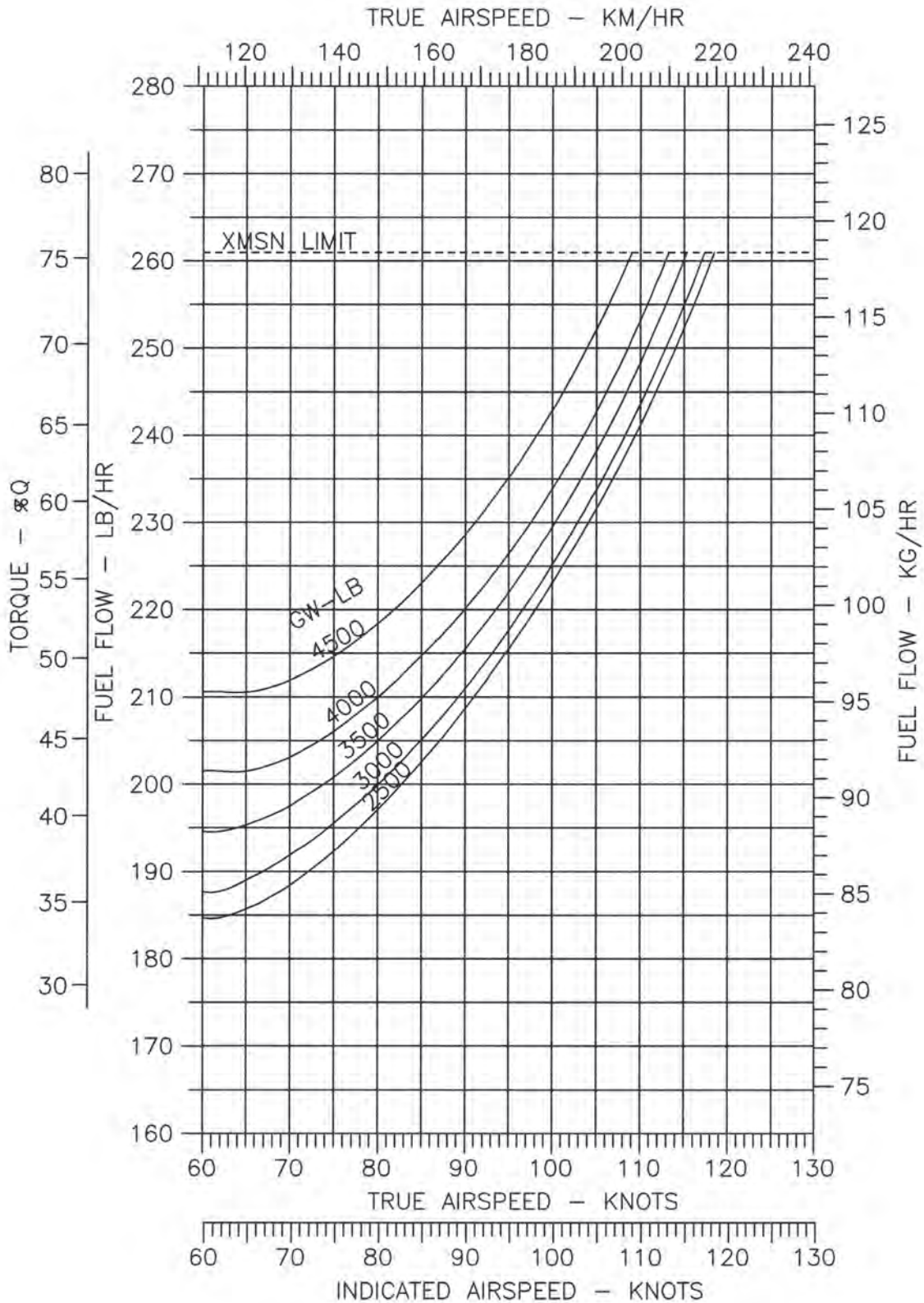
***Fuel Flow vs. Airspeed***  
***ISA & ISA +20°C***  
***ROLLS-ROYCE 250-C30P ENGINE***  
***BASIC INLET INSTALLED***  
***LOW SKID GEAR WITHOUT FAIRINGS***

For particle separator installed; increase fuel flow two (2) lb/hr [one (1) kg/hr] for cross tube fairings; increase airspeed two(2) knots [four(4) km/hr]

**Note:** The best allowable cruise speed is either Long Range Cruise speed [LRC], or when speed is limited by Maximum Continuous Cruise Power [MCP] or  $V_{NE}$ , the maximum speed permitted .

**Fuel Flow vs. Airspeed**

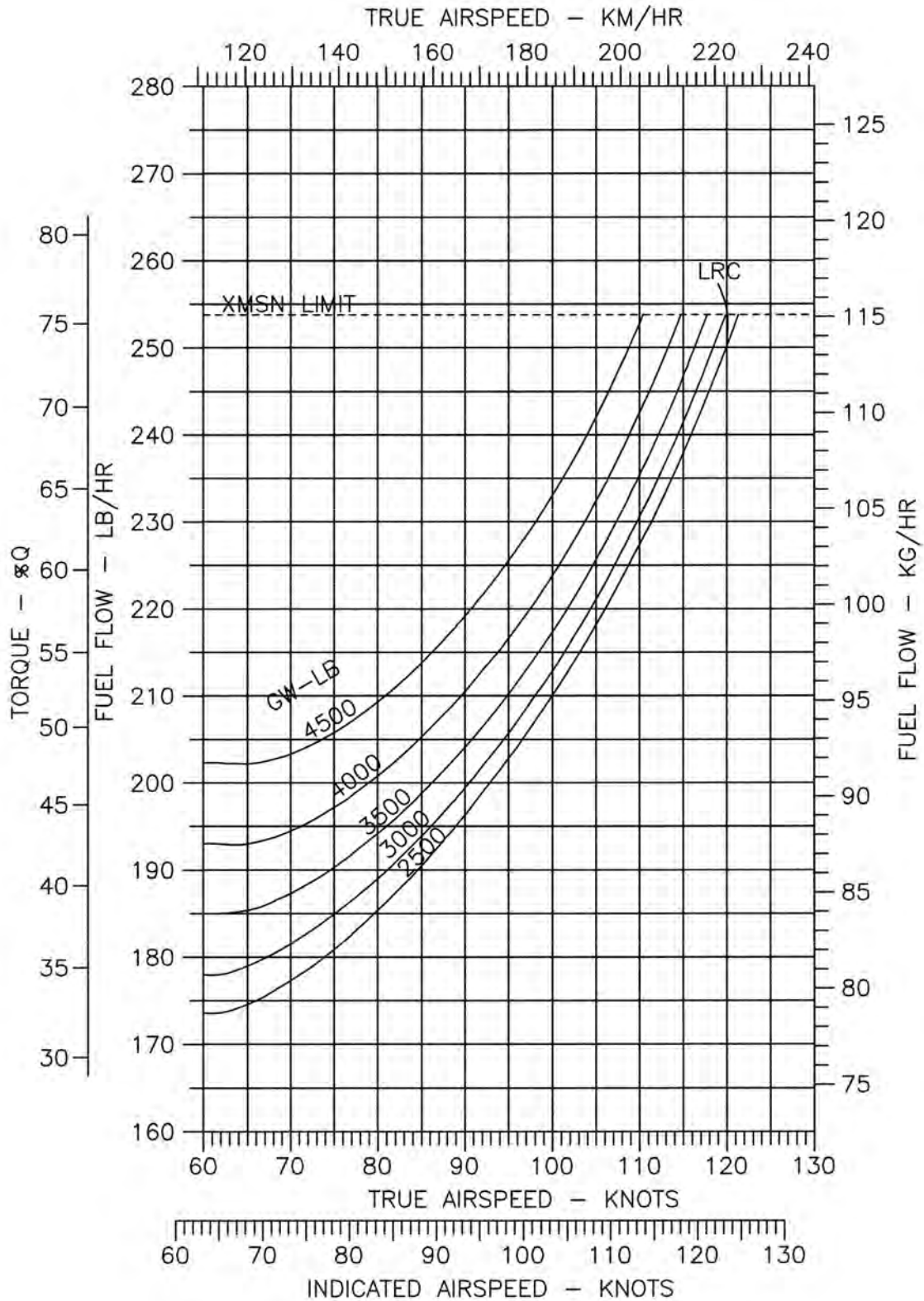
**Pressure Altitude = Sea Level  
OAT = 15°C (ISA)**



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## Fuel Flow vs. Airspeed

Pressure Altitude = 2,000 FT  
OAT = 11°C (ISA)

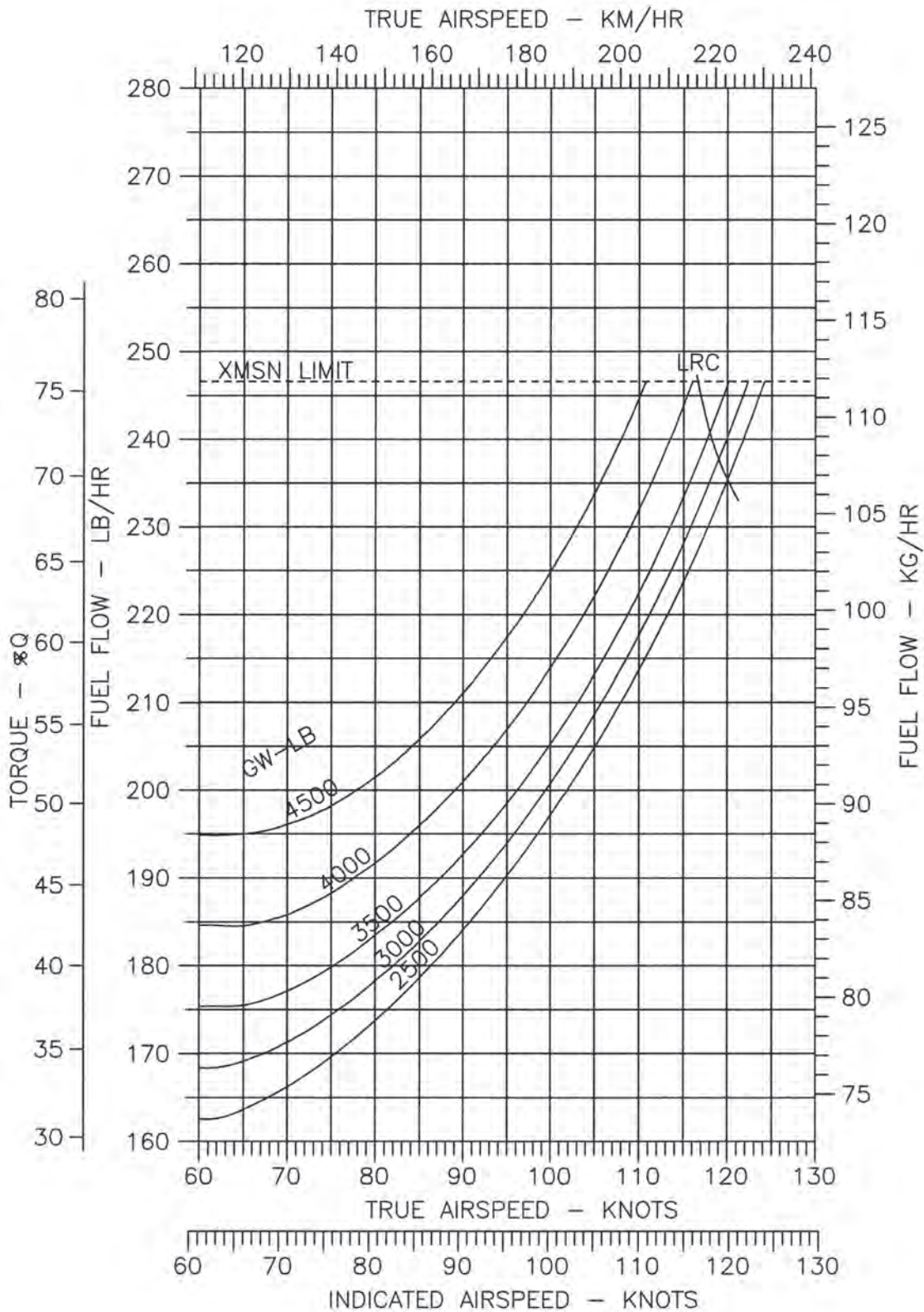


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**Fuel Flow vs. Airspeed**

**Pressure Altitude = 4,000 FT  
OAT = 7°C (ISA)**

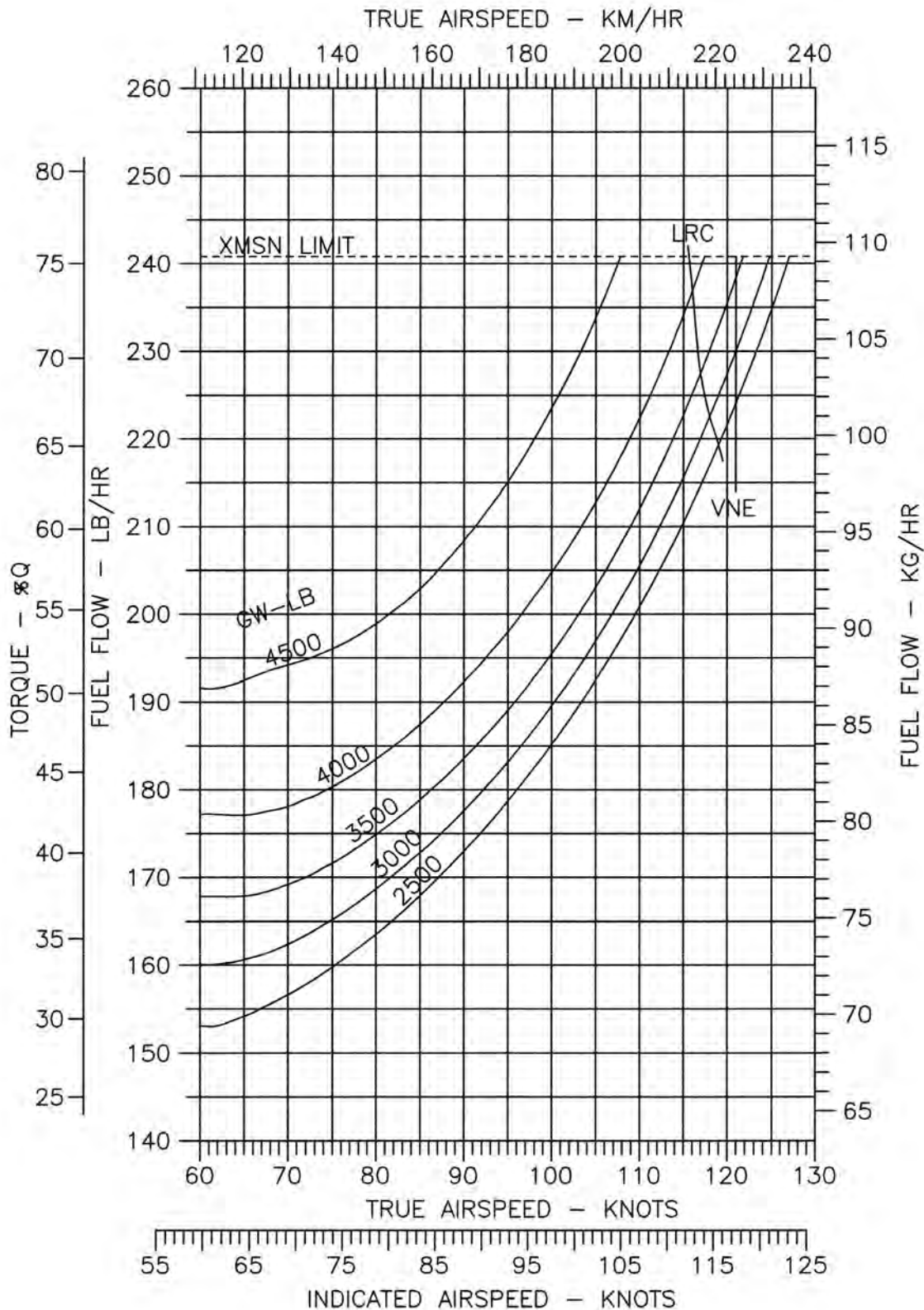


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## Fuel Flow vs. Airspeed

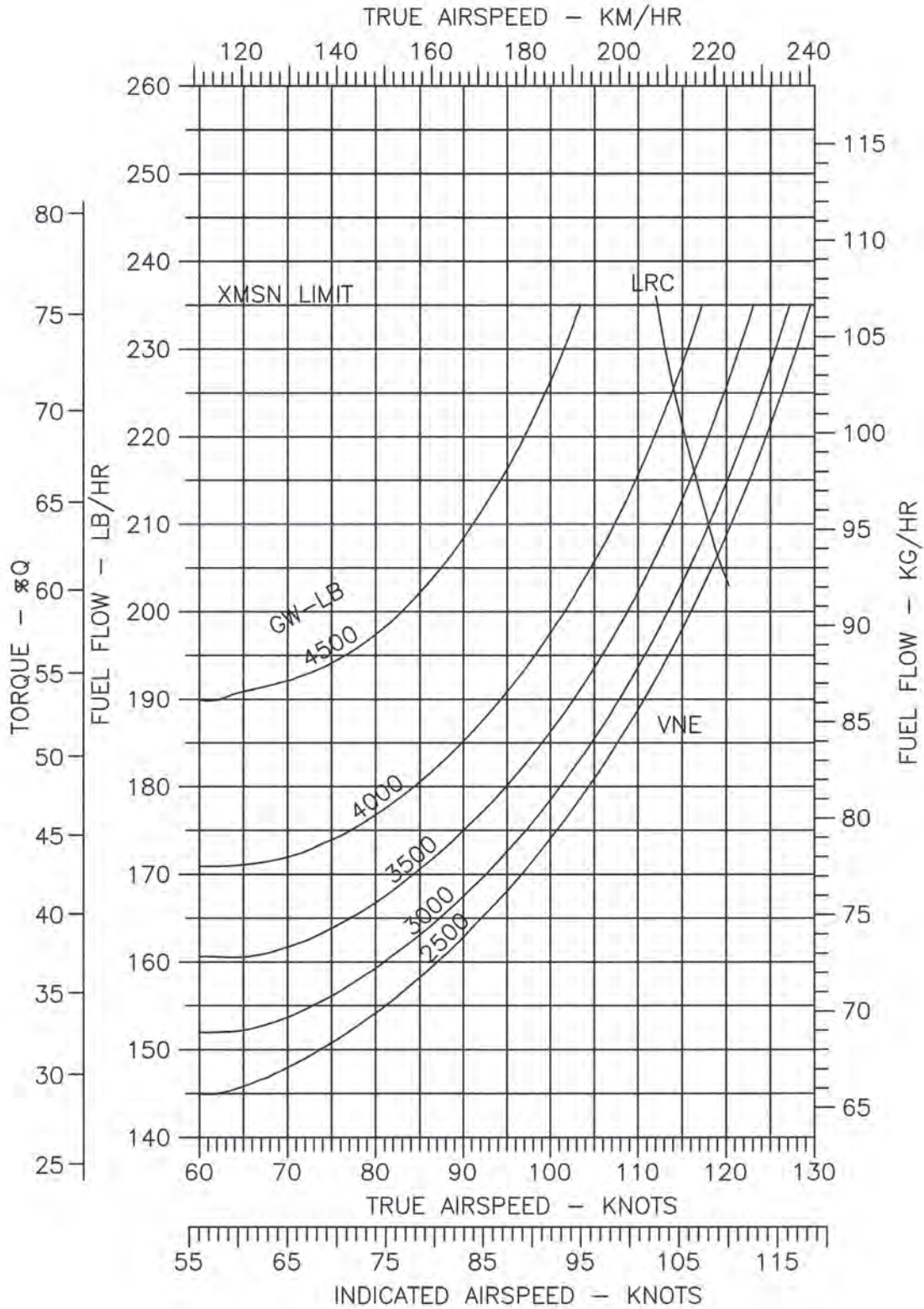
Pressure Altitude = 6,000 FT  
OAT = 3°C (ISA)



The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.

**Fuel Flow vs. Airspeed**

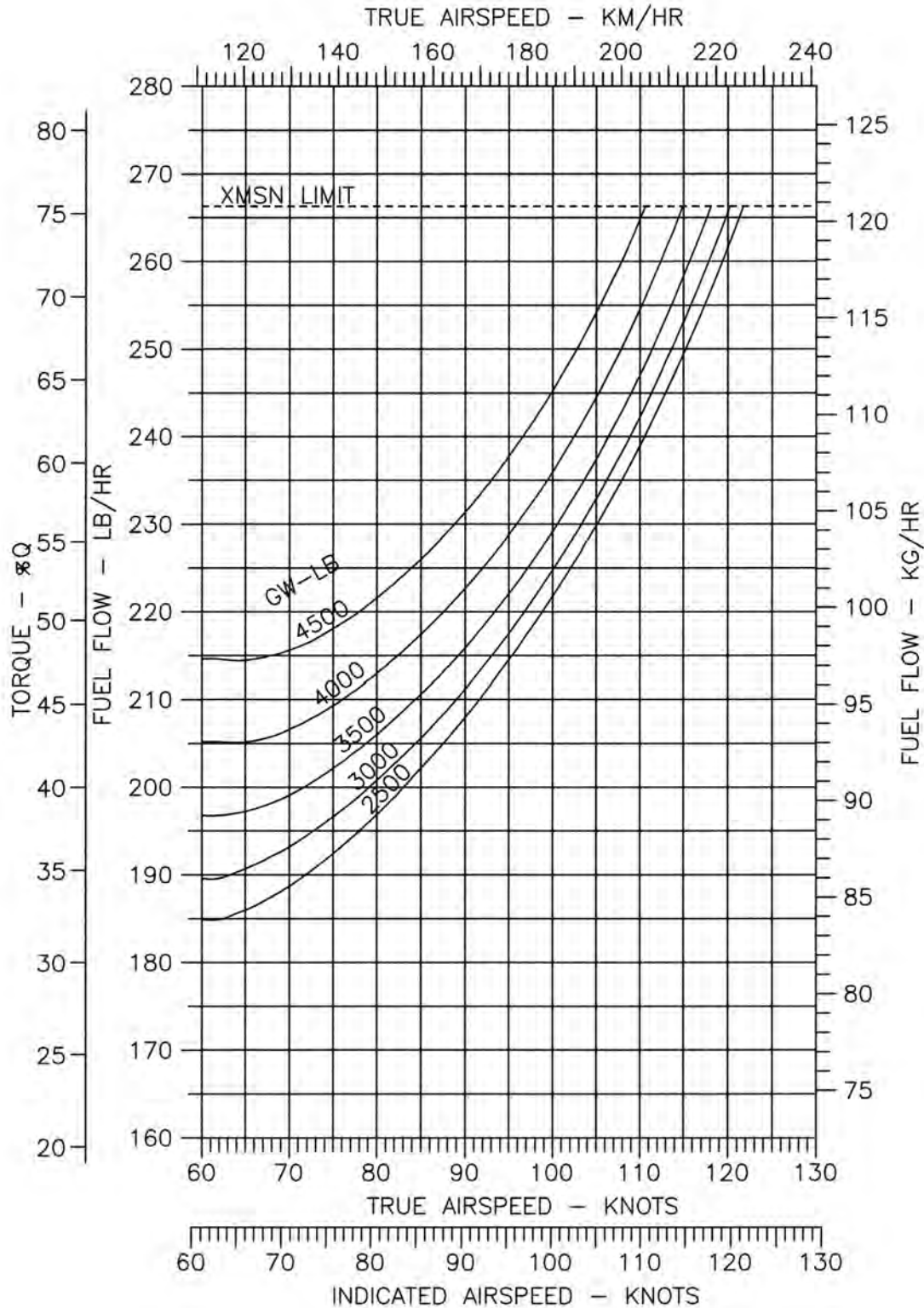
**Pressure Altitude = 8,000 FT  
OAT = -1°C (ISA)**



The data set forth on this document are general in nature and may vary with conditions. For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.

## Fuel Flow vs. Airspeed

Pressure Altitude = Sea Level  
OAT = 35°C (ISA + 20)

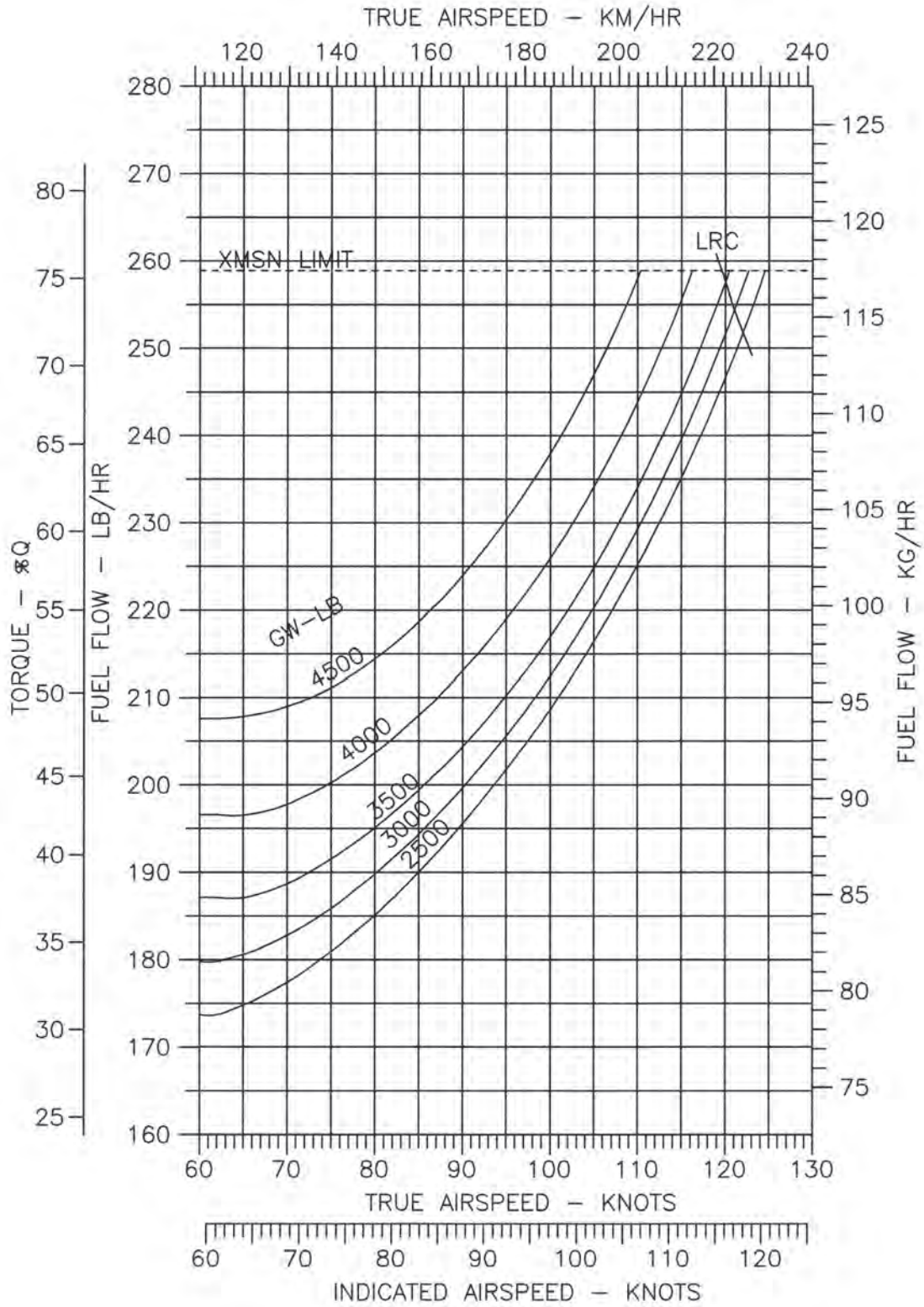


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**Fuel Flow vs. Airspeed**

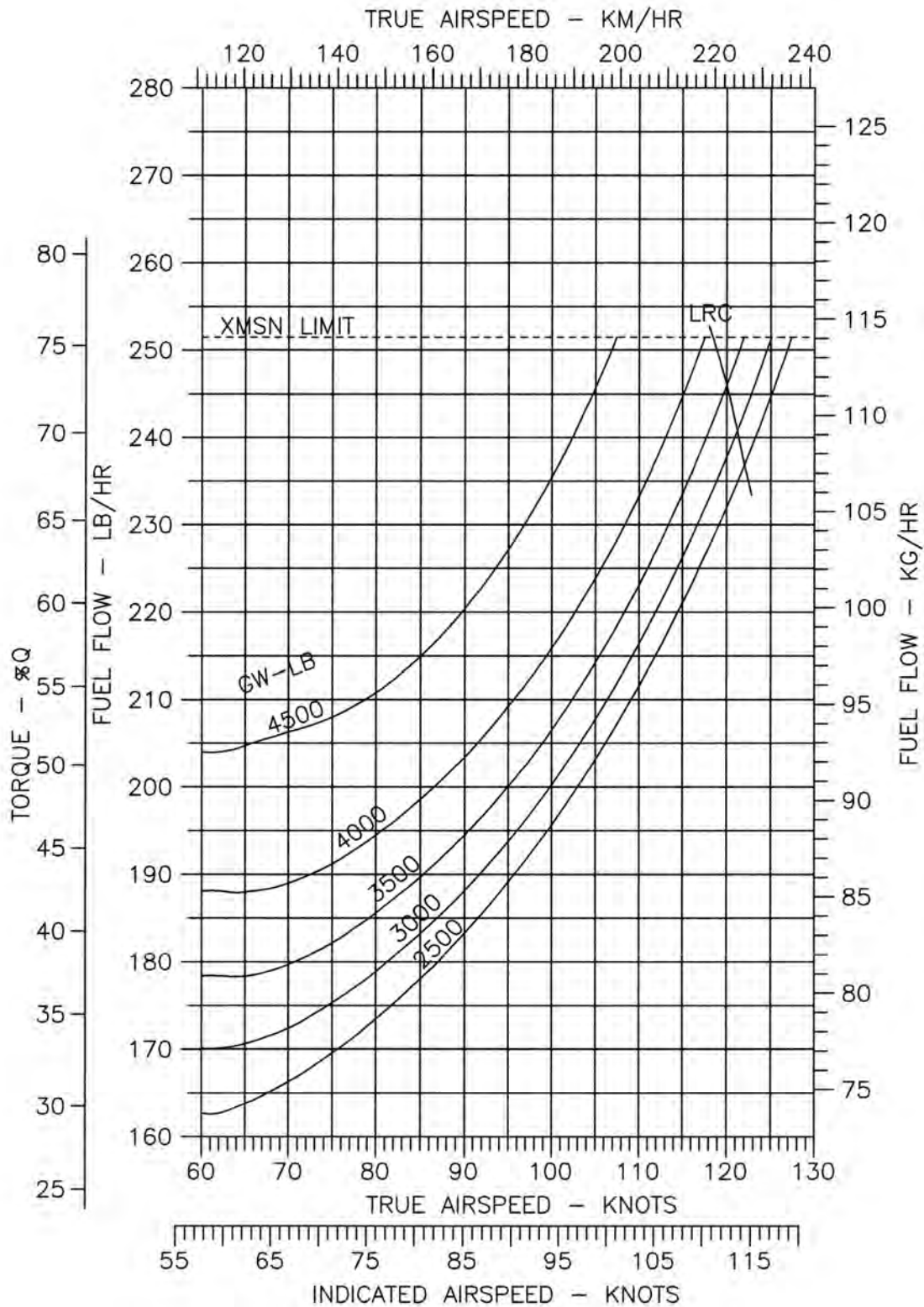
**Pressure Altitude = 2,000 FT  
OAT = 31°C (ISA + 20)**



The data set forth on this document are general in nature and may vary with conditions. For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.

## Fuel Flow vs. Airspeed

Pressure Altitude = 4,000 FT  
OAT = 27°C (ISA + 20)

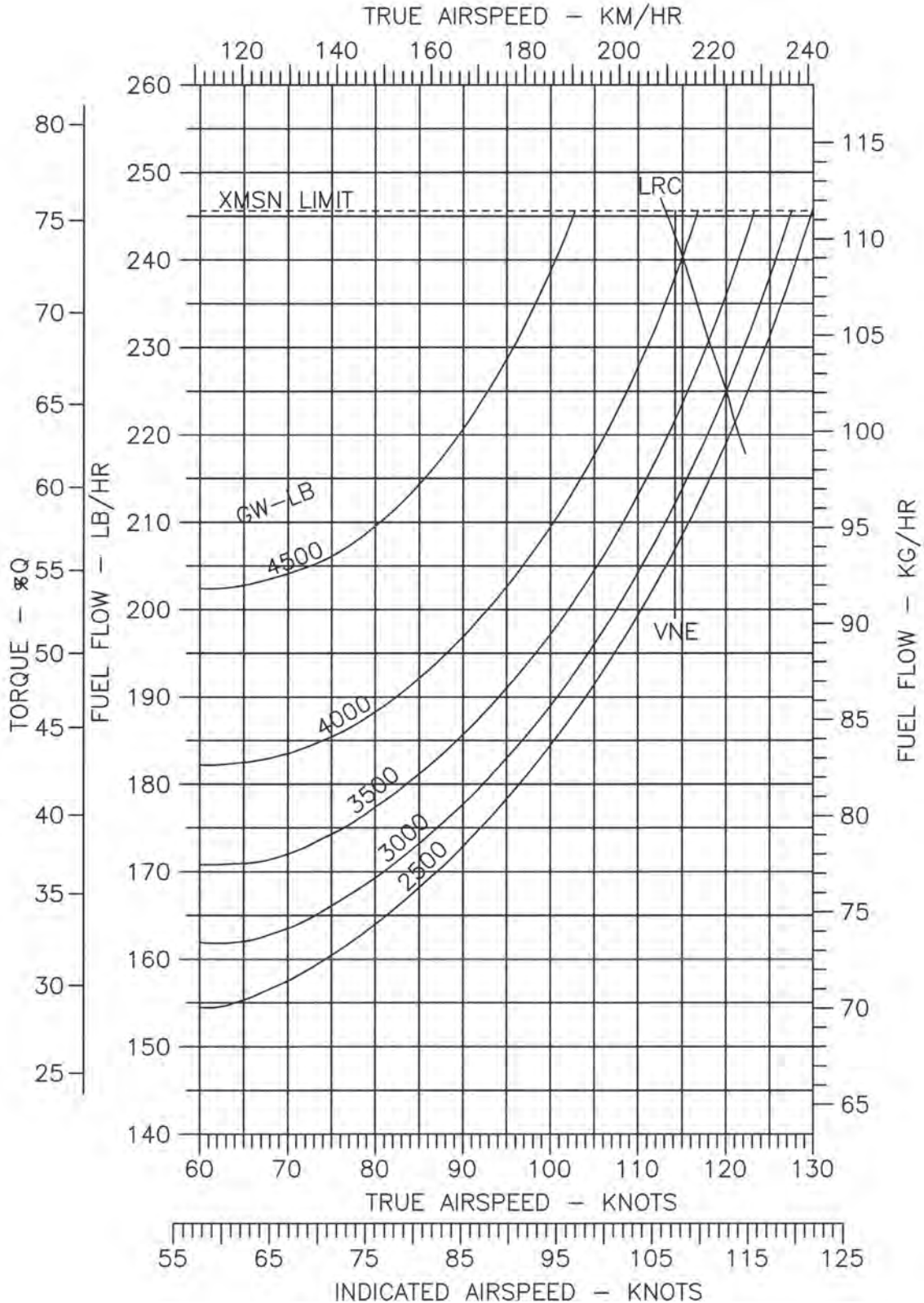


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.



**Fuel Flow vs. Airspeed**

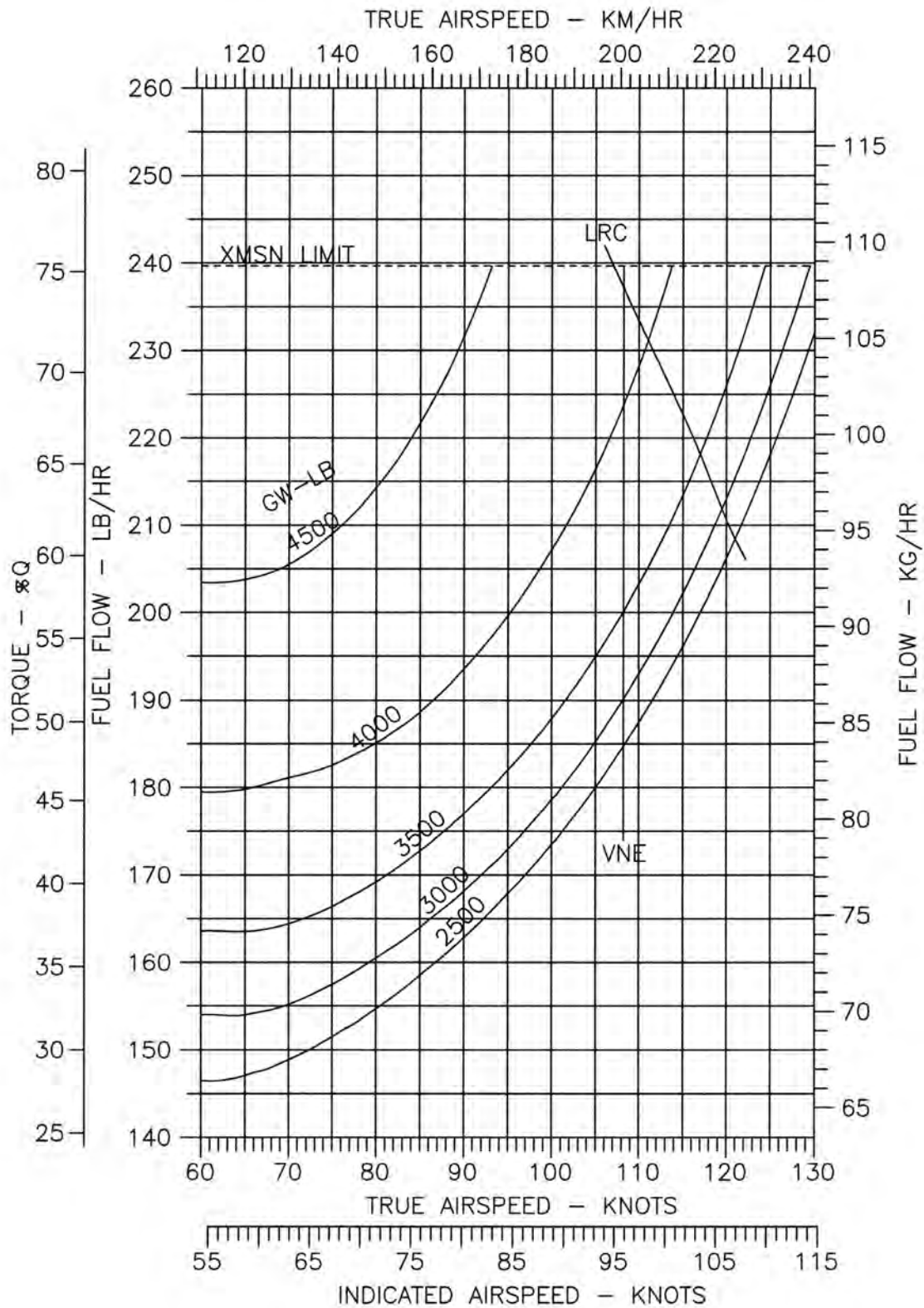
**Pressure Altitude = 6,000 FT  
OAT = 23°C (ISA + 20)**



The data set forth on this document are general in nature and may vary with conditions. For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.

## Fuel Flow vs. Airspeed

Pressure Altitude = 8,000 FT  
OAT = 19°C (ISA + 20)



The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual.

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## Cost of Operations

### INTRODUCTION

Bell Helicopter Textron Inc. cost of operations data for current production helicopters is based on information from Bell Helicopter operators and service facilities. BHTI's Product Support organization accumulates cost data from a diverse group of operators - large, small; sub-polar, subtropical; inland, coastal; corporate, charter. This information is analyzed to generate sample data for each production model which are averages of the field experience. BHTI intends to continue monitoring actual costs to enable annual updates of the data to maintain its currency.

The following discussion is provided to review the variables involved in the helicopter's direct and indirect cost of operations as well as its cost of ownership.

The total cost of helicopter ownership and operation involves both direct and indirect costs. The direct costs are those which are incurred essentially by the flight hour and include:

- Fuel, Lubricants
- Basic Airframe Maintenance
- Powerplant Maintenance

The indirect costs are not directly dependent upon the number of hours flown and include:

- Insurance
- Facilities (hangar, workshop, etc.)
- Crew Compensation
- Financial Factors (depreciation, investment tax credit, financing costs, etc.)

Sample direct operating cost data is available for each current production model. Detailed estimates for total costs relating to specific operations are available through the BHT regional marketing manager or corporate office using input data supplied by customer/prospect.

### DIRECT COSTS

#### Fuel, Lubricants

A typical average value of fuel and lubricant costs is included in the sample data provided for each model. Fuel consumption depends upon speed, temperature, externally-mounted accessories, sling loads, etc. A band of approximately 10% more or less than sample value will cover these factors for normal operations. Fuel pricing varies considerably based on where the fuel is purchased geographically and whether it is purchased retail or in bulk. The sample cases use average retail purchase price prevalent at the time of the sample data are prepared.

#### Basic Airframe Maintenance

Airframe maintenance is divided into four categories:

- Periodic Inspections
- Overhauls
- Replacement of Retirement Parts
- Unscheduled

Periodic inspections include those inspection tasks, with their part requirements, listed in the Maintenance Manual for each model. Man hours for periodic inspections can vary from the sample value provided because of differences in personal experience, tool and parts availability, facilities, environmental effects such as extremes in working temperatures. Man hour costs/hour are also variable among the Authorized Service Centers as a result of differences in local costs, overhead expenses and volume of work. The sample value is an average of costs per hour at Authorized Service Centers at the time of publication.

Overhauls include removal, disassembly, inspection, parts replacement, reassembly and reinstallation of certain components/assemblies at the periods stated in the BHTI Maintenance Manual. Overhaul man hour and parts requirements are subject to considerable variation depending upon the helicopter's operations and environments. The sample data reflect average values.

**Specifications subject to change without notice.**

## Cost of Operations

Retirement parts are those which are subject to disposal after an operating time stated in the Maintenance Manual. These are normally components of the rotors/control systems which are subject to oscillatory loads and are designed and tested for use over a finite number of flight hours rather than on their condition. The replacement at the required intervals requires some labor which is included in the man hour data in the sample.

Unscheduled maintenance encompasses labor and parts replacement for major maintenance not covered under the formal Maintenance Manual requirements for inspections and overhauls. It also includes those additional maintenance requirements imposed by the manufacturer through issue of Service Bulletins.

The sample data for periodic inspections provide for some minor unscheduled maintenance tasks resulting from the inspection.

### Powerplant Maintenance

The powerplant (engine) requires periodic inspection and overhauls. The overhaul periods are based on the number of operating hours or on the number of cycles, whichever is the first limit to be attained. Start cycles are a factor because thermal cycles are important in the design of the turbine engine's rotating components. Overhauls are performed by the engine manufacturer and/or at authorized facilities. Powerplant overhaul can be performed for the engine as a unit, or in some cases for individual modules. (Modules can be gearbox, compressor, turbine, for example.) Each module can have its own overhaul period. Modular overhaul can be cost-effective for some operations and its use should be evaluated. Engine or module exchanges can be made in lieu of overhaul. For details, contact the engine manufacturer or his authorized distributors/service centers. The sample costs are based on an average exchange. The powerplant may also require unscheduled maintenance (unscheduled removals for repair, parts replacement).

## INDIRECT COSTS

- Insurance:** Insurance rates are based on a number of factors including claim experience, type of operations, and crew qualifications. Rates can be obtained from insurance agent/broker.
- Facilities:** Facilities can include hangar, workshop, parts storage area, tools, ground support equipment and administrative area as appropriate to the specific operation.
- Crew Compensation:** The number of aircrew personnel depends on the individual operation; i. e., whether the normal crew consists of one or two pilots, hours per day flown, backup requirements for illness, vacation, etc. Bell Helicopter regional marketing managers can advise typical local costs for estimation purposes.
- Financial Factors:** Funding a helicopter purchase can be accomplished in a variety of ways, including cash, short term note, long term note, partnership, etc. For investment accounting, several depreciation methods also exist; straight line, double declining, sum of the years digits, etc. Value of resale is a significant factor.
- Miscellaneous Factors:** Staff expenses (other than aircrew and direct maintenance personnel), utilities, office expenses, etc.

## OWNERSHIP ANALYSIS PROGRAM

Bell Helicopter Textron Inc. uses the most recent published edition of the Life Cycle Cost computer program provided by Conklin & de Decker Associates, Inc. to determine ownership costs for an operators planned period of utilization for the aircraft. Conklin's Rotorcraft Analysis Office may be contacted at: Phone; (817) 277-6403 or Fax; (817) 277-6402.

Bell Helicopter's regional marketing managers or corporate office personnel will be able to assist in preparing an ownership analysis which is customized for our customers specific individual conditions and needs.

**Specifications subject to change without notice.**



## Sample - Direct Cost of Operations - US Dollars Per Flight Hour

	Operator Overhaul
<b>Fuel, Lubricants</b>	
Fuel <sup>[1]</sup>	\$152
Lubricants	1.52
<b>Airframe Direct Maintenance</b>	
<b>Labor <sup>[2]</sup></b>	
Scheduled Inspections <sup>[3]</sup>	26.46
Scheduled Retirements <sup>[4]</sup>	0.53
Scheduled Overhauls <sup>[5]</sup>	7.21
Provision for Unscheduled Maintenance and Service Bulletins	1.11
On-Condition Maintenance	23.19
<b>Parts:</b>	
Scheduled Inspections <sup>[3]</sup>	1.60
Scheduled Retirements <sup>[4]</sup>	53.84
Scheduled Overhauls <sup>[5]</sup>	29.61
Provision for Unscheduled Maintenance and Service Bulletins	7.67
On-Condition Maintenance	48.93
<b>Powerplant Direct Maintenance</b>	
Mfr. Allison Model 250-C30P Quantity 1 Mfr. Estimate of Engine Cost Per Hour	75.04
Bht Estimate of Additional Line Maintenance	5.66
<b>Total Average Cost Per Hour</b>	<b>\$434.38</b>

- Notes:**
- [1] Calculated at 38 GPH at \$4.00 per gallon.
  - [2] Labor rate assumed at \$80.00 per hour.
  - [3] Based on 600 FLT HRS/YR
  - [4] Based on 100% Life
  - [5] Based on 100% TBO

**Other assumptions:** Basic VFR helicopter with no optional equipment installed mature helicopter (no warranty considerations) Bell Helicopter list price for spare parts.

**Specifications subject to change without notice.**

## Limited Life Components

Part Number	Component	Life in Flight Hours	Life in RIN	Qty per a/c
<b>MAIN ROTOR HUB AND BLADES</b>				
206-011-120-105	Trunnion	2,400	24,000	1
206-011-150-105	Strap Fitting	2,400		2
206-011-125-001	Strap Pin	1,200		2
206-011-132-113A	Grip	4,800		2
206-011-154-107	Tension-Torsion Strap	1,200		2
206-011-260-101	Latch Bolt	1,200		2
206-015-001-115	Main Rotor Blade	4,000		2
<b>MAIN ROTOR MAST</b>				
206-040-535-109	Main Rotor Mast	5,000	44,000	1
<b>MAIN ROTOR CONTROLS</b>				
206-001-193-001	Cyclic Tube	4,800		2
<b>SWASHPLATE AND SUPPORT</b>				
206-010-446-107	Collective Idler Link	14,400		1
206-010-445-113	Swashplate Support	14,400		1
206-010-454-113	Collective Sleeve	14,400		1
206-010-447-109	Collective Lever	14,400		1
<b>TAIL ROTOR HUB AND BLADES</b>				
206-011-819-109	Tail Rotor Yoke	5,000		1
206-016-201-135	Tail Rotor Blade	2,500		2
<b>TAIL ROTOR GEARBOX</b>				
206-040-410-101	Duplex Bearing	3,000		1

**Prices and hours are subject to change without notice.** These data are provided for illustration purposes. Consult maintenance documents and BHTI spare parts pricing for current, official information.

<b>Component Overhaul Intervals (Hours)</b>					
Main Rotor Hub	2,400	Freewheeling Assembly	3,000	Tail Rotor Hub	2,500
Mast Assembly	3,000	Swashplate & Support	4,800	Servo Actuator	3,600
Transmission	4,500	Tail Rotor Gearbox	6,000	Starter Generator	1,000

**Specifications subject to change without notice.**

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## Paint Schemes

# *Sample Illustrations of the Standard Paint Schemes are available from your Bell Helicopter Sales Representative*

### **Paint Selection Notes:**

1. Color renderings (original) must be provided for any deviation to the standard schemes (all models).
2. Custom paint schemes to customer specification are available, and a price quote will be provided on request. Please provide as much detail as possible when describing special instructions and custom paint schemes.
3. The danger arrow is always applied on the tail boom between the horizontal stabilizer and the tail rotor, not withstanding any other illustrations.
4. Unless clearly specified (location, dimension, color), registration markings will be applied per FAA regulations (all models).
5. Metallic paint can not be applied over RADOME areas when a radar is installed.
6. Placement of Bell Helicopter model logos is effected by individual paint schemes, and will be applied at the discretion of Bell Helicopter unless otherwise specified by the customer.

**Specifications subject to change without notice.**

## Training

### THE BELL HELICOPTER TRAINING ACADEMY

The Bell Helicopter Training Academy (BTA) is recognized throughout the world for providing quality military and commercial training. The BTA has trained more than 120,000 customers and has a current annual throughput of approximately 1,900 pilots and 1,800 maintenance technicians. Over seventy highly trained professionals in courseware development and classroom instruction are part of the Bell Helicopter team. Many have military backgrounds of twelve (12) or more years. BTA Instructor Pilots have an average experience level of 11,000 flight hours.

#### The Bell Helicopter Training Academy offers World Class Training Solutions

- FAA Certified and offers the most complete training and customer service available
- Flight Training Device (FTD) enhances pilot training
- Long standing training programs with multiple state, country and municipality agencies including pilot transition, refresher and advanced courses

The Bell Helicopter Training Academy is located at the Alliance Airport in Fort Worth, Texas. The academy features eighteen (18) multimedia classrooms, three overhaul labs fitted for the newest learning technology tools, a 40,000+ square foot training hanger space for crucial hands-on maintenance training, one Cockpit Procedure Trainer (CPT), and five (5) advanced Flight Training Devices (FTD) designed to train on seven different Bell Helicopter model aircraft.



#### **Bell Helicopter Training Academy.**

Located at Alliance Airport in Ft. Worth, TX has trained over 120,000 pilots and maintenance technicians.

**Specifications subject to change without notice.**

## Training

### Flight Practice Area

Our flight training practice area (PA), is a short flight away from the academy and is just northwest of the Texas Motor Speedway. To ensure the safest possible training environment, the PA is supported by a full time Crash and Rescue crew. Our dedicated staff combines these features with the latest innovations in training technology to generate optimum training results.

The 120-acre practice area has three runways; a 2,000-foot lighted north / south runway, an 850-foot north / south runway, and a 1,650-foot east / west runway. There are four (4) separate concrete landing pads. A 30-foot elevated helipad is used for pinnacle, oil platform, and rooftop approach and landing training. This entire site is dedicated solely for the use of Bell Helicopter Training Academy's flight training.



### Flight Practice Area.

120-acre practice area dedicated solely for Bell flight instruction.

## GENERAL INFORMATION

### Pilot Operator Training

The operator and maintenance training provided by BTA establishes a foundation that supports mission tasks with aircraft pilot qualification. Our pilot training program includes basic academics, simulator, and initial flight training. In addition, all flight training is conducted by certified Bell Helicopter instructor pilots in dedicated Bell Helicopter owned aircraft.

### Maintenance Technician Training

Experience is important, however, instruction received in the classroom and training lab is an undeniable enhancement and cannot be over-emphasized. Academic training includes both state-of-the-art instructor-led computer presentations and hands-on maintenance training. Mechanical, electrical, and avionics training takes place in a temperature controlled shop and will include use of composite maintenance trainers. The BTA also has operational cutaway mock-ups, a composite repair room, an electrical/avionics lab, and a Non-Destructive Inspection (NDI) room. Over half of the maintenance training is hands-on, skill enhancing, and performance focused instruction. Training is determined complete, as defined by Bell Helicopter Textron Inc., after each student demonstrates an ability to perform to the course standards for actual maintenance and operation of the equipment referencing technical manuals



### BTA Maintenance Technician Training.

We offer students hands-on training.

Specifications subject to change without notice.



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## Training

### Training Aircraft

The Bell Helicopter Training Academy uses Bell Helicopter-owned dedicated helicopters for all phases of flight training for those models.

### Training Materials and Language

Bell Helicopter will provide each maintenance and pilot training candidate with a hard-copy course notebook in the English language for each course conducted by BTA instructor personnel. The training materials will be sufficient to train maintenance technicians and pilots who meet the course prerequisites in the maintenance and operation of the applicable model helicopters. Course instructional electronic media, syllabi, course outlines, and company intellectual property will be considered non-deliverables within the scope of this contract.

### Student Registration

The customer is responsible for submitting an enrollment request for each training candidate via Bell Helicopter's on-line registration process at [http://www.bellhelicopter.com/en\\_US/Training/Training.html](http://www.bellhelicopter.com/en_US/Training/Training.html). It is encouraged that all training be scheduled at least thirty (60) days prior to the start of each established course date to ensure space and instructor availability.

### Student Visas

Applying for and receiving a VISA permit for students in a timely manner is the responsibility of the customer. To ensure timely approvals, students must register early.

### Trainee Expenses

Arrangements and expenses associated with air travel, ground transportation (car rental/taxi), meals, and lodging for each designated trainee will be the responsibility of the customer.

### Certificate of Qualification

Trainees will receive a graduation certificate for each pilot or maintenance course successfully completed within this training program.

**Bell Helicopter**

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