

# Bell 206L4 Product Specifications

January 2010



**Bell** Helicopter  
A Textron Company



## Publishers Notice

The data presented in this document is general in nature, and has 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 Sales Personnel 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 [International Dealers] is forbidden without written permission from Bell Helicopter Textron.

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 found in the right margins of the optional equipment list pages 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.

©2010 Bell Helicopter Textron Inc.

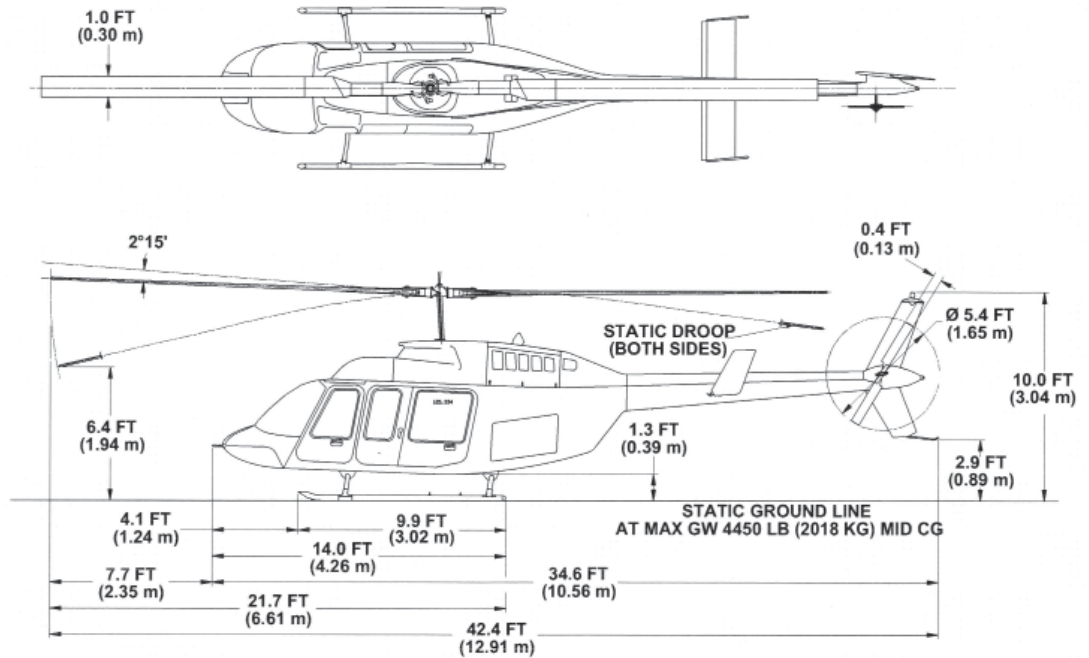
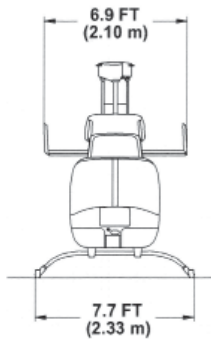
Bell 206B3, 206L-4, 407, 427, 430, 412, 609, JetRanger and LongRanger are registered trademarks of Bell Helicopter Textron Inc.

All rights reserved.

## Exterior Dimensions

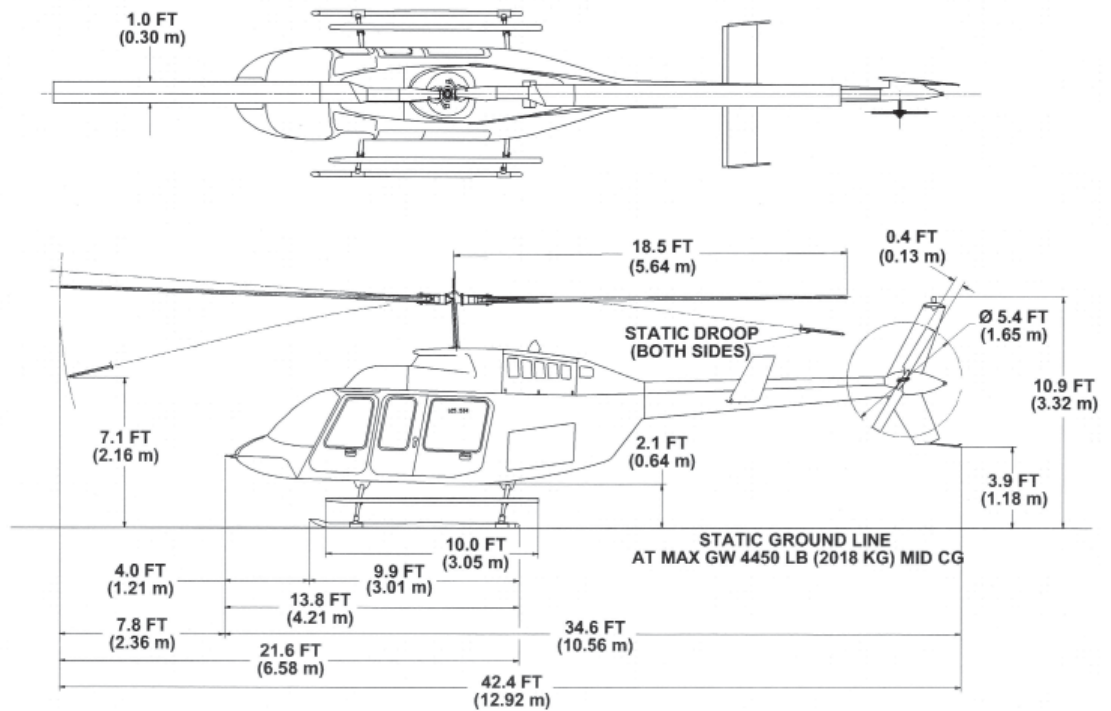
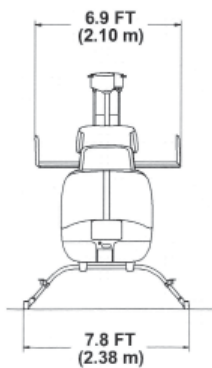
## Standard Low Skid Gear

## 206L4 Standard Gear



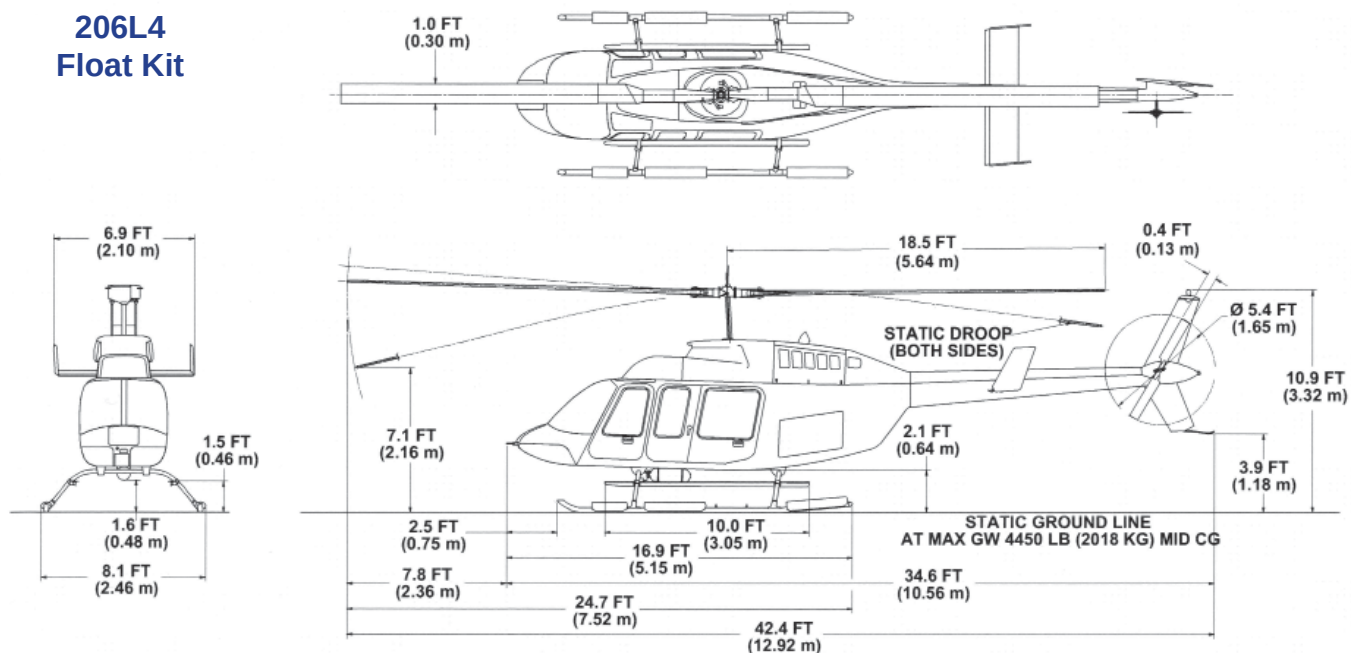
### Optional High Skid Gear w/AAI Flightstep®

## 206L4 High Skid Gear



## 206L4 Optional Emergency Float Gear w/AAI Floatsetp®

### 206L4 Float Kit

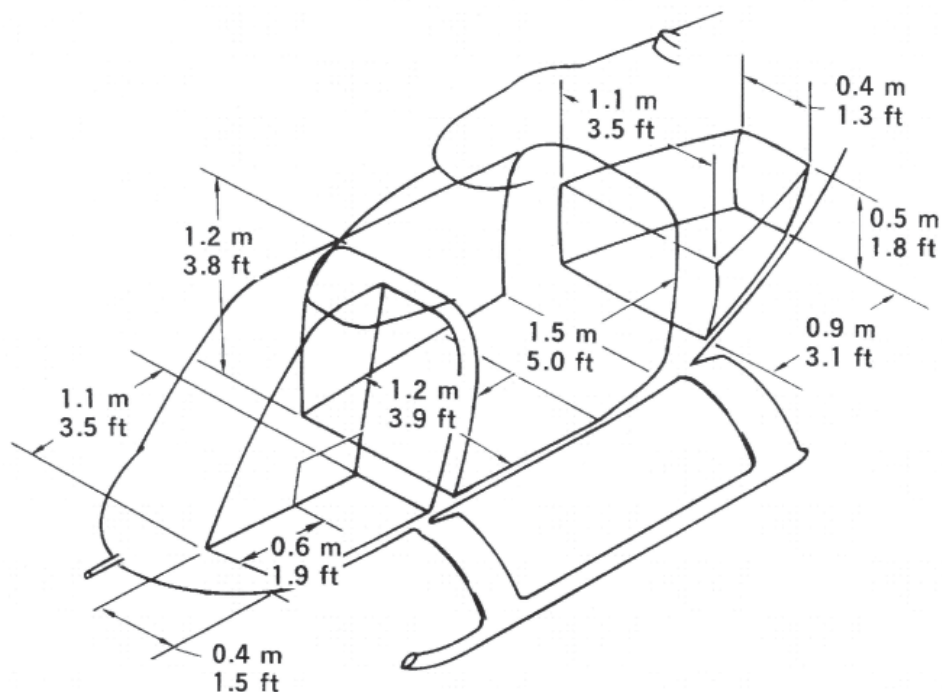


### Minimum Hanger Size\*

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

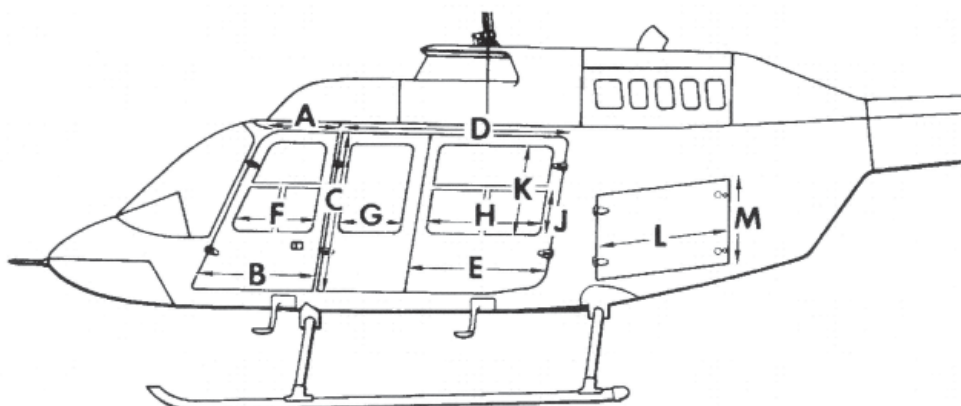
\*Allowance should be made for high skid gear, ground wheels, empty fuel condition and door lip when considering hangar door width and height

## 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   |   | cm   | in   |
|---|-------|------|---|------|------|
| A | 49.5  | 19.5 | G | 36.8 | 14.5 |
| B | 78.7  | 31.0 | H | 76.2 | 30   |
| C | 104   | 41   | J | 27.9 | 11   |
| D | 152.4 | 60.0 | K | 70.0 | 24   |
| E | 91.4  | 36.0 | L | 94.0 | 37   |
| F | 43.2  | 17   | M | 58.4 | 23   |

**Page Intentionally Left Blank**

## Specification Summary [U. S. Units]

| Weights                                                                  | Lbs  |
|--------------------------------------------------------------------------|------|
| Standard Configuration Weight (Note 1)                                   | 2331 |
| Normal Gross Weight                                                      | 4450 |
| External Load Gross Weight                                               | 4550 |
| Standard Configuration Useful Load (Gross Weight-Standard Configuration) | 2123 |
| Maximum External Load (Cargo Hook Limit)                                 | 2000 |

| Performance Summary: (International Standard Day Except As Noted) |                  |     |         |         |        |
|-------------------------------------------------------------------|------------------|-----|---------|---------|--------|
| Takeoff, Gross Weight                                             |                  | Lbs | 3600    | 4000    | 4450   |
| IGE Hovering Ceiling (2.5ft skid height)                          | ISA              | ft  | 20,000+ | 17,600  | 10,000 |
|                                                                   | ISA+20 C         | ft  | 18,300  | 15,100  | 7730   |
|                                                                   | ISA+30 C         | ft  | 16,500  | 13,100  | 6660   |
| OGE Hovering Ceiling                                              | ISA              | ft  | 16,600  | 13,600  | 6500   |
|                                                                   | ISA+20 C         | ft  | 13,800  | 10,500  | 4200   |
|                                                                   | ISA+30 C         | ft  | 11,500  | 7600    | 3100   |
| Service Ceiling MCP, (100 ft/min)                                 | ISA              | ft  | 20,000+ | 20,000+ | 10,000 |
|                                                                   | ISA+20 C         | ft  | 20,000+ | 19,300  | 7730   |
|                                                                   | ISA+30 C         | ft  | 20,000+ | 17,300  | 6660   |
| Range @ LRC Speed<br>(Average Gross Weight, Full Fuel)            | ISA,SL           | nm  | 336     | 332     | 324    |
|                                                                   | ISA,SL           | kn  | 116     | 114     | 112    |
|                                                                   | ISA,5000 ft      | nm  | 382     | 372     | 357    |
|                                                                   | ISA,5000 ft      | kn  | 118     | 117     | 114    |
| MCP Speed @ Takeoff Gross Weight                                  | ISA,SL           | kn  | 115     | 113     | 110    |
|                                                                   | ISA+20 C,SL      | kn  | 118     | 115     | 111    |
|                                                                   | ISA,5000 ft      | kn  | 120     | 117     | 111    |
|                                                                   | ISA+20 C,5000 ft | kn  | 122     | 118     | 107    |
| Endurance @ Loiter 52 kn<br>(No Reserve)                          | ISA,SL           | hr  | 3.9     | 3.8     | 3.7    |
|                                                                   | ISA,5000 ft      | hr  | 4.5     | 4.3     | 4.1    |

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

\* Refer to demonstrated takeoff and landing and maximum operating altitude notes on the performance charts

**Note 1:** Includes thirteen (13.0) pounds of engine oil. Ballast is not included in standard configuration weight (ballast is a function of installed equipment).

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 [MetricUnits]

| Weights                                                                  | KG   |
|--------------------------------------------------------------------------|------|
| Standard Configuration Weight (Note 1)                                   | 1057 |
| Normal Gross Weight                                                      | 2018 |
| External Load Gross Weight                                               | 2064 |
| Standard Configuration Useful Load (Gross Weight-Standard Configuration) | 962  |
| Maximum External Load (Cargo Hook Limit)                                 | 907  |

| Performance Summary: (International Standard Day Except As Noted) |                  |      |       |       |      |
|-------------------------------------------------------------------|------------------|------|-------|-------|------|
| Takeoff, Gross Weight                                             |                  | KG   | 1633  | 1814  | 2064 |
| IGE Hovering Ceiling (0.8m skid height)                           | ISA              | M    | 6096+ | 5464  | 3048 |
|                                                                   | ISA+20 C         | M    | 5578  | 4602  | 2356 |
|                                                                   | ISA+30 C         | M    | 5029  | 3993  | 2030 |
| OGE Hovering Ceiling                                              | ISA              | M    | 5060  | 4145  | 1981 |
|                                                                   | ISA+20 C         | M    | 4026  | 3200  | 1280 |
|                                                                   | ISA+30 C         | M    | 3505  | 2316  | 945  |
| Service Ceiling MCP, (0.5 M/S)                                    | ISA              | M    | 6096+ | 6096+ | 3048 |
|                                                                   | ISA+20 C         | M    | 6096+ | 5883  | 2356 |
|                                                                   | ISA+30 C         | M    | 6096+ | 5273  | 2030 |
| Range @ LRC Speed<br>(Average Gross Weight, Full Fuel)            | ISA,SL           | km   | 623   | 615   | 600  |
|                                                                   | ISA,SL           | km/h | 215   | 211   | 207  |
|                                                                   | ISA, 1524 M      | km   | 708   | 689   | 662  |
|                                                                   | ISA, 1524 M      | km/h | 219   | 217   | 211  |
| MCP Speed @ Takeoff Gross Weight                                  | ISA,SL           | km   | 213   | 209   | 204  |
|                                                                   | ISA+20 C,SL      | km/h | 219   | 213   | 206  |
|                                                                   | ISA, 1524 M      | km/h | 222   | 217   | 206  |
|                                                                   | ISA+20 C, 1524 M | km/h | 226   | 219   | 198  |
| Endurance @ Loiter 96 km/h<br>(No Reserve)                        | ISA,SL           | hr   | 3.9   | 3.8   | 3.7  |
|                                                                   | ISA, 1524 M      | hr   | 4.5   | 4.3   | 4.1  |

| 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                                              | 277              |
| Fuel:                                                               |                  |
| Type                                                                | Aviation Turbine |
| Capacity (Usable)                                                   | 419.0 Liters     |

\* Refer to demonstrated takeoff and landing and maximum operating altitude notes on the performance charts

**Note 1:** Includes 5.9 kilograms of engine oil. Ballast is not included in standard configuration weight (ballast is a function of installed equipment).

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

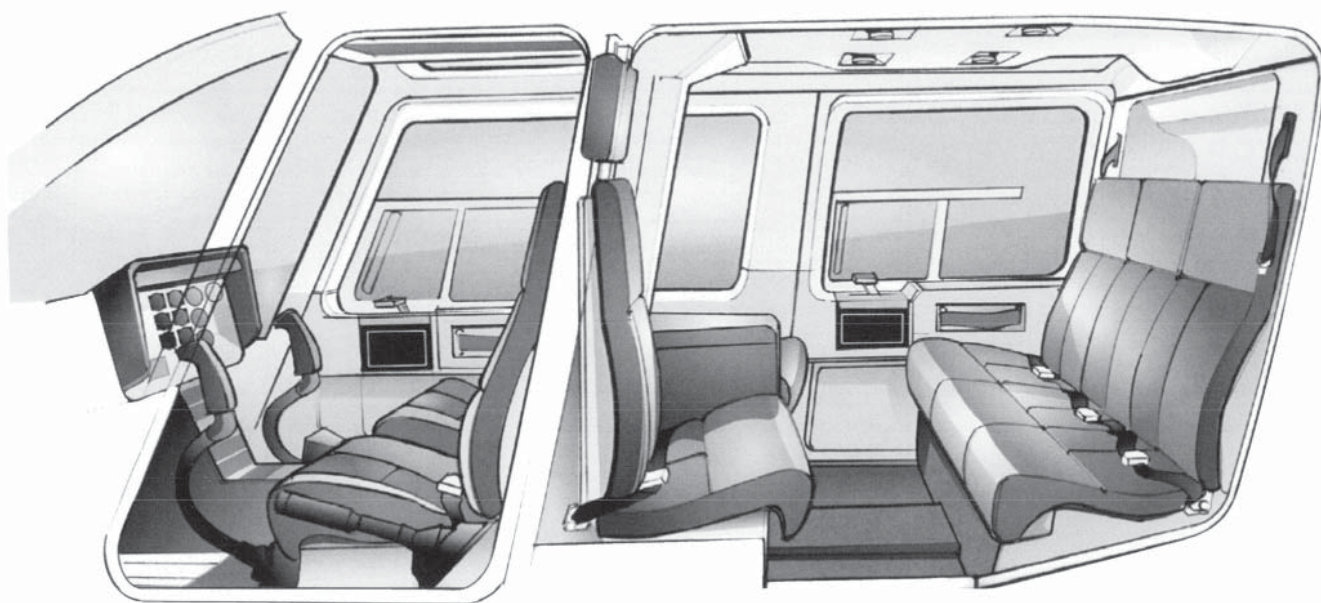
## Longranger IV Seating

### 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

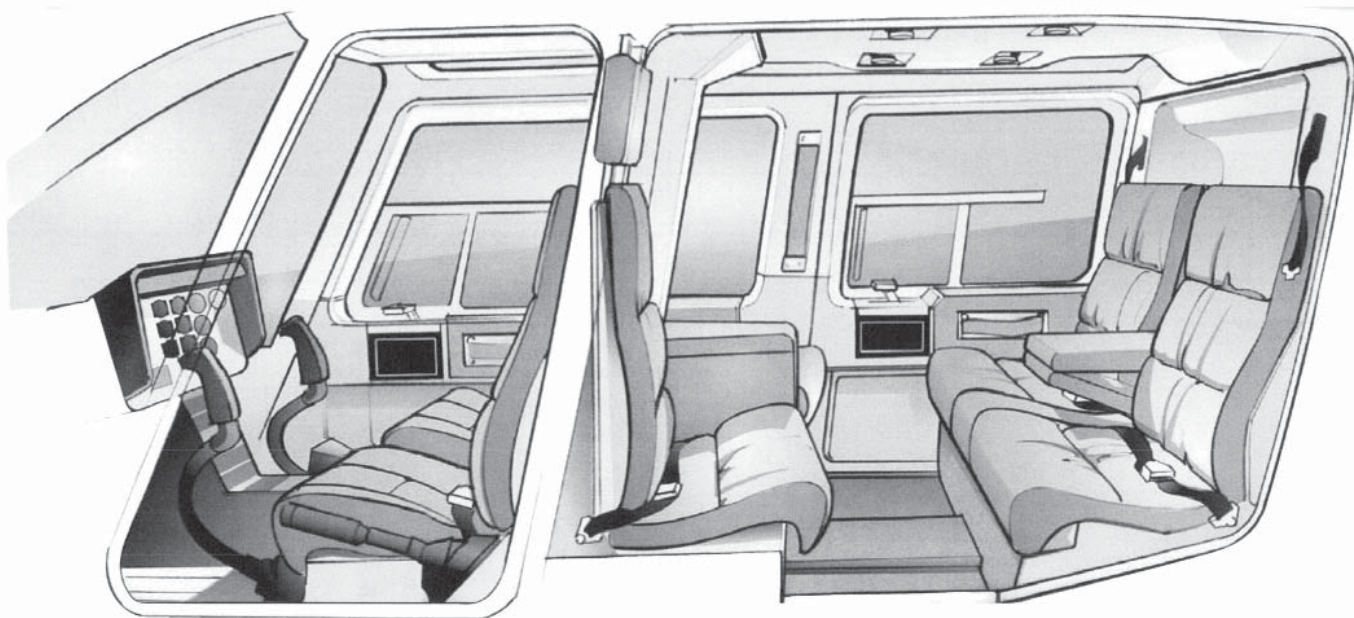
The standard cabin seating consists of five ergonomically designed seats with individual seat belts and single strap shoulder harness, arranged with three equal width forward facing seats across the rear of the cabin and two individual rearward facing seats aft of the cockpit. Available with Grey, Blue, 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 interior trim (and corporate soundproofing) increase the basic aircraft empty weight 9 lbs. (4.1 kg.).



**Specifications subject to change without notice.**

## Standard Configuration (Items Included in List Price)

| AIRFRAME                                                                                                                                                                                                                                                                                               |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Cabin; bonded aluminum honeycomb, and semi-monocoque structure                                                                                                                                                                                                                                         | Mechanical flight control linkages throughout                         |
| Doors (five), one hinged double door & copilot door on left side, pilot door & passengers door on right side                                                                                                                                                                                           | Pilots Cyclic Grip has provisions for Optional Equipment Control      |
| Landing gear, tubular skid type with replaceable skid shoes                                                                                                                                                                                                                                            | TRANSMISSION DRIVE SYSTEM                                             |
| Locks for cabin doors and luggage compartment                                                                                                                                                                                                                                                          | Focused pylon mounted with nodal beam                                 |
| Luggage compartment (16 ft <sup>3</sup> [45 M <sup>3</sup> ], 250 lbs [113 Kg]cap), with Composite Door                                                                                                                                                                                                | Freewheeling unit (between engine and main transmission)              |
| Provisions for mooring, jacking and single point lifting                                                                                                                                                                                                                                               | Kaflex (non-lubricated) input drive shaft                             |
| Tailboom, monocoque structure with vertical fin and fixed stabilizer with synchronized elevator                                                                                                                                                                                                        | Gearbox, tail rotor with 2.3:1 spiral bevel gear reduction            |
| Tail skid (tail rotor guard)                                                                                                                                                                                                                                                                           | Hydraulic pump (for cyclic and collective boost controls)             |
| Windshield (and Chin Windows), clear plexiglass                                                                                                                                                                                                                                                        | Main transmission 2 stage 15.22:1 planetary reduction                 |
| Windows, blue tinted plexiglass with sliding panels in doors, Crew "Wedge" Windows, Bulged Panel Windows, Passenger Cabin "Wedge" Windows                                                                                                                                                              | Oil cooler                                                            |
| Three color exterior paint schemes                                                                                                                                                                                                                                                                     | Oil filter with replaceable type cartridge                            |
| Rain gutters                                                                                                                                                                                                                                                                                           | Oil pump, constant pressure                                           |
| INTERIOR                                                                                                                                                                                                                                                                                               | FLIGHT AND ENGINE INSTRUMENTS                                         |
| Standard 7-place interior with soundproofing, carpeting, ash trays & data case. Color options available for upholstery & carpet                                                                                                                                                                        | Clock,Digital Quartz Crystal Chronometer                              |
| 7-place shoulder harnesses, dual straps in cockpit, single strap in cabin                                                                                                                                                                                                                              | Compass, magnetic                                                     |
| Fire extinguisher, cabin                                                                                                                                                                                                                                                                               | Dual tachometer (rotor and engine)                                    |
| First aid kit                                                                                                                                                                                                                                                                                          | Inclinometer                                                          |
| Parcel shelf (behind aft seat)                                                                                                                                                                                                                                                                         | Indicator, airspeed                                                   |
| Ram air ventilation system                                                                                                                                                                                                                                                                             | Indicator, altimeter                                                  |
| POWERPLANT                                                                                                                                                                                                                                                                                             | Indicator, engine oil pressure/temperature                            |
| Rolls-Royce Model 250-C30P gas turboshaft engine                                                                                                                                                                                                                                                       | Indicator, free air temperature                                       |
| Fuel control, Bendix                                                                                                                                                                                                                                                                                   | Indicator, fuel quantity with forward cell quantity switch            |
| Fuel filter (eliminates anti-ice additive requirement)                                                                                                                                                                                                                                                 | Indicator, fuel pressure/generator load meter                         |
| Fuel pump, engine mounted                                                                                                                                                                                                                                                                              | Indicator, torque meter pressure                                      |
| Fuel boost pumps (2 canister type) submerged in main fuel tank                                                                                                                                                                                                                                         | Indicator, transmission oil pressure/ temperature                     |
| Fuel system, 110.7 gal [419 liter] capacity                                                                                                                                                                                                                                                            | Indicator, turbine outlet temperature with over temp light            |
| Oil system, 1.5 gal [5.7 liter] capacity                                                                                                                                                                                                                                                               | Hour meter                                                            |
| Compressor wash provisions                                                                                                                                                                                                                                                                             | MONITORING SYSTEM                                                     |
| ROTORS AND CONTROLS                                                                                                                                                                                                                                                                                    | Caution indication lights:                                            |
| Main rotor, semi-rigid, two-bladed, see-saw type with preconed and underslung feathering axis. All metal blades that are moisture proofed and epoxy encapsulated. Flap restraints. CHOICE of STANDARD [black top-white bottom] or HIGH VISIBILITY [orange/white top-white bottom] painted rotor blades | Baggage Door Open                                                     |
| Tail rotor; semi-rigid, two-bladed, see-saw type                                                                                                                                                                                                                                                       | Fuel boost pump inoperative, left & right                             |
| Hydraulic boost system (pump and reservoir module)                                                                                                                                                                                                                                                     | Engine failure warning                                                |
|                                                                                                                                                                                                                                                                                                        | Fuel filter by-pass indicator                                         |
|                                                                                                                                                                                                                                                                                                        | Transmission oil pressure                                             |
|                                                                                                                                                                                                                                                                                                        | Transmission oil temperature                                          |
|                                                                                                                                                                                                                                                                                                        | Tail rotor gearbox chip detector                                      |
|                                                                                                                                                                                                                                                                                                        | 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 |

Specifications subject to change without notice.

|                                         |
|-----------------------------------------|
| (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 w/lift tube            |
| Operating manuals:                            |
| Aircraft log book                             |
| Engine log book                               |
| Engine operating manual                       |
| Engine parts manual                           |
| Flight manual                                 |
| Illustrated parts catalog                     |
| Maintenance & overhaul manual                 |
| Tie-down assemblies, main rotor and ail rotor |

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 (lbs) | Wt (Kg) | Notes   |
|-----------------------------------------------------------|----------|---------|---------|
| <b>AIRFRAME</b>                                           |          |         |         |
| HIGH SKID GEAR (INCL AAI FLIGHT STEPS)                    | 54.8     | 24.9    | (1, 11) |
| DUAL CONTROLS                                             | 11.7     | 5.3     |         |
| LIGHT WEIGHT POP-OUT FLOATS                               | 159.0    | 72.1    | (1      |
| SKID GEAR FAIRINGS                                        | 10.3     | 4.7     | (2      |
| <b>AUDIO</b>                                              |          |         |         |
| AFT AUDIO ICS - ONE STATION (TELEPHONE TYPE HANDSET)      | 3.0      | 1.4     |         |
| <b>AVIONICS</b>                                           |          |         |         |
| VHF EQUIPMENT (KX-155)                                    | 7.7      | 3.5     |         |
| TRANSPONDER PROVISIONS (KT-76A)                           | 1.0      | 0.5     | (3      |
| TRANSPONDER EQUIPMENT (KT-76A)                            | 2.5      | 1.1     | (3      |
| ADF EQUIPMENT (KR-87)                                     | 7.1      | 3.2     |         |
| OMNI W/ PROVISIONS (KI208)                                | 3.4      | 1.5     |         |
| TRANSPONDER PROVISIONS (DIGITAL) (KT-70)                  | 1.0      | 0.5     | (3      |
| TRANSPONDER EQUIPMENT (DIGITAL) (KT-70)                   | 3.9      | 1.8     | (3      |
| VHF/ADF PROVISIONS W/ AUDIO PANEL (KMA24H-71)             | 10.3     | 4.7     |         |
| ENCODING ALTIMETER                                        | 0.9      | 0.4     | (1, 3   |
| BLIND ENCODING ALTIMETER                                  | 1.9      | 0.9     | (3      |
| <b>AVIONICS</b>                                           |          |         |         |
| PARTICLE SEPARATOR                                        | 13.5     | 6.1     | (1      |
| <b>ENVIRONMENT</b>                                        |          |         |         |
| STANDARD HEADLINER w/ A/C DUCTS [for STC A/C]             | 6.2      | 2.8     | (4      |
| <b>EQUIPMENT</b>                                          |          |         |         |
| HIGH ALTITUDE TAIL ROTOR                                  | 13.0     | 5.9     | (1, 5   |
| REVERSE FLOW SNOW BAFFLE                                  | 4.9      | 2.2     |         |
| CARGO HOOK EQUIPMENT                                      | 16.7     | 7.6     |         |
| CARGO HOOK PROVISIONS                                     | 3.6      | 1.6     |         |
| LITTER PROVISIONS & EQUIPMENT [Basic Dual Litter System]  | 49.5     | 22.5    |         |
| LITTER PROVISIONS & EQUIPMENT W/ AIR SPLINT MOD.          | 51.9     | 23.5    | (6      |
| ROTOR BRAKE                                               | 13.3     | 6.0     |         |
| <b>INSTRUMENT</b>                                         |          |         |         |
| FLIGHT INSTRUMENTS [for less Dir. Gyro. See Note/Credits] | 10.5     | 4.8     | (7      |
| <b>INTERIOR</b>                                           |          |         |         |
| CORPORATE SEATS                                           | 8.4      | 3.8     | (1, 10  |
| SOUND-PROOFING                                            | 13.0     | 5.9     |         |
| <b>PAINT</b>                                              |          |         |         |
| MARKINGS FOR HIGH VIS. M/R BLADES (WHITE & ORANGE)        | 0.0      | 0.0     | (8      |

Specifications subject to change without notice.

| Kit Description                          | Wt (lbs) | Wt (Kg) | Notes |
|------------------------------------------|----------|---------|-------|
| <b>ENVIRONMENT</b>                       |          |         |       |
| AIR CONDITIONER EQUIPMENT [Air Com]      | 113.6    | 51.6    | (4)   |
| <b>EQUIPMENT</b>                         |          |         |       |
| WIRE STRIKE - RECOMMENDED KIT - SEE NOTE |          |         | (9)   |
| LOW SKIDS                                | 15.7     | 7.1     |       |
| HIGH SKIDS                               | 16.2     | 7.3     |       |
| <b>EQUIPMENT</b>                         |          |         |       |
| GROUND HANDLING WHEELS                   | 95.0     | 43.1    |       |
| <b>INSTRUMENT</b>                        |          |         |       |
| DIRECTIONAL GYRO                         | -3.6     | -1.6    |       |
| <b>PAINT</b>                             |          |         |       |
| NO EXTERIOR PAINT                        | -16.7    | -7.6    |       |
| WHITE PAINT ONLY                         | 0.0      | 0.0     |       |

## Optional Accessories Explanatory Notes

All equipment kits require Provision Kits prior to installation list.

- 1) Price and/or weight includes credit for basic ship hardware.
- 2) Only compatible with low skid gear.
- 3) Encoding Altimeter or Blind Encoder required to enable Mode C or Mode S Altitude reporting. Customer is responsible for obtaining Aircraft ID code for Mode S.
- 4) The Standard Headliner with A/C Ducts is required for installation of the STC Air Com airconditioner.
- 5) Requires installation of Encoding Altimeter or Blind Encoder.
- 6) 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.
- 7) Flight Instruments Less D. G. requires a Sales Order Amendment (Kit number is the SAME).
- 8) Standard or High Visibility Main Rotor Blade Paint to be specified by Sales Order.
- 9) 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.
- 10) Material to be called out on Sales Order. Can be Leather, Fabric/Leather, or Fabric.
- 11) "J Steps" (4 each) may be substituted for the AAI FlightSteps by Sales Order. Substitution of "J Steps" reduce High Skid Kit installed weight by 20.0 lbs (9.1 kg.).

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

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

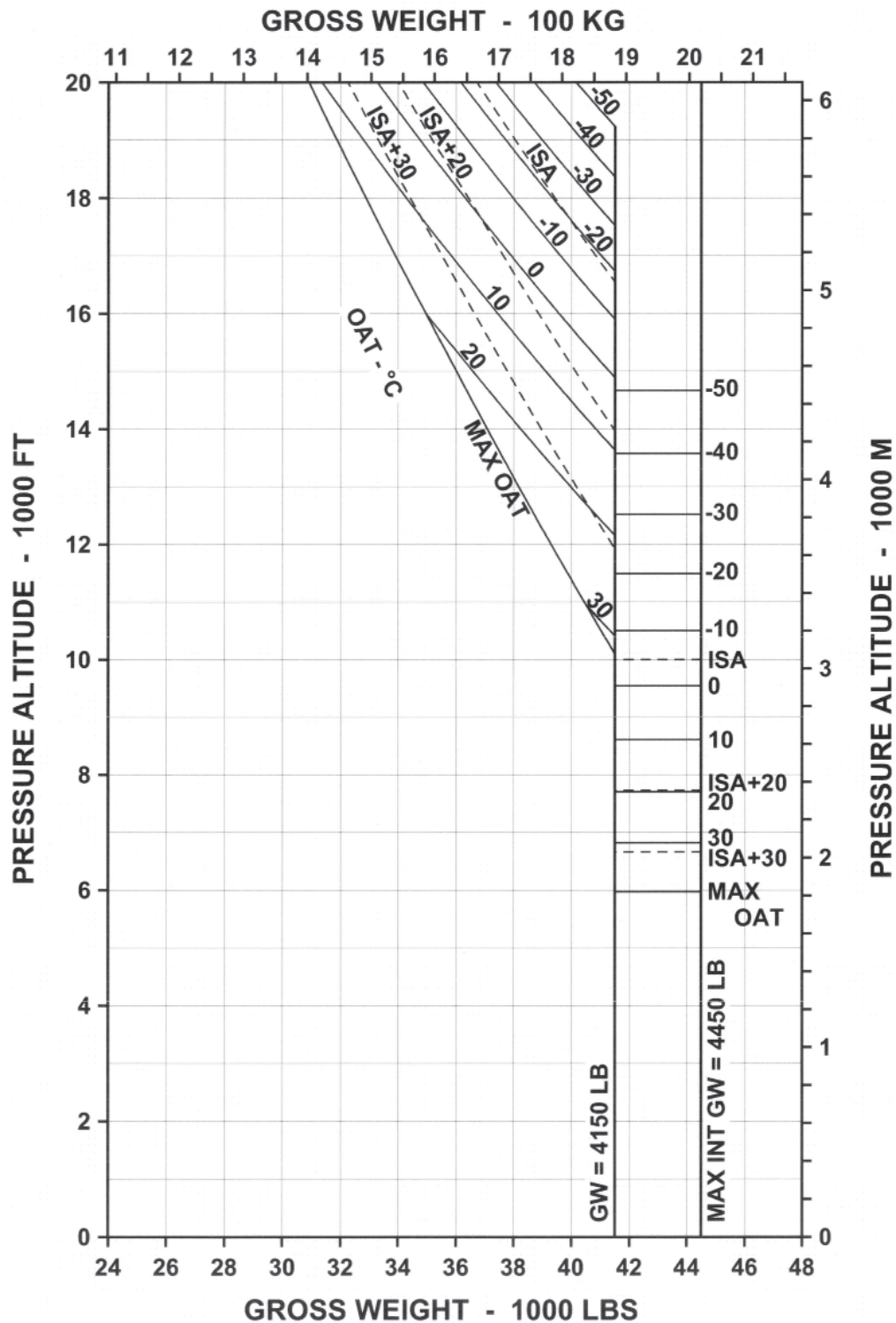
**Specifications subject to change without notice.**

**Page Intentionally Left Blank**

***HELICOPTER PERFORMANCE  
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

Rolls-Royce 250-C30P Engine at Top  
Standard Tail Rotor

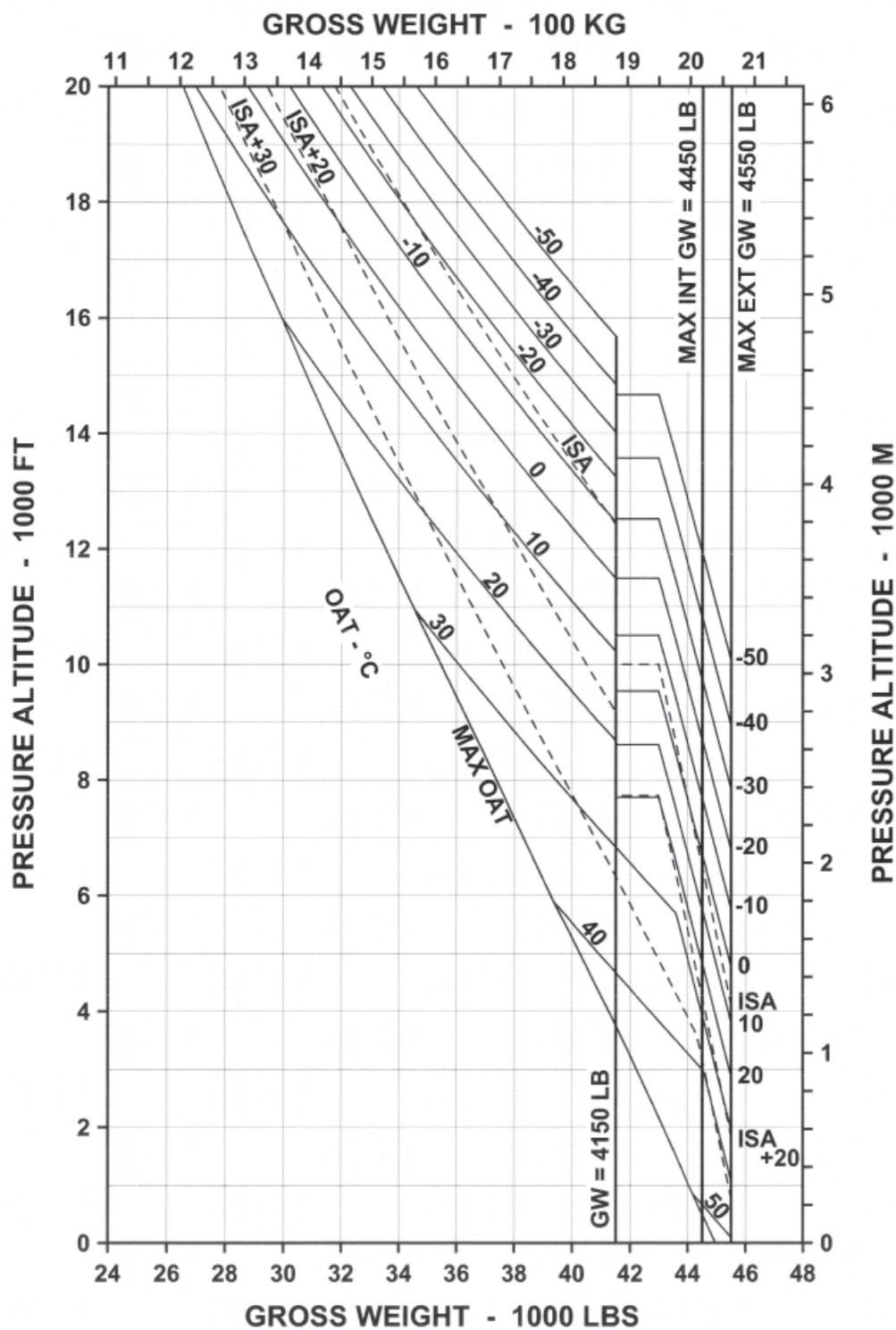


**Note:** Takeoff and landing has not been demonstrated and is not approved above 15,000 feet / 4572 meters density altitude.

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 Top  
Standard Tail Rotor

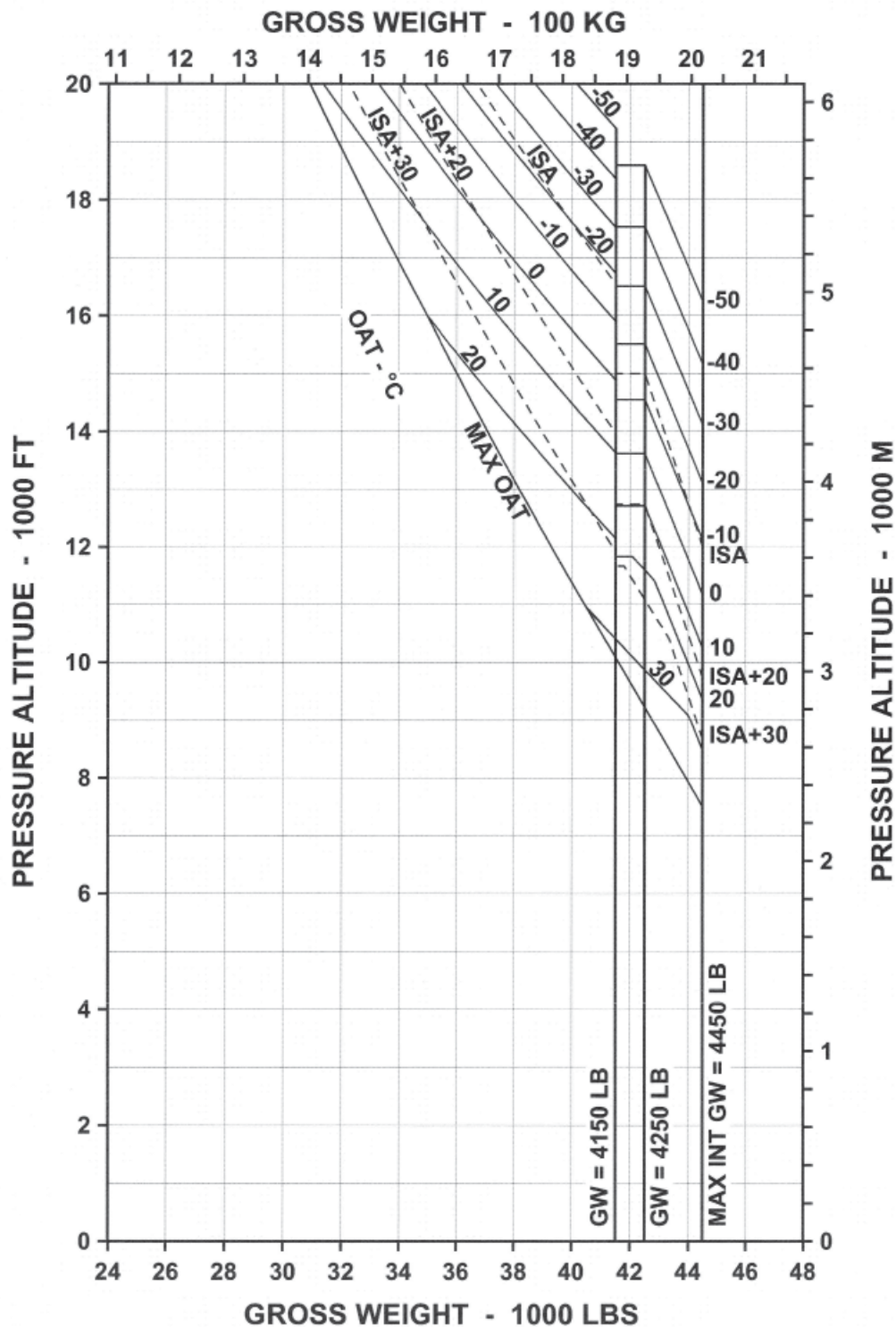


**Note:** Takeoff and landing has not been demonstrated and is not approved above 15,000 feet / 4572 meters density altitude.

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 IGE 2.5 Ft

Rolls-Royce 250-C30P Engine at Top  
High Altitude Tail Rotor

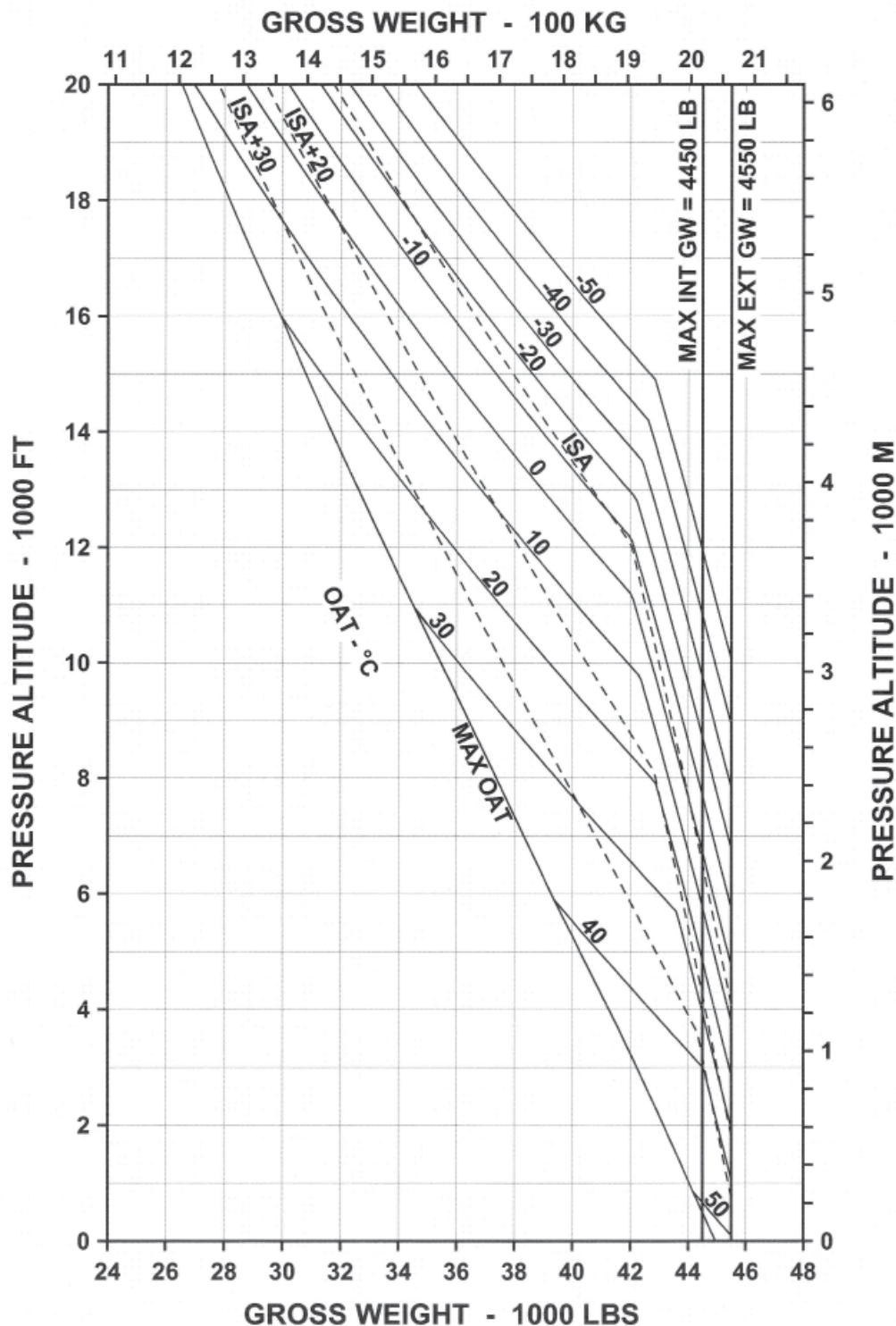


**Note:** Takeoff and landing at gross weights above 4150 pounds/1882 kilograms is subject to density altitude limitation, see the FAA approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-19.

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 Top  
High Altitude Tail Rotor

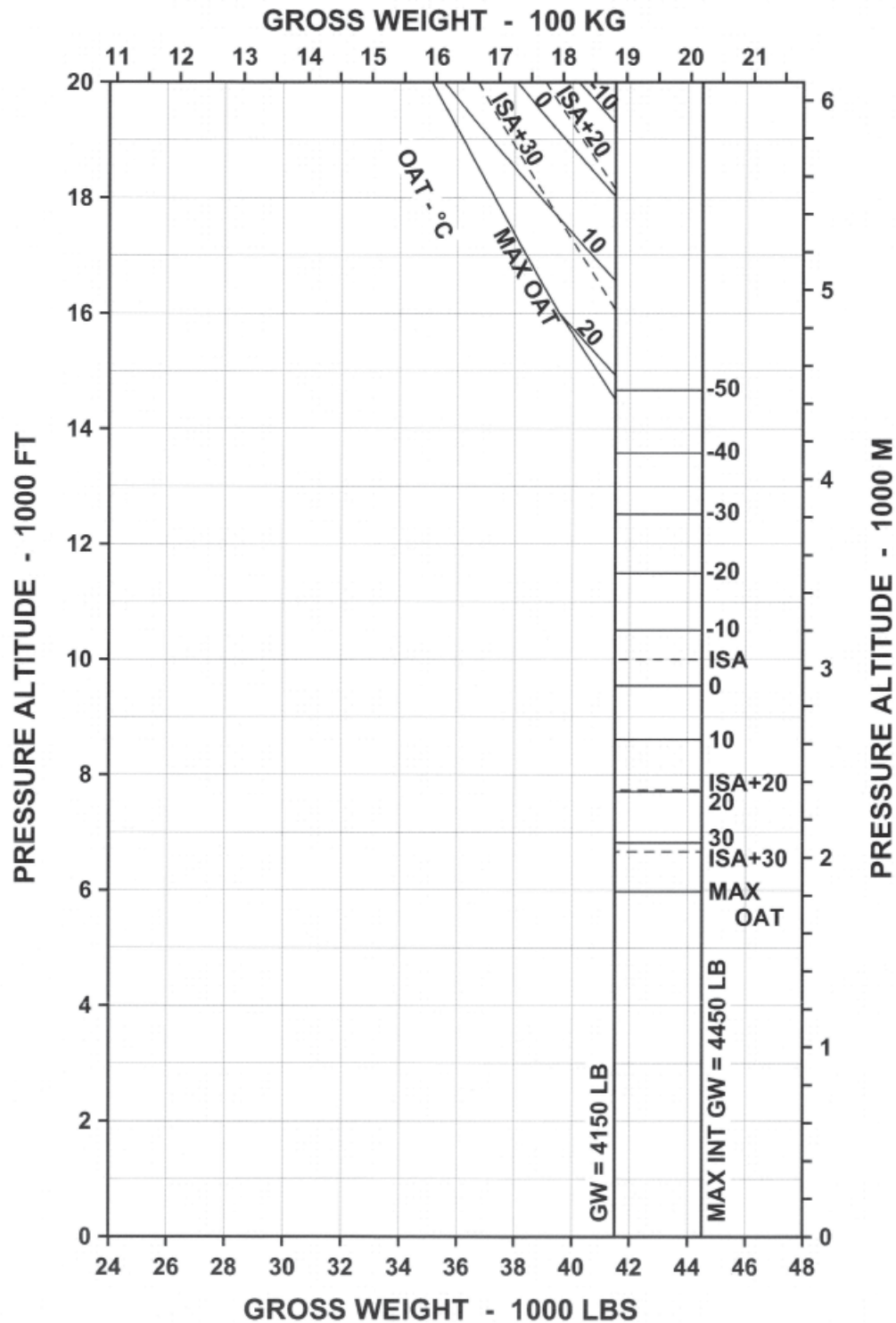


**Note:** Takeoff and landing at gross weights above 4150 pounds/1882 kilograms is subject to density altitude limitation, see the FAA approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-19.

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, STANDARD TAIL ROTOR

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

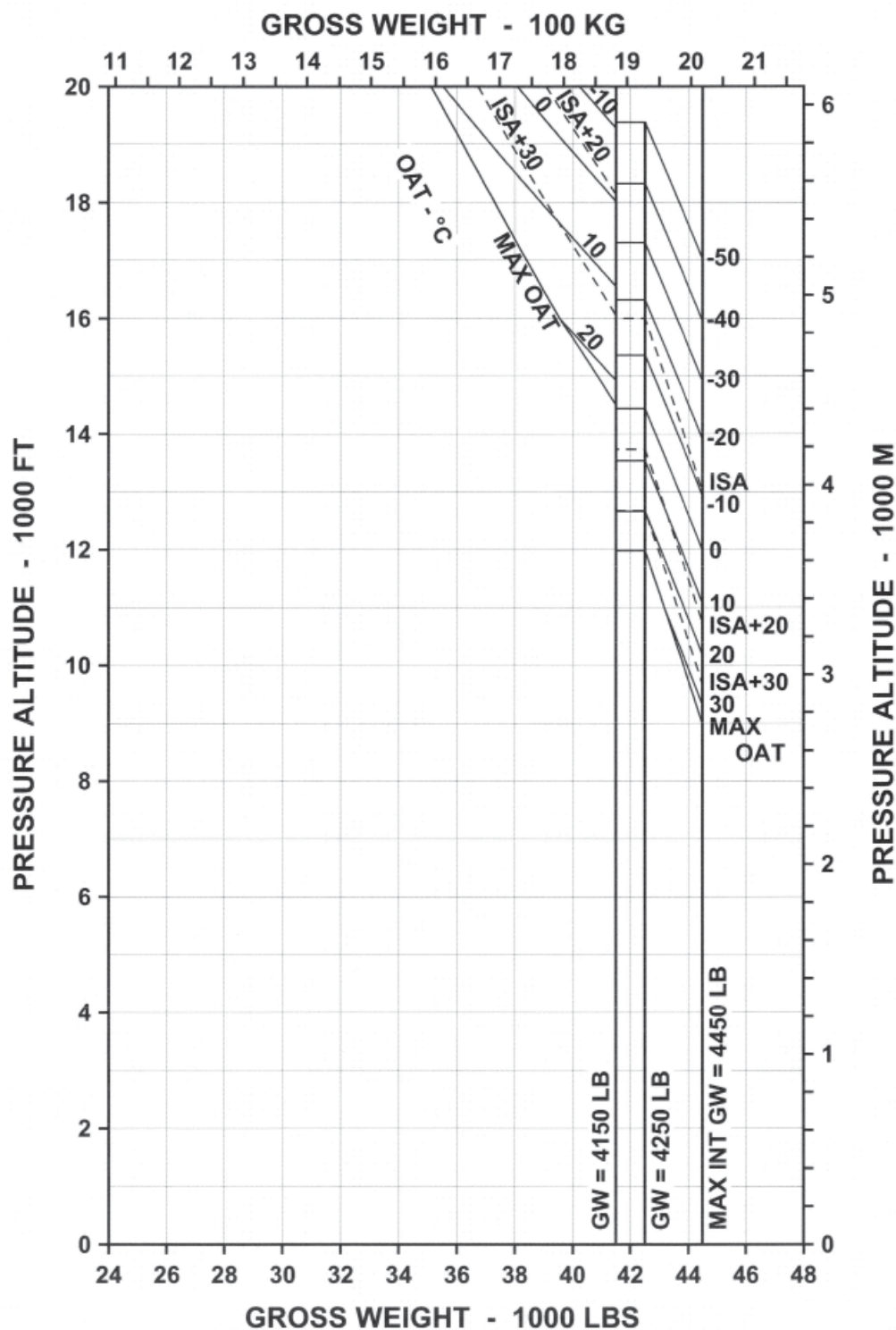


**Note:** Maximum operating altitude with standard tail rotor for gross weights above 4150 pounds/1882 kilograms is 10,000 feet / 3050 meters density altitude.

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 4150 pounds/1882 kilograms is subject to density altitude limitation, see the FAA approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-19.

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

**Page Intentionally Left Blank**

***FUEL FLOW VS. AIRSPEED***  
***ISA & ISA +20°C***  
***ROLLS-ROYCE 250-C30P ENGINE***  
***BASIC INLET INSTALLED***  
***LOW SKID GEAR WITHOUT FAIRINGS***

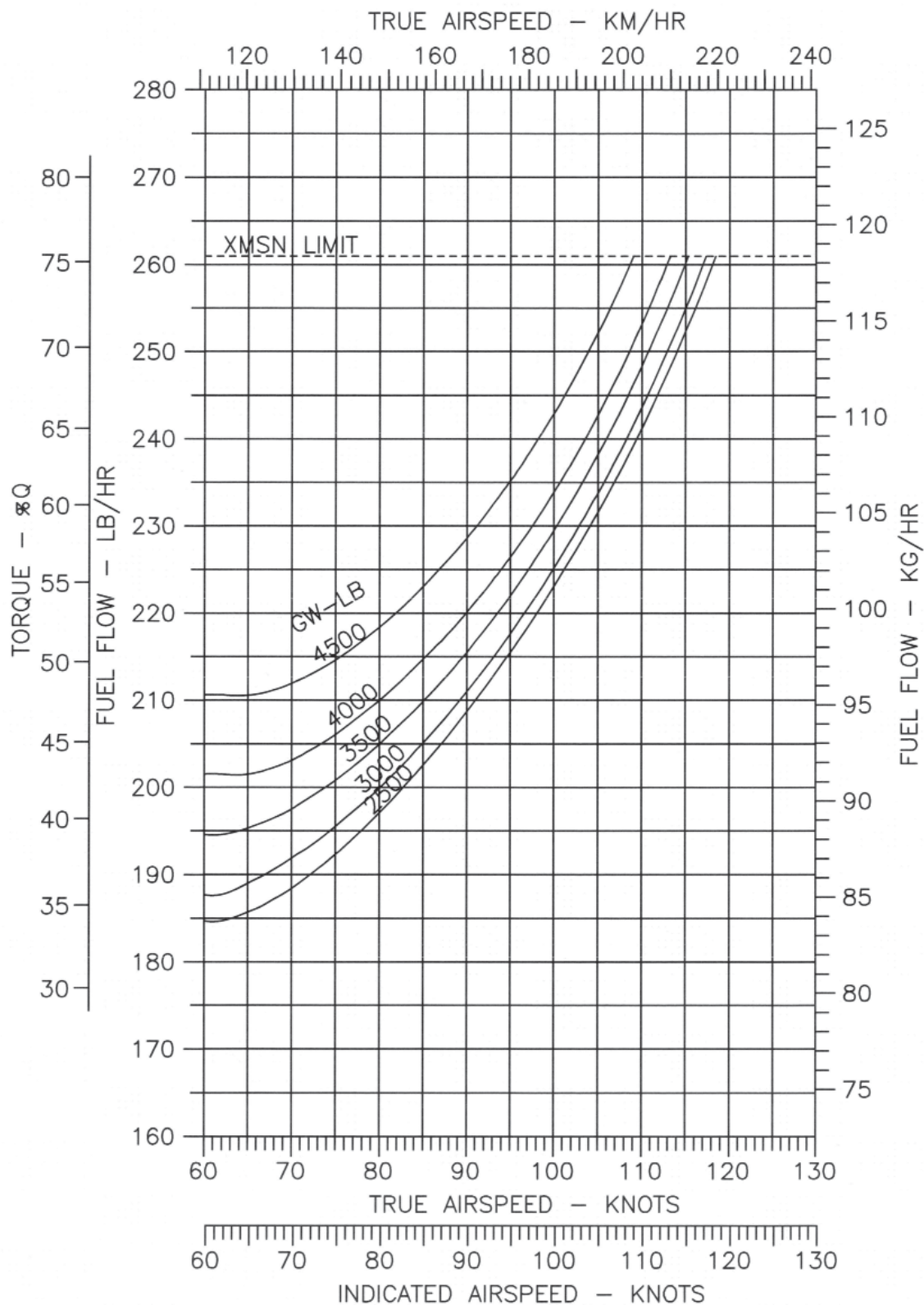
For particle separator installed; increase fuel flow two (2) lb/hr [one (1) kg/hr] for cross tube fairings; increase airspeed two(2) knots [four(4) km/hr]

**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 VERSUS AIRSPEED

Pressure Altitude = Sea Level

OAT = +15 Deg C

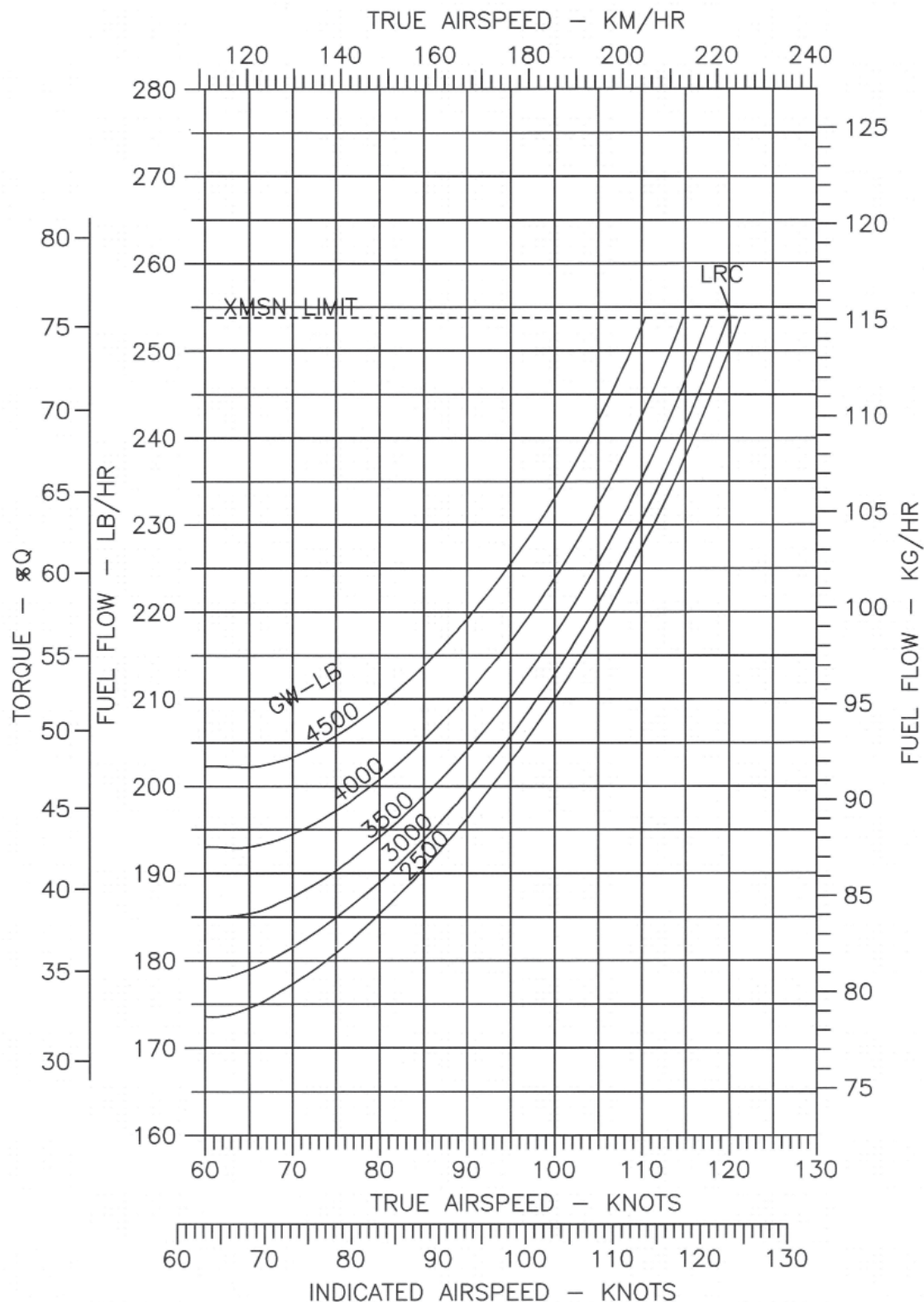


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 2000 Feet

OAT = +11 Deg C

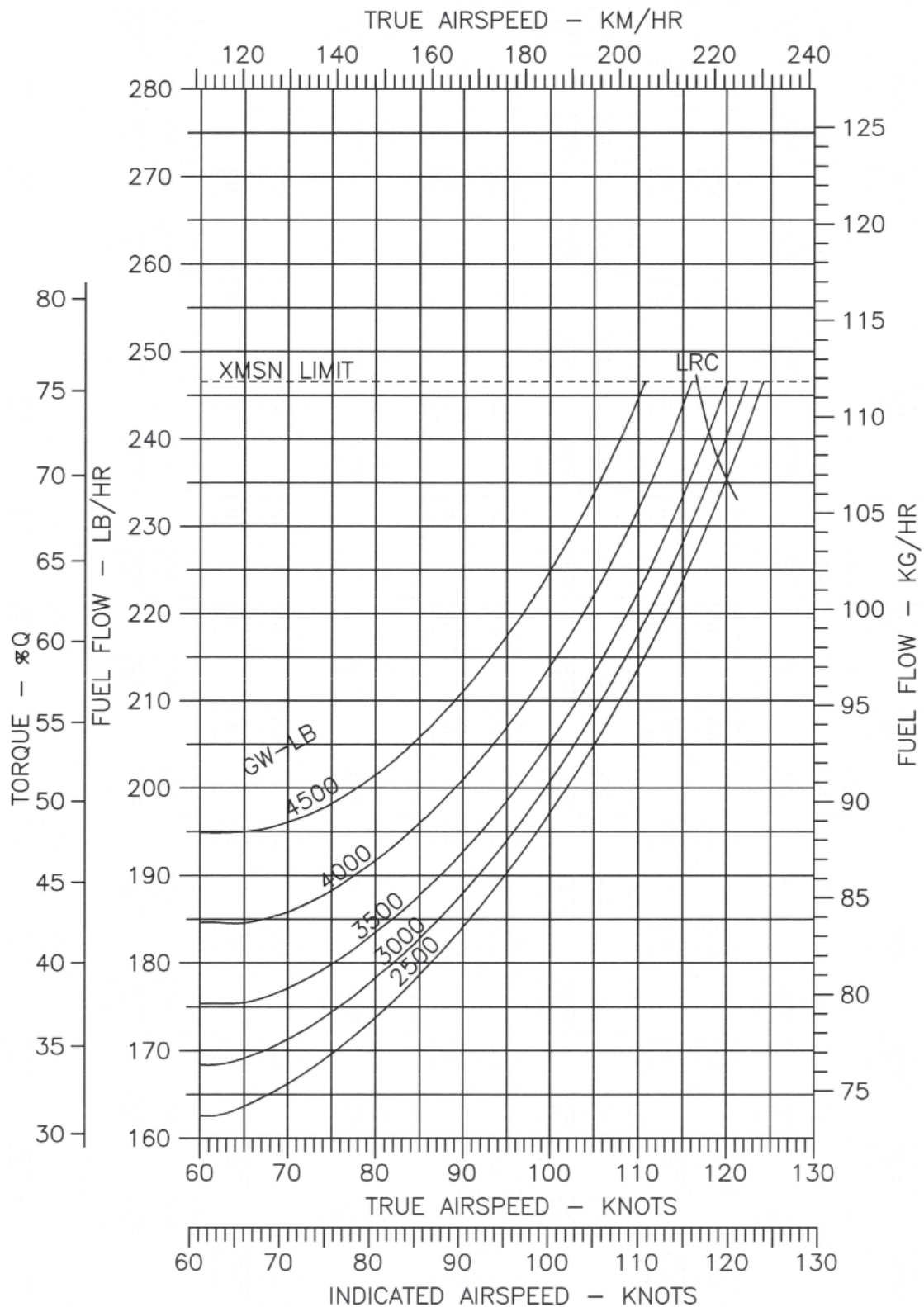


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 4000 Feet

OAT = + 7 Deg C

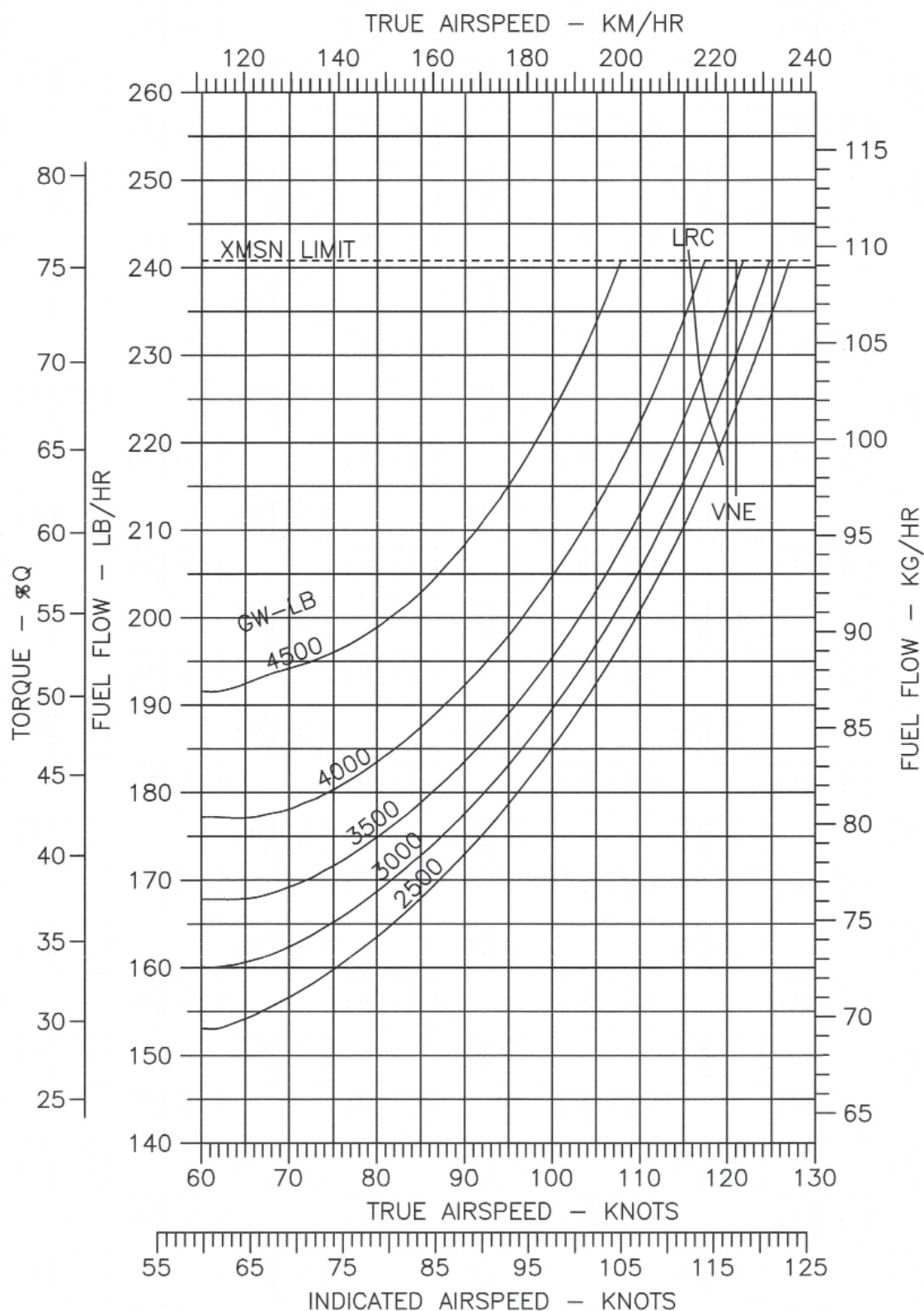


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 6000 Feet

OAT = + 3 Deg C

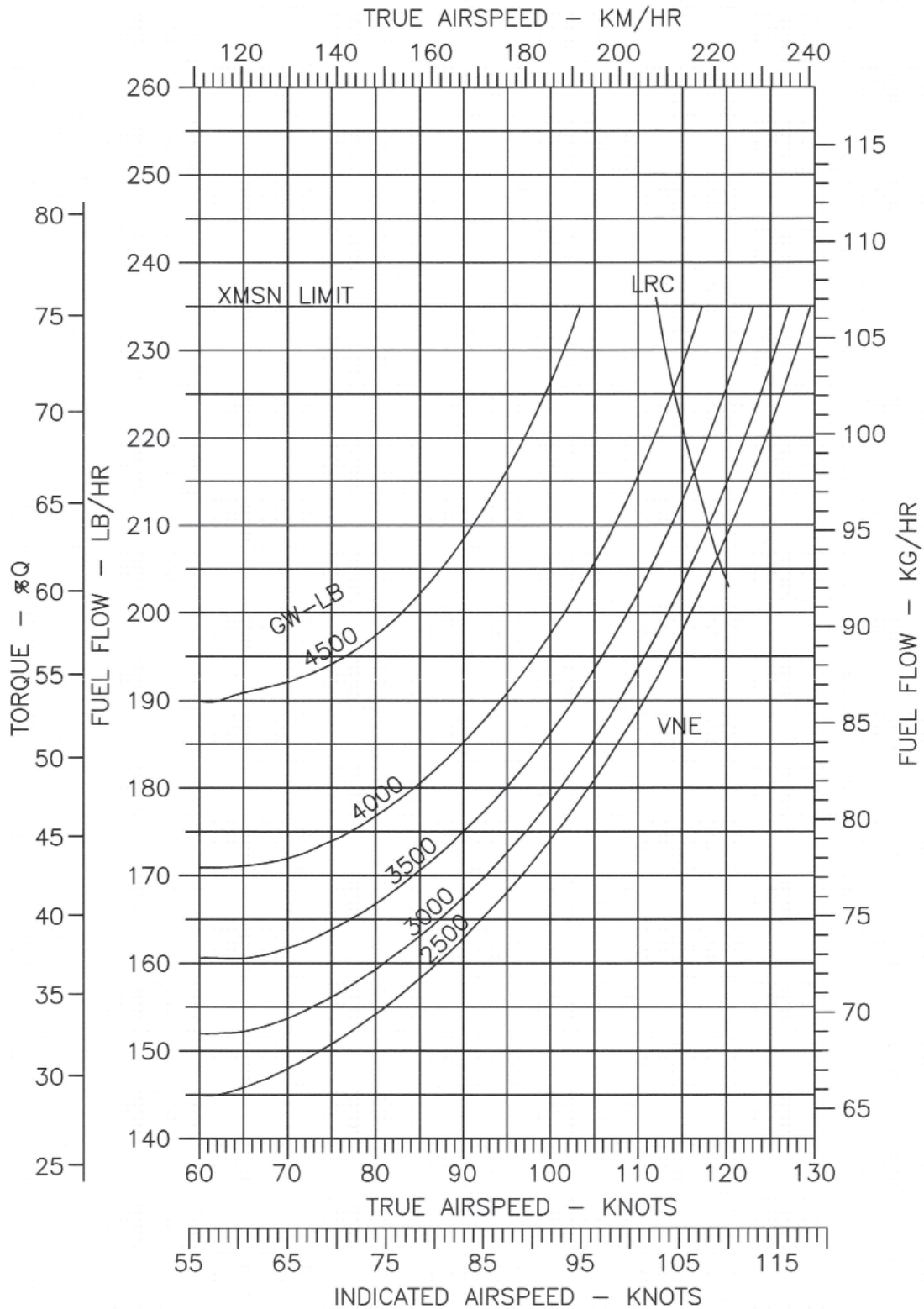


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 8000feet

OAT = -1 Deg C

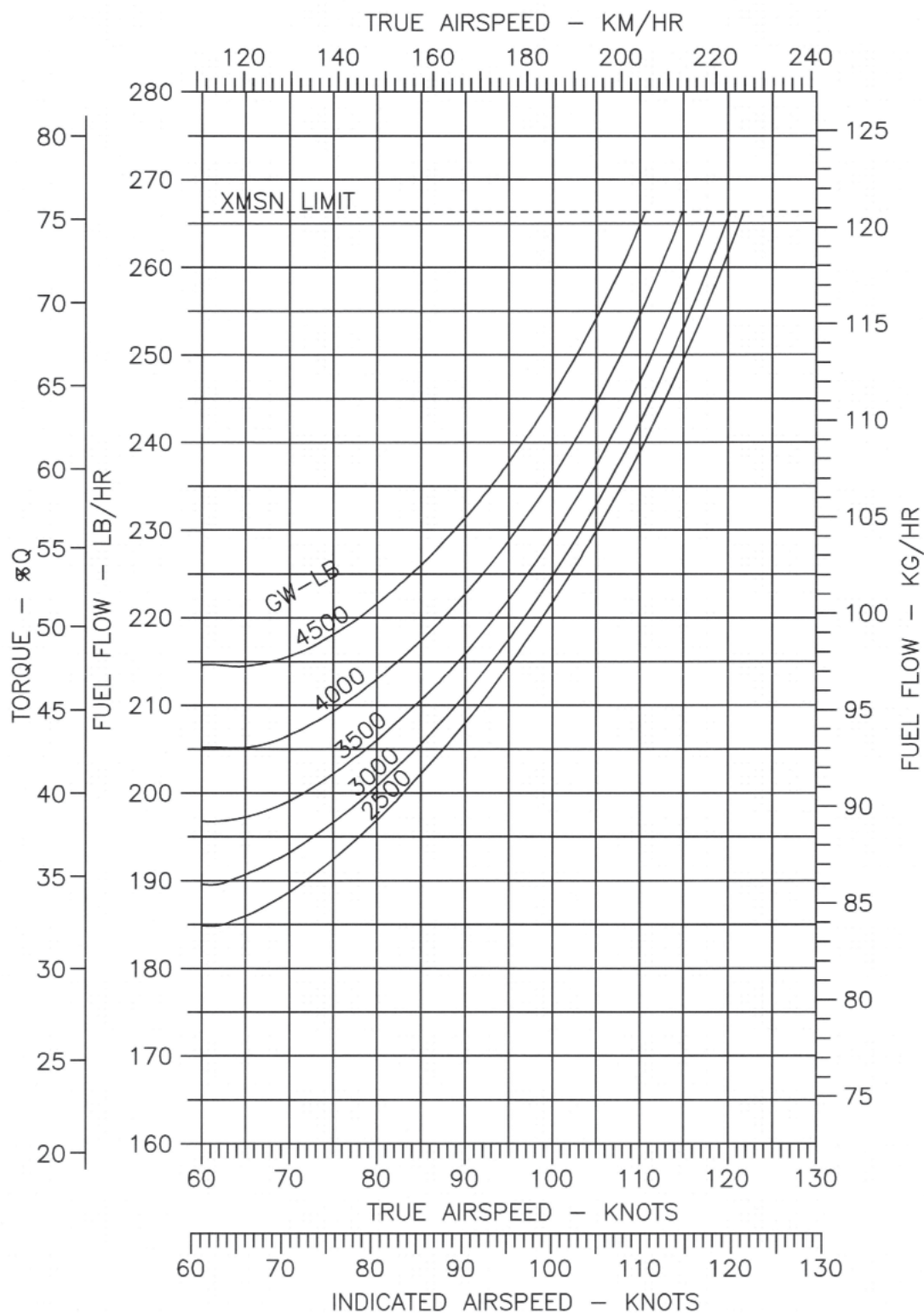


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = Sea Level

OAT = + 35 Deg C

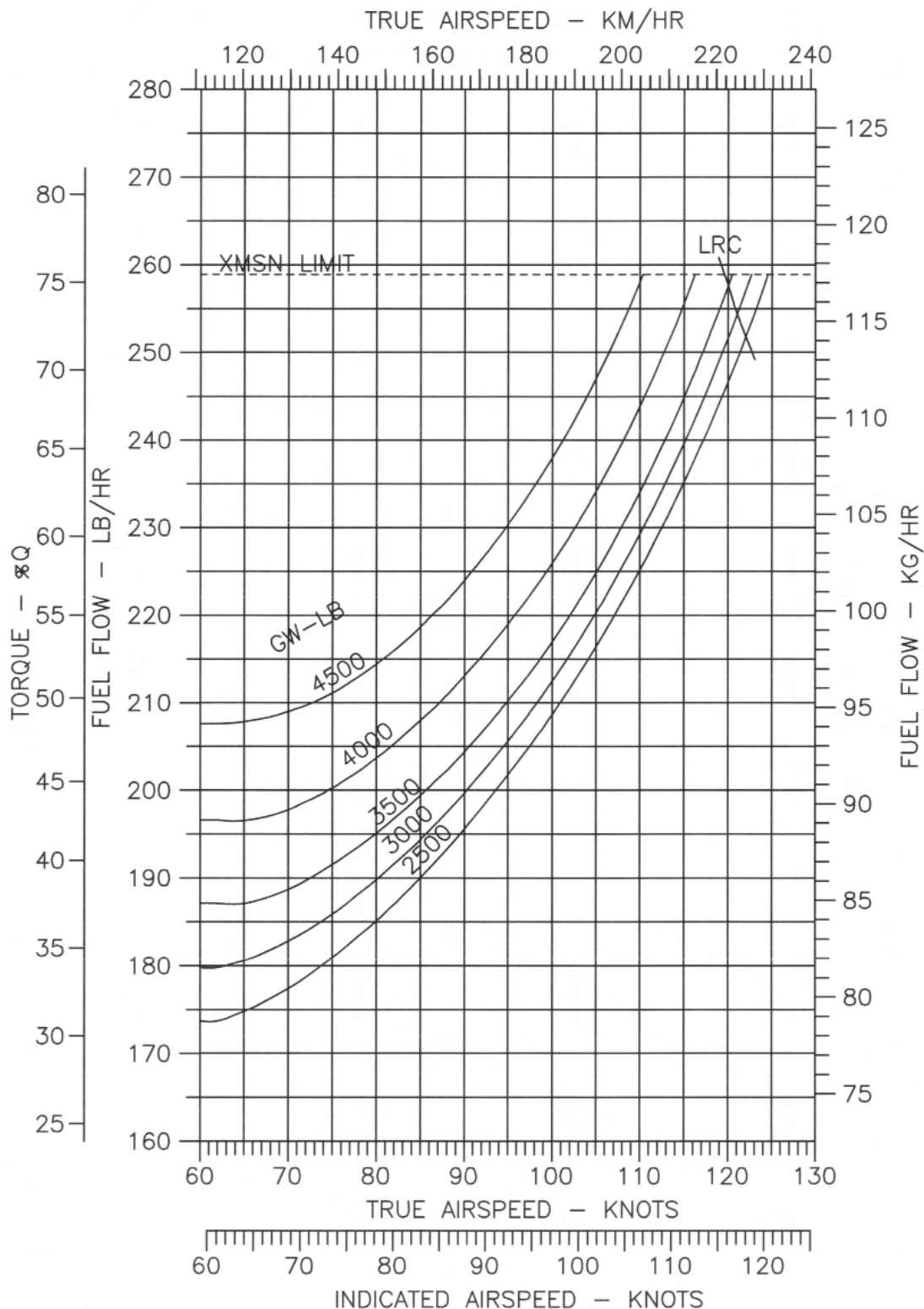


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 2000feet

OAT = + 31 DEG C

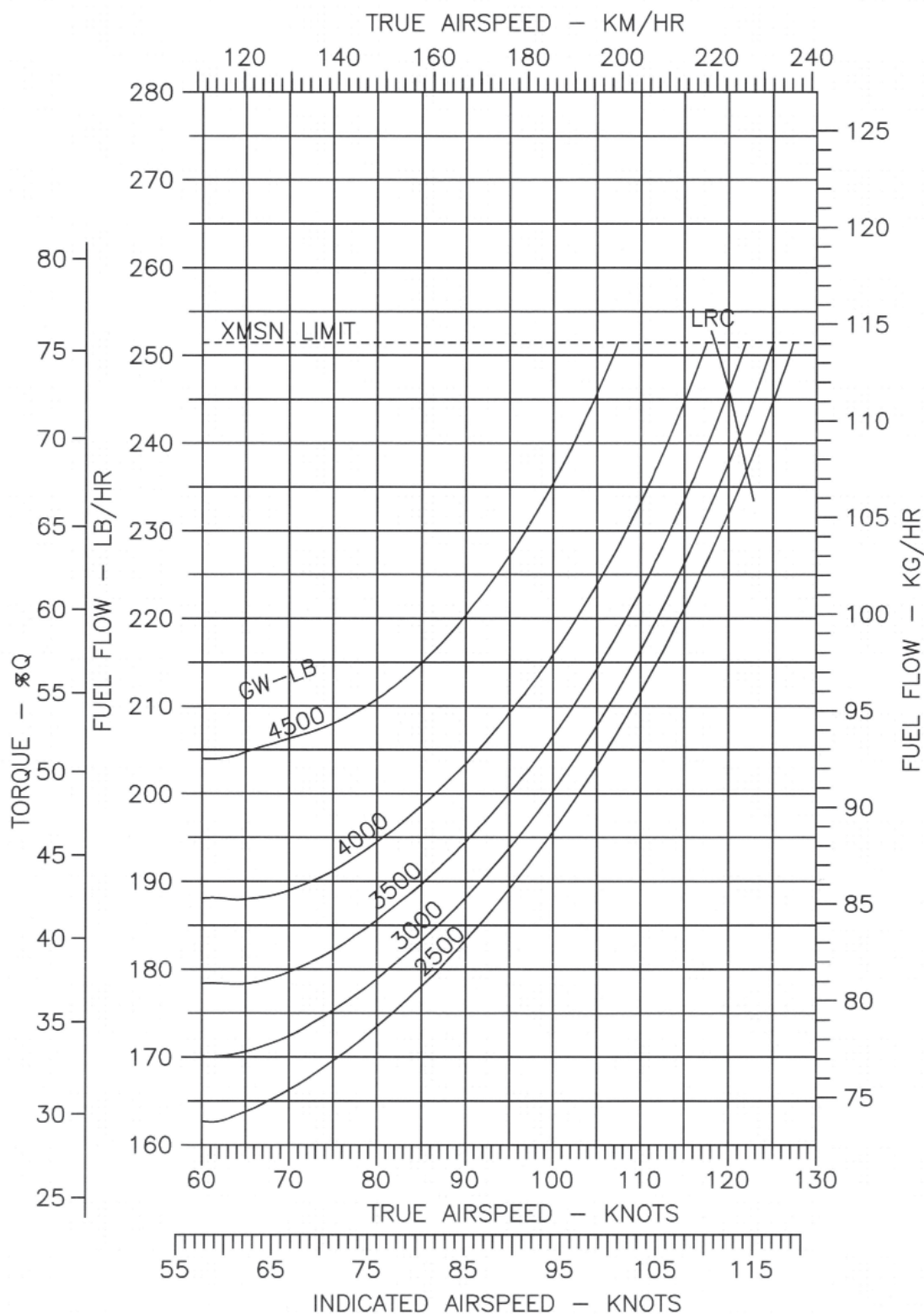


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 4000feet

OAT = + 27 Deg C

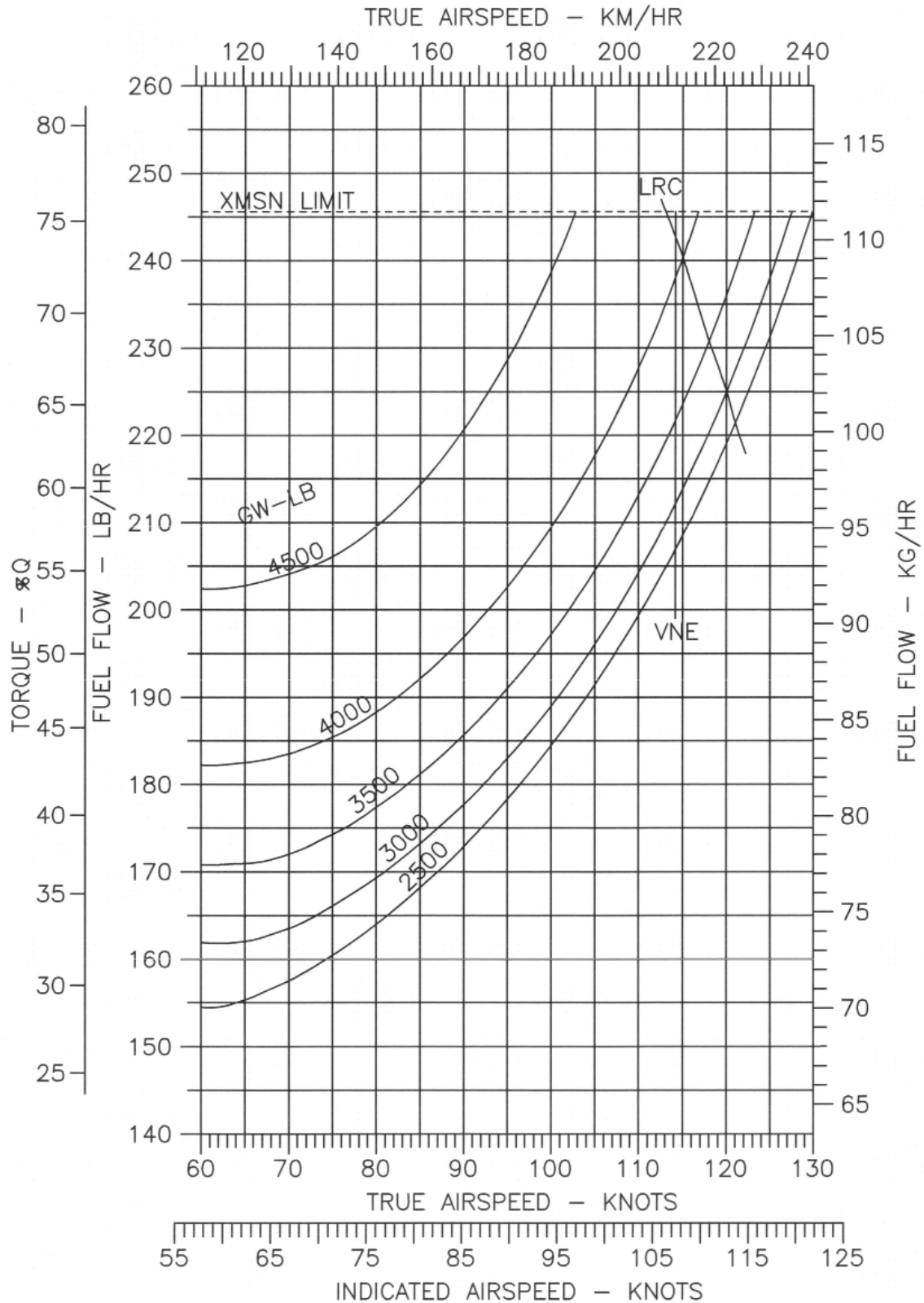


The data set forth on this document are general in nature and may vary with conditions.  
 For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 6000feet

OAT = + 23 Deg C

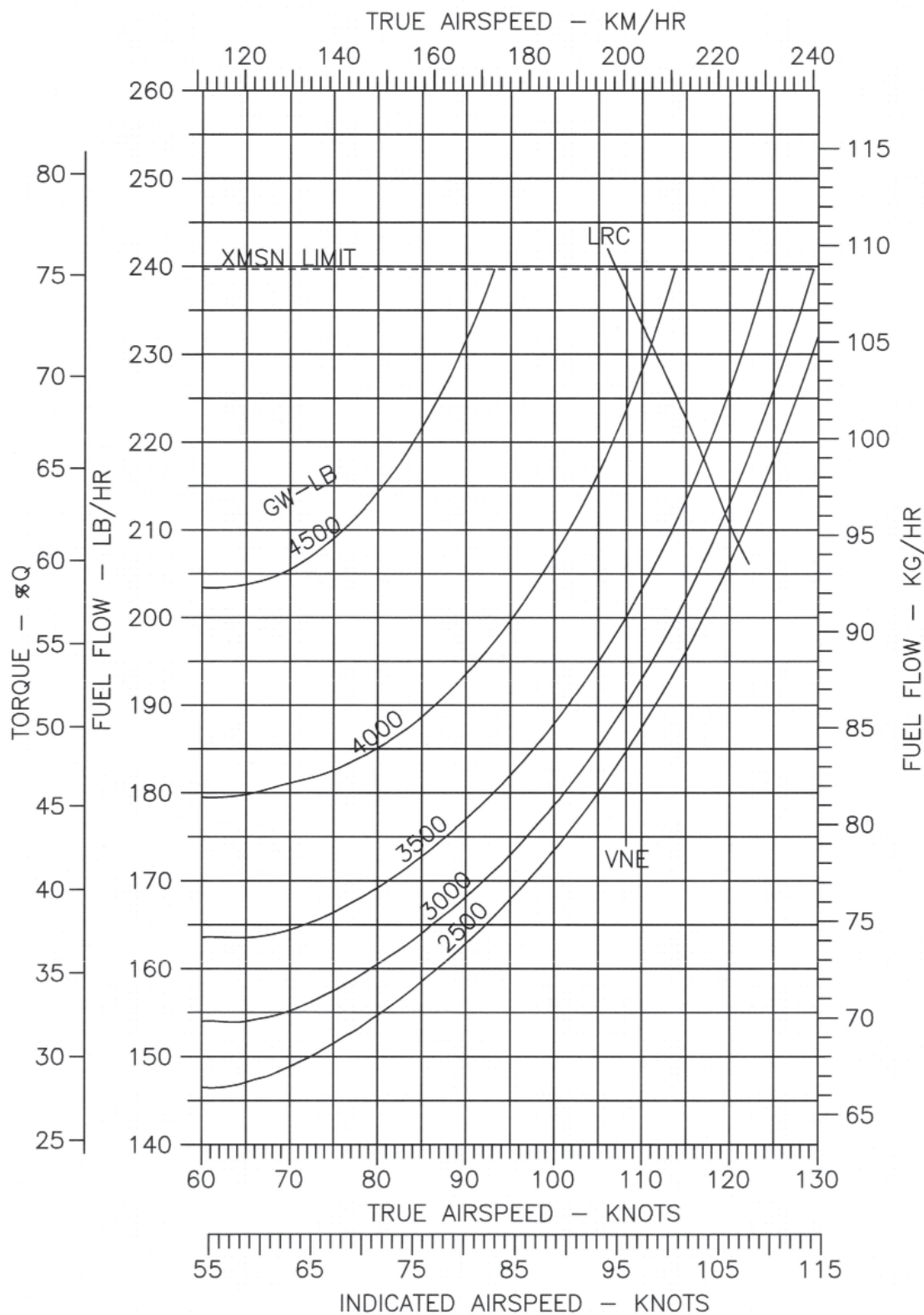


The data set forth on this document are general in nature and may vary with conditions.  
For performance data and operating limitations for any specific flight mission, reference must be made to the approved Flight Manual

## FUEL FLOW VERSUS AIRSPEED

Pressure Altitude = 8000feet

OAT = +19 Deg C



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

---

## Cost of Operations

### Introduction

Bell Helicopter Textron's cost of operations data for current production helicopters is based on information from Bell operators and service facilities. BHT'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. BHT 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 BHT 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.

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 [s]) 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**

|                               |                                                                                                                                                                                                                                                                                                                        |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Insurance:</b>             | 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.                                                                                                                                           |
| <b>Facilities:</b>            | Facilities can include hangar, workshop, parts storage area, tools, ground support equipment and administrative area as appropriate to the specific operation.                                                                                                                                                         |
| <b>Crew Compensation:</b>     | 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 regional marketing managers can advise typical local costs for estimation purposes.                       |
| <b>Financial Factors:</b>     | 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. |
| <b>Miscellaneous Factors:</b> | Staff expenses (other than aircrew and direct maintenance personnel), utilities, office expenses, etc.                                                                                                                                                                                                                 |

### **Ownership Analysis Program**

Bell Helicopter Textron uses the Life Cycle Cost 2006 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'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.

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

|                                                            | OPERATOR OVERHAUL |
|------------------------------------------------------------|-------------------|
| <b>Fuel, Lubricants</b>                                    |                   |
| Fuel: (Note 1)                                             | \$152             |
| Lubricants:                                                | 4.56              |
| <b>Airframe Direct Maintenance</b>                         |                   |
| <b>Labor:</b> (Note 2)                                     |                   |
| Scheduled Inspections (Note 3)                             | 26.46             |
| Scheduled Retirements (Note 4)                             | 0.53              |
| Scheduled Overhauls (Note 5)                               | 7.21              |
| Provision for Unschedule Maintenance and Service Bulletins | 4.18              |
| On-Condition Maintenance                                   | 23.19             |
| <b>Parts:</b>                                              |                   |
| Scheduled Inspections (Note 3)                             | 1.51              |
| Scheduled Retirements (Note 4)                             | 67.23             |
| Scheduled Overhauls (Note 5)                               | 29.64             |
| Provision for Unschedule Maintenance and Service Bulletins | 25.51             |
| On-Condition Maintenance                                   | 47.97             |
| <b>Powerplant Direct Maintenance</b>                       |                   |
| Mfr. Allison Model 250-C30P Quantiy 1                      |                   |
| Mfr. Estimate of Engine Cost Per Hour                      | 69.85             |
| Bht Estimate of Additional Line Maintenance                | 5.33              |
| <b>Total Average Cost Per Hour</b>                         | <b>\$465.18</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 list price for spare parts.

## Limited Life Components

| Part Number                      | Component               | Life in Flight Hours | Life in RIN | Qty per a/c | List Price (ea) | Total Cost (flt hr) |
|----------------------------------|-------------------------|----------------------|-------------|-------------|-----------------|---------------------|
| <b>MAIN ROTOR HUB AND BLADES</b> |                         |                      |             |             |                 |                     |
| 206-011-120-103                  | Trunnion                | 2,400                | 24,000      | 1           | \$3,575         | 1.49                |
| 206-011-150-105                  | Strap Fitting           | 2,400                |             | 2           | \$2,108         | 1.76                |
| 206-011-125-001                  | Strap Pin               | 1,200                |             | 2           | \$326           | 0.54                |
| 206-011-132-113A                 | Grip                    | 4,800                |             | 2           | \$9,362         | 3.90                |
| 206-011-154-107                  | Tension-Torsion Strap   | 1,200                |             | 2           | \$4,483         | 7.47                |
| 206-011-260-101                  | Latch Bolt              | 1,200                |             | 2           | \$805           | 1.34                |
| 206-015-001-115                  | Main Rotor Blade        | 3,600                |             | 2           | \$44,513        | 24.73               |
| <b>MAIN ROTOR MAST</b>           |                         |                      |             |             |                 |                     |
| 206-040-535-109                  | Main Rotor Mast         | 5,000                | 44,000      | 1           | \$16,324        | 3.26                |
| <b>MAIN ROTOR CONTROLS</b>       |                         |                      |             |             |                 |                     |
| 206-001-193-001                  | Cyclic Tube             | 4,800                |             | 2           | \$2,227         | 0.93                |
| <b>SWASHPLATE AND SUPPORT</b>    |                         |                      |             |             |                 |                     |
| 206-010-446-107                  | Collective Idler Link   | 4,800                |             | 1           | \$4,967         | 1.03                |
| 206-010-445-113                  | Swashplate Support      | 4,800                |             | 1           | \$10,776        | 2.24                |
| 206-010-454-113                  | Collective Sleeve       | 4,800                |             | 1           | \$4,401         | 0.92                |
| 206-010-447-109                  | Collective Lever        | 4,800                |             | 1           | \$9,223         | 1.92                |
| <b>POWERTRAIN</b>                |                         |                      |             |             |                 |                     |
| 206-340-300-105                  | Kaflex Input Driveshaft | 5,000                |             | 1           | \$38,556        | 7.71                |
| <b>TAIL ROTOR HUB AND BLADES</b> |                         |                      |             |             |                 |                     |
| 206-011-819-109                  | Tail Rotor Yoke         | 5,000                |             | 1           | \$5,906         | 1.18                |
| 206-016-201-135                  | Tail Rotor Blade        | 2,500                |             | 2           | \$7,731         | 6.18                |
| <b>TAIL ROTOR GEARBOX</b>        |                         |                      |             |             |                 |                     |
| 206-040-410-101                  | Duplex Bearing          | 3,000                |             | 1           | \$1,838         | 0.61                |
| <b>TOTAL</b>                     |                         |                      |             |             |                 | <b>\$67.23</b>      |

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

| Component Overhaul Intervals (Hours) |       |                       |       |                   |       |
|--------------------------------------|-------|-----------------------|-------|-------------------|-------|
| 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 |

***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 model logos is effected by individual paint schemes, and will be applied at the discretion of Bell Helicopter unless otherwise specified by the customer.





P.O. Box 482, Fort Worth, Texas 76101  
Phone: 817-280-2800  
Fax: 817-278-8802  
[www.bellhelicopter.com](http://www.bellhelicopter.com)

***Bell Helicopter Textron Canada Limited***

12,800 rue de l' Avenir  
Mirabel, Quebec, Canada J7J1R4  
Phone: 450-437-3400  
Fax: 450-437-2006