

SPECIFICATIONS



**BELL 505**







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## The World's Most Advanced Short Light Single

### BELL 505 OVERVIEW

The Bell 505 is the latest-generation short light single-engine helicopter. The Bell 505 is powered by the Safran Helicopter Engines (HE) Arrius 2R engine featuring a first-in-class, dual channel Full Authority Digital Engine Control (FADEC) engine control that delivers exceptional performance along with a maximum cruise speed of 125 kts (232 kph). A first-in-class fully integrated Garmin G1000H NXi Integrated Avionics System delivers an unparalleled flying experience by greatly reducing pilot work load. The Garmin G1000H NXi flight deck featuring dual 10.4-inch (26.4 cm) displays provides critical flight information for crews at a glance, enhancing situational awareness and safety.

The reliability, speed, performance, and maneuverability of the Bell 505 helicopter is integrated with a flat floor, open cabin that is configurable for a wide variety of missions and payloads. The spacious cabin can be configured to carry up to 4 passengers or for internal cargo missions by removing rear cabin seats and/or copilot seat. Passenger comfort is enhanced with a quiet and smooth ride along with a large rear cabin that provides ample legroom and headroom. Clamshell doors, located on the copilot side, open to a wide 55 inches (140 cm) to allow for easy ingress/egress from the aircraft. Large rear cabin windows and wrap around windscreens in the cockpit provide excellent visibility for passengers and enhance situational awareness for the crew. These features combined with a proven and reliable drivetrain and rotor system make the Bell 505 a true multi-mission aircraft in the short light single-engine market.

The Bell 505 design team has developed the aircraft with direct input from a council of customer advisors representing expertise in all facets of the helicopter industry. The customer advisory council has participated in the aircraft design process since 2011 and has provided critical input to the following areas:

- Baggage capacity and access
- Engine and avionics suppliers
- Kit configurations
- Maintenance access
- Fleet integration
- Training requirements
- Operating economics
- Payload range capability
- Cockpit integration and situational awareness
- Cabin comfort
- Maintainability/supportability

The platform is certified to the most recent TCCA, FAA and EASA Part 27 regulations and is the first helicopter in its class to utilize MSG-3 to develop the aircraft maintenance plan.

Bell's products are backed by our renowned in-service support. The Bell 505 proves you don't have to sacrifice comfort for performance.



The Bell 505.

## The World's Most Advanced Short Light Single

### GARMIN G1000H NXi INTEGRATED AVIONICS SYSTEM

The Bell 505, featuring the Garmin G1000H NXi Integrated Avionics System, provides unparalleled crew situational awareness through the use of a fully integrated glass flight deck coupled with an advanced dual channel FADEC engine control system, resulting in enhanced safety levels and mission capabilities. The cockpit design features a wrap around windscreen offering excellent crew visibility that results in increased situational awareness and safety. The aircraft systems are fully-integrated with the Garmin G1000H NXi avionics suite to display critical flight instruments, audio alerts and CAS messages. One of the design goals for the Bell 505 team was to increase ease of operations and lower pilot workload. These goals have been realized through the combination of an advanced FADEC engine control system and a fully-integrated avionics suite.



The Bell 505 Garmin G1000H NXi Flight Deck provides the next level of safety.

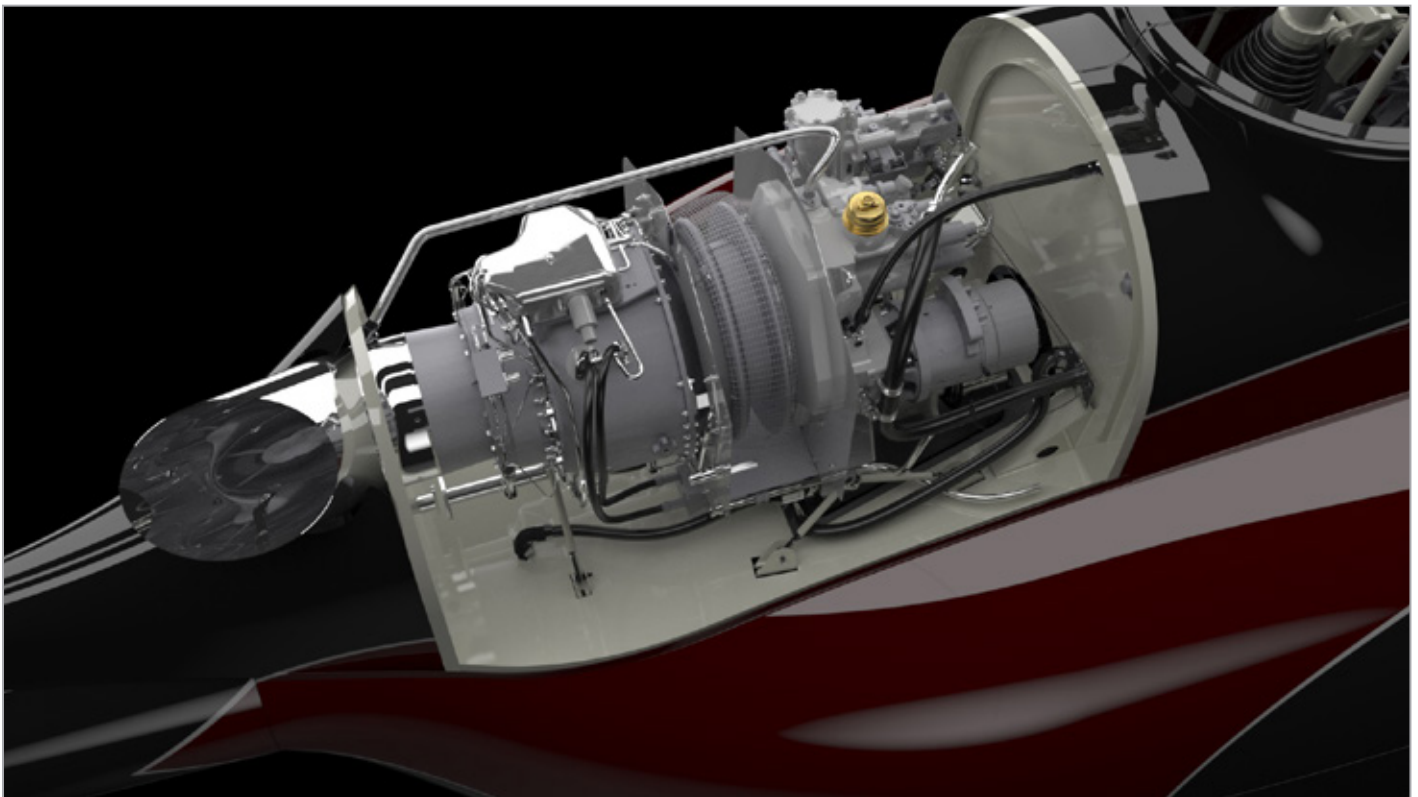


## The World's Most Advanced Short Light Single

### BELL 505 DUAL CHANNEL FADEC ENGINE CONTROLS

As the first helicopter in its class to offer a dual channel Full Authority Digital Engine Control (FADEC) and fully integrated glass cockpit, the Bell 505 is the future of safety. The Safran HE Arrius 2R engine control is provided through a dual channel FADEC which increases operational safety by lowering pilot workload. The dual channel FADEC offers added protection with the incorporation of an automatic backup Auxiliary Control Unit. There are many features on the Safran HE Arrius 2R engine that increase safety and truly differentiate it from the competition including:

- Dual-channel FADEC
- Auxiliary Control Unit (backup for HMU)
- Automatic startup
- Surge and flame-out protection
- Engine parameter recording for maintenance (BOOST compatible)
- Data stored in avionics for easy access
- Automatic cycle and flight hour counting



The Bell 505's Safran HE Arrius 2R Engine features a dual channel FADEC with automatic backup.

## Specification Summary (U.S. Units)

### WEIGHTS (LB)

Empty Weight (Base Aircraft)	2,180	External Load Gross Weight	4,475
Internal Gross Weight	3,680	Maximum External Load (Cargo Hook Limit)	2,000
Useful Load (Base Aircraft)	1,500		

### PERFORMANCE SUMMARY (International Standard Day except as noted)

			Takeoff Gross Weight (lb)		
			3,000	3,400	3,680
IGE Hovering Ceiling	ISA	ft	20,000	17,100	14,450
	ISA + 20 °C	ft	16,320	12,300	9,700
	ISA + 30 °C	ft	14,240	9,980	6,650
OGE Hovering Ceiling	ISA	ft	17,400	13,250	10,460
	ISA + 20 °C	ft	12,740	8,580	5,430
	ISA + 30 °C	ft	10,590	5,400	1,620
Service Ceiling (MCP), 100 ft/min	ISA	ft	20,000	20,000	18,610
	ISA + 20 °C	ft	20,000	17,020	14,590
	ISA + 30 °C	ft	19,000	15,160	12,410
Maximum Cruise Speed (True Airspeed)	SL, ISA	ktas	128	126	125
	SL, ISA + 20 °C	ktas	123	121	118
Cruise at Long Range Cruise Speed (LRC)					
Range (Standard Fuel, No Reserve)	SL, ISA	nmi	318	311	306
LRC Speed (Average True Airspeed)		ktas	113	112	112
Range (Standard Fuel, No Reserve)	4000 ft, ISA	nmi	355	344	333
LRC Speed (Average True Airspeed)		ktas	112	113	112
Endurance at Loiter Speed (60 kias) (Standard Fuel, No Reserve)	SL, ISA	hr	4.1	4.0	3.9
	4000 ft, ISA	hr	4.5	4.3	4.2

### ENGINE RATING

Safran HE Arrius 2R (uninstalled thermodynamic rating)	
Takeoff Horsepower	505 SHP
Maximum Continuous	459 SHP

### TRANSMISSION RATING (Engine Output)

Takeoff Horsepower (5 minutes)	475 SHP
Maximum Continuous	428 SHP

### FUEL CAPACITY (Usable)

Type	Aviation Turbine
Standard	84.85 US Gallons

## Specification Summary (Metric Units)

### WEIGHTS (KG)

Empty Weight (Base Aircraft)	989	External Load Gross Weight	2,030
Internal Gross Weight	1,669	Maximum External Load (Cargo Hook Limit)	907
Useful Load (Base Aircraft)	680		

### PERFORMANCE SUMMARY (International Standard Day except as noted)

			Takeoff Gross Weight (kg)		
			1,361	1,542	1,669
IGE Hovering Ceiling	ISA	m	6,096	5,212	4,404
	ISA + 20 °C	m	4,974	3,749	2,957
	ISA + 30 °C	m	4,340	3,042	2,027
OGE Hovering Ceiling	ISA	m	5,304	4,039	3,188
	ISA + 20 °C	m	3,883	2,615	1,655
	ISA + 30 °C	m	3,228	1,646	494
Service Ceiling (MCP), 0.5 m/sec	ISA	m	6,096	6,096	5,672
	ISA + 20 °C	m	6,096	5,188	4,447
	ISA + 30 °C	m	5,791	4,621	3,783
Maximum Cruise Speed (True Airspeed)	SL, ISA	km/h	237	233	231
	SL, ISA + 20 °C	km/h	228	224	218
Cruise at Long Range Cruise Speed (LRC)					
Range (Standard Fuel, No Reserve)	SL, ISA	km	588	576	566
LRC Speed (Average True Airspeed)		km/h	209	208	208
Range (Standard Fuel, No Reserve)	1,200 m, ISA	km	657	638	617
LRC Speed (Average True Airspeed)		km/h	208	208	208
Endurance at Loiter Speed (60 kias) (Standard Fuel, No Reserve)	SL, ISA	hr	4.1	4.0	3.9
	1,200 m, ISA	hr	4.5	4.3	4.2

### ENGINE RATING

Safran HE Arrius 2R (uninstalled thermodynamic rating)	
Takeoff Horsepower	377 kW
Maximum Continuous	342 kW

### TRANSMISSION RATING (Engine Output)

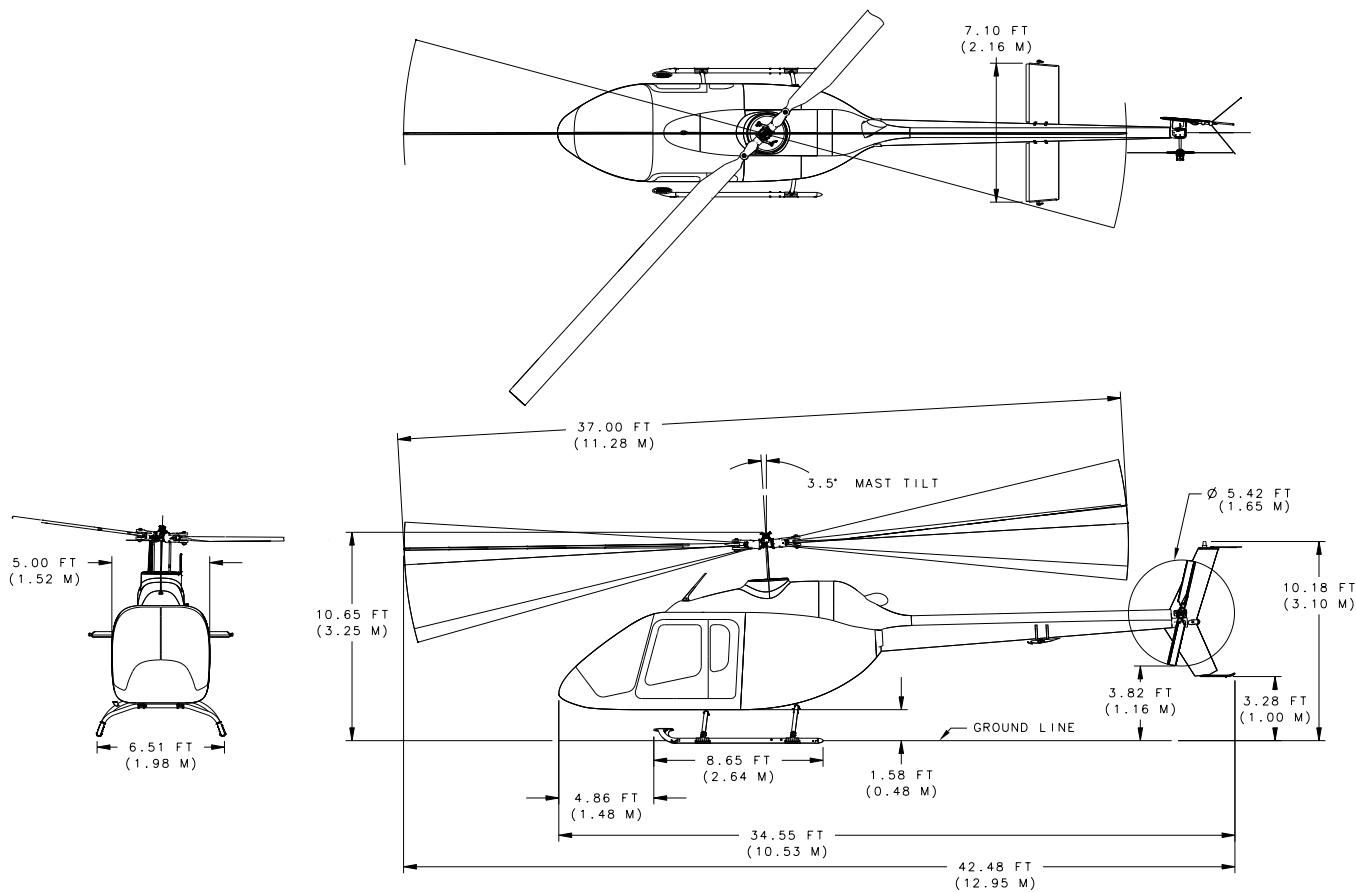
Takeoff Horsepower (5 minutes)	354 kW
Maximum Continuous	319 kW

### FUEL CAPACITY (Usable)

Type	Aviation Turbine
Standard	321 Liters

Helicopter Dimensions

EXTERNAL DIMENSIONS – STANDARD



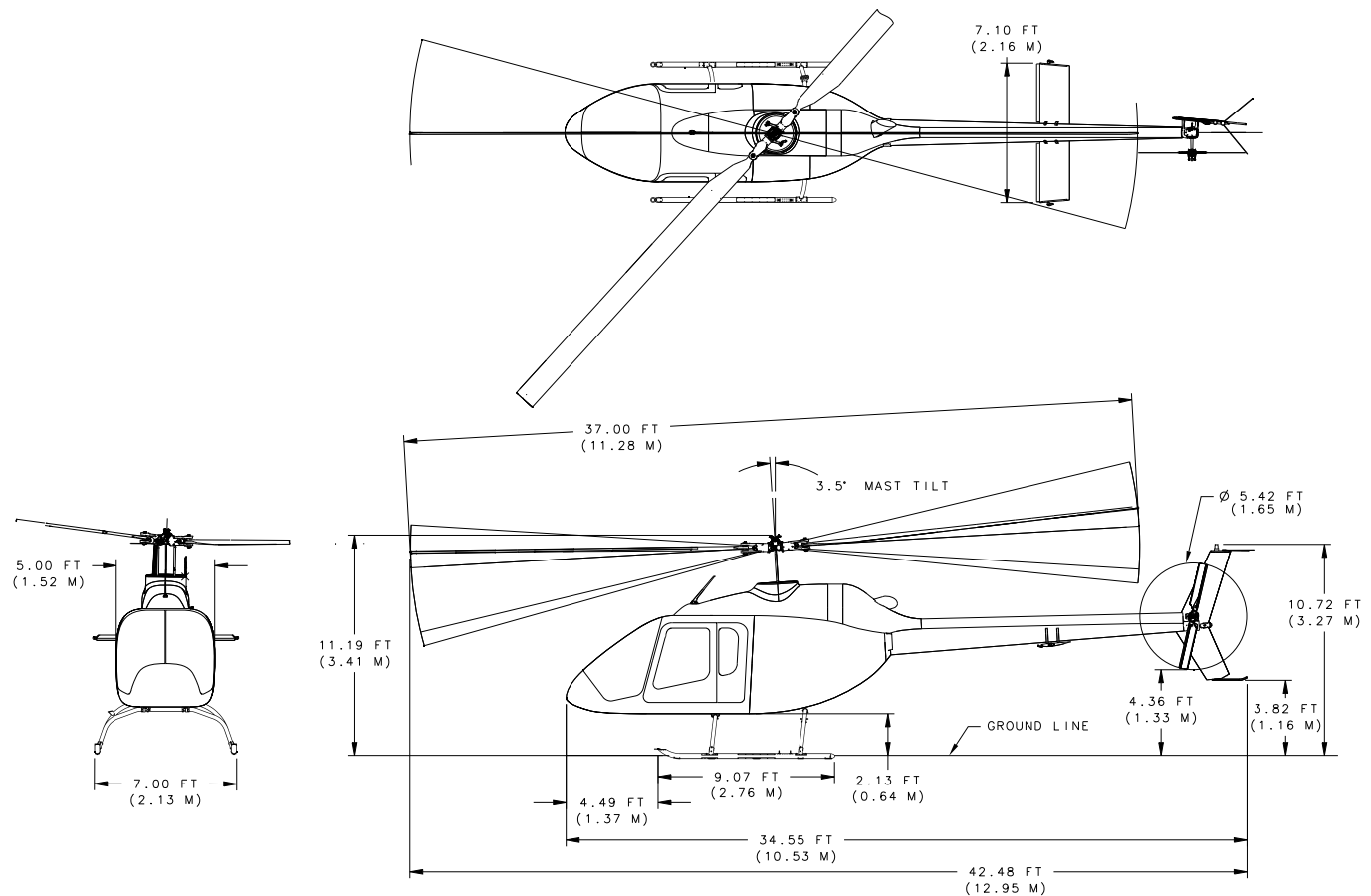
Bell 505 External Dimensions.



Bell 505.

## Helicopter Dimensions

### EXTERNAL DIMENSIONS – HIGH SKID GEAR



Bell 505 External Dimensions.

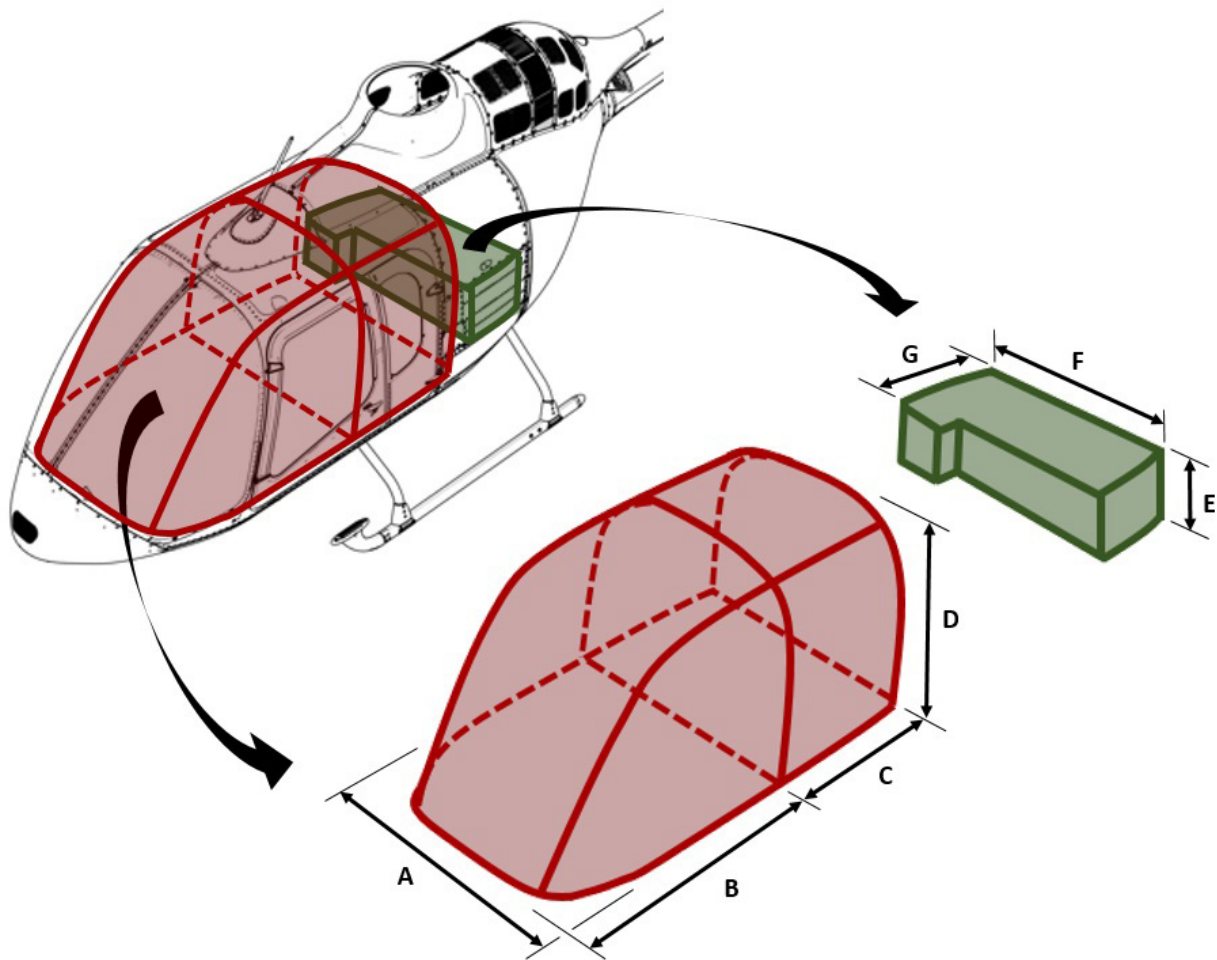


Bell 505 with high skid gear.



Helicopter Dimensions

INTERNAL DIMENSIONS



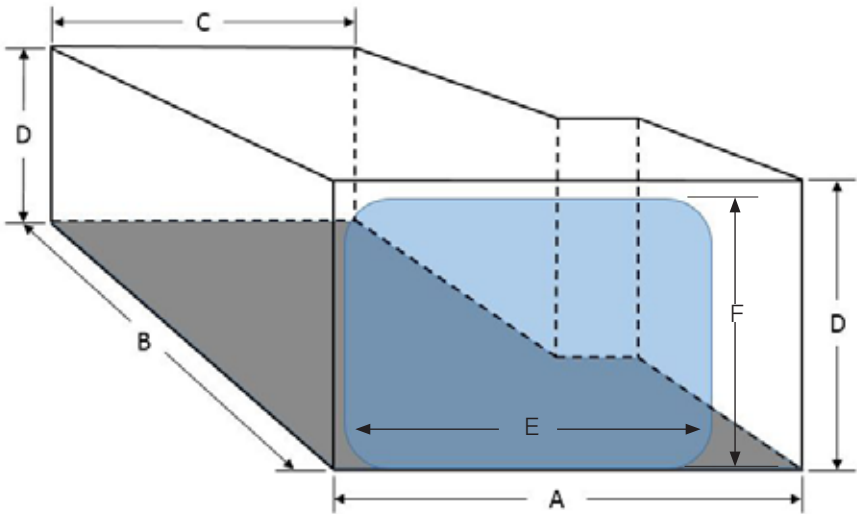
Dimension *	in	cm
A	56	142
B	53	135
C	33	84
D	53	84
E	18	46
F	55	140
G	32	82

Volume *	US Units	Metric
Total cabin volume (excluding pilot area)	99 ft³	2.80 m³
Rear cabin volume	61 ft³	1.73 m³
Copilot volume	38 ft³	1.08 m³
Floor Loading *		
Total cabin floor area (excluding pilot area)	22 ft²	2.04 m²
Cabin floor loading	55 lb/ft²	269 kg/m²
Cargo loading not to exceed	425 lb	192 kg

NOTE: \* Volumes and dimensions are approximate.

Helicopter Dimensions

INTERNAL DIMENSIONS



Dimension *	in	cm
A	32	82
B	55	140
C	25	65
D	18	46
E	22.2	56.4
F	16.1	41

Baggage compartment *		
Baggage volume	18 ft <sup>3</sup>	0.51 m <sup>3</sup>
Baggage Floor Loading *		
Baggage floor loading	50 lb/ft <sup>2</sup>	244 kg/m <sup>2</sup>
Total baggage floor capacity	250 lb	113 kg

NOTE: \* Volumes and dimensions are approximate.

## Garmin G1000H NXi Integrated Avionics System

The Bell 505 is the first helicopter in its class to incorporate a fully integrated flight deck. The Garmin G1000H NXi Avionics System, featuring dual 10.4-inch (26.4 cm) displays, is designed to improve situational awareness and reduce pilot workload through easy to read displays of critical flight information, tuning of communication and navigation frequencies, and simple flight planning management. The Bell 505's standard configuration Garmin G1000H NXi Flight Deck can be upgraded to include Helicopter Synthetic Vision Technology (HSVT) that gives pilots a 3D depiction of terrain, obstacles, traffic and more in any visibility condition. The PFD boasts a Power Situation Indicator (PSI) to provide critical flight information in a centralized location. The system has two SD card slots to facilitate data input/output tasks such as flight plan and database uploading or critical flight data downloads. The system takes advantage of the latest in display, computer processing, and digital data bus technology to provide a high degree of redundancy, reliability, and flexibility.

The basic ship main components of the Garmin G1000H NXi Integrated Avionics system includes:

- Two 10.4-inch (26.4 cm) GDU high-resolution LED displays
- One GIA 64H integrated avionics units, including:
  - GPS / WAAS receiver
  - VHF COM transceiver
  - VHF NAV and glideslope receivers
  - Aural alert generation
- GEA 71BH Engine and airframe unit (signal processing of engine parameters and major system sensors)
- GMA350Hc Audio panel
- GTX 335R Extended Squitter (ES) Mode S transponder
- GSU 75H Air Data Attitude Heading Reference Unit (ADAHRS)
- GMU 44 magnetometer
- Standby Attitude Module (SAM)



### BELL 505 FLIGHT DECK

System	Description
Two-display system	Two 10.4-inch (26.4 cm) flat panel high-resolution LEDs, interchangeable for Primary Flight Display (PFD) or Multi-Function Display (MFD)
Flight Instruments	Integrated on PFD with stand-by Flight Display
Engine Instruments	Integrated on PFD / MFD with Power Situation Indicator (PSI), Engine Indication System (EIS), fuel flow
EICAS & Audio Alerts	Engine Indicating and Crew Alerting System (EICAS) integrated on PFD / MFD Audio alerts integrated into intercom system
COM/NAV	Single COM / NAV / GPS, WAAS, Mode S Transponder with Extended Squitter (ES), ADS-B out, FMS, auto-tuning
Situational Awareness	Integrated on PFD / MFD, Traffic Information System (TIS), Moving Map, Fuel and NAV range, optional TAS with active and passive (ADS-B) surveillance, HTAWS, and Synthetic Vision System
Intercom	5-place ICS with recorder / playback, Headsets have Bluetooth support for phones, Garmin MP3 jack (customizing), Automatic Speech Recognition

# Garmin G1000H NXi Integrated Avionics System

## STANDBY ATTITUDE MODULE (SAM)

The SAM is entirely self contained and provides attitude, altitude, airspeed and slip information in a small package measuring just two inches by five inches and weighing 1.6 lb (.72 kg). The SAM contains two LED-backlit LCDs, one displaying attitude and the other airspeed and altitude. The unit is powered by a back-up battery that runs for at least 60 minutes if primary aircraft power is lost.

## DISPLAYS

The Garmin G1000H NXi flight deck presents critical flight information to the pilot at a glance for greater situational awareness, simplicity and safety. The pilot can easily and quickly select the information formats to display on the interchangeable Primary Flight Display (PFD) and Multi-Function Display (MFD). The Power Situation Indicator (PSI), located in the lower left-hand corner of the PFD provides a “one stop shop” for power indications and limits.

**Primary Flight Display (PFD) Typical User Selected Formats:** The PFD displays all major flight parameters in an intuitive, easy to scan layout: Attitude, Airspeed, HSI, Altitude and VSI. Primary and inset screens can be user-selected to display a variety of additional functions, including "Pathways in the Sky", Flight Path Vector, Synthetic Vision <sup>[1]</sup>, HTAWS <sup>[1]</sup>, and Traffic Information System (TIS) <sup>[2]</sup>.

- Notes: [1] Available as an optional kit.  
[2] The GTS 800 TAS (Traffic Advisory System) is available as an optional kit.



### MFD Traffic Display



## PFD Synthetic Vision with HIS Map and WireAware



## Garmin G1000H NXi Avionics Integrated Avionics System

**Multi-Function Display (MFD) Typical User Selected Formats:** User-selectable MFD display options in the standard configuration Garmin G1000H NXi include System Status, checklists, flight planning, maintenance pages, engine pages, NAV map, Traffic Information System (TIS), engine and transmission information, fuel status, and calculated range.

Optional features include satellite weather through an XM satellite datalink<sup>[1]</sup> (North America) and the Garmin GTS 800 Traffic Advisory System.

Notes: [1] Subscription to XM Satellite Weather and/or Radio is the responsibility of the helicopter owner/operator.



MFD Weight and Balance Display.



MFD Moving Map Display.

**Power Situation Indicator (PSI):** The PSI, shown in the dashed red circle, is a single indicator section of the PFD that provides the pilot quick information about power settings. The color-coded parameter display automatically highlights normal performance (green), near limits (yellow) or exceedances (red).



Power Situation Indicator.



## Communication and Navigation

The standard configuration Garmin GIA 64H Integrated Avionics Unit includes a GPS/WAAS receiver, VHF COM Transceiver and VHF NAV and Glideslope receivers. It also maintains a prioritized queue of aural alerts for Aural Alert Generation.

### AUDIO SYSTEM

The GMA 350Hc Audio Control Panel incorporates Bluetooth technology for wireless access to music, phone and more. This adds to an impressive list of features including industry-first Telligence Voice Command technology, 3D audio processing and enhanced auto squelch capability and more. These features decrease heads-down time and increase overall situational awareness in the cockpit. The GMA 350Hc provides cockpit ICS, pilot and copilot volume control and dual stereo entertainment inputs. The COM interface supports up to three (3) transceivers and the NAV interface supports up to five (5) radios. The system can accommodate up to seven (7) mono/stereo headsets (two (2) for pilot/copilot and five (5) for passengers), and provides ICS audio isolation modes for the pilot, copilot and passenger headset positions.

The GMA 350Hc features two (2) entertainment inputs (MUSIC 1 and MUSIC 2), with identical streaming content from the optional GDL 69AH XM Radio Datalink [2]. A 3.5 mm front panel mini-jack on the GMA 350Hc can be used as an entertainment input or as a telephone input.

### EXTENDED SQUITTER (ES) MODE S TRANSPONDER

The GTX 335R Extended Squitter (ES) Mode S Transponder functions are controlled by the PFD display and support European Mode S mandates for Extended Squitter, Elementary Surveillance and Enhanced Surveillance. In addition, the GTX 335R ES provides Traffic Information (TIS) display of all Mode A and Mode C transponder equipped aircraft, and Automatic Dependent Surveillance-Broadcast (ADS-B) out capability. With ADS-B out capability, position velocity and heading information are automatically transmitted to other aircraft and ground stations to improve situational awareness and flight safety.

### GARMIN SOFTWARE FEATURES

The Weight and Balance Multi-Function Display (MFD) page provides information about the helicopter weight and center of gravity. It uses pilot data entry for the crew, passengers, baggage loads, helicopter empty weight and the fuel load. It can synchronize with fuel quantity indication instead of relying on manual entry. Longitudinal and lateral aircraft CG are automatically calculated and displayed graphically with a digital readout. The Longitudinal CG slider indicator includes a cyan bar to show CG migration due to fuel burn.

The impending exceedances alert tone provides an aural alert to the pilot before encountering an engine exceedances. The aural alert tone is generated when any of the engine parameters are operating in a time-limited range. profile and path views are selectable and displayed on the navigation map MFD page. When the profile view is enabled, it is displayed in a window below the navigation map. Altitude is shown along a vertical scale, with an aircraft icon positioned at the current altitude. Distance is represented horizontally along the bottom of the profile view, and increases from left (present position) to right.

The profile view is based on the current aircraft track (or heading if track is unavailable) and shows the highest known terrain or obstacles within a predetermined width from the present aircraft position to the end of the profile range.

The profile path displays the horizontal and lateral boundaries of the profile view. The path is shown as a white rectangle on the navigation map page and is only available when profile view is enabled. White range markers both edges of the profile path rectangle match the range markers along the distance scale inside the profile view display window whenever the profile range is at least 4 nm.

## AVIONICS UPGRADE OPTIONS

The Bell 505 optional avionics upgrade includes GRA-55, Helicopter Synthetic Vision Technology (HSVT™), Helicopter Terrain Avoidance Warning System (HTAWS) and Traffic Advisory System (TAS)

**GRA-55 Radar Altimeter:** Designed to work with Garmin flight displays, the GRA-55 conveniently places The Above Ground Level (AGL) readout right in front of the pilot. The GRA-55, when combined with the Garmin GTS 800 TAS and the Garmin GTX 335R ES transponder provides enhanced traffic situational awareness to the flight crew and other suitably equipped aircraft.

**HSVT (Helicopter Synthetic Vision):** Using sophisticated computer modeling to recreate a virtual topographic landscape from the system's terrain database, HSVT gives you a clear depiction of obstacles, traffic, ground and water features, airports and more - all shown in 3-D perspective on the primary flight display.

**HTAWS (Helicopter Terrain Avoidance Warning System):** HTAWS works in the background to monitor terrain and obstacles. It issues audio & visual alerts for instances requiring attention. Voice callouts enhance situational awareness while allowing you to keep eyes looking forward.

**TAS (Traffic Advisory System):** The TAS provides expanded traffic alerts through both active and passive surveillance capabilities. When installed, the optional GTS 800 TAS replaces the standard configuration Traffic Information System (TIS) using active interrogation of Mode A, C, and S transponders to provide traffic advisories to the pilot independent of the air traffic control system.

**Second VHF Comm - Garmin GTR 225B:** The pedestal-mounted Garmin GTR 225B VHF COM Radio incorporates functions that can reduce cockpit workload, provides 16 watts transmit power with either 8.33 KHz spacing or 25 KHz spacing (selectable).

**Emergency Locator Transmitter (ACK Technologies Model E-04):** In case of an accident, the Emergency Locator Transmitter (ELT) provides crucial location information to assist first responders.

The ELT installs in the truss area of the aircraft on a dedicated shelf and the ELT antenna is mounted thru the aft body center panel. The kit provides an instrument panel mounted remote control panel indicator (RCPI) which includes ON and TEST/RESET switches. Also mounted behind the instrument panel is an audio alert. The ELT provides 121.5 MHz and 406 MHz distress signals as well as GPS coordinates and is automatically activated when crash level impact is detected, or manually activated using the cockpit remote control (RCPI).

**Flight Stream 510:** Wireless cockpit connectivity unlocks more capabilities from within the G1000H NXi integrated flight deck. Available as an option, Flight Stream 510 enables Database Concierge, the wireless transfer of aviation databases from the Garmin Pilot™ app on a mobile device to the G1000H NXi system. Flight Stream 510 also supports two-way flight plan transfer, the sharing of traffic, weather, GPS information, back-up attitude information and more, between the G1000H NXi and compatible mobile devices running Garmin Pilot™ or ForeFlight mobile.



**Transponder GTX 345R:** The Garmin GTX 345R Transponder (ADS-B IN & OUT capability) replaces the basic ship GTX 335R.

- 1090 MHz ADS-B "Out" enables aircraft to operate at any altitude, in airspace around the globe
- Combines Mode S Extended Squitter (ES) transponder and optional WAAS/GPS position source in a single unit
- Provides access to dual-link ADS-B "In" traffic and subscription-free weather on compatible displays
- Wirelessly stream weather, traffic, GPS position and backup attitude<sup>2</sup> via Connex<sup>®</sup> link to Garmin Pilot™ and ForeFlight Mobile apps as well as the aera<sup>®</sup> 795/796 Garmin portables

## Seating and Interiors

### CREW SEATING

Two individual ergonomically designed seats, 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. Seats are mounted on in-line tracks to allow for easy entry and exit from the aircraft.

### PASSENGER SEATS

Passenger seats are bulkhead mounted, forward facing, energy attenuating seats with incorporated fixed headrests and a four point restraint harness. The seats provide protection and restraint of occupants (passengers) in normal flight, emergency states and dynamic landing conditions. Standard equipped seats can be folded against the bulkhead for additional rear cabin storage and are mounted with quick disconnect fittings to easily remove the seats from the aircraft without the use of tools. Passenger seats can also be stowed in the baggage compartment. Leather passenger seats shown below are removable, non-foldable and available as optional equipment. Standard seating is provided in black fabric with optional leather provided in black, tan, and gray colors. Floor carpet is also available to match the selected seat colors.



Bell 505 Interior Layout, Two Tone Premium Leather Gray seats



Bell 505 Interior Layout, Macaer "Magnificent" seats



Bell 505 Interior Layout, Standard Equipped seats



## Seating and Interiors

### INTERIOR TRIM AND CABIN ACCESS

Clamshell cabin doors located on the copilot side of the aircraft open to a wide 55 inches (top right image), allowing easy ingress/egress for passengers or the ability to load and unload for various missions (bottom right image). Quick disconnect seats (bottom left image, shown with one seat removed) allow the rear cabin to be converted for utility missions.



Bell 505 Interior and Cabin Access.

## Seating and Interiors

### BAGGAGE COMPARTMENT

The Bell 505 is equipped with one large rectangular baggage compartment that is accessible from the pilot side. Standard equipment includes an integrated light that automatically activates/deactivates when the baggage compartment door is opened or closed. Cargo of many different shapes and sizes can easily be stowed in the baggage bay including: several travel golf bags, up to four standard suitcases, or passenger seats from the main cabin.

A uniform rectangular design allows for maximum usage of the full storage space without wasted space. The Bell 505's flat floor cabin design and large rectangular baggage compartment lets the Bell 505 adapt to your changing mission needs. The baggage compartment has a large usable volume of 18 ft<sup>3</sup> (0.51 m<sup>3</sup>). In fact, the baggage compartment can fit three standard travel golf bags, with some room to spare.



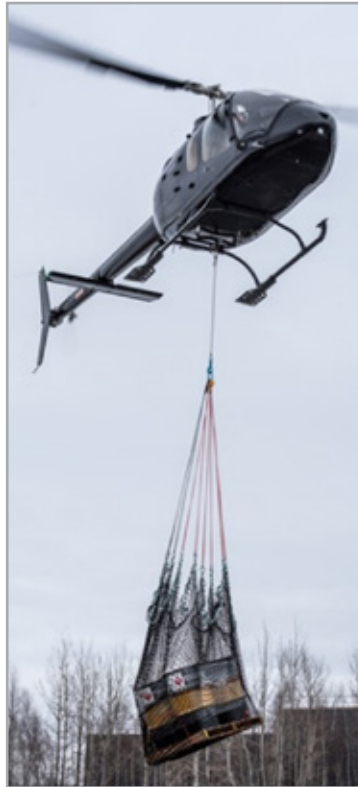
Bell 505 Baggage Compartments



## Mission Profiles

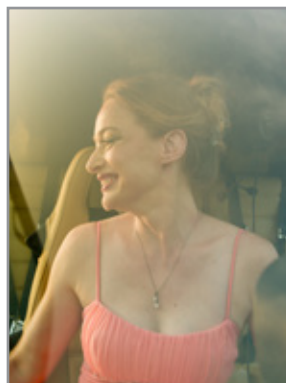
### UTILITY

With an optional 2,000 lb (907 kg) capacity cargo hook, a highly configurable 22 ft<sup>2</sup> (2.0 m<sup>2</sup>) fully flat cabin floor area with integrated tie downs, a large 18 ft<sup>3</sup> (0.514 m<sup>3</sup>) baggage compartment and superior crew visibility, the Bell 505 provides utility operators with the flexibility and performance they require to conduct their mission. The cargo hook features a load release button on the cyclic controls with a manual backup release to ensure the pilot can release external loads in flight. The cargo hook assembly also features fitting and disconnects that allow the whole assembly to be quickly removed from the aircraft.



### CORPORATE

The Bell 505 is perfectly suited to accommodate everything from VIP transportation to corporate shuttle missions. Features such as a large cabin volume of 99 ft<sup>3</sup> (2.80 m<sup>3</sup>), comfortable 18-inch wide premium leather seats and ample leg-room/headroom combined with a smooth ride, superb range and the state of the art Garmin G1000H NXi flight deck make the Bell 505 an ideal choice for any business needs.



## Mission Profiles

### ADVENTURE

From breathtaking scenic flights to camping at remote destinations, find the places only a helicopter can take you. With the spacious cabin and integrated tie downs comfortably fit bikes, gear and more securely while saving room for passengers in the intelligent and powerful Bell 505.



### PUBLIC SAFETY

With a highly configurable cabin, superb speed and range, and points for mounting external equipment, the Bell 505 delivers multi-mission capability and flexibility for public safety operators. The Bell 505 displays its excellent capacity for public safety equipment with the ability to add features such as a searchlight, EO/IR Sensor, Public Address Speaker, large format high definition mission display, tactical radio, additional audio panels, and much more. This combination of Public Safety equipment, that can be tailored to your mission, paired with a wide cabin, removable seats, fully flat floor design, and large baggage compartment gives the crews ability to meet any mission without sacrificing their comfort.





## Mission Profiles

### TRAINING

With optional dual pilot controls, the Bell 505 is an excellent aircraft for training pilots to fly today's modern aircraft with FADEC controlled engines, integrated avionics system and other advanced technologies. These modern technologies coupled with proven dynamic systems and a high inertia rotor system for excellent autorotation capabilities create the optimal platform for helicopter training.



### MEDICAL

A flat floor cabin, 55" clam shell door, and easy install EMS interiors make the Bell 505 ideally suited for fast and efficient patient and medical personnel transport. Rear seat rails allow for a configurable equipment rack capable of handling a multitude of life saving medical equipment. The G1000H NXi avionics suite provides added situational awareness for flight into high traffic and complex terrain areas ensuring every rescue effort is a success.



## External Paint Schemes

For more color options, please visit [config.bh.com](http://config.bh.com) or speak with a Sales Representative.



## Bell 505 Standard Configuration

### AIRFRAME

Hybrid composite / metallic structure with composite side panels and aft fuselage skins
Doors (three), one large hinged pilot and copilot door on LH and RH side, one hinged passenger door on the copilot side, copilot side doors open to unobstructed 55 inches (140 cm).
Landing gear, tubular skid type with replaceable skid shoes (painted black)
Lock for luggage compartment
Baggage Compartment: 18 ft <sup>3</sup> , 250 lb (0.51 m <sup>3</sup> , 113 kg) capacity with one composite door on pilot side
Tail boom, monocoque structure with vertical fin and fixed horizontal stabilizer
Tail Skid (tail rotor guard)
Rupture Resistant Fuel Tank: 84.85 gallons (321 liters)
Multiple paint schemes and color options available at <a href="http://config.bh.com">config.bh.com</a>

### INTEGRATED AVIONICS SYSTEM with GARMIN G1000H NXi SUITE

Two 10.4-inch (26.4 cm) high resolution display units, providing Primary Flight Display (PFD) and Multi-Function Display (MFD) functionalities
Integrated Avionics Unit, consisting of a 16-watt VHF communication transceiver with 8.33 kHz spacing, VHF navigation, WAAS GPS navigation, and glideslope receiver
One audio control panel with clearance recording and Automatic Speech Recognition (ASR) capability
One Air Data Attitude Heading Reference Unit (ADAHRS) with Outside Air Temperature (OAT) probe and Magnetometer Unit
One Mode S transponder with extended squitter, including Traffic Information Service (TIS), with ADS-B out capability
One engine and airframe interface unit
Integrated Engine Indication and Crew Alerting System (EICAS), including Power Situation Indicator (PSI) that provides an integrated display presentation of all critical engine parameters into a single indicator to present the power "margin" remaining
Fuel flow indication with range ring display capability
Flight Data Recording of standard aircraft and engine parameters
Electronic Standby Instrument System

### ELECTRICAL

Auxiliary power outlet (28 VDC System)

\*Aircraft maintenance manuals are available on ePubs located here: [bellflight.com](http://bellflight.com)

Battery, 17 amp-hour Lithium Ion
External power and grounding receptacle
Starter-generator (165 ampere)
Solid state voltage regulator
Heated pitot tube
Static Ports, Unheated
LED lighting (interior/exterior)
Single LED landing light and dual LED taxi lights
Lighted baggage compartment

### INTERIOR

5-place ICS allows audio access for all seats
Handholds for ingress/egress
Cargo tie-downs in cabin and baggage compartment
Cabin heater and defogger
LED cabin lighting and crew lighting
Decals and exit lighting/labels
5-place energy crash attenuating seats with 4-point shoulder harnesses
3 bulkhead mounted passenger seats, foldable, quick disconnect
Structural provisions for mounting of external hardware
Helmet hooks (Pilot & Copilot)
Fire extinguisher (Cockpit)
First aid kit

### MANUAL (not included in empty weight)

Garmin Pilot's Handbook (Available Electronically)
Garmin Cockpit Reference Guide (Available Electronically)
Operating manuals: Rotorcraft flight manual, Aircraft log book, Engine log book
Aircraft maintenance manuals*, Fault isolation manual, Wiring diagrams, Engine maintenance manual, Engine operating manual, Engine parts manual, Ground station software (aircraft data display)

### POWERPLANT

Safran HE Arrius 2R gas turbo-shaft engine with dual channel FADEC and automatic backup
Engine data recording system (Automatic cycle and flight hour counting, stored in cockpit avionics system)
Automatic startup



## Bell 505 Standard Configuration

Surge and flame-out protection
Interchangeable modules
Engine Inlet Barrier Filter

### ROTORS AND CONTROLS

Main rotor, semi-rigid, two-bladed, teetering type with precone and underslung feathering axis. All metal blades that are moisture proof and epoxy encapsulated. Flap restraints.
High visibility main rotor blades
Tail rotor, semi-rigid, two-bladed, teetering type
Hydraulic boost system (pump and reservoir module)
Adjustable pedals
Mechanical flight control linkages throughout
Cyclic mounted Intercom / Transmit Switch
Pilot's cyclic grip has provisions for optional equipment control

### TRANSMISSION DRIVE SYSTEM

Soft mounted LIVE pylon isolation system
Main transmission 2 stage 15.22:1 planetary reduction
Kaflex (non-lubricated) input drive shafts
Gearbox, tail rotor with 2.3:1 spiral bevel gear reduction
Freewheeling unit (between engine and main transmission)
Hydraulic pump (for cyclic and collective boost controls)
Oil Cooler
Oil pump constant pressure
Oil filter with replaceable type cartridge



## Bell 505 Kits

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.

### OPTIONAL ACCESSORIES

Kit Description	Weight		Notes
	lb	kg	
AIRFRAME			
Air Conditioning System	72.3	32.8	3
Air Conditioning System - 3rd Evaporator	11.5	5.2	2
Automatic Door Openers for Co-Pilot Door	1.0	0.5	3
Automatic Door Openers for Pilot Door	1.0	0.5	3
Cowling Access Door (access to engine wash connection port)	0.4	0.2	
Foreign Certification (Decal Kits)	0	0	19
Full Length Trainer Shoe	5.9	2.7	20
Frahm Provisions	1.2	0.5	3
Frahm Equipment	25.5	11.6	1, 3
Fresh Air Inlet Snow Deflector Kit	0.3	0.1	
Hard Point (Forward Location)	12.9	5.9	4, 22
Hard Point (AFT Location)	6.1	2.8	4
Movable Ballast (Cabin Provisions & Equipment)	6.5	2.9	1, 21
Quick Release Door Pins	0	0	
Solar Advantage Windshields	0	0	
Sliding Windows (Pilot & Co-Pilot)	1.2	0.5	
Wire Strike Protection System	12.9	5.9	
AVIONICS			
Avionics Upgrade (HTAWS, Synthetic Vision, TAS)	15.9	7.2	5
Avionics Shelf	2.3	1.0	5
Radar Altimeter (Garmin GRA-55)	6.5	2.9	5
Second VHF Communication (Garmin GTR 225B)	5.4	2.4	
Emergency Locator Transmitter (ACK Technologies Model E-04)	6.1	2.8	
Headsets - H10-13H (David Clark)	1.5	0.7	6
Bose Headset Adapter (5 stations, wiring and jacks)	0.6	0.3	
Headsets - A20 (Bose) with or without Bluetooth	1.0	0.5	
Transponder GTX 345R (Garmin)	0.3	0.1	
Flight Stream 510 (Garmin)	0	0	
EQUIPMENT			
Cargo Hook Equipment (2,000 lb / 907 kg)	8.1	3.7	1
Cargo Hook Provisions	4.4	2	
Cargo Hook Mirrors (Right and Left side available)	4.8	2.2	
Cargo Hook Weighing System	3.5	1.6	
Dual Pilot Controls	10.6	4.8	
Rotor Brake	14.1	6.4	3
INTERIOR			
Color Coordinated Carpet	4.6	2.1	3
Seats - Standard Interior (Black)	0	0	7

## OPTIONAL ACCESSORIES

Kit Description	Weight		Notes
	lb	kg	
Seats - Premium Interior (Black Leather)	29.6	13.4	3, 7
Seats - Premium Interior (Two Tone Tan or Two Tone Gray Leather)	29.6	13.4	7
OTHER			
No Exterior Paint	-14.6	-6.6	
Landing Gear Painted to Match Aircraft Color	0	0	
Mechanical Ground Handling Wheels (Loose Equipment)	NA	NA	
Ground Handling Carrier Bracket (Qty 2) (Loose Equipment)	NA	NA	8
Operator Accessory Package (Loose Equipment)	NA	NA	9
VENDOR (STC)	10		
Avionics Rain Shield (AA)	6.7	3.0	18
Baggage Compartment Divider Kit (AA)	4.3	2.0	
Baggage Door Kit - LHS (AA)	7.3	3.3	
Bear Paws (Alpine Aerotech)	17.5	2.6	13
Bear Paws (DART)	10.6	4.8	14
Crew Flashlight Kit (AA)	0.5	0.2	
Emergency Float Kit (Dart)	129.0	58.5	12, 20
Emergency Float Kit with Heavy Duty Wear Plates (Dart)	135.1	61.3	12, 20
EMS - Interior (URC) (STC Pending)	TBD	TBD	16
EMS-LITE Medical Transport Interior (Med-Pac)	53.1	24.1	16
Expanded Avionics Shelf (AA)	4.0	1.8	5
Expanded Instrument Panel - 12 inch monitor (AA)	8.9	4.0	
Expanded Instrument Panel - 17 inch monitor (AA)	11.4	5.2	
Flitestep (AA) - Standard or High Standard Landing Gear (AA)	17.6	8.0	
Floor Protectors - Baggage Bay (AA)	7.2	3.3	
Floor Protectors - Co-pilot (AA)	1.7	0.8	
Floor Protectors - Passengers Cabin with Carpet (AA)	9.3	4.2	15
Floor Protectors - Passengers Cabin without Carpet (AA)	10.8	4.9	
Floor Protectors - Pilot (AA)	1.7	0.8	
Garmin 2-Axis Autopilot	15	6.8	17
Garmin 3-Axis Autopilot	18	8.2	17, 22
Genesys HeliSAS 2-Axis Autopilot	22.2	10.1	5, 17, 18
Genesys HeliSAS 3-Axis Autopilot	25.7	11.7	5, 17, 18
Headliner Kit (Black or Beige or Black with Tan or hydrographic Center)(AA)	16.2	7.3	
High Skid Gear (includes crew steps)(AA)	5.7	2.6	11, 20
Mecaer VIP MAGnificent Interior Kit - Offshore, Saddle, Sand, Sport	92.0	41.7	3
Passenger Headset Hanger Kit (AA)	0.5	0.2	
Pulselite Pulse Landing Lights (Precise Flight)	1.0	0.5	
Nightscanner HID (500K or 700 candlepower) (AA)	10.0	4.5	
NVG Cockpit/Cabin Lighting (AeroDynamix)	0	0	
Pre-Flight Step/Handle Kit (AA)	1.0	0.5	
Solar Advantage Windows - Light or Dark Grey (Crew & Passenger) (AA)	0	0	
Tail Rotor Gearbox Cover (AA)	4.3	2.0	21

## OPTIONAL ACCESSORIES

Notes: For commonality, notes shown below are identical in Product Specification and Price List.

1. Requires provision kit installed prior to or concurrently with equipment
2. Requires Air Conditioning System installed prior to or concurrently with the 3<sup>rd</sup> evaporator – Air Conditioning System
3. Mecaer VIP MAGnificent Interior Kit requires the installation of Premium Seats, Automatic Door Openers, Rotor Brake , Air Conditioning, Frahm (Provisions & Equipment) & No Carpets.
4. Frahm (provisions and equipment) and no carpets.
5. Avionics Upgrade, or Radar Altimeter or a Genesys HeliSAS Autopilot require an Avionics Shelf installed (only one Avionic Shelf allowed).
6. Avionics Upgrade and Radar Altimeter requires the Avionics Shelf
7. David Clark Headsets NOT compatible with Bose Headset Adapter Kit
8. This adaptor kit allows the 206L/407 series "Brackett" ground handling wheels to the standard 505 landing gear (not compatible with 206B wheels)
9. This adapter kit allows the 206L/407 series "Bracket" ground handling wheels to the standard 505 landing gear (not compatible with 206B wheels)
10. Operator Accessory Package includes Main Rotor Tie Down, Pitot Tube Cover, Tail Rotor Tie Down, Exhaust Cover Assembly, and IBF Cover
11. All vendor kits listed have FAA Supplemental Type Certificates (STC), other countries validations may be required
12. High Skid Gear provides an additional 6.5 inches (16.5 cm) of ground clearance versus the standard Skid Gear
13. Emergency Float Kit is NOT compatible with High Skid Gear, Bear Paws, or Full Length Training Shoes
15. Bear Paws (Alpine Aerotech) NOT compatible with Emergency Float Kit (DART) or High Skid Gear (AA)
16. Bear Paws (DART) compatible with Emergency Float Kit (DART) but NOT compatible with High Skid Gear (AA)
17. Requires a carpet installed
18. Requires the removal of Co-Pilot and Aft LHS Passenger Seats and Co-Pilot control
19. A Foreign Certification (Decal Kit) is required if 505 will be registered in any of the following counties: Argentina, Brazil, Chile, China, Colombia, Indonesia, Israel, Japan, Mexico, Russia, UAE, Ukraine, Uruguay, Vietnam.
20. Full Length Trainer Shoe is NOT compatible with High Skid Gear or Emergency Floats.
21. Tail Rotor Gearbox Cover is NOT compatible with Movable Ballast Kit.
22. Garmin 3-Axis Autopilot is NOT compatible with Hard Point (Forward Location).



## Helicopter Performance Charts

IGE and OGE hover, and service ceiling performance chart data based on the following conditions:

- Safran HE Arrius 2R engine
- Barrier filter installed
- Heater off
- No wind



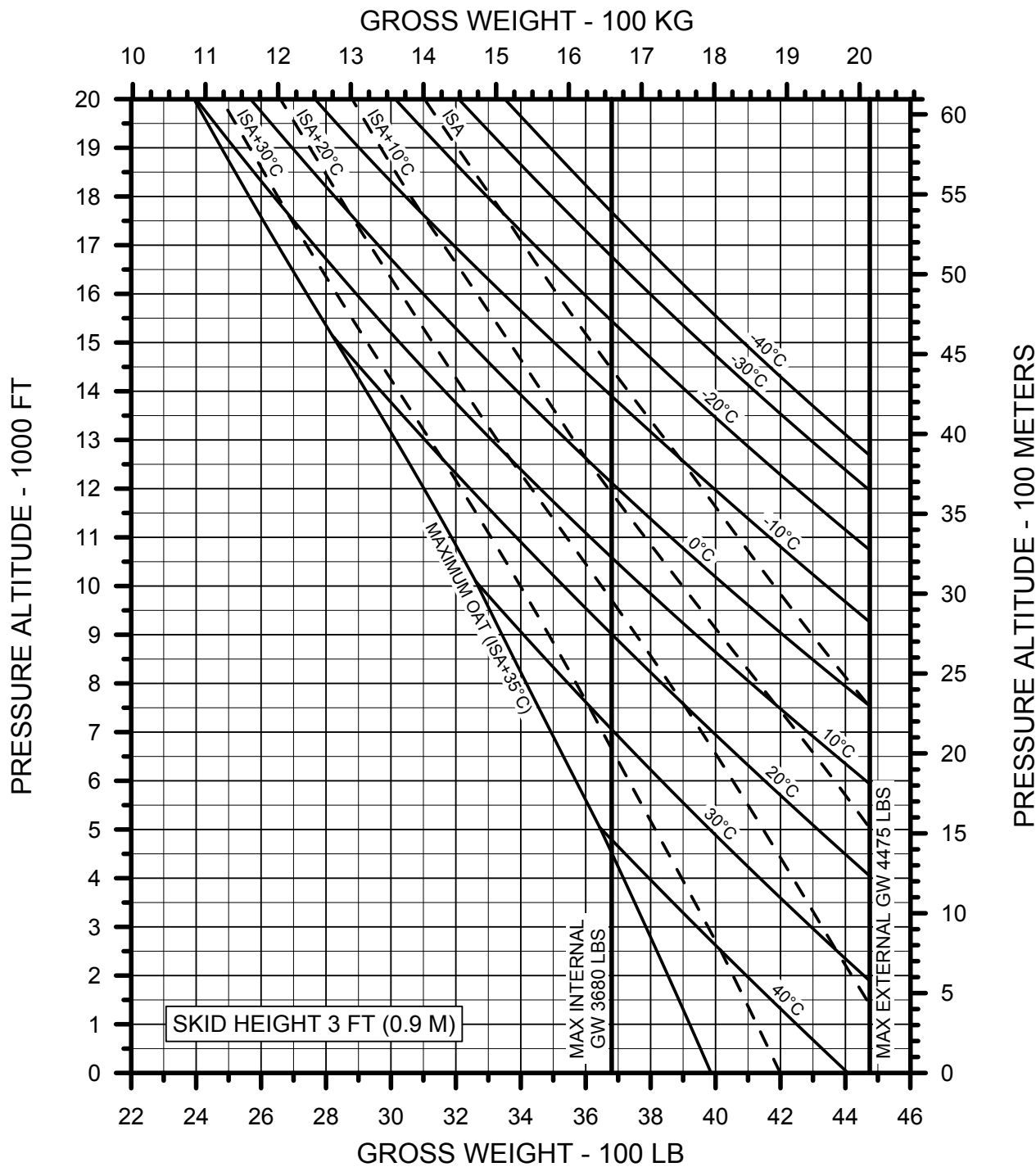


Helicopter Performance Charts

IGE HOVER CEILING

Conditions:

- Safran HE Arrius 2R engine at takeoff power
- Barrier filter installed
- Heater off, No wind

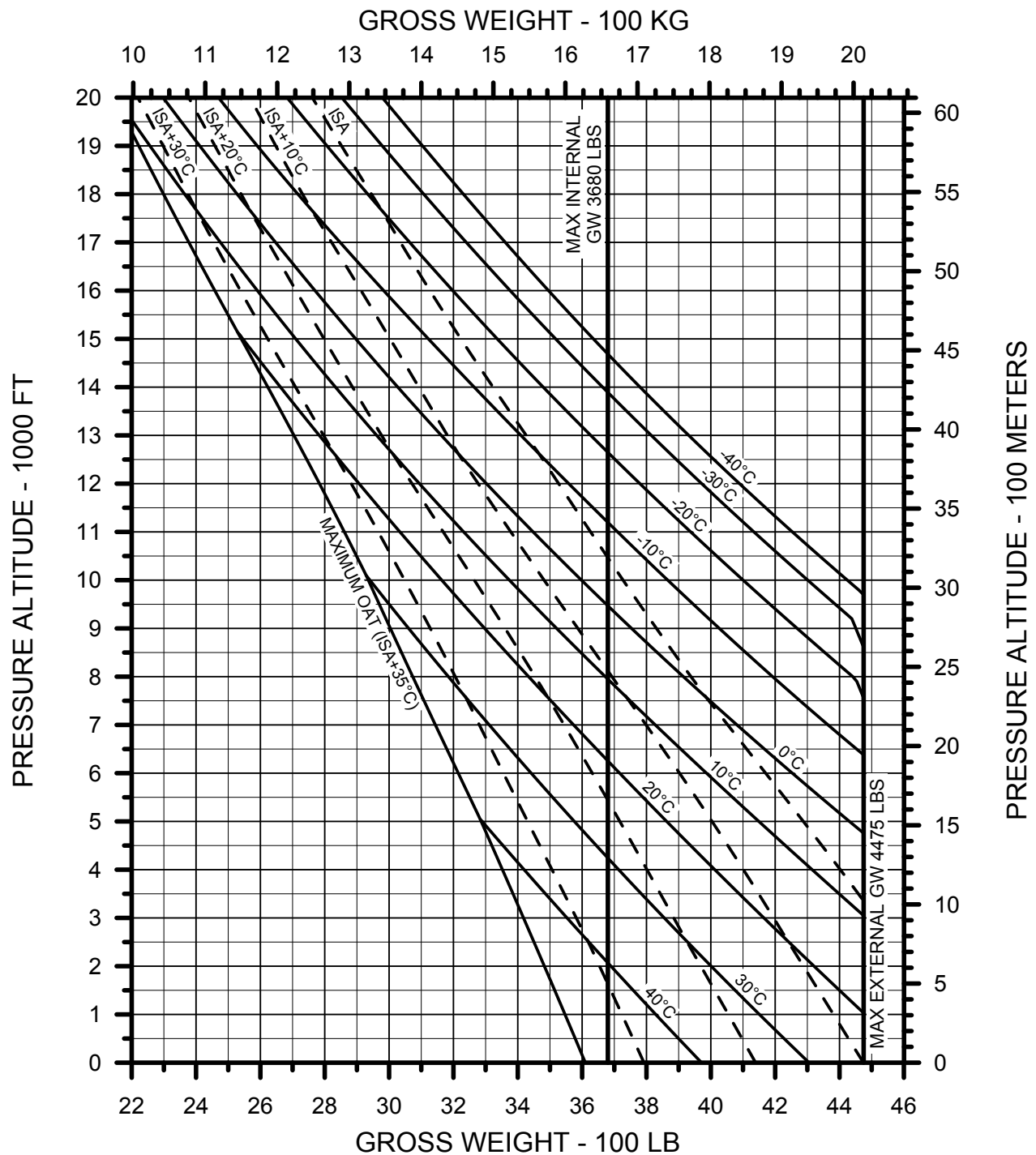


## Helicopter Performance Charts

### OGE HOVER CEILING

Conditions:

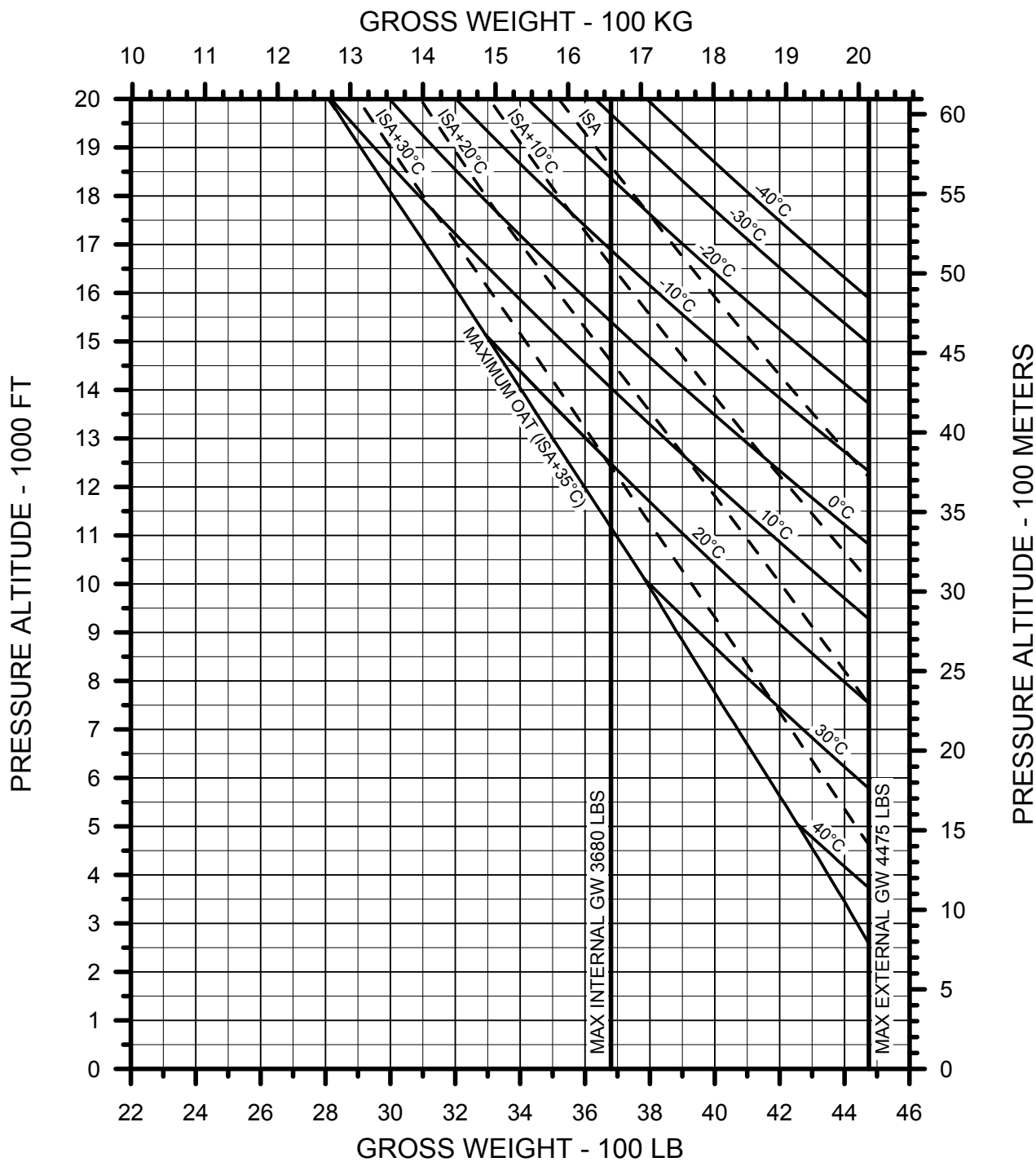
- Safran HE Arrius 2R engine at takeoff power
- Barrier filter installed
- Heater off, No wind



Helicopter Performance Charts

SERVICE CEILING

- Conditions:
- Safran HE Arrius 2R engine at MCP power
  - Barrier filter installed
  - Heater off, No wind



## Fuel Flow vs. Airspeed

Fuel Flow vs Airspeed chart data based on the following conditions:

- ISA & ISA+20°C
- Safran HE Arrius 2R engine
- Inlet Barrier Filter installed
- Standard skid gear
- Clean configuration (no external kits)
- No wind

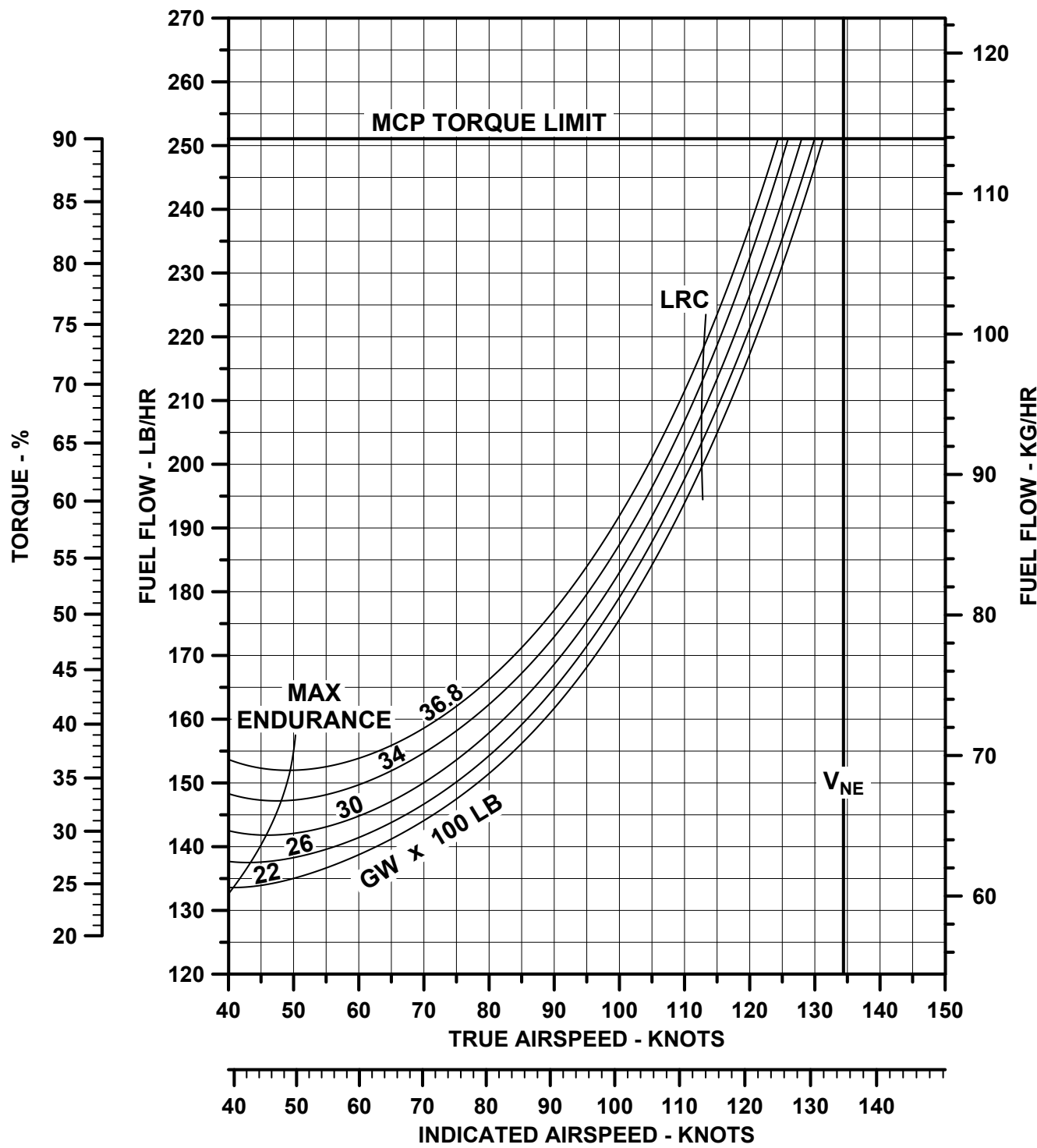
Notes: The best allowable Cruise Speed is either Long Range Cruise Speed (LRC), or when speed is limited by Maximum Continuous Cruise Power (MCP) or VNE , the maximum speed permitted.





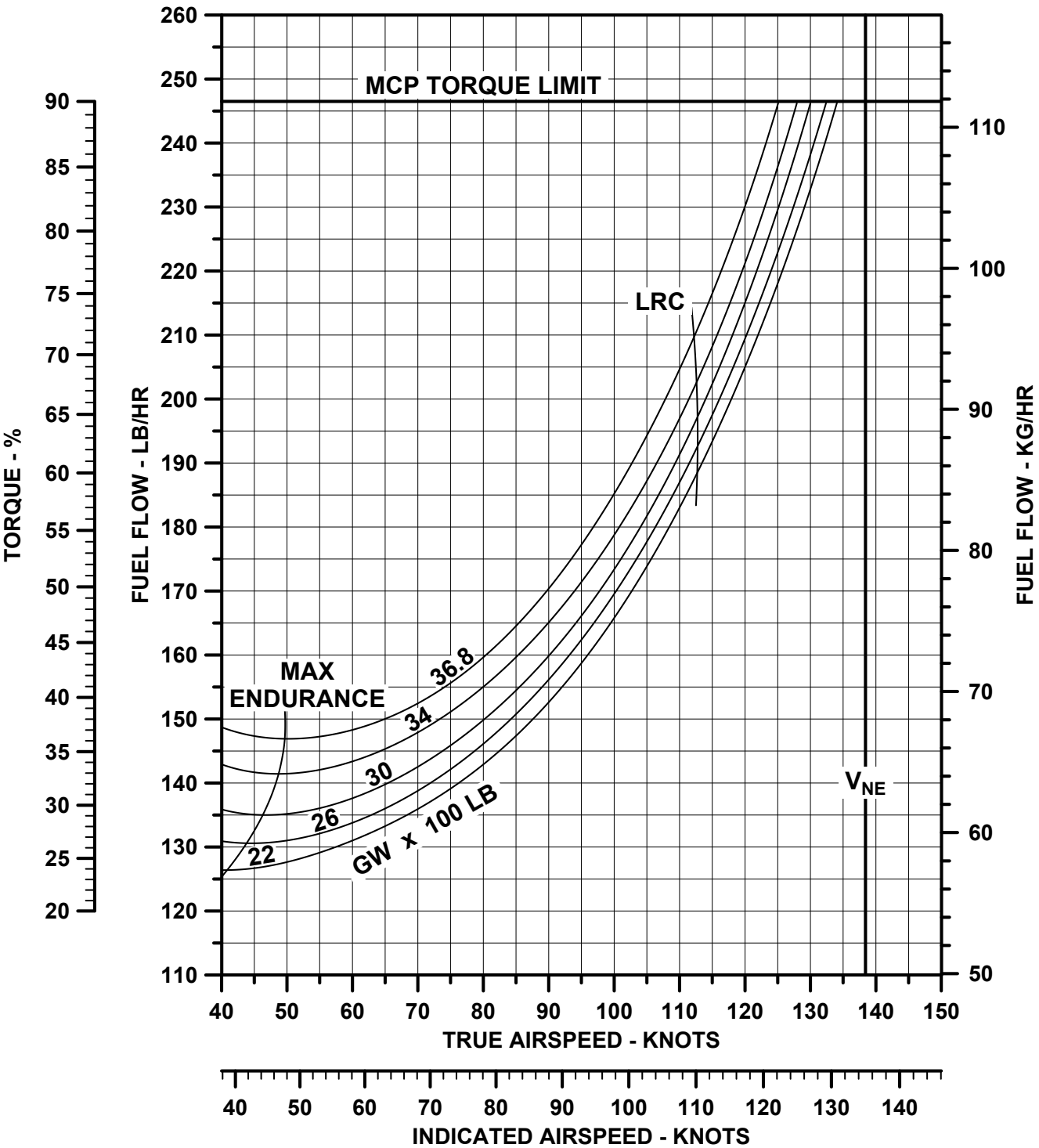
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = SEA LEVEL, OAT = 15°C (ISA)



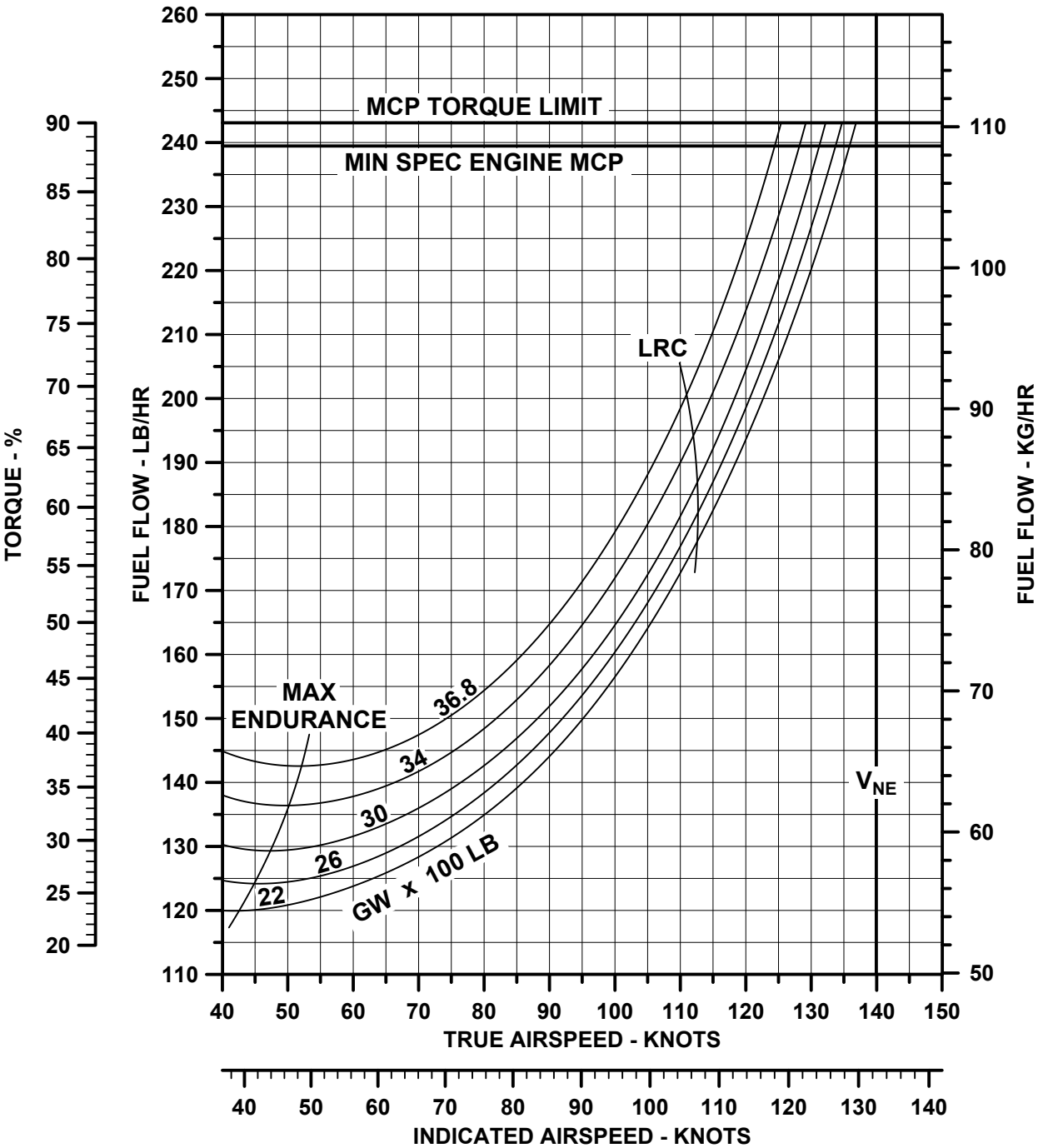
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 2,000 FT, OAT = 11°C (ISA)



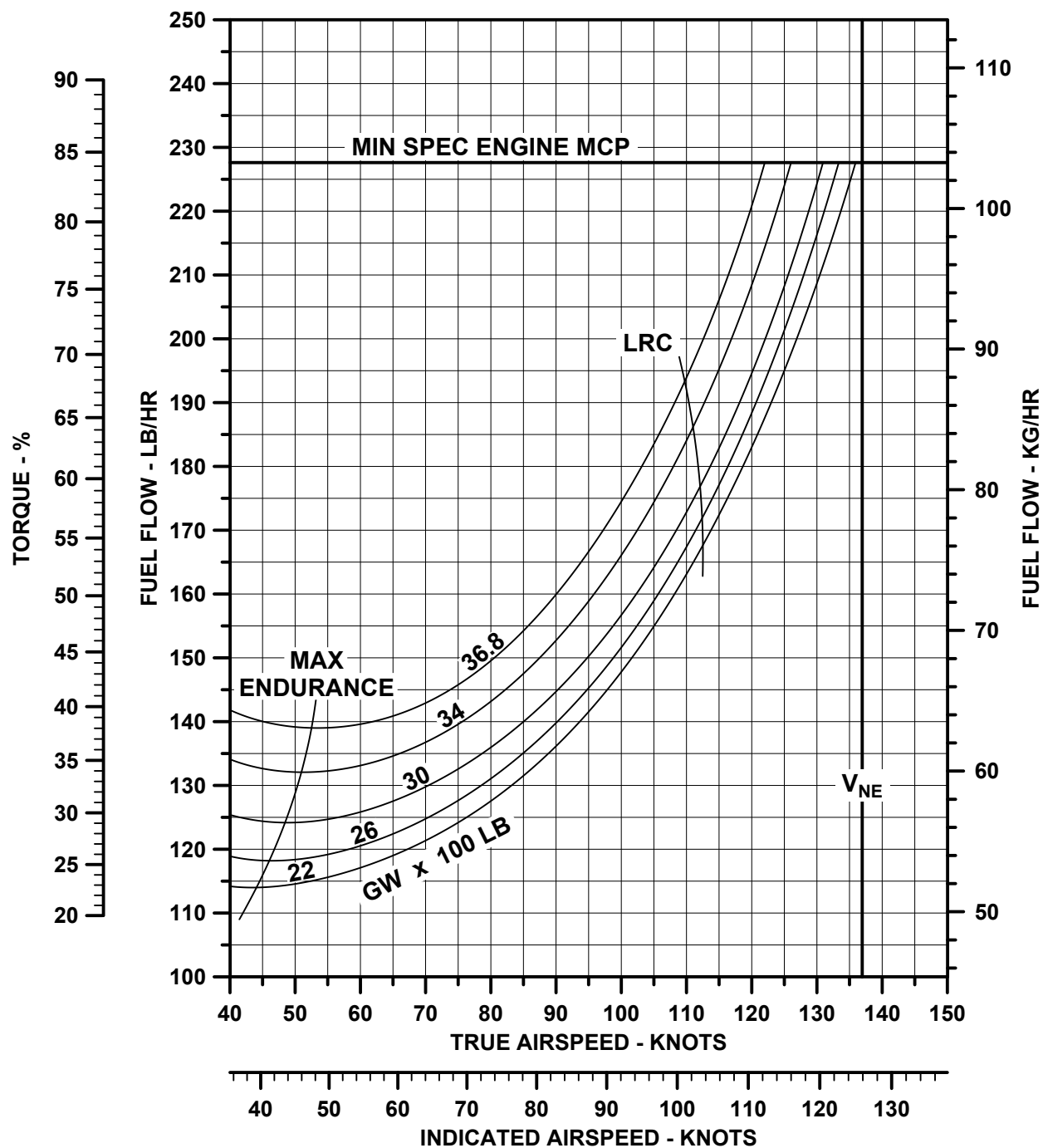
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 4,000 FT, OAT = 7 °C (ISA)



## Fuel Flow vs. Airspeed

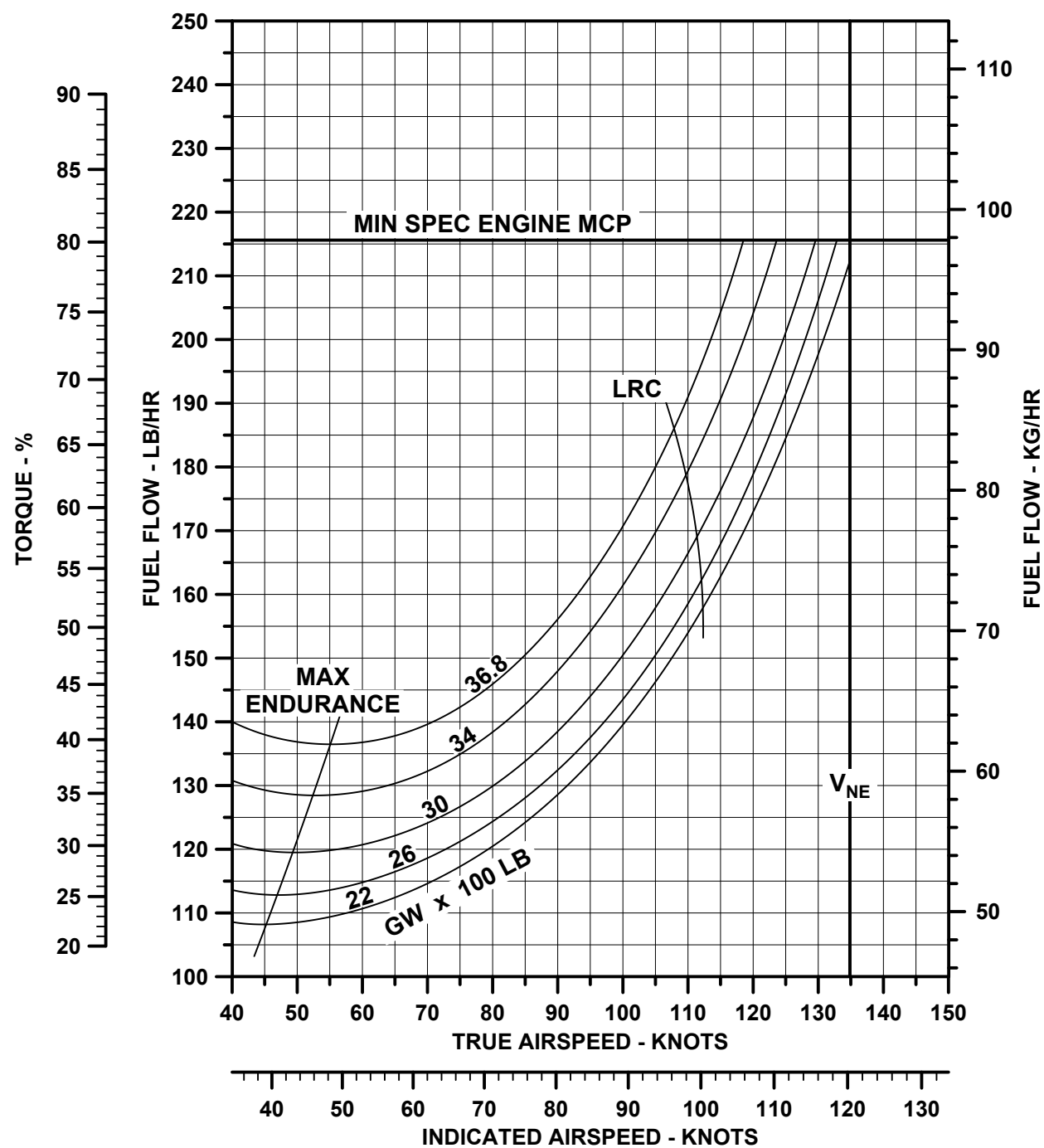
PRESSURE ALTITUDE = 6,000 FT, OAT = 3 °C (ISA)





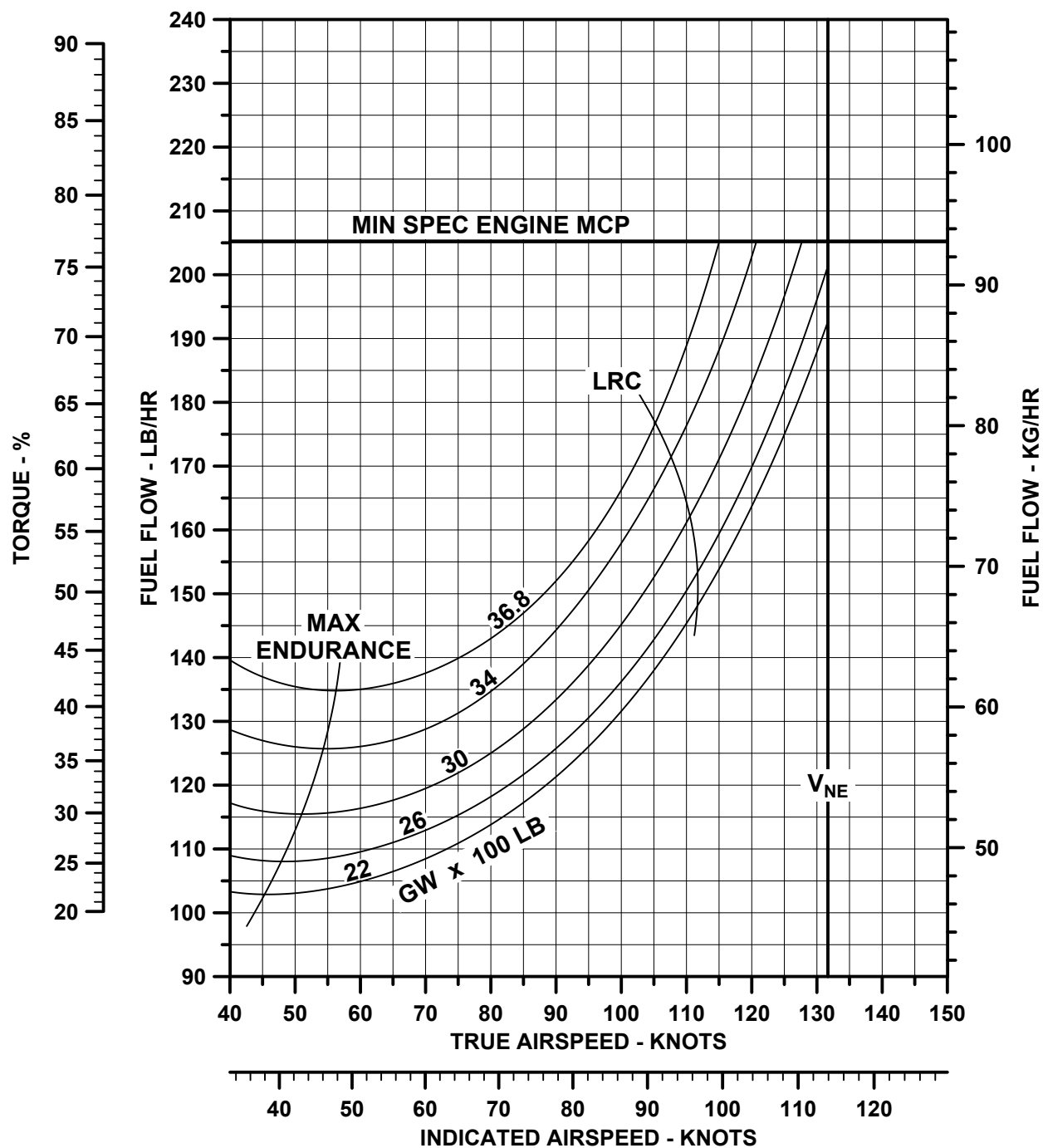
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 8,000 FT, OAT = -1 °C (ISA)



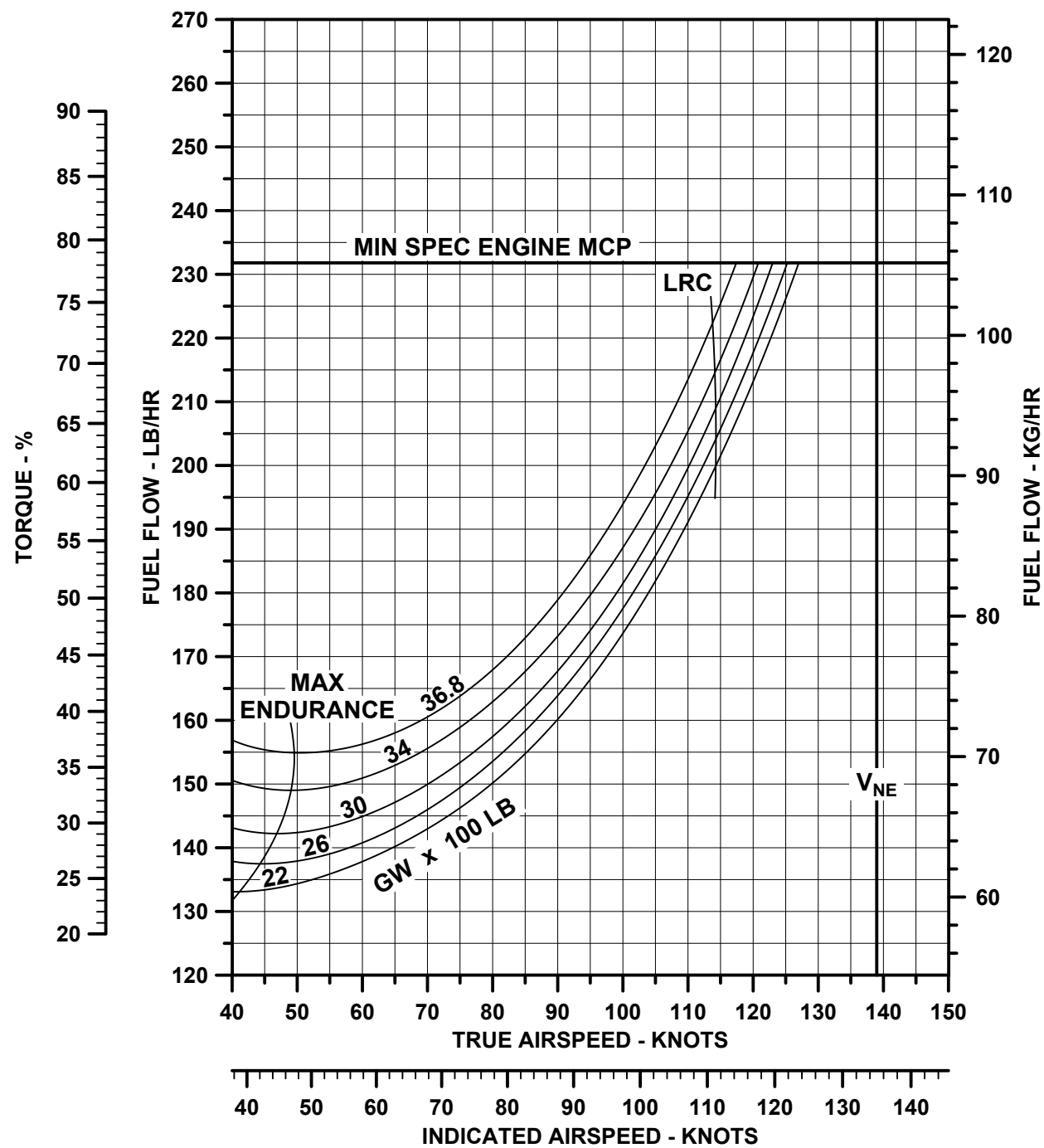
## Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 10,000 FT, OAT = -5 °C (ISA)



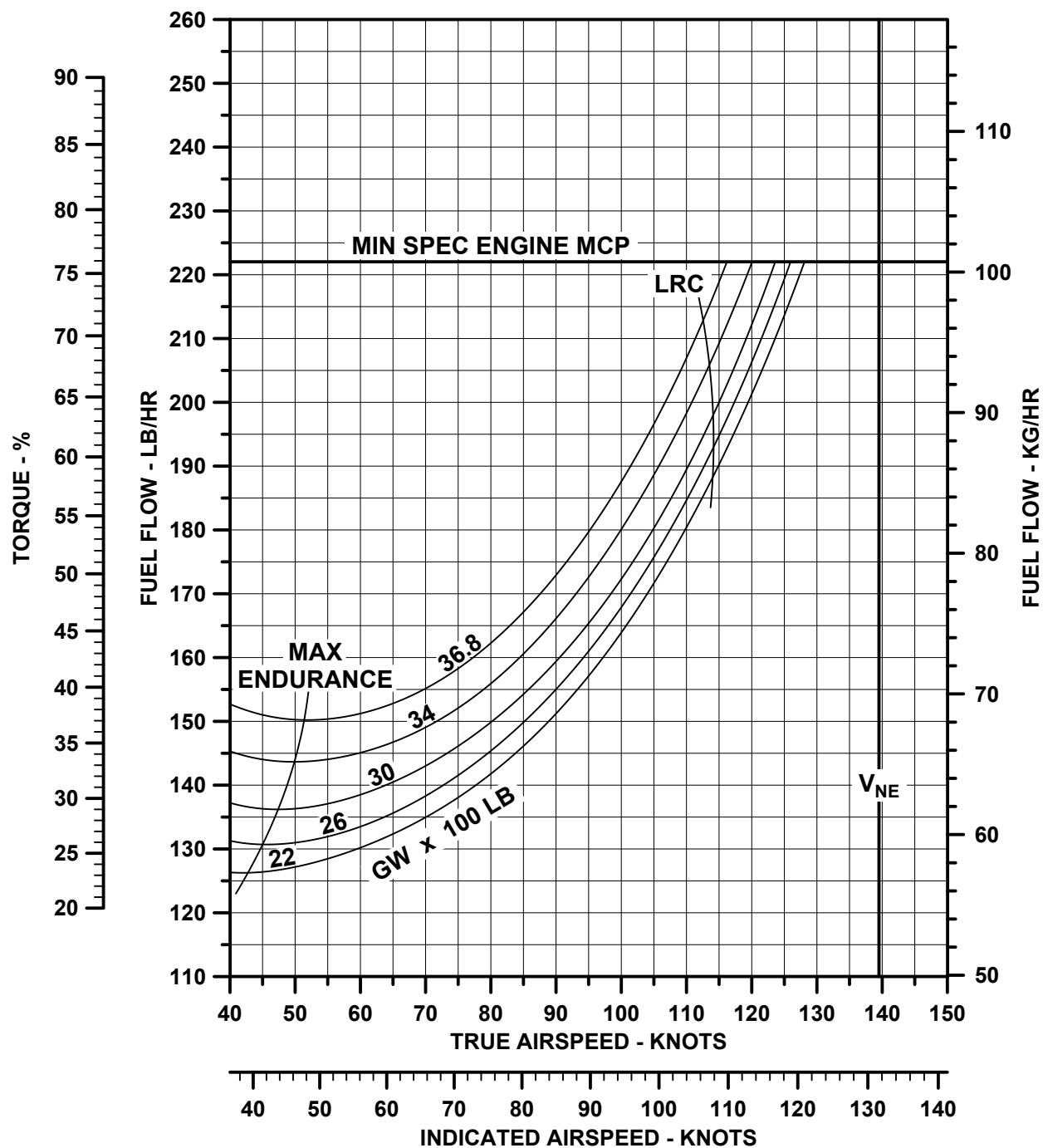
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = SEA LEVEL, OAT = 35 °C (ISA + 20)



## Fuel Flow vs. Airspeed

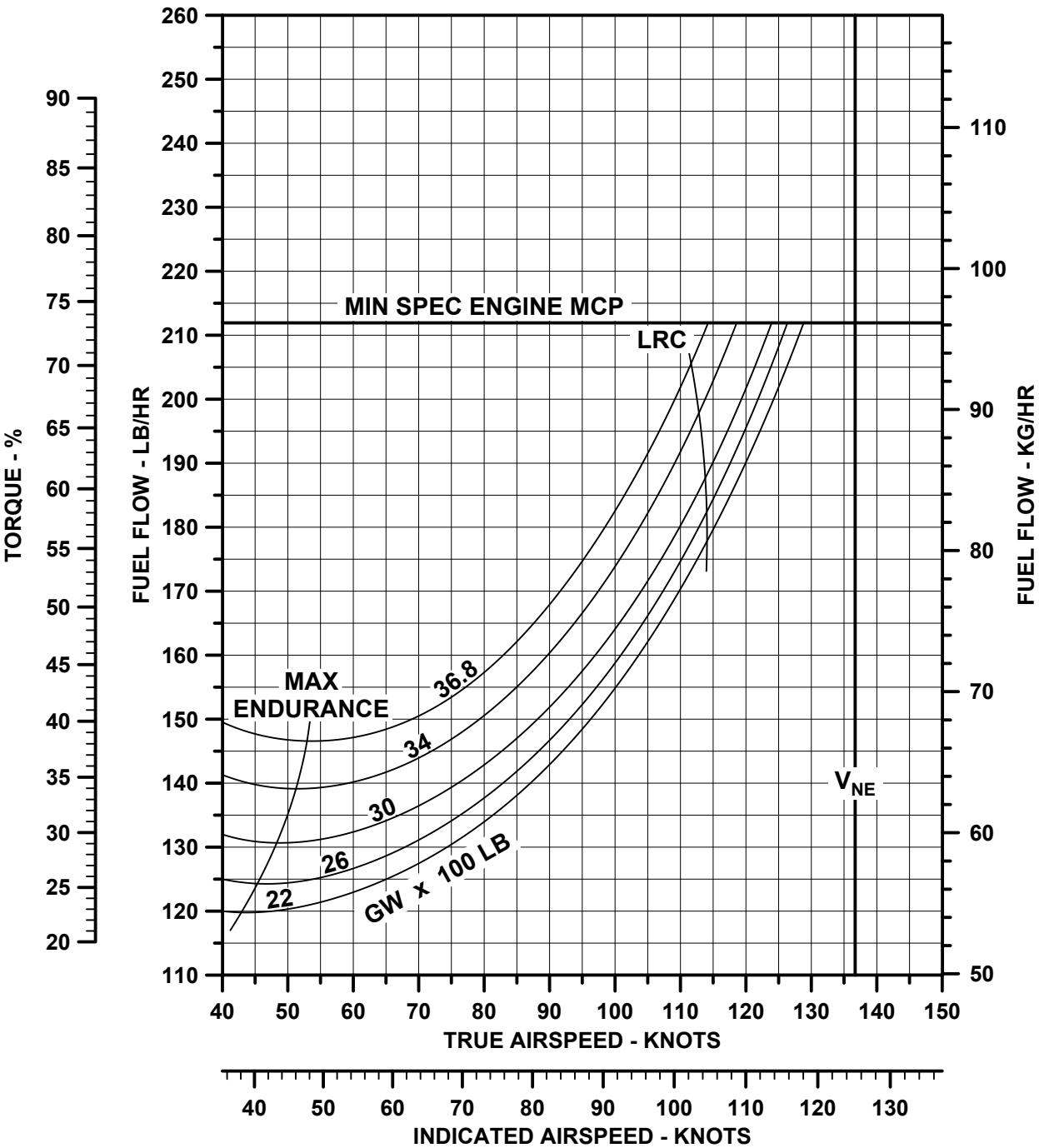
PRESSURE ALTITUDE = 2,000 FT, OAT = 31 °C (ISA + 20)





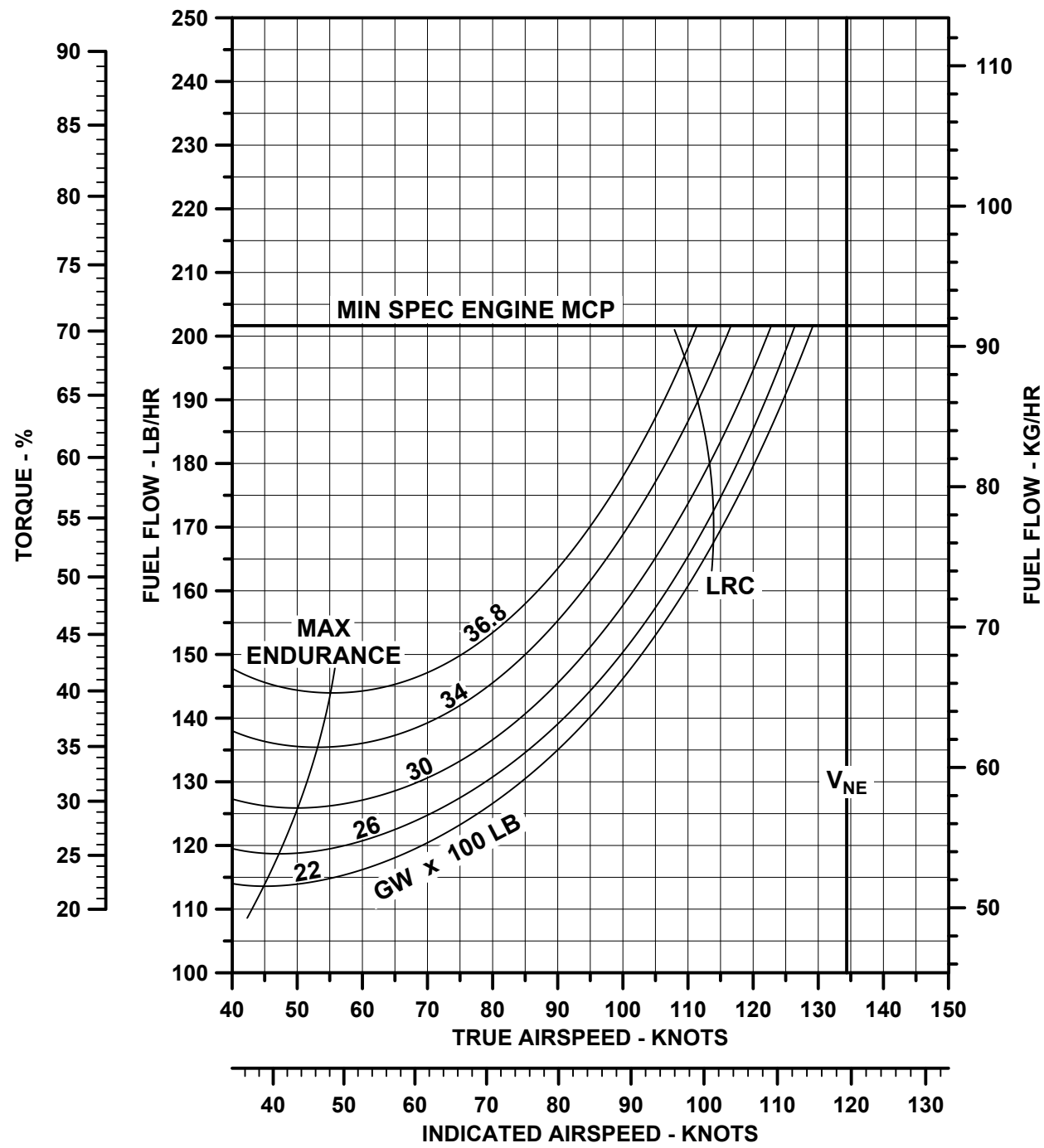
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 4,000 FT, OAT = 27 °C (ISA + 20)



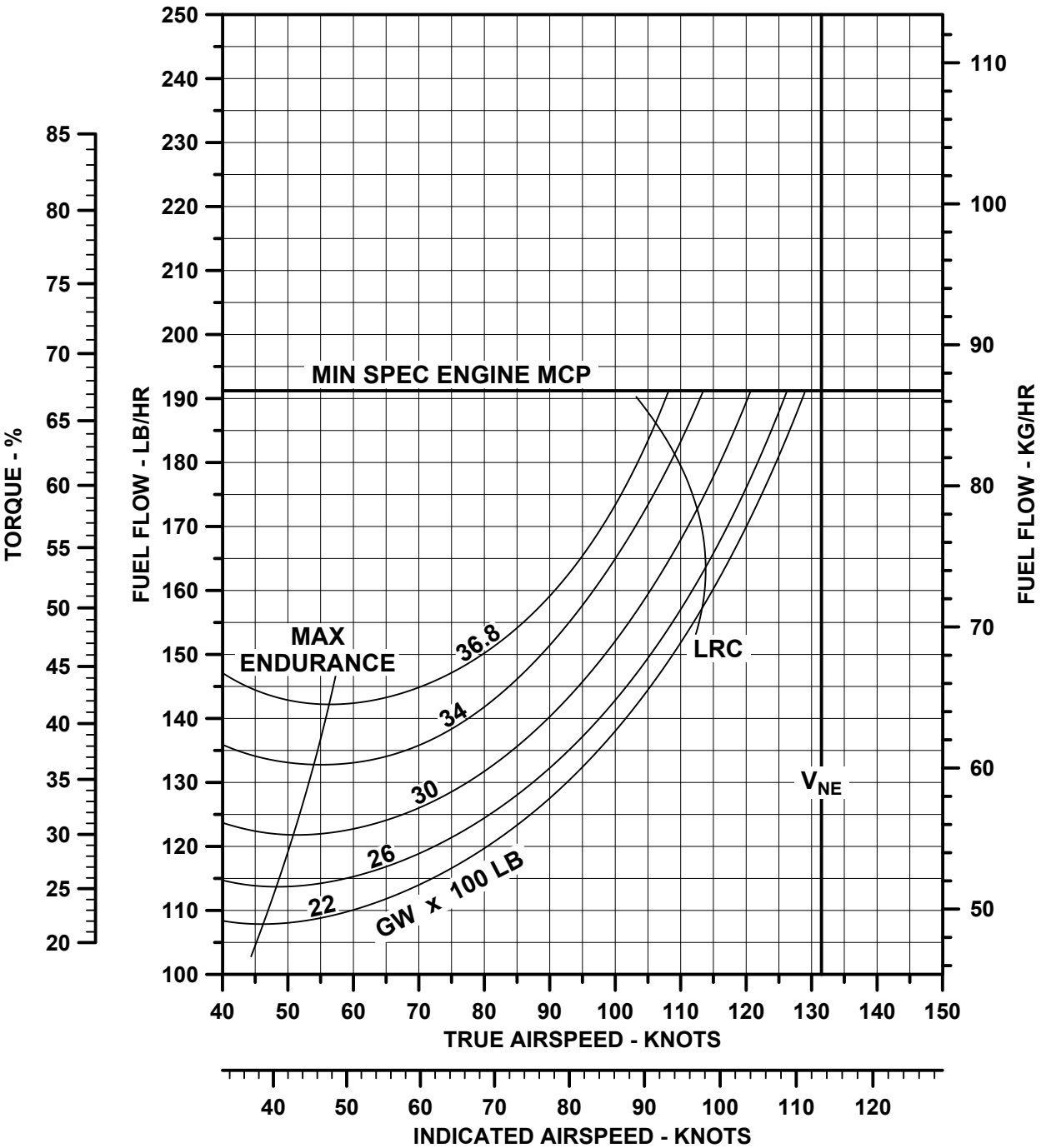
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 6,000 FT, OAT = 23 °C (ISA + 20)



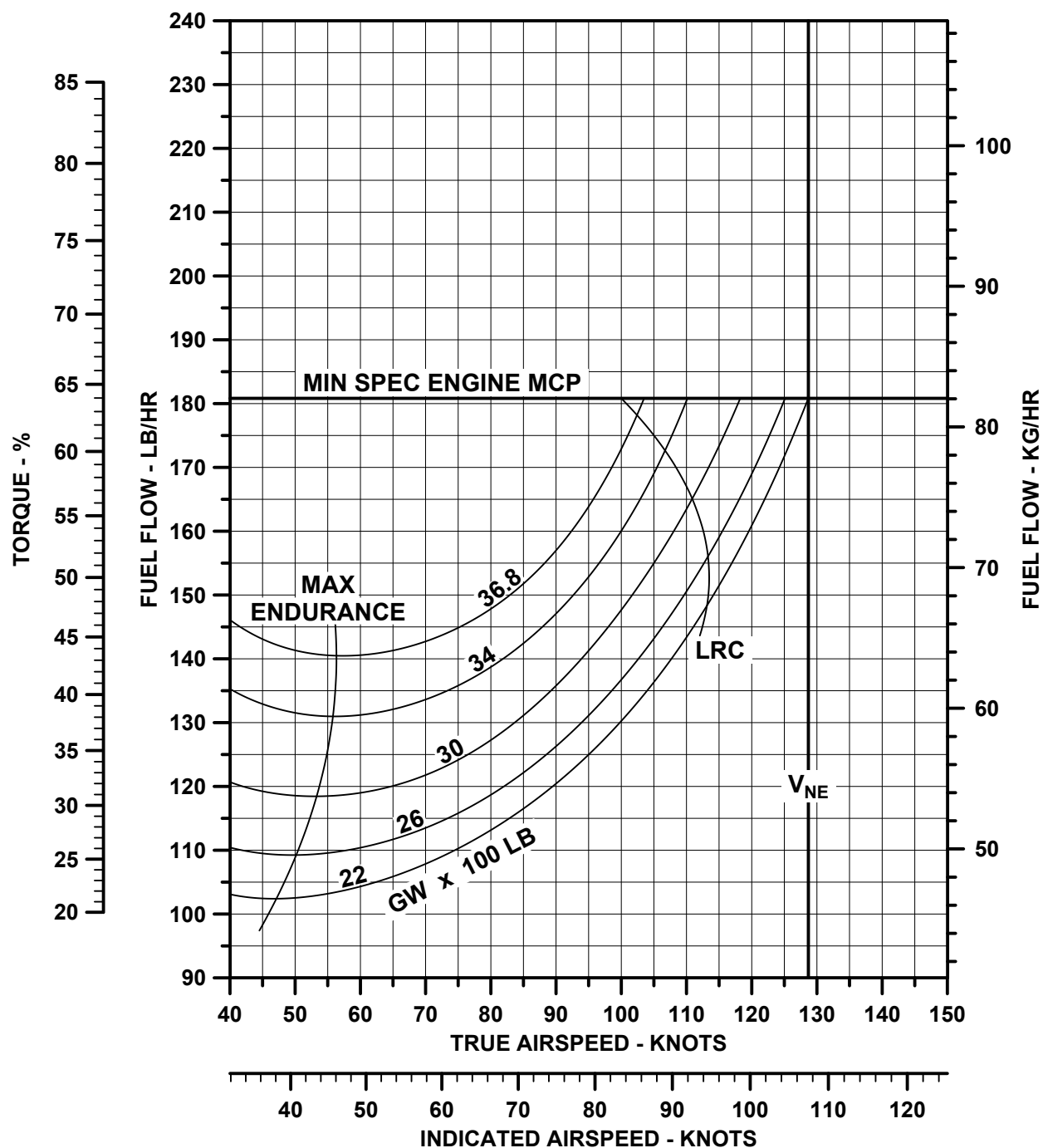
Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 8,000 FT, OAT = 19 °C (ISA + 20)



## Fuel Flow vs. Airspeed

PRESSURE ALTITUDE = 10,000 FT, OAT = 15 °C (ISA + 20)





## Cost of Operations

### INTRODUCTION

Bell Textron Inc. has worked diligently with its very own operators and service facilities to provide a detailed and accurate cost of operations for production helicopters. Our Product Support Organization acquires cost data from an assorted group of operators ranging from large to small; sub-polar, subtropical; inland to coastal; corporate, and charter. The purpose of this information is to analyze and generate sample data for each production model which are averages of the field experiences to ensure we monitor actual costs, enable annual updates, and to maintain aircraft 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.

- 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.)

### 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% 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 prices prevalent at the time of the sample data are prepared.
Basic Airframe Maintenance	<p>Airframe maintenance is divided into four categories:</p> <ul style="list-style-type: none"><li>• Progressive Inspections</li><li>• Overhauls</li><li>• Replacement of Retirement Parts</li><li>• Unscheduled</li></ul> <p><u>Progressive inspections</u> include proper inspection tasks and part requirements which are listed in the Maintenance Manual for each model. Man hours for progressive inspections can vary from the sample value provided because of differences in personal experience, tools, part availability, facilities, and environmental effects such as extremes in working temperatures. Man hour costs/hour is 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.</p>

Cost of Operations

DIRECT COSTS

Basic Airframe Maintenance (continued)	<p><u>Overhauls</u> include removal, disassembly, inspection, parts replacement, reassembly and reinstallation of certain components/assemblies at the periods stated in the BTI Maintenance Manual. Overhaul man hour and parts requirements are subject to considerable variation depending upon the helicopter’s operations and environments. The sample data reflects average values.</p> <p><u>Retirement parts</u> are those of which have reached their respected flight life expectancy and are subjected to disposal after an operating time stated within 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.</p> <p><u>Unscheduled maintenance</u> 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.</p> <p>The sample data for periodic inspections provide for some minor unscheduled maintenance tasks resulting from the inspection.</p>
Powerplant Maintenance	<p>The power plant 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. Power plant 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 power plant may also require unscheduled maintenance (unscheduled removals for repair, parts replacement).</p>

## Cost of Operations

### 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 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.

## Cost of Operations

### OWNERSHIP ANALYSIS PROGRAM

Bell 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 operator's planned period of utilization for the aircraft.

Bell's regional marketing managers or corporate office personnel will be able to assist in preparing an ownership analysis which is customized for our customer's specific individual conditions and needs. To request a Life Cycle Cost Analysis, contact your sales representative or call 1-800-FLY-BELL.

### DIRECT COST OF OPERATIONS (U.S. DOLLARS PER FLIGHT HOUR)

	Parts	Labor <sup>[1]</sup>	Total
<b>AIRFRAME DIRECT MAINTENANCE</b>			
Scheduled Inspections <sup>[2]</sup>	\$2.19	\$18.72	\$20.91
Scheduled Retirements <sup>[3]</sup>	\$123.22	\$3.71	\$126.93
Scheduled Overhauls <sup>[4]</sup>	\$21.37	\$8.16	\$29.53
Provision for Unscheduled Maintenance and Service Bulletins on above Components	\$10.52	\$1.41	\$11.93
On-condition Maintenance of Other Airframe Components	\$17.12	\$6.26	\$23.38
<b>Subtotal</b>	<b>\$174.41</b>	<b>\$38.26</b>	<b>\$212.68</b>
0.40 Mx Man-Hour / Flt. Hr			
<b>POWERPLANT - Turbomeca Arrius 2R (Quantity 1)</b>			
Mfr. Estimate of Engine Cost per Hour			\$97.50
BHT Estimate of Additional Line Maintenance			\$1.03
<b>Subtotal</b>			<b>\$98.53</b>
<b>Total DMC</b>			<b>\$311.21</b>
<b>FUEL AND LUBRICANTS</b>			
Fuel <sup>[5]</sup>			\$137.60
Lubricants			\$1.38
<b>Subtotal</b>			<b>\$138.97</b>
<b>Grand Total with Fuel</b>			<b>\$450.18</b>

- Notes:
- [1] Labor rate figured at \$95.00 per hour (0.45 mx man hour / flight hour).
  - [2] Based on 625 flight hours / year, 1.5 RIN/flight hours
  - [3] Based on 100% Life.
  - [4] Based on 100% TBO.
  - [5] Calculated at Fuel Flow Rate of 32 U.S. GPH at Fuel Cost of \$4.26 per gallon.
  - [6] The costs above were calculated as of 02/2022 and are subject to change.

Other assumptions: Basic VFR helicopter with no optional equipment installed  
 (Add 5-10% for optional equipment using operator experience);  
 Mature helicopter (no warranty considerations);  
 Bell list price for spare parts.



## Component Overhaul

### COMPONENT OVERHAUL INTERVALS

Component	Hours	Component	Hours	Component	Hours
M/R Hub	2,400	Freewheeling Assy	3,000	Tail Rotor Hub	2,500
Mast Assy	3,000	Swashplate & Support	4,800	Main Driveshaft	2,000
Transmission	4,500	Tail Rotor Gearbox	6,000	Starter Generator	1,000

Note: Analysis of Lead-the-Fleet performance data continues to permit extension of TBOs beyond 2,500 hours for drive train components.

### LIMITED LIFE COMPONENTS

Part Number	Component	Life in Flt Hours	Life in SRIN	Life in Months	Qty Per Aircraft
<b>AIRFRAME</b>					
SLS-030-056-015	Truss	3,000			1
SLS-030-600-023	Tailboom Assy (1)	14,000			1
SLS-030-820-005	Fwd Crosstube Assy	14,667	22,000		1
SLS-030-830-003	Aft Crosstube Assy	4,333	6,500		1
SLS-030-810-005	Skid Tube Assy	4,333	6,500		1
SLS-010-200-101	LIVE Mount Assy, Left	3,000			1
SLS-010-200-102	LIVE Mount Assy, Right	3,000			1
<b>MAIN ROTOR HUB AND BLADES</b>					
206-011-120-105	Trunnion (2)	16,000	24,000		1
206-011-150-105	Strap Retention Fitting	2,400			2
206-011-125-001	Strap Pin	1,200			2
206-011-132-113A	Grip	4,800			2
206-310-004-103	Tension-Torsion Strap	1,200		48	2
206-011-260-101	Latch Bolt	1,200			2
206-015-001-119	Main Rotor Blade	4,000			2
<b>MAIN ROTOR MAST</b>					
206-040-535-109	Main Rotor Mast	5,000	44,000		1
<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

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

## Global Support Network

As the industry leader in customer support, we at Bell pride ourselves on supporting our customers around the world at every step of your aircraft's life cycle. We are committed to providing customers with an extensive range of support and service capabilities to ensure safe and reliable operation of our products, enhance mission execution, and keep you flying.



### SUPPORT AND SERVICE OFFERINGS

**2**

Straightforward Customer Advantage Plans (CAP) covering basic aircraft configuration with optional coverage for non-standard kits

**4,000**

Parts offered through the Aeronautical Accessories brand

**and**

**10**

Bell service centers around the world with wide ranging maintenance, repair and overhaul capabilities

**1,200**

Unique Supplemental Type Certificates (STCs), all of which comply with FAA regulations and meet rigorous internal quality standards

**3**

Bell Training Academy locations around the world with expert instructors who offer industry-leading pilot and technical training

**85**

Network Service Partners with the ability to perform a wide range of aircraft services

Global Support Network

CUSTOMER ADVANTAGE PLANS (CAP)

CAP safeguards your direct maintenance costs and provide the ultimate in cost predictability. The plans protect your investment and provide confidence of knowing you're backed by the industry leader in customer support. With coverage options for non-standard kits, our customers experience the Bell Advantage.

SIMPLE COMPREHENSIVE PLANS

Bell offers two simple CAP options: Standard and Premier Plans. Both offer holistic coverage of the standard helicopter configuration, with optional coverage for non-standard kits. Standard and Premier Plans are both designed to provide peace-of-mind that your aircraft is protected from day one of your aircraft ownership. Why overcomplicate your OEM support?

Peace of Mind



DMC competitive



Residual value protection



Optional non-standard kit coverage



Improved financing terms



Preferred rates for aircraft serviced by any of the 100+ Bell Customer Service Facilities (CSFs)



Reduced part replacement and repair time



Streamlined budgeting



Fleet customers may be eligible for no 'Buy-Ins'

PREMIER ACCESS TO INCREASE AIRCRAFT AVAILABILITY

CAP members have preferred access to Bell's dedicated rotatable pool of parts. This inventory reduces traditional repair or replace turnaround times.

*\*Upon sale of aircraft, any remaining funds in the aircraft's Premier CAP account may be transferred with execution of new contract.*

## Global Support Network

### CAP FEATURES

		Premier	Standard
Typical Customer	Aircraft ownership	New aircraft, fielded, or fleet customers	New aircraft only
	Annual flight hours	High	Low
Coverage	Standard helicopter configuration parts	✓	✓
	Optional coverage for kits installed by Bell	✓	✓
	Optional OEM engine coverage	Varies by model	
	Parts used for scheduled maintenance	✓	
	Parts used for unscheduled maintenance	✓	✓
	Life-limited component coverage	✓	
	Overhauls	✓	
	OEM-original or authorized parts	✓	✓
	Alert Service Bulletins	✓	✓
Contract	Minimum annual flight hours	No minimum	No minimum
	Renewable	✓	
	Transferable	✓ *	✓ **
	Choice pricing under warranty	✓	✓
Support	Access to Bell Customer Portal	✓	✓
	On-site technical assistance	✓	✓
	24/7/365 Aircraft on Ground (AOG) support	✓	✓

\* Upon sale of aircraft, any remaining funds in the aircraft's Premier CAP account may be transferred with execution of a new contract.

\*\* Conditions may apply

### NEW AIRCRAFT COVERAGE

CAP provides the confidence of knowing you're backed by the industry leader in customer support. For new aircraft, the plans are designed to provide peace-of-mind that your aircraft is protected from day one of your aircraft ownership.

#### KEY BENEFITS



**LOWER RATES  
DURING WARRANTY**



**SAVINGS ON OVERALL AIRCRAFT  
SUPPORT**



**RESIDUAL VALUE  
PROTECTION ON AIRCRAFT**

**To learn more about how CAP can assist you with your aircraft operations, please contact  
CAP@bellflight.com or contact your Bell Sales Representative.**



## Global Support Network

### SERVICE CENTERS

Bell's Global Support Network provides customers with a complete and seamless support system offering a full service experience anywhere in the world.

With a suite of available services including aircraft customizing, maintenance repair and overhaul, and Bell warranty work, our service centers offer direct OEM support in every corner of the world.

### GLOBAL AFTERMARKET SUPPORT

		Piney Flats, TN	Miami, FL	Ozark, AL	Singapore	Prague	China	Mirabel, Canada	Broussard Blades	Broussard Composite Panels	RBI Hawker (UAE)	RBI Hawker (Australia)	RBL (United Kingdom)
Component Repair & Overhaul Capabilities	Expanded repair	●	●	●	●	●	●	▲					
	Transmission	●	●	●	●	●	▲	▲					
	Hubs	●	●	●	●	●	▲	▲					
	Avionics	●	▲	●	▲	●	●	▲					
	Rotor blades	▲	▲	▲	▲	▲	▲	▲	●		●	●	●
	Composite panels	▲	▲	▲	▲	▲	▲	●		●			
Additional Capabilities	Aircraft customizing	●	▲	●	●	●	●	●					
	Retrofits, modifications & upgrades	●	●	●	●	●	●	●					
	Approved installer of Aeronautical Accessories parts & accessories	●	●	●	●	●	●	●					
	Aircraft Paint Services	●	▲	●	●	●		●					
	Field maintenance & repair (Remote)	●	●	●	●	●	●	●	●		●		●
	Bell maintenance training	●			●			●					
	Bell warranty work	●	●	●	●	●	●	●	●	●	●	●	●
	Engine support & rental program		▲		▲		▲						

● In-House Capabilities

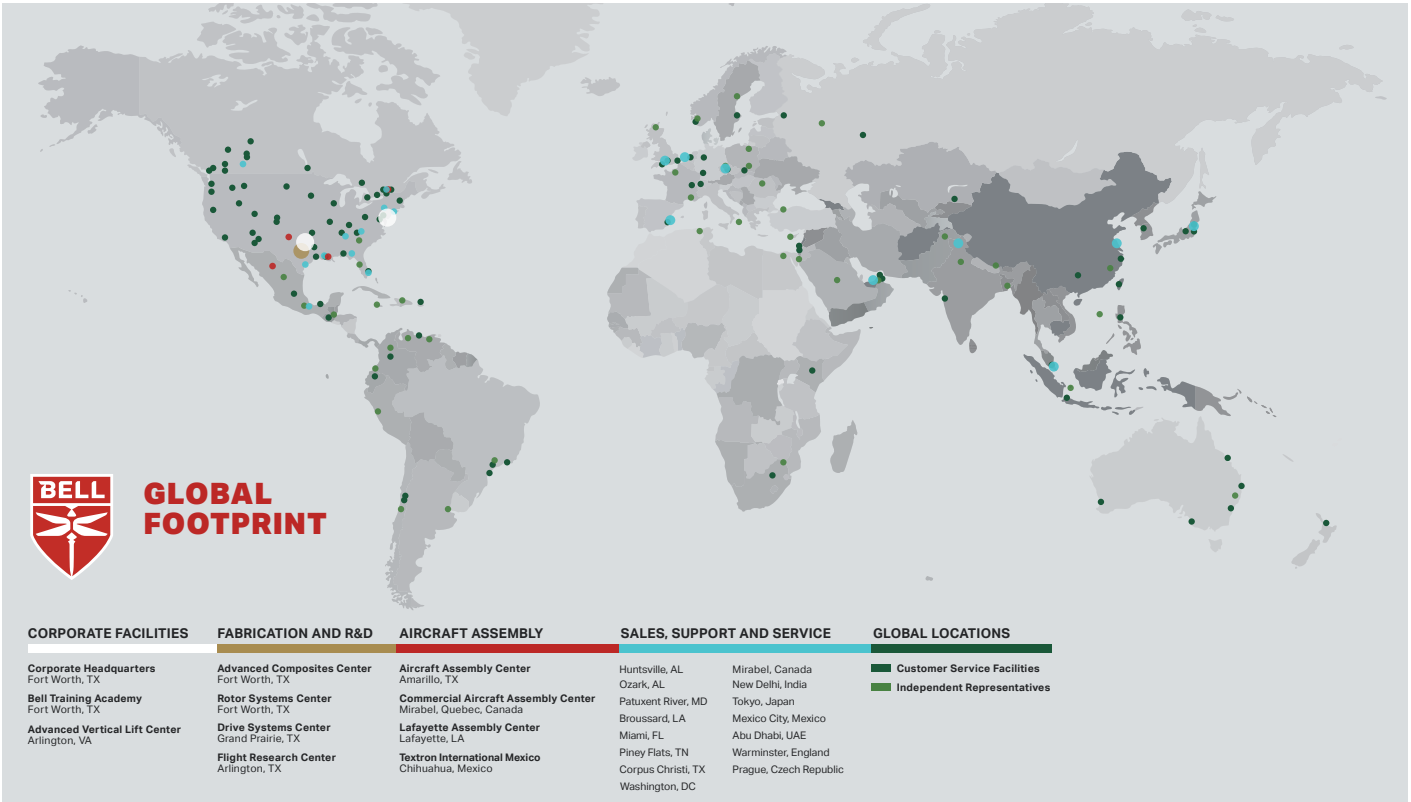
▲ Outside Services

For more information on each facility visit: [bell.co/MRO](https://bell.co/MRO)

# Global Support Network

## CUSTOMER SERVICE FACILITIES (CSF)

In addition to our 10 service centers, Bell has a strong network of more than 70 Authorized Customer Service Facilities (CSFs). These award-winning facilities enhance the accessibility of in-region global support and ensure that your aircraft is ready whenever and wherever you need it.



## QUALITY ASSURED AND OEM APPROVED

Customers who choose an authorized CSF for maintenance, repair and overhaul work can be assured that both the staff members and the facility itself meet Bell's stringent internal standards for quality and safety. Authorized CSFs have factory-trained maintenance technicians and are equipped with the skills and expertise required to process Bell warranty claims. In addition, these facilities maintain guaranteed parts inventories to service aircraft and possess the most up-to-date technical and safety information available. All of this combines to provide in-region support you can trust.

Training

BELL TRAINING ACADEMY (BTA)

BellFlight.com/Training

Bell’s global training solutions are designed to equip customers with the knowledge and skills necessary to safely and efficiently perform their missions. Since 1946, the BTA has been committed to providing industry leading training programs that create better, safer flight operations. The BTA staff of highly skilled professional pilot and technical instructors leverages OEM data and expertise to deliver the finest helicopter training in the world. We continue to develop innovative programs that will take our customers’ pilot and technical skills to a whole new level.











The BTA at Bell’s headquarters in Fort Worth, Texas.

Pilot and maintenance training is complimentary with each new aircraft purchase. Supplemental, training courses are available at an additional cost.

STATE-OF-THE-ART TRAINING RESOURCES

Based at the Bell headquarters in Fort Worth, Texas, the BTA combines a track record of excellence with a wide variety of industry-leading amenities.

	<b>#1</b> Pilot and maintenance training consistently ranked #1 in the industry		<b>375+</b> Years combined experience among Bell's technical instructors
	<b>25,000+</b> Square foot maintenance hangar		<b>8,500</b> Average instructor pilot flight hours
	<b>200,000+</b> Pilot and maintenance technicians trained		<b>134+</b> Countries represented by customers in every market segment
	<b>3</b> Full Flight Simulators for the Bell 407GX, Bell 525 in Fort Worth, Texas, and a FFS for the Bell 429 in Valencia, Spain		<b>6</b> Advanced Flight Training Devices (FTD) designed to train on seven models

## Training

The BTA's 80+ staff members welcome students from all over the world, and are eager to share the knowledge gained from decades of hands-on experience within the military and across other professions. Instruction can be provided in English or Spanish. Language translation is available for an additional cost.

Recognized by the European Aviation Safety Agency (EASA) as an Approved Training Organization (ATO), the BTA has the authorization to provide Part-FCL flight training courses to European customers for the 407, 212/412, 429, and 505 models, including the use of Flight Training Devices (FTD) for the Bell 407, Bell 412 and 429 models. A Performance Based Navigation (PBN) Generic Non-Type or 412/429 Type Rating Specific courses are also approved.

The BTA is also authorized by various international regulatory agencies for type-specific technical training of engineers / mechanics. These agencies include the Civil Aviation Authority of Singapore (CAAS), Transport Canada (TC), European Aviation Safety Agency (EASA), Australian Civil Aviation Safety Authority (CASA), Civil Aviation Administration of China (CAAC), Director General Civil Aviation of India (DGCA), and the UAE General Civil Aviation Authority (GCAA).

### GLOBAL TRAINING NETWORK

With nearly 70 percent of our commercial aircraft delivered internationally, Bell understands the need for training to be readily available where our customers perform their missions. Our training centers are equipped and certified to meet the needs of our customers around the globe. We are committed to having resources where our customers operate and are investing to provide world-class, global training solutions to meet a growing customer demand.

**Europe:** All pilot training classes at BTA – Valencia, are instructed upon the Bell 429 EASA-certified Level D Full Flight Simulator (FFS). The Bell 429 FFS offers the largest standard visual field of view and the largest standard dome radius of any simulator on the market today. Additionally the FFS offers industry-leading motion performance with high-fidelity superior accelerations, smoothness, and responsiveness powered by REALFEEL® Control Loading System and REALVibe™ Secondary Cueing System.

BTA, Valencia, offers three courses with plans for additional class offerings in the coming years. BTA-Valencia offers a 10-day Bell 429 EASA initial type rating and a Bell 429 recurrent course to reinforce the initial type rating. Additionally, BTA-Valencia offers wet and dry leasing that is custom tailored to each operator. For more information on wet and dry leasing please visit [www.bellflight.com/training](http://www.bellflight.com/training).

**Singapore:** BTA Singapore is approved by the Civil Aviation Authority of Singapore (CAAS), European Aviation Safety Agency (EASA), Australian Civil Aviation Safety Authority (CASA), and Director General Civil Aviation of India (DGCA), and the UAE General Civil Aviation Authority (GCAA). BTA Singapore offers regulatory classes for maintenance theory and practical training on all current Bell models and select legacy aircraft. Available courses include avionics maintenance, field maintenance and refresher courses, cable and connector training, and vibration monitoring system training.



Maintenance training at BTA Singapore



## Training

### GENERAL INFORMATION

The operator and maintenance training provided by BTA establishes a foundation that supports mission tasks with aircraft pilot qualification.

**Pilot Operator Training:** Our pilot training program includes basic academics and initial flight training to transition current pilots into Bell aircraft. All training is conducted by certified Bell instructor pilots.

**Maintenance Technician Training:** Experience is important, however, instruction received in the classroom and training lab provides an undeniable enhancement. Facilitating more efficient maintenance manpower and improving logistics supportability ensures that the customer's Bell is operational and maintainable in all types of climate and terrain.

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 and avionics bench trainers. The BTA also has operational cutaway mockups, a composite repair room, and an electrical/avionics lab. Over half of the maintenance training is hands-on, skill enhancing, and performance focused instruction. Training is determined complete, as defined by Bell, after each student demonstrates an ability to perform to the course standards for actual maintenance and operation of the equipment referencing technical manuals.

**Training Aircraft:** The BTA conducts flight training in Bell OEM-owned or newly delivered customer aircraft.

**Training Materials and Language:** Bell provides each maintenance and pilot training candidate 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.

**Training Technology:** Bell is leading the industry in its use of engineering technology to more effectively teach pilots and maintainers around the world. The use of 3-D rendered, high-fidelity, interactive graphics provide students an authentic representation of each component. Smart Board technology allows for independent media manipulations such as assembly and disassembly of system subassemblies and replication maintenance actions without leaving the classroom. The adoption of 3-D modeling of aircraft components and system assemblies has greatly improved training efficiency by enhancing student retention.

**Student Registration:** The customer is responsible for submitting an enrollment request for each training candidate via Bell's on-line registration process at [bellflight.com/training](http://bellflight.com/training). It is encouraged that all training be scheduled at least ninety (90) days prior to the start of each established course date to ensure space and instructor availability.



## Training

**Cancellation Policy:** The customer agrees to comply with the BTA cancellation policy as set forth at [bellflight.com/training](http://bellflight.com/training).

**Trainee Visas:** Applying for and receiving a visa 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 training, including but not limited to, air travel, ground transportation (car rental/taxi), meals, and lodging for each designated trainee will be the responsibility of the customer.

## TRAINING COURSES

The following table summarizes both the pilot and maintenance training course offerings for the Bell 505. Additional training options are available at [bellflight.com/training](http://bellflight.com/training)

### BELL 505 TRAINING COURSE SUMMARY

Course	Duration
<b>Pilot Training</b>	
Bell 505 Ground and Flight Initial	5 days
Bell 505 Ground and Flight Refresher	2 days
Bell 505 Ground and Flight Initial Blended Learning Package (Virtual)	7-8 days
Bell 505 Ground and Flight Refresher Blended Learning Package (Virtual)	3-4 Days
Bell 505 Left Seat Orientation for IPs	2 days
Bell 505 Non-NVG Night Flight	1 flight
Bell 505 FTD	2 hours
Bell 505 FTD Dry Lease	varies
Bell 505 NVG Ground and Flight Initial	4 days
Bell 505 NVG Ground and Flight Refresher	2 days
Inadvertent IMC and Helicopter Upset Recovery Course (505)	1 day
<b>Maintenance Training</b>	
Bell 505 Field Maintenance	2 weeks
Bell 505 Electrical/Avionics Maintenance	2 weeks
Bell 505 B2 Integrated Avionics	2 weeks
Bell 505 B1.3 Field Maintenance	2 weeks
Bell 505 Field Maintenance Refresher	3 days
Bell 505 Familiarization	3 days
Bell 505 Support Staff Systems Familiarization	
Bell 505 & Bell 206 Series Component Maintenance	8 days

## COURSE DESCRIPTIONS

Please visit our website [bellflight.com/training](http://bellflight.com/training) for complete course descriptions.







Aeronautical Accessories, a Bell brand, offers more than 4,000 parts and 1,200 unique supplemental type certificates (STCs), allowing you to upgrade your aircraft to meet the latest mission requirements.

With a broad selection of competitively priced, proven replacement parts and accessories, Aeronautical Accessories also features outstanding customer service that has been rated the best in the rotorcraft aftermarket.

### INNOVATION, RELIABILITY & PERFORMANCE

Aeronautical Accessories is dedicated to listening to the voice of the customer in developing new products, focusing on the safety for your passengers and crew, and providing an uncompromising emphasis on quality. Our components meet FAA requirements as well as exacting internal standards and are backed by an exceptional warranty—a benefit of being part of Bell. Aeronautical Accessories is also registered under Bell as a certified ISO 9001 with AS9100 Revision D facility.

### GLOBAL AVAILABILITY OF PRODUCTS

Through our global distribution and modern inventory management system, we minimize customer downtime for repairs, refurbishments and completions. Whether you are looking for new landing gear components, a specialty window or replacement interior plastic panels, Aeronautical Accessories has these in-demand items as part of our core product offering. We also can assist your needs with the latest developments in safety and mission equipment – featuring several new products that can take your aircraft to that next level. Our options such as enhanced doors and seating can make those long flights seem shorter, and the extensive choices for specialized lighting are sure to assist in all your flights that take place at night. Aeronautical Accessories' growing product line also features important items such as fuel filtration, floats for missions that occur over water, as well as the best solutions available in ground handling equipment.

### WE ARE HERE TO HELP

Whether you are customizing your new aircraft, looking to improve your ship's capabilities, or repurposing your helicopter, Aeronautical Accessories is available to assist. Visit our website [www.aero-access.com](http://www.aero-access.com) and learn about all the products we offer. You may also send an email to [sales@aero-access.com](mailto:sales@aero-access.com) to reach our Sales & Support team or give them a call at 800.251.7094.



