



**TYPE CERTIFICATE DATA SHEET No. ER-2018T03**

Type Certificate Holder:

**BELL HELICOPTER TEXTRON CANADA LIMITED**

12800 rue de l'Avenir  
 Mirabel, Quebec J7J 1R4  
**CANADA**

ER-2018T03-00  
 Sheet 01

BELL  
 BELL 505

20 March 2018

This data sheet, which is part of Type Certificate No. 2018T03, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

**I - Model Bell 505 (Normal Category), approved 20 March 2018.**

**ENGINE** 1 Safran Arrius 2R (EM 9803)

**FUEL SPECIFICATION**

Type	Specification	
Kerosene Jet A, Jet A-1 JP8	Canada CGSB 3.23 3-GP-23	USA ASTM D1655 MIL-DTL-83133
Wide Cut Jet B JP4	CGSB 3.22 CGSB 3.22	ASTM D1655 MIL-DTL-5624
High Flash JP5	3-GP-24	MIL-DTL-5624

**ENGINE LIMITS**

	<u>Takeoff (5 min.)</u>		<u>Max. Continuous</u>	
Torque Pressure	100%	61.2 kg-m (442.5 lb-ft)	92%	56.1 kg-m (405.6 lb-ft)
Turbine Outlet Temperature	853° C		817° C	
Gas Generator Speed	101.29%	(54.817 RPM)	99.8%	(54.011 RPM)
Output Shaft Speed	104% (5 834 RPM)			

**ROTOR LIMITS**

	Power Off		Power On	
Maximum	422 rpm	115%	Maximum	394 rpm 107%
Minimum	331 rpm	90%	Minimum	357 rpm 97%

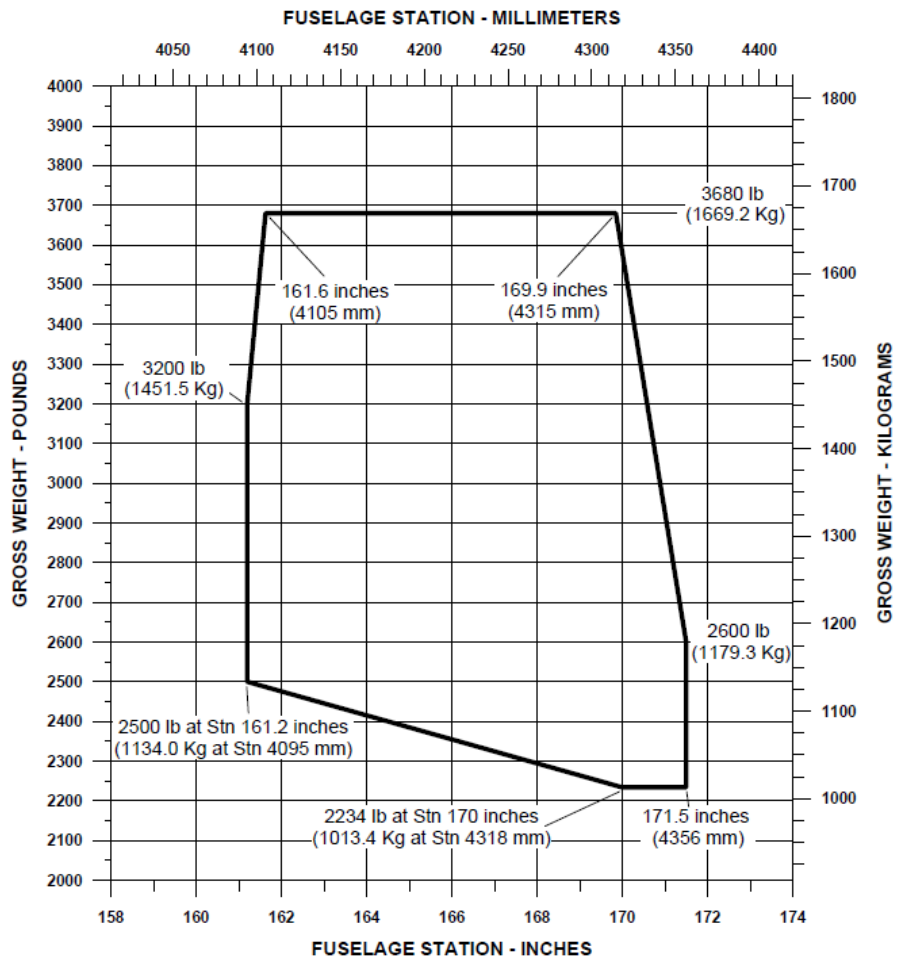
**AIRSPEED LIMITS**

V<sub>NE</sub> (never exceed) Max 135 KIAS  
 For further information, see Rotorcraft Flight Manual (see NOTE 4).

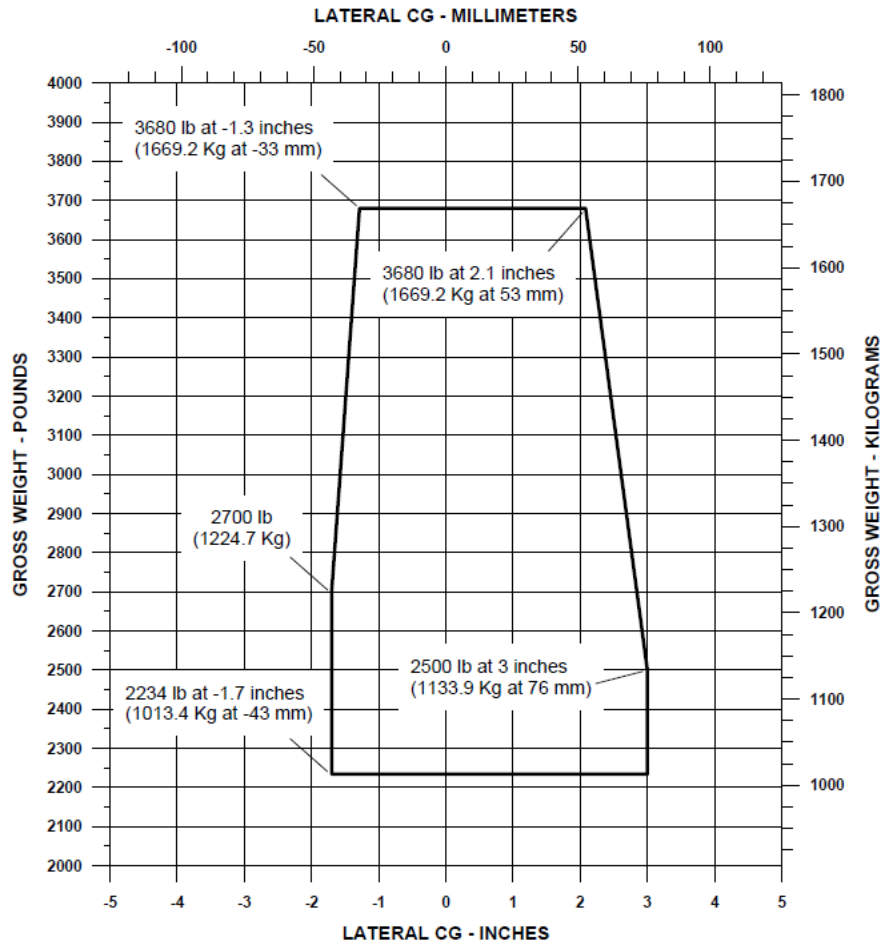
**CG LIMITS**

Refer to approved Rotorcraft Flight Manual (see NOTE 1)

**GROSS WEIGHT / LONGITUDINAL CG LIMITS**



GROSS WEIGHT / LATERAL CG LIMITS



<b>ALTITUDE LIMITS</b>	Maximum altitude at 6 096 m (20 000 ft) pressure altitude
<b>MAXIMUM WEIGHTS</b>	1 670 kg (3 680 lb) Internal loading
<b>MINIMUM CREW</b>	1 pilot
<b>PASSENGERS</b>	4 passengers
<b>MAXIMUM BAGGAGE</b>	Refer to Rotorcraft Flight Manual for loading schedule.
<b>FUEL CAPACITY</b>	Refer to Rotorcraft Flight Manual for Fuel Capacity
<b>OIL CAPACITY</b>	Refer to Rotorcraft Maintenance Manual for Oil Capacity
<b>OAT LIMITS</b>	-32° C (-25.6° F) to 50° C (122° F)
<b>DATUM</b>	Model 505 station 0 datum is 96 cm (37.8 in) forward of the nose of the helicopter.
<b>LEVELING MEANS</b>	Protractor or level placed on the crew or passenger floor or seat rails, both longitudinally and laterally
<b>SERIAL NUMBERS</b>	65011 and subsequent

**ELIGIBLE**

**IMPORT REQUIREMENTS** A Brazilian Airworthiness Certificate must be issued in the basis of the Airworthiness Certificate for Exportation issued by the Exportin Authority , including the following statement:

"The rotorcraft covered by this Certificate has been inspected, tested and found to comply with the Brazilian approved type design as defined by the ANAC Type Certificate No 2018T03, and is in condition for safe operation."

**CERTIFICATION BASIS** Brazilian Type Certificate No. 2018T03 issued on 13 March 2018 based on the RBHA 21.29 and RBAC 27, which endorses the 14 CFR Part 27, effective 02 October 1964, as amended by 27-1 through 27-46, effective 13 June 2013.

And, based on RBAC 21.29(a)(1)(ii), 14 CFR Part 27, effective 02 October 1964, as amended by 27-47.

Special Conditions:

1. SCA 2015-09, Rechargeable Lithium Batteries.

Equivalent Level of Safety:

1. AWM chapter 27, section 527.307(b)(5), 527.723, 527.725 and 527.727 – Landing Gear Limit Drop Test;
2. AWM 527.1545(b)(2) – Airspeed Indicator Marking of VNE (autorotation);
3. AWN 527.995(d) – Fuel Shut-Off Valve Installation.

Based on RBAC 21 .29(1)(a)(i) the following requirements are applicable: Title 14 CFR part 36 Amendment 36-1 through 36-30.

**EQUIPMENT** The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the helicopters for certification; and The TCCA approved Brazilian Rotorcraft Flight Manual issued for the applicable helicopters serial numbers.

**DATA PERTINENT TO ALL MODELS****NOTES:**

**NOTE 1** Weight and balance.  
Current weight and balance report including list of required equipment and list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each helicopter at the time of original certification. The certificated empty weight and corresponding C.G. locations must include undrainable oil and unusable fuel for the appropriate model.

**NOTE 2** Marking and placards.  
The placards specified in the approved Rotorcraft Flight Manual, including the placards in Portuguese specified in the Rotorcraft Flight Manual Supplement BHT-505-FMS-BRAZIL must be displayed.

**NOTE 3** Continuing airworthiness.  
Information essential to the proper maintenance of the helicopter is contained in the Manufacturer's Maintenance Manual provided with each helicopter. The approved service lives, mandatory inspections or other approved supplemental procedures of components are listed in TCCA approved Chapter 4, Airworthiness Limitations

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Section of the Maintenance Manual BHT-505-MP1-1, dated December 19, 2016 or later approved revision.

**NOTE 4**

The differences of the Brazilian aircraft in relation to the basic TCCA type design are summarized below:

1. The Brazilian Rotorcraft Flight Manual cover page BHT-505-FM-1-BRAZIL
2. The Markings and placards as listed in the Rotorcraft Flight Manual Supplement BHT-505-FMS-BRAZIL.

**NOTE 5**

This type certificate is for a Day/Night VFR Normal Category Rotorcraft

**NOTE 6**

Certification Noise Level are detailed in the approved Rotorcraft Flight Manual.

**MARIO IGAWA**

**Gerente-Geral de Certificação de Produto Aeronáutico  
(Manager, Aeronautical Product Certification)**