



TYPE CERTIFICATE DATA SHEET

No. EASA.IM.R.512

for

Bell 206/407 Series

Type Certificate Holder

Bell Textron Canada Ltd.

12 800, rue de l'Avenir
Mirabel, Quebec J7J 1R4
Canada

For Models: 206A
206B
206L, 206L-1, 206L-3, 206L-4
407



TABLE OF CONTENTS

SECTION 1: 206A	4
I. General	4
II. Certification Basis	4
III. Technical Characteristics and Operational Limitations	5
IV. Operating and Service Instructions	7
V. Notes (206A only)	7
SECTION 2: 206B (see Note 18)	10
I. General	10
II. Certification Basis	10
III. Technical Characteristics and Operational Limitations	11
IV. Operating and Service Instructions	13
V. Notes (206B only)	13
SECTION 3: 206B (see Note 19)	15
I. General	15
II. Certification Basis	15
III. Technical Characteristics and Operational Limitations	16
IV. Operating and Service Instructions	18
V. Notes (206B only)	18
SECTION 4: 206B (see Note 24)	20
I. General	20
II. Certification Basis	20
III. Technical Characteristics and Operational Limitations	21
IV. Operating and Service Instructions	23
V. Notes (206B only)	23
SECTION 5: 206L	26
I. General	26
II. Certification Basis	26
III. Technical Characteristics and Operational Limitations	27
IV. Operating and Service Instructions	28
V. Notes (206L only)	29
SECTION 6: 206L-1	31
I. General	31
II. Certification Basis	31
III. Technical Characteristics and Operational Limitations	33
IV. Operating and Service Instructions	35
V. Notes (206L-1 only)	36
SECTION 7: 206L-3	38
I. General	38
II. Certification Basis	38
III. Technical Characteristics and Operational Limitations	39
IV. Operating and Service Instructions	41
V. Notes (206L-3 only)	42
SECTION 8: 206L-4	44
I. General	44
II. Certification Basis	44
III. Technical Characteristics and Operational Limitations	45
IV. Operating and Service Instructions	47
V. Notes (206L-4 only)	47



SECTION 9: 407	49
I. General	49
II. Certification Basis	49
III. Technical Characteristics and Operational Limitations	51
IV. Operating and Service Instructions	53
V. Notes (407 only)	54
SECTION 10: OPERATIONAL SUITABILITY DATA (OSD)	56
I. OSD Certification Basis	56
II. OSD Elements	56
SECTION: ADMINISTRATIVE	57
I. Acronyms and Abbreviations	57
II. Type Certificate Holder Record	57
III. Change Record	57



SECTION 1: 206A

I. General

- | | |
|---|--|
| 1. Type/ Model/ Variant | |
| 1.1 Type | 206 |
| 1.2 Model | 206A |
| 1.3 Variant | --- |
| 2. Airworthiness Category | Normal Category / Small Rotorcraft |
| 3. Manufacturer | Bell Textron Canada Ltd.
12 800 rue de l'Avenir
Mirabel, Québec
J7J 1R4, Canada |
| 4. Type Certification Application Date to | TCCA: not recorded
LBA DE: not recorded |
| 5. State of Design Authority | Transport Canada Civil Aviation (TCCA), Canada |
| 6. Type Certificate Date by | TCCA: 25 July 1986 (see Note 16)
LBA DE: 9 June 1967 |
| 7. Type Certificate n° by | TCCA: H-92
LBA DE: 3034 |
| 8. Type Certificate Data Sheet n° by | TCCA: H-92
LBA DE: 3034 |
| 9. EASA Type Certification Date | 28 September 2003,
in accordance with CR (EU) 1702/2003, Article 2, 3., (a),
(i), 2 nd bullet, 2 nd indented bullet. |

II. Certification Basis

- | | |
|---|--|
| 1. Reference Date for determining the applicable requirements | not recorded |
| 2. Airworthiness Requirements | CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5 |
| 3. Special Conditions | Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters, dated 2 October 1962 revised 8 February 1966
Water/Alcohol power augmentation dated 14 November 1967, revised 17 October 1968 |
| 4. Exemptions | FAA Exemption N° 595 |
| 5. Deviations | none |
| 6. Equivalent Safety Findings | none |
| 7. Requirements elected to comply | none |
| 8. Environmental Protection Requirements | |
| 8.1 Noise Requirements | See TCDSN EASA.IM.R.512 |
| 8.2 Emission Requirements | n/a |
| 9. Operational Suitability Data (OSD) | Not required for rotorcraft that are no longer in production.
CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.). |



III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition Bell Helicopter Textron top drawing 206-900-002
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage Length: 9.50 m
Width skids: 1.92 m
Height: 2.54 m
 - 4.2 Main Rotor Diameter: 10.16 m
 - 4.3 Tail Rotor Diameter: 1.65 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C18, or,
1 x Model 250-C18B (see Note 9), or,
1 x Model 250-C20
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-10
FAA TC/TCDS n°: E4CE
EASA TC/TCDS n°: EASA.IM.E.052
 - 5.3 Limitations

5.3.1 Installed Engine Limits

for 250-C18 and 250-C18B	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (317)	100 (6 000)	104 (53 164)	749 (1 380)
MCP	85 (270)	100 (6 000)	104 (53 164)	693 (1 280)

for 250-C20*	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (317)	100 (6 000)	104 (53 010)	793 (1 460)
MCP	85 (270)	100 (6 000)	104 (53 010)	743 (1 369)

*250-C20 engine is used in 206B only.
206A may be modified to 206B by using SI-206-80 incorporating 250-C20 engine.

5.3.2 Transmission Torque Limits Refer to approved RFM

- 6. Fluids (Fuel/ Oil/ Additives)
 - 6.1 Fuel (see Note 5) ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Type Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.
 - 6.2 Oil (Engine) MIL-L-7808F, MIL-L-7808G, MIL-L-23699, or Turbine Oil 555
 - 6.3 Additives Anti-icing fuel additive is required for fuel temperatures below 4 °C (40 °F).
See RFM for approved concentrations.
- 7. Fluid capacities
 - 7.1 Fuel Fuel tank capacity: 288 litres (76 US gal) usable



7.2 Oil (Engine)	5.2 litres (1.37 US gal) 1.9 litres (2.0 US quarts) usable (included in capacity)
7.3 Coolant System Capacity	n/a
8. Air Speeds Limits	V_{NE} : 130 KCAS Decrease V_{NE} 3.5 kts per 1 000 ft above 3 000 ft DA.
9. Rotor Speed Limits	Power on: Maximum 100% Nr (394 rpm) Minimum 95% Nr (374 rpm) Power off: Maximum 107% Nr (422 rpm) Minimum 90% Nr (355 rpm) <u>Note:</u> % Nr dual tach reading %
10. Maximum Operating Altitude and Temperature	
10.1 Altitude	20 000 ft (6 100 m) PA at gross weight less than 1 361 kg (3 000 lb) 13 500 ft (4 115 m) PA at gross weight greater than 1 361 kg (3 000 lb)
10.2 Temperature	-40 °C to +46 °C
11. Operating Limitations	Refer to approved RFM
12. Maximum Mass	1 361 kg (3 000 lb) for standard skid landing gear equipped; 1 315 kg (2 900 lb) for other landing gear equipped; (See Notes 7 and 9 for external cargo configuration information)
13. Centre of Gravity Range	Straight line variation between points given by, Longitudinal CG limits [cm (in)]: 269.2 (106) to 284.7 (112.1) at 1 361 kg (3 000 lb) 269.2 (106) to 285.5 (112.4) at 1 315 kg (2 900 lb) 269.2 (106) to 288.0 (113.4) at 1 179 kg (2 600 lb) 269.2 (106) to 290.1 (114.2) at 1 066 kg (2 350 lb) 269.2 (106) to 290.1 (114.2) at 953 kg (2 100 lb) Lateral CG limits [cm (in)]: -5.8 (-2.3) left to 7.6 (3.0) right at longitudinal CG 269.2 (106.0) -7.6 (-3.0) left to 10.2 (4.0) right at longitudinal CG 274.3 (108.0) to 290.1 (114.2)
14. Datum	The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means	s/n 104 to 583: Plumb line from roof left rear cabin to index plate on floor. Levelling pads on right side of the transmission compartment.
16. Minimum Flight Crew	1 pilot
17. Maximum Passenger Seating Capacity	4 passengers
18. Passenger Emergency Exit	2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads	Refer to approved RFM
20. Rotor Blade Control Movement	For rigging information refer to Maintenance Manual



- | | |
|--------------------------------|--|
| 21. Auxiliary Power Unit (APU) | n/a |
| 22. Life-limited Parts | Refer to approved Chapter 4 of the Maintenance Manual BHT-206A/B-SERIES-MM-1 for service lives of components |

IV. Operating and Service Instructions

- | | |
|--|--|
| 1. Flight Manual | BHT-206A-FM-1, 20 October 1966, reissued 15 May 1970 revision D-43, dated 27 February 1997 or later approved revision. |
| 2. Maintenance Manual | BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations Section of the Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision. |
| 3. Structural Repair Manual | BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010. |
| 4. Weight and Balance Manual | Refer to approved RFM |
| 5. Illustrated Parts Catalogue | BHT-206A/B-SERIES-IPB-1, May 1996 or later approved revisions. |
| 6. Service Letters and Service Bulletins | As published by Bell and approved by TCCA |
| 7. Required Equipment | |

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

- (a) Engine-Out Warning System all 206 models (see Note 13);
- (b) Outside air temperature gauge;
- (c) Approved RFM as listed in Approved Publications;
- (d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206A only)

1. Manufacturer's serial numbers:
s/n 4 to 251, s/n 254 to 625, s/n 627 to 660, s/n 672 to 715 are eligible.
See Note 17 and 18.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. For all operations below 4 °C (40 °F) ambient temperature, all fuel used in the model 206A helicopter must contain Phillips PFA-55MB anti icing additive in concentrations of not less than 0.035% or more than 0.15% by volume. Blending this additive into the fuel and checking its concentration must be conducted in the manner prescribed by the Rotorcraft Flight Manual.



V. Notes (206A only)

This does not apply for Model 206A helicopters equipped with fuel filter kit P/N 206-706-603-1, -3. RFM Supplement BHT-206A-FMS-17, dated 13 January 1970 is required.

6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206A with Rolls-Royce (Allison) model 250-C18 or 250-C18B engine:
 - Accumulator Assy. Rolls-Royce (Allison) *P/N 6848165, Double Check Valve *P/N 6854622, plus Accumulator Assy. Kit Rolls-Royce (Allison) P/N 6858338, or,
 - Accumulator Assy. Rolls-Royce (Allison) *P/N 6848165, Double Check Valve Rolls-Royce (Allison) *P/N 6873599, plus Accumulator Assy. Kit Rolls-Royce (Allison) P/ N 6874921.* These items are included in basic 250-C18, 250-C18B, and 250-C10D engines.
7. The engine air induction systems on the Model 206A has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.
8. Model 206A helicopters that have external cargo hooks installed per service instructions 206-4 (revised 1 July 1968 or later) or 206-17 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 520 kg (3 350 lb) gross weight in accordance with the limits of the 206A approved Rotorcraft Flight Manual supplement, dated 3 May 1967 as reissued 19 August 1968. The retirement times as issued under the Life Limited Parts are not changed.
9. Rolls-Royce (Allison) model 250-C18B engine is required with water-alcohol power augmentation kit P/N 206-706-400-1 for improved performance shown in Rotorcraft Flight Manual Supplement, dated 26 November 1969, reissued 15 May 1970.
The 250-C18D engine is also eligible without water-alcohol power augmentation at limitations and performance shown for the 250-C18 engine.
10. Model 206A helicopters that have external cargo hooks installed per service instructions 206-94 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 520 kg (3 350 lb) gross weight in accordance with the limits of the 206A approved Rotorcraft Flight Manual supplement, dated 16 June 1972, reissued 20 December 1972. The retirement times as issued under the Life Limited Parts are not changed.
11. Model 206A helicopters may be converted to Model 206B helicopters in accordance with Bell Helicopter Company Service Instruction 206-80, dated 11 May 1971, or later revision.
12. Model 206A engine fuel controls must be set for 235 PPH (pounds per hour) Maximum Fuel Flow.
13. Removal of engine-out warning, audio system, in accordance with Bell Technical Bulletin TB206-82-71 is approved.
14. The following FAA airworthiness directives applied at the time of design transfer (see Note 15) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.

for 206A:

67-22-02	70-07-03	75-06-03	80-17-05	90-21-03	95-09-06
68-04-02	70-14-05	75-06-10	80-18-04 R1	91-03-12	95-11-14
69-11-02	70-14-06	75-09-09	81-04-08	92-01-05	
69-11-04	71-08-03	75-18-07	81-18-01	92-06-12	
69-12-07	71-18-04	76-04-09	85-25-01	92-09-07	
69-15-02	72-19-01	76-15-03	85-26-06	94-15-07	
69-16-02	73-08-03	77-10-06	86-24-01	94-19-02	
69-17-02	73-12-01	78-11-02 R1	87-10-11	94-20-03	
	73-19-08	78-16-01	88-23-03	94-24-11	
	73-19-09	79-10-01	89-10-11		
	73-21-03		89-22-01		



V. Notes (206A only)

74-08-12				
74-19-03				
74-24-01				
74-25-10				

15. Effective 14 September 1995 design responsibility for model 206A helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
16. The Bell Model 206A helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 20 October 1966
 - DOT Transport Canada TC H-92 on 25 July 1986
17. These serial numbers were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.
18. The serial number s/n 626 has been removed from this data sheet.
The aircraft and data plate have been destroyed.

* * *



SECTION 2: 206B (see Note 18)

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206B
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date	to TCCA: not recorded to LBA: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 16) LBA DE: 2 March 1973
7. Type Certificate n° by	TCCA: H-92 LBA DE: 3034
8. Type Certificate Data Sheet n° by	TCCA: H-92 LBA DE: 3034
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. Reference Date for determining the applicable requirements	not recorded
2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters, dated 2 October 1962 revised 8 February 1966 IFR instrument flight requirements for Bell models 206B and 206L, dated 16 July 1975
4. Exemptions	FAA Exemption N° 595B
5. Deviations	none
6. Equivalent Safety Findings	none
7. Requirements elected to comply	none
8. Environmental Protection Requirements	
8.1 Noise Requirements	See TCDSN EASA.IM.R.512
8.2 Emission Requirements	n/a
9. Operational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.).



III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition For s/n 661 to 671:
Bell Helicopter Textron top drawing 206-900-002.
For s/n 716 to 2210:
Bell Helicopter Textron top drawing 206-900-007.
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage Length: 9.50 m
Width skids: 1.92 m
Height: 2.54 m
 - 4.2 Main Rotor Diameter: 10.16 m
 - 4.3 Tail Rotor Diameter: 1.65 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C20
with Chandler Evans Model MC-40 fuel control system.
See Note 10 for alternate fuel control.
See Note 12 for alternative engines.
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-10
FAA TC/TCDS n°: E4CE
EASA TC/TCDS n°: EASA.IM.E.052

5.3 Limitations

5.3.1 Installed Engine Limits

	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (317)	100 (6 016)	104 (53 010)	793 (1 459)
MCP	85 (270)	100 (6 016)	104 (53 010)	737 (1 359)

5.3.2 Transmission Torque Limits

Refer to approved RFM

6. Fluids (Fuel/ Oil/ Additives)

- 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Type Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44; and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.
- 6.2 Oil Engine: MIL-PRF-7808, MIL-PRF-23699 or DOD-PRF-85734
- 6.3 Additives n/a

7. Fluid capacities

- 7.1 Fuel Usable: 288 litres (76 US gal)
Unusable: 3.1 kg (6.7 lb)
For s/n 3567 and subsequent:
Usable: 344 litres (91 US Gal.)
Unusable: 3.1 kg (6.7 lb)
- 7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.9 litres (2.0 US quarts) usable (included in capacity);
0.45 kg (1 lb) undrainable.
- 7.3 Coolant System Capacity n/a



8. Air Speeds Limits Refer to approved RFM
9. Rotor Speed Limits Power on (gross weight 3 000 lb or less):
Maximum 100% Nr (394 rpm)
Minimum 95% Nr (374 rpm)
Power on (gross weight 3 000 to 3 200 lb):
Maximum 100% Nr (395 rpm)
Minimum 97% Nr (382 rpm)
Power off (all):
Maximum 107% Nr (422 rpm)
Minimum 90% Nr (355 rpm)
Note: % Nr dual tach reading %
10. Maximum Operating Altitude and Temperature
10.1 Altitude 20 000 ft (6 100 m) PA
at gross weight less than 1 361 kg (3 000 lb)
13 500 ft (4 115 m) PA
at gross weight greater than 1 361 kg (3 000 lb)
10.2 Temperature -40 °C to +46 °C
11. Operating Limitations Refer to approved RFM
12. Maximum Mass 1 451 kg (3 200 lb)
See Note 8 for external cargo configuration information.
13. Centre of Gravity Range Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
269.2 (106) to 282.9 (111.4) at 1 451 kg (3 200 lb)
269.2 (106) to 284.7 (112.1) at 1 361 kg (3 000 lb)
269.2 (106) to 285.5 (112.4) at 1 315 kg (2 900 lb)
269.2 (106) to 288.0 (113.4) at 1 179 kg (2 600 lb)
269.2 (106) to 290.1 (114.2) at 1 066 kg (2 350 lb)
269.2 (106) to 290.1 (114.2) at 953 kg (2 100 lb)
Lateral CG limits [cm (in)]:
-5.8 (-2.3) left to 7.6 (3.0) right at longitudinal CG 269.2 (106.0)
-7.6 (-3.0) left to 10.2 (4.0) right at longitudinal CG 274.3 (108.0) to 290.1 (114.2)
14. Datum The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means Plumb line from roof left rear cabin to index plate on floor.
16. Minimum Flight Crew 1 pilot
17. Maximum Passenger Seating Capacity 4 passengers
18. Passenger Emergency Exit 2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads Refer to approved RFM
20. Rotor Blade Control Movement For rigging information refer to the 206B Maintenance Manual
21. Auxiliary Power Unit (APU) n/a
22. Life-limited Parts Refer to approved Chapter 4 of the Maintenance Manual BHT-206A/B-SERIES-MM-1 for service lives of components



IV. Operating and Service Instructions

1. Flight Manual BHT-206B-FM-1 July 30, 1971, reissued 20 December 1972, Revision B-45 dated 27 February 1997, or later approved revision.
2. Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations Section of the Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
3. Structural Repair Manual BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010.
4. Weight and Balance Manual Refer to approved RFM
5. Illustrated Parts Catalogue Refer to approved RFM
6. Service Letters and Service Bulletins As published by Bell and approved by TCCA
7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

(a) Engine-Out Warning System all 206 models (see Note 13);

(b) Outside air temperature gauge;

(c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206B only)

1. Manufacturer's serial numbers:
s/n 661 to 671, s/n 716 to 897, s/n 899 to 1053, s/n 1055 to 1317, s/n 1319 to 2210 are eligible.
See Note 17 and 18.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206B with Bendix Fuel Control:
- Rolls-Royce (Allison) Accumulator Kit P/N 6887645 (see Rolls-Royce (Allison) 250 Installation Bulletin No. 1004.)
7. The engine air induction systems on the Model 206B has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.



V. Notes (206B only)

8. Model 206B helicopters that have external cargo hooks installed per service instructions 206-4 (revised 1 July 1968 or later) or 206-17 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the 206B approved flight manual supplement dated 30 July 1971 as reissued 20 December 1972. The retirement times as issued under the Life Limited Parts are not changed.
9. Model 206B helicopters that have an external cargo hook installed per Service Instruction 206-94 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement, dated 16 June 1972, reissue date 20 December 1972. The retirement lives are not changed.
10. Bendix P/N DP-N₁ or DP-N₂ are eligible on model 206B helicopters – see Rolls-Royce (Allison) 250 installation Bulletin No. 1004.
11. Model 206B engine Fuel Controls must be set for 235 PPH pounds per hour Maximum Fuel Flow.
12. Model 206B helicopters s/n 498 to 2211 may be converted to the configuration defined in Section 5 Model 206B by modification as prescribed by Bell Helicopter Textron Service Instruction 206-112, dated 17 March 1978 or later revision. Alternative engine (Model 250-C20J) does apply to these aircraft.
13. Removal of engine-out warning, audio system, in accordance with Bell Technical Bulletin TB206-82-71 is approved.
14. The following FAA airworthiness directives applied at the time of design transfer (see Note 14) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.

for 206B:

71-18-04	75-06-03	80-17-05	90-13-01 R1	95-09-06
72-19-01	75-06-10	80-18-04 R1	90-21-03	95-11-14
73-08-03	75-09-09	81-04-08	91-03-12	
73-12-01	75-18-07	81-18-01	91-23-15	
73-19-08	76-04-09	85-25-01	92-01-05	
73-19-09	76-05-01	85-26-06	92-06-12	
73-21-03	76-15-03	86-24-01	92-09-07	
74-08-12	77-10-06	87-10-11	94-15-07	
74-19-03	78-11-02 R1	88-23-03	94-19-02	
74-24-01	78-16-01	89-10-11 R1	94-20-03	
74-25-10	79-10-01	89-22-01 R1	94-24-11	

15. Effective 14 September 1995 design responsibility for model 206B helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
16. The Bell Model 206B helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 19 August 1971
 - DOT Transport Canada TC H-92 on 25 July 1986
17. These serial numbers were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.
18. Model 206B s/n 661 to 671 and s/n 716 to 2211 have a commercial designation of Jetranger II.
19. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed:
s/n 2599, s/n 3124, s/n 3523

* * *



SECTION 3: 206B (see Note 19)

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206B
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded LBA DE: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 17)
7. Type Certificate n° by	TCCA: H-92 LBA DE: 3034
8. Type Certificate Data Sheet n° by	TCCA: H-92 LBA DE: 3034
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. Reference Date for determining the applicable requirements	not recorded
2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters, dated 2 October 1962 revised 8 February 1966 IFR instrument flight requirements for Bell models 206B and 206L, dated 16 July 1975
4. Exemptions	FAA Exemption N° 595B
5. Deviations	none
6. Equivalent Safety Findings	none
7. Requirements elected to comply	none
8. Environmental Protection Requirements	
8.1 Noise Requirements	See TCDSN EASA.IM.R.512
8.2 Emission Requirements	n/a
9. Operational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.).



III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition Bell Helicopter Textron top drawing 206-900-007.
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage Length: 9.50 m
Width skids: 1.92 m
Height: 2.54 m
 - 4.2 Main Rotor Diameter: 10.16 m
 - 4.3 Tail Rotor Diameter: 1.65 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C20B
with Bendix P/N DP-N₂ Fuel Control. Alternative fuel control Ceco Mod. MC-40 Control P/N 104900A3-2, governor P/N 6851468E.
Alternative engine:
1 x Model 250-C20J
with Bendix P/N DP-N₂ and Bendix power turbine governor AL-AAI.
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-10
FAA TC/TCDS n°: E4CE
EASA TC/TCDS n°: EASA.IM.E.052

5.3 Limitations

5.3.1 Installed Engine Limits

	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP(5 min)	100 (317)	100 (6 016)	105 (53 519)	810 (1 490)
MCP	85 (270)	100 (6 016)	105 (53 519)	738 (1 360)

5.3.2 Transmission Torque Limits

Refer to approved RFM

6. Fluids (Fuel/ Oil/ Additives)

- 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Type Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL 83133 JP-8 (NATO F-34).
See approved RFM for fuel temperature limitations.

6.2 Oil (Engine) MIL-PRF-7808, MIL-PRF-23699 or DOD-PRF-85734

6.3 Additives n/a

7. Fluid capacities

7.1 Fuel Usable: 288 litres (76 US gal)
Unusable: 3.0 kg (6.7 lb)

7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.9 litres (2.0 US quarts) usable (included in capacity);
0.45 kg (1 lb) undrainable.

7.3 Coolant System Capacity n/a

8. Air Speeds Limits

Refer to approved RFM



9. Rotor Speed Limits
- Power on:
Maximum 100% Nr (395 rpm)
Minimum 97% Nr (382 rpm)
Power off:
Maximum 107% Nr (422 rpm)
Minimum 90% Nr (355 rpm)
Note: % Nr dual tach reading %)
10. Maximum Operating Altitude and Temperature
- 10.1 Altitude 20 000 ft (6 100 m) PA
at gross weight less than 1 361 kg (3 000 lb)
13 500 ft (4 115 m) PA
at gross weight greater than 1 361 kg (3 000 lb)
- 10.2 Temperature -40 °C to +46 °C
11. Operating Limitations Refer to approved RFM
12. Maximum Mass 1 451 kg (3 200 lb)
See Note 8 for external cargo configuration information.
13. Centre of Gravity Range Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
269.2 (106) to 283.4 (111.6) at 1 451 kg (3 200 lb)
269.2 (106) to 285.2 (112.3) at 1 361 kg (3 000 lb)
269.2 (106) to 286.0 (112.6) at 1 315 kg (2 900 lb)
269.2 (106) to 288.5 (113.6) at 1 179 kg (2 600 lb)
269.2 (106) to 290.1 (114.2) at 1 100 kg (2 425 lb)
269.2 (106) to 290.1 (114.2) at 953 kg (2 100 lb)
- Lateral CG limits [cm (in)]:
-5.8 (-2.3) left to 7.6 (3.0) right at longitudinal CG 269.2 (106.0)
-7.6 (-3.0) left to 10.2 (4.0) right at longitudinal CG 274.3 (108.0) to 290.1 (114.2)
14. Datum The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means Plumb line from roof left rear cabin to index plate on floor.
16. Minimum Flight Crew 1 pilot
17. Maximum Passenger Seating Capacity 4 passengers
18. Passenger Emergency Exit 2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads Refer to approved RFM
20. Rotor Blade Control Movement For rigging information refer to the 206B Maintenance Manual
21. Auxiliary Power Unit (APU) n/a
22. Life-limited Parts Refer to approved Chapter 4 of the Maintenance Manual BHT-206A/B-SERIES-MM-1 for service lives of components



IV. Operating and Service Instructions

1. Flight Manual BHT-206B3-FM-1 dated 1 July 1977, reissued 13 February 1992, Revision 9, dated 2 April 2007 (See Note 19).or later approved revision.
2. Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations Section of the Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
3. Structural Repair Manual BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010.
4. Weight and Balance Manual Refer to approved RFM
5. Illustrated Parts Catalogue n/a
6. Service Letters and Service Bulletins As published by Bell and approved by TCCA
7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

(a) Engine-Out Warning System all 206 models (see Note 12);

(b) Outside air temperature gauge;

(c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206B only)

1. Manufacturer's serial numbers:
s/n 2212 to 2598, s/n 2600 to 3123, s/n 3125 to 3522, s/n 3524 to 3566, are eligible.
Not eligible: s/n 2520, 2529, 2536, 2538, 2542, 2581, 2585, 2589, 2601 and 2605.
See Note 19 and 20
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206B with Bendix Fuel Control:
Rolls-Royce (Allison) Accumulator Kit P/N 6887645 (see Rolls-Royce (Allison) 250 Installation Bulletin No. 1004)
7. The engine air induction systems on the Model 206B has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.



V. Notes (206B only)

8. Model 206B helicopters that have external cargo hooks installed per service instructions 206-4 (revised 1 July 1968 or later) or 206-17 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the 206B approved flight manual supplement dated 30 July 1971 as reissued 20 December 1972. The retirement times as issued under the Life Limited Parts are not changed.
9. Model 206B helicopters that have an external cargo hook installed per Service Instruction 206-94 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement, dated 16 June 1972, reissue date 20 December 1972. The retirement lives are not changed.
10. Bendix P/N DP-N₁ or DP-N₂ are eligible on model 206B helicopters – see Rolls-Royce (Allison) 250 installation Bulletin No. 1004.
11. Model 206B engine Fuel Controls must be set for 235 PPH pounds per hour Maximum Fuel Flow.
12. Model 206B helicopters s/n 498 to 2211 may be converted to the configuration defined in Section 5 Model 206B by modification as prescribed by Bell Helicopter Textron Service Instruction 206-112, dated 17 March 1978 or later revision. Alternative engine (Model 250-C20J) does apply to these aircraft.
13. Removal of engine-out warning, audio system, in accordance with Bell Technical Bulletin TB206-82-71 is approved.
14. The Rolls-Royce (Allison) engine Model 250-C20J may be modified with an auxiliary gear pad. The 250-C20J may be modified with Rolls-Royce (Allison) kit P/N 6896857. See Rolls-Royce (Allison) Installation Bulletin No. 1012 rev.3.
15. The following FAA airworthiness directives applied at the time of design transfer (see Note 15) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.
for 206B:

71-18-04	75-06-03	80-17-05	90-13-01 R1	95-09-06
72-19-01	75-06-10	80-18-04 R1	90-21-03	95-11-14
73-08-03	75-09-09	81-04-08	91-03-12	
73-12-01	75-18-07	81-18-01	91-23-15	
73-19-08	76-04-09	85-25-01	92-01-05	
73-19-09	76-05-01	85-26-06	92-06-12	
73-21-03	76-15-03	86-24-01	92-09-07	
74-08-12	77-10-06	87-10-11	94-15-07	
74-19-03	78-11-02 R1	88-23-03	94-19-02	
74-24-01	78-16-01	89-10-11 R1	94-20-03	
74-25-10	79-10-01	89-22-01 R1	94-24-11	

16. Effective 14 September 1995 design responsibility for model 206B helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
17. The Bell Model 206B helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 19 August 1971
 - DOT Transport Canada TC H-92 on 25 July 1986
18. These serial numbers were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.
19. Model 206B serial numbers s/n 2212 to 4005 have a commercial designation of Jetranger III and 206B3.
20. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed: s/n 2599, s/n 3124, s/n 3523

* * *



SECTION 4: 206B (see Note 24)

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206B
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded LBA DE: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 22)
7. Type Certificate n° by	TCCA: H-92 LBA DE: 3034
8. Type Certificate Data Sheet n° by	TCCA: H-92 LBA DE: 3034
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. Reference Date for determining the applicable requirements	not recorded
2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters, dated 2 October 1962 revised 8 February 1966 IFR instrument flight requirements for Bell models 206B and 206L, dated 16 July 1975
4. Exemptions	FAA Exemption N° 595B
5. Deviations	none
6. Equivalent Safety Findings	none
7. Requirements elected to comply	For s/n 5101 to 5400 meets the fuel system qualification to NPRM 90-24 "Crash Resistant fuel systems in normal and transport category rotorcraft". Draft paragraph 29.952 and associated revised paragraphs.
8. Environmental Protection Requirements	
8.1 Noise Requirements	See TCDSN EASA.IM.R.512
8.2 Emission Requirements	n/a
9. Operational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not



require OSD elements for this model (see Article 7a, 1.).

III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition For s/n 3567 and subsequent:
Bell Helicopter Textron top drawing 206-900-007.
For s/n 5101 to 5400:
Bell Helicopter Textron top drawing 206-900-031.
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage Length: 9.50 m
Width skids: 1.92 m
Height: 2.54 m
 - 4.2 Main Rotor Diameter: 10.16 m
 - 4.3 Tail Rotor Diameter: 1.65 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C20J
with Bendix P/N DP-N₂ and Bendix power turbine governor AL-AAI.
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-10
FAA TC/TCDS n°: E4CE
EASA TC/TCDS n°: EASA.IM.E.052

5.3 Limitations

5.3.1 Installed Engine Limits Sea level static / standard day

	TQ Pressure [%] ([HP])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (317)	100 (6 016)	105 (53 519)	810 (1 490)
MCP	85 (270)	100 (6 016)	105 (53 519)	738 (1 360)

5.3.2 Transmission Torque Limits Refer to approved RFM

- 6. Fluids (Fuel/ Oil/ Additives)
 - 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Type Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44; and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.
 - 6.2 Oil Refer to approved RFM
 - 6.3 Additives Refer to approved RFM
- 7. Fluid capacities
 - 7.1 Fuel Usable: 344 litres (91 US gal)
Unusable: 3.0 kg (6.7 lb)
 - 7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.9 litres (2.0 US quarts) usable (included in capacity);
0.45 kg (1 lb) undrainable.
 - 7.3 Coolant System Capacity n/a
- 8. Air Speeds Limits Refer to approved RFM



9. Rotor Speed Limits
- Power on:
Maximum 100% Nr (395 rpm)
Minimum 97% Nr (382 rpm)
Power off:
Maximum 107% Nr (422 rpm)
Minimum 90% Nr (355 rpm)
(Note: % Nr dual tach reading %)
10. Maximum Operating Altitude and Temperature
- 10.1 Altitude 20 000 ft (6 100 m) PA
at gross weight less than 1 361 kg (3 000 lb)
13 500 ft (4 115 m) PA
at gross weight greater than 1 361 kg (3 000 lb)
- 10.2 Temperature -40 °C to +46 °C
11. Operating Limitations Refer to approved RFM
12. Maximum Mass 1 451 kg (3 200 lb)
See Note 8 for external cargo configuration information.
13. Centre of Gravity Range Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
269.2 (106) to 283.4 (111.6) at 1 451 kg (3 200 lb)
269.2 (106) to 285.2 (112.3) at 1 361 kg (3 000 lb)
269.2 (106) to 286.0 (112.6) at 1 315 kg (2 900 lb)
269.2 (106) to 288.5 (113.6) at 1 179 kg (2 600 lb)
269.2 (106) to 290.1 (114.2) at 1 100 kg (2 425 lb)
269.2 (106) to 290.1 (114.2) at 953 kg (2 100 lb)
- Lateral CG limits [cm (in)]:
-5.8 (-2.3) left to 7.6 (3.0) right at longitudinal CG 269.2 (106.0)
-7.6 (-3.0) left to 10.2 (4.0) right at longitudinal CG 274.3 (108.0) to 290.1 (114.2)
14. Datum The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means Except s/n 4158 and subsequent:
Plumb line from roof left rear cabin to index plate on floor.
s/n 4158 and subsequent:
Plumb line from roof left rear cabin to index/levelling plate on floor.
16. Minimum Flight Crew 1 pilot
17. Maximum Passenger Seating Capacity 4 passengers
18. Passenger Emergency Exit 2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads Refer to approved RFM
20. Rotor Blade Control Movement For rigging information refer to the 206B Maintenance Manual
21. Auxiliary Power Unit (APU) n/a
22. Life-limited Parts Refer to approved Chapter 4 of the Maintenance Manual BHT-206A/B-SERIES-MM-1 for service lives of components



IV. Operating and Service Instructions

1. Flight Manual BHT-206B3-FM-1, dated 1 July 1977, reissued 13 February 1992, Revision 9, dated 2 April 2007 (see Note 24), or later approved revision.
2. Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations Section of the Maintenance Manual BHT-206A/B-SERIES-MM-1, dated 7 January 1998 or later approved revision.
3. Structural Repair Manual BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010.
4. Weight and Balance Manual Refer to approved RFM
5. Illustrated Parts Catalogue n/a
6. Service Letters and Service Bulletins As published by Bell and approved by TCCA
7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

- (a) Engine-Out Warning System all 206 models (see Note 14);
- (b) Outside air temperature gauge;
- (c) Approved RFM as listed in Approved Publications;
- (d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206B only)

1. Manufacturer's serial numbers:
s/n 3567 to 3797, s/n 3799 to 4128, s/n 4130 to 4499, s/n 4501 and subsequent.
See Note 15, 16, 22 and 24.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206B with Bendix Fuel Control:
Rolls-Royce (Allison) Accumulator Kit P/N 6887645 (see Rolls-Royce (Allison) 250 Installation Bulletin No. 1004)
7. The engine air induction systems on the Model 206B has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.



V. Notes (206B only)

8. Model 206B helicopters that have external cargo hooks installed per service instructions 206-4 (revised 1 July 1968 or later) or 206-17 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the 206B approved flight manual supplement dated 30 July 1971 as reissued 20 December 1972. The retirement times as issued under the Life Limited Parts are not changed.
9. Model 206B helicopters that have an external cargo hook installed per Service Instruction 206-94 meet the structural and design requirements of the certification basis, provided the weight in excess of the normal category gross weight is not imposed on the landing gear, when operated at 1 519.5 kg (3 350 lb) gross weight in accordance with the limits of the approved Rotorcraft Flight Manual Supplement, dated 16 June 1972, reissue date 20 December 1972. The retirement lives are not changed.
10. Model 206A helicopters may be converted to Model 206B helicopters in accordance with Bell Helicopter Company Service Instruction 206-80, dated 11 May 1971, or later revision.
11. Bendix P/N DP-N₁ or DP-N₂ are eligible on model 206B helicopters – see Rolls-Royce (Allison) 250 installation Bulletin No. 1004.
12. Model 206B engine Fuel Controls must be set for 235 PPH pounds per hour Maximum Fuel Flow.
13. Model 206B s/n 5101 to 5313 have been delivered to the US Army (designation TH-67 Creek) for military training.
14. Removal of engine-out warning, audio system, in accordance with Bell Technical Bulletin TB206-82-71 is approved.
15. The Rolls-Royce (Allison) engine Model 250-C20J may be modified with an auxiliary gear pad. The 250-C20J may be modified with Rolls-Royce (Allison) kit P/N 6896857. See Rolls-Royce (Allison) Installation Bulletin No. 1012 rev.3.
16. Model 206B s/n 3567 to 4004 modifications include 96 US gal capacity fuel system and installation of Rolls-Royce (Allison) engine model 250-C20J. No prior serial numbers are eligible for complete modification to the configuration effective at s/n 3567.
17. Model 206B s/n 4005 and subsequent modifications include model 206L tail rotor gearbox, increased tail rotor authority and a longer capacity tailrotor drive shafting. No prior s/n are eligible for complete modification to the configuration effective at s/n 4005.
18. Model 206B s/n 5238 to 5267 have been delivered to the Taiwan Army for military training.
19. Model 206B s/n 5101 to 5400:
Engine: Rolls-Royce (Allison) model 250-C20J with Chandler Evans MC-40 Fuel Control System (see Note 15).
For alternate fuel control see Note 11.
CG limit: Same as 206B s/n 2212 and subsequent.
Passengers: none
Fuel capacity: 82.6 US gal, unusable fuel 1 US gal.
All other data is same as model 206B
20. The following FAA airworthiness directives applied at the time of design transfer (see Note 21) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.

for 206B:

71-18-04	75-06-03	80-17-05	90-13-01 R1	95-09-06
72-19-01	75-06-10	80-18-04 R1	90-21-03	95-11-14
73-08-03	75-09-09	81-04-08	91-03-12	
73-12-01	75-18-07	81-18-01	91-23-15	
73-19-08	76-04-09	85-25-01	92-01-05	
73-19-09	76-05-01	85-26-06	92-06-12	
73-21-03	76-15-03	86-24-01	92-09-07	
74-08-12	77-10-06	87-10-11	94-15-07	
74-19-03	78-11-02 R1	88-23-03	94-19-02	



V. Notes (206B only)

74-24-01	78-16-01	89-10-11 R1	94-20-03
74-25-10	79-10-01	89-22-01 R1	94-24-11

21. Effective 14 September 1995 design responsibility for model 206B helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
22. The Bell Model 206B helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 19 August 1971
 - DOT Transport Canada TC H-92 on 25 July 1986
23. Model 206 B s/n 3959 and subsequent, except 4048, are manufactured by Bell Helicopter Textron Canada Ltd..
Models and serial numbers not referenced above but eligible under this type certificate were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.
24. Model 206B serial numbers s/n 2212 to 4005 have a commercial designation of Jetranger III and 206B3.
25. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed:
s/n 3798, s/n 4129, s/n 4500

* * *



SECTION 5: 206L

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206L
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded ACG AT: 14 September 1995
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 13)
7. Type Certificate n° by	TCCA: H-92 ACG AT: not recorded
8. Type Certificate Data Sheet n° by	TCCA: H-92 ACG AT: not recorded
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. Reference Date for determining the applicable requirements	not recorded
2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters dated 2 October 1962 revised 8 February 1966. Water/alcohol power augmentation special conditions dated 14 November 1967, revised 12 September 1975. "IFR Instrument Flight requirements for Bell models 206B and 206L", dated 16 July 1975.
4. Exemptions	none
5. Deviations	none
6. Equivalent Safety Findings	none
7. Requirements elected to comply	none
8. Environmental Protection Requirements	
8.1 Noise Requirements	See TCDSN EASA.IM.R.512
8.2 Emission Requirements	n/a
9. Operational Suitability Data (OSD)	see SECTION 10 below



III. Technical Characteristics and Operational Limitations

1. Type Design Definition Bell Helicopter Textron top drawing 206-900-009
2. Description 2-blade main/tail rotor, single turbine engine helicopter
3. Equipment Refer to approved RFM
4. Dimensions
 - 4.1 Fuselage Length (w. rotor): 12.92 m
Width skids: 2.34 m
Height: 3.15 m
 - 4.2 Main Rotor Diameter: 11.28 m
 - 4.3 Tail Rotor Diameter: 1.57 m
5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C20B, or,
1 x Model 250-C20J
with Bendix P/N DP-N₁ or DP-N₂ fuel control.
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-10
FAA TC/TCDS n°: E4CE
EASA TC/TCDS n°: EASA.IM.E.052
 - 5.3 Limitations
 - 5.3.1 Installed Engine Limits

	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (420)	100 (6 016)	105 (53 519)	810 (1 490)
MCP	88 (370)	100 (6 016)	105 (53 519)	738 (1 360)

- 5.3.2 Transmission Torque Limits Refer to approved RFM

6. Fluids (Fuel/ Oil/ Additives)
 - 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Type Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.
 - 6.2 Oil (Engine) MIL-PRF-7808, MIL-PRF-23699 or DOD-PRF-85734
 - 6.3 Additives Refer to approved RFM
7. Fluid capacities
 - 7.1 Fuel Usable: 371 litres (98 US gal)
Unusable: not recorded
 - 7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.89 litres (2.0 US quarts) usable (included in capacity);
0.72 kg (1.6 lb) undrainable.
 - 7.3 Coolant System Capacity n/a
8. Air Speeds Limits Refer to approved FM
9. Rotor Speed Limits

Power on:		
Maximum	100% Nr	(395 rpm)
Minimum	97% Nr	(382 rpm)
Power off:		
Maximum	107% Nr	(422 rpm)



	Minimum	90% Nr	(355 rpm)
	<u>Note:</u> % Nr dual tach reading %		
10. Maximum Operating Altitude and Temperature			
10.1 Altitude	20 000 ft (6 100 m) PA		
10.2 Temperature	-50 °C to +46 °C		
11. Operating Limitations	Refer to approved RFM		
12. Maximum Mass	1 814 kg (4 000 lb)		
13. Centre of Gravity Range	Straight line variation between points given by, Longitudinal CG limits [cm (in)]: Forward limit: 300 (118.0) up to 1 270 kg (2 800 lb) to 302.5 (119.1) at 1 814 kg (4 000 lb.) Aft limit: 326 (128.5) up to 1 315 kg (2 900 lb) to 322 (126.8) at 1 814 kg (4 000 lb) Lateral CG limits [cm (in)]: Left: -10.2 (-4.0) Right: 8.9 (3.5)		
14. Datum	The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).		
15. Levelling Means	Plumb line from roof left rear cabin to index plate on floor.		
16. Minimum Flight Crew	1 pilot		
17. Maximum Passenger Seating Capacity	6 passengers		
18. Passenger Emergency Exit	2, one on each side of the passenger cabin		
19. Maximum Baggage/ Cargo Loads	Refer to approved RFM		
20. Rotor Blade Control Movement	For rigging information refer to the 206B Maintenance Manual		
21. Auxiliary Power Unit (APU)	n/a		
22. Life-limited Parts	Refer to approved Chapter 4 of the Maintenance Manual BHT-206L-MM-1, for airworthiness lives of applicable components.		

IV. Operating and Service Instructions

1. Flight Manual	BHT-206L-FM-1, 22 September 1975 revision 23, dated 14 September 1995, or later approved revision.
2. Maintenance Manual	BHT-206L-MM-1, dated 22 September 1975, or later approved revision. Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations section of the Maintenance Manual BHT-206L-MM-1, dated 22 September 1975, or later approved revision.
3. Structural Repair Manual	BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010.
4. Weight and Balance Manual	Refer to approved RFM
5. Illustrated Parts Catalogue	BHT-206L-SERIES-IPB, dated 1 December 1996, or later revisions.



- 6. Service Letters and Service Bulletins As published by Bell and approved by TCCA
- 7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

- (a) Engine-Out Warning System all 206 models (see Note 10);
- (b) Outside air temperature gauge;
- (c) Approved RFM as listed in Approved Publications;
- (d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206L only)

- 1. Manufacturer's serial numbers:
s/n 45004 to 45153, s/n 46601 to 46617
are eligible.
See Note 14.
- 2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
- 3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
- 4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
- 5. *deleted*
- 6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206L with Bendix Fuel Control:
- Rolls-Royce (Allison) Accumulator Kit P/N 6887645 (see Rolls-Royce (Allison) 250 Installation Bulletin No. 1004.)
- 7. The engine air induction systems on the Model 206L has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.
- 8. Installed battery capacity must be at least 13 Ampère hours (Ah) for the 206L to ensure fuel transfer pump operation for CG control after electrical system failure. A special emergency circuit for fuel transfer pump operation is provided.
- 9. Model 206L fuel control must be set for 270 PPH.
- 10. Removal of engine out warning, audio system, in accordance with Bell Technical Bulletin TB206L-82-86 is approved.
- 11. The following FAA airworthiness directives applied at the time of design transfer (see Note 11) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.

for 206L:

76-14-05	80-17-05	85-09-04	90-13-01 R1	95-09-06
78-11-02 R1	80-18-04 R1	85-25-01	90-21-03	95-11-14
78-24-06-R1	81-18-01	85-26-06	91-03-12	
	82-05-03	86-24-01	91-23-15	
	83-03-04	87-10-11	92-01-05	
		88-23-03	92-06-12	



V. Notes (206L only)

	88-26-03	94-19-02
	89-22-01 R1	94-20-03
		94-24-11

12. Effective 14 September 1995 design responsibility for model 206B helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
13. The Bell Model 206L helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 22 September 1975
 - DOT Transport Canada TC H-92 on 25 July 1986
14. These serial numbers were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.

* * *



SECTION 6: 206L-1

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206L-1
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded LBA DE: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 17) LBA DE: 25 October 1978
7. Type Certificate n° by	TCCA: H-92 LBA DE: 3034
8. Type Certificate Data Sheet n° by	TCCA: H-92 LBA DE: 3034
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. For 206L-1:

1.1. Reference Date for determining the applicable requirements	not recorded
1.2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts.- 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
1.3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters dated 2 October 1962 revised 8 February 1966. "IFR Instrument Flight requirements for Bell models 206B and 206L", dated 16 July 1975.
1.4. Exemptions	none
1.5. Deviations	none
1.6. Equivalent Safety Findings	none
1.7. Requirements elected to comply	none
1.8. Environmental Protection Requirements	
1.8.1 Noise Requirements	See TCDSN EASA.IM.R.512
1.8.2 Emission Requirements	n/a
1.9. Operational Suitability Data (OSD)	see SECTION 10 below



2. For 206L-1 with Model 250-C30P engine (see Note 20):

- 2.1. Reference Date for determining the applicable requirements not recorded
- 2.2. Airworthiness Requirements
- 2.2.1. For all areas not affected by the installation of BHT kit P/N 206-706-520, CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5, Special Conditions, dated 2 October 1962 as revised 8 February 1966.
- 2.2.2. The Basis of Certification for installation of the 250-C30P engine on Bell 206L-1 helicopters as installed per BHT kit P/N 206-706-520 is; CAR 6.251(c) from CAR 6, dated 20 December 1956, Amdts. 6-1 to 6-4, Special Conditions, dated 2 October 1962 as revised 8 February 1966. Plus the following regulations from FAR Part 27: 27.143, 27.1587 at Amdt. 27-1; 27.1093 at Amdt. 27-8; 27.45, 27.141, 27.1309 at Amdt. 27-20; 27.65, 27.73, 27.301, 27.303, 27.305, 27.561, 27.601, 27.603, 27.605, 27.607, 27.609, 27.619, 27.621, 27.625, 27.771, 27.773, 27.777, 27.831, 27.901, 27.903, 27.907, 27.931, 27.939, 27.993, 27.1011, 27.1041, 27.1043, 27.1045, 27.1091, 27.1123, 27.1142, 27.1163, 27.1183, 27.1191, 27.1193, 27.1301, 27.1305, 27.1307, 27.1321, 27.1337, 27.1351, 27.1365, 27.1367, 27.1381, 27.1503, 27.1505, 27.1521, 27.1527, 27.1529, 27.1541, 27.1543, 27.1549, 27.1581, 27.1583 at Amdt. 27-24; 27.307, 27.613, 27.629 at Amdt. 27-28.
- 2.3. Special Conditions none
- 2.4. Exemptions none
- 2.5. Deviations none
- 2.6. Equivalent Safety Findings none
- 2.7. Requirements elected to comply none
- 2.8. Environmental Protection Requirements
- 2.8.1 Noise Requirements See TCDSN EASA.IM.R.512
- 2.8.2 Emission Requirements n/a
- 2.9 Operational Suitability Data (OSD) see SECTION 10 below

3. For 206L-1 modified per Bell Service Instruction BHT-206-SI-2052 (see Note 22):

- 3.1. Reference Date for determining the applicable requirements not recorded
- 3.2. Airworthiness Requirements
- 3.2.1. For all areas not affected by the installation of BHT kit P/N 206-706-520, CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5, Special Conditions, dated 2 October 1962 as revised 8 February 1966.
- 3.2.2. The Basis of Certification for modification as installed per BHT kit P/Ns 206-705-420 and 206-706-530, CAR 6.251(c) from CAR 6, dated 20 December 1956, Amdts. 6-1 to 6-4, Special Conditions, dated 2 October 1962 as revised 8 February 1966. Plus the following regulations from FAR Part 27, dated 2 October 1964: 27.79, 27.143, 27.173, 27.175, 27.1519, 27.1587 at Amdt. 27-1; 27.45, 27.141, 27.1309 at Amdt. 27-20; 27.1, 27.21, 27.25, 27.27, 27.29, 27.51, 27.65, 27.73, 27.75, 27.171, 27.251, 27.301, 27.303, 27.305, 27.309, 27.321, 27.339, 27.341, 27.411, 27.471, 27.473, 27.549, 27.561, 27.601, 27.603, 27.605, 27.607, 27.609, 27.611, 27.619, 27.621, 27.623, 27.625, 27.695, 27.725, 27.771, 27.773, 27.873, 27.901, 27.903, 27.907, 27.921, 27.931, 27.939, 27.1011, 27.1041, 27.1043, 27.1045, 27.1191, 27.1301, 27.1303, 27.1305, 27.1321, 27.1337, 27.1381, 27.1435, 27.1501, 27.1503, 27.1505, 27.1521, 27.1529, 27.1541, 27.1543, 27.1549, 27.1581, 27.1583, 27.1589 at Amdt. 27-24; 27.307, 27.337, 27.351, 27.501, 27.571, 27.613, 27.629, 27.727 at Amdt. 27-28.
- 3.3. Special Conditions none
- 3.4. Exemptions none
- 3.5. Deviations none



- 3.6. Equivalent Safety Findings 206L-4 Equivalent Safety Finding for skid landing gear (drop test) – FAR Part 27.723, 27.725 and 27.727.
- 3.7. Requirements elected to comply none
- 3.8. Environmental Protection Requirements
- 3.8.1 Noise Requirements See EASA Type Certificate Data Sheet for Noise TCDSN EASA.IM.R.512
- 3.8.2 Emission Requirements n/a
- 3.9 Operational Suitability Data (OSD) see SECTION 10 below

III. Technical Characteristics and Operational Limitations

1. Type Design Definition Bell Helicopter Textron top drawing 206-900-009
2. Description 2-blade main/tail rotor, single turbine engine helicopter
3. Equipment Refer to approved RFM
4. Dimensions
- 4.1 Fuselage Length (w. rotor): 12.92 m
Width skids: 2.34 m
Height: 3.15 m
- 4.2 Main Rotor Diameter: 11.28 m
- 4.3 Tail Rotor Diameter: 1.57 m
5. Engine
- 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C28B
with Bendix gas producer Fuel Control DP-T₃, or,
1 x Model 250-C30P
with Bendix gas producer Fuel Control DP-V1.
- 5.2 Type Certificate TCCA TC/TCDS n°: IE-19
FAA TC/TCDS n°: E1GL
EASA TC/TCDS n°: EASA.IM.E.109
- 5.3 Limitations

5.3.1 Installed Engine Limits

206-L1 with 250-C28B	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (435)	100 (6 016)	104 (52 980)	791 (1 456)
MCP	85 (370)	100 (6 016)	104 (52 980)	743 (1 369)
206-L1 with 250-C30P (see Note 2)	TQ Pressure [%] ([hp])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (435)	100 (6 016)	104 (53 550)	768 (1 414)
MCP	85 (370)	100 (6 016)	104 (53 550)	716 (1 320)

5.3.2 Transmission Torque Limits Refer to approved RFM

6. Fluids (Fuel/ Oil/ Additives)

- 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).



- See RFM for fuel temperature limitations.
- 6.2 Oil (Engine) MIL-PRF-7808, MIL-PRF-23699, or DOD-PRF-85734 (Turbine Oil 555)
- 6.3 Additives Refer to approved RFM
7. Fluid capacities
- 7.1 Fuel Usable: 371 litres (98 US gal)
Unusable: not recorded
- 7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.89 litres (2.0 US quarts) usable (included in capacity);
0.72 kg (1.6 lb) undrainable.
- 7.3 Coolant System Capacity n/a
8. Air Speeds Limits Refer to approved RFM
9. Rotor Speed Limits
- | | | | |
|------------|---------|--|-----------|
| Power on: | | | |
| Maximum | 100% Nr | | (395 rpm) |
| Minimum | 97% Nr | | (382 rpm) |
| Power off: | | | |
| Maximum | 107% Nr | | (422 rpm) |
| Minimum | 90% Nr | | (355 rpm) |
- Note: % Nr dual tach reading %
10. Maximum Operating Altitude and Temperature
- 10.1 Altitude 20 000 ft (6 100 m) PA
- 10.2 Temperature -50 °C to +46 °C
11. Operating Limitations Refer to approved RFM
12. Maximum Mass
- 1 837 kg (4 050 lb)(internal loading)(see Note 12).
 - 1 928 kg (4 250 lb)(external loading) (see Note 11 for external cargo configuration information).
 - 2 018 kg (4 450 lb)(internal loading) (see Note 22).
 - 2 064 kg (4 550 lb)(external loading) (see Note 22).
13. Centre of Gravity Range
- Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
Forward limit (internal loading):
300 (118.0) up to 1 270 kg (2 800 lb) to 302 (119) at 1 837 kg (4 050 lb).
Aft limit (internal loading):
326 (128.5) up to 1 315 kg (2 900 lb) to 323 (127) at 1 837 kg (4 050 lb).
Forward limit (external loading):
300 (118.0) up to 1 270 kg (2 800 lb) to 303 (119.2) at 1 928 kg (4 250 lb).
Aft limit (external loading):
326 (128.5) up to 1 315 kg (2 900 lb) to 322 (126.7) at 1 928 kg (4 250 lb).
Lateral CG limits [cm (in)]:
Left: -10.2 (-4.0)
Right: 8.9 (3.5)
14. Datum The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means Plumb line from roof left rear cabin to index plate on



	floor.
16. Minimum Flight Crew	1 pilot
17. Maximum Passenger Seating Capacity	6 passengers
18. Passenger Emergency Exit	2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads	Refer to approved RFM
20. Rotor Blade Control Movement	For rigging information refer to the 206L-1 Maintenance Manual
21. Auxiliary Power Unit (APU)	n/a
22. Life-limited Parts	Refer to approved Chapter 4 of the Maintenance Manual BHT-206L-1-MM-1, for airworthiness lives of applicable components.

IV. Operating and Service Instructions

1. Flight Manual
BHT-206L1-FM-1 17 May 1978 revision 20, dated 14 September 1995, or later approved revision. Model 206L-1 with Rolls-Royce (Allison) 250-C30P engine are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-206L3-FM-1, dated 18 December 2007, or later approved revision (see Note 20) Model 206L-1 modified with increased Gross Weight Upgrade kit 206-706-560 installed per BHT-206-SI-2052 are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-206L4-FM-1, dated 22 August 2008, or later approved revision (see Note 20 and 21)
2. Maintenance Manual
BHT-206L1-MM-1, dated 3 December 1977, or later approved revision. Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations section of the Maintenance Manual BHT-206L1-MM-1, dated 3 December 1977, or later approved revision.
3. Structural Repair Manual
BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010.
4. Weight and Balance Manual
n/a
5. Illustrated Parts Catalogue
BHT-206L-SERIES-IPB, dated 1 December 1996, or later revisions.
6. Service Letters and Service Bulletins
As published by Bell and approved by TCCA
7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

(a) Engine-Out Warning System all 206 models (see Note 14);

(b) Outside air temperature gauge;

(c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.



V. Notes (206L-1 only)

1. Manufacturer's serial numbers:
s/n 45154 to 45236, s/n 45238 to 45525, s/n 45527 to 45738, s/n 45740 to 4579
are eligible.
See Note 19.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
3. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206L-1 with Bendix DP-T3 fuel control:
Equipment required for system torsional stability (accumulator P/N 6857224 and Double Check Valve P/N 6876557) is approved and included as part of the Rolls-Royce (Allison) model 250-C28B engine
Model 206L-1 with Bendix DP-V1 fuel control:
Equipment required for system torsional stability (accumulator P/N 6857224) is approved and included as part of the Rolls-Royce (Allison) model 250-C30P engine.
7. The engine air induction systems on the Model 206L-1 has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.
8. Installed battery capacity must be at least 17 Ampère hours (Ah) for the 206L-1 to ensure fuel transfer pump operation for CG control after electrical system failure. A special emergency circuit for fuel transfer pump operation is provided.
9. Model 206L-1 (with 250-C28B engine) fuel control must be set for 290 PPH.
Model 206L-1 (with 250-C30P engine) fuel control must be set for 325 PPH except for Note 13.
10. For the model 206L-1, only Marathon model CA 170, or Saft model 1756 batteries are eligible.
11. Model 206L-1 that have an external cargo hook installed per Service Instruction 206-2012 meet the structural and design requirements of the certification basis provided the weight in excess of the normal category gross weight is not imposed on the landing gear when operated to 1 928 kg (4 250 lb) gross weight in accordance with the limits of the appropriate approved Rotorcraft Flight Manual Supplement 206L-1, dated 17 May 1978.
12. Model 206L-1 helicopters that have main rotor yoke P/N 206-011-149-101 installed may be operated to 1 882 kg (4 150 lb) internal gross weight in accordance with the limits of 206L-1 approved Rotorcraft Flight Manual Supplement, dated 9 November 1979. The retirement times as listed under Life Limited Parts are not changed.
13. Bell Helicopter Textron Service Instruction Number 206-2039 provides for an increased take-off power rating up to 456 hp. Special maintenance procedures are required with use of this rating. See Service Instruction 206-2039.
Not applicable to 206L-1 with 250-C28B engine installed.
14. Removal of engine out warning, audio system, in accordance with Bell Technical Bulletin TB206L-82-86 is approved.



V. Notes (206L-1 only)

15. The following FAA airworthiness directives applied at the time of design transfer (see Note 16) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive. for 206L-1:

78-11-02 R1		85-09-04	90-13-01 R1	95-09-06
78-24-06-R1	80-18-04 R1	85-25-01	90-21-03	95-11-14
	80-22-11	85-26-06	91-03-12	
	81-06-05 R1	86-24-01	92-01-05	
	81-18-01	87-10-11	92-06-12	
	82-05-03	88-23-03	94-15-07	
	83-03-04	88-26-03	94-19-02	
		89-20-13	94-20-03	
		89-22-01 R1	94-24-11	

16. Effective 14 September 1995 design responsibility for Model 206L-1 helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
17. The Bell Model 206L-1 helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
- FAA TC H2SW on 17 May 1978
- DOT Transport Canada TC H-92 on 25 July 1986
18. These serial numbers were manufactured by Bell Helicopter Textron, Fort Worth, Texas under FAA Type Certificate H2SW.
19. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed: s/n 45237, s/n 45526, s/n 45739
20. Model 206L-1 helicopters modified per Bell Service Instruction BHT-206-SI-2050 (BHT kit 206-706-520) have Rolls-Royce (Allison) model 250-C30P engine installed.
21. Model 206L-1 helicopters modified per Bell Service Instruction BHT-206-SI-2052 (BHT kit 206-706-530) have a commercial designation of 206L-1+.
22. Model 206L-1 helicopters modified per Bell Service Instruction BHR-206-SI-2052 (BHT kit 206-706-530) may operate to 2 018 kg (4 450 lb) internal gross weight and 2 064 kg (4 550 lb) external gross weight in accordance with the limitations specified in Bell Rotorcraft Flight Manual BHT-206L4-FM-1.

* * *



SECTION 7: 206L-3

I. General

1. Type/ Model/ Variant	
1.1 Type	206
1.2 Model	206L-3
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded DGAC FR: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 25 July 1986 (see Note 15) DGAC FR: 22 May 1990
7. Type Certificate n° by	TCCA: H-92 DGAC FR: not recorded
8. Type Certificate Data Sheet n° by	TCCA: H-92 DGAC FR: not recorded
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. For 206L-3:

1.1. Reference Date for determining the applicable requirements	not recorded
1.2. Airworthiness Requirements	CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5
1.3. Special Conditions	Conditions establishing compensating factors providing an equivalent level of safety under Civil Air Regulations, Section 6.10 for light turbine powered helicopters dated 2 October 1962 revised 8 February 1966. "IFR Instrument Flight requirements for Bell models 206B and 206L", dated 16 July 1975.
1.4. Exemptions	none
1.5. Deviations	none
1.6. Equivalent Safety Findings	none
1.7. Requirements elected to comply	none
1.8. Environmental Protection Requirements	
1.8.1 Noise Requirements	See TCDSN EASA.IM.R.512
1.8.2 Emission Requirements	n/a
1.9 Operational Suitability Data (OSD)	see SECTION 10 below



2. For 206L-3 modified per Bell Service Instruction BHT-206-SI-2052 (see Note 18):

- 2.1. Reference Date for determining the applicable requirements not recorded
- 2.2. Airworthiness Requirements
 - 2.2.1. For all areas not affected by the installation of BHT kit P/N 206-705-420 and 206-706-530, CAR 6, dated 20 December 1956 Amdts. 6-1 through 6-4, CAR 6.307(b) and 6.637 of Amdt. 6-5, Special Conditions, dated 2 October 1962 as revised 8 February 1966.
 - 2.2.2. The Basis of Certification for modification as installed per BHT kit P/Ns 207-705-420 and 206-706-530 is; CAR 6.251(c) from CAR 6, dated 20 December 1956, Amdts. 6-1 to 6-4, Special Conditions, dated 2 October 1962 as revised 8 February 1966.
Plus the following regulations from FAR Part 27, dated 2 October 1964: 27.79, 27.143, 27.173, 27.175, 27.1519, 27.1587 at Amdt. 27-1; 27.45, 27.141, 27.1309 at Amdt. 27-20; 27.1, 27.21, 27.25, 27.27, 27.29, 27.51, 27.65, 27.73, 27.75, 27.171, 27.251, 27.301, 27.303, 27.305, 27.309, 27.321, 27.339, 27.341, 27.411, 27.471, 27.473, 27.549, 27.561, 27.601, 27.603, 27.605, 27.607, 27.609, 27.611, 27.619, 27.621, 27.623, 27.625, 27.695, 27.725, 27.771, 27.773, 27.873, 27.901, 27.903, 27.907, 27.921, 27.931, 27.939, 27.1011, 27.1041, 27.1043, 27.1045, 27.1191, 27.1301, 27.1303, 27.1305, 27.1321, 27.1337, 27.1381, 27.1435, 27.1501, 27.1503, 27.1505, 27.1521, 27.1529, 27.1541, 27.1543, 27.1549, 27.1581, 27.1583 27.1589 at Amdt. 27-24; 27.307, 27.337, 27.351, 27.501, 27.5712, 27.613, 27.629, 27.727 at Amdt. 27-28.
- 2.3. Special Conditions none
- 2.4. Exemptions none
- 2.5. Deviations none
- 2.6. Equivalent Safety Findings 206L-4 Equivalent Safety Finding for skid landing gear (drop test) – FAR 27.723, 27.725 and 27.727.
- 2.7. Requirements elected to comply none
- 2.8. Environmental Protection Requirements
 - 2.8.1 Noise Requirements See TCDSN EASA.IM.R.512
 - 2.8.2 Emission Requirements n/a
- 2.9 Operational Suitability Data (OSD) see SECTION 10 below

III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition Bell Helicopter Textron top drawing 206-900-020
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage
 - Length (w. rotor): 12.92 m
 - Width skids: 2.34 m
 - Height: 3.15 m
 - 4.2 Main Rotor Diameter: 11.28 m
 - 4.3 Tail Rotor Diameter: 1.57 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C30P
with Bendix gas producer Fuel Control DP-V1.
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-19
FAA TC/TCDS n°: E1GL
EASA TC/TCDS n°: EASA.IM.E.109
 - 5.3 Limitations



5.3.1 Installed Engine Limits

See Note 11

	TQ Pressure [%] ([HP])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (435)	100 (6 016)	105 (53 5500)	768 (1 414)
MCP	85 (370)	100 (6 016)	105 (53 5500)	743 (1 320)

5.3.2 Transmission Torque Limits

Refer to approved RFM

6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel

ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.

6.2 Oil (Engine)

MIL-PRF-7808 (NATO O-148), DOD-PRF-85734, MIL-PRF-23699 (NATO O156)

6.3 Additives

Refer to approved RFM

7. Fluid capacities

7.1 Fuel

Usable: 419 litres (110.7 US gal)
Unusable: not recorded

7.2 Oil (Engine)

5.2 litres (1.37 US gal);
1.89 litres (2.0 US quarts) usable (included in capacity);
0.72 kg (1.6 lb) undrainable.

7.3 Coolant System Capacity

n/a

8. Air Speeds Limits

Refer to approved RFM

9. Rotor Speed Limits

Power on:
Maximum 100% Nr (395 rpm)
Minimum 97% Nr (382 rpm)
Power off:
Maximum 107% Nr (422 rpm)
Minimum 90% Nr (355 rpm)
Note: % Nr dual tach reading %

10. Maximum Operating Altitude and Temperature

10.1 Altitude

20 000 ft (6 100 m) PA

10.2 Temperature

-50 °C to +51.7 °C

11. Operating Limitations

Refer to approved RFM

12. Maximum Mass

- 1 882 kg (4 150 lb)(internal loading).
- 1 928 kg (4 250 lb)(external loading) (see Note 10 for external cargo configuration information).
- 2 018 kg (4 450 lb)(internal loading) (see Note 19).
- 2 064 kg (4 550 lb)(external loading) (see Note 19).

13. Centre of Gravity Range

Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
Forward limit (internal loading):
300 (118.0) up to 1 270 kg (2 800 lb) to 302.5 (119.1) at 1 882 kg (4 150 lb).
Aft limit (internal loading):
326.1 (128.5) up to 1 315 kg (2 900 lb) to 322.2 (126.85) at 1 882 kg (4 150 lb).
Forward limit (external loading):



- 300 (118.0) up to 1 270 kg (2 800 lb) to 302.8 (119.2) at 1 928 kg (4 250 lb).
Aft limit (external loading):
326.4 (128.5) up to 1 315 kg (2 900 lb) to 322.2 (126.7) at 1 928 kg (4 250 lb).
Lateral CG limits [cm (in)]:
Left: -10.2 (-4.0)
Right: 8.9 (3.5)
14. Datum
The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline).
15. Levelling Means
Except s/n 51505 and subsequent:
Plumb line from roof left rear cabin to index plate on floor.
s/n 51505 and subsequent:
Plumb line from roof left rear cabin to index/levelling plate on the floor.
16. Minimum Flight Crew
1 pilot
17. Maximum Passenger Seating Capacity
6 passengers
18. Passenger Emergency Exit
2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads
Refer to approved RFM
20. Rotor Blade Control Movement
For rigging information refer to the 206L-3 Maintenance Manual
21. Auxiliary Power Unit (APU)
n/a
22. Life-limited Parts
Refer to approved Chapter 4 of the Maintenance Manual BHT-206L-3-MM-1, for airworthiness lives of applicable components.

IV. Operating and Service Instructions

1. Flight Manual
BHT-206L-3-FM-1, 9 December 1981 reissued 28 October 1992, revision 2, dated 14 September 1995, or later approved revision.
Model 206L-3 modified with Increased Gross Weight Upgrade kit 206-706-530 installed per BHT-206-SI-2052 are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-206L4-FM-1, dated 22 August 2008, or later approved revision (see Note 18 and 19)
2. Maintenance Manual
BHT-206L3-MM-1, dated 27 August 1992; or later approved revision. Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations section of the Maintenance Manual BHT-206L3-MM-1, dated 27 August 1992, or later approved revision.
3. Structural Repair Manual
BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM dated 14 December 2010.
4. Weight and Balance Manual
n/a
5. Illustrated Parts Catalogue
BHT-206L-SERIES-IPB, dated 1 December 1996, or later revisions.
6. Service Letters and Service Bulletins
As published by Bell and approved by TCCA



7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

- (a) Engine-Out Warning System all 206 models (see Note 12);
- (b) Outside air temperature gauge;
- (c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM Manual must be installed in the specified locations.

V. Notes (206L-3 only)

1. Manufacturer's serial numbers:
s/n 51001 to 51271, s/n 51273 to 51441, s/n 51443 to 51612
are eligible.
See Note 16 and 17.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Engine fuel system components as listed below are required to assure satisfactory engine/ rotor drive system torsional stability.
Model 206L-1 with Bendix DP-VI fuel control:
Equipment required for system torsional stability (accumulator P/N 6857224) is approved and included as part of the Rolls-Royce (Allison) model 250-C30P engine.
7. The engine air induction systems on the Model 206L-3 has been substantiated for icing characteristics as necessary to demonstrate that ice accumulation on the engine air inlet will not adversely affect engine operation or cause a serious loss of power when the helicopter is operated in icing conditions within the capability of the remainder of the helicopter to operate under such conditions.
8. Installed battery capacity must be at least 17 Ampère hours (Ah) for the 206L-3 to ensure fuel transfer pump operation for CG control after electrical system failure. A special emergency circuit for fuel transfer pump operation is provided.
9. Model 206L-3 fuel control must be set for 325 PPH (except for Note 9).
10. Model 206L-3 that have an external cargo hook installed per Service Instruction 206-2012 meet the structural and design requirements of the certification basis provided the weight in excess of the normal category gross weight is not imposed on the landing gear when operated to 1 928 kg (4 250 lb) gross weight in accordance with the limits of the appropriate approved Rotorcraft Flight Manual Supplement 206L-3, dated 11 December 1981, No. BHT-206L-3-FMS-4.
11. Bell Helicopter Textron Service Instruction Number 206-2039 provides for an increased take-off power rating up to 456 hp. Special maintenance procedures are required with use of this rating. See Service Instruction 206-2039.
12. Removal of engine out warning, audio system, in accordance with Bell Technical Bulletin TB206L-82-86 is approved.



V. Notes (206L-3 only)

13. The following FAA airworthiness directives applied at the time of design transfer (see Note 15) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.
for 206L-3:

78-11-02 R1	85-09-04	90-13-01 R1	95-09-06
	85-25-01	90-21-03	95-11-14
	85-26-06	91-03-12	
	87-10-11	92-01-05	
	87-15-01	92-06-12	
	88-23-03	94-15-07	
	89-20-13	94-19-02	
	89-22-01 R1	94-20-03	
		94-24-11	

14. Effective 14 September 1995 design responsibility for Model 206L-3 helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
15. The Bell Model 206L-3 helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
- FAA TC H2SW on 10 December 1981
- DOT Transport Canada TC H-92 on 25 July 1986
16. Model 206L-3 serial numbers 51215 and subsequent are manufactured by Bell Helicopter Textron Canada Ltd., Mirabel, Quebec, Canada.
Models and serial numbers not referenced above but eligible under this type certificate were manufactured by Bell Helicopter Textron Inc., Fort Worth, Texas under FAA Type Certificate H2SW.
17. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed: s/n 51272, s/n 51442
18. Model 206L-3 helicopters modified per Bell Service Instruction BHT-206-SI-2052 (BHT kit 206-706-530) have a commercial designation of 206L-3+.
19. Model 206L-3 helicopters modified per Bell Service Instruction BHR-206-SI-2052 (BHT kit 206-706-530) may operate to 2 018 kg (4 450 lb) internal gross weight and 2 064 kg (4 550 lb) external gross weight in accordance with the limitations specified in Bell Rotorcraft Flight Manual BHT-206L4-FM-1.



SECTION 8: 206L-4

I. General

- | | |
|---|--|
| 1. Type/ Model/ Variant | |
| 1.1 Type | 206 |
| 1.2 Model | 206L-4 |
| 1.3 Variant | --- |
| 2. Airworthiness Category | Normal Category / Small Rotorcraft |
| 3. Manufacturer | Bell Textron Canada Ltd.
12 800 rue de l'Avenir
Mirabel, Québec
J7J 1R4, Canada |
| 4. Type Certification Application Date to | TCCA: not recorded
LBA DE: not recorded |
| 5. State of Design Authority | Transport Canada Civil Aviation (TCCA), Canada |
| 6. Type Certificate Date by | TCCA: 2 February 1993 (see Note 11)
LBA DE: 15 January 1993 |
| 7. Type Certificate n° by | TCCA: H-92
LBA DE: 3034 |
| 8. Type Certificate Data Sheet n° by | TCCA: H-92
LBA DE: 3034 |
| 9. EASA Type Certification Date | 28 September 2003,
in accordance with CR (EU) 1702/2003, Article 2, 3., (a),
(i), 2 nd bullet, 2 nd indented bullet. |

II. Certification Basis

- | | |
|---|--|
| 1. Reference Date for determining the applicable requirements | not recorded |
| 2. Airworthiness Requirements | FAR Part 27, dated 2 October 1964 Amdts. 27-1 to 27-24 with: 27.45, 27.141, 27.1309 at Amdt. 27-20; 27.1093, 27.1545 at Amdt. 27-8; 27.79, 27.143, 27.173, 27.175, 27.1519, 27.1595, 27.1587 at Amdt. 27-1; 27.2, 27.307, 27.337, 27.351, 27.427, 27.501, 27.571, 27.613, 27.629, 27.663, 27.674, 27.685, 27.727, 27.783, 27.807, 27.861, 27.865 at Amdt. 27-28; and 27.391, 27.395, 27.397, 27.681, 27.1357, 27.1361 replaced by 6.220, 6.225, 6.323, 6.623, 6.624, 6.625, 6.626 of CAR Part 6, dated 6 December 1956 Amdt. 6-1 to 6-4.
Exceptions to FAR Part 27 are the deletion of 27.71, 27.177, 27.399, 27.562, 27.610, 27.954, 27.1195, 27.1322. |
| 3. Special Conditions | none |
| 4. Exemptions | none |
| 5. Deviations | none |
| 6. Equivalent Safety Findings | - Skid landing gear (drop test), FAR 27.723, 27.725, 27.727;
- Fuel tanks (drop test), FAR 27.965(c)(1) and (c)(2). |
| 7. Requirements elected to comply | none |



- 8. Environmental Protection Requirements
 - 8.1 Noise Requirements See TCDSN EASA.IM.R.512
 - 8.2 Emission Requirements n/a
- 9. Operational Suitability Data (OSD) See SECTION 10 below.

III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition Bell Helicopter Textron top drawing 206-900-020
- 2. Description 2-blade main/tail rotor, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage
 - Length (w. rotor): 12.92 m
 - Width skids: 2.34 m
 - Height: 3.15 m
 - 4.2 Main Rotor Diameter: 11.28 m
 - 4.3 Tail Rotor Diameter: 1.57 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
Model 250-C30P with Bendix gas producer Fuel Control DP-V1.
 - 5.2 Type Certificate
 - TCCA TC/TCDS n°: IE-19
 - FAA TC/TCDS n°: E1GL
 - EASA TC/TCDS n°: EASA.IM.E.109
 - 5.3 Limitations
 - 5.3.1 Installed Engine Limits See Note 11

	TQ Pressure [%] ([HP])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (495)	101 (6 076)	105 (53 5500)	768 (1 414)
MCP	85 (373.7)	101 (6 076)	105 (53 5500)	716 (1 320)

- 5.3.2 Transmission Torque Limits Refer to approved RFM
- 6. Fluids (Fuel/ Oil/ Additives)
 - 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.
 - 6.2 Oil (Engine) MIL-PRF-7808 (NATO O-148), DOD-PRF-85734, MIL-PRF-23699 (NATO O156)
 - 6.3 Additives Refer to approved RFM
- 7. Fluid capacities
 - 7.1 Fuel Usable: 419 litres (110.7 US gal)
Unusable: not recorded
 - 7.2 Oil (Engine) 5.2 litres (1.37 US gal);
1.89 litres (2.0 US quarts) usable (included in capacity);
0.72 kg (1.6 lb) undrainable.
 - 7.3 Coolant System Capacity n/a



8. Air Speeds Limits Refer to approved RFM
9. Rotor Speed Limits Power on:
Maximum 101% Nr (398 rpm)
Minimum 99% Nr (390 rpm)
Power off:
Maximum 107% Nr (422 rpm)
Minimum 90% Nr (355 rpm)
Note: % Nr dual tach reading %
10. Maximum Operating Altitude and Temperature
10.1 Altitude 20 000 ft (6 100 m) PA
at weight 1 882 kg (4 150 lb) or less.
10 000 ft (3 048 m) DA
at weight greater than 1 882 kg (4 150 lb).
10.2 Temperature -50 °C to +51.7 °C
11. Operating Limitations Refer to approved RFM
12. Maximum Mass 2 018 kg (4 450 lb)(internal loading).
2 064 kg (4 550 lb)(external loading) (see Note 8 for
external cargo configuration information);
13. Centre of Gravity Range Straight line variation between points given by,
Longitudinal CG limits [cm (in)]:
Forward limit (internal loading):
299.7 (118.0) up to 1 270 kg (2 800 lb) to 303.3 (119.4) at
2 018 kg (4 450 lb).
Aft limit (internal loading):
326.4 (128.5) up to 1 315 kg (2 900 lb) to 321.1 (126.4) at
2 018 kg (4 450 lb)
Forward limit (external loading):
299.7 (118.0) up to 1 270 kg (2 800 lb) to 303.5 (119.5) at
2 064 kg (4 550 lb)
Aft limit (external loading):
326.4 (128.5) up to 1 315 kg (2 900 lb) to 320.8 (126.3) at
2 064 kg (4 550 lb)
Lateral CG limits [cm (in)]:
Left: -10.2 (-4.0) up to 1 882 kg (4 150 lb)
-3.0 (-1.2) above
Right: 8.9 (3.5) up to 1 882 kg (4 150 lb)
4.09 (1.61) above.
14. Datum The datum line (STA 0) is located at 25.4 mm (1.0 in)
forward of most forward point of fuselage cabin nose
section, or, 1 400 mm (55.16 in) forward of jack point
centreline).
15. Levelling Means Plumb line from roof left rear cabin to index/levelling
plate on the floor.
16. Minimum Flight Crew 1 pilot
17. Maximum Passenger Seating Capacity 6 passengers
18. Passenger Emergency Exit 2, one on each side of the passenger cabin
19. Maximum Baggage/ Cargo Loads Baggage compartment:
113 kg (250 lb), see RFM loading schedule
Cargo floor loading 422 kg/m² (86 lb/ft²)
Cabin compartment:
Cabin floor loading 370 kg/m² (75 lb/ft²)



- | | |
|----------------------------------|---|
| 20. Rotor Blade Control Movement | For rigging information refer to the 206L-4 Maintenance Manual |
| 21. Auxiliary Power Unit (APU) | n/a |
| 22. Life-limited Parts | Refer to approved chapter 4 of the Maintenance Manual, BHT-206L4-MM-1 for the service lives of components applicable to the Model 206L-4. |

IV. Operating and Service Instructions

- | | |
|--|---|
| 1. Flight Manual | BHT-206L4-FM-1, dated 2 October 1992 revision 3, dated 14 September 1995, or later approved revision. |
| 2. Maintenance Manual | BHT-206L4-MM-1, dated 2 December 1994, or later approved revision. Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations section of the Maintenance Manual BHT-206L4-MM-1, dated 2 December 1994, or later approved revision. |
| 3. Structural Repair Manual | BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010. |
| 4. Weight and Balance Manual | n/a |
| 5. Illustrated Parts Catalogue | BHT-206L-SERIES-IPB, dated 1 December 1996, or later revisions. |
| 6. Service Letters and Service Bulletins | As published by Bell and approved by TCCA |
| 7. Required Equipment | |

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

(a) Engine-Out Warning System all 206 models (see Note 12);

(b) Outside air temperature gauge;

(c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (206L-4 only)

1. Manufacturer's serial numbers:
s/n 52001 to 52143, s/n 52145 and subsequent are eligible.
See Note 12 and 13.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Installed battery capacity must be at least 17 Ampère hours (Ah) for the 206L-4 to ensure fuel transfer pump operation for CG control after electrical system failure. A special emergency circuit for fuel transfer pump operation is provided.



V. Notes (206L-4 only)

7. Model 206L-4 fuel control must be set for 356 PPH.
8. Model 206L-4 that have an external cargo hook installed per Service Instruction 206-2012 meet the structural and design requirements of the certification basis provided the weight in excess of the normal category gross weight is not imposed on the landing gear when operated to 2 064 kg (4 550 lb) gross weight in accordance with the limits of the appropriate approved Rotorcraft Flight Manual Supplement BHT-206L4-FMS-4, dated October 1992. The retirement times listed under the Life Limited Parts are not changed.
9. The following FAA airworthiness directives applied at the time of design transfer (see Note 10) and remain in effect unless subsequently superseded by a Canadian or EASA airworthiness directive.
for 206L-4:

94-15-07	95-11-14
94-20-03	---

10. Effective 14 September 1995 design responsibility for Model 206L-4 helicopter was transferred from Bell Helicopter Textron, Fort Worth, Texas, and FAA to Bell Helicopter Textron Canada, Mirabel, Quebec, and DOT Transport Canada.
11. The Bell Model 206L-4 helicopter model was approved by Transport Canada under TC H-92 on the basis of FAA TC H2SW. The following table reflects the original approval dates:
 - FAA TC H2SW on 2 October 1992
 - DOT Transport Canada TC H-92 on 2 February 1993
12. Model 206L-4 serial numbers 52001 and subsequent are manufactured by Bell Helicopter Textron Canada Ltd., Mirabel, Quebec, Canada.
13. The following serial number has been removed from this data sheet. The aircraft and data plate have been destroyed: s/n 52144

* * *



SECTION 9: 407

I. General

1. Type/ Model/ Variant	
1.1 Type	407
1.2 Model	407
1.3 Variant	---
2. Airworthiness Category	Normal Category / Small Rotorcraft
3. Manufacturer	Bell Textron Canada Ltd. 12 800 rue de l'Avenir Mirabel, Québec J7J 1R4, Canada
4. Type Certification Application Date to	TCCA: not recorded CAA SE: not recorded
5. State of Design Authority	Transport Canada Civil Aviation (TCCA), Canada
6. Type Certificate Date by	TCCA: 9 February 1996 CAA SE: 22 April 1996
7. Type Certificate n° by	TCCA: H-92 CAA SE: not recorded
8. Type Certificate Data Sheet n° by	TCCA: H-92 CAA SE: not recorded
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 2 nd indented bullet.

II. Certification Basis

1. For 407:

1.1. Reference Date for determining the applicable requirements	not recorded
1.2. Airworthiness Requirements	FAR Part 27, dated 2 October 1964, Amdt. 27-1 to 27-30 with the following exceptions: Ultimate inertia load factors of 27.561(b)(3)(i-iv) remain at the levels specified by 27.561(b)(3) Amdt. 27-0; 27.173 Amdt. 27-1; 27.175 Amdt. 27-1; 27.563 Amdt. 27-25; 27.785 Amdt. 27-21; 27.1093 Amdt. 27-8; 27.562 n/a; 27.1195 n/a; and 27.952(b)(1) n/a.
1.3. Special Conditions	TCCA Special Conditions for HIRF SCA 95-02, dated 26 April 1995 and Lightning Protection SCA 95-03, dated 26 April 1995
1.4. Exemptions	none
1.5. Deviations	none
1.6. Equivalent Safety Findings	- FAR 27.307(b)(5), 27.723, 27.725, 27.727 for skid type undercarriage; - FAR 27.952 for forward fuel tank drop test; - FAR 27.952 for aft fuel tank drop test;



- FAR 27.965(c)(1) and (2) for fuel tank pressure test;
- FAR 27.1305(p) for engine anti-ice annunciation (see Note 11).

- 1.7. Requirements elected to comply none
- 1.8. Environmental Protection Requirements
 - 1.8.1 Noise Requirements See TCDSN EASA.IM.R.512
 - 1.8.2 Emission Requirements n/a
- 1.9. Operational Suitability Data (OSD) See SECTION 10 below.

2. For 407 s/n 54300 to 54566 and 54568 to 54800

with installation of Integrated Avionics System (Garmin 1000H), (see Notes 12 and 13).

- 2.1. Reference Date for determining the applicable requirements not recorded
- 2.2. Airworthiness Requirements
 - For unaffected areas:
Certification basis as above (1.1. to 1.8.);
 - For areas affected by the change:
CS 27 Amdt. 2, dated 17 November 2008 with the following exceptions:
CS 27.561 Change 2 - ultimate inertia load factors remain at the levels specified by FAR 27.561(b)(3) Amdt. 27-0;
CS 27.785 Change 2 - reverts back to FAR 27.785 Amdt. 27-21;
- 2.3. Special Conditions HIRF, see CRI F-01
- 2.4. Exemptions none
- 2.5. Deviations none
- 2.6. Equivalent Safety Findings CS 27.1545(b)(2) Airspeed Indicator Markings, see CRI F-02
- 2.7. Requirements elected to comply none
- 2.8. Environmental Protection Requirements
 - 2.8.1 Noise Requirements See TCDSN EASA.IM.R.512
 - 2.8.2 Emission Requirements n/a
- 2.9. Operational Suitability Data (OSD) See SECTION 10 below.

3. For 407 s/n 54567, s/n 54805 and subsequent

with installation of Rolls-Royce 250-C47E/4 and Integrated Avionics System (Garmin G1000H NXi).

- 3.1. Reference Date for determining the applicable requirements not recorded
- 3.2. Airworthiness Requirements
 - For unaffected areas:
Certification basis as above (1.1. to 1.8.);
 - For areas affected by the change:
CS 27 Amdt. 2, dated 17 November 2008 with the following exceptions:
CS 27.561 Change 2 - ultimate inertia load factors remain at the levels specified by FAR 27.561(b)(3) Amdt. 27-0;
CS 27.785 Change 2 - reverts back to FAR 27.785 Amdt. 27-21; CS 27.1316 and CS 27.1317, Amdt. 4
- 3.3. Special Conditions
 - For areas affected by the change:
Automatic Speech Recognition (CRI – F-03)
- 3.4. Exemptions none
- 3.5. Deviations none



- 3.6. Equivalent Safety Findings CS 27.1545(b)(2) Airspeed Indicator Markings (CRI F-02)
- 3.7. Requirements elected to comply For areas affected by the change:
CS 27.1316 and CS 27.1317, Amdt. 4
- 3.8. Environmental Protection Requirements
 - 3.8.1 Noise Requirements See TCDSN EASA.IM.R.512
 - 3.8.2 Emission Requirements n/a
- 3.9. Operational Suitability Data (OSD) See SECTION 10 below.

III. Technical Characteristics and Operational Limitations

- 1. Type Design Definition For s/n 53000 to 54299:
Bell Helicopter Textron top drawing 407-900-001.
For s/n 54300 and subsequent:
Bell Helicopter Textron top drawing 407-900-003
(see Note 12, 13 and 14).
- 2. Description 4-blade main rotor, 2-blade tail rotor, single turbine engine helicopter, single turbine engine helicopter
- 3. Equipment Refer to approved RFM
- 4. Dimensions
 - 4.1 Fuselage Length: 10.42 m
Width skids: 2.29 m
Height: 3.10 m
 - 4.2 Main Rotor Diameter: 10.66 m
 - 4.3 Tail Rotor Diameter: 1.65 m
- 5. Engine
 - 5.1 Model Rolls-Royce Corporation (Allison)
1 x Model 250-C47B
with Chandler Evans EC-135 (FADEC) Fuel Control System,
or,
1 x Model 250-C47B/8 (see Note 13)
1 x Model 250-C47E/4 (see Note 14)
 - 5.2 Type Certificate TCCA TC/TCDS n°: IE-19
FAA TC/TCDS n°: E1GL
EASA TC/TCDS n°: EASA.IM.E.109
 - 5.3 Limitations

5.3.1 Installed Engine Limits

	TQ Pressure [%] ([HP])	Output Shaft Speed [%] ([rpm])	Gas Generator Speed [%] ([rpm])	Turbine Temperature [°C] ([°F])
TOP (5 min)	100 (674)	100 (6 317)	105 (53 550)	779 (1 434)
MCP	93.5 (630)	100 (6 317)	105 (53 550)	727 (1 341)

5.3.2 Transmission Torque Limits Refer to approved RFM

- 6. Fluids (Fuel/ Oil/ Additives)
 - 6.1 Fuel ASTM-D-6615 Type Jet B; ASTM-D-1655 Type Jet A and Jet A-1; MIL-DTL-5624 Grade JP-4 (NATO F-40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 JP-8 (NATO F-34).
See RFM for fuel temperature limitations.



6.2 Oil (Engine)	MIL-PRF-7808 (NATO O-148), DOD-PRF-85734, MIL-PRF-23699 (NATO O-156)
6.3 Additives	Refer to approved RFM
7. Fluid capacities	
7.1 Fuel	Usable: 483.7 litres (127.8 US gal) Unusable: 10.0 litres (2.65 US gal)
7.2 Oil (Engine)	5.2 litres (1.37 US gal); 1.9 litres (2.0 US quarts) usable (included in capacity); 3.53 kg (1.6 lb) undrainable.
7.3 Coolant System Capacity	n/a
8. Air Speeds Limits	Refer to approved RFM
9. Rotor Speed Limits	Power on: Maximum 100% Nr (413 rpm) Minimum 99% Nr (409 rpm) Power off: Maximum 107% Nr (442 rpm) Minimum 85% Nr (351 rpm)
10. Maximum Operating Altitude and Temperature	
10.1 Altitude	20 000 ft (6 100 m) DA or PA, whichever is less.
10.2 Temperature	-40 °C to +51.7 °C
11. Operating Limitations	Refer to approved RFM
12. Maximum Mass	2 268 kg (5 000 lb)(internal loading). 2 381 kg (5 250 lb)(internal loading) when equipped with kit 407-706-020. 2 722 kg (6 000 lb) (external loading (see Note 6 for external cargo configuration information).
13. Centre of Gravity Range	<u>Basic Aircraft:</u> Longitudinal CG limits [cm (in)]: Forward limit (internal loading): 302.3 (119.0) up to 2 041 kg (4 500 lb) changing linearly to 303.5 (119.5) at 2 268 kg (5 000 lb) Aft limit (internal loading): 327.7 (129.0) up to 2 268 kg (5 000 lb) Lateral CG limits (internal loading): Left: -6.4 (-2.5) up to 1 588 kg (3 500 lb) changing linearly to -3.9 (-1.5) at 2 268 kg (5 000 lb) Right: 7.6 (3.0) up to 1 588 kg (3 500 lb) changing linearly to 5.2 (2.0) at 2 268 kg (5 000 lb) <u>Aircraft when kit 407-706-020 (5 250 lb kit) is installed:</u> Longitudinal CG limits [cm (in)]: Forward limit (internal Loading): 302.3 (119.0) up to 2 041 kg (4 500 lb) changing linearly to 304.2 (119.8) at 2 381 kg (5 250 lb) Aft limit (internal loading): 327.7 (129.0) up to 2 268 kg (5 000 lb) changing linearly to 326.8 (128.7) at 2 381 kg (5 250 lb) Lateral CG limits (internal loading): Left: -6.4 (-2.5) up to 1 588 kg (3 500 lb) changing linearly to -3.5 (-1.4) at 2 381 kg (5 250 lb) Right: 7.6 (3.0) up to 1 588 kg (3 500 lb) changing linearly to 4.8 (1.9) at 2 381 kg (5 250 lb)



External Loading Limits for basic aircraft or when kit 407-706-020 (5 250 lb kit) is installed:

Longitudinal CG limits [cm (in)]:

Forward limit (external loading):

302.3 (119.0) up to 2 041 kg (4 500 lb) changing linearly to 306.1 (120.5) at 2 722 kg (6 000 lb)

Aft limit (internal loading):

327.7 (129.0) up to 2 268 kg (5 000 lb) changing linearly to 324.1 (127.6) at 2 722 kg (6 000 lb)

Lateral CG limits (external loading):

Left: -10.2 (-4.0) up to 2 268 kg (5 000 lb), -3.9 (-1.5) at 2 268 kg (5 000 lb), changing linearly to -2.3 (-0.9) at 2 722 kg (6 000 lb)

Right: 10.2 (4.0) up to 2 268 kg (5 000 lb), 5.2 (2.0) at 2 268 kg (5 000 lb), changing linearly to 3.6 (1.4) at 2 722 kg (6 000 lb)

- | | |
|--|--|
| 14. Datum | The datum line (STA 0) is located at 25.4 mm (1.0 in) forward of most forward point of fuselage cabin nose section, or, 1 400 mm (55.16 in) forward of jack point centreline). |
| 15. Levelling Means | Plumb line from the underside of the engine pan through the access panel in the baggage bay roof to an index plate on the floor of the baggage compartment. |
| 16. Minimum Flight Crew | 1 pilot |
| 17. Maximum Passenger Seating Capacity | 6 passengers |
| 18. Passenger Emergency Exit | 2, one on each side of the passenger cabin |
| 19. Maximum Baggage/ Cargo Loads | Refer to approved RFM |
| 20. Rotor Blade Control Movement | For rigging information refer to the 407 Maintenance Manual |
| 21. Auxiliary Power Unit (APU) | n/a |
| 22. Life-limited Parts | Refer to approved Chapter 4 of the Maintenance Manual BHT-407-MM-1 for service lives of components applicable to the model 407. |

IV. Operating and Service Instructions

- | | |
|-----------------------|---|
| 1. Flight Manual | For s/n 53000 to 54299:
BHT-407-FM-1, dated 9 February 1996 revision 8, dated 17 April 2000, or later approved revision.

For s/n 54300 to 54566 and 54568 to 54800 (see Note 12 and 13):
BHT-407-FM-2, dated 4 March 2011, or later approved revision.

For s/n 54567, 54805 and subsequent (see Note 14):
BHT-407-FM-3, dated 17 January 2018, or later approved revision. |
| 2. Maintenance Manual | BHT-407-MM-1 dated 22 February 1996 or later approved revision. Life limited components and approved retirement times are listed in the approved Chapter 4, Airworthiness Limitations section of the Maintenance Manual BHT-407-MM-1, dated 22 February 1996, or later approved revision. |



- | | | |
|----|---------------------------------------|--|
| 3. | Structural Repair Manual | BHT-206-SRM-1, dated 18 February 1994 and BHT-ALL-SRM, dated 14 December 2010. |
| 4. | Weight and Balance Manual | n/a |
| 5. | Illustrated Parts Catalogue | BHT-407-IPB, dated 18 May 1999, or later revisions |
| 6. | Service Letters and Service Bulletins | As published by Bell and approved by TCCA |
| 7. | Required Equipment | |

The basic required equipment as prescribed in the applicable airworthiness Equipment regulations (see Basis of Certification) must be installed in the helicopter.

In addition, the following items of equipment are required:

(a) *reserved*;

(b) Outside air temperature gauge;

(c) Approved RFM as listed in Approved Publications;

(d) The following placard must be displayed in front of and in clear view of the pilot:

"THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER FLIGHT MANUAL."

All placards listed in the approved RFM must be installed in the specified locations.

V. Notes (407 only)

1. Manufacturer's serial numbers:
s/n 53000 to 53138, s/n 53140 to 53279, s/n 53281 to 53470, s/n 53472 to 53900, s/n 53911 to 54800, 54805, and subsequent are eligible.
See Note 8, 9 and 10.
2. 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 CG locations must include undrainable oil and unusable fuel for the appropriate model.
3. Information essential for proper maintenance is contained in the appropriate model Bell Helicopter Textron Maintenance or Overhaul Manual.
4. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved Rotorcraft Flight Manuals for all models).
5. *deleted*
6. Installed battery capacity must be at least 17 Ampère hours (Ah) for the 407 to ensure fuel transfer pump operation for CG control after electrical system failure. A special emergency circuit for fuel transfer pump operation is provided.
7. Model 407 helicopters equipped with an external cargo hook may operate to 2 722kg (6 000 lb) gross weight in accordance with the limits of Transport Canada approved Rotorcraft Flight Manual Supplement BHT-407-FMS-5, rev 1, Supplemental Cargo Hook P/N 206-706-341, dated 4 September 1998, or later approved revision.
8. Model 407 s/n 53000 to 53138, s/n 53140 to 53279, s/n 53281 to 53470, s/n 53472 to 53900, s/n 53911 to 54800, 54805 and subsequent are manufactured by Bell Helicopter Textron Canada Ltd., Mirabel, Québec, Canada.
9. The following serial numbers have been removed from this data sheet. The aircraft and data plates have been destroyed: s/n 53139, s/n 53280, s/n 53471
10. Model 407 s/n 53901 to 53910 and 54801 to 54804 do not have commercial certification.
11. The equivalent Safety Finding for FAR 29.1305(p) applies to Model 407 s/n 53000 to 53094 inclusive. Model 407 s/n 53095 and subsequent comply with the requirements of FAR 27.1305(p) for engine anti-ice annunciation.
12. Model 407 s/n 54300 to 54565 have the commercial designation 407GX (Rolls-Royce 250-C47B plus Garmin G1000H)
13. Model 407 s/n 54566 and 54568 to 54800 have the commercial designation 407GXP (Rolls-Royce 250-C47B/8 plus Garmin G1000H)



V. Notes (407 only)

14. Model 407 s/n 54567, s/n 54805 and subsequent have the commercial designation 407GXi (Rolls-Royce 250-C47E/4 plus Garmin G1000H NXi)

* * *



SECTION 10: OPERATIONAL SUITABILITY DATA (OSD)

The OSD elements listed below are approved by the European Aviation Safety Agency as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

I. OSD Certification Basis

- I.1 Reference Date for determining the applicable OSD requirements
For models 206A, 206B: not applicable
For models 206L, 206L-1, 206L-3, 206L-4, 407: Grandfathering date is 17 February 2014
- I.2 MMEL - Certification Basis
For models 206A, 206B: not required
For models 206L, 206L-1, 206L-3, 206L-4, 407: JAR-MMEL Section 1 Amdt. 1, dated 1 August 2005
For 407 (see Note 14): CRI –A-MMEL (ref. to SC CS-GEN-MMEL-H)
- I.3 Flight Crew Data - Certification Basis
For models 206A, 206B: not required
For models 206L, 206L-1, 206L-3, 206L-4, 407: CS-FCD Initial Issue, dated 31 January 2014
- I.4 SIM Data - Certification Basis
reserved
- I.5 Maintenance Certifying Staff Data - Certification Basis
reserved

II. OSD Elements

- II.1 MMEL
For models 206L, 206L-1, 206L-3, 206L-4, 407:
EASA Master Minimum Equipment List (MMEL), HT-208/407-EASA-MMEL, Revision Original, issue date 11 May 2015, and subsequent approved revisions.
- II.2 Flight Crew Data
For models 206L, 206L-1, 206L-3, 206L-4:
Operational Suitability Data (OSD) Flight Crew Bell 206 Long Ranger (206L, 206L-1, 206L-3, 206L-4), Report BHT-206L-EASA-FCD, dated 1 December 2015, and subsequent approved revisions.
For model 407:
Operational Suitability Data (OSD) Flight Crew Bell 407, Report BHT-407-EASA-FCD, dated 8 December 2015, and subsequent approved revisions.
- II.3 SIM Data
reserved
- II.4 Maintenance Certifying Staff Data
reserved



SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

ACG AT	Austro Control, CAA Austria	MSL	Mean Sea Level
Amdt.	Amendment	Nr	Rotor Speed
C.G.	Centre of Gravity	OEI	One Engine Inoperative
CAA	Civil Aviation Authority	OSD	Operational Suitability Data
CAA SE	Transportstyrelsen, CAA Sweden	PA	Pressure Altitude
CR	(European) Commission Regulation	PPH	Pounds per hour
DA	Density Altitude	PPM	Pounds per minute
DOT	Department of Transport	P/N	Part Number
FAA	Federal Aviation Administration	PWR	Power
hp	Horse Power	RFM	Rotorcraft Flight Manual
KIAS	Knots Indicated Air Speed	s/n	Serial Number
LBA	Luftfahrt-Bundesamt German Federal Aviation Office	STA	Station
LDG	Landing	TCDSN	Type Certificate Data Sheet Noise
Max.	Maximum	TO	Take-Off
MCP	Maximum Continuous Power	TOP	Take-Off Power
Min.	Minimum	TQ	Torque
min	Minute	V _{NE}	Never Exceed Speed
MMEL	Master Minimum Equipment List		

II. Type Certificate Holder Record

Type Certificate Holder	Period
Bell Helicopter Textron, Fort Worth, Texas, U.S.A.	from 20 October 1966 until 13 September 1995
Bell Helicopter Textron Canada, 12 800 rue de l'Avenir, Mirabel, Québec, J7J 1R4, Canada	from 25 July 1986 until 15 December 2019
Bell Textron Canada Ltd., 12 800 rue de l'Avenir, Mirabel, Québec, J7J 1R4, Canada	from 16 December 2019

III. Change Record

Issue	Date	Changes	TC issue
Issue 1	7 Feb 2012	Initial issue of EASA TCDS	Reissued, 7 February 2012
Issue 2	14 Apr 2016	For Bell 407 engine Model 250-C47B/8 added, OSD data added; EASA TCDS format updated	---
Issue 3	10 Dec 2018	Sections 1 to 9: I.2, III.6.1, MIL-DTL-... updated Sections 2, 3, 4: III.12, lb to kg conversion corrected; Section 9, 10: configuration '407GX _i added; various editorial consolidations (non-technical)	---
Issue 4	16 Dec 2019	Type Certificate Holder name change	Reissued, 16 December 2019

- end of file -

