DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H2SW
REVISION 53
BELL
206
206A
206A-1(OH-58A)
206B
206B-1
206L
206L-1
206L-3
206L-4
407
February 9, 2022

TYPE CERTIFICATE DATA SHEET NO. H2SW

This data sheet which is part of type certificate No. H2SW prescribes conditions and limitations under which the product for which type certificate was issued meets the airworthiness requirements of Civil Air Regulations and Federal Aviation Regulations.

Type Certificate Holder Bell Textron Canada Limited

12,800 Rue De L'Avenir

Mirabel, Quebec J7J 1R4 Canada

Type Certificate Holder Record: Bell Helicopter Textron Canada Limited was the previous name of TC holder.

The company name history is presented below.

Type Certificate Holder	Period
Bell Helicopter Textron, Fort Worth, Texas	Prior to 14 September 1995
Bell Helicopter Textron, A Division of Textron Canada Limited, Mirabel, Québec	14 September 1995 to 19 December 2001
Bell Helicopter Textron Canada Limited.	20 December 2001 to 15 December 2019
Bell Textron Canada Limited, Mirabel Québec	16 December 2019 to Present

I - Model 206 4PCLH (Normal Category), Approved April 28, 1964.

Serial Nos. eligible No eligible serial numbers exist.

II - Model 206A 5PCLH (Normal Category), Approved October 20, 1966

Engine Rolls-Royce (Allison) Model 250-C18 or 250-C18B (See Note 13), or Allison Model 250-C20. En gine

Type Certificate No. E4CE.

Fuel ASTM D6615 Type Jet B; ASTM D1655 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 Grade JP-8 (NATO F-34) See

Rotorcraft Flight Manual for fuel temperature limitations. (See Note 8)

Engine limits	Torque	Output	Turbine	Gas Gen.	
	Pressure	Shaft Speed	Temp.	Speed	
250-C18 and 250-C	C18B				
Takeoff	100% (95 psi)	100%	749°C	104%	
(5 Min)	(317 HP)	(6,000 rpm)	(1380°F)	(53,164 rpm)	
Max.	85%(81 psi)	100%	693°C	104%	
Continuous	(270 HP)	(6,000 rpm)	(1,280°F)	(53,164 rpm)	

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Engine limits (cont'd)	Engine limits (cont'd) Torque Pressure		Turbine Temp.	Gas Gen. Speed
*250-C20 Take-off (5 min.)	100% (76 psi) (317 HP)	100% (6,000 rpm)	793°C (1459°F)	104% (53,010 rpm)
Max. Continuous	85% (65 psi) (270 HP)	100% (6,000 rpm)	743°C (1369°F)	104% (53,010 rpm)

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

Rotor limits	Power Off Maximum 422 rpm (Dual Tach Reading 107%) Minimum 355 rpm (Dual Tach Reading 90%)	Power On Maximum 394 rpm (Dual Tach Reading 100%) Minimum 374 rpm (Dual Tach Reading 95%)				
Airspeed limits	Never exceed 150 mph (130 knots) CAS Decrease V _{ne} 4 mph (3.5 knots) per 1000 ft. abo	ove 3000 ft.				
C.G. Range	Straight line variation between points given. (a) Longitudinal C.G. Limits					
Empty weight C.G. range	Refer to Section 1 of the appropriate Model Mai	ntenance Manual.				
Maximum weight	3,000 lbs. for standard skid landing gear equippenote for external cargo configuration information	ped; 2,900 lbs. for other landing gear equipped. (See n)				
Minimum crew	1 at (+65.0)					
Passengers	1 at (+65.0) and 3 at (+104.0)					
Maximum cargo	1,200 lbs maximum. See Rotorcraft Flight Manu	nal for loading schedule.				
Fuel capacity	76 gallons (+116.0); unusable fuel 10 lbs. at (+1	20.0)				
Oil capacity	5.5 quarts (+179.0); usable oil, 2 quarts (include	d in capacity). Undrainable oil 1.0 lbs. at (+167.)				
Rotor blade and control movements	For rigging information refer to the 206A Mainton	enance Manual.				
Serial Nos. eligible	4-251, 254-625, 627-660, 672-715					

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III - Model 206A-1 (OH-58A) 4 PCLH (Normal Category), Approved May 6, 1969

(See note 12 for Conversion of Military Model OH-58A to Model 206A-1)

(See note 15 regarding Canadian Military Model COH-58A) (See note 16 regarding surplused Military Model OH-58A)

Engine Rolls-Royce (Allison) Model 250-C10D (See Note 14 and 34) Engine Type Certificate E4CE

Fuel ASTM D6615 Jet B (See Note 8)

Engine limits	ne limits Torque Ou		Turbine	Gas Gen.
	Pressure	Shaft Speed	Temp.	Speed
Takeoff	92 psi	103%	738°C	104%
(5 Min)	(317 HP)	(6,180 rpm)	(1360°F)	(53,164 rpm)
Max.	79 psi	103%	693°C	104%
	1			
Continuous	(270 HP)	(6,180 rpm)	(1,280°F)	(53,164 rpm)

(See Rotorcraft Flight Manual for transient limits)

NOTE: Powerplant cooling has been demonstrated to be adequate for the following ambient temperature schedule: 125°F at sea level, decreasing at a lapse rate of 3.6°F per 1000 feet to 89°F at the maximum operating altitude of 10,000 feet.

Rotor limits	Power Off Maximum 390 rpm (Dual Tach Reading 110%)	Power On Maximum 394 rpm (Dual Tach Reading 100%, N ₂ 103%)
	Minimum 330 rpm (Dual Tach Reading 93%)	Minimum 347 rpm (Dual Tach Reading 98%, N ₂ 101%) (See Rotorcraft Flight Manual for transient limits.)
Airspeed limits	Never exceed 120 knots CAS $ \label{eq:caseVne} Decrease\ V_{ne}\ 3.5\ knots/1000\ ft.\ above\ 3000\ ft.$	
C.G. Range	Straight line variation between points given.	

Straight line variation between points given.

(a) Longitudinal C.G. Limits (+106) to (+112.1) at 3,000 lbs (+105.2) to (+114.2) at 2,500 lbs (+105.2) to (+114.2) at 1,800 lbs

(b) Lateral C.G. Limits 2.6 inches right 2.4 inches left

Empty weight C.G. range Refer to Section 1 of the appropriate Model Maintenance Manual.

Maximum weight 3,000 lbs.

Minimum crew 1 at (+65.0)

Passengers 1 at (+65.0) and 2 at (+104.0)

Maximum cargo 1,200 lbs maximum. See Rotorcraft Flight Manual for loading schedule.

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III - Model 206A-1 (cont'd)

Fuel capacity 71.5 gallons (+116.0); unusable fuel 6 lbs. at (+110.0) included in capacity

Oil capacity 5.5 quarts (+179.0); usable oil, 2 quarts (included in capacity). Undrainable oil 2.8 lbs. at (+153.)

Rotor blade and For rigging information refer to the 206A-1 Maintenance Manual.

control movements

Serial Nos. eligible 39,998 and up

Serial Nos. certificated 39,998 and 39,999. All other eligible serial number rotorcraft must be converted to Model 206A-1 in accordance with note 12 prior to issuance of a standard airworthiness certificate.

IV - Model 206B 5 PCLH (Normal Category), Approved 19 August 1971 (See Note 31)

Engine Rolls-Royce (Allison) Model 250-C20 with Chandler Evans Model MC-40 Fuel Control System.

(See Note 21 and 25) See Note 20 for Alternate Fuel Control. Engine Type Certificate No. E4CE.

Fuel ASTM D6615 Type Jet B; ASTM D1655 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 Grade JP-8 (NATO

F-34). See Rotorcraft Flight Manual for fuel temperature limitations. (See Note 8).

Engine limits	Torque	Output	Turbine	Gas Gen.
	<u>Pressure</u>	Shaft Speed	Temp.	<u>Speed</u>
Takeoff	100% (76 psi)	100%	793°C	104%
(5 min.)	(317 HP)	(6,016 rpm)	(1459°F)	(53,010 rpm)
Max	85% (65 psi)	100%	737°C	104%
Continuous	(270 HP)	(6,016 rpm)	(1359°F)	(53,010 rpm)

Rotor limits	Power Off	<u>P</u>	ower On
		GW 3,000 lbs or less	GW 3,000 to 3,200 lbs
	Maximum 422 rpm	Maximum 394 rpm	Maximum 395 rpm
	(Dual Tach 107%)	(Dual Tach 100%)	(Dual Tach 100%)
	Minimum 355 rpm	Minimum 374 rpm	Minimum 382 rpm
	(Dual Tach 90%)	(Dual Tach 95%)	(Dual Tach 97%)

Airspeed limits (a) 3,000 lbs or less

Never exceed 150 mph (130 knots) CAS)

Decrease V_{NE} 4mph (3.5 knots) per 1,000 ft. above 3,000 ft.

Maximum altitude 20,000 ft.

(b) 3000 - 3200 lbs

Never exceed 140 mph (122 knots) CAS

Decrease V_{NE} 8 mph (7 knots) per 1,000 ft. above 3,000 ft.

Maximum altitude 13,500 ft.

C.G. range (a) Longitudinal C.G. Limits.

<u>Prior to S/N 2212</u>	<u>S/N 2212 and Sub</u>
(+106) to (+111.4) at 3,200 lbs.	(+106) to (+111.6) at 3,200 lbs.
(+106) to (+112.1) at 3,000 lbs.	(+106) to (+112.3) at 3,000 lbs.
(+106) to (+112.4) at 2,900 lbs.	(+106) to (+112.6) at 2,900 lbs.
(+106) to (+113.4) at 2,600 lbs.	(+106) to (+113.6) at 2,600 lbs.
(+106) to (+114.2) at 2,350 lbs.	(+106) to (+114.2) at 2,425 lbs.
(+106) to (+114.2) at 2,100 lbs.	(+106) to (+114.2) at 2,100 lbs.

Straight line variation between points given.

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IV - Model 206B (cont'd)

C.G. Range (cont'd) (b) Lateral C.G. Limits

2.3 inches left to 3.0 inches right at longitudinal C.G. 106.0

3.0 inches left to 4.0 inches right at longitudinal C.G. 108.0 to 114.2

Straight line variation between points given.

Empty Weight

Refer to Section 1 of the appropriate Model Maintenance Manual.

C.G. range

Maximum weight 3,200 lbs (See note 11 for external cargo configuration information)

Minimum crew 1 at (+65.0)

Passengers 1 at (+65.0), 3 at (+104.0)

Maximum cargo 1,200 lbs maximum. See Rotorcraft Flight Manual for loading schedule.

Fuel capacity 76 gallons (+116.0); unusable fuel 6.7 lbs. at (+120.0)

S/N 3567 and subsequent 91 gallons usable (+118); unusable 6.7 lbs.(+120.0)

Oil capacity 5.5 quarts (+179.0); usable oil, 2 quarts (included in capacity); undrainable oil, 1.0 lbs. (+167).

Rotor blade and

For rigging information refer to the 206B Mantenance Manual.

Control Movements.

Serial Nos. eligible 661, 671, 716 and up except 898, 1054, 1318, 2211, 2520, 2529, 2536, 2538, 2542, 2581, 2585, 2589,

2599, 2601, 2605, 3124, 3523, 3798, 4129, 4500

V - Model 206B-1 5 PCLH (Normal Category), Approved November 10, 1971

Serial Nos. eligible No eligible serial numbers exist.

VI - Model 206L 7 PCLH (Normal Category), Approved September 22, 1975

Engine Rolls-Royce (Allison) Model 250-C20B or 250-C20J with Bendix P/N DP-N1 or DP-N2 Fuel

Control. Engine Type Certificate No. E4CE.

Fuel ASTM D6615 Type Jet B; ASTM D1655 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 Grade JP-8 (NATO F-34). See Rotorcraft Flight Manual for fuel mixtures and fuel temperature limitations. (See Note 8.)

Engine limits Gas Gen. Torque Output Turbine **Pressure** Shaft Speed Temp. Speed Takeoff 100% (101 psi) 100% 810°C 105% (5 min.) 420 shp (6,016 rpm) (1490°F) (53,519 rpm) Max. 738°C 88% (89 psi) 100% 105% Continuous 370 shp $(1360^{\circ}F)$ (53,519 rpm) (6,016 rpm)

(See Rotorcraft Flight Manual for transient limits)

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$\overline{\mathbf{VI}}$	 Model 206L 	(cont'd)

Rotor limits	Maximum (Dual Tac Minimum	Power Off Maximum 422 rpm (Dual Tach Reading 107%) Minimum 355 rpm (Dual Tach Reading 90%)				Power On Maximum 395 rpm (Dual Tach Reading NR 100%,) Minimum 382 rpm (Dual Tach Reading 97%)						
Airspeed limits	H _p FTx1000	0	2	4	6	8	10	12	14	16	18	20
	<u>OAT°C</u>		v_{ne}	<u>IAS</u>	M	<u>PH</u>						
	46	150										
	40	150	146									
	20	150	150	145	138	131	123	116				
	0	150	150	150	145	138	130	123	115	108	101	93
	-20	150		150	150	145	137	130	123	115	108	100
	-40	147		138	132	128	123	119	114	110	105	101
	-50	135		126	121	117	112	108	104	100	96	92
		1	NOTE: A	ABOVE	NOS E	SASED	ON					
			K. MACI					i				
C.G. range (a) Longitudinal C.G. Limits (See Note 19). Forward Limit (+118) up to 2,800 lbs. changing linearly to (+119.1) at 4,0 Aft Limit												
		(+128.5) up to 2,900 lbs. changing linearly to (+126.8) at 4,000 lbs.										
	(b)	Lateral C	.G. Limi	ts								
		Left	4.0 inch									
		Right	3.5 inch									
Empty weight C.G. range	Refer to S	Section 8	of the app	propriate	e Mode	l Mainte	enance	Manual				
Maximum weight	4,000 lbs.											
Minimum crew	1 at (+65.	0)										
Passengers	1 at (+65.	0) and 2 a	at (+91.0)), and 3	at (+12	9.0)						
Maximum cargo	1,464 lbs	maximun	n. See Ro	otorcraft	Flight	Manual	for loa	ding sch	nedule.			
Fuel capacity	98.0 gallo	ons at (+1	28.9); un	usable f	uel 1 ga	al. at (+9	94)					
Oil capacity	5.5 quarts	(+205.0)	; usable	oil, 2 qu	arts (in	cluded i	n capac	ity). Ur	ndrainal	ole oil 1	.6 lbs. a	it (+192)
Rotor blade and control movements	For riggin	g inform	ation refe	er to the	206L N	A aintena	ance Ma	anual				
Serial Nos. eligible	45004 thr	ough 451	53 and 4	6601 thi	ru 4661	7						

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VII - Model 206L-1 7 PCLH (Normal Category), Approved May 17, 1978.

(See Note 26 for 4,150 lbs. gross weight.)

Engine	Rolls-Royce (Allison)	Model 250-C28B with	h Bendix gas producer Fue	l control DP-T3. Engine Type
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Certificate No. E1GL. Or

Rolls-Royce (Allison) Model 250-C30P with Bendix gas producer Fuel Control DP-V1. Engine Type

Certificate No. E1GL

Fuel ASTM D6615 Type Jet B; ASTM D1655 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 Grade JP-8 (NATO F-34). See

Rotorcraft Flight Manual for fuel mixtures and fuel temperature limitations. (See Note 8)

Engine limits Model 206L-1 Rotorcraft with Rolls Royce (Allison) 250-C28B engines installed

Torque	Output	Turbine	Gas Gen.	Gas Gen.
	<u>Pressure</u>	Shaft Speed	Out Temp	<u>Speed</u>
Takeoff	100% (59 psi)	100%	791°C	104%
(5 min.)	435 shp	(6,016 rpm)	(1456°F)	(52,980 rpm)
Max.	85% (50 psi)	100%	743°C	104%
Continuous	370 shp	(6,016 rpm)	(1369°F)	(52,980 rpm)

Engine limits Model 206L-1 Rotorcraft with Rolls Royce (Allison) 250-C30P engines installed (See Note 38).

Torque	Output	Turbine	Gas Gen.	Gas Gen
	<u>Pressure</u>	Shaft Speed	Out Temp	<u>Speed</u>
Takeoff	100% (62 psi)	100%	768°C	104%
(5 min.)	435 shp	(6,016 rpm)	(1414°F)	(53,550 rpm)
Max.	85% (53 psi)	100%	716°C	104%
Continuous	370 shp	(6,016 rpm)	(1320°F)	(53,550 rpm)

(See Rotorcraft Flight Manual for transient limits)

Rotor limits	Power Off	Power On
	Maximum 422 rpm	Maximum 395 rpm
	(Dual Tach Reading 107%)	(Dual Tach Reading 100%)
	Minimum 355 rpm	Minimum 382 rpm
	(Dual Tach Reading 90%)	(Dual Tach Reading 97%)

Airspeed limits	Hp FTx1000	0	2	4	6	8	10	12	14	16	18	20
	OAT° C			VNE	IAS	S 1	MPH					
	46	150										
	40	150										
	20	150	150	145	138	131	123	116				
	0	150	150	150	145	138	130	123	115	108	101	93
	-20	150	150	150	150	145	137	130	123	115	108	100
	-40	147	142	138	132	128	123	119	114	110	105	101
	-50	135	130	126	121	117	112	108	104	100	96	92

NOTE: ABOVE NOS. BASED ON MAX MACH_{Advancing BladeTip} OF 0.95

C.G. range (a) Longitudinal C.G. Limits. (See Note 19.)

> (Internal Loading) Forward Limit

(+118) up to 2,800 lbs. changing linearly to (+119) at 4,050 lbs. Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+127) at 4,050 lbs.

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VII - Model 206L-1 (cont'd)

C.G. Range (External Loading)
Forward Limit

(+118) up to 2,800 lbs. changing linearly to (+119.2) at 4,250 lbs.

Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+126.7) at 4,250 lbs.

(b) Lateral C.G. Limits

Left 4.0 inches Right 3.5 inches

Empty weight C.G. range

Refer to Section 8 of the appropriate Model Maintenance Manual.

Maximum Weight

4,050 lbs (Internal Loading) 4,250 lbs (External Loading)

4450 lbs (Internal Loading) See Note 40 4550 lbs (External Loading) See Note 40

Minimum Crew 1 at (+65.0)

Passengers 1 at (+65.0), 2 at (+91.0), and 3 at (+129.0)

Maximum Cargo See Rotorcraft Flight Manual for loading schedule

Fuel Capacity 98.4 gallons (+130.4); unusable fuel, 1 gallon at (+94)

Oil Capacity 5.5 quarts (+205.0); usable oil, 2 quarts (included in capacity); undrainable oil, 1.6 lbs (+192)

Rotor blade and Control Movement For rigging information refer to the 206L-1 Maintenance Manual.

Serial Nos. eligible

45154 thru 45790 except 45237, 45526, 45739

VIII - Model 206L-3 7PCLH (Normal Category). Approved December 10, 1981.

Engine Rolls-Royce (Allison) Model 250-C30P with Bendix Gas Producer Fuel Control DP-V1. Engine

Type Certificate E1GL.

Fuel ASTM D6615 Type Jet B; ASTM D1655 Type Jet A and A-1; MIL-DTL-5624 Grade JP-4 (NATO

 $F-40); \ MIL-DTL-5624 \ Grade \ JP-5 \ (NATO \ F-44); \ and \ MIL-DTL-83133 \ Grade \ JP-8 \ (NATO \ F-34).$

See Rotorcraft Flight Manual for fuel mixtures and fuel temperature limitations. (See Note 8)

Engine Limits Torque Output Turbine Gas Gen. (See Note 28) **Pressure** Shaft Speed Out Temp Speed. Takeoff 100% (62 psi) 100% 768°C 105% (5 min.) 435 shp (6,016 rpm) $(1,414^{\circ}F)$ (53,550 rpm)

Max. 85%(53 psi) 100% 716°C 105%

Continuous 370 shp (6,016 rpm) (1,320°F) (53,550 rpm)

(See Rotorcraft Flight Manual for Transient Limits)

Rotor limits <u>Power Off</u> <u>Power On</u>

Maximum 422 rpm Maximum 395 rpm (Dual Tach Reading 107%) (Dual Tach Reading 100%) Minimum 355 rpm Minimum 382 rpm (Dual Tach Reading 90%) (Dual Tach Reading 97%)

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VIII - Model 206L-3 (cont'd)

Airspeed limits Basic VNE is 130 KIAS sea level to 3,000 feet density altitude. Decrease VNE for ambient

conditions in accordance with Airspeed Limitation Placard in the FAA approved Rotorcraft Flight

Manual, dated December 9, 1981.

C.G. range (a) Longitudinal C.G. Limits. (See Note 19.)

(Internal Loading) Forward Limit

(+118) up to 2,800 lbs. changing linearly to (+119.1) at 4,150 lbs.

Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+126.85) at 4,150 lbs.

(External Loading) Forward Limit

(+118) up to 2,800 lbs. changing linearly to (+119.2) at 4,250 lbs.

Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+126.7) at 4,250 lbs.

(b) Lateral C.G. Limits Left 4.0 inches

Right 3.5 inches

Empty weight C.G. range Refer to Section 8 of the appropriate Model Maintenance Manual.

Maximum Weight 4,150 lbs (Internal Loading)

4,250 lbs (External Loading)

4450 lbs (Internal Loading) See Note 40 4550 lbs (External Loading) See Note 40

Minimum Crew 1 at (+65.0)

Passengers 1 at (+65.0), 2 at (+91.0), and 3 at (+129.0)

Maximum Cargo See Rotorcraft Flight Manual for loading schedule

Fuel Capacity 110.7 gallons (+131.7); unusable fuel, 1 gallon at (+94)

Oil Capacity 5.5 quarts (+205.0); usable oil, 2 quarts (included in capacity); undrainable oil, 1.6 lbs (+192)

Rotor blade and Control Movement For rigging information refer to the 206L-3 Maintenance Manual.

Serial Nos. eligible 51001 thru 51612 except 51272, 51442

IX - MODEL 206L-4 7PCLH (Normal Category). Approved October 2, 1992

Engine Rolls-Royce (Allison) Model 250-C30P with Bendix Gas Producer Fuel Control DP-V1. Engine

Type Certificate No. E1GL.

Fuel ASTM D6615 Type Jet B; ASTM D1655 Type Jet A and A-1; MIL-DTL-5624 Grade JP-4 (NATO F-

40); MIL-DTL-5624 Grade JP-5 (NATO F-44); and MIL-DTL-83133 Grade JP-8 (NATO F-34). See Rotorcraft Flight Manual for fuel mixtures and fuel temperature limitations. (See Note 8)

Engine Limits	Torque	Output	Turbine	Gas Gen.
	<u>Pressure</u>	Shaft Speed	Out Temp	<u>Speed</u>
Takeoff	100%(71.4 psi)	101%	768°C	105%
(5 min)	495 shp	(6,076 rpm)	$(1,414^{\circ}F)$	(53,550 rpm)

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<u>IX - MODEL 206L-4</u> (cont'd)

Engine Limits Torque Output Turbine Gas Gen **Pressure** Shaft Speed Out Temp Speed 101% 716°C 105% Maximum 75% (54 psi) Continuous 373.7 shp (6,076 rpm) $(1,320^{\circ}F)$ (53,550 rpm)

(See 206L-4 Rotorcraft Flight Manual for Transient Limits)

Rotor Limits Power Off Power On

Maximum 422 rpm Maximum 398 rpm (Dual Tach Reading 107%) Dual Tach Reading 101%)

Minimum 355 rpm Minimum 390 rpm (Dual Tach Reading 90%) (Dual Tach Reading 99%)

Basic VNE is 140 KIAS sea level to 3,000 feet density altitude. Decrease VNE for ambient conditions and internal loading in accordance with Airspeed Limitation Placard in the 206L-4 Rotorcraft Flight Manual. Also see the 206L-4 Rotorcraft Flight Manual for VNE limits associated

with peculiar operating conditions.

C.G. range (a) Longitudinal C.G. Limits. (See Note 19)

(Internal Loading) Forward Limit

(+118.0) up to 2,800 lbs. changing linearly to (+119.4) at 4,450 lbs.

Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+126.4) at 4,450 lbs.

(External Loading) Forward Limit

(+118.0) up to 2,800 lbs. changing linearly to (+119.5) at 4,550 lbs.

Aft Limit

(+128.5) up to 2,900 lbs. changing linearly to (+126.3) at 4,550 lbs.

(b) Lateral C.G. Limits

Left 4.0 inches up to 4,150 lbs., 1.2 inches above Right 3.5 inches up to 4,150 lbs., 1.61 inches above

Empty Weight C.G. range

Airspeed limits

Refer to Section 8 of the appropriate Model Maintenance Manual.

Maximum weight 4,450 lbs. (2018.5 kg) (Internal Loading)

4,550 lbs. (2063.8 kg) (External Loading)

Altitude limits Maximum altitude at 4,150 lbs. or less is 20,000 feet pressure altitude. Maximum altitude at 4,151

lbs. to 4,450 lbs is 10,000 feet density altitude

Minimum crew 1 at (65.0)

Passengers 1 at (+65.0), 2 at (+91.0), and 3 at (+129.0). Refer to 206L-4 Rotorcraft Flight Manual for

limitations.

Maximum cargo Refer to 206L-4 Rotorcraft Flight Manual for loading schedule.

Fuel capacity 110.7 gallons (+131.7): unusable fuel, 1 gallon at (+94)

Oil capacity 5.5 quarts (+205.0); usable oil, 2 quarts (included in capacity); undrainable oil, 1.6 lbs. (+192).

Rotor blade and For rigging information refer to the 206L-4 Maintenance Manual.

Control Movement

Serial Nos. eligible 52001 and subsequent except 52144

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X. - Model 407 7PCLH (Normal Category). Approved February 9, 1996

Engine Rolls Royce (Allison) Model 250-C47B with Chandler Evans EC-135 (FADEC) Fuel Control System

or Model 250-C47B/8 or Model 250-C47E/4. Engine Type Certificate No. E1GL.

Fuel ASTM D6615, Type Jet B; ASTM D1655 Type Jet A, and Jet A-1; MIL-DTL-5624 Grade JP-4

(NATO F-40): MIL-DTL-5624 Grade JP5 (NATO F-44); and MIL-DTL-83133 Grade JP8 (NATO F-

34). See Rotorcraft Flight Manual for fuel mixture and fuel temperature limitations.

Engine Limits	Torque <u>Pressure</u>	Output Shaft Speed	Turbine Out Temp	Gas Gen. <u>Speed</u>
Takeoff	100%(91.4 psi)	100%	779°C	105%
(5 min)	674 shp	(6,317 rpm)	(1,434°F)	(53,550 rpm)
Maximum	93.5%(85.5 psi)	100%	727°C	105%
Continuous	630 shp	(6,317 rpm)	(1,341°F)	(53,550 rpm)

(See 407 Rotorcraft Flight Manual for Transient Limits)

Rotor Limits <u>Power Off</u> <u>Power On</u>

Maximum 422 rpm Maximum 413 rpm
(Dual Tach Reading 107%) Dual Tach Reading 100%)
Minimum 351 rpm Minimum 409 rpm

(Dual Tach Reading 85%) (Dual Tach Reading 99%)

Airspeed limits

(See Note 8)

Basic VNE is 140 KIAS sea level to 3,000 feet density altitude. Decrease VNE for ambient conditions and internal loading in accordance with Airspeed Limitation Placard in the 407 Rotorcraft Flight Manual. Also see the 407 Rotorcraft Flight Manual for VNE limits associated with peculiar operating conditions.

C.G. range

(a) Longitudinal C.G. Limits cm (in.)

Forward Limit (Internal Loading)

302.3 cm (+119.0) up to 2041 kg (4,500 lbs.) changing linearly to 303.5 cm (+119.5) at 2268 kg (5,000 lbs.)

Aft Limit (Internal Loading)

327.7 cm (+129.0) up to 2268 kg (5,000 lbs.)

Forward Limit (Internal Loading when kit 407-706-020 (5250 lb kit) is installed)

 $302.3~{\rm cm}~(+119.0~{\rm in})$ up to $2041~{\rm kg}~(4,500~{\rm lbs.}),$ changing linearly to $304.2~{\rm cm}~(+119.8~{\rm in})$ at $2381~{\rm kg}~(5,250~{\rm lbs.})$

Aft Limit (Internal Loading when kit 407-706-020 (5250 lb. Kit) is installed)

327.7 cm (+129.0 in) up to 2268 kg (5,000 lbs), changing linearly to 326.8 cm (128.7 in) at 2381 kg (5,250 lbs)

Forward Limit (External Loading)

302.3 cm (+119.0 in) up to 2041 kg (4,500 lbs.) changing linearly to 306.1 cm (+120.5in) at 2722 kg (6,000 lbs.)

Aft Limit (External Loading)

327.7 cm (+129.0 in) up to 2268 kg (5,000 lbs) changing linearly to 324.1 cm (127.6 in) at 2722 kg (6,000 lbs.)

(b) Lateral C.G. Limits (Internal Loading)

Left 6.4 cm (2.5 in.) up to 1588 kg (3,500 lbs.), changing linearly to 3.9 cm (1.5 in.) at 2268 kg (5,000 lbs.)

Right 7.6 cm (3.0 in.) up to 1588 kg (3,500 lbs.) changing linearly to 5.2 cm (2.0 in.) at 2268 kg (5,000 lbs.)

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X. - Model 407 (cont'd)

C.G. Limits (Cont'd) Lateral C.G. Limits (Internal Loading when kit 407-706-020 (5250 lb kit) installed)

Left 6.4 cm (2.5 in.) up to 1588 kg (3,500 lbs), changing linearly to 3.5 cm (1.4 in) at

2381 kg (5,250 lbs.)

Right 7.6 cm (3.0 in.) up to 1588 kg (3,500 lbs), changing linearly to 4.8 cm (1.9 in) at

2381 kg (5,250 lbs.)

Lateral C.G. Limits (External Loading)

Left 10.2 cm (4.0 in.) up to 2268 kg (5,000 lbs.),

3.9 cm (1.5 in.) at 2268 kg (5,000 lbs.), changing linearly to 2.3 cm (0.9 in.) at 2722

kg (6,000 lbs.)

Right 10.2 cm (4.0 in.) up to 2268 kg (5,000 lbs.),

5.2 cm (2.0 in) at 2268 kg (5,000 lbs.) changing linearly to 3.6 cm (1.4 in.) at 2722 kg

(6,000 lbs.)

Maximum weight

2268 kg (5,000 lbs.) (Internal Loading)

(Mass)

2381 kg (5,250 lbs.) (Internal Loading) when equipped with kit 407-706-020

2722 kg (6,000 lbs.) (External Loading) (See Note 24 for external cargo configuration information)

Altitude limits Maximum altitude at 2268 kg (5,000 lbs.) or less is 20,000 feet pressure altitude.

Maximum altitude above 2268 kg (5,000 lbs.) is 10,000 feet density altitude

Minimum crew 1 pilot

Maximum Occupants 7 (includes crew)

Maximum cargo Refer to 407 Rotorcraft Flight Manual for loading schedule.

Fuel capacity 483.7 litres (106.4 Imp. Gal) (127.8 US Gal) usable,

10.0 litres (2.21 Imp. Gal) (2.65 US Gal) unusable.

Oil capacity 5.21 litres (4.58 Imp. Quarts) (5.5 US quarts); usable oil 2 US quarts included in capacity.

Undrainable oil, 1.6 lbs.

Rotor blade and Control Movement

For rigging information refer to the 407 Maintenance Manual

Serial Nos. eligible 53000 to 53138, 53140 to 53279, 53281 to 53470, 53472 to 53900, 5391l to 54800, 54805 and

subsequent

Data Pertinent to all Models except as indicated

Datum Model 206 Station 0 (datum is 7 inches forward of most forward point of fuselage cabin nose section).

Models 206A, 206A-1, 206B, 206B-1, 206L, 206L-1, 206L-3, 206L-4, and 407 Station 0 (datum is 1 inch forward of most forward point of fuselage cabin nose section or 55.16 inches forward of jack point

centerline).

Leveling Means 206 Series except 206A S/N 104-583. Plumb line from ceiling left rear cabin to index plate on floor.

206A S/N 104-583. Level pads on right side in the transmission compartment.

407 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.

Certification Basis FAR 21.29 and CAR 6 dated December 20, 1956, Amendments 6-1 thru 6-4, CAR 6.307(b) and 6.637 of

Amendment 6-5, Special Conditions dated October 2, 1962, as revised February 8, 1966, plus the

water/alcohol power augmentation special conditions dated November 14, 1967, revised September 15, 1975.

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Certification Basis (cont'd)

Special conditions for "IFR Instrument Flight requirements for Bell Model 206B/L" submitted to Bell by FAA (ASW-216) letter dated July 16, 1975.

Exemption No. 595 for Model 206A only. Exemption No. 595A for Model 206A-1 only.

Exemption No. 595B for Model 206B AND 206B-1 only.

206L-1 with Rolls Royce (Allison) 250-C30P engine (See Note 38)

a. For all areas not affected by the installation of BHT kit P/N 206-706-520, CAR 6 dated December 20, 1956, Amendments 6-1 thru 6-4, CAR 6.307(b) and 6.637 of Amendment 6-5, Special Conditions dated October 2, 1962, as revised February 8, 1966.

b. 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 December 20, 1956, Amendments 6-1 through 6-4, Special Conditions dated October 2, 1962 as revised February 8, 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, 27.1141, 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.

FAR Part 36 dated 3 November 1969 Amendment 36-1 thru 36-14, Subpart H.

206L-1 modified per Bell Service Instruction BHT-206-SI-2052 (See Note 39)

- a. For all areas not affected by the installation of BHT kit P/Ns 206-705-420 and 206-706-530, CAR 6 dated December 20, 1956, Amendments 6-1 thru 6-4, CAR 6.307(b) and 6.637 of Amendment 6-5, Special Conditions dated October 2, 1962, as revised February 8, 1966.
- b. 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 December 20, 1956, Amendments 6-1 through 6-4, Special Conditions dated October 2, 1962 as revised February 8, 1966. Plus the following regulations from FAR Part 27 dated October 2, 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, 29.931, 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.

Plus 206L-4 Equivalent Safety Finding for Skid Landing Gear (Drop Test) – FAR 27.723, 27.725, 27.727

FAR Part 36 dated 3 November 1969 Amendment 36-1 thru 36-14, Subpart H.

206L-3

For 206L-3 basis of certification is the same as 206L-1 with Rolls Royce (Allison 250-C30P engine plus FAR 27.1529 at Amdt 27-18.

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206L-3 modified per Bell Service Instruction BHT-206-SI-2052 (See Note 39)

a. For all areas not affected by the installation of BHT kit P/Ns 206-705-420 and 206-706-530, CAR 6 dated December 20, 1956, Amendments 6-1 thru 6-4, CAR 6.307(b) and 6.637 of Amendment 6-5, Special Conditions dated October 2, 1962, as revised February 8, 1966.

b. 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 December 20, 1956, Amendments 6-1 through 6-4, Special Conditions dated October 2, 1962 as revised February 8, 1966. Plus the following regulations from FAR Part 27 dated October 2, 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, 29.931, 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.

Plus 206L-4 Equivalent Safety Finding for Skid Landing Gear (Drop Test) - FAR 27.723, 27.725, 27.727

FAR Part 36 dated 3 November 1969 Amendment 36-1 thru 36-14, Subpart H.

<u>For 206B S/N 5101 through 5400</u>. Meets fuel system qualification to NPRM 90-24. Crash resistant fuel system in normal and transport category rotorcraft, Draft paragraph 29-952 and associated revised paragraphs.

For 206L-4 FAR 21.29 and Part 27 dated 2 October 1964 Amendment 27-1 thru 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, 27.1585, 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, 6.624, 6.625, 6.626 of CAR Part 6 dated 6 December 1956 Amendment 6-1 thru 6-4. Exceptions to FAR 27 are the deletion of: 27.71, 27.177, 27.399, 27.562, 27.610, 27.954, 27.1195, 27.1322.

Equivalent Safety Findings: 1. Skid Landing Gear (Drop Test) - FAR 27.723, 27.725, and 27.727; 2. Fuel Tanks (Drop Test) - FAR 27.965(c)(1) and (c)(2).

FAR Part 36 dated 3 November 1969 Amendment 36-1 thru 36-14, Subpart H.

For Model 407

(a) FAR part 27, dated October 2, 1964 Amendment 27-1 through 27-30 with;

Ultimate inertia load factors Section 27.561(b)(3)(i-iv) remain at the levels specified by Section 27.561(b)(3) at Amdt 27-0;

Section 27.563 at Amdt 27-25;

Section 27.785 at Amdt 27-21;

Section 27.1093 at Amdt 27-8; and

Section 27.173 at Amdt 27-1

Section 27.175 at Amdt 27-1.

Exceptions to FAR 27 are the deletion of sections: 27.562, 27.1195, and 27.952(b)(1)

Section 27.1317 at Amdt 27-42 for the 250-C47E/4 engine installation

- (b) FAR 36 Amdt 36-1 through 36-20.
- Transport Canada Special Conditions
 High Intensity Radiated Fields (HIRF), SCA 95-02, April 26, 1995 (except for the 250-C47E/4 engine installation)
- (d) Equivalent Safety Findings exist with respect to the following regulations: -FAR 27.307(b)(5), 27.723,

27.725, and 27.727

Skid Type Undercarriages

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Certification Basis (d) (cont'd)

-FAR27.952 -FAR27.952 -FAR27.965(c)(1) and (2) -FAR27.1305(p) Forward Fuel Tank Drop Test Aft Fuel Tank Drop Test Fuel Tank Pressure Test

Engine Anti-Ice Annunciation (See Note 41)

Installation of Integrated Avionics System (Garmin G1000H) and affected areas on Bell Model 407 helicopters, Serial Numbers 54300 to 54303 and 54305 to 54566 and Serial Numbers 54568 to 54800. Installation of the Integrated Avionics System (Garmin G1000H NXi) and affected areas on 407 Serial Number 54304, 54567 and Serial Numbers 54805 and Subsequent (See Note 42)

(a) 14 CFR part 27, dated October 2, 1964 Amdt 27-1 through 27-46 with the following exceptions; Ultimate inertia load factors 14 CFR 27.561(b)(3)(i-iv) remain at the levels specified by 14 CFR 27.561(b)(3) at Amdt 27-0;

14 CFR 27.785 at Amdt 27-21

- (b) 14 CFR 36 Amdt 36-1 through 36-20.
- (c) Equivalent Safety Finding:

Number SP4107RD-R/F-1

14 CFR part 27.1545 (b)(2) Airspeed Indicator

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the helicopter for certification.

In addition, the following items of equipment are required:

- (a) Engine Out Warning System all models.
- (b) Outside air temperature gage for Models 206A, 206A-1, 206B, 206L, 206L-1, 206L-3, 206L-4, and 407.
- (c) FAA approved Helicopter Flight Manual.
 - (1) a. Model 206A dated October 20, 1966, reissued May 15, 1970.
 - Model 206A (Serial No. 503 only) dated October 20, 1966, reissued August 19, 1968, for 2900 lbs gross weight.
 - c. Model 206A dated April 2, 1971, for 205-C20 Engine.
 - (2) Model 206B, dated July 30, 1971, reissued December 20, 1972. Model 206B, Serial No. 2212 (See Note 21), dated July 1, 1977.

Model 206B, Serial No. 5101 through 5400 (See note 31), TH-67 Configuration Fuel System and Torque Indicator (BHT-206B3-FMS-33), dated 5 October, 1993.

- (3) Model 206L, dated September 22, 1975.
- (4) Model 206L-1, dated May 17, 1978.
- (5) Model 206L-3, dated December 9, 1981.
- (6) Model 206L-4, dated October 2, 1992.
- (7) Model 407 Serial Numbers 53001 to 54299 are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-407-FM-1, dated February 9, 1996
- (8) Model 407 Serial Numbers 54300 to 54303 and 54305 to 54566 and Serial Numbers 54568 to 54800 are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-407-FM-2, dated March 4, 2011. (See Note 42)
- (9) Model 407 Serial Numbers 54304, 54567 and 54805 and subsequent are to be operated in accordance with Bell Rotorcraft Flight Manual BHT-407-FM-3, dated January 17, 2018. (see Note 42)

Production Basis

None for 206. Production Certificate No. 100 for Models 206A, 206A-1, 206B, 206B-1, 206L, 206L-1, 206L-3, 206L-4 and 407. (See Note 29 and Note 32 for helicopters produced by Bell Textron Canada Limited)

NOTE 1. 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

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the time of original certification. The certificate empty weight and corresponding C.G. locations must include undrainable oil and unusable fuel for the appropriate model.

NOTE 2.

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 required in the approval flight manual must be installed in the appropriate locations.

NOTE 3. The retirement times of critical parts are listed in the following table. These limitations may not be changed without FAA engineering approval.

MODEL 206, 206A-1 AND 206B-1

For a list of Critical Parts contact; Manager, Rotorcraft Directorate; Department of Transportation; Federal Aviation Administration Fort Worth, Texas 76193-0100

MODEL 206A and 206B (Refer to FAA approved Chapter 4 of the Maintenance Manual, BHT - 206A/B-MM-1, for airworthiness lives of components applicable to the 206A and 206B)

MODEL 206L (Refer to FAA approved Chapter 4 of the Maintenance Manual, BHT-206L-MM-1, for airworthiness lives of components applicable to 206L)

MODEL 206L-1 (Refer to FAA approved Chapter 4 of the Maintenance Manual, BHT-206L-1-MM-1, for airworthiness lives of components applicable to 206L-1)

MODEL 206L-3 (Refer to FAA approved Chapter 4 of the Maintenance Manual, BHT 206L3-MM-1 for the service lives of components applicable to the Model 206L-3)

MODEL 206L-4 (Refer to FAA approved Chapter 4 of the Maintenance Manual, BHTI 206L4-MM-1 for service lives of components applicable to the 206L-4

MODEL 407 (Refer to approved Chapter 4 of the Maintenance Manual, BHT-407-MPI for service lives of components applicable to the Model 407)

NOTE 4. Information essential for proper maintenance is contained in the appropriate Model Bell maintenance or overhaul manual.

NOTE 5. Reserved

NOTE 6. Power on rotor and engine output shaft speed limits increase (inversely with power as shown in approved flight manuals for all models).

NOTE 7. Reserved

NOTE 8. For all operations below 40 F ambient temperature, all fuel used in the Model 206A must contain Phillips PFA-55 MB 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. This additive is eligible as described above but not required for use in the Models 206B, 206L, 206L-1, 206L-3, and 206L-4 helicopter.

Note Anti-ice additive is eligible but not required and the above 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 January 13, 1970, is required. For Model 407 S/N 54304, S/N 54567 and S/N 54805 and subsequent (See Note 42) operating in ambient temperatures below -12.2°C (10°F) OAT, all fuel must contain MIL-DTL-85470 or ASTM D4171 anti-icing additive contration to be 0.07% to 0.15% by volume.

NOTE 9. Engine fuel system components as listed below are required to assure satisfactory engine/rotor drive system torsional stability.

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Model 206A with Model 250-C18 or 250-C18B engine:

Accumulator Assy. Allison *P/N 6848165, Double Check Valve *P/N 6854622, plus Accumulator Assy. Kit Allison P/N 6858338

or

Accumulator Assy. Allison *P/N 6848165, Double Check Valve Allison *P/N 6873599, plus Accumulator Assy. Kit Allison P/N 6874921

Model 206B and Model 206L with Bendix Fuel Control:

Allison Accumulator Kit P/N 6887645 (See Allison 250 Installation Bulletin No. 1004.)

Model 206L-1 with Bendix DP-T3 fuel control:

Equipment required for system torsional stability (accumulator P/N 6875224 and Double Check Valve P/N 6876557) is approved and included as part of the Allison Model 250-C28B engine.

Model 206L-3 with Bendix DP-V1 Fuel Control:

Equipment required for system torsional stability (accumulator P/N 687522) is approved and included as part of the Allison Model 250-C30P engine.

* These items are included in basic 250-C18, 250-C18B, and 250-C10D engines.

NOTE 10.

The engine air induction systems on the Models 206A, 206B, 206L, 206L-1, and 206L-3 have 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.

NOTE 11.

Models 206A and 206B helicopters that have external cargo hooks installed per Service Instructions No. 206-4 (revised July 1, 1968, or later) or No. 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 3,350 pounds gross weight in accordance with the limits of the 206A FAA approved Helicopter Flight Manual Supplement dated May 3, 1967, as reissued August 19, 1968, or the 206B FAA approved Helicopter Flight Manual Supplement dated July 30, 1971, reissued December 20, 1972, as appropriate. The retirement times listed in Note 3 are not changed.

NOTE 12.

Prior to civil certification, the military Model OH-58A must be modified in accordance with approved data. Information regarding modification to the Model 206A-1 configuration is contained in Type certification No. H2SW Type Design Data. In addition, all historical records of the aircraft must be available and conformity to the FAA approved 206A-1 type design data must be shown.

NOTE 13.

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 November 26, 1969, reissued May 15, 1970. The 250-C18D engine is also eligible without water alcohol power augmentation at limitations and performance shown for the 250-C18 engine.

- NOTE 14. Engine must be modified in accordance with Airworthiness Directives 69-18-4.
- NOTE 15. Canadian Military Model COH-58A serial numbers 44001 and up are not eligible for Federal Aviation Administration type certification in any category.
- NOTE 16. Military Model OH-58A surplused from other than an Armed Force of the United States is not eligible for Federal Aviation Administration type certification in any category.
- NOTE 17. Models 206A and 206B helicopters that have an external cargo hook installed per Service Instruction No. 206-94 meet the structural and design requirements of the certification basis, provided the weight in excess

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of the normal category gross weight is not imposed on the landing gear, when operated to 3,350 pounds gross weight in accordance with the limits of 206A FAA-approved Helicopter Flight Manual Supplement dated June 16, 1972, as reissued December 20, 1972. The retirement times listed in Note 3 are not changed.

NOTE 18. Model 206A helicopters may be converted to Model 206B helicopters in accordance with Bell Helicopter

Company Service Instruction No. 206-80, dated May 11, 1971, or later revision.

NOTE 19. Installed battery capacity must be at least 13 ampere hours for the 206L and 17 ampere hours for the 206L-

1, 206L-3, 206L-4, and 407 to insure fuel transfer pump operation and c.g. control after electrical system

failure. A special emergency circuit for fuel transfer pump operation is provided.

NOTE 20. Bendix P/N DP-N1 or DP-N2 is eligible on Model 206B helicopters - See Allison 250 Installation Bulletin

No. 1004.

NOTE 21. Model 206B, Serial No. 2212 and subsequent

Engine Allison Model 250-C20B with Bendix P/N DP-N2 Fuel Control Alternate Fuel Control CECO Mod. MC-40, Control P/N 104900A3-2, Governor P/N

6851468E

Alternate Engine Allison Model 250-C20J with Bendix P/N DP-N2 and Bendix power

turbine governor AL-AAI

Fuel ASTM D6615 Type Jet B; ASTM D1655 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 Grade JP-8 (NATO F-34). See Rotorcraft Flight Manual for Fuel Mixture and Fuel Temperature

Limitations (see Note 8).

Engine limits	Torque	Output	Turbine	Gas Gen.
	<u>Pressure</u>	Shaft Speed	Out Temp.	<u>Speed</u>
Takeoff	100%	100%	810°C	105%
(5 min.)	(317 shp)	(6,016 rpm)	(1490°F)	(53,519 rpm)
Max.	85%	100%	738°C	105%
Continuous	(270 shp)	(6,016 rpm)	(1360°F)	(53,519 rpm)

Rotor Limits Power Off Power On Maximum 422 rpm Maximum 395

> (Dual Tach Reading 107%) (Dual Tach Reading 100%) Minimum 355 rpm Minimum 382 rpm (Dual Tach Reading 90%) (Dual Tach Reading 97%)

Empty Weight C.G. range Refer to Section 8 of the appropriate Model Maintenance Manual.

NOTE 22. Model 206A and 206B engine Fuel Controls must be set for 235 pounds per hour (pph) Maximum Fuel

Flow. Model 206L fuel control must be set for 270 PPH, Model 206L-1 must be set for 290 PPH, and 206L-3 must be set for 325 PPH (except for Note 28), and Model 206L-4 must be set for 356 PPH.

NOTE 23. For the Model 206L-1, only Marathon Model CA 170 or Saft Model 1756 batteries are eligible.

NOTE 24. Model 206L-1 or 206L-3 helicopters that have an external cargo hook installed per Service Instruction No.

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 4,250 pounds gross weight in accordance with the limits of the appropriate FAA-approved Helicopter Flight

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Manual Supplement, 206L-1, dated May 17, 1978, or 206L-3, dated December 11, 1981, No. BHT-206L-3-FMS4. Model 206L-4 helicopters equipped with this external cargo hook may operate to 4,550 pounds gross weight in accordance with the limits of FAA approved Helicopter Flight Manual Supplement, BHT-206L4-FMS-4 dated October 1992.

The retirement times listed in Note 3 are not changed.

Model 407 helicopters equipped with an external cargo hook may operate to 2722 kg (6,000 lbs.) 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 September 4, 1998.

NOTE 25.

Model 206A/B helicopters, Serial Nos. 498 through 2211, may be converted to the configuration defined by Note 21 by modification as prescribed by Bell Textron Service Instruction No. 206-112, dated March 17, 1978, or later revision. Alternate engine (Model 250-C20J) does apply to these aircraft. Refer to Bell Information Letter 206-82-26 regarding applicable engine models.

NOTE 26.

Model 206L-1 helicopters that have main rotor yoke, P/N 206-011-149-101, installed, may be operated to 4,150 pounds internal gross weight in accordance with the limits of 206L-1 FAA-approved Helicopter Flight Manual Supplement, dated November 9, 1979. The retirement times listed in Note 3 are not changed.

NOTE 27.

Model 206B helicopters designated as TH-57, TH-57A and TH-57B were delivered to the US Navy for training purposes. Model 206B serial numbers 3437, 3540 thru 3545, 3572, 3675, 3690 thru 3742, 3747, 3748, 3751 thru 3754, 3758 thru 3762, 3766 thru 3769, 3773 thru 3775, 3779 thru 3781, 3828 thru 3848, 3882 thru 3917 and 5001 thru 5040 are not eligible for commercial certification.

NOTE 28.

Bell Textron Service Instruction Number 206-2039 provides for an increased takeoff power rating up to 456 HP. Special maintenance procedures are required with use of this rating. See Service Instruction Number 206-2039. Not applicable to 206L-1 or 206L-4.

NOTE 29.

Model 206B S/N 3959 and subsequent except 4048, Model 206L-3 S/N 51215 and subsequent and Model 206L-4 S/N 52001 and subsequent are manufactured by Bell Textron Canada Limited under the Canadian Department of Transportation, Manufacturers Approval No. 1-86. S/N 4048 was produced under FAA Production Certificate No. 100 by Bell Helicopter Textron Inc., Fort Worth, Texas.

Import Requirements:

To be considered eligible for operation in the United States, each Aircraft manufactured under this Type Certificate must have a U. S. Airworthiness Certificate that may be issued on the basis of the Canadian Department of Transport Certificate of Airworthiness for Export signed by the Minister of Transport containing the following statement:

"The rotorcraft covered by this certificate has been examined, tested, and found to comply with the type design approved under Type Certificate H2SW and to be in condition for safe operation".

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is 21.183(c) or 21.185(c). The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.21 exported from countries other than the country of manufacture (e.g., third party country) is FAR Sections 21.183(d) or 21.183(b).

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft.

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NOTE 30.

The Allison engine Model 250-C20JN is the 250-C20J engine with an auxiliary gear pad. The 250-C20J may be modified into 250-C20JN with Allison kit P/N 6896857. See Allison Installation Bulletin No. 1012 Rev 3.

NOTE 31.

MODEL 206B, SERIAL NO. 5101 THROUGH 5400

Model 206B Serial No. 5101 through 5313 are designated by the U.S. Army as the TH-67 Creek.

Engine:

Allison Model 250-C20J, P/N 23006900, with Bendix Fuel Control. The engine is modified with Allison Kit, P/N 6896857. (See Detroit Diesel Allison Installation Bulletin.

1012, Rev 3). The engine is used with P/N 23005745 Gearbox Assembly which includes the spare accessory drive.

C.G. Range: (Same as 206B S/N 2212 and sub)

Passengers: None

Fuel Capacity: 82.6 gallons (+118.97); unusable fuel, 1 gallon (+104.5)

All other data is same as Model 206B as noted in Section IV of this document.

NOTE 32.

Model 407 S/N 53000 and subsequent are manufactured by Bell Textron Canada Limited (see Note 44) under the Canadian Department of Transportation, Manufacturers Approval No. 1-86.

Import Requirements:

To be considered eligible for operation in the United States, each Aircraft manufactured under this Type Certificate must have a U. S. Airworthiness Certificate that may be issued on the basis of the Canadian Department of Transport Certificate of Airworthiness for Export signed by the Minister of Transport containing the following statement:

"The rotorcraft covered by this certificate has been examined, tested, and found to comply with the type design approved under Type Certificate H2SW and to be in condition for safe operation".

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is 21.183(c) or 21.185(c).

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.21 exported from countries other than the country of manufacture (e.g., third party country) is FAR Sections 21.183(d) or 21.183(b).

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NOTE 33.	Bell Textron Service Bulletins are approved by Transport Canada and include a statement to that effect. Such approval may be interpreted as approved by FAA.
NOTE 34.	The Allison engine Model 250-C10D military's designation is T63-A-700. This engine is identified by this designation in the military operator's manual for the OH-58A helicopter (TM55-1520-228-10).
NOTE 35.	Note deleted in entirety per Revision 47.
NOTE 36.	Note deleted in entirety per Revision 52.
NOTE 37.	Model 407 helicopters equipped with Bell Kit 407-706-020, may be operated to 2381 kg (5,250 lb.) internal gross weight in accordance with the limits of 407 FAA approved Rotorcraft Flight Manual Supplement dated May 7, 1999.
NOTE 38.	Model 206L-1 helicopters modified per Bell Service Instruction BHT-206-SI-2050 (BHT Kit 206-706-520) have engine Rolls-Royce (Allison) 250-C30P installed. Model 206L-1 helicopters with Rolls Royce (Allison) 250-C30P engine are to be operated in accordance with FAA approved Rotorcraft Flight Manual BHT-206L3-FM-1 dated December 19, 2007 or later FAA approved revision.
NOTE 39.	Model 206L-1 and Model 206L-3 helicopters modified per Bell Service Instruction BHT-206-SI-2052 (BHT Kit 206-706-530) have a commercial designation of 206L-1+ and 206L-3+.
NOTE 40.	Model 206L-1 and Model 206L-3 helicopters modified per Bell Service Instruction BHT-206-SI-2052 (BHT Kit 206-706-530) may operate to 4450 lbs internal gross weight and 4550 lbs external gross weight in accordance with the limitations specified in Bell Rotorcraft Flight Manual BHT-206L4-FM-1.
NOTE 41.	The Equivalent Level of Safety Finding for 14 CFR 27.1305(p) applies to Model 407, Serial Number 53000 to 53094. Model 407, Serial Number 53095 and subsequent comply with the requirements of 14 CFR 27.1305 (p) for Engine Anti-Ice Annunciation.
NOTE 42.	Model 407 helicopters Serial Numbers 54300 to 54303 and 54305 to 54565 have a commercial designation of 407GX (Rolls Royce 250-C47B plus Garmin G1000H). Model 407 Serial Numbers 54566 and 54568 to 54800 have a commercial designation of 407GXP (Rolls Royce 250-C47B/8 plus Garmin G1000H). Model 407 Serial Numbers 54304, S/N 54567 and 54805 and subsequent have a commercial designation of 407GXi (Rolls Royce 250-C47E/4 plus Garmin G1000H NXi).
NOTE 43.	Paragraph X Model 407 7PCLH (Normal Category). Approved February 9, 1996. Correction made to airspeed limits basic VNE from 130 to 140 KIAS sea level to 3,000 feet density altitude. (Reference: Airworthiness Directive, AD 2001-01-52 R1; published in Federal Register, 66 FR 33019, June 20, 2001; effective date: July 25, 2001.)

Effective December 16, 2019 the name Bell Helicopter Textron Canada Limited was revised to Bell Textron Canada Limited.

....END....

NOTE 44.