DEPARTMENT OF TRANSPORTATION FFEDERAL AVIATION ADMINISTRATION

A-757 Revision 27 Hawker Beechcraft

Beechcraft C18S (Army C-45, -45A,

-45F, UC-45B, -45F, AT-7, -7A, -7B, -7C;

Navy JRB-1, -2, -3, -4, SNB-2, -2C) March 26, 2007

AIRCRAFT SPECIFICATION NO. A-757

This aircraft specification which is part of Type Certificate No. A-757 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Hawker Beechcraft Corporation

9709 E. Central Wichita, KS 67201

Type Certificate Holder Record Beech Aircraft Company transferred to

Raytheon Aircraft Company on April 15, 1996

Raytheon Aircraft Company transferred to Hawker Beechcraft Corporation on March 26, 2007

<u>I - Model C18S (Army C-45, -45A, -45F, UC-45B, -45F, AT-7, -7A, -7B, -7C; Navy JRB-1, -2, -3, -4, SNB-2, -2C), 10 PCLM, Approved September 23, 1944</u>

See Note 3 for conversion of military models. Model C18S same as B18S, TC-710, except equipment installations, stabilizer setting and minor structural changes. Model B18S, S/N 430 through 434, 6290, 6350, 6414 and 6426 are eligible under this specification. Equipment items on S/N 430 through 434 will conform to Aircraft Specification No. A-710.

Engines Two P&W Wasp Jr. SB, with one 4-1/2N and one 9N damper each.

See Item 109 for optional engines.

Fuel 80 minimum octane aviation gasoline for continuous rating and takeoff rating of 400 hp.

87 minimum octane aviation gasoline for takeoff rating of 450 hp.

When 87 octane fuel is used, in order to utilize 450 hp. for takeoff, at least one fuel

tank filler should be marked 87 octane minimum.

Tank selector valve placard then should designate the 87 octane tank and state that 87

octane must be used for takeoff.

Engine limits Maximum continuous

(Sea level) 34.5 in. Hg, 2200 rpm. (400 hp.)

(Straight line manifold pressure variation with altitude to 5000 ft.

33.5 in. Hg, 2200 rpm. (400 hp.)

Takeoff (one minute)

34.5 in. Hg, 2200 rpm. (400 hp.) or 36.5 in. Hg, 2300 rpm. (450 hp.)

Airspeed limits Level flight or climb 211 mph. (184 knots)
(TIAS) Glide or dive 253 mph. (220 knots)
Flaps extended 117 mph. (102 knots)

(+107.0) to (+118.9) (with landing gear extended).

Datum Nose of fuselage, most forward point, 102 inches forward of centerline

of main wing spar.

Leveling means Leveling lugs on top of fuselage, forward of cabin door.

Maximum weight 7850 lb.
No. of seats Maximum 10

C.G. range

See item 402 for optional arrangements.

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Maximum baggage 600 lb. (+28) (nose compartment: When 50 gal. auxiliary fuel tank is installed, capacity

of this compartment is reduced to 300 lb. at (+17). When 38 gal. auxiliary fuel tank is installed, capacity of this compartment is reduced to 372 lb. at (+17) 300 lb. (+243) (rear

compartment)

Fuel capacity

Oil capacity

(+155)).

206 gal. (four tanks in wings, two 78 gal. tanks at (+126) and two 25 gal. tanks at

16 gal. (8 gal. tank in each nacelle at (+93)).

Anti-icer fluid capacity 3 gal. (20 lb.) (+97)

Control surface movements Wing flaps Down 44°

Elevator trim tab 18° 12° Down Up Elevator Up 33° Down 25° Aileron trim tab 21° 20° Up Down Aileron Up 40° Down 23° Rudder trim tab Right 30° Left 21° Rudder Right 21° Left 21° Stabilizer Fixed

Serial Nos. eligible 364 and up. Model B18S, S/N 430 through 434, 6290, 6350, 6414, 6424 and 6426 are

eligible for certification as Model C18S at a maximum weight of 7850 lb. No conversions necessary except name plate and placards. Equipment items on S/N 430

through 434 conform to Aircraft Specification A-710 (B18S).

Required equipment In addition to the pertinent required basic equipment specified in CAR 4a, the following

items of equipment must be installed: 1, 2, 7 or 8, 101, 102, 103, 201, 202, 203, 301,

302, 303, 304, 401 and 408.

Specifications Pertinent to All Models

Certification basis T

Type Certificate No. 757 (CAR 4a)

For items 601 and 602 only, CAR 03 (effective November 13, 1945) and paragraph 3.242 of CAR 3 (effective November 1, 1949) as amended by 3-14.

Production basis None. Prior to original certification of each aircraft manufactured subsequent to May 28,

1947, an FAA representative must perform a detailed inspection for workmanship, material and conformity with the approved technical data, and a check of the flight

characteristics.

Export eligibility Eligible for export to all countries subject to the provisions of currently effective

Advisory Circular 21-2.

Canada - Landplane eligible.

Skiplane not eligible. However, structure complies with Canadian requirements for ski installation when item 204 installed, with tread 155

inches and pedestal height of 13 inches.

Equipment: A plus (+) or minus (-) sign preceding the weight of an item indicates net weight change when that item is

installed. Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by an asterisk (*). The asterisk denotes that apaproval has been obtained by someone other than the aircraft manufacturer. An item so marked may not have been manufactured under an FAA monitored or approved quality control system, and therefore conformity must be determined if the item is not identified by a Form FAA-186, PMA or other evidence of FAA production

approval.

Propell	er and Propeller Accessories	
1.	Hamilton-Standard hubs 2D30, blades 6095A-15 or 6095A-16,	157 lb. ea. (+ 34)
	6167A-15 or 6167A-16, 6101A-21 or 6101A-22, 6101A-21S or 6101A-22S	
	Diameter: not over 8'3-1/2" max., 8'7/8"	
	For interchangeable blade models see Propeller Spec. No. 206, (Note 6).	
	Pitch settings: high 29°, low 14°	
2.	Two governors, Hamilton-Standard 1A2-G5	5 lb. ea. (+ 66)
3.	Two spinners: (a) Air Associates HC-1026	8 lb. ea. (+ 31)
	(b) Air Associates HC-1027	5 lb. ea. (+ 31)
4.	Hamilton-Standard hubs 22D30, blades 6181A-15 or 6181A-16	172 lb. ea. (+ 35)
	Diameter: not over 8'3-3/8", not under 8'1-1/8"	
	For interchangeable blade models see Propeller Spec. No. 736, (Note 6).	
	Pitch settings: low 13°, high 86°	
5.	·	5 lb. ea. (+ 66)
6.	Hamilton-Standard hydromatic full-feathering installation	
	(a) Hubs 22D30, blades 6381A-15 or 6381A-16	170 lb. ea. (+ 35)
	Diameter: not over 8'3-3/8", not under 8'1-1/8"	
	For interchangeable blades, see Propeller Spec. No. 736, (Note 6).	
	Pitch settings: low 13°, high 86°	7.11 (
	(b) Governor, Hamilton-Standard 4B2-G6	5 lb. ea. (+ 66)
	(c) Feathering pump, Pesco 525-13BB	14 lb. ea. (+ 77)
7	(d) Controls installation Two Hestaell 2 helds full facthering installs from days 404 001058 or 404 001068	28 lb. (+ 80)
7.	Two Hartzell 3-blade full-feathering instlns. per dwg. 404-001058 or 404-001068	
	(a) Hub and blade assemblies (1) HC P2720 2F byte with 10152 5 1/2 blades and 836 16 crimps.	129 lb. ea. (+ 35)
	(1) HC-B3Z30-2E hubs with 10152-5-1/2 blades and 836-16 spinner or 10152B-5-1/2 blades and 836-17S spinner	130 lb. ea. (+ 35)
	Pitch settings at 30 in. sta.: high 87°, low 17°	130 to. ca. (+ 33)
	Diameter: 95-1/2 in no cutoff permitted	
	Engine tachometer is to be marked with yellow arc between 1500 and	
	1700 rpm. and between 2100 and 2275 rpm. indicating restriction	
	against continuous operation in this range.	
	(2) HC-B3W30-2E hubs with W10152-5-1/2 blades and 836-16 spinner	129 lb. ea. (+ 35)
	Pitch settings at 30 in. sta.: high 87°, low 17°	,
	Diameter: 95-1/2 in no cutoff permitted	
	Engine tachometer is to be marked with yellow arc between 1500 and	
	1700 rpm. and between 2100 and 2275 rpm. indicating restriction against	
	continuous operation in this range.	
	(b) Governor, Woodward 210402 or 210491 or Hartzell C3	6 lb. ea. (+ 66)
	(c) Controls installation (AFM Supplement P/N 130225	32 lb. ea. (+ 79)
	dated April 14, 1964, or later)	
8.	Two Hartzell 3-blade full-feathering propeller instlns. per dwg. 404-001068	
	(a) Hub and blade assemblies HC-B3R30-2E hubs with	135 lb. ea. (+ 35)
	R10152-5-1/2 blades and 836-16 spinner	
	or R10152B-5-1/2 blades and 836-17S spinner	136 lb. ea. (+ 35)
	Pitch settings at 30 in. sta.: high 87°, low 17°	
	Diameter: 95-1/2 in. No cutoff permitted.	
	Engine tachometer is to be marked with yellow arc between 1500 and	
	1700 rpm. and between 2100 and 2275 rpm. indicating restriction against	
	continuous operation in this range.	(11 ((6)
	(b) Governor, Hartzell C3, Woodward 210402 or 210494	6 lb. ea. (+ 66)
	(c) Controls installation (AFM Supplement P/N 130225 dated July 11, 1967)	32 lb. ea. (+ 79)
Engine	and Engine Accessories - Fuel and Oil Systems	
	and Engine Accessories - Fuel and Oil Systems Two oil radiators (G & O E-703-1)	12 lb. (+ 76)
	Fuel pumps	12 10. (+ 70)
102.	(a) Wobble, either	
	(1) United Aircraft U-550-B0	4 lb. (+ 80)
	or (2) Romec RXD-1563	4 lb. (+ 80)
	or (3) United Aircraft U-550-BE	4 lb. (+ 80)
	or (4) Romec RXD-1563-1	4 lb. (+ 80)
	or (5) Romec RXD-1563-7	4 lb. (+ 80)
		(1.20)

Engine	and Engine Accessories - Fuel and Oil Systems (cont'd)	
102.	(b) Two engine-driven, either	
	(1) Pesco 400 series	3 lb. ea. (+ 62)
	or (2) Thompson Products (Army Type G-6)	3 lb. ea. (+ 62)
102	or (3) Chandler Evans (Army Type G-6)	3 lb. ea. (+ 62)
103.	Two carburetor heaters (wt. and arm are for air scoop valve	21 lb. ea. (+ 62)
104.	and one set of heater muffs) Two carburetor air filters and ducts for both engines	30 lb. (+ 44)
105.	Starters (Eclipse E80)	20 lb. ea. (+ 70)
106.	Auxiliary fuel tank in nose baggage compartment	20 10. ca. (+ 70)
	(a) 50 gal. (nose baggage is reduced to 300 lb.)	45 lb. (+ 38)
	(b) 38 gal. (nose baggage is reduced to 373 lb.)	32 lb. (+ 37)
	This item may be installed or retained in the military models provided satisfactory	
	drain and fuel gauges are installed in lower tank and a finger strainer of	
	approximately 10 mesh is installed in fuel tank outlet.	
107.	Oil tanks	Negligible weight
	(a) 8-1/2 gal.	-3 lb. ea. (+ 93)
100	(b) 6-1/2 gal.	14 lb. ea. (+ 77)
108. 109.	Oil dilution valve and system Engines (must have one 4-1/2N and one 9N damper)	5 lb. (+ 97) Use act. wt. change
109.	(a) P&W Wasps Jr. SB-2 (limits same as SB)	Ose act. wt. change
	(b) P&W Wasps Jr. SB-3 (limits same as SB)	
	(c) P&W Wasps Jr. T1B2	
	Limits	
	Max. continuous	
	(Sea level) 35 in. Hg 2200 rpm. (400 hp.)	
	(Straight line manifold pressure variation with altitude	
	to 3800 ft.) 34 in. Hg 2200 rpm. (400 hp.)	
	Takeoff (one minute)	
	35 in. Hg 2200 rpm. (400 hp.)	
	37.5 in. Hg 2300 rpm. (450 hp.)	
	(d) P&W Wasp Jr. T1B3 (limits same as T1B2, item 109(c) above)(e) Military R-985-AN-4 (limits same as SB)	
	(f) Military R-985-AN-6 or -AN-6N (limits same as SB)	
	(g) Military R-985-AN-12 or -AN-12B (limits same as SB)	
	(h) Military R-985-AN-14B (limits same as SB)	
	(i) ilitary R-985-25 (limits same as T1B2, item 109(c) above)	
	(j) Military R-985-AN-1 or -AN-3 (limits same as T1B2, item 109(c) above)	
	(k) Military R-985-13, -17, -19, -23, -48, -50, -AN-2, or -AN-8 (limits same as SB)	
	(l) Military R-985-27 (limits same as T1B2, item 109(c) above)	
110.	Jet Stack installation (E18 type per dwg. 404-001019)	-45 lb. (+ 80)
110.	set black installation (E10 type per ang. 101 001017)	15 15. (1 00)
Landir	ng Gear	
201.	Wheels, brakes and tires (see item 203)	
	(a) 33 in. smooth contour wheels (Bendix B-4) with	104 lb. ea. (+ 91)
	13x2-1/2 (Bendix 59799) brakes and 8-ply tires.	
	(b) Goodyear A5HBM-10 wheels with 29x13-5 brakes and 6-ply tires.	76 lb. ea. (+ 93)
	(c) Goodyear Model L12HBM, 11.00-12, Type III, Wheel	95 lb. ea. (+ 92)
	Assy. No. 530884M or 530884G, Brake Assy. No. 530886H or 530886SG,	
	with 11.00-12, 8-ply tires and tubes. (d) Goodyear Model L12HBM, 11.00-12 Type III, Wheel Assy. No. 9531432,	70 11 (+ 02)
	(d) Goodyear Model L12HBM, 11.00-12 Type III, wheel Assy. No. 9531452, Brake Assy No. 9531637 or 530886SG, with 11.00-12 8-ply Nylon tubeless tires.	79 lb. ea. (+ 92)
202.	12 x 5-3 wheel and tire (Goodyear)	8 lb. (+364)
203.	Landing gears	010. (1304)
_00.	(a) Beech dwg. 804-188000 and 804-188005 (used with item 201(a);	110 lb. ea. (+ 90)
	used with item 201(c) when modified per Beech dwg. 404-001113).	(/
	(b) Beech dwg. 188004 and 188005 (used with item 201(b); used with 201(d) when	93 lb. ea. (+ 90)
	modified per Beech dwg. 404-001113).	

<u>Landii</u> 204.	ng Gear (cont'd) Skiplane landing gear (dwg. 200-188500K or 18800K. 188110 revision Q, shock struts 188400K, and drag legs C18820K).					
205.	Landing gear oleo drag leg assembly (734-188005)	Use act. wt. change				
*206.	replacing standard drag legs, 18820, 804-188416 or 804-188420. Martin landing gear oleo drag leg assy. (90-1000001) replacing standard drag legs 18820, 804-188416 or 804-188420.	Use act. wg. change				
Electric 301. 302. 303.	<u>cal Equipment</u> Landing gear operating motor (Electric Specialty, type HGA3, modified). Wing flap operating motor (Dumore KBL, modified) Generators	14 lb. (+ 87) 5 lb. (+ 94)				
303.	(a) Two 50 a. (Leece-Neville M-3)	20 lb. ea. (+ 64)				
	(b) Two 25 a. (Leece-Neville L-2 or Eclipse)	20 lb. ea. (+ 64)				
304.	Two batteries (type 24 v. 17 a.) Maximum weight	64 lb. ea. (+ 87)				
306. 307.	Passing light Two landing lights (Grimes ST-1220)	1 lb. (+112) 6 lb. ea. (+142)				
Ŧ						
401.	<u>r Equipment</u> Two pilot seats with safety belts					
	(a) Tubular dural frame	16 lb. ea. (+ 87)				
	(b) Plastic or tubular steel frame	18 lb. ea. (+ 97)				
402.	Cabin seating arrangement					
	(a) Five transport type cabin seats with safety belts as follows: Front right (Number 1)	20 lb. (+128)				
	Front left (Number 2)	20 lb. (+136)				
	Middle right (Number 3)	20 lb. (+166)				
	Middle left (Number 4)	20 lb. (+181)				
	Rear right (Number 5)	20 lb. (+206)				
	(b) Cabin seats with safety belts (these seats mount to the side of the airplane with two legs on the floor. Arrangements are as shown on Beech dwg. 18051-1 to -7).					
	(1) 4 seats (+136, +181, +147, +192)	17 lb. ea.				
	(2) 6 seats (+124, +156, +188)	17 lb. ea.				
	(3) 7 seats (+124, +156, +188 and one at +217)	17 lb. ea.				
	(4) 6 seats (+124, +127, +156, +161, +188, +194)	17 lb. ea.				
	(5) 6 seats (+124, +156, +188) 2 folding chairs (+220)	17 lb. ea.				
	(6) 3 place couch (39 lb. with safety belts at +143)					
	(left side, +117, +143, +169; with from 1 to 5 seats at any of the					
	following locations: +124, +127, +156, +161, +188, +194, +217, +220).					
	(7) 2, 3 or 4 place couch (40 lb. with safety belts as required)					
	(left side, +114, +134, +154, +174; with from 1 to 5 seats at any					
	of the following locations; +124, +127, +147, +156, +161, +188, +194, +215, +217, +220).					
	,					
402.	(c) Five bucket-type seats with safety belts:	22 11- (+129)				
	Front right (Number 1) Front left (Number 2)	22 lb. (+128) 22 lb. (+136)				
	Middle right (Number 3)	22 lb. (+166)				
	Middle left (Number 4)	22 lb. (+181)				
	Rear right (Number 5)	22 lb. (+206)				
403.	Pressure fire extinguisher	` '				
	(a) Fixed portion (less bottle)	12 lb. (+ 50)				
	(b) 7-1/4 lb. bottle (Walter Kidde)	22 lb. (+ 50)				
46.4	(c) 5 lb. bottle (Lux)	20 lb. (+ 71)				
404.	Toilet equipment. Placard lavatory door: "This room not to be occupied during					
	takeoff and landing." Adequate rear baggage tie-down straps or other means should be provided to prevent baggage shifting into lavatory space.					
	be provided to prevent baggage sinting into lavatory space.					

	r Equipment (cont'd)		
405.	Vacuum pumps		
	(a) Two Pesco Model 3P-207JA		. (+ 64)
	(b) Eclipse - AP-8 and accessories	8 lb.	(+ 64)
100	(c) Romec	5 lb.	(+64)
406.	Flares (a) Wiley type A 8 TC 46 (2 required)	18 lb.	(+ 50)
	(a) Wiley type A-8, TC 46 (2 required)		(+50)
	(b) International - 3 minute	23 lb.	(+262) (+ 50)
	(b) International - 3 infinite		(+262)
407.	Extra instruments (dwg. 900-183800) (max.)		(+60)
408.	Approved Airplane Flight Manual (current issue) (Airplane Operating Manual	00 10.	(1 00)
100.	is the equivalent)		
409.	Sperry type A-3 automatic pilot installation		
	(Autopilots for new installations made after April 1, 1947 must conform to TSO C9a)		
	(a) Control gyros with mount	35 lb.	(+54)
	(b) Servo unit, model C6-D3-B, and bellcranks		(+80)
	(c) Sump, pump and valves		(+64)
	(d) Filter and pressure regulator	3 lb.	(+112)
	(e) Pulleys, cables and guards	5 lb.	(+41)
	(f) Tubing and fittings	24 lb.	(+70)
	(g) Fluid (2 gal.)	14 lb.	(+73)
410.	Jack and Heintz type A-3A automatic pilot installation		
	(Autopilots for new installations made after April 1, 1949, must conform to TSO C9a)		
			(+57)
	(b) Servo unit, Model M6-D3-A, pulleys and cables		(+51)
			(+ 74)
	(d) Fluid	14 lb.	(+74)
411.	Eclipse-Pioneer Type A-10 automatic pilot installation		
	(Autopilots for new installations made after April 1, 1949, must conform to TSO C9a)	10.11	(. 57)
	(a) Controls and instrument units		(+ 57)
			(+ 53) (+ 149)
	(c) Fluxgate transmitter, amplifier and brackets(d) Servo amplifier		(+148)
			(+ 19) (+114)
	(f) Rudder pulley brackets and plates		(+44.5)
	(g) Manual disconnect handle and pulley		(+ 58)
412.	U. S. Army type safety belts B-11 or B-14	2 10.	(1 30)
	Lear automatic pilot installation		
		76 lb.	(+247)
	The Airplane Flight Manual should be supplemented to include the following:		,
	Before takeoff - check that the automatic pilot is "OFF". During flight - to		
	engage pilot, (1) Center "Turn" manual control, (2) Turn automatic pilot switch		
	to "Ready", (3) Turn automatic pilot switch to "ON". (It will not be possible to		
	turn switch to "ON" until automatic pilot switch is ready for operation).		
	To disengage automatic pilot, turn switch to "OFF". Before landing - check that		
	automatic pilot is "OFF".		
	(b) Model L-2C and optional equipment installed per Lear dwgs. as follows:(1) 91250C		
	Servo stall torque measured at the servo on the ground:		
	Aileron 75 ± 5 inlb.		
	Rudder 75 ± 5 inlb.		
	Elevator 75 ± 5 inlb.		
	Servo drum pitch diameters for all three axes are 1.375 in.		
	Item 412(b)(6) required.		

Intonia	on Equipment (cont'd)			
413.	or Equipment (cont'd) (b) (2) 95658 and 95658G		58 lb.	(+209)
413.	Servo stall torque m	36 10.	(+20))	
	Aileron 150 ±5			
	Rudder 150 ± 5			
	Elevator 150 ± 5	inlb.		
		ameters for all three axes are 2.67 in.		
	Item 413(b)(6) requi			
		de controller installed per Lear dwg. 95658 (optional)	2 lb.	(+283)
		controller installed per Lear dwg. 95658G (optional)	2 lb.	(+283)
		ach coupler installed per Lear dwg.	Use act.	wt. change
		quipment) item 143(b)(7) required		
	(6) Lear FAA Approved Airplane Flight Manual Supplement dated April 5, 1951, or Revisions dated September 2, 1952 or November 29, 1954.			
		d Airplane Flight Manual Supplement dated		
		(with approach coupler).		
		rds should be installed on airplanes with Flight		
		s dated April 5, 1951 or Revision dated		
		"DO NOT USE AUTOPILOT BELOW 300 FEET		
		IN CRUISE CONFIGURATION."		
		TOPILOT BELOW 100 FEET ABOVE TERRAIN IN		
v 41.4	APPROACH CONF		0.11	(. 200)
*414.	Retractable entry step per insta		9 lb.	(+208)
	Dwg. 62149 and 62150 for kit		5 lb.	(+221)
*415	Company, Municipal Airport, Shoulder harness, Air Associa		Use act	wt. change
415.	and M-4450M1-F18 for pilot		Osc act.	wt. change
	installed per Air Associates, T			
416.	Sperry automatic pilot installa			
		wg. 414-001035-15. AFM Supplement	33 lb.	(+202)
	P/N 130017 dated Noven			
		hold per Beech Dwg. 414-001035-15,	38 lb.	(+213)
		30017 dated November 3, 1961 required.		
417.		ech Dwg. 414-001051, approved for flight	Use act.	wt. change
		o door panel and cabin entrance door installed.		
110		14-001074 and 414-001075 required.	Line not	urt ahanga
418.	Cabin floor provisions, high d (a) Install per Beech Dwg. 4		Use act.	wt. change
419.	Electrically heated stall warning			
41).	(a) Safe-Flight No. 180F	ng maleutor mistanation	2 lb.	(+ 75)
or		r Beech Dwg. 414-180611 or 404-001046	2 lb.	(+75)
	, ,			,
Deicir	ng Equipment (Propeller, Wing	and Windshield)		
501.	Surface deicers - Goodrich Ty			
	(a) Two wing boots (remova			a. (+108)
	(b) Two stabilizer boots (rem			a. (+349)
502	(c) Deicer installation (fixed	portion)	47 lb.	(+117)
502.	Propeller anti-icer (a) 3 gal. fluid tank, pump ar	ad lines	11 lb.	(+ 02)
	(b) Two slinger rings (Air As		11 lb. 1 lb.	(+ 92) (+ 40)
	(b) Two siniger rings (All As	550Clates 11C-407)	1 10.	(± 4 0)
Misce	llaneous (not listed above)			
601.		rnization kit per Beech Dwg. 404-000023	Use act.v	wt.change
	Limitations as follows:			Č
	Fuel	80/87 min. grade aviation gasoline		
	Engine limits	Maximum continuous		
		Sea level, 34.5 in. Hg, 2200 rpm. (400 hp.)		
		Straight line manifold pressure variation with altitu	de to	
		5000 ft., 33.5 in.Hg, 2200 rpm. (400 hp.) Takeoff (one min.), 36.5 in. Hg., 2300 rpm. (450 hp.)		
		1 accord (one min.), 50.5 m. fig., 2500 tpm. (450 fip.)		

Miscellaneous (not listed above) (cont'd)

601. C.G. range (landing (+109.8) to (+120.5) (Moment due to retraction of landing gear

gear extended) +12000 in.-lb.)

Maximum weight Takeoff 8750 lb., landing 8550 lb.

Required equipment 4 and 5 or 6, 101, 102, 103, 201, 202, 203 (modified as noted

on Dwg. 404-000023), 301, 302, 303, 304, 401 and AFM P/N 404-001151

dated October 11, 1963.

602. 9000 lb. gross wt. basic modernization kit per Beech Dwg. 404-000025.

Limitations as follows:

Fuel 80/87 min. grade aviation gasoline

Engine limits For all operations

Sea level, 36.5 in. Hg, 2300 rpm. (450 hp.)

Straight line manifold pressure variation with altitude

3500 ft., 35.5 in. Hg, 2300 rpm. (450 hp.)

C.G. range (landing (+108.6) to (+120.5) at 9000 lb. gear extended) (+107.0) to (+120.5) at 8600 lb. or less

Straight line variation between points given. Moment due to

retraction of landing gear is +!2000 in.-lb.

Maximum weight Takeoff 9000 lb., landing 8550 lb.

Required equipment 4 and 5 or 6, 101, 102, 103, 110, 201, 202, 203, (modified as noted on

Dwg. 404-000023), 301, 302, 303, 304, 401 and AFM 130394 dated

November 15, 1963, 418, 601 and 603.

603. Stall strip installation per Beech Dwg. 404-001048-3

Negligible weight

604. E18S type removable nose installation per Beech Dwg. 404-001080

25 lb. (+ 22)

Note 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The C.G. limits were determined with the landing gear extended. The airplane must <u>always</u> be so loaded that its C.G. position with the landing gear extended is between the limits shown.

- Note 2. The following placards must be displayed as indicated:
 - (a) Lavatory door: "This room not to be occupied during takeoff and landing."
 - (b) Instrument panel in full view of the pilot:
 - (1) "This airplane shall be operated in accordance with Part I of the FAA Approved Operating Manual for the Beech C18S airplane. This manual shall be carried in the pilot's compartment at all times." (Used with standard aircraft).
 - (2) "Acrobatics and intentional spinning prohibited."
 - (3) "This airplane must be operated as a normal category airplane in compliance with the Airplane Flight Manual. No acrobatic maneuvers including spins approved." (Used when aircraft is modernized per item 601 and 602).
 - (c) On airplanes with nose baggage provisions on inner side of nose door: "Load in accordance with Airplane Flight Manual. Max. structural capacity of nose 600 lb."
- Note 3. Prior to certification as a civil aircraft, the following must be accomplished:
 - (a) Each airplane must be weighed to determine its weight and balance unless a satisfactory Army or Navy weight and balance report is available. An approved loading chart or device must be installed.
 - (b) The fuel cross-feed system must either be removed or disconnected from the fuel system, or the pressure cross-feed valve enclosed in a fuel and fume-tight box which is ventilated and drained to the outside. (Beech Service Bulletin C18-3 outlines a satisfactory method of accomplishing this modification).
 - (c) Each fuel and oil tank and/or the structure adjacent to the filler opening must be placarded for the contents and capacity.
 - (d) A satisfactory means of measuring the oil must be provided.
 - (e) Instruments must be marked for approved operation limitations as outlined in CAM 04.4632.
 - (f) A master switch arrangement (accessible to the pilot or copilot) must be installed in order that all electrical power, including batteries and generators, can be disconnected within approximately two feet of the power source with one operation.

- Note 3. (g) All fuses and circuit breakers for required equipment, including radio fuse, must be accessible to the crew for replacement or resetting in flight.
 - (h) All airplanes except C-45 and C-45A (JRB-2) must have control system lock removed.
 - (i) The navigators turret must be removed and a suitable enclosure installed.
 - (j) When engines as described by item 109(e) through (j) are installed, the engine nameplate must have the following information added: "FAA Specification No. 5E1".
 - (k) If the landing lights are retained, the circuit must be revised to provide adequate circuit protection in the motor circuit. The installation of an additional fuse (15 a.) in the motor circuit is satisfactory.
 - (l) Circuit breakers or fuses must be installed in the generator main line circuits (applies only to C-45B, C-45F, AT-7C, SNB-2C, JRB-3 and JRB-4 aircraft).
 - (m) The 38 gal. nose fuel tank may be installed or retained in the military models provided a satisfactory drain and fuel gauge is installed in the lower tank and a finger strainer of approximately 10 mesh is installed in the fuel tank outlet.
 - (n) For certification for "Night Flying", the following must be complied with:
 - (1) Remove the resistors installed in the position light circuits and replace the single pole double throw position light switch with a single pole single throw switch.
 - (2) Replace the wing position lights with certificated units, or satisfactorily modify the lights, if pertinent. Nose: Type A-9 wing position lights (AN-3033-5 through -8) may be satisfactorily modified by painting the inside of the frosted glass cover black. Type A-9 (AN-3033-1 through -4) are satisfactory without modification.
 - (3) The tail light must be replaced with a certificated unit.
 - (4) The amber glass of the tail warning light must be replaced with a clear cover glass; otherwise, this light must be made inoperative.
 - (o) If the engines do not incorporate an .010 inch radius at the root of the crankshaft thrust bearing nut threads as outlined in P&W Service Bulletin No. 1488, the dye penetrant inspection of the subject area described under "Note" in AD 57-5-4 must be accomplished even though no oil leakage of the front section is noted.
 - (p) Install wing spar strap which reinforces the lower spar cap from LWS 181 to RWS 181. Consult STC Summary or applicable AD's for eligible installation.

Upon completion of the conversion to certificated status, the manufacturer's nameplate containing the commercial model designation, serial number and the date of manufacture shall be installed below the original nameplate. The original or any succeeding nameplate should not be removed from the aircraft.

Contact Beech Aircraft Corporation as necessary to obtain availability information concerning the drawings and kits which are referenced by this publication.

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