DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	A14CE	
	Revision 41	
	Textron Aviation	
99	100	
99A	A100	
99A	(U-21F)	
(FACH)	A100A	
À99	A100C	
A99A	B100	
B99		
C99		
	November 27, 2017	

TYPE CERTIFICATE DATA SHEET NO. A14CE

This data sheet which is part of Type Certificate No. A14CE 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 Textron Aviation Inc.

One Cessna Boulevard Wichita, Kansas 67215

Beech Aircraft Corporation to Type Certificate Holder Record:

Raytheon Aircraft Company on April 15, 1996

Raytheon Aircraft Company transferred to

Hawker Beechcraft Corporation on March 26, 2007

Hawker Beechcraft Corporation transferred to Beechcraft Corporation on April 12, 2013

Beechcraft Corporation transferred to Textron Aviation Inc. on October 12, 2016

Model 99, Airliner, (Normal Category), Approved May 2, 1968 Model 99A, Airliner, (Normal Category), Approved February 10, 1969 Military 99A(FACH), (Normal Category), Approved June 10, 1970

Engines Two (2) United Aircraft of Canada, Ltd. PT6A-20 (Turboprop) per Beech

Specification BS 20331A (99).

Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-27 (Turboprop) per Beech Specification BS 20570B (99A). OR

See NOTE 6

OR Two (2) UACL or Pratt and Whitney PT6A-28 (Turboprop) per Beech

Specification BS 21404 (99A).

See NOTE 8

JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1 &Fuel

JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

Oil (Engine and Gearbox) UACL PT6 Service Bulletin No. 1 lists approved brand oils.

	Static	Sea Level Ratings P	T6A-20	
Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)
550**	72	579	2200*	750
550**	72	579	2200*	750
				1090
300			2100	750

Takeoff (5 min.) Maximum continuous Starting trans. (2 sec.) Max. reverse (1 min.)

> *See NOTE 4 **Available to 70° F. (21.2° C.) static

***See NOTE 9

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Model 99, Model 99A, Military 99A

Takeoff (5 min.)

Engine Limits***

Maximum continuous Starting trans. (2 sec.) Max. reverse (1 min.)

	Static Sea Level Ratings PT6A-27 or -28									
Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp(Deg.C.)						
550**	76	580	2200*	725						
550**	76	580	2200*	725						
				1090						
300			2100	725						

^{*}See NOTE 4

Minus 40° F. Oil temperatures: Minimum starting

Minus 40° F. to 210°F. Low idle

50° F. to 210° F. Maximum continuous

Propeller and **Propeller Limits** Two (2) Hartzell HC-B3TN-3 or HC-B3TN3B hubs with Hartzell T10173E-8

or T10173B-8 blades

Diameter: 93 3/8 in. (normal); minimum allowable for repair 90 3/8 in.

No further reduction permitted Pitch settings at 30 in. sta.:

Reversing propeller

Flight idle stop See NOTE 5 Second flight idle stop See NOTE 5

Reverse - 11° Feather - 87°

Airspeed Limits (CAS)

Max. operating speed 260 mph (226 knots) up to 15,500 ft.

15,500 ft. to 25,000 ft. decrease 4 knots per 1,000 ft.

195 mph (169 knots) Maneuvering speed *Flaps extended speed 152 mph (132 knots) 180 mph (156 knots) Landing gear extended

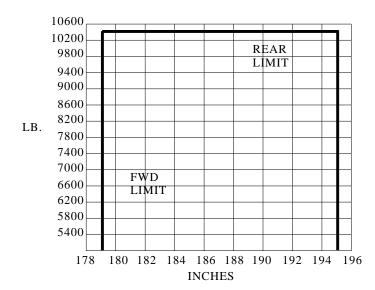
150 mph (130 knots) (Retraction) Landing gear Operating 180 mph (156 knots) (Extension)

*See NOTE 9.

C.G. Range (Landing Gear Extended)

(+179.0) to (+195.0) at 10,400 lb. or less

Moment change due to retracting landing gear -4871 in.-lb.



^{**}Available to 112.4° F. (44.6° C.) static

^{***}See NOTE 9

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Model 99, Model 99A, Military 99A (cont'd)

Empty Wt. C.G. Range None

*Maximum Weight Takeoff 10,400 lb. 10,400 lb. Landing

*See NOTE 9

No. of Seats Maximum 17 (including 2 crew seats at +126)

See loading instructions in Pilot's Operating Handbook for an approved

seating or cargo configuration. FAA approval for any other configuration must be

obtained.

Maximum Baggage 600 lb. (+ 52) 100 lb. (+378)

800 lb. (+187) in baggage pod when installed

Fuel Capacity 115 gal. (+160) (total usable in 2 nacelle tanks, 57 gal. each)

258 gal. (+196) (total usable in 2 wing tanks 128 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. (total oil capacity) (includes 12 qt. usable in 2 integral engine tanks at +131)

See NOTE 1(b) for data on system oil

25,500 ft. Maximum Operating

For FAR 91 operations: Altitude

12,000 ft. without oxygen with crew oxygen only 15,000 ft.

For FAR 135 operations: as limited by FAR 135.83

Control Surface Movements Wing flaps Maximum 43°

15° Down 15° Aileron tab Up Aileron Úр 18° Down 20° 12° Elevator Up Down 15° *Stabilizer Úр 3-1/2° Down 3-1/2° Right 30° Left 30° Rudder tab Rudder Right 26° Left 20°

*See NOTE 9

Serial Nos. Eligible U-1 through U-145 and U-147

See NOTE 6

II. Model 100, King Air, (Normal Category), Approved July 24, 1969

Engines Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-28

(Turboprop) per Beech Specification BS 21404

JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, & JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655. Fuel

See NOTE 7 for emergency fuels

Oil (Engine and Gearbox) UACL PT6 Service Bulletin No. 1 lists approved brand oils. A14CE Page 4 of 17 Rev. 41

II. Model 100 (cont'd)

Engine Limits***

Static Sea Level Ratings Maximum Permissible Turbine Equivalent Interstage Shaft Shaft Jet Prop Shaft Temp (Deg.C.) Horsepower Horsepower Thrust Speed 680** 715 2200* 750 90 680** 90 715 2200* 750 1090 300 2100 750

Takeoff (5 min.) Maximum continuous Starting trans. (2 sec.) Max. reverse (1 min.)

At low altitude and low ambient temperature, the engines may produce more power at takeoff than that for which the airplane has been certificated. Under those conditions the placarded torquemeter limitations shall not be exceeded.

Oil temperatures: Minus 40° F. Minimum starting

Minus 40° F. to 210°F. Low idle 50° F. to 210° F. Max. continuous

Propeller and Propeller Limits Two (2) Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with Hartzell T10173E-8 or T10173B-8 or T10173NB-8 blades.

Diameter: 93-3/8 in. (normal); minimum allowable for repair

90-3/8 in. No further reduction permitted

Pitch settings at 30 in. sta.:

Flight idle stop See NOTE 5 Secondary flight idle stop See NOTE 5

Reverse - 11°

Feather - 87°

Airspeed Limits (CAS)

Max. operating speed 260 mph (226 knots) up to 15,500 ft.

Decrease 4 knots per 1,000 ft. above 15,500 ft.

Maneuvering speed 195 mph (169 knots)

Max. flaps extension speed

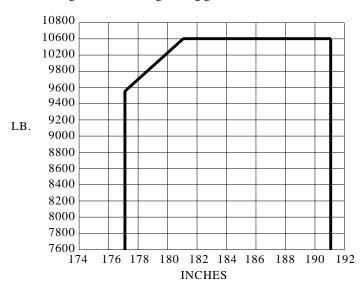
Approach position 13° 210 mph (182 knots) Full down position 43° 161 mph (140 knots) Landing gear extended 180 mph (156 knots)

Landing gear operating 180 mph (156 knots) (Extension) 150 mph (130 knots) (Retraction)

C.G. Range (Landing Gear Extended)

(+181.0) to (+191.0) at 10,600 lb. or less (+177.0) to (+191.0) at 9,580 lb. or less Straight line variation between points given

Moment change due to retracting landing gear -4845 in.-lb.



^{*}See NOTE 4

^{**}Available to 70° F. (21.2° C.) static

II. Model 100 (cont'd)

Empty Wt. C.G. Range None

*Maximum Weight Ramp 10,688 lb. 10,600 lb. Takeoff

10,600 lb. Landing

No. of Seats Maximum 15 (including 2 crew seats at +129)

See loading instructions in Pilot's Operating Handbook for an approved seating or cargo configuration. FAA approval for any other configurations must be obtained.

Maximum Baggage 355 lb. (+292); 410 lb. (+325)

Extra equipment installed in or aft of this area may reduce limit to below placarded figure.

115 gal. (+161) (total usable in 2 nacelle tanks, 57 gal. each) Fuel Capacity

258 gal. (+197) (total usable in 2 wing tanks 130 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. total (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil

Maximum Operating Altitude 31,000 ft.

Control Surface 43° Wing flaps Maximum Movements

Aileron tab Up 15° Down Up Aileron 16° Down 22° 15° Elevator Up Down Horizontal stabilizer Down

> (at leading edge) 30° Rudder tab Right Left 30° 25° 20° Rudder Right Left

Serial Nos. Eligible B-2 through B-89 and B-93

III. Model A99, Airliner (Normal Category), Approved February 19, 1971

Two (2) United Aircraft of Canada, Ltd. PT6A-20 (Turboprop) per Beech Specification Engines

BS 20331A. See NOTE 6

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, & JET B conforming

to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

UACL PT6 Service Bulletin No. 1 lists approved brand oils. Oil (Engine & Gearbox)

Engine Limits	Static Sea Level Ratings PT6A-20						
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)		
Takeoff (5 min.)	550**	72	579	2200*	750		
Maximum continuous	550**	72	579	2200*	750		
Starting trans. (2 sec.)					1090		
Max. reverse (1 min.)	300			2100	750		

^{*}See NOTE 4

Minus 40° F. Oil temperatures: Minimum starting

Minus 40° F. to 210°F. Low idle 50° F. to 210° F. Max. continuous

^{**}Available to 70° F. (21.2° C.) static

III. Model A99 (cont'd)

Propeller and Two (2) Hartzell HC-B3TN-3 or HC-B3TN-3B hubs with Hartzell T10173E-8 or

Propeller Limits T10173B-8 blades.

Diameter: 93-3/8 in. (normal); minimum allowable for repair

90-3/8 in. No further reduction permitted

Pitch settings at 30 in. sta.:

Reversing propeller:

Flight idle stop See NOTE 5 Secondary flight idle stop See NOTE 5

Reverse - 11° Feather - 87°

Airspeed Limits (CAS) Max. operating speed 260 mph (226 knots) up to 15,500 ft.

15,500 ft. to 25,000 ft. decrease 4 knots per 1,000 ft.

Maneuvering speed 195 mph (169 knots) Flaps extended speed 161 mph (140 knots) Landing gear extended 180 mph (156 knots)

Landing gear operating 150 mph (130 knots) (Retraction) 180 mph (156 knots) (Retraction)

C.G. Range (Landing (+179.0) to (+195.0) at 10,650 lb. or less

Gear Extended) Moment change due to retracting landing gear -4871 in.-lb.

Empty Wt. C.G. Range None

*Maximum Weight Ramp 10,705 lb. Takeoff 10,650 lb.

Landing 10,650 lb.

Maximum Zero Fuel Weight 9900 lb. (All weight above 9900 lb. must be in fuel weight)

No. of Seats Maximum 17 (including 2 crew seats at +126)

See loading instructions in Pilot's Operating Handbook for an approved seating or cargo configuration. FAA approval for any other configurations must be obtained.

Maximum Baggage 600 lb. (+ 52)

100 lb. (+378)

800 lb. (+187) in baggage pod when installed.

Fuel Capacity 257 gal. (+181) (total usable in 2 wing tanks, 127 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. total (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil

Maximum Operating Altitude 25,000 ft.

For FAR 91 operations: without oxygen with crew oxygen only 12,500 ft. 15,000 ft.

For FAR 135 operations: As limited by FAR 135.83

Control Surface Wing flaps Maximum 43° Movements Aileron tab Up 15°

15° 15° Aileron tab Up Down 22° Up 18° Aileron Down 12° Down 15° Elevator Up 4-1/4° Stabilizer Up Down 3-1/2° 30° 30° Rudder tab Left Right 26° 20° Rudder Left

Serial Nos. Eligible U-1 through U-145 and U-147

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IV. Model A99A, Airliner (Normal Category), Approved February 19, 1971

Engines Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-27 or -28

(Turboprop) per Beech Specification BS 20570B or BS 21404.

See NOTE 8

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, and

JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

Oil (Engine & Gearbox) UACL PT6 Service Bulletin No. 1 lists approved brand oils.

Engine Limits	Static Sea Level Ratings PT6A-27 or -28								
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)				
Takeoff (5 min.)	680**	76	715	2200*	725				
Maximum continuous	680**	76	715	2200*	725				
Starting trans. (2 sec.)					1090				
Max. reverse (1 min.)	300			2100	725				

^{*}See Note 4

Oil temperatures: Minus 40° F. Minimum starting

Minus 40° F. to 210°F. Low idle 50° F. to 210° F. Max. continuous

Propeller and Propeller Limits $\underline{\text{Two (2)}} \ \text{Hartzell HC-B3TN-3} \ \text{or HC-B3TN-3B hubs with Hartzell T10173E-8} \ \text{or}$

T10173B-8 blades.

Diameter: 93-3/8 in. (normal); minimum allowable for repair

90-3/8 in. No further reduction permitted

Pitch settings at 30 in. sta.:

Reversing propeller:

Flight idle stop See NOTE 5 Secondary flight idle stop See NOTE 5

Reverse - 11° Feather - 87°

Airspeed Limits (CAS) Max. operating speed 260 mph (226 knots) up to 15,500 ft.

15,500 ft. to 25,000 ft. decrease 4 knots per 1,000 ft.

Maneuvering speed 195 mph (169 knots) Flaps extended speed 161 mph (140 knots) Landing gear extended 180 mph (156 knots)

Landing gear operating 150 mph (130 knots) (Retraction) 180 mph (156 knots) (Retraction)

C.G. Range (Landing Gear Extended)

(+179.0) to (+195.0) at 10,900 lbs. or less

Moment change due to retracting landing gear -4871 in.-lb.

Empty Wt. C.G. Range None

*Maximum Weight Ramp 10,955 lb.
Takeoff 10,900 lb.
Landing 10,900 lb.

Maximum Zero Fuel Weight 9900 lb. (All weight above 9900 lb. Must be in fuel weight)

No. of Seats Maximum 17 (including 2 crew seats at +126)

See loading instructions in Pilot's Operating Handbook for an approved seating or cargo configuration. FAA approval for any other configurations must be obtained.

^{**}Available to 70° F. (21.2° C.) static

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IV. Model A99A (cont'd)

Maximum Baggage 600 lb. (+ 52) 100 lb. (+378)

800 lb. (+187) in baggage pod when installed.

Fuel Capacity 257 gal. (+181) (total usable in 2 wing tanks 127 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. total (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil

Maximum Operating Altitude 25,000 ft.

For FAR 91 operations: without oxygen with crew oxygen only 12,500 ft. 15,000 ft.

For FAR 135 operations: As limited by FAR 135.83

Control Surface Wing flaps Maximum 43° Movements Aileron tab Up 15° Down 15° UpAileron 18° Down 20° 12° 15° Elevator Up Down Stabilizer Úр 4-1/4° Down 3-1/2° Rudder tab Right 30° Left 30° Rudder Right 26° Left 20°

Serial Nos. Eligible U-1 through U-145 and U-147

V. Model A100, King Air (Military U-21F) (Normal Category), Approved May 7, 1971

Engines Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-28

(Turboprop) per Beech Specification BS 21404 or;

Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-34

(Turboprop) per Pratt and Whitney Specification No. 735.

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, &

JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

Oil (Engine & Gearbox) Pratt & Whitney Canada Service Bulletin No. 1001 lists approved oils.

Engine Limits	Limits Static Sea Level Ratings PT6A-28					
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)	
Takeoff (5 min.)	680**	90	715	2200*	750	
Maximum continuous	680**	90	715	2200*	750	
Starting trans. (2 sec.)					1090	
Max. reverse (1 min.)	300			2100	750	

^{*}See Note 4.

At low altitude and low ambient temperature, the engines may produce more power at takeoff than that for which the airplane has been certificated. Under these conditions the placarded torquemeter limitations shall not be exceeded.

^{**}Available to 70° F. (21.2° C.) static

$\textbf{V.} \quad \underline{\textbf{Model A100}} \ \, (\texttt{cont'd})$

Engine Limits		Static	Sea Level Rating	s PT6A-34	
	Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.
Takeoff (5 min.)	680**	87	715	2200*	790
Maximum continuous Starting trans. (2 sec.)	680**	87	715	2200*	790 790 1090
Max. reverse (1 min.)	300			2100	790
	takeoff than that for the placarded torqu	low ambient r which the a	temperature, the irplane has been cutions shall not be		
	Oil temperatures:		° F. to 210°F.	Minimum starting Low idle Max. continuous not to exceed 5 min.	
Propeller and Propeller Limits	T10173FB-12.5 or	T10173FNB n. (normal) n permitted in. sta.:		th Hartzell T10173-1	2 1/2,
Airspeed Limits (CAS)	Max. operating speed Maneuvering speed Maximum flap exte Approach posit Full down posi Landing gear exten Landing gear opera	ension speed tion 13° tion 43° ded	Decrease 4 kn 195 mph (169 210 mph (182 161 mph (140 180 mph (156 180 mph (156 150 mph (130 (S/N B-1, B- B-94 throu	knots) knots) knots) knots) (Extension) knots) (Retraction) -90 through B-92, gh B-151) knots) (Retraction)	
C.G. Range (Landing Gear Extended)	(+184.5) to (+191.0 (+177.0) to (+191.0 Straight line variati Moment change du	0) at 9,580 lb on between p	or less ooints given.	345 inlb.	
Empty Wt. C.G. Range	None				
*Maximum Weight	Ramp Takeoff Landing Maximum zero fue	11,568 lb 11,500 lb 11,210 lb 9,600 lb).).		
No. of Seats		tions in Pilot	's Operating Hand	lbook for an approve configurations must	
Maximum Baggage	355 lb. (+292) 410 lb. (+325) Extra equipment in figure.	stalled in or a	aft of this area ma	y reduce limit to belo	ow placarded

V. Model A100 (cont'd)

Fuel Capacity 82 gal. (+204) (2 auxiliary tanks 41 gal. ea.); 388 gal. (+183)

(2 main tanks interconnected 194 gal. each) See NOTE 1(a) for data on system fuel.

Oil Capacity 28 qt. total (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil.

Maximum Operating Altitude 31,000 ft.

Control Surface Wing flaps Maximum 43° Movements Aileron tab 15° Down 15° Up 16° 22° Aileron Up Down Elevator 15° Down 15° Up Up 4-1/4° 4° Stabilizer Down (at leading edge) Rudder tab Right 30° Left 30° Rudder Right 25° Left 20°

Serial Nos. Eligible B-1, B-90 through B-92, B-94 and on.

Prior to Civil Certification, Model A100 (U-21F) airplanes, S/N B-95 through

B-99 must be modified per Beech Drawing 100-005002.

VI. Model B99, Airliner (Normal Category), Approved March 27, 1972

Engines Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-27 or -28

(Turboprop) per Beech Specification BS 20570B, or BS 21404.

See NOTE 8

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, &

JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

Oil (Engine & Gearbox) UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits Static Sea Level Ratings PT6A-27 or -28

Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)
680**	76	715	2200*	725
680**	76	715	2200*	725
				1090
300			2100	725

Takeoff (5 min.) Maximum continuous Starting trans. (2 sec.) Max. reverse (1 min.)

Oil temperatures: Minus 40° F. Minimum starting

Minus 40° F. to 210° F. Low idle 50° F. to 210° F. Max. continuous

Propeller and Propeller Limits Two (2) Hartzell HC-B3TN-3 or HC-B3TN-3B hubs with Hartzell T10173E-8 blades.

Diameter: 93-3/8 in. (normal); minimum allowable for repair 90-3/8 in.

No further reduction permitted

Pitch settings at 30 in. sta.:

Reversing propeller:

Flight idle stop See NOTE 5 Secondary flight idle stop See NOTE 5

Reverse - 11° Feather - 87°

^{*}See NOTE 4.
**Available to 70° F. (21° C.) static

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VI. Model B99 (cont'd)

Airspeed Limits (CAS) Max. operating speed 260 mph (226 knots) up to 15,500 ft.

15,500 ft. to 25,000 ft. decrease 4 knots per 1,000 ft.

Maneuvering speed 195 mph (169 knots)

Flaps extended speed

Full (100 percent) 161 mph (140 knots)

Approach and
Takeoff (30 percent)
Landing gear extended

209 mph (182 knots)
180 mph (156 knots)

Landing gear operating 150 mph (130 knots) (Retraction) 180 mph (156 knots) (Retraction)

C.G. Range (Landing (+179.0) to (+195.0) at 10,900 lbs. or less

Gear Extended) Moment change due to retracting landing gear -4871 in.-lb.

Empty Wt. C.G. Range None

*Maximum Weight Ramp 10,955 lb.

Takeoff 10,900 lb. Landing 10,900 lb.

No. of Seats Maximum 17 (including 2 crew seats at +126

See loading instructions in Pilot's Operating Handbook for an approved seating or cargo configuration. FAA approval for any other configurations must be obtained.

Maximum Baggage 600 lb. (+ 52) 100 lb. (+378)

800 lb. (+187) in baggage pod when installed.

Fuel Capacity 115 gal. (+160) (Total usable in 2 nacelle tanks, 56 gal. each)

258 gal. (+196) (Total usable in 2 wing tanks 128 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. total (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil

Maximum Operating Altitude 25,000 ft.

For FAR 91 operations: without oxygen 12,500 ft.

with crew oxygen only 15,000 ft.

For FAR 135 operations: As limited by FAR 135.83

Control Surface Wing flaps Maximum 43°

Aileron tab Movements 15° Down 15° Up 18° 20° Aileron Up Down Úp 12° Elevator Down 15° Up 4-1/4° 3-1/2° Horizontal Stabilizer Down Rudder tab Right 30° Left 30°

Rudder Right 26° Left 20°

Serial Nos. Eligible U-146, U-148 through U-164

VII. Model A100A, King Air, (Normal Category), Approved November 1, 1972

(This section was removed from the TCDS at Revision 39 since no airplanes have been built, nor are any planned to be made).

VIII. Model A100C, King Air, (Normal Category), Approved December 14, 1973

(This section was removed from the TCDS at Revision 27 since no airplanes have been built, nor are any planned to be made.)

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IX. Model B100, King Air, (Normal Category), Approved December 1, 1975

Two (2) AiResearch TPE 331-6-252B (Turboprop) per Beech Specification 22558 **Engines**

Fuel Aviation turbine fuels ASTM Designation D1655-68, Types Jet A, Jet B,

& Jet A-1; MIL-F-5616-1, Grade JP-1; and MIL-T-5624G-1, Grades JP-4 and JP-5; and MIL-F-46005A(MR)-1, Types I and II. Fuels shall conform

to the specifications as listed or to subsequent revisions thereto.

See NOTE 7 for use of emergency fuel

Oil MIL-23699B and MIL-L-7808G (Oils shall conform to the specifications

as listed or to the subsequent revisions thereto.)

Engine Limits

	S	tatic Sea Level Ratir	ngs	
Shaft Horsepower	Jet Thrust	Equivalent Shaft Horsepower	Prop Shaft Speed	Maximum Permissible Turbine Interstage Temp (Deg.C.)
715	153	776	2000	923
715	153	776	2000	923
				1149
			2000	

Takeoff (5 min.) Maximum continuous Starting trans. (2 sec.) Max. reverse (1 min.)

> At low altitude and low ambient temperature, the engines may produce more power at takeoff than that for which the airplane has been certificated. Under those conditions the placarded torquemeter limitations shall not be exceeded.

Minus 40° C. to 110° C. Oil temperatures: Normal operations

Minus 40° C. to 110° C. Ground idle

Minus 40° C. to 110° C. Takeoff or climb power

for 5-minute maximum

Propeller and Propeller Limits (For Aircraft S/N BE-1 through BE-113):

Two (2) Hartzell HC-B4TN-5C or HC-B4TN-5F hubs with Hartzell T10173FB-12.5 or T10173FNB-12.5 aluminum alloy blades and Hartzell D3434-4P or D3434-10P spinner assembly.

(For Aircraft S/N BE-114 and on):

Two (2) Hartzell HC-B4TN-5C or HC-B4TN-5F hubs with Hartzell T10173FK-12.5 or T10173FNK-12.5 aluminum alloy blades and Hartzell D3434-4P spinner assembly.

Diameter: 90 in. (normal); no further reduction permitted.

Pitch settings at 30 in. sta.: +87° Feathered

-10° Reverse pitch stop $+2.5^{\circ}$ Start locks + 8.5° Flight idle

Airspeed Limits (CAS)

Max. operating speed 256 mph (223 knots)

Decrease 4 knots per 1,000 ft. above 15,500 ft.

Max. design maneuver 192 mph (167 knots)

Max. flaps extended (30 percent approach)

206 mph (179 knots)

Max. flap extended (100 percent full down)

176 mph (153 knots) 176 mph (153 knots)

Landing gear extended 176 mph (153 knots) Landing gear operating

C.G. Range (Landing Gear Extended)

(+181.75) to (+191.0) at 11,800 lb. (+175.0) to (+191.0) at 9,100 lb. or less Straight line variation between points given

Moment change due to retracting landing gear -4845 in.-lb.

Empty Wt. C.G. Range

None

Maximum Weight

Ramp 11,875 lb. Takeoff 11,800 lb. Landing 11,210 lb. Maximum zero fuel 9,600 lb.

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IX. Model B100 (cont'd)

No. of Seats Maximum 15 (including 2 crew seats at +129)

See loading instructions in Pilot's Operating Handbook for an approved seating or

cargo configuration. FAA approval for any other configurations must be obtained.

Maximum Baggage 150 lb. (+292) 410 lb. (+325)

Fuel Capacity **Tank** Cap. (Gal.) Usable (Gal.) <u>Arm</u> L&R Main 194+ 194 each (+183.0)L & R Aux. 41 +41 each (+204.0)

See NOTE 1(d) on System Fuel.

Oil Capacity 21 qt. total (includes 8 qt. usable in 2 integral tanks at (+207)).

See NOTE 1(c) for data on system oil.

Maximum Operating Altitude 31,000 ft.

Control Surface Wing flaps 43° Maximum Movements Aileron tab 15° 15° Up Down 16° 2.2° Aileron Up Down 15°

15° (at leading edge) Elevator Up Down $U\bar{p}$ Horizontal stabilizer 4-1/4° Down 4°

30° 30° Rudder tab Right Left Rudder 25° 20° Right Left

Serial Nos. Eligible BE-1 and on

X. Model C99, Airliner, (Normal Category), Approved July 27, 1981

Engines Two (2) United Aircraft of Canada, Ltd. or Pratt and Whitney PT6A-36

(Turboprop) per Beech Specification 23365

Fuel JP-4, JP-5 (MIL-T-5624); JP-8 (MIL-T-83133); JET A, JET A-1, &

JET B conforming to P&WC S.B. 1244 or ASTM SPEC. D1655.

See NOTE 7 for emergency fuels

Oil (Engine & Gearbox) UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils

EngineLlimits*** Static Sea Level Ratings PT6A-36 Maximum Permissible Turbine Equivalent Interstage Shaft Shaft Jet Prop Shaft Temp (Deg.C.) Thrust Horsepower Horsepower Speed Takeoff (5 min.) 715** 85 749 2200* 805 715** Maximum continuous 85 749 2200* 805 1090 Starting trans. (2 sec.) Max. reverse (1 min.) 300 2100 805

*See Note 4

**Available to 103° F. (39° C.) static

Oil temperatures: Minus 40° F. Minimum starting

Minus 40° F. to 210°F. Low idle 50° F. to 210° F. Max. continuous 210° F. to 220°F. 10 min.

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X. Model C99 (cont'd)

Propeller and One (1) or Two (2) Hartzell HC-B3TN-3B and/or One (1) or Two (2) HC-B3TN-3M

Propeller Limits hubs with Hartzell 0173K-8 blades.

See NOTE 10

Diameter: 93-3/8 in. (normal); minimum allowable for repair 90-3/8 in.

No further reduction permitted Pitch settings at 30-n sta.: Reversing propeller:

Flight Idle Stop See portion of NOTE 5

Reverse - 11° Feather - 87°

Airspeed Limits (CAS) Max. operating speed 258 mph (224 knots) up to 15,500 ft.

15,500 ft. to 25,000 ft. decrease 4 knots per 1,000 ft.

Maneuvering speed 190 mph (166 knots)

Flaps extended speeds

Full (100 percent) 161 mph (140 knots)

Approach and takeoff

(30 percent) 205 mph (178 knots) Landing gear extended 175 mph (152 knots)

Landing gear operating 175 mph (152 knots) (Extension) 175 mph (152 knots) (Retraction)

C.G. Range (Landing (+1 Gear Extended) (+1

(+182.5) to (+195.0) at 11,300 lbs. or less (+179.0) to (+195.0) at 10,900 lbs. or less Straight line variation between points given

Moment change due to retracting landing gear -4871 in.-lb.

Empty Wt. C.G. Range None

Maximum Weight Ramp 11,380 lb.

Takeoff 11,300 lb. Landing 11,300 lb.

No. of Seats Maximum 17 (including 2 crew seats at +129)

See loading instructions in Pilot's Operating Handbook for an approved seating or cargo configuration. FAA approval for any other configurations must be obtained.

Maximum Baggage 600 lb. (+ 52)

100 lb. (+378)

800 lb. (+187) in baggage pod when installed

Fuel Capacity 115 gal. (+160) (Total usable in 2 nacelle tanks, 56 gal. each)

258 gal. (+196) (Total usable in 2 wing tanks, 128 gal. each)

See NOTE 1(a) for data on system fuel

Oil Capacity 28 qt. (total oil capacity) (includes 12 qt. usable in 2 integral tanks at (+131)).

See NOTE 1(b) for data on system oil.

Maximum Operating Altitude 25,000 ft.

Control Surface Wing flaps Maximum 43°

Movements Aileron tab 15° 15° Down Up 18° 20° Aileron Up Down Up12° 15° Elevator Down Up 4-1/4° 3-1/2° Horizontal stabilizer Down Rudder tab Right 30° Left 30° Rudder 20° Right 26° Left

Serial Nos. Eligible U-50, U-165 and On

Data Pertinent to All Models

Datum Located +190 in. forward of wing main (forward spar centerline).

Leveling Means Two external screws on left side of fuselage forward of entrance door.

Certification Basis

Certification dasis	99, 99A, A99, A99A	B99	C99	100	A100	A100A	B100
Part 23 of the Federal Aviation Regulations dated Feb 1, 1965, as amended by 23-1, 23-2, and 23-3	X	X	X	X	X	X	X
and Par. 23.954 or Am. 23-7					X	X	X
and Par. 23.959 of Am. 23-7		X	X			X	X
and Par. 23.1385(c), 23.1387(a) and 23.1387(e) of Am. 23-12	X	X	X	X	X	X	X
and Par. 23.729 of Am. 23-21	X	X	X				
and Par. 23.967(a)(5) of Am. 23-18			X				
and Par. 23.1545(a) of Am. 23-23			X				
and 23.1583(a) of Am. 23-7 and Par. 23.1419 of Am. 23-14							X
Par. 25.777 of FAR 25 in effect on				X	X	X	Λ
April 4, 1969 Part 36 of the Federal Aviation							
Regulations dated Dec 1, 1969, as amended through 36-10			X				X
SFAR 27 effective February 1, 1974			X				X
Equivalent Safety findings:							
FAR 23.621					X	X	X
FAR 23.729(e)	X	X	X	X	Λ	Λ	X
FAR 23.967(a)(5)	24	21	21	71	X	X	X
FAR 23.1323, 23.1545, 23.1583(a)							X
Approved for flight into known icing conditions when equipped per AFM	X	X	X	X	X	X	X
Special conditions as outlined in FAA letters to Beech dated April 24, 1968 (FAR 135) and July 17, 1969 (FAR 91)	X	X	X				
Special conditions as outlined in FAA letter to Beech dated July 19, 1969, and November 6, 1969 (FAR 91 operation only)				X	X	X	X
Special conditions 23-98-CE-13 issued July 24, 1980	X	X	X	X	X	X	X
Special condition A-11, "De-icers FAR 23 equivalent to Sec. 34 "Ice Protection" of S							

Application for Type Certificate dated July 8, 1966. Type Certificate No. A14CE issued May 2, 1968, obtained by the manufacturer under delegation option procedures.

Data Pertinent to All Models (cont'd)

Production Basis

Production Certificate No. 8. Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Equipment

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

In addition, the following equipment is required:

 Pre-stall warning indicator, Safe Flight Instrument Corp. Models 99, 99A, A99, A99A (not equipped for operation in icing conditions) P/N 793-1/795-6

Models 99, 99A, A99, A99A (equipped for operation in icing conditions) P/N 795-1/795-6

Model B99 P/N 795-6/795-1
Model 100 P/N 795-1/795-6
Models A100 (U-21F) and A100A P/N 796-5/795-9
Model B100 P/N 795-13
Model C99 P/N 795-6

 Maximum allowable airspeed indicator P/N 100-384043-1 - pilot's side (Model 100) P/N 100-384043-5 - pilot's side (Model A100) P/N 100-384043-13 - pilot's side (Model A100A) P/N 100-384043-15 - pilot's side (Model B100)

- NOTE 1. Current weight and balance report including list of equipment included in basic empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.
 - a. The basic empty weight and corresponding center of gravity must include unusable fuel of 18 lb. at (+165) for Models A99, A99A, 20 lb. at (+169) for Models 99, 99A and 100, 28 lb. at (+173) for Models A100 and A100A, and 35 lb. at (+163) for Models B99 and C99.
 - b. The basic empty weight and corresponding center of gravity must include oil of 56 lb. at (+131) for Models 99, 99A, A99, A99A, B99, C99, 100, A100 and A100A.
 - The basic empty weight and corresponding center of gravity must include oil of 42 lb. at (+107) for Model B100.
 - d. The basic empty weight and corresponding center of gravity must include unusable fuel of 40 lb. at (+171) for Model B100.
- NOTE 2. All placards required in the approved Airplane Flight Manual (AFM) must be installed in the appropriate location.
- NOTE 3. Mandatory retirement time for all fuselage structural components for Models 100, A100 (U-21F), A100A and B100 is 20,000 hours' time in service. However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals specified in Chapter 5 (or Chapter 4 or Airworthiness Limitations Section, as appropriate) of the Airplane's Maintenance Manual.

Mandatory retirement time for Models 99, 99A, A99A and B99 wing center section lower forward spar cap and both right and left outer panel lower forward spar caps including wing attachment fittings is as specified in the applicable Airworthiness Directive, or for airplanes having complied with Beechcraft Service Instruction 0986, the FAA Approved AFM. Mandatory retirement times for all Model C99 structural components are contained in the Pilot's Operating Handbook and FAA Approved AFM (P/N 99-590030-3) Limitations Section. These limitations may not be changed without FAA Engineering approval.

Mandatory replacement time for Model 100, A100 and B100; serials B-1 and on, BE-1 and on all wing attach bolts and nuts is 15 years or 15, 000 hours, whichever occurs first; subsequent replacement times are the same as initial intervals as noted.

Data Pertinent to All Models

NOTE 4.

The maximum propeller shaft overspeed limit for Models 99, 99A, 99A(FACH), A99, B99 and C99 is 110 percent of all ratings and may be employed for sustained periods in emergencies. 100 percent propeller shaft speed is defined as 2200 rpm and is the normal steady state operating limit. Gas generator speeds up to 102.7 percent are permissible for 10 seconds and to 101.6 percent for unlimited periods subject to applicable temperature and other limits. 100 percent gas generator speed is defined as 37,500 rpm.

The maximum propeller shaft overspeed limit for Model 100, A100, and A100A is 110 percent of all ratings and may be employed for sustained periods in emergencies. 100 percent propeller shaft speed is defined as 2200 rpm and is the normal steady state operating limit. Gas generator speeds up to 102.6 percent are permissible for 10 seconds and to 101.5 percent for unlimited periods subject to applicable temperature and other limits. 100 percent gas generator speed is defined as 37,500 rpm.

For Model B100 only. The maximum allowable propeller shaft speeds are 2100 rpm. 105 percent for a transient period not to exceed 5 seconds and 2020 rpm. 101 percent for 5 minutes. Normal propeller shaft speed is 2000 rpm. 100 percent turbine speed is defined as 41,730 rpm.

NOTE 5.

Flight idle propeller low pitch stop is set so that at 2000 rpm, torque shall be an indicated 600 ± 60 ft.-lb. corrected for sea level standard day. Secondary flight idle stop shall be 210 ± 40 propeller rpm higher than flight idle stop with a gas generator speed of 70 percent (Models 99, 99A, 100, 99A(FACH), A99, A99A and B99).

Flight idle propeller low pitch stop is set so that at 2000 rpm torque shall be an indicated 600 ± 40 ft.-lb. corrected for sea level standard day (Model C99).

Flight propeller low pitch stop is set so that at 2000 rpm torque shall be an indicated 660 ± 60 ft.-lb. corrected for sea level standard day. Secondary flight and ground low pitch stop shall set so that at 2000 rpm torque shall be an indicated 440 ± 60 ft.-lb. corrected for sea level standard day (Models A100 and A100A).

NOTE 6.

Prior to civil certification, Model 99A(FACH) airplanes, S/N U-137 through U-145, which have been operated by the Chilean Air Force, must be modified per Beech Dwg. 99-002010.

Model 99, S/N U-36, U-80 through U-145 and U-147 are eligible for installation of PT6A-27 engines at the Beech factory and when so modified must be identified as Model 99A.

Model 99A airplanes may be modified to the A99A configuration by field or factory incorporation of Beech Kit 99-5008-1.

Model 99 airplanes may be modified to the A99 configuration by field or factory incorporation of Beech Kit 99-5008

NOTE 7.

Emergency use of MIL-G-5572 fuel (Models 99, 99A, A99, A99A, B99, C99, 100, A100, A100A):

Grades 80/87, 91/98, 100/130 and 115/145 are permitted for a total time period not to exceed 150 hours during any overhaul period. It is not necessary to purge the unused fuel from the system when switching fuel types.

Emergency use of MIL-G-5572D fuel (Model B100):

Use of MIL-G-5572D, 80/87 only, aviation gasoline permitted not to exceed 1,000 gallons per engine for each 100 hours of engine operation. Log book entry required. Icing inhibitor MIL-I-2768E fuel additive approved not to exceed 0.15 percent by volume.

NOTE 8.

PT6A-27 and -28 engines may be intermixed on the 99, 99A, B99, and A99A. PT6A-28 engine should be modified with the -27 rear scavenge oil tee and hose.

NOTE 9.

Model 99 and 99A aircraft may increase their gross weight to 10,900 pounds and increase their performance limitations in accordance with FAA AFM 99-590019-13 when modified per Beech Kits 99-5014-1 or 95-5014-3. When modified, the limitations in Section VI of the TCDS appropriate to Model B99 will apply.

NOTE 10.

The two (2) propeller models used on the Model C99 differ only in the manner in which the feather angle is adjusted. The HC-B3TN-3B propeller has an internal feather adjustment and must be partially disassembled to reset the feather angle. The HC-B3TN-3M hub has an external adjustment feature and need not be disassembled to reset the feather angle.