**DEPARTMENT OF TRANSPORTATION**
**FEDERAL AVIATION ADMINISTRATION**

| | |
|---|---|
| | 3A20 |
| | Revision 82 |
| | Textron Aviation |
| 65 (L-23F) | 65-A90-1 (JU-21A) |
| A65 | (U-21A) |
| A-65-8200 | (RU-21A) |
| 65-80 | (RU-21D) |
| 65-A80 | (U-21G) |
| 65-A80-8800 | (RU-21H) |
| 65-B80 | 65-A90-2 (RU-21B) |
| 65-88 | 65-A90-3 (RU-21C) |
| 65-90 | 65-A90-4 (RU-21E) |
| 65-A90 | (RU-21H) |
| 70 | |
| C90 | B90 |
| C90A | E90 |
| C90GT | H90 (T-44A) |
| C90GTi | |
| | September 5, 2019 |

## TYPE CERTIFICATE DATA SHEET NO. 3A20

This data sheet which is part of Type Certificate No. 3A20 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, KS 67215

Type Certificate Holder Record:

Beech Aircraft Corporation transferred to
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.

| Page No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rev. No. | 82 | 32 | 70 | 70 | 65 | 70 | 36 | 70 | 70 | 42 | 70 | 36 | 36 | 70 | 36 | 70 | 70 | 57 | 70 | 47 |
| Page No. | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | |
| Rev. No. | 70 | 57 | 70 | 70 | 70 | 62 | 70 | 70 | 70 | 70 | 66 | 77 | 82 | 78 | 66 | 82 | 73 | 73 | 81 | |

**I. Model 65, Queen Air (Military L-23F), 7 or 9 PCLM (Normal Category), Approved February 4, 1959**

Engines

2 Lycoming IGSO-480-A1A6 or IGSO-480-A1B6
2 Lycoming IGSO-480-A1E6 (See NOTE 6 (a))

Fuel

100/130 min. grade aviation gasoline

Engine Limits

Straight line manifold pressure variation with altitude shown

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 340 | 3400 | 48.0 | S.L. |
| Takeoff | 340 | 3400 | 44.0 | 11,000 |
| Takeoff | 340 | 3400 | 43.5 | 11,000 (See NOTE 6 (a)) |
| Max continuous | 320 | 3200 | 45.0 | S.L. |
| Max continuous | 320 | 3200 | 41.5 | 11,000 |

Propeller and Propeller Limits

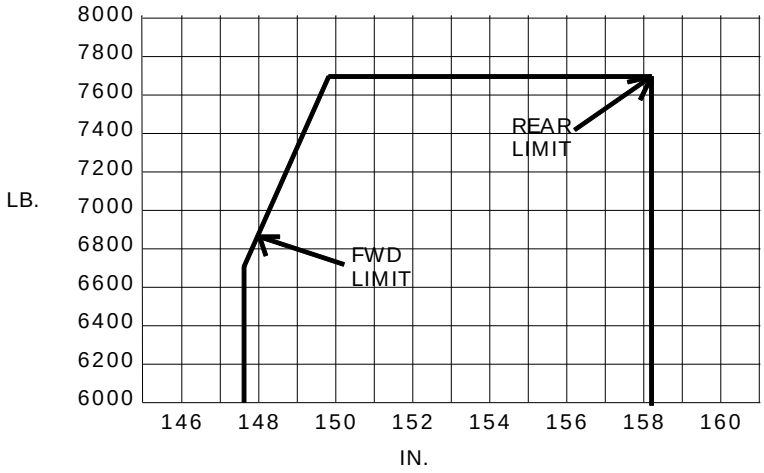
2 Hartzell, full-feathering, three-bladed
(a) HC-93Z20-2C1 or HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner. (see NOTE 6(b)).
Pitch settings at 30 in. sta.: low 16°, high 87°
Diameter: not over 93 in., not under 90 in.
(b) Woodward hydraulic governor 210190 or 210635. (see NOTE 6(b))

Airspeed Limits

| | | |
|---|---|---|
| Never exceed | | 270 mph (234 knots) |
| Maximum structural cruising | | 205 mph (178 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Flaps extended | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)

(+149.9) to (+158.4) at 7700 lb.
(+147.6) to (+158.4) at 6720 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -2500 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

Takeoff - 7700 lbs.
Landing - 7350 lbs. or 7700 lbs. S/N LC-203 and up, and LC-168 thru LC-202 when modified per Beech Kit dwg. 65-4012.

No. of Seats

Maximum 9 (2 crew at +129). See loading instructions for passenger loading.

**I. Model 65** (cont'd)

Maximum Baggage (Structural Limit)
350 lbs. (300 lbs. at +267, 50 lbs. at +288) (aft compartment).
350 lbs. (+70) (optional nose compartment).

Fuel Capacity

| | Tank | Cap. Gal | Usable Gal | Arm |
|---|---|---|---|---|
| | L & R Main | 44 ea. | 44 ea. | +174 |
| | L & R Aux | 47 ea. | 45 ea. | +162 |
| or | L & R Aux | 72 ea. | 71 ea. | +165 |
| or | L & R Aux | 89 ea. | 88 ea. | +163 |

See NOTE 1 for data on unusable fuel.

Oil Capacity
Left nacelle tank, 16 qts (+138), right nacelle tank, 16 qts. (+138).
See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing Flaps | Maximum | 31 ½ ° | | |
| Aileron tabs | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-sevo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 25° | Left | 25° |
| Rudder tab servo | Right | 1° | Left | 1° |

Serial No's. Eligible
L-1, L-2, L-6, LF-7 and up, and LC-1 thru LC-239. (L-3, L-4, L-5 eligible when modified per Beech dwg. 50-002017). Prior to civil certification, LF-23F airplanes which have been operated by the military must be modified per BEECH dwg. 50-002016. Type Certificate issued and Delegation Option Manufacturer No. DOA-230339-CE authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

**II. Model 65-80, 7 or 9 PCLM (Normal Category), Approved February 20, 1962**

Engines
2 Lycoming IGSO-540-A1A

Fuel
100/130 min. grade aviation gasoline

Engine Limits
(Straight line manifold pressure variation with altitude shown)

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 380 | 3400 | 47.0 | S.L. |
| Takeoff | 380 | 3400 | 43.5 | 10,500 |
| Max. continuous | 360 | 3200 | 45.0 | S.L. |
| Max. continuous | 360 | 3200 | 41.7 | 10,500 |

Propeller and Propeller Limits
2 Hartzell, full-feathering, three-bladed
(a) HC-B3Z30-2 hub with 10151-8 or 10151B-8 or 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.
Pitch settings at 30 in sta: Low 18 1/4°, ± 1/4°, high 87°, ± 1/2°
Diameter: not over 93 in., not under 90 in.
(b) Woodward hydraulic governor A210390

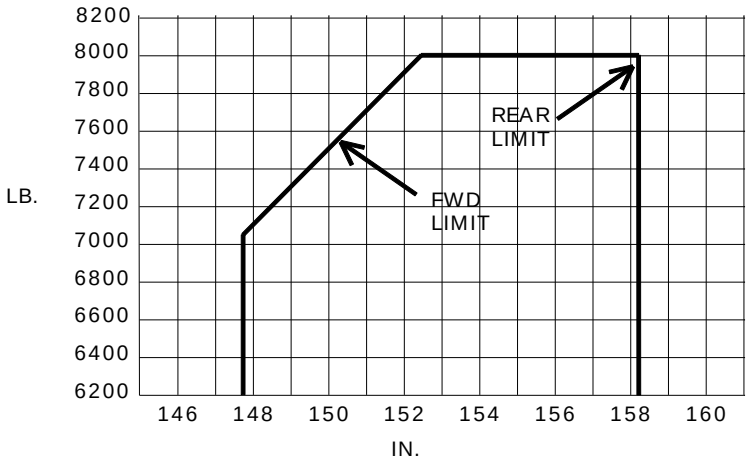
Airspeed Limits

| | | |
|---|---|---|
| Never exceed | | 270 mph (234 knots) |
| Maximum structural cruising | | 205 mph (178 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Flaps extended | | 150 mph (130 knots) |
| Maximum Landing Gear Operating Speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum Landing Gear Extended Speed: | | 180 mph (156 knots) |

**II. Model 65-80** (cont'd)

C.G. Range (Landing Gear Extended)

(+152.8) to (+158.4) at 8000 lb
(+147.6) to (+158.4) at 7060 lb or less
Straight line variation between points given
Moment change due to retracting landing gear -2500 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

Takeoff - 8000 lb
Landing - 7600 lb. or 8000 lb. (See NOTE 8)

No. of Seats

Maximum 9 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lb. (300 lb. at +267, 50 lb. at +288)

Fuel Capacity

| | Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|---|
| | L & R Main | 44 ea. | 44 ea. | +174 |
| | L & R Aux | 47 ea. | 45 ea. | +162 |
| or | L & R Aux | 72 ea. | 71 ea. | +165 |

See NOTE 1 for data on unusable fuel

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138)
See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing Flaps | Maximum | 31 ½ ° | | |
| Aileron tabs | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible

LD-1 thru LD-150 (except LD-34 and LD-46)

**III. Model 65-A80, 7 to 11 PCLM (Normal Category), Approved March 26, 1964**
**Model 65-A80-8800, 7 to 11 PCLM (Normal Category), Approved October 22, 1965**

Engine: 2 Lycoming IGSO-540-A1A or IGSO-540-A1D

Fuel: 100/130 min. grade aviation gasoline

Engine Limits: (Straight line manifold pressure variation with altitude shown)

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 380 | 3400 | 47.0 | S.L. |
| Takeoff | 380 | 3400 | 43.5 | 10,500 |
| Max. continuous | 360 | 3200 | 45.0 | S.L. |
| Max. continuous | 360 | 3200 | 41.7 | 10,500 |

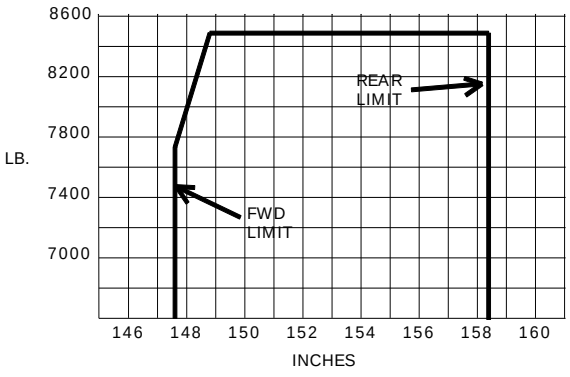
Propeller and Propeller Limits: 2 Hartzell, full-feathering, three-bladed
(a) HC-B3Z30-2 hub with 10151-8R or 10151B-8R aluminum alloy blades and spinner.
Pitch settings at 30 in. sta.: low 18 1/4°, ± 1/4°, high 87°, ± 1/2°
Diameter: not over 93 in., not under 90 in.
(b) Woodward hydraulic governor A210390; use 210498 with propeller synchronizer

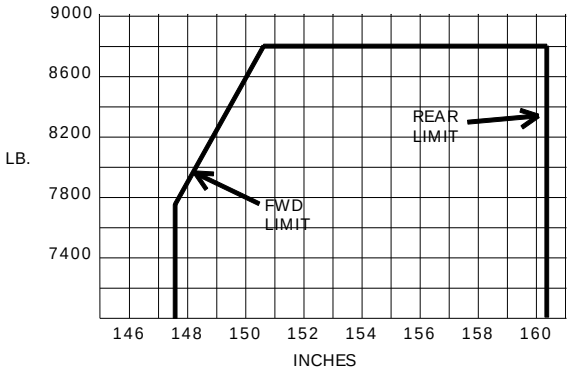
Airspeed Limits:

| | | |
|---|---|---|
| Never exceed | | 270 mph (234 knots) |
| Maximum structural cruising | | 205 mph (178 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Flaps extended | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed: | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended):

| Model 65-A80 | Model 65-A80-8800 |
|---|---|
| (+149.8) to (+158.4) at 8500 lb. | (+150.7) to (+160.4) at 8800 lb. |
| (+147.6) to (+158.4) at 7750 lb. or less | (+147.6) to (+160.4) at 7750 lb. or less |
| Straight line variation between points given. | Straight line variation between points given |
| Moment change due to retracting landing gear -2500 in. -lb. | Moment change due to retracting landing gear -2500 in. -lb. |




Empty Wt. C.G. Range: None

Maximum Weight:

| | Model 65-A80 | Model 65-A80-8800 |
|---|---|---|
| Takeoff | 8500 lb. | 8800 lb (see NOTE 9) |
| Landing | 8500 lb. | 8800 lb. |

No. of Seats: Maximum 11 (2 crew at +129). See loading instructions for passenger loading.

**III. Model 65-A80, Model 65-A80-8800** (cont'd)

| | |
|---|---|
| Maximum Baggage (Structural Limit) | 350 lb. (+275, aft compartment, except LD-34 and LD-46)<br>350 lb. (300 lb. at +267, 50 lb. at +288, LD-34 only) (Standard aft compartment)<br>300 lb. (+267, LD-46 only) (Standard aft compartment)<br>250 lb. (+309) (Optional aft compartment) (65-A80-8800) (450 lb. max in both compartments)<br>350 lb. (+70) (Optional nose compartment) |

| Fuel Capacity | | Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|---|---|
| | | L & R Main | 44 ea. | 44 ea. | +174 |
| | | L & R Aux. | 47 ea. | 45 ea. | +162 |
| | or | L & R Aux. | 64 ea. | 63 ea. | +160 |
| | or | L & R Aux. | 72 ea. | 71 ea. | +165 |
| | or | L & R Aux. | 89 ea. | 88 ea. | +163 |

See NOTE 1 for data on unusable fuel.

| | |
|---|---|
| Oil Capacity | Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138)<br>See NOTE 1 for data on unusable (undrainable) oil. |

| Control Surface Movements | | | | | |
|---|---|---|---|---|---|
| Wing flaps | Maximum | 31 ½ ° | | |
| Aileron tabs | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

| | |
|---|---|
| Serial No's. Eligible | LD-34, LD-46, LD-151 through LD-269 |

**IV. Model 65-90, 10 PCLM (Normal Category), Approved May 19, 1964**

| | |
|---|---|
| Engines | 2 United Aircraft of Canada, Ltd. PT6A-6 (Turboprop) or<br>2 United Aircraft of Canada, Ltd. or Pratt & Whitney PT6A-20 (Turboprop)<br>See NOTE 11. |
| 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.<br>See NOTE 5 for emergency fuels. |

**IV. Model 65-90** (cont'd)

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

Engine Limits

Static Sea Level Ratings PT6A-6

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop Shaft Speed | Max. Permissible Turbine Inlet Temp. (Deg. C.) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 500 | 62 | 525 | 2200* | 994 |
| Max. Continuous | 500 | 62 | 525 | 2200* | 952 |
| Strtg. Trans. (2 seconds) | | | | | 1038 |
| Max Reverse (1 minute) | 300 | | | 2100* | 750 |

Static Sea Level Ratings PT6A-20

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop Shaft speed | Max. Permissible Turbine Inlet Temp. (Deg. C.) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 500 | 68 | 527 | 2200* | 750 |
| Max. Continuous | 500 | 68 | 527 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max Reverse ( 1 minute) | 300 | | | 2100* | 750 |

See NOTE 4 At low altitude and low ambient temperature the engines may produce more power at takeoff than the airplane has been certificated for. Under these conditions, the placarded torquemeter limitations shall not be exceeded.

Oil Temperature PT6A-6 Plus 32°F to 185°F max continuous
Maximum 195°F not to exceed 5 minutes
Minus 40°F minimum starting

PT6A-20 Plus 50° F to 200° F max. continuous
Minus 40°F to 200°F low idle
Maximum 210°F not to exceed 5 minutes
Minus 40°F minimum starting

Propeller and Propeller Limits (See NOTES 12 & 13)

Non Reversing Propeller:
2 Hartzell HC-B3TN-2/T10173B-8 or HC-B3TN-2(B)/T10173B-8 or HC-B3TN-2M/ T10173NB-8 with three blades each.
Diameter: 93.5 in. (nominal) Min. allowable for repair 91.5 in.
(No further reduction permitted).
Pitch settings at 30 in. sta.: low 19°, feathered 87°

Reversing Propeller:
2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3M/T10173NB-8 with three blades each
Diameter: 93-3/8 in. (nominal). Min. allowable for repair 90-3/8 in.
(No further reduction permitted)
Flight idle stop (See NOTE 10)
Secondary flight idle stop (See NOTE 10)
Reverse -11°
Feather -87°

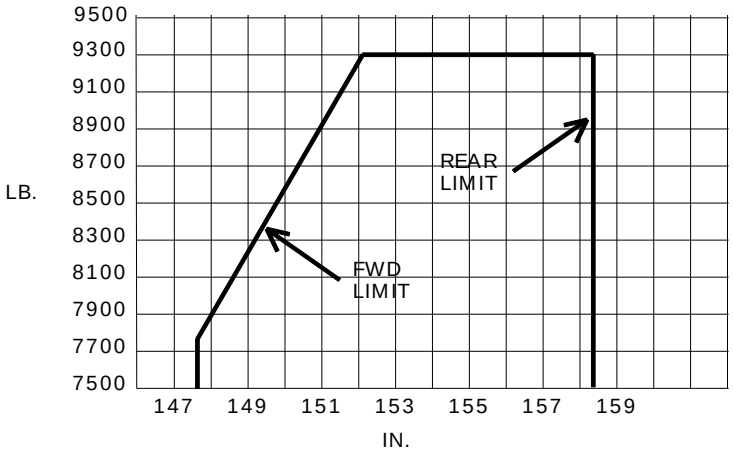
Airspeed Limits

| | | |
|---|---|---|
| Maximum operating speed | | 240 mph (208 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Flaps extended | | 150 mph (130 knots) |
| Maximum landing gear operating speed : | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

**IV. Model 65-90** (cont'd)

C.G. Range (Landing Gear Extended)

(+152.2) to (+158.4) at 9300 lb. (See NOTE 7)
(+151.3) to (+158.4) at 9000 lb.
(+147.6) to (+158.4) at 7750 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -3530 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 9000 or 9300 lb. (See NOTE 7)
Landing 8550 or 8835 lb. (See NOTE 7)

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage

350 lb. (+275)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel.

Oil Capacity

18.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

Max Oper Limit

30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron Tab | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator Tab | Up | 10° | Down | 21° |
| Elevator Tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder Tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible

LJ-1 thru LJ-113 (except LJ-76)

**V. Model 65-88, 10 PCLM (Normal Category), Approved September 21, 1965**

Engines

2 Lycoming IGSO-540-A1D

Fuel

100/130 minimum grade aviation gasoline

Engine Limits

(Straight line manifold pressure variation with altitude shown)

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 380 | 3400 | 47.0 | S.L. |
| Takeoff | 380 | 3400 | 43.5 | 10,500 |
| Max. continuous | 360 | 3200 | 45.0 | S.L. |
| Max. continuous | 360 | 3200 | 41.7 | 10,500 |

Propeller and Propeller Limits

2 Hartzell, full-feathering, three-bladed

(a) HC-B3Z30-2 hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.
Pitch settings at 30 in. sta.: low 18 1/4° ± 1/4°
high 87° ± 1/4°
Diameter: not over 93 in., not under 90 in.

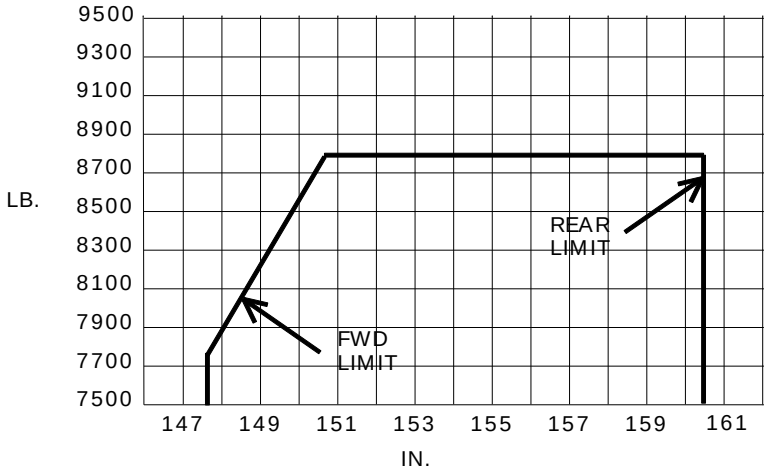
(b) Woodward hydraulic governor A210390 (use 210498 with propeller synchronizer)

Airspeed Limits

| | | |
|---|---|---|
| Never exceed | | 270 mph (234 knots) |
| Maximum structural cruising | | 205 mph (178 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Maximum flap extension speed | | |
| Approach position - 50% | | 200 mph (174 knots) |
| Full down flap psn. - 100% | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)

(+150.7) to (+160.4) at 8800 lb.
(+147.6) to (+160.4) at 7750 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -2050 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 8800 lb
Landing 8800 lb

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

**V. Model 65-88** (cont'd)

Maximum Baggage (Structural Limit): 350 lb. (+275)

Fuel Capacity

| | Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|---|
| | L & R Main | 44 ea. | 44 ea. | +174 |
| | L & R Aux | 89 ea. | 88 ea. | +162 |
| or | L & R Wing | 134.5 ea. | 132 ea. | +166 |

See NOTE 1 for data on unusable fuel

Oil Capacity: Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138). See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 31 ½ ° | | |
| Aileron Tab | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo (S/N LP-1 thru LP-45) | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator Tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible: LP-1 thru LP-47 (except LP-27 and LP-29)

## VI. Model 65-B80, Queen Air, 13 PCLM (Normal Category), Approved October 22, 1965

**Engines**

2 Lycoming IGSO-540-A1A or 2 Lycoming IGSO-540-A1D

**Fuel**

100/130 minimum grade aviation gasoline

**Engine Limits**

(Straight line manifold pressure variation with altitude shown)

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 380 | 3400 | 47.0 | S.L. |
| Takeoff | 380 | 3400 | 43.5 | 10,500 |
| Max. continuous | 360 | 3200 | 45.0 | S.L. |
| Max. continuous | 360 | 3200 | 41.7 | 10,500 |

**Propeller and Propeller Limits**

2 Hartzell, full-feathering, three-bladed

(a) HC-B3Z30-2 hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.
Pitch settings at 30 in. sta.: low 18 1/4° ± 1/4°, high 87° ± 1/2°
Diameter: not over 93 in., not under 90 in.

(b) Woodward hydraulic governor A210390 (use 210498 with propeller synchronizer)

**Airspeed Limits**

| | | |
|---|---|---|
| Never exceed | | 270 mph (234 knots) |
| Maximum structural cruising | | 205 mph (178 knots) |
| Maneuvering | | 195 mph (169 knots) |
| Maximum flap extension speed | | |
| Approach position - 50% | | 200 mph (174 knots) |
| Full down position - 100% | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

**C.G. Range (Landing Gear Extended)**

(+150.7) to (+160.4) at 8800 lb.
(+147.6) to (+160.4) at 7750 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -2500 in. -lb.
For diagram see Section V.

**Empty Wt. C.G. Range**

None

**Maximum Weight**

Takeoff 8800 lb.
Landing 8800 lb.

**No. of Seats**

Maximum 13 (2 crew at +125). See loading instructions for passenger loading.

**Maximum Baggage (Structural Limit)**

350 lb (+275) (standard aft compartment)
250 lb. (+309) (optional aft compartment)
(450 lb. maximum in both compartments)
350 lb. (+70) (nose compartment)
300 lb. (+161) (optional cargo pod) (See NOTE 20)

**Fuel Capacity**

(LD-270 thru LD-279)

| | Tank | Cap Gal | (1) Usable Gal | (2) Usable Gal | Arm |
|---|---|---|---|---|---|
| | L & R Main | 44 ea. | 44 ea. | 39 ea. | +174 |
| | L & R Aux | 64 ea. | 63 ea. | 61 ea. | +160 |
| or | L & R Aux | 89 ea. | 88 ea. | 85 ea. | +162 |
| | L & R Wing | 19.5 ea. | 107 ea. | | +166 |
| or | L & R Wing | 107.5 ea. | | 100 ea. | +166 |
| or | L & R Wing | 134.5 ea. | 132 ea. | 127 ea. | +166 |

See NOTE 1 for data on unusable fuel
(1) Prior to incorporation of S.I. 0539-381
(2) After incorporation of S.I. 0539-381

**VI. Model 65-B80** (cont'd)

Oil Capacity: Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138)
See NOTE 1 for data on unusable (undrainable) oil.

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing Flaps | Maximum | 31 ½ ° | | |
| Aileron Tab | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab anti-servo (S/N LD-270 thru LD-368) | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible: LD-270 thru LD-511

**VII. Model 65-A90, King Air, 10 PCLM (Normal Category), Approved March 7, 1966**

Engines: 2 United Aircraft of Canada, Ltd. or Pratt & Whitney, PT6A-20 (Turboprop)

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 5 for emergency fuels.

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

Engine Limits

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C.) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 500 | 68 | 527 | 2200* | 750 |
| Max Continuous | 500 | 68 | 527 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max. Reverse (1 minute) | 300 | | | 2100 | 750 |

Static Sea Level Ratings (See NOTES 17 & 19)

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C.) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 72 | 579 | 2200* | 750 |
| Max. Continuous | 550 | 72 | 579 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max. Reverse (1 minute) | 300 | | | 2100 | 750 |

*See NOTE 4

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

| | | |
|---|---|---|
| Oil Temperatures: | -40°F | minimum starting |
| | -40°F to 200°F | low idle |
| | 50°F to 200°F | max continuous |
| | 210°F | max oil temperature not to exceed 5 minutes. |
| Oil Temperatures: (see NOTES 17 & 19) | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | max continuous |

**VII. Model 65-A90** (cont'd)

Propeller and Propeller Limits

Non Reversing Propeller:
2 Hartzell HC-B3TN-2 (b)/T10173B-8 or HC-B3TN-2M/T10173NB-8
Diameter: 93 3/8 in. (Nominal) minimum allowable for repair 90 3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

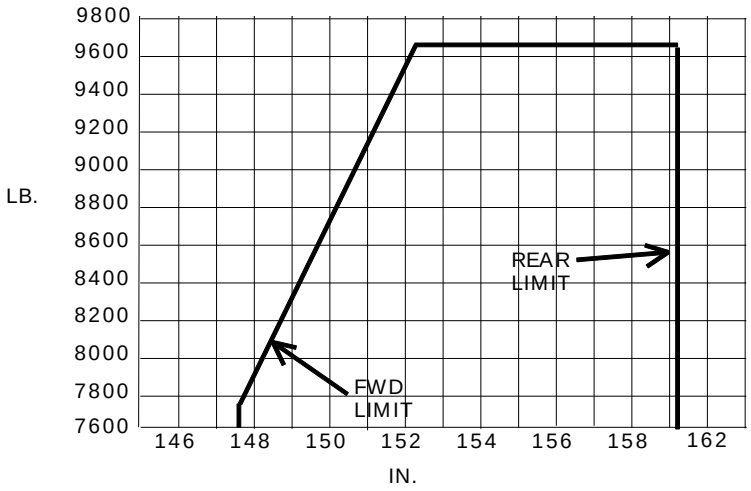
Reversing Propeller:
2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with T10173E8 or T10173B8 or T10173NB-8 blades.
Diameter: 93-3/8 in. (nominal) minimum allowable for repair 90-3/8 in (no further reduction permitted)
Pitch Settings at 30 in. Sta.:
Flight idle stop (See NOTE 10)
Secondary flight idle stop (See NOTE 10)
Reverse -11°
Feather 87°

Airspeed Limits

| | | |
|---|---|---|
| Max Operating Speed | | 240 mph (208 knots) |
| Maneuvering Speed | | 195 mph (169 knots) |
| Flaps extended speed | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

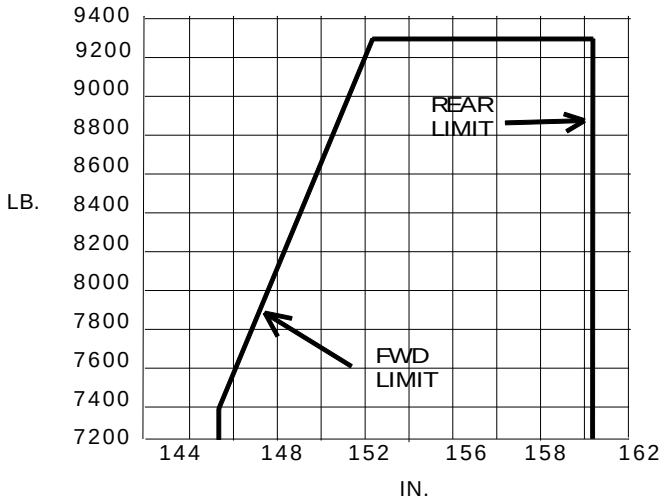
C.G. Range (Landing Gear Extended)

(+153.2) to (+160.4) at 9650 lb. (See NOTE 17)
(+152.2) to (+160.4) at 9300 lb.
(+147.6) to (+160.4) at 7750 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -3411 in. -lb.

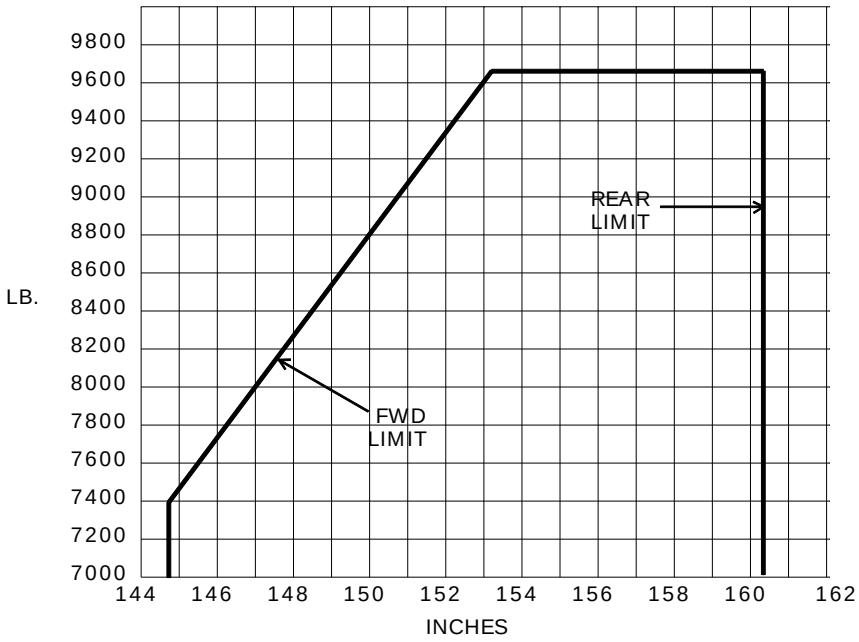


**II. Model 65-A90** (cont'd)

(+152.2) to (+160.4) at 9300 lb.
(+144.7) to (+160.4) at 7400 lb. or less (See NOTE 18)
Straight line variation between points given.
Moment change due to retracting landing gear -3825 in. -lb.




(+153.2) to (+160.4) at 9650 lb. (See NOTE 19)
(+144.7) to (+160.4) at 7400 lb. or less (See NOTE 19)
Straight line variation between points given.
Moment change due to retracting landing gear -3825 in. -lb.




| | |
|---|---|
| Empty Wt. C.G. Range | None |
| Maximum Weight | Takeoff 9300 lb.<br>Takeoff 9650 lb. (See NOTE 17 & 19)<br>Landing 8835 lb.<br>Landing 9168 lb. (See NOTE 17 & 19) |
| No. of Seats | Maximum 10 (2 crew at +129). See loading instructions for passenger loading. |
| Maximum Baggage (Structural limit) | 350 lb. (+275) |

**VII. Model 65-A90** (cont'd)

Fuel Capacity

| Tank | Cap. Gal. | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel

Oil Capacity

18.4 qt. total (+101)
See NOTE 1 for data on unusable oil

Max. Oper Limit

30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tab (See NOTE 18 & 19) | Up | 15° | Down | 15° (LH only) |
| Aileron tab (anti-servo) | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab (anti-servo) | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |
| Rudder (See NOTES 17 & 19) | Right | 24° | Left | 19° |

Serial No's. Eligible

LJ-76, LJ-114 thru LJ-317

**VIII. Model A65, Queen Air, 7 to 9 PCLM (Normal Category), Approved November 3, 1966**
**Model A65-8200, Queen Air, 11 PCLM (Normal Category), Approved October 9, 1967**
**Model 70, Queen Air, 11 PCLM (Normal Category), approved November 27, 1968**

Engines

2 Lycoming IGSO-480-A1E6 or IGSO-480-A1B6 (Model A65)
2 Lycoming IGSO-480-A1E6 (Models A65-8200 and 70)

Fuel

100/130 min. grade aviation gasoline

Engine Limits

(Straight line manifold pressure variation with altitude shown)

| | HP | RPM | MP | Alt |
|---|---|---|---|---|
| Takeoff | 340 | 3400 | 48.0 | S.L. |
| Takeoff | 340 | 3400 | 43.5 | 11,000 |
| Max continuous | 320 | 3200 | 45.0 | S.L. |
| Max continuous | 320 | 3200 | 41.5 | 11,000 |

Propeller and Propeller Limits

2 Hartzell, full-feathering, three-bladed
(a) HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 836 spinner.
Pitch settings at 30 in. Sta.: low 16°, high 87°
Diameter: not over 93 in., not under 90 in.
(b) Woodward hydraulic governor 210365 or 210433

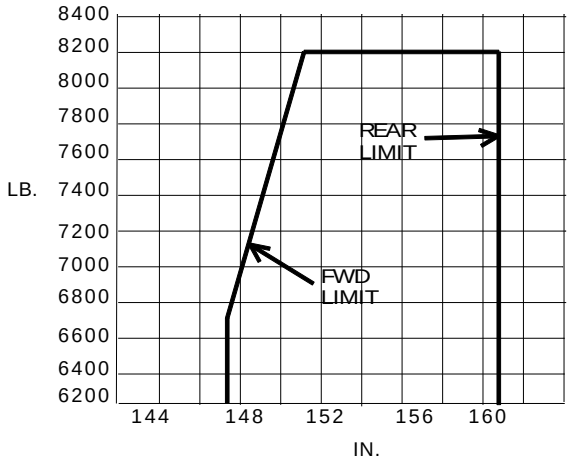
Airspeed Limits

| | |
|---|---|
| Never exceed | 270 mph (234 knots) |
| Maximum structural cruising | 205 mph (178 knots) |
| Maneuvering | 195 mph (169 knots) |
| Maximum flap extension speed | |
| Approach position - 50% (LC-325 & up - Model A65) | 200 mph (174 knots) |
| (LB-1 & up - Model 70) Full down position - 100% | 150 mph (130 knots) |
| Maximum landing gear operating speed: Extension | 180 mph (156 knots) |
| Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | 180 mph (156 knots) |

**VIII. Model A65, Model A65-8200, Model 70** (cont'd)

C.G. Range (Landing Gear Extended)

(+151.1) to (+160.4) at 8200 lb. (see NOTE 16)
(+149.9) to (+160.4) at 7700 lb.
(+147.6) to (+160.4) at 6720 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -2500 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 7700 or 8200 lb. (See NOTE 16)
Landing 7700 or 8200 lb (See NOTE 16)

No. of Seats

Maximum 9 or 11 (2 crew at +129). See NOTE 16.
See loading instructions for passenger loading.

Maximum Baggage (Structural Limits) (LC-325 and up)

350 lb. (300 lb. at +267, 50 lb. at +288) (aft compartment)
350 lb. (+70) (nose compartment)

Maximum Baggage (Structural Limits) (LC-325 and up) (LB-1 and up)

350 lb. (+275) (standard aft compartment)
250 lb. (+309) (optional aft compartment)
350 lb. (+ 70) (nose compartment)

Fuel Capacity

| | Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|---|
| | (A) L & R Wing | 92.5 ea. | 90 ea. | +168 |
| or | (B) L & R Wing | 109.5 ea. | 107 ea. | +166 |
| or | (C) L & R Wing | 117.5 ea. | 115 ea. | +168 |
| or | (D) L & R Wing | 134.5 ea. | 132 ea. | +166 |

Fuel system applicability:

| Model | Serial No. | Systems |
|---|---|---|
| A65 | LC-240 through LC-324 | A,C,D |
| A65 | LC-325 and up | B,D |
| A65-8200 | LC-273 through LC-324 | A,B,D |
| 70 | LB-1 and up | B,D |

See NOTE 1 for data on unusable fuel

Oil Capacity

Left nacelle tank, 16 qt. (+138), right nacelle tank, 16 qt. (+138).
See NOTE 1 for data on unusable (undrainable) oil.

**VIII. Model A65, Model A65-8200, Model 70** (cont'd)

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 31 ½ ° | | |
| Aileron tabs | Up | 7 ½ ° | Down | 7 ½ ° (LH only) |
| Aileron tabs anti-servo | Up | 14° | Down | 8° |
| | (S/N LC-240 thru LC-283) | | | |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible

Model A65 LC-240 through LC-335
Model A65-8200 LC-273 through LC-324 (see NOTE 16)
Model 70 LB-1 through LB-35

**IX. Model 65-A90-1 (Military U-21A, RU-21A, RU-21D, JU-21A, U-21G, RU-21H (GR V)), 12 PCLM (Normal Category), Approved April 27, 1966**
**Model 65-A90-4 (Military RU-21E, RU-21H (GR II & IV), RU-21H (GR V)), 12 PCLM (Normal Category), Approved December 10, 1971.**

Engines

2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-20 (Turboprop)

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. D1644.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox)

Use MIL-L-7808 or MIL-L-23699

Engine Limits

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop Shaft Speed | Max Permissible Turbine Interstage Temp. (Deg. C.) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 68 | 579 | 2200* | 750 |
| Max. Continuous | 550 | 68 | 579 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max. Reverse (1 minute) | 300 | | | 2100 | 750 |

*See NOTE 4.

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

| | | |
|---|---|---|
| Oil Temperatures: | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | maximum continuous |
| | 210°F | maximum oil temperature not to exceed 5 minutes. |

Propeller and Propeller Limits

2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3/T10173E-8 or HC-B3TN-3/T10173B-8 or HC-B3TN-3M/T10173NB-8 with three blades each.
Diameter: 93 3/8 in. (Nominal)
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 10)
Secondary flight idle stop (See NOTE 10)
Reverse -11°
Feather 87°

**IX. Model 65-A90-1, Model 65-A90-4** (cont'd)

Airspeed Limits

| | | |
|---|---|---|
| Max. operating speed | | 240 mph (208 knots) |
| Maneuvering speed | | 195 mph (169 knots) |
| Flaps extended speed | | 150 mph (130 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed: | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)

(+153.2) to (+160.4) at 9650 lb.
(+144.7) to (+160.4) at 7400 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -3825 in. -lb.
For diagram see third one of Section VII.

Empty Wt C.G. Range

None

Maximum Weight

Takeoff 9650 lb. (See NOTE 24)
Landing 9168 lb.

No. of Seats

Maximum 12 (2 crew at +129). See loading instructions for passenger loading.

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 57 ea. | 57 ea. | +131 |
| L & R Wing | 128 ea. | 128 ea. | +167 |

See NOTE 1 for data on unusable fuel

Oil Capacity

18.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

Max Oper Limits

30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron Tab (left only) | Up | 7 ½ ° | Down | 7 ½ ° |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 26° |

Serial No's. Eligible

LM-1 and up. Prior to civil certification, 65-A90-1 airplanes that have been operated by the military must be modified per Beech dwg. 50-002018 (U21A, U-21G, and RU-21A) or 50-002083 (RU-21D) or 50-002084 (JU-21A) or 91-002052 (RU-21H, GR V).

LU-1 and up. Prior to civil certification, 65-A90-4 airplanes that have been operated by the military must be modified per Beech dwg. 91-002050 (RU-21E) or 91-002051(RU-21H, GR II & IV) or 91-002052 (RU-21H, GR V).

**X. Model B90, King Air, 10 PCLM (Normal Category), Approved November 14, 1967**
**Model C90, King Air, 10 PCLM (Normal Category), Approved October 23, 1970**

Engines

2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-20 (Turboprop) (Model B90)
2 United Aircraft of Canada Ltd. or Pratt & Whitney, PT6A-20 (Turboprop), PT6A-6/20 (Turboprop), PT6A-20A (Turboprop), or PT6A-21 (Turboprop) (Model C90). See NOTE 21.

**X. Model B90, Model C90** (cont'd)

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 5 for emergency fuels.

Oil (Engine and Gearbox)

UACL PT6 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits

Static Sea Level Ratings (PT6A-20, PT6A-6/C20, PT6A-20A)

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 72 | 579 | 2200* | 750 |
| Max. Continuous | 550 | 72 | 579 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max Reverse (1 minute) | 300 | | | 2100 | 750 |

Static Sea Level Ratings (PT6A-21)

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop Shaft Speed | Max Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 75 | 580 | 2200* | 695 |
| Max. Continuous | 550 | 75 | 580 | 2200* | 695 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max Reverse (1 minute) | 300 | | | 2100 | 695 |

***** See NOTE 4

At low altitudes 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.

Oil Temperatures:

| | |
|---|---|
| -40°F | minimum starting |
| -40°F to 210° F | low idle |
| 50°F to 210°F | max continuous |

Propeller and Propeller Limits

Non Reversing Propeller:
2 Hartzell HC-B3TN-2(B)/T10173B-8 or HC-B3TN-2M/T10173NB-8
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

Reversing Propeller (For Model C90 Only, See Note 30.)
2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with T10173E8 or T10173B8 or T10173NB-8 blades
(For Model C90 S/N LJ-954 and after)
2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with Hartzell T10173K-8 or T10173NK-8 aluminum alloy blades, and Hartzell C-3065-8P or C-3065-10P or C-3065-12P or C-3065-13P spinner assembly.

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 10) |
| Secondary flight idle stop | (See NOTE 10) |
| Reverse | -11° |
| Feather | 87° |

**X. Model B90, Model C90** (cont'd)

| | | | |
|---|---|---|---|
| Airspeed Limits | Maximum operating speed | | 240 mph (208 knots) |
| | Maneuvering speed | | 195 mph (169 knots) |
| | Flaps extended speed | | 150 mph (130 knots) |
| | Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | | Retraction | 150 mph (130 knots) |
| | Maximum landing gear extended speed | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)

(+153.2) to (+160.4) at 9650 lb.
(+144.7) to (+160.4) at 7400 lb.
For Model B90
For Model C90 aircraft with PT6A-20, PT6A-6/C20, or PT6A-20A engines (See NOTE 21)

(+153.2) to (+160.0) at 9650 lb.
(+144.7) to (+160.0) at 7400 lb.
For Model C90 aircraft with PT6A-21 engines (See NOTE 21)

Straight line variation between points given
Moment change due to retracting landing gear -3825 in. -lb.

Empty Wt. C.G. Range: None

Maximum Weight: Takeoff: 9650 lb.
Landing: 9168 lb.

No. of Seats: Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit): 350 lb (+275)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel.

Oil Capacity: 18.4 qt. total (+101) for PT6A-20 engine, 22.4 qt. total (+101) for PT6A-21 engine.
See NOTE 1 for data on unusable oil.

Max. Oper. Limit: 30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 15° | Down | 15° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Ele. tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible: Model B90: LJ-318 thru LJ-501
Model C90: LJ-502 thru LJ-1062

**XI. Model 65-A90-2 (Military RU-21B) and 65-A90-3 (Military RU-21C), 5 PCLM (Normal Category), Approved March 20, 1969**

Engines: 2 United Aircraft of Canada, Ltd. or Pratt & Whitney PT6A-29 (turboprop),
or 2 United Aircraft of Canada, Ltd. or Pratt & Whitney PT6A-34 (turboprop)

**XI. Model 65-A90-2** (cont'd)

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 5 for emergency fuels.

Oil (Engine and Gearbox)

PT6A-29 Engine Service Bulletin No. 1 lists approved brand oils.
PT6A-34 Engine Service Bulletin No. 1 lists approved brand oils.

Engine Limits (PT6A-29)

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 620 | 70 | 648 | 2200* | 750 |
| Max. Continuous | 620 | 70 | 648 | 2200* | 750 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max Reverse (1 minute) | 470 | | | 2068 | 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.

| Oil Temperatures: | | |
|---|---|---|
| | -40°F | minimum starting |
| | -40°F to 200°F | low idle |
| | 50°F to 200°F | max continuous |
| | 210°F | max oil temperature not to exceed 5 min. |

Engine Limits (PT6A-34)

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp. (deg. C) |
|---|---|---|---|---|---|
| Takeoff (5 minutes) | 620 | 82 | 648 | 2200* | 790 |
| Max Continuous | 620 | 82 | 648 | 2200* | 790 |
| Strtg. Trans. (2 seconds) | | | | | 1090 |
| Max Reverse (1 minute) | 470 | | | 2068 | 790 |

*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.

| Oil temperatures: | | |
|---|---|---|
| | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | max. continuous |
| | 210°F | max oil temperature not to exceed 5 minutes |

Propeller and Propeller Limits

2 Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3/T10173E-8 or HC-B3TN-3/T10173B-8 or HC-B3TN-3M/T10173NB-8 with three blades each.
Diameter: 93-3/8 in. (Nominal)
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 10) |
| Secondary flight idle stop | (see NOTE 10) |
| Reverse | -11° |
| Feather | 87° |

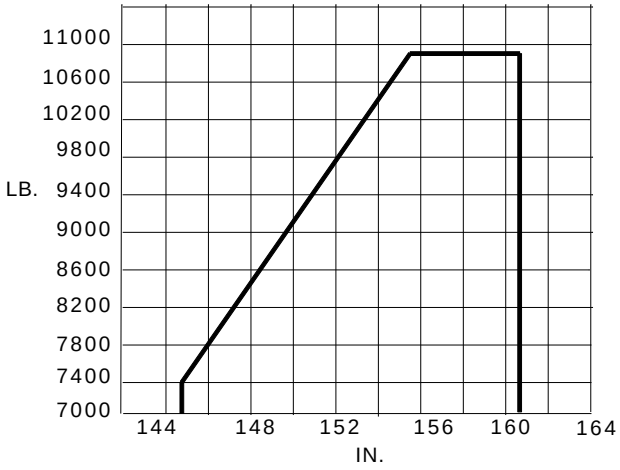
**XI. Model 65-A90-2** (cont'd)

Airspeed Limits

| | | |
|---|---|---|
| Maximum operating speed | | 240 mph (208 knots) |
| Maneuvering speed | | 195 mph (169 knots) |
| Maximum flap extended speed | | |
| Approach position 35% | | 200 mph (174 knots) |
| Full down flap position - 100% | | 164 mph (143 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 150 mph (130 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)

(+155.2) to (+160.4) at 10,900 lb.
(+144.7) to (+160.4) at 7400 lb or less
Straight line variation between points given
Moment change due to retracting landing gear -4500 in. -lb.




Empty Wt. C.G. Range

None

Maximum Weight

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

No. of Seats

Maximum 5 (2 crew at +129). See loading instructions for passenger loading.

Fuel Capacity

| Tank | Cap. Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 53 ea. | 53 ea. | +131 |
| L & R Wing | 145 ea. | 145 ea. | +165 |

See NOTE 1 for data on unusable fuel.

Oil Capacity

22.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 7 ½ ° | Down | 7 ½ ° |
| Aileron tab anti-servo | Up | 14° | Down | 8° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible

LS-1 and up. Prior to civil certification, 65-A90-2 airplanes that have been operated by the military must be modified per Beech dwg. 50-002081.
LT-1 and up. Prior to civil certification 65-A90-3 airplanes that have been operated by the military must be modified per Beech dwg. 50-002082.

**XII. Model E90, King Air, 10 PCLM (Normal Category), Approved April 13, 1972**

Engines: 2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-28 (turboprop)

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 5 for emergency fuels.

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

Engine Limits

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp. (deg. C) |
|---|---|---|---|---|---|
| Max. cont. and takeoff | 550** | 76 | 580 | 2200* | 750 |
| Strtg. Trans (2 seconds) | | | | | 1090 |
| Max Reverse (1 minute) | 300 | | | 2100 | 750 |

*See NOTE 4
**Flat rated

At low altitudes 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.

| Oil Temperature: | | |
|---|---|---|
| | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | maximum continuous |

Propeller and Propeller Limits

Non Reversing Propeller:
2 Hartzell HC-B3TN-2(B)/T10173B-8
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair: 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

Reversing Propeller (See NOTE 30.)
2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with T10173E8 or T10173B8 or T10173NB-8 blades.

(For Model E90 S/N LW-348 and after only): 2 Hartzell HC-B3TN-3 or HC-B3TN-3B or HC-B3TN-3M hubs with Hartzell T10173K-8 or T10173NK-8 aluminum alloy blades, and Hartzell C-3065-8P or C-3065-10P or C-3065-12P or C-3065-13P spinner assembly.

Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair: 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 10) |
| Secondary flight idle stop | (See NOTE 10) |
| Reverse | -11° |
| Feather | 87° |

Airspeed Limits

| | |
|---|---|
| Maximum Operating Speed | 260 mph (226 knots) |
| Maneuvering | 202 mph (175 knots) |
| Flaps extended speed | 150 mph (130 knots) (S/N LW-1 through LW-42) |
| | 161 mph (140 knots) (S/N LW-43 and after) |

**XII. Model E90** (cont'd)

| | | | |
|---|---|---|---|
| Airspeed Limits (cont'd) | Maximum Landing Gear Operating Speed: | Extension | 180 mph (156 knots) |
| | | Retraction | 150 mph (130 knots) (S/N LW-1 through LW-42) |
| | | | 168 mph (146 knots) (S/N LW-43 and after) |
| | Maximum Landing Gear Extended Speed: | | 180 mph (156 knots) |

C.G. Range (Landing Gear Extended)
(+152.0) to (+160.0) at 10,100 lb.
(+144.7) to (+160.0) at 7850 lb. or less
Straight line variation between points given
Moment change due to retracting landing gear -3825 in. -lb.

Empty Wt. C.G. Range
None

Maximum Weight
Takeoff: 10,100 lb.
Landing: 9,700 lb.

No. of Seats
Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)
350 lb. (+275)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Aux | 41 ea. | 41 ea. | +174 |
| L & R Main | 196 ea. | 196 ea. | +153 |

See NOTE 1 for data on unusable fuel.

Oil Capacity
18.4 qt. total (+101).
See NOTE 1 for data on unusable oil.

Control Surface Movements

| | | | | | |
|---|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 15° | Down | 15° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder Tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible
Model E90: LW-1 and up

**XIII. Model H90, King Air (T-44A), 10 PCLM (Normal Category), Approved March 23, 1977**

Engines
2 United Aircraft of Canada, Ltd., or Pratt & Whitney, PT6A-34B (Turboprop)

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 5 for emergency fuels.

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

**XIII. Model H90** (cont'd)

Engine Limits

Static Sea Level Ratings

| | Shaft Horsepower | Jet Thrust | Equivalent Shaft Horsepower | Prop. Shaft Speed | Max. Permissible Turbine Interstage Temp (Deg. C) |
|---|---|---|---|---|---|
| Max Cont & Takeoff | 550** | 74 | 579 | 2200* | 790 |
| Strtg. Trans (2 seconds) | | | | | 1090 |
| Max. Reverse (1 minute) | 300 | | | 2100 | 790 |

*See NOTE 4
**Flat rated

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.

| Oil Temperatures: | | |
|---|---|---|
| | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | maximum continuous |

Propeller and Propeller Limits

Reversing Propeller (See NOTE 30.)
2 Hartzell HC-B3TN-3B or HC-B3TN-3M hubs with T10173B8 or T10173NB-8 blades.
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 10) |
| Reverse | -11° |
| Feather | 87° |

Airspeed Limits

| | | |
|---|---|---|
| Maximum operating speed | | 260 mph (226 knots) |
| Maneuvering | | 203 mph (175 knots) |
| Flaps extended speed | | 161 mph (140 knots) |
| Maximum landing gear operating speed: | Extension | 180 mph (156 knots) |
| | Retraction | 168 mph (146 knots) |
| Maximum landing gear extended speed | | 180 mph (156 knots) |

See NOTE 23

C.G. Range (Landing Gear Extended)

(+152.4) to (+160.0)at 10,200 lb.
(+144.7) to (+160.0) at 7,850 lb.
Straight line variation between points given
Moment change due to retracting landing gear -3825 in.-lb.

Empty Wt. C.G. Range

None

Maximum Weight

Takeoff 10,200 lb.
Landing 9,700 lb.

No. of Seats

Maximum 10 (2 crew at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lb. (+277)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Aux. | 61 ea. | 61 ea. | +135 |
| L & R Main | 131 ea. | 131 ea. | +165 |

See NOTE 1 for data on unusable fuel.

Oil Capacity

22.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

**XIII. Model H90** (cont'd)

Maximum Operating Limit: 31,000 ft. pressure altitude

Control Surface Movements

| | | | | | |
|---|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 15° | Down | 15° |
| Aileron | Up | 20° | Down | 20° |
| Elevator Tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible: Model H90 (T-44A): LL-1 and up

**XIV. Model C90A, King Air (Normal Category), Approved December 1, 1983**

Engines: 2 Pratt & Whitney Aircraft of Canada, Ltd. PT6A-21 (Turboprop)

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 5 for emergency fuels.

Oil (Engine and Gearbox): P&WC PT6 Engine Service Bulletin No. 1 lists approved brand oils

Engine Limits

| | Shaft Horsepower | $N_1$ Gas Generator Speed | Prop Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 101.5 | 2200* | 695 |
| Max Continuous | 550 | 101.5 | 2200* | 695 |
| Starting Transient (2 seconds) | | 102.6 | | 1090 |
| Max Reverse (1 minute) | 300 | 88.0 | 2100 | 695 |

* 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 limits shall not be exceeded.

| | | |
|---|---|---|
| Oil temperatures: | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | max. continuous |

Propeller and Propeller Limits

Reversing Propeller (See Note 30.)
2 Hartzell HC-B3TN-3M or HC-B3TN-3B hubs with T10173K-8 or T10173NK-8 blades.
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 10) |
| Secondary flight idle stop | (See NOTE 10) |
| Reverse | -11° |
| Feather | 87° |

Propeller and Propeller Limits
S/N LJ-1063 thru LJ-1287,
LJ-1288 thru LJ-1294
LJ-1296 thru LJ-1299

Non Reversing Propeller
2 Hartzell HC-B3TN-2(B)/T10173B-8
Diameter: 93-3/8 in. (Nominal) Minimum allowable for repair 90-3/8 in. (no further reduction permitted)
Pitch settings at 30 in. Sta.: Low 19°, Feather 87°

**XIV. Model C90A** (cont'd)

| | | |
|---|---|---|
| S/N LJ-1288, LJ-1295 | Reversing Propeller | |
| LJ-1302, LJ-1303, LJ-1305 | 2 McCauley 4HFR34C768 hubs with 94LMA-4 blades | |
| thru LJ-1308, LJ-1311, LJ-1312 | Diameter: 90 in. (Nominal) Minimum allowable for repair | |
| LJ-1314 thru LJ-1316, LJ-1318 | 89 in. (no further reduction permitted) | |
| LJ-1320 thru LJ-1366, LJ-1368 | Pitch settings at 30 in. sta.: | |
| thru LJ-1372, LJ-1374 thru | Flight Idle Stop | (See NOTE 27) |
| LJ-1376, LJ-1378 thru | Reverse | -10° ± .2° |
| LJ-1383, LJ-1385, LJ-1387, | Feather | 85.8° ± .2° |
| LJ-1388, LJ-1390 thru LJ-1393, | minimum idle speed | 1100 rpm (See NOTE 33) |
| LJ-1395, LJ-1396, LJ-1398 thru | | |
| LJ-1402, LJ-1404 thru LJ-1410, | | |
| LJ-1412 thru LJ-1424, LJ-1426 | | |
| thru LJ-1430, LJ-1432 thru | | |
| LJ-1434, LJ-1436 thru LJ-1726, | | |
| LJ-1728 thru LJ-1753, LJ-1755. | | |

| Airspeed Limits | | CAS | CAS | IAS |
|---|---|---|---|---|
| S/N LJ-1063 thru | Maximum operating speed | 260 mph | (226 knots) | 226 knots |
| LJ-1137 and LJ-1146 | Maneuvering | 176 mph | (153 knots) | 153 knots |
| | Flaps extended speed | 161 mph | (140 knots) | 148 knots |
| | Maximum landing gear operating speed | | | |
| | Extension | 209 mph | (182 knots) | 182 knots |
| | Retraction | 189 mph | (164 knots) | 163 knots |
| | Maximum landing gear extended speed | 209 mph | (182 knots) | 182 knots |
| S/N LJ-1138 thru LJ-1145 | Maximum operating speed | 260 mph | (226 knots) | 226 knots |
| | Maneuvering | 195 mph | (169 knots) | 169 knots |
| LJ-1147 thru LJ-1726, | Flaps extended speed | 161 mph | (140 knots) | 148knots |
| LJ-1728 thru LJ-1753, LJ-1755 | Maximum landing gear operating speed | | | |
| | Extension | 209 mph | (182 knots) | 182 knots |
| | Retraction | 189 mph | (164 knots) | 163 knots |
| | Maximum landing gear extended speed | 209 mph | (182 knots) | 182 knots |

| | |
|---|---|
| C.G. Range (Landing | (+153.2) to (+160.0) at 9650 lb. |
| Gear Extended) | (+144.7) to (+160.0) at 7400 lb. or less |
| S/N LJ-1063 thru | Straight line variation between points given |
| LJ-1137 and LJ-1146 | Moment change due to retracting landing gear -3825 in. -lb. |
| | |
| C.G. Range (Landing | (+152.0) to (+160.0) at 10,100 lb. |
| Gear Extended) | (+151.7) at 9999 lbs. (Note 28) |
| | (+144.7) to (+160.0) at 7850 lb or less |
| S/N LJ-1138 thru LJ-1145, | Straight line variation between points given |
| LJ-1147 thru LJ-1726, and after | Moment change due to retracting landing gear -3825 in. -lb. |
| LJ-1728 thru LJ-1753, | |
| LJ-1755 (See NOTE 28) | |
| | |
| Empty Wt. C.G. Range | None |

| | | | | |
|---|---|---|---|---|
| Maximum Weight | Ramp: | 9710 lb. | Landing: | 9168 lb. |
| S/N LJ-1063 thru | Takeoff: | 9650 lb. | | |
| LJ-1137 and LJ-1146 | | | | |
| | | | | |
| Maximum Weight | Ramp: | 10,160 lb. | Landing: | 9600 lb. |
| S/N LJ-1138 thru | Takeoff: | 10,100 lb. | | |
| LJ-1145, LJ-1147 thru LJ-1726 | | | | |
| LJ-1728 thru LJ-1753, LJ-1755 | | | | |

| | |
|---|---|
| No. of Seats | Maximum 13 (including 2 at +129). See loading instructions for passenger loading. |
| | |
| Maximum Baggage | 350 lb. (+275) |
| (Structural Limit) | 350 lb. (+70) (Baggage and Avionics) |

**XIV. Model C90A** (cont'd)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel.

Oil Capacity

22.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

Max. Oper. Limit

30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 15° | Down | 15° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible

LJ-1063 thru LJ-1726, LJ-1728 thru LJ-1753 and LJ-1755
See NOTE 29.

**XV. Model C90GT, King Air (Normal Category), Approved December 16, 2005**

Engines

2 Pratt & Whitney Aircraft of Canada, Ltd. PT6A-135A (Turboprop)
Per Hawker Beechcraft Corporation Specification BS184061.

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; and Chinese Jet Fuel No. 3.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox)

P&WC PT6 Engine Service Bulletin No. 1001 lists approved brand oils

Engine Limits

| | Shaft Horsepower | $N_1$ Gas Generator Speed | Prop Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 101.5 | 1900* | 805 |
| Max Continuous | 550 | 101.5 | 1900* | 805 |
| Starting Transient (2 seconds) | | 102.6 | | 1090 |
| Max Reverse (1 minute) | 300 | 88.0 | 1825 | 805 |

* See NOTE 31

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 limits shall not be exceeded.

| | | |
|---|---|---|
| Oil temperatures: | -40°F | minimum starting |
| | -40°F to 210°F | low idle |
| | 50°F to 210°F | max. continuous |

Propeller and Propeller Limits

Reversing Four Bladed Propeller (See Note 30.)
2 Hartzell HC-E4N-3N hubs with D8990SK blades per
Hawker Beechcraft Corporation Specification BS186497.
Diameter: 90.00 in. (Nominal) Minimum allowable for repair 89.00 in.
(no further reduction permitted)
Pitch settings at 30 in. Sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 32) |
| Reverse | -10° ± .5° |
| Feather | 85.8° ± .5° |
| Minimum idle speed | 1100 RPM (See Note 33) |

**XV. Model C90GT** (cont'd)

Airspeed Limits

| | CAS | CAS | IAS |
|---|---|---|---|
| Maximum operating speed | 260 mph | (226 knots) | 226 knots |
| Maneuvering | 195 mph | (169 knots) | 169 knots |
| Flaps extended speed (full down) | 161 mph | (140 knots) | 148 knots |
| Maximum landing gear operating speed | | | |
| Extension | 209 mph | (182 knots) | 182 knots |
| Retraction | 189 mph | (164 knots) | 163 knots |
| Maximum landing gear extended speed | 209 mph | (182 knots) | 182 knots |

C.G. Range (Landing Gear Extended)
(+152.0) to (+160.0) at 10,100 lb.
(+144.7) to (+160.0) at 7850 lb or less
Straight line variation between points given
Moment change due to retracting landing gear -3825 in. -lb.

Empty Wt. C.G. Range
None

Maximum Weight

| | |
|---|---|
| Ramp: | 10,160 lb. |
| Takeoff: | 10,100 lb. |
| Landing | 9,600 lb. |

No. of Seats
Maximum 13 (including 2 at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)
350 lb. (+275)
350 lb. (+70) (Baggage and Avionics)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel.

Oil Capacity
18.4 qt. total (+101)
See NOTE 1 for data on unusable oil.

Max. Oper. Limit
30,000 ft. pressure altitude

Control Surface Movements

| | | | | |
|---|---|---|---|---|
| Wing flaps | Maximum | 44° | | |
| Aileron tab (left only) | Up | 15° | Down | 15° |
| Aileron | Up | 20° | Down | 20° |
| Elevator tab | Up | 10° | Down | 21° |
| Elevator tab anti-servo | Up | 12° | Down | 8° |
| Elevator | Up | 25° | Down | 15° |
| Rudder tab | Right | 30° | Left | 30° |
| Rudder | Right | 24° | Left | 19° |

Serial No's. Eligible
LJ-1727, LJ-1754, LJ-1756 thru LJ-1846, and LJ-1848 thru LJ-1852.
See NOTE 29.

**XVI. Model C90GTi, King Air (Normal Category), Approved December 13, 2007**

Engines
2 Pratt & Whitney Aircraft of Canada, Ltd. PT6A-135A (Turboprop)
Per Hawker Beechcraft Corporation Specification BS184061.

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; and Chinese Jet Fuel No. 3.
See NOTE 5 for emergency fuels.

Oil (Engine and Gearbox)
P&WC PT6 Engine Service Bulletin No. 1001 lists approved brand oils

**XVI. Model C90GTi** (cont'd)

Engine Limits

| | Shaft Horsepower | $N_1$ Gas Generator Speed | Prop Shaft Speed | Max. Permissible Turbine Interstage Temp. (Deg. C) |
|---|---|---|---|---|
| Takeoff (5 minutes) | 550 | 101.5 | 1900* | 805 |
| Max Continuous | 550 | 101.5 | 1900* | 805 |
| Starting Transient (2 seconds) | | 102.6 | | 1090 |
| Max Reverse (1 minute) | 300 | 88.0 | 1825 | 805 |

* See NOTE 31

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 limits shall not be exceeded.

Oil temperatures: -40°F minimum starting
-40°F to 210°F low idle
50°F to 210°F max. continuous

Propeller and Propeller Limits

Reversing Four Bladed Propeller (See Note 30.)
2 Hartzell HC-E4N-3N hubs with D8990SK blades per
Hawker Beechcraft Corporation Specification BS186497.
Diameter: 90.00 in. (Nominal) Minimum allowable for repair 89.00 in.
(no further reduction permitted)
Pitch settings at 30 in. Sta.:

| | |
|---|---|
| Flight idle stop | (See NOTE 32) |
| Reverse | -10° ± .5° |
| Feather | 85.8° ± .5° |
| Minimum idle speed | 1100 RPM (See Note 33) |

Airspeed Limits

| | CAS | CAS | IAS |
|---|---|---|---|
| Maximum operating speed | 260 mph | (226 knots) | 226 knots |
| Maneuvering | 195 mph | (169 knots) | 169 knots |
| Flaps extended speed (full down) | 161 mph | (140 knots) | 148 knots |
| Maximum landing gear operating speed | | | |
| Extension | 209 mph | (182 knots) | 182 knots |
| Retraction | 189 mph | (164 knots) | 163 knots |
| Maximum landing gear extended speed | 209 mph | (182 knots) | 182 knots |

C.G. Range (Landing Gear Extended)

(+152.0) to (+160.0) at 10,100 lb.
(+144.7) to (+160.0) at 7850 lb or less
Straight line variation between points given
Moment change due to retracting landing gear -3825 in. -lb.

Empty Wt. C.G. Range

None

Maximum Weight

Ramp: 10,160 lb.
Takeoff: 10,100 lb.
Landing 9,600 lb.

No. of Seats

Maximum 13 (including 2 at +129). See loading instructions for passenger loading.

Maximum Baggage (Structural Limit)

350 lb. (+275)
350 lb. (+70) (Baggage and Avionics)

Fuel Capacity

| Tank | Cap Gal | Usable Gal | Arm |
|---|---|---|---|
| L & R Nacelle | 61 ea. | 61 ea. | +131 |
| L & R Wing | 131 ea. | 131 ea. | +167 |

See NOTE 1 for data on unusable fuel.

Oil Capacity

18.4 qt. total (+101). See NOTE 1 for data on unusable oil.

**XVI. Model C90GTi** (cont'd)

| | | | | | |
|---|---|---|---|---|---|
| Max. Oper. Limit | 30,000 ft. pressure altitude | | | | |
| Control Surface Movements | Wing flaps | Maximum | 44° | | |
| | Aileron tab (left only) | Up | 15° | Down | 15° |
| | Aileron | Up | 20° | Down | 20° |
| | Elevator tab | Up | 10° | Down | 21° |
| | Elevator tab anti-servo | Up | 12° | Down | 8° |
| | Elevator | Up | 25° | Down | 15° |
| | Rudder tab | Right | 30° | Left | 30° |
| | Rudder | Right | 24° | Left | 19° |
| Serial Nos. Eligible | LJ-1847, LJ-1853 and after. | | | | |

**Data Pertinent to All Models**

Datum — Located 160 in. forward of wing main (forward) spar centerline.

Leveling Means — 2 external screws on left side of fuselage forward or aft of entrance door.

Certification Basis

**Applicable to Model 65 (L-23F), 65-80, 65-A80, 65-88, 65-A80-8800; A65; A65-8200; and 70:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); 14 CFR 23.1385(c) (Amdt. Original). 23.1387(a), 23.1387(e) (Amdt. 12).

**Applicable to Model 65-B80:**
CAR 3, Effective May 15, 1956, (Am. 3-1, 3-2, 3-8); 3.705 (Amdt. 3-7); 14 CFR 23.1385(c) (Amdt. Original). 23.1387(a), 23.1387(e) (Amdt. 12).

**Applicable to Model 65-90:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8), CAR 3 (Amdt. 3-6); 14 CFR 23.1385(c) (Amdt. Original). 23.1387(a), 23.1387(e) (Amdt. 12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963 and February 27, 1963.

**Applicable to Models 65-A90, 65-A90-1 (U-21A, RU-21A, RU-21D, JU-21A, RU-21H, (GR V, U-21G)), 65-A90-4 (RU-21E, RU-21H (GR II & IV), RU-21H (GR V)), and B90:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6); 3.705 (Amdt. 3-7); 14 CFR 23.1385(c) (Amdt. Original). 23.1387(a), 23.1387(e) (Amdt. 12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965.

**Applicable to Models 65-A90-2 (RU-21B) and 65-A90-3 (RU-21C):**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6); 3.705 (Amdt. 3-7); 14 CFR 23.1385(c) (Amdt. Original). 23.1387(a), 23.1387(e) (Amdt. 12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963, May 5, 1965, and November 8, 1961.

**Applicable to Model C90:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6); 3.705 (Amdt. 3-7); 14 CFR Part 23 §23.1385(c) (Amdt. Original); 23.1111 (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. FAA Exemption No. 1554A, issued March 4, 1977 from CAR 3 §3.115(a).

**Data Pertinent to All Models**
Certification basis (cont'd)

**Applicable to Model E90:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6); 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.954, 23.959, 23.1111 (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963, and May 5, 1965. FAA Exemption No. 1554 issued March 31, 1972 from CAR 3 3.115(a).

**Applicable to Model H90 (T-44A):**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6). 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.954, 23.959, 23.1111 (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. FAA Exemption No. 1554A, issued March 4, 1977 from CAR 3 §3.115(a).

**Applicable to Model C90A:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6). 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.959, 23.1111, 23.1583(a) (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. 23.143(a), 23.145(d), 23.153, 23.161(c)(3), 23.173(a) (Amdt. 23-14). 23.175 (Amdt. 23-17). 23.967(a)(5) (Amdt. 23-18). 23.1545(a) (Amdt. 23-23). 23.729 (Amdt. 23-26). 25.831(d) (Amdt. 25-41). 14 CFR Part 36, December 1, 1969 thru Amendment 36-10; SFAR 27, February 1, 1974 thru Amendment 27-4.

**Applicable to Model C90A with EFIS:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6). 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.959, 23.1111, 23.1583(a) (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. 23.143(a), 23.145(d), 23.153, 23.161(c)(3), 23.173(a) (Amdt. 23-14). 23.175 (Amdt. 23-17). 23.967(a)(5) (Amdt. 23-18). 23.1545(a) (Amdt. 23-23). 23.729 (Amdt. 23-26). Effective April 17, 1992, Electronics Flight Instrument Systems shall meet the requirements of 23.1301, 23.1309, 23.1311, 23.1321, 23.1322 and 23.1335 (Amdt. 23-41). Effective January 20, 1994, 23.1457 (Amdt. 23-35). 14 CFR 25.831(d) (Amdt. 25-41). 14 CFR Part 36, December 1, 1969 thru Amendment 36-10; SFAR 27, February 1, 1974 thru Amendment 27-4.

**Applicable to Model C90GT:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6). 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.959, 23.1111, 23.1583(a) (Amdt. 23-7). 23.1387(a), 23.1387(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. 23.143(a), 23.145(d), 23.153, 23.161(c)(3), 23.173(a) (Amdt. 23-14). 23.175 (Amdt. 23-17). 23.967(a)(5) (Amdt. 23-18). 23.1545(a) (Amdt. 23-23). 23.729, 23.1529 (Amdt. 23-26). Effective April 17, 1992, Electronics Flight Instrument Systems shall meet the requirements of 23.1301, 23.1309, 23.1311, 23.1321, 23.1322 and 23.1335 (Amdt. 23-41). Effective January 20, 1994, 23.1457 (Amdt. 23-35). 23.201, 23.203, 23.207 (Amdt. 23-50). 14 CFR 25.831(d) (Amdt. 25-41). 14 CFR 34.11(a)(b)(c), 34.21(e), 34.71, 34.89 (Amdt. 34-3). 14 CFR Part 36, December 1, 1969 thru Amendment 36-25; SFAR 27, February 1, 1974 thru Amendment 27-4.

**Additional Requirements for IHAS 800 Installation on Model C90A/C90GT:**
14 CFR 23.301(a), 23.303, 23.305(a)(b), 23.307(a), 23.321, 23.331, 23.333, 23.335, 23.337, 23.341, 23.347, 23.349, 23.351, 23.365(a)(b)(c), 23.425, 23.441, 23.471, 23.473, 23.571, 23.573, 23.609(b), 23.613(a)(b), 23.615, 23.619, 23.621, 23.623, 23.625, 23.627, 23.629, 23.1331(a)(b), 23.1365(a)(d)(e), 23.1367(a)(b)(c)(d) (Amdt.Original). 23.611, 23.617, 23.777(a)(b), 23.867(a)(b), 23.561(a)(b), 23.1351(b) (Amdt. 23-7). 23.1581 (Amdt. 23-13); 23.1322(a)(b)(c)(d) (Amdt. 23-17). 23.1301(a)(b)(d), 23.1321(a)(b)(c)(d)(e), 23.1357(a)(b)(c)(d) (Amdt. 23-20). 23.1541 (Amdt. 23-21). 23.1307(b) (Amdt. 23-23). 23.1529 (Amdt. 23.26). 23.1583(m), 23.1585(j), 23.1587 (Amdt. 23-34). 23.1311(a)(b), 23.1331(c), 23.1359(c) (Amdt. 23-35). 23.1309(a)(b), (Amdt. 23-41).

**Data Pertinent to All Models**
Certification basis (cont'd)

**Additional Requirements for RDR2100/KDM850 Installation on Model C90A/C90GT:**
14 CFR 23.301(a), 23.303, 23.305(a)(b), 23.307(a), 23.321, 23.331, 23.333, 23.335, 23.337, 23.341, 23.347, 23.349, 23.351, 23.365(a)(b)(c), 23.421, 23.423, 23.425, 23.441, 23.471, 23.473, 23.571, 23.573, 23.601, 23.603(a)(b), 23.605(a), 23.607, 23.609(a)(b), 23.613(a)(b), 23.615, 23.619, 23.621, 23.623, 23.625, 23.627, 23.629, 23.1331(a)(b), 23.1365(a)(d)(e), 23.1367(a)(b)(c)(d) (Amdt.Original). 23.611, 23.617, 23.777(a)(b), 23.867(a)(b), 23.561(a)(b), 23.959, 23.1111, 23.1351(a) (Amdt. 23-7). 23.1581 (Amdt. 23-13). 23.1322(a)(b)(c)(d) (Amdt. 23-17). 23.1301(a)(b)(d), 23.1321(a)(b)(c)(d)(e), 23.1357(a)(b)(c)(d) (Amdt. 23-20). .23.1307(b) (Amdt. 23-23). 23.1529 (Amdt. 23.26). 23.1583(m), 23.1585(j), 23.1587 (Amdt. 23-34). 23.1311(a)(b), 23.1331(c), 23.1359(c) (Amdt. 23-35). 23.1309(a)(b) (Amdt. 23-41).

**Additional Requirements for GPS 400 Installation on Model C90A/C90GT:**
14 CFR 23.301(a), 23.303, 23.305(a)(b), 23.307(a), 23.321, 23.331, 23.333, 23.335, 23.337, 23.341, 23.347, 23.349, 23.351, 23.365(a)(b)(c), 23.421, 23.423, 23.425, 23.441, 23.471, 23.473, 23.571, 23.573, 23.601, 23.603(a)(b), 23.605(a), 23.607, 23.609(a)(b), 23.613(a)(b), 23.615, 23.619, 23.621, 23.623, 23.625, 23.627, 23.1331(a)(b), 23.1365(a)(d)(e), 23.1367(a)(b)(c)(d), 23.1431(a)(b)(c) (Amdt.Original). 23.611, 23.617, 23.777(a)(b), 23.867(a)(b). 23.561(a)(b), 23.1351(b) (Amdt. 23-7); 23.1581 (Amdt. 23-13); 23.1322(a)(b)(c)(d) (Amdt. 23-17). 23.1301(a)(b)(c)(d), 23.1321(a)(b)(c)(d)(e), 23.1357(a)(b)(c)(d) (Amdt. 23-20). 23.1307(b) (Amdt. 23-23). 23.1529 (Amdt. 23.26). 23.1583(m), 23-1585(j), 23.1587 (Amdt. 23-34). 23.1329(h), 23.1331(c), 23.1359(c) (Amdt. 23-35). 23.1309(a)(b) (Amdt. 23-41).

**Applicable to Model C90GTi:**
CAR 3, Effective May 15, 1956, (Amdt. 3-1, 3-2, 3-8); CAR 3 (Amdt. 3-6). 3.705 (Amdt. 3-7). 14 CFR 23.1385(c) (Amdt. Original). 23.959, 23.1111, 23.1583(a) (Amdt. 23-7). 23.1387(a)(e) (Amdt. 23-12). Special Conditions outlined by FAA letters to Beech dated January 21, 1963, February 15, 1963, February 27, 1963 and May 5, 1965. 23.143(a), 23.145(d), 23.153, 23.161(c)(3), 23.173(a) (Amdt. 23-14). 23.175 (Amdt. 23-17). 23.967(a)(5) (Amdt. 23-18). 23.1545(a) (Amdt. 23-23). 23.729, 23.1529 (Amdt. 23-26). 23.201, 23.203, 23.207 (Amdt. 23-50). 25.831(d) (Amdt. 25-41). SFAR 27, February 1, 1974 thru Amendment 27-4. 34.11(a)(b)(c), 34.21(e), 34.71, 34.89 (Amdt. 34-3).

**Additional Requirements for Rockwell Collins Pro Line 21 Avionics Installation on Model C90GTi:**
14 CFR 23.601, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c) (Amdt. Original). 23.1301(a)(b)(c)(d), 23.1335 (Amdt. 23-20). 23.1501(a) (Amdt. 23-21). 23.1457(a)(c) (Amdt. 23-35). 23.1322(a)(b)(c)(d), 23.1357 (Amdt. 23-43). 23.1549 (Amdt. 23-45). 23.1309(a)(b)(c)(d)(e), 23.1311(a)(b)(c), 23.1321(a)(b)(c)(d)(e), 23.1329(a)(b)(d)(e)(f), 23.1359(c), 23.1365(a)(b)(c)(d)(e), 23.1431(a)(b)(c) (Amdt. 23-49). 23.1521(b)(c), 23.1543(c), 23.1545(a)(b)(c), 23.1555(a) (Amdt. 23-50). 23.1305(a)(2)(3)(c)(1)(2)(5)(e)(1) (Amdt. 23-52). 23.901(e)(1) (Amdt. 23-53).

14 CFR Part 36, through Amendment 36-28.

| | | |
|---|---|---|
| Special Condition | 23-108-SC | "Protection of Systems for High Intensity Radiated Fields (HIRF)" |
| Equivalent Level of Safety | ACE-07-06 | "Installing Electronic Engine Indicating Systems (EIS)" |

**Additional Requirements for Rockwell Collins Pro Line Fusion Avionics Installation on Model C90GTi (See NOTE 37):**
14 CFR 23.601, 23.1367, 23.1381(a)(b) (Amdt. Original). 23.937(a) (Amdt. 23-7). 23.1301(a)(b)(c)(d), 23.1327(a)(1)(2)(b), 23.1335, 23.1547(a)(b)(c)(d)(e) (Amdt. 23-20). 23.1501(b) (Amdt. 23-21). 23.853(a) (Amdt. 23-34). 23.1322(a)(b)(c)(d)(e), 23.1331(b)(c), 23.1357(a)(b)(c)(d) (Amdt. 23-43). 23.613, 23.773(a)(1)(2), 23.1525, 23.1549(d), (Amdt. 23-45). 23.867(a)(b)(1), 23.1303(a)(b)(c)(e)(f), 23.1309(a)(1)(3)(b)(c)(1)(2)(i)(iii)(3)(d)(e), 23.1311(a)(b)(c), 23.1321, 23.1323(a)(c), 23.1329(c)(h), 23.1351(a)(1)(2)(i), 23.1353(h), 23.1359(c), 23.1365(a)(b)(c)(d)(e), 23.1431(a)(b)(c)(e) (Amdt. 23-49). 23.1521(a)(b)(1)(3)(4)(c)(1)(3), 23.1543(b)(c), 23.1545(d), 23.1555(a), 23.1581(a)(2)(b)(1)(3)(c)(d)(f), 23.1583(b)(h)(m), 23.1585(a)(j) (Amdt 23-50). 23.777(a)(b), 23.1141(g)(2), 23.1203(a)(d) (Amdt. 23-51). 23.1305(c)(1)(3)(6)(7)(e)(1) (Amdt. 23-52). 23.901(a)(1)(2)(e)(1) (Amdt. 23-53). 23.1308(a)(b)(c)(d) (Amdt. 23-57). 23.1306(a)(b) (Amdt. 23-61). 23.251(b), 23.903(b)(2) (Amdt. 23-62). Equivalent Level of Safety ACE-15-18 for 23.1305(a)(2)(3)(c)(2)(5) (Amdt 23-52), 23.1311(a)(6)(7) (Amdt 23-49). 23.1549(a)(b)(c) (Amdt 23-45). Effective at Serial Numbers LJ-2129 and on.

**Additional Requirements for GPS-4000S Installation on Model C90GTi (See NOTE 38):**
14 CFR 23.867(a)(b) (Amdt. 23-49). 23.1301(a)(b)(c)(d) (Amdt. 23-20). 23.1306(b) (Amdt. 23-61). 23.1308(b) (Amdt. 23-57). 23.1309(a)(1)(3)(b)(c)(1)(2)(i)(iii)(3)(d)(e), 23.1351(a)(1)(2)(i), 23.1431(a)(b) (Amdt. 23-49). 23.1529 (Amdt 23-26). Effective at Serial Numbers LJ-2151 and on.

Application for Type Certificate dated May 1, 1958
Type Certificate No. 3A20 issued February 4, 1959, obtained by the manufacturer under delegation option procedures.

**Data Pertinent to All Models**

Production Basis: Production Certificate No. 8. Delegation Option Manufacturer No. DOA-230339-CE authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Serial Numbers LJ-2125 through LJ-2133:
Manufactured under Production Certificate No. 4 by Textron Aviation, Inc., under license agreement between Beechcraft Corporation and Textron Aviation, Inc.

Serial Numbers LJ-2134 and after:
Manufactured under Production Certificate No. 4 by Textron Aviation Inc.

Organization Delegation Authorization No. ODA-100129-CE is authorized to issue airworthiness certificates under the provisions of 14 CFR Part 21 and Part 183 of the Federal Aviation Regulations.

**Data Pertinent to All Models**

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 items of equipment are required:

1. Pre-stall warning indicator, Safe Flight Corp., P/N 168-2 or P/N 168-3, to be used if deicing equipment is installed per Beech Dwg. 50-369100 and 50-361100.
2. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 793-1 or P/N 795-3, to be used if deicing equipment is installed per Beech Dwg. 50-369100 and 50-361100 for Model s 65-A90 and B90.
3. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 168-3 to be used if deicing equipment is installed per Beech dwg. 50-970103 and 50-361104 or 91-361001 for Models 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4.
4. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 795-1 for Model C90, P/N 795-13 for Models C90A, C90GT, C90GTi.
5. Pre-stall warning indicator, Safe Flight Instrument Corp., P/N 795-5 for Model E90.
6. Pre-stall warning system, Rosemount P/N 92AT for Model H90 (T-44A).
7. FAA Approved Airplane Flight Manual or Pilot's Operating Handbook
   (a) Model 65-90* S/N LJ-1 thru LJ-113
   Model 65-A90* S/N LJ-114 thru LJ-317, LJ-317, LJ-76, LJ-178A

   *Model 65-90 and 65-A90 aircraft were delivered in and/or are modified by Beech kits to various configurations with non-reversing and reversing propellers: with PT6A-6, -20, -20A, and -21 engines, and at 9300 and 9650 lbs. An FAA Approved Airplane Flight Manual appropriate to the aircraft configuration is required. Refer to the Limitations Section of FAA Approved Airplane Flight Manual Supplement, P/N 131044, for equipment requirements for flight into known icing conditions.

   (b) Model B90 P/N 65-001123-31 S/N LJ-318 thru LJ-501
   Model C90 P/N 90-590010-5 S/N LJ-502 thru LJ-624
   Model C90 P/N 90-590010-53 S/N LJ-625 thru LJ-667 and LJ-670
   Refer to the Limitations Section of FAA Approved Airplane Flight Manual Supplement, P/N 131044, for equipment requirements for flight into known icing conditions.

**Data Pertinent to All Models**
Equipment (cont'd)

(c)

| | | |
|---|---|---|
| Model E90 | P/N 90-590012-5 | S/N LW-1 thru LW-347 |
| Model C90 | P/N 90-590010-61 | S/N LJ-668 thru LJ-1010 except LJ-670, LJ-986 and LJ-996 |
| Model C90 | P/N 90-590010-87 | S/N LJ-986, LJ-996, LJ-1011 thru LJ-1062 |
| Model C90A | P/N 90-590024-5 | S/N LJ-1063 thru LJ-1137 and LJ-1146 |
| Model C90A | P/N 90-590024-23 | S/N LJ-1138 thru LJ-1145, LJ-1147 thru LJ-1287, LJ-1289 thru LJ-1294, LJ-1296 thru LJ-1299 |
| Model C90A | P/N 90-590024-35 | S/N LJ-1288, LJ-1295, LJ-1302, LJ-1303, LJ-1305 thru LJ-1308, LJ-1311, LJ-1312, LJ-1314 thru LJ-1316, LJ-1318, LJ-1320 thru LJ-1352 |
| Model C90A | P/N 90-590024-43 | S/N LJ-1300, LJ-1301, LJ-1304, LJ-1309, LJ-1310 LJ-1313, LJ-1317 and LJ-1319 |
| Model C90A | P/N 90-590024-61 | S/N LJ-1367, LJ-1373, LJ-1377, LJ-1384, LJ-1386, LJ-1389, LJ-1394 and LJ-1397, LJ-1403, LJ-1411, LJ-1425, LJ-1431 and LJ-1435 |
| Model C90A | P/N 90-590024-69 | S/N LJ-1353 through LJ-1726, LJ-1728 thru LJ-1753 and LJ-1755, except –61 manual serial. |
| Model C90GT | P/N 90-590024-111 | S/N LJ-1727, LJ-1754, LJ-1756 thru LJ-1846, and LJ-1848 thru LJ-1852. |
| Model C90GTi | P/N 90-590024-163 | S/N LJ-1847, LJ-1853 thru LJ-1963, LJ-1965, LJ-1967, LJ-1969 thru LJ-1971and LJ-1973 thru LJ-1976. |
| Model C90GTi | P/N 90-590024-217 | S/N LJ-1964, LJ-1966, LJ-1968, LJ-1972, LJ-1977 thru LJ-2128. |
| Model C90GTi | P/N 434-590171-0003 | S/N LJ-2129 and after. |

Refer to the Limitations Section of the FAA Approved Airplane Flight Manual or Pilot's Operating Handbook for equipment requirements for flight into known icing conditions.

NOTE 1 At the time of original certification, the following must be provided for each aircraft: current weight and balance data; loading information; list of equipment included in the empty weight.

The Certificated Empty Weight must include unusable fuel and unusable (undrainable) oil as shown below:

Fuel 15 lbs. (+162 in.) and oil 21 lbs. (+111 in.) for Models 65 (L-1 and up, LF-1 and up, and LC-1 through LC-229), 65-80, 65-A80, 65-A80-8800, 65-88 (except LP-28), 65-B80 (LD-270 through LD279 unless S.I. 0539-281 is incorporated).

Fuel 30 lbs. (+170 in.) and oil 21 lbs. (+111in.) for Models 65 (LC-230 and up), 65-88 (LP-28 only), A65, A65-8200, 70, 65-B80 (LD-280 through LD-467 unless S.I. 0539-281 is incorporated).

Fuel 96 lbs. (+168 in.) and oil 21 lbs. (+111 in.) for Model65-B80 (prior to LD-468 that have S.I. 0539-281 incorporated.

Fuel 24 lbs. (+140 in.) and oil 16 lbs. (+101 in.) for Model 65-90. Fuel 24 lbs. (+140 in.) and oil 28 lbs. (+101 in.) for Models 65-A90. Fuel 24 lbs. (+140 in.) and oil 32 lbs. (+101 in.) for Models 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, and B90.

The Basic Empty Weight must include unusable fuel and engine oil (includes capacity oil and undrainable, where applicable) as shown below:

Fuel 96 lbs. (+168) and oil 81 lbs. (+131) for Model 65-B80 (LD-468 and up). Fuel 24 lbs. (+140) and oil 56 lbs. (+101) for Model C90, C90A, C90GT, H90 (T-44A) and C90GTi. Fuel 40 lbs. (+140) and oil 56 lbs. (+101) for Model E90.

NOTE 2 The following placard must be displayed in full view of the pilot:
"This airplane must be operated as a normal category airplane in compliance with the operation limitations stated in the form of placards, markings, and manuals."

**Data Pertinent to All Models**

NOTE 3 Mandatory retirement time for all fuselage structural components of Models 65-88, 65-90, 65-A90, B90, and C90 (prior to LJ-1011 except LJ-986 and LJ-996) 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 in both Chapter 5 of the Airplane's Maintenance Manual and Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

For the Model C90 (LJ-986, LJ-996, LJ-1011 and after), the retirement limit is 13,500 hours time in service. However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals in both Chapter 5 of the Airplane's Maintenance Manual and Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

For the E90 and H90 fuselage pressure vessel structural life limit, refer to the latest revision of the airplane flight manual for mandatory retirement time.

For the Model C90A and C90GT, the retirement limit is 13,500 hours time in service. However, the Fuselage Life may be unlimited if the airplane is maintained and inspected at the required intervals in both Chapter 5 of the Airplane's Maintenance Manual and Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

Mandatory replacement time for the model 65-90, 65-A90, B90, C90, C90A and E90; serials LJ-1 through LJ-1084, LJ-1085, LJ-1087, LW-1 thru LW-347, for all wing attach bolts and nuts, is as required in Chapter 4-00-00 of the Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

Mandatory replacement time for Model C90A and C90GT; serials LJ-1086, LJ-1088 and after for upper and lower forward attach bolt, upper and lower aft wing attach bolt and nuts is as required in Chapter 4-00-00 of the Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

Mandatory replacement time for Model C90GTi, serials LJ-1847 and LJ-1853 and after for upper and lower forward attach bolt, upper and lower aft wing attach bolt and nuts is as required in Chapter 4-00-00 of the Airworthiness Limitations Manual P/N 90-590024-187, latest revision.

NOTE 4 The maximum propeller shaft overspeed limits for Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, E90, and H90 (T-44A) is 104 percent at 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.

NOTE 5 Emergency use of MIL-G-5572:
Grades 80/87, 91/98, 100/130, and 115/145 are permitted on Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, C90GT, E90, H90 (T-44A) and C90GTi 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.

NOTE 6 Required for Model 65, S/N LC-163 through LC-239: 2 Lycoming IGSO-480-A1E6 engines. Aircraft prior to S/N LC-163 eligible for IGSO-480-A1E6 engines provided FAA approval related equipment is installed; such as, Bendix fuel injector, cockpit and engine control system, higher pressure engine and boost pumps, induction air modification, etc.

Required for Model 65, S/N LC-163 thru LC-239: Hartzell HC-B3Z20-2A hub with 10151-8R or 10151B-8R aluminum alloy blades and 210365 Woodward governor.

NOTE 7 Model 65-90 (S/N LJ-1 thru LJ-22) eligible for maximum landing weight of 8835 lb. and a maximum takeoff weight of 9300 lb. when modified per Beech Kit No. 90-4001. Subsequent serials are eligible for these weights.

NOTE 8 Model 65-80 (S/N LD-1 thru LD-150, except LD-34) eligible for a maximum landing weight of 8000 lb. when modified per Beech Mod. C.O. C00766.

**Data Pertinent to All Models**

NOTE 9 Model 65-A80 (S/N LD-151 thru LD-269) eligible for a maximum landing and takeoff gross weight of 8800 lb. when modified per Beech dwg. 80-4004 which defines Modification Kit No. 80-4004-1 (S/N LD-254 thru LD-269) and Kit No. 80-4004-3 (S/N LD-151 thru LD-253). Upon completion of this modification, the aircraft is eligible for designation as a Model 65-A80-8800.

NOTE 10 Flight idle at 2000 propeller rpm shall be an indicated 600 ± 60 ft. -lb. torque corrected for sea level standard day. Secondary flight idle stop when installed shall be 210 ± 40 propeller rpm higher than flight idle stop with a gas generator speed of 70%.

NOTE 11 Model 65-90 (S/N LJ-1 thru LJ-113) (except LJ-76) are eligible for installation of PT6A-20 engines when modified in accordance with Beech Kit 90-9027 or 90-9027 and 90-9029. For airplane LJ-9, use Beech Kit 90-9007. For airplane LJ-24, use Beech dwgs. 90-9016 and 90-9023 for PT6A-20 engine installation.

NOTE 12 Model 65-90 (S/N LJ-24) eligible for full feathering, three-bladed Hartzell HC-B3TN-3B/T10173E-8 reversing propeller installation when modified per Beech dwgs. 90-9016 and 90-9023.

NOTE 13 Model 65-90 (S/N LJ-1 thru LJ-113) equipped with PT6A-6 engines eligible for full-feathering, three bladed Hartzell HC-B3TN-3B/T10173E-8 or HC-B3TN-3B/T10173B-8 reversing propeller installation when modified per Beech dwg. 90-9028.

NOTE 14 Models A65 and A65-8200 (S/N LC-240 thru LC-335), 65-80, 65-A80, 65-A80-8800, 65-B80 (S/N LD-1 and up), and 70 (S/N LB-1 thru LB-35) eligible to operate with cabin door removed when operated as prescribed in Approved Airplane Flight Manual Supplement No. 130758.

NOTE 15 Model 65, A65, 65-80, 65-A80, 65-A80-8800, 65-B80, 70 eligible for installation of cargo door when modified per Beech Kit No. 65-4014.

NOTE 16 Model A65-8200 (S/N LC-273 thru LC-324) when manufactured per Beech dwg. 50-000200 and Model 70 (S/N LB-1 thru LB-35) are eligible for a maximum weight of 8200 lbs. and 11 place seating capacity.

NOTE 17 Model 65-A90 (S/N LJ-76 and LJ-114 thru LJ-301) when modified per Beech Kit No. 90-4032, and Model 65-A90 (S/N LJ-302 thru LJ-317) when modified per Beech Kit No. 90-4032-1 eligible for maximum landing weight of 9168 lb. and a maximum takeoff weight of 9650 lb.

NOTE 18 Model 65-A90 (S/N LJ-76 and LJ-114 thru LJ-317) when modified per Beech Kit No. 90-4035 eligible to move forward center of gravity limit 2.9 in. forward.

NOTE 19 Model 65-A90 (S/N LJ-76 and LJ-114 thru LJ-301) when modified per Beech Kit Nos. 90-4031 or 90-4032 and 90-4035, and 65-A90, (S/N LJ-302 thru LJ317) when modified per Beech Kit Nos. 90-4031-1 or 90-4032-1 and 90-4035 eligible for maximum landing weight of 9168 lb., maximum takeoff weight of 9650 lb., and to move forward center of gravity limit 2.9 in. forward.

NOTE 20 Model 65-B80 eligible for optional Cargo Baggage Pod installation when modified per Beech Kit No. 80-4013.

NOTE 21 Model C90 aircraft, LJ-670 and LJ-584 thru LJ-667 except LJ-585, LJ-590, LJ-592, LJ-593, LJ-601, LJ-604, LJ-612, LJ-619, LJ-620, LJ-622, and LJ-652 are equipped with PT6A-20A engines. Model C90 Aircraft LJ-668, LJ-669, LJ-671 and after are equipped with PT6A-21 engines. Model C90 aircraft with PT6A-20A engines are eligible for installation of PT6A-21 engines when modified per Beech Kit Drawing No. 90-9066.

NOTE 22 Model H90 (T-44A) airplanes are eligible for FAA certification as Model H90 aircraft when modifed as required by Beech Aircraft Corporation Drawing 90-005004.

NOTE 23 Model H90 (T-44A) airplanes are licensed at gross weight of 9650 lb. and gross weight C.G. range of 150.6 to 160.0 inches at 9650 lb., and C.G. range of 144.7 to 160.0 inches at 7850 lb. or less.

**Data Pertinent to All Models**

NOTE 24 The following U-21 series aircraft are eligible for maximum takeoff weight of 10,200 lbs. and maximum landing weight of 9,700 lbs., when modified with Beech Kit 91-5002-1:

a. 65-A90-1 (RU-21A) aircraft serial numbered LM-108 through LM-111.

b. 65-A90-1 (RU-21H, GUARDRAIL V) aircraft serial numbered LM-101, LM-107, LM-115, LM-125, LM-127 thru LM-129, LM-132, LM-133, and LM-136 thru LM-138.

c. 65-A90-4 (RU-21H, GUARDRAIL V) aircraft serial numbered LU-1 thru LU-15.

These aircraft must be equipped with wingtip H.F. antenna pods and wingtip extensions, or equivalent ballast, as specified on Drawing 91-5001, in order to operate at the increased weights.

NOTE 25 Export:

a. The Beech Model C90 is eligible for export to United Kingdom when modified in accordance with Modification Drawing 90-005000.

b. The Beech Model C90A is eligible for export to United Kingdom when modified in accordance with Modification Drawing 90-005006.

The above models are eligible for return to U.S. certification when the modifications incorporated by the above drawings have been removed.

NOTE 26 Models 65-90, 65-A90, B90, C90, C90A, C90GT, E90 and C90GTi are eligible for flight into known icing conditions when the required equipment is installed and operational.

NOTE 27 Flight idle propeller low pitch stop is set so that at 2000 rpm the engine torque is 608 ± 40 ft. lb. torque corrected to sea level standard day conditions. Ground idle low pitch stop is set so that at 58% to 60% $N_1$, prop rpm is not less than 1100 rpm.

NOTE 28 Model C90A Airplanes which incorporate MOD Drawing MOD005147-1 are limited to a maximum ramp weight of 10,059 lbs., a maximum takeoff weight of 9,999 lbs., and a maximum landing weight of 9,600 lbs. MOD Drawing MOD005147-1 requires an AFM and POH supplement PN 90-590024-81 and an operating weight limitation placard, MOD005147-3. Eligible Serial Numbers are LJ-1469 thru LJ-1726, LJ-1728 thru LJ-1753, and LJ-1755.

NOTE 29 Company name change effective April 15, 1996. The following serial numbers are manufactured under the name of Raytheon Aircraft Company: C90A and C90GT: LJ-1437 through LJ-1826.

NOTE 30 By model, any combination of reversing hub and blade part numbers listed is acceptable. It is permissible to mix blade part numbers on the same hub.

NOTE 31 The maximum propeller shaft overspeed limit for the Model C90GT and C90GTi is 110 percent (2090 rpm). 100 percent propeller shaft speed is defined as 1900 rpm and is the normal steady state operating limit. Gas generator speeds up to 102.6 percent are permissible for 2 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.

NOTE 32 Flight idle propeller low pitch stop is set so that at 1800 rpm the engine torque is 545 -0/+40 ft. lb. torque corrected to sea level standard day conditions.

NOTE 33 The following warning concerning propeller operation is in both the AFM and Maintenance Manual:

"Stabilized ground operation within the propeller restricted RPM range can generate high propeller stresses and result in fatigue damage to the propeller. This damage can lead to a reduced propeller fatigue life, propeller, propeller failure and loss of control of the aircraft".

NOTE 34 Company name change effective 3-26-07. The following serial numbers are manufactured under the name of Hawker Beechcraft Corporation: LJ-1827 through LJ-2069.

**Data Pertinent to All Models**

NOTE 35 Company name change effective 4-12-13. The following serial numbers are manufactured under the name of Beechcraft Corporation: C90GTi: LJ-2070 through LJ-2124.

NOTE 36. Company name change effective 10/12/16. The following serials are manufactured under the name Textron Aviation Inc.: C90GTi: LJ-2134 and after.

NOTE 37. STC SA10747SC must be installed with the Rockwell Collins Pro Line Fusion® installation.

NOTE 38. Installation of GPS-4000S due to in-draw of Rockwell Collins STC SA01848WI, which addressed the use of a multi-core processor and upgrading of the GPS-4000S receiver.

..... END .....