

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A30SO Revision 2
CONNAIR INTERNATIONAL
USAF KC-97G
July 31, 2015

TYPE CERTIFICATE DATA SHEET NO. A30SO

Type Certificate Holder                      Connair International  
P.O. Box 131  
Dothan, Alabama 36302

I. - Model USAF KC-97G (Boeing) (Restricted Category), approved September 20, 1984

Engines    4    P & W R-4360-59B

Fuel    Aviation Gasoline 115/145 Grade  
For Alternate Fuels See T.O. 1C-97G-1 Section V

Engine Limits                                      Maximum Wet Power, Sea Level  
3500 BHP at 2700 RPM and 147 TPSI (Torque Pressure)

Maximum Dry Power, Sea Level  
3250 BHP at 2700 RPM and 230 TPSI (Torque Pressure)

See Airplane Flight Manual T.O. 1C-97G-1 and Appendix T.O. 1C97G-1-1  
Part 2 for complete engine power and performance data.

Propellers    4    Hamilton Standard 34G60, Blade No. R-C7021D-8  
See T.O. 1C-97G-1 Section V for limitations

Airspeed Limits                                       $V_N$     = 302 knots or Mach 0.62, whichever is less  
 $V_A$     = 206 knots IAS Maneuvering  
 $V_F$     = 155 knots IAS for 55% to 100% flaps  
          = 190 knots IAS with flaps to 55%  
 $V_{LO}$  = 200 knots IAS Landing Gear Extension Speed

Maximum Cargo Doors Open and Aerial Delivery Speed  
 $V$      = 155 knots IAS

C.G. Range    Operating 18.5% to 30.5% MAC

Datum    50 in. fwd of nose (Distance from datum to nose jacking cone 228.6 in.)

Leveling Means                                      Indicator below floor in forward lower compartment (Station 356)

Maximum Gross Weight                              Take Off = 153,000 lbs.

Landing Weight                                      (10 FPS Sink Speed)    = 130,000 lbs.  
(8.3 FPS Sink Speed)    = 264,000 lbs.  
(NOTE: Chart for Contact Sinking Speed between 130,000 and 153,000 lbs.  
provided in Flight Manual T.O. 1C-97G-1)

Maximum Zero Fuel Weight                              = 128,000 lbs.  
(See Flight Manual for Fuel Loading distribution and limitations)

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Minimum Crew Pilot, Copilot, and Flight Engineer and the number of persons essential to perform the special purpose operation.

Fuel Capacity 7,790 gallons total - 2 outboard tanks 1,770 gallons each  
2 inboard tanks 1,520 gallons each  
1 Center Wing tank 1,210 gallons

Oil Capacity 186 gallons total - 4 engine tanks 32.5 gallons each  
2 transfer tanks 56 gallons

Cargo Capacity See Flight Manual T.O. 1C-97G-1 Section V

<u>Control Surface Movements</u>	Position	Movement From Neutral Position in Degrees	Trailing Edge Movement in inches
Ailerons	Up	25 (± 1)	9.22 (± .38)
	Down	25 (± 1)	9.22 (± .38)
Aileron Trim Tabs	Up	5.5 (± 1)	.78 (± .06)
	Down	5 (± 1)	.75 (± .06)
Elevators	Up	20 (± 1)	12.45 (± .62)
	Down	15 (± 1)	9.36 (± .62)
Elevator Trim Tabs Right	Up	12 (± 2)	2.55 (±.43)
	Down	15 (± 2)	2.55 (±.43)
Left - Wing Flaps up, neutral position of trim tab with elevator in neutral position Wing Flaps down 45 degrees, elevator in neutral position measured from position give above	Up	1.5 (+ .5/- .25)	.32 (+.11/- .05)
	Up	3 (± ½)	.64 (± .11)
Rudder - (By pedal with rudder boost on)  - (By trim knob with rudder boost on)	Right	22 (± 1)	24.94 (± 1.12)
	Left	22 (± 1)	24.94 (± 1.12)
	Right	15.5 (+ 1/-1.5)	17.62 (+1.11/-1.69)
	Left	15.5 (+1/-1.5)	17.62 (+1.11/-1.69)
Rudder Tab	Right	20 (± 1)	2.95 (±.15)
	Left	20 (± 1)	2.95 (± .15)
Wing Flaps	Down	45 (± 2)	

Serial Numbers Eligible See Connair International Report No. 97, dated September 17, 1984

Certification Basis FAR 21.25(a)(2) dated May, 1974, Amendment 21-1 through 21-53

Production Basis None - Prior to original airworthiness certification of each aircraft, an FAA representative must perform inspection for workmanship, materials, and conformity with the approved technical data, and witness a flight check.

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, Airplane Flight Manual, T.O. 1C-97G-1, must be included in the airplane.

NOTE 1. Current weight and balance report and loading instructions for Model USAF KC-97G aircraft will agree with Section V of T.O. 1C-97G-1 Manual.

- NOTE 2.
- A. This approval applies to USAF (Boeing) KC-97G airplanes with Connair International modification as described in Connair International Report No. 97, dated September 17, 1984.
  - B. An additional data plate as described in Connair Report No. 97, page 2, dated September 17, 1984, will be installed in the airplane adjacent to the existing data plate.
  - C. Airplane to be certified for the special purpose of carrying cargo, consisting of minerals, equipment, agriculture, aquatic creatures, animals, perishable goods, and other hardware from one destination to another. Liquids may be carried in the tanks installed in accordance with Connair International Report No. 97, dated September 17, 1984, and when the installation is FAA approved.
    - (1) Operation over densely populated areas will be avoided.
    - (2) In addition to the operating limitations in this data sheet, area, economic, passenger and other appropriate operating limitations in accordance with FAR 21.25 shall be shown on placards or listing accessible to the pilot.
    - (3) The following placard will be displayed in front of and in clear view of the pilot:

"This airplane must be operated as a restricted category airplane in compliance with FAR 91.39 and the operating limitations stated in the form of placards, markings, and manuals."
    - (4) Carriage of hazardous material is prohibited unless compliance is shown with applicable Regulations in Code of Federal Regulations Title 49, Part 175.
- NOTE 3. The aircraft will be serviced and maintained in accordance with USAF T.O. 1C-97(K)E(C)-2-1.
- NOTE 4. On July 29, 2015 a search of all FAA files and records was conducted and no type design records were found.

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