

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A24SO BOEING USAF KC-97G March 15, 1983
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TYPE CERTIFICATE DATA SHEET NO. A24SO

Type Certificate Holder Center Equities Corp.
Suite 234
Two Northside 75
Atlanta, GA 30318

I. Model USAF KC-97G (Restricted Category), approved March 8, 1983

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 @ 2700 RPM and 247 TPSI (Torque Pressure)

Maximum Dry Power, Sea Level
3250 BHP @ 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_{ne} = 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 Range 18.5% to 30.5% MAC

Datum 50 inches forward of nose (Distance from datum to nose jacking cone
228.6 inches)

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

Maximum Gross Weight Take Off = 153,000 lbs.

Landing Weight (10 FPS Sink Speed) = 130,000 lbs.
(8.3 FPS Sink Speed) = 153,000 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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<u>Minimum Crew</u>	Pilot, Copilot, and Flight Engineer and the number of persons essential to perform the special purpose operation.
<u>Fuel Capacity</u>	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
<u>Oil Capacity</u>	186 gallons total - 4 engine tanks 32.5 gallons each - 2 transfer tanks 56 gallons
<u>Cargo Capacity</u>	See Flight Manual T.O. 1C-97G-1 Section V

CONTROL SURFACE	POSITION	MOVEMENT FROM NEUTRAL POSITION IN DEGREES	TRAILING EDGE MOVEMENT IN INCHES
Aileron	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	12 (± 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 given above	Up	1.5 (± .5/- .25)	.32 (± .11/- .05)
	Up	3 (± 1/2)	.64 (± .11)
Rudder (By pedal with rudder boost on)	Right	22 (± 1)	24.94 (± 1.12)
	Left	22 (± 1)	24.94 (± 1.12)
(By trim knob with rudder boost on)	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 USAF Serial Number 53-244

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 Center Equities Corporation modification as described in Report No. 83-0111, dated March 8, 1983, or later FAA approved revision.
- B. Airplane to be certified for the special purpose of carrying cargo, consisting of minerals, equipment, agriculture, aquatic creatures, animals, perishable goods, and other hardwares from one destination to another.

- (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 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 715.

NOTE 3. The aircraft will be serviced and maintained in accordance with USAF T.O. 1C-97(K)E(C)-2-1.

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