

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A7NW
Boeing
KC97G

April 17, 1981

TYPE CERTIFICATE DATA SHEET NO. A7NW

This data sheet which is part of Type Certificate No. A7NW prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder Hawkins & Powers Aviation, Inc.
P. O. Box 391
Greybull, Wyoming 82426

I - Model HP-KC-97G (Restricted Category) Approved April 17, 1981

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. 1C-97G-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 in. fwd of nose (Distance from datum to nose jacking cone 228.6 in.)
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)																																																																	
Minimum crew	Pilot, Copilot, and Flight Engineer and the number of persons essential to perform the special purpose operation.																																																																	
Fuel capacity	7,790 gals. total	- 2 outboard tanks 1,770 gal. each - 2 inboard tanks 1,520 gal. each - 1 Center Wing tank 1,210 gal.																																																																
Oil capacity	186 gals. total	- 4 engine tanks 32.5 gal. each - 2 transfer tanks 56 gal.																																																																
Cargo capacity	See Flight Manual T.O. 1C-97G-1 Section V																																																																	
Control surface movements	<table><tr><th><u>Control Surface</u></th><th><u>Position</u></th><th><u>Movement from Neutral Position In Degrees</u></th><th><u>Trailing Edge Movement In Inches</u></th></tr><tr><td rowspan="2">Ailerons</td><td>Up</td><td>25 (± 1)</td><td>9.22 (± .38)</td></tr><tr><td>Down</td><td>25 (± 1)</td><td>9.22 (± .38)</td></tr><tr><td rowspan="2">Aileron trim tabs</td><td>Up</td><td>5.5 (± 1)</td><td>.78 (± .06)</td></tr><tr><td>Down</td><td>5 (± 1)</td><td>.75 (± .06)</td></tr><tr><td rowspan="2">Elevators</td><td>Up</td><td>20 (± 1)</td><td>12.45 (± .62)</td></tr><tr><td>Down</td><td>15 (± 1)</td><td>9.36 (± .42)</td></tr><tr><td rowspan="2">Elevator trim tabs Right</td><td>Up</td><td>12 (± 2)</td><td>2.55 (± .43)</td></tr><tr><td>Down</td><td>12 (± 2)</td><td>2.55 (± .43)</td></tr><tr><td rowspan="2">Left - Wing flaps up, neutral position of trim tab with elevator in neutral position</td><td>Up</td><td>1.5 (+.5/- .25)</td><td>.32 (+.11/- .05)</td></tr><tr><td>Up</td><td>3 (± 1/2)</td><td>.64 (± .11)</td></tr><tr><td colspan="4">Wing flaps down 45°, elevator in neutral position measured from position given above</td></tr><tr><td rowspan="4">Rudder (by pedal with rudder boost on)</td><td>Right</td><td>22 (± 1)</td><td>24.94 (± 1.12)</td></tr><tr><td>Left</td><td>22 (± 1)</td><td>24.94 (± 1.12)</td></tr><tr><td>Right</td><td>15.5 (+1/-1.5)</td><td>17.62 (+1.11/-1.69)</td></tr><tr><td>Left</td><td>15.5 (+1/-1.5)</td><td>17.62 (+1.11/-1.69)</td></tr><tr><td rowspan="2">Rudder tab</td><td>Right</td><td>20 (± 1)</td><td>2.95 (± .15)</td></tr><tr><td>Left</td><td>20 (± 1)</td><td>2.95 (± .15)</td></tr></table>			<u>Control Surface</u>	<u>Position</u>	<u>Movement from Neutral Position In Degrees</u>	<u>Trailing Edge Movement In Inches</u>	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 (± .42)	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	Up	1.5 (+.5/- .25)	.32 (+.11/- .05)	Up	3 (± 1/2)	.64 (± .11)	Wing flaps down 45°, elevator in neutral position measured from position given above				Rudder (by pedal 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)
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Serial Numbers eligible	USAF Serial Number 52-918																																																																	
Certification basis	FAR 21.25(a)(2) dated May 1974, Amendment 21-1 through 21-53 Restricted Type Certificate issued April 17, 1981																																																																	

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, an FAA approved Airplane Flight Manual Supplement is required in addition to the operating limitations specified in Section V of T.O. 1C-97G-1.
NOTE 1.	Current weight and balance report and loading instructions for Model HP-1C-97G aircraft must agree with Section V of T.O. 1C-97G-1 Manual.
NOTE 2.	<p>A. This approval applies to USAF (Boeing) KC97G aircraft with modifications as described in data per Hawkins & Powers Aviation, Inc. FAA approved drawing list HPA-97-DL1 dated April 9, 1981, or later FAA approved revision thereto.</p> <p>B. Airplane certified for the special purpose of mineral exploration, agriculture, forest and wildlife conservation and carrying fresh fish from remote coastal areas of the State of Alaska either to fish canneries or to airports in Alaska for transport to other destinations.</p> <p>(1) Operation over densely populated areas is prohibited.</p> <p>(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.</p> <p>(3) The following placard must be displayed in front of and in clear view of the pilot:</p> <p>"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."</p>
NOTE 3.	The aircraft must be serviced and maintained in accordance with USAF T.O. 1C-97(K)E(C)-2-1.

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