DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A12SW
Revision 13
Twin Commander
700

September 25, 2015

TYPE CERTIFICATE DATA SHEET NO. A12SW

This data sheet which is part of type certificate No. A12SW prescribes conditions and limitations under which the product for which the type certificate was issued meet the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder	Twin Commander Aircraft LLC 1176 Telecom Drive Creedmoor, NC 27522
Type Certificate Holder Record:	Rockwell transferred type certificate A12SW to Gulfstream American Corporation on February 3, 1981. Gulfstream American Corporation transferred type certificate A12SW to Gulfstream Aerospace Corporation on November 29, 1981. Gulfstream Aerospace Corporation transferred type certificate A12SW to Twin Commander Aircraft Corporation on December 4, 1989. Twin Commander Aircraft Corporation transferred type certificate A12SW to Twin Commander Aircraft LLC on June 15, 2004.

I. Model 700 (Normal Category), Approved October 28, 1977

Engine	Two Lycoming TIO-540-R2AD
Fuel	100/130 Minimum grade and 100 low lead aviation gasoline
Engine limits	For all operations, 2,500 r.p.m. (340 hp) 44.0 in. Hg. MP up to 16,800 feet altitude in standard atmosphere. Above 16,800 feet the following maximum MP applies for maximum r.p.m.:

Altitude (FT)	Max. Allowable MP (in Hg.)
16,800	44.0
17,000	43.6
18,000	41.8
19,000	40.1
20,000	38.5
21,000	36.9
22,000	35.4
23,000	33.9
24,000	32.6
25,000	31.4

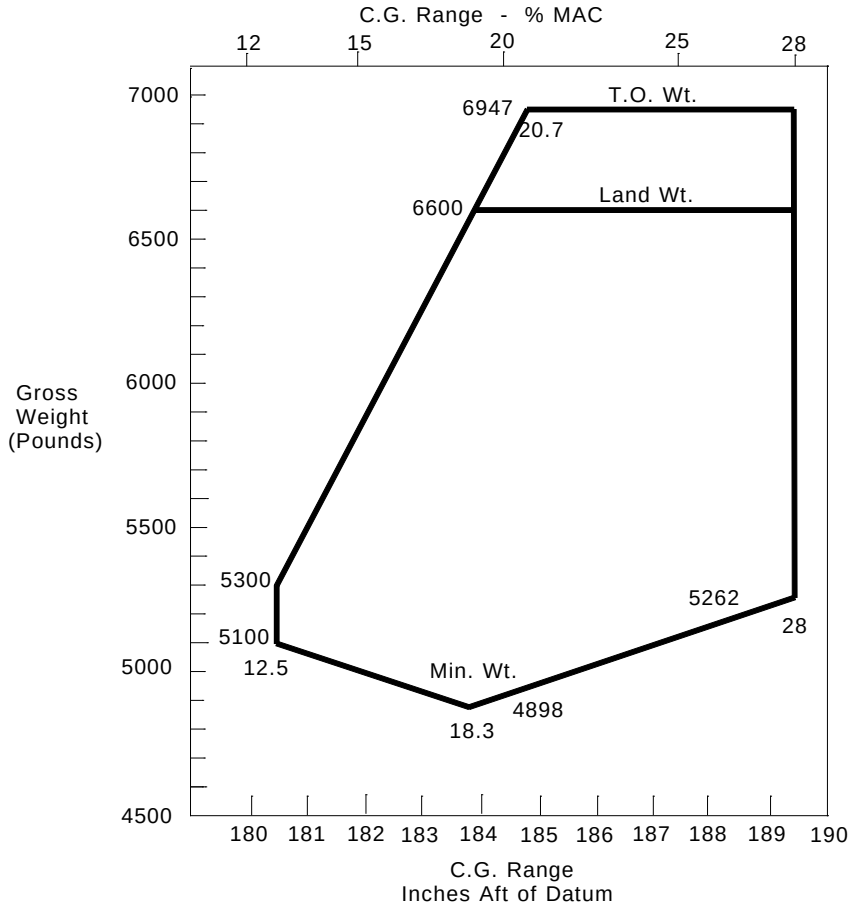
Propeller and Propeller limits	Two Hartzell HC-E3YR-2ATF/FC 8468-5R or HC-E3YR-24FT/FC-8468-5R 3-blade full feathering Pitch settings at 30 in Station: Low 13.8° min. to 15.8° max. High 84° ± 0.5° (feathered) Diameter: 81 in. to 79 in.

Airspeed limits	Never exceed:	243 KCAS (280 MPH), S. L. to 18,000 Ft. M = 0.51, Above 18,000 Ft.
	Maximum structural cruising	208 KCAS (240 MPH), SL to 18,000 Ft. M = 0.44, Above 18,000 Ft.
	Design maneuvering	161 KCAS (185 MPH)
	Minimum control	78 KCAS (90 MPH)
	Flap extended	
	- Takeoff - 12°	156 KCAS (180 MPH)
	- Landing & Approach -35°	130 KCAS (160 MPH)
	Maximum gear extended	156 KCAS (180 MPH)
	Maximum gear retraction	139 KCAS (160 MPH)
	Maximum gear extension	156 KCAS (180 MPH)

C.G. Range (landing gear extended)	Max. Aft. @ 28% MAC (Sta. 189.5)	6947 lbs. to 5262 lbs.
	Max. Fwd @ 20.7% MAC (Sta. 185.2)	6947 lbs.
	@ 12.5% MAC (Sta. 180.3)	5300 lbs. to 5100 lbs.
	Min. Wt. @ 18.3% MAC (Sta. 183.8)	4898 lbs.

Straight line variation between points given.

Landing gear retracted moment change: -3425 in.-lb.



Empty Weight C.G. range: None

Datum: 121.26 in. forward of the forward face of front pressure bulkhead.

Weight limits	Maximum				
	Ramp	6987 lbs.			
	Takeoff	6947 lbs.			
	Landing	6600 lbs.			
	Minimum	4898 lbs.			
Leveling means	Across and along floor seat tracks. (Use bubble scale)				
Number of seats	Maximum 8 (Pilot at +158.0) See FAA approved Pilot Operating Handbook for loading instructions.				
Maximum baggage	700 lbs. (300 lbs. at +82.7, 400 lbs. at +303.1)				
Fuel capacity	210 gal. (2 wing tanks, 105 gal. ea., 104 gal. usable at +200.0) See Note 1 for weight of unusable fuel.				
Oil capacity	24 Qts. (12 Qt. per Engine) at +134.0 See Note 1 for weight of undrainable oil.				
Maximum operating altitude	25,000 ft.				
Control surface movements	Wing flaps			Down	35° ± 1°
	Main surfaces:				
	Aileron	Up	22.5° ± .5	Down	17.5° ± .5°
	Rudder	Right	27.85° to 29.13°	Left	21.31° to 23.50°
	Elevator	Up	19° ± 5°	Down	15° ± 1°
	Trim tabs:				
	Aileron	Up	16° ± 1° (Aileron in neutral)		
		Down	16° ± 1° (Aileron in neutral)		
	Rudder	Left	36° ± 1° (Rudder full right)		
		Right	20° +0°/-1° (Rudder full left)		
	Elevator	Up	2.0° ± 5° (Elevator full up)		
		Down	28.5° + 1.0°/-3.5° (Elevator full down)		
Serial Numbers Eligible	70002 through 70032				

Specifications Pertinent to All Models

Certifications Basis	FAR 23 effective February 1, 1965, including Amendment 23-14 effective December 20, 1973, and Special Conditions No. 23-75-SW-6 dated May 9, 1977 (Docket No. 16772). FAR 36 effective December 1, 1969, including Amendment 36-2 effective December 1, 1973. Application for Type CertificateApril 4, 1974. Compliance with Ice Protection has been certified in accordance with FAR 25, Appendix "C", when ice protection equipment is installed per drawing 300-970001 and the appropriate supplements as listed on the Log of Supplements are included in the Pilot's Operating Handbook.
Production Basis	None. Prior to original certification of each aircraft, an FAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.

Equipment	The basic required equipment as prescribed in the applicable airworthiness regulation must be installed in the aircraft for certification. Rockwell Report W80-2789 contains a list of required equipment as well as optional equipment installations. This equipment must include a current Airplane Flight Manual.
NOTE 1:	Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include undrainable oil and unusable fuel as follows: Undrainable oil: 1.35 Qt. at +140.2 Unusable fuel: 2 Gal. at +200.0
NOTE 2:	The engine tachometer must be calibrated annually after aircraft has been placed in service to avoid inadvertent operation above 2,500 rpm.
NOTE 3:	(a) An airframe service life of 10,000 hours has been established. (b) Service life of flap actuators is 7,500 hours.
NOTE 4:	Deleted

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