DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A7SW
Revision 6

WINDECKER
AC-7

May 30, 2017

TYPE CERTIFICATE DATA SHEET NO. A7SW

This data sheet which is a part of type certificate No. A7SW prescribes condition 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	Windecker Aircraft, Inc. 137 Knob Hill Road Mooresville, NC 28117
TC Holder Record:	Windecker Research, Inc. transferred TC A7SW to Gerald P. Dietrick on May 19, 1977. Gerald P. Dietrick transferred TC A7SW to Composite Aircraft Corporation on December 26, 1979. Composite Aircraft Corporation transferred TC A7SW to Theodore R. Windecker on February 12, 2009. Theodore R. Windecker transferred TC A7SW to AC7 LLC on January 22, 2013. AC7 LLC transferred TC A7SW to Windecker Aircraft, Inc. on November 15, 2014.

I - Model AC-7, 4 PCLM (Normal Category) (Approved 18 December 1969)

Engine	Continental IO-520C Spec-6
Fuel	100/130 min. aviation fuel
Engine limits	For all operation, 2700 r.p.m. (285 b.h.p.)
Propeller and propeller limits	1. McCauley D2A34C58/90AT-6 Propeller Diameter: not over 84 in. not under 82 in. Pitch settings at 36 inch station: Low 9.7 degrees ± 0.2 degrees High 25.8 degrees ± 0.5 degrees 2. McCauley D-4082 spinner 3. McCauley C290D2/T16 propeller governor

Airspeed limits (CAS)

Va (Maneuvering)	136 m.p.h. (118 knots)
Vno (Max Structural Cruise)	190 m.p.h. (165 knots)
Vne (Never exceed)	234 m.p.h. (203 knots)
Vfe (Flaps extended)	130 m.p.h. (113 knots)
Vle (Gear extended)	150 m.p.h. (130 knots)
Vlo (Gear operation)	
Extension	150 m.p.h. (130 knots)
Retraction	130 m.p.h. (113 knots)

C.G. range (Landing gear extended)	+96.1 at 2500 lbs. +99.4 to +106.0 at 3400 lbs. Straight line variation between points given. Moment change due to retracting landing gear, +1017 in-lbs.
Empty wt. C.G. range	None.
Datum (Zero):	59.65 inches forward of the steel firewall at the front face of wheel well flange.

Leveling means	Front seat tracks or longitudinal leveling screws.		
Maximum weight	3,400 lbs.		
No. of seats	4		
Maximum baggage	120 lbs. (+167 in.)		
Fuel capacity	86 gallons		
Oil capacity	12 qts.		
Control surface movements	Wing flaps	25° ± 1° takeoff	
		45° ± 1° landing	
	Ailerons	Up 17° ± 1°	Down 10° ± 1°
	Elevator tab	Up 4° + 1°	Down 10° + 1°
		- 0°	- 0°
	Elevator	Up 22° ± 1°	Down 22° ± 1°
	Rudder	Right 25° ± 1°	Left 25° ± 1°
Manufacturer's serial numbers	#3 and on.		
Certification basis	Part 23 of the Federal Aviation Regulations effective 2-1-65 as amended thru Change 6. Also FAR 23.1351(b) (2), (3), and (4) of Amend. 23-7 effective 14 September 1969. Type Certificate No. A7SW issued 18 December 1969. Application for type certificate dated 6 July 1967.		
Production basis	None. Prior to original airworthiness 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 flight characteristics. Prior to original airworthiness certification of any aircraft manufactured after December 12, 1986, compliance with the special retroactive requirements of 14 CFR Part 23.2 for seat belts with shoulder harnesses is required. Prior to original standard airworthiness certification of any aircraft without prior flight time before January 1, 1980, compliance with 14 CFR Part 36.501(a)(2) and (c) noise standards is required.		
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 equipment is required: (a) FAA approved flight manual, Revision C, dated 29 April 1971.		

NOTE 1. The 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. This certified empty weight and corresponding center of gravity location must include unusable fuel and unusable oil.

NOTE 2. The following placards must be displayed:

a. <u>In clear view of the pilot:</u>
THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS, AND MANUALS.

THIS IS A NORMAL CATEGORY AIRCRAFT APPROVED FOR DAY-NIGHT/IFR-VFR OPERATION. FLIGHT UNDER KNOWN ICING CONDITIONS IS NOT APPROVED.

Maximum speed for landing gear extended - 150 m.p.h. (130.0 knots)

Maximum speed for landing gear operation -
Gear extend 150 m.p.h. (130 knots)
Gear retract 130 m.p.h. (113 knots)

Design maneuvering speed - 136 m.p.h. (118.0 knots)

Demonstrated crosswind velocity - 21 m.p.h. (18 knots)

No acrobatic maneuvers, including spins, are approved. Refer to AFM emergency procedures section for inadvertent spin recovery techniques. (Nonacrobatic operation includes any maneuver incident to normal flying, stalls (except Whip Stalls), Lazy Eights, Chandelles, and Steep Turns, in which the angle of bank is not more than 60 degrees.)

b. On or near fuel filler cap:
Minimum grade fuel - 100/130 octane.
Usable fuel tank capacity - 43 gallons

c. On or near door vent window:
Do not open foul weather window above 150 m.p.h. (130 knots)

d. At Flap Indicator:
0 degrees to 25 degrees take-off (range color coded with light gray)
25 degrees to 45 degrees landing (range color coded with white) 130 m.p.h. maximum.

e. Between baggage compartment and soft goods compartment:
Soft Goods Compartment Limit:
ONLY soft articles may be carried in shelf area.
Maximum allowable load - 10 lbs.
NOTE: For more complete information, refer to weight and balance data sheet.

Baggage Compartment Limits:
ONLY baggage may be carried in this area.
Use baggage net.
Maximum allowable load - 120 lbs.

f. At alternate static air control:
Alternate
Static Air

Turn counter-clockwise to open static system drain.

g. On control lock:
Remove before starting engine.

h. On landing gear release valve:
Emergency gear release turn counter-clockwise.

i. On Center Floor Console:
Emergency Landing Gear Extension
1. Retard throttle to closed position.
2. Close cowl flaps.
3. Set up 90-100 m.p.h. glide.
4. Pull out landing gear circuit breaker.
5. Open hydraulic release valve completely.
6. Pump elevator control moderately to swing nose gear into position. (An audible thump will indicate a down lock on the nose gear.)
7. Check for gear down light.
8. If no gear down light--pump rudder control left and right moderately to pull main gear into down lock position.

.....END.....