

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00011WI Original Rans Inc. Model S-7C September 14, 2001

TYPE CERTIFICATE DATA SHEET NO. A00011WI

This Data Sheet, which is part of Type Certificate No. A00011WI prescribes conditions 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: Rans Inc.
4600 Highway 183 Alternate
Hays, Kansas 67601

MODEL S-7C (PRIMARY CATEGORY) - APPROVED SEPTEMBER 14, 2001.

ENGINE: Rotax 912 ULS

FUEL:

Unleaded automotive (ASTM D 4814) gasoline with minimum AKI (Anti Knock Index) of 91(R+M)/2 – no alcohol permitted.
Or Avgas 100 LL Grade Aviation Fuel
For other fuel see Rotax Operators Manual supplied with engine.

OIL:

SAE- Motorcycle oil of registered brand with gear additives.
Use only oil with API classification “SF” or “SG”.
Minimum recommended viscosity SAE 10W-40.
For additional information refer to Rotax Operators – and Maintenance Manual.

COOLANT:

50%/50% glycol antifreez / water (ASTM D4985) with additives against corrosion. For additional information refer to Rotax Operators Handbook.

ENGINE LIMITS:

Maximum Takeoff (max. for 5 minutes):	98.5 HP at 5800 RPM
Maximum Continuous: (Power tolerance + 5%)	92.5 HP at 5500 RPM

PROPELLER AND PROPELLER LIMITS:

Sensenich W72RR
Diameter: not over 72” in., not under 70 in.

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AIRSPPEED LIMITS (MPH CAS):

Never exceed: 130 mph
 Maneuvering: 97 mph
 Flaps extended: 69mph

CG RANGE:

(+46.1) in to (+50.25) in at 950 lb. or less
 (+48.4) in to (+50.25) in at 1200 lb.
 Straight line variation between points given.

EMPTY WEIGHT CG RANGE:

None

MAXIMUM WEIGHT:

Maximum Ramp: 1200 lb.
 Maximum Take off: 1200 lb.
 Maximum Landing: 1200 lb.

MINIMUM CREW:

One (1) Pilot

NO. OF SEATS AND LOADING:

Pilot (+37.4) in
 Passenger (+65.4) in

MAXIMUM BAGGAGE:

50 lb. at (+92.5) in

FUEL CAPACITY:

18 gal total (16.75 gal usable, two 9 gal tanks in wings at +52.2)

OIL CAPACITY:

6.4 liq pt, min. 4.2 liq pt)

MAXIMUM OPERATING ALTITUDE:

12500 ft

CONTROL SURFACE MOVEMENTS:

Rudder:	Right	28°	Left	28°
Elevators:	Up	28°	Down	20°
Elevator trim tab:	Right	30°	Left	20°
Ailerons:	Up	28°	Down	20°
Wing Flaps:	Half	17°	Full	34°

DATUM:

Front of firewall.

LEVELING MEANS:

Top of upper cabin longeron (below door).

CERTIFICATION BASIS:

Primary Category FAR Part 21 Certification using Canadian TP10141E and FAR Part 36.
 Equivalent Safety Findings have been granted as follows:

JAR- VLA Paragraph 145(a) was used in lieu of Transport Canada TP10141E
 Paragraph 145 as an Equivalent Level of Safety per FAA letter dated September 13, 2001.

Application for Type Certificate was dated January 27, 1994. The Model S-7C Type Certificate was obtained by RANS under authority of FAR Part 21, Subpart J.

PRODUCTION BASIS:

None

EQUIPMENT:

N/A

NOTE 1. Current weight and balance data, loading information and a list of equipment included in empty weight must be provided for each airplane at the time of original certification.

(a) Basic empty weight includes unusable fuel of 7.5 lb (1.25 gall) at (+52.2) in.

NOTE 2. All Placards required in the FAA Approved Flight Manual P/N CPAC0103 must be installed in the appropriate location.

NOTE 3. The type design of the RANS S-7C is defined by RANS Corporation Master Drawing CVAC0001, Revision None, dated August 10, 2001.

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