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RANS S-14 AIRAILE SPECIFICATIONS AND PERFORMANCE

SPECIFICATIONS

	65 HP	42 HP	52 HP
Wing Span.....	26 ft 4.5 in.....	26 ft 4.5 in.....	26 ft 4.5 in.....
Area.....	100 sq ft.....	100 sq ft.....	100 sq ft.....
Mean Chord.....	3 ft 9 in.....	3 ft 9 in.....	3 ft 9 in.....
Aspect.....	6.98:1.....	6.98:1.....	6.98:1.....
Length.....	18 ft 10 in.....	18 ft 10 in.....	18 ft 10 in.....
Height.....	7 ft.....	7 ft.....	7 ft.....
Cockpit Width.....	30 in.....	30 in.....	30 in.....
Headroom.....	39 in.....	39 in.....	39 in.....
Legroom.....	42.5 in.....	42.5 in.....	42.5 in.....
Number of Seats.....	1.....	1.....	1.....
Doors.....	1.....	1.....	1.....
Landing Gear*.....	F/TR.....	F/TR.....	F/TR.....
Baggage Volume**.....	n/a.....	n/a.....	n/a.....
Baggage Capacity.....	n/a.....	n/a.....	n/a.....
Fuel Capacity***.....	9 gal US.....	9 gal US.....	9 gal US.....

POWER PLANT 447

	447	503	582
Engine.....	Rotax 447.....	Rotax 503.....	Rotax 582.....
Output.....	42 hp.....	52 hp.....	65 hp.....
Oil Capacity.....	n/a.....	n/a.....	2.5 qts.....
Coolant Capacity.....	n/a.....	n/a.....	4.4 qts.....
Propeller Diameter.....	68 in to 72 in.....	68 in to 72 in.....	68 in to 72 in.....
Propeller Type.....	Wood.....	Wood.....	Wood.....
Gear Reduction.....	1:2.58.....	1:2.58.....	1:2.58.....
Fuel G.P.H.....	3.75 gal @ 85%.....	4.0 gal @ 85%.....	5.75 gal @ 85%.....

PERFORMANCE

Take Off Roll.....	300 ft.....	250 ft.....	225 ft.....
Rate of Climb.....	600 fpm.....	700 fpm.....	900 fpm.....
Service Ceiling.....	12,000 ft.....	13,500 ft.....	15,000 ft.....
Cruise.....	75 mph.....	85 mph.....	95 mph.....
VNE.....	120 mph.....	120 mph.....	120 mph.....
Stall Clean.....	41 mph.....	41 mph.....	43 mph.....
Stall Flaps.....	36 mph.....	36 mph.....	38 mph.....
Roll Rate.....	94° /sec.....	94° /sec.....	94° /sec.....
Glide Ratio.....	8:1.....	8:1.....	8:1.....
Landing Roll.....	190 ft.....	190 ft.....	190 ft.....
Endurance.....	2.4 hrs.....	2.25 hrs.....	1.56 hrs.....
Range.....	180 miles.....	191 miles.....	148 miles.....

WEIGHTS AND LOADINGS

Gross Weight.....	675 lbs.....	750 lbs.....	775 lbs.....
Empty Weight.....	360 lbs.....	370 lbs.....	390 lbs.....
Useful Load.....	315 lbs.....	380 lbs.....	385 lbs.....
Wing Loading.....	6.75 lbs.....	7.5 lbs.....	7.75 lbs.....
Power Loading.....	16.0 lbs.....	14.4 lbs.....	11.9 lbs.....
Limit Load Factors.....	+4-2.....	+4-2.....	+4-2.....

*F/TR=Fixed Trike

**50 lbs of baggage can be carried in the space available behind the seats.

***Double the Range with a second optional wing tank.

STANDARD EQUIPMENT

- Full enclosure
- ROTAX engine install kits (see pricing info)
- 2-Blade prop
- Semi-focal 4-point rubber isolated engine mount
- Steerable nose gear, drum toe brakes
- 6" Nose and main gear aluminum wheels
- Tubular spring steel main gear
- Seating adjusts fore and aft, 4 positions and tilt
- Upholstered seat with map pockets
- Center control stick, 4 position flaps
- ASI, Hour meter, engine instruments vary with engine package
- Aluminum airfoil struts
- Ball bearing aircraft control pulleys
- 3" Main wing spar
- 2" Trailing wing spar
- 5" Tail boom
- Root rib tension system on wings, ailerons and flaps
- Wings fold or detach
- Welded 4130 cockpit cage comes powder coated
- Fuel sump drain
- Dual cockpit air vents
- 9 Gallon fuel wing tank
- Lap and shoulder belts
- Dual elevator horns operated by push-pull tube
- Push-pull tube ailerons with 2:1 differential
- Folding tail for storage
- 4 ounce Dacron skin in choice of colors

The S-14 Airaile is an FAA Approved 51% Kit – No Painting*, fabric work or welding required. Clear coating of covering recommended. Order our video to learn the how-to's of clear coating.

*Enclosure pieces provided unpainted, 6061-T6, can be polished or painted.

Build Time: 350 hours

Performance at sealevel and maximum gross weight.

RANS, Inc. reserves the right to make changes to prices, specifications or models or add improvements at any time without notice or obligation. Some measurements are approximate. Many photos show optional equipment.

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