

AeroKits P/L

Importers and Suppliers of all things Savannah STOL



These terrific aircraft just keep getting better...

We now have over 200 Savannah aircraft of various models in Australia and well over 1000 world wide.

To its credit the manufacturer of Savannah Kits and Factory Built Aircraft , ICPsrl in Italy, is constantly innovating and making subtle but important changes to constantly improve the Savannah range of LSA and Kit aircraft.

The venerable Classic Savannah morphed from a capable, but a little slow in the cruise work horse, to the VG version, which with a changed wing leading edge profile and the addition of Vortex Generators, enabled a cruise TAS of 90Kts at 70% power with a modest three knot increase in the stall speed to 26Kts. No vices here!

However the cabin width and leg room was a bit of an issue for us Aussies so the factory blessed us with

the introduction of the mighty Savannah XL. Now this new aircraft almost had it all. A wider and longer cabin, more sloping windscreen, a longer more streamlined nose, a clear roof, more Lexan in the doors to improve all round visibility, and a Ring Mount for the venerable Rotax 912ULS which freed up the engine bay and subdued the "Rotax Knock" at start-up and shutdown.

Well this new model was heaven to the long legged pilot and the standard aircraft could still weigh in empty at about 300Kg even with the long range, bladder busting 150L tanks. That's up to eight hours in the air non stop. A long way at a TAS of 90kts before you have to sniff out a fuel stop. A further bonus arrived with the RAA accepting the design 560 KG MTOW that the factory had certified rather than the arbitrary 544Kg imposed by the Australian rules.

SPECIFICATIONS; Savannah S/XL from AeroKits... Ph. 0418157044

Material	Rotax 912 UL 80 HP	Rotax 912 ULS 100 HP
Seating	6061-T6 aluminium 2, side-by-side	
Wing type	high with 2 struts	
Wing span	8980mm	
Wing chord	1320mm	
Wing area	11.90m ²	
Aspect ratio	6.3:1	
Wing loading	45.7Kg/M ²	
Flaps	0 - 20 - 40	
Landing gear	fixed; tricycle	
Wheel track	1700mm	
Length	6500mm	
Height	2580mm	
Cabin width	1165mm	
Gross weight (MTOW)	600Kg	
Power ratio	5.47Kg - 5.05Kg./hp	
Forward C of G limit	25% MAC	
Rear C of G limit	38.5% MAC	
Limit load factor (At 544Kg)	+6/-3g (+4/-2g)	
Number of kits sold	800+	
Empty weight - Kgs *	285	300 with aux Tanks
Useful load - Kgs.	315	300
Fuel capacity - Litres. Plus 6L reserve tank.	72	72 (144)
Payload with max. fuel - Kgs **	263	190

* Empty weight is for a Savannah completed and flown with only standard equipment as indicated in "Kit Contents". Empty weight will increase when adding optional accessories and paint.

** A luxuriously-equipped, factory-built, ready-to-fly Savannah including a Rotax 912ULS (100hp) engine, aux tanks, painted with one coat of primer and 2 coats of solid polyurethane enamel, with radio, intercom, GPS, trim indicator, single stick, and incorporating all standard equipment, and fluid levels, typically weighs 308Kg. Add full fuel of 150L (110Kg), for a ramp weight of 458Kg. This leaves a payload of 185Kg for pilot, passenger and baggage.

PERFORMANCE; Savannah XL/LS from AeroKits... Ph. 0418157044

Stall speed full flaps (Vso) - Kts	Rotax 912 UL 80 HP	Rotax 912 ULS 100 HP
Approach speed (Vref) - Kts	26	26
Maneuvering speed (Va) - Kts	40	40
Cruise speed - Kts TAS (standard tires)	74	74
Max speed - Kts TAS (standard tires)	85	90
Never exceed speed (Vne) - Kts	90	95
Take off run at 454Kg. - M	120	120
Landing roll at 454 Kg. - M.	55	35
Climb rate- ft/min at 450Kg	40	40
Best rate of climb speed - Kts	700	1100
Best angle of climb speed - Kts	46	49
Glide ratio at 54Kts	42	45
Fuel consumption at 75% power - L/Hr	11:1	11:1
Range (max endurance) - NM with aux Tanks	16.2	18.5
	768	720

Performance figures are typical for a standard Savannah and are general in nature



Remember always that: **Performance + Quality = Safety + Reliability = Savannah STOL**



Savannah XL about to land for breakfast.



XL Ready for work or fun.



When it comes to building a Savannah from a Kit you will be surprised and amazed at how complete the kit presents. Everything you need to build your own airframe masterpiece is in the box with the exception of outside paint. You will need a radio, engine, and prop to complete the standard aircraft.



XL Fuselage

The XL was really getting us to the far away places in comfort and style much to the chagrin of the opposition aircraft which had to fly with a much higher sphincter factor because they did not have the capability of putting down on a very short piece of dirt and walk away from it in the unlikely event that Mr Rotax decides to take a holiday or someone had not allowed enough fuel on board. It only needs a double dose of a very short bit of dirt and a suitably well trained and practiced pilot can put the Savannah down and use the aeroplane again. Now I ask you, what other aircraft in this class can take on the long distance adventures and still be very handy mustering goats or dropping in on the neighbours for a cup of coffee whilst packing 20Kg of luggage into a huge luggage area, and in the hands of an experienced pilot take off and land in 40-50m in light ship configuration. Savannah STOL Rules.

And it just keeps getting better. The ICP factory then released the S model which has incorporated a rounded rear fuselage and improved empennage fairings to satisfy the needs of those among us who just love to stare at that look of curved form. Still the same performance, a bit more work to build, but for some the eye candy factor is irresistible.

The wiring harness is pre made, all necessary forming is done, and even an "air over oil" pop riveter is supplied. You will need more Clecos, some hose and clamps for the extra tanks, and about 400 hours of your best creative time plus painting to fashion your own 19 Cat Savannah. A little daunting when you first open the box with hundreds of bits. But seeing all those bits converted into a living aircraft is a great feeling. And the XL kit starts at A\$ [redacted] incl GST. A bit of a steal really considering the quality of the match hole drilling and accuracy of the all CNC cut parts.

Now just when we thought it couldn't get any better, the factory has completed proof testing in Germany to allow the MTOW of the XL and S models to be increased to 600Kg with a small modification to the strut attachment points. This means the Savannah is legally capable of carrying its own weight into the sky. Not bad for a conventional, all metal, easy to repair and maintain aircraft. Spare parts are readily available and much, much, cheaper than parts for most other LSA or Ultralight aircraft. ICP even has a new engine in the testing pipeline with all the bells and whistles and a skinny weight.

Factory Built aircraft now have the option of full internal painting for extra corrosion protection for those customers who operate in harsher conditions. Even so, proper maintenance is still essential if you operate on or near the coast if you expect a long life from your pride and joy. ICP have new ideas and further improvements in the pipeline so be sure to check out the websites below.

Savannah XL/S Kits from : AeroKits...

Kit One:

This kit contains all the materials needed for building the fuselage, wings with flaperons, horizontal and vertical tail with elevator and rudder, trim tab on elevator, streamline wing struts drilled for exact alignment and angle of attack, tricycle gear, wheels with hydraulic differential brakes with command on pedals, tyres, air tubes, rudder pedals, stick, flap control, control systems and control cables for elevator and rudder, with turnbuckles, thimbles, shackles, all fitted to the right length and closed with nicropress sleeves, with certified equipment.

All the pieces come from a serial production by CNC machines in order to obtain a drastic cost reduction and to achieve a superior quality as a final result. This also allows for a perfect interchange ability of spare parts requiring no further adaptation. All metal sheets are cut in the right dimensions, bent and moulded where needed. Then they are drilled and mostly deburred, ready to be riveted with blind rivets supplied in the kit. (The pneumatic rivet gun and some clecos are supplied with the kit) Parts requiring solid rivets are supplied already

Kit Two:

Same as Kit one, but including:

Engine mount for Rotax 912, with silent-blocks; engine cowlings; water and oil coolers; hoses with steel spiral core, oil tubes and NORMA and ABA clamps; Cabin heating system; Firewall forward fuel system, with electric fuel pump, filter, fuel distributor return against vapour-lock, rubber stratified hoses NBR+CR with NORMA clamps; Exhaust system and muffler; Airbox with carb heat 912ULS only. Instruments: 3-1/8" airspeed indicator, 3-1/8" altimeter, 3-1/8" vertical speed indicator, 3-1/8" RPM with hour meter for Rotax 912, 2" or 2-1/4" slip indicator, compass, voltmeter, oil pressure gauge, oil temperature gauge, left and right CHT, airbox temperature indicator, fuel pressure.

Suppliers and/or manufacturers of;

Aircraft Building Tools and Clecos	VHF and UHF Radios, Aerials, Custom Savannah Harnesses, Bolly and Sensensich Props
Avex Blind Rivets	Airmaster C/S Props.
Stainless Button Head Screws	AeroShell Sport Plus 4 oil for 912ULS
Rivnuts (Nutserts)	
Instruments Non TSO'd	

finished ready for easy assembly (wing spars, some fuselage parts etc...).

Also included in kit one:

- All AN bolts with nuts and washers
- Safety wire
- Wing tanks 4off (144 litres total) with 6 litres reservoir with reserve floating indicator and water drain, fuel valve, and complete fuel tubes to the fire-wall.
- 4 point attachment seat belts
- Double throttle control
- Plastic wingtips for wings, ailerons, slats and tail
- Jigs for ailerons

Not included in kit one:

Engine mount, engine cowlings, engine, propeller, water and oil coolers, tubes, hoses, pipes, clamps, seats, instruments, electric system, paint, internal upholstery. Estimated time for assembling (Painting and upholstery excluded) 100 hours + engine and systems installation.

Electric system complete with battery (not filled), key switch, 2 thermal breakers, switches for additional devices (position and strobe lights), battery charge warning light, fuel reserve warning light with test button, landing light, cabin light, electric trim for elevator. Separate cloth seats.

What is not included for finishing the aircraft:

Engine Rotax 912UL with oil tank, regulator rectifier, propeller. Estimated time for assembling (painting and upholstery excluded); 300 hours.

Kit 3; Same as Kit 2, but including Rotax 912 ULS engine regulator, oil tank. Bolly 3 blade Prop with spinner kit. Estimated time for assembling (painting and upholstery excluded); 350 hours

Upgrade parts for Savannah including;

Fuel Distribution Manifolds	Restraint
Improved Fuel Filter Kit	Front Axle strength Mod
Improved 3 Point Door Latch Kit	Low Permeability fuel hose.
Clear View Luggage Area	Flexible "Build Assist" Programs

www.aerokits.net.au or www.icp.it for new developments or phone Reg at AeroKits... 0418157044.