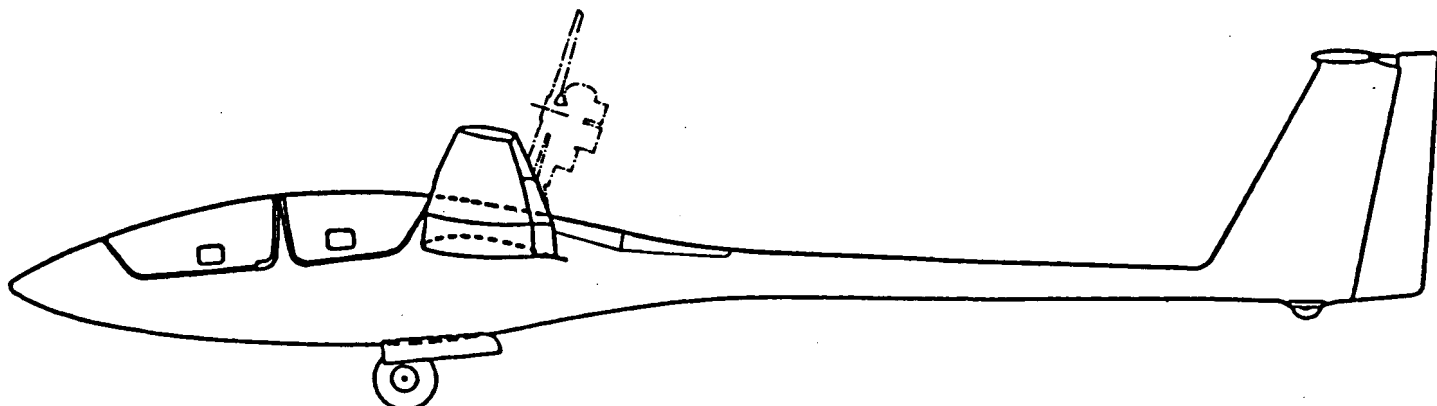


Schleicher ASH-24E Rotax Powered Sustainer Sailplane



This 2-place ship is powered with a Rotax 277 2-cycle engine producing 24 hp at standard conditions S/L. Empty weight-1047 lbs/Gross-1653 lbs. The engine has a gear box reduction of 3:1 and swings a 4.27' propeller. Rate of climb S/L. max. gross wt is 157 fpm. Span-82'; L/D 57:1. Engine is raised and lowered electrically. Starting is via hand cable in cockpit. Controls & instruments include; Prop brake; CHT gauge; RPM Indicator.

Self-Launching Sailplane Pilot's Assn. **N E W S L E T T E R**

MARCH-APRIL 1992

Published Bi-Monthly by SLSPA, Inc. // Pete Williams, President and Editor // Jim Culp, Vice President // Issue # 25 Vol. IV

SSA CONVENTION SLSPA ACTIVITIES....

The Motorglider luncheon had about 55 attendees, 36 of which were SLSPA members. SLSPA Board of Directors and Officers:

Pete Williams.....Pres & C.O.B./Newsletter Ed.
Jim Culp.....VP & Sec/Board Member
Steele Lipe.....Treasurer
Bruce Templeton.....Board Member
Jerry Wenger.....Board Member
Stan Nelson.....Safety Off. & Board Member

Committee for Government Affairs & FAA Liaison:

Al Blackburn
Bill Crouch

Al and Bill have the task of coordination with SSA (Judy Lincoln) in matters pertaining to any future changes in FAA procedures regarding checkout and adding a rating for self-launching sailplanes. SLSPA wants to make sure if any changes are proposed by FAA, that positive input from the self-launching pilots will be provided to assure procedures retain the current provisions outlined in Advisory Circular 61-94 and that a sailplane with a motor continues

to be classified as a "glider" (FAA terminology). What SLSPA wants to retain is simplicity and ease of checkout without classifying the motorized glider as a power ship. The current system requires only a log book entry by a CFIG stating that checkout was satisfactorily accomplished per AC 61-94.

Stan Nelson gave an informative talk on density altitude considerations for self-launching the Ventus CM. Copies of this presentation are available from SLSPA. Send SASE (58 cents). Oliver Dyer Bennet and John Murray talked about the DG-800 and ASW 26E 18 meter ships. According to Murray, four engines are under consideration for the 26E.

Jason Gregg's ASW 24E was on the convention floor. He has self-launched the ship at a Florida location and reported no problems. Greg has installed an EGT probe and gauge to closely monitor engine temperature. As a matter of interest, the gauge shows 1150 F at full power. A DG-600M and 2-place Rotax powered Grob 103 SL were also on the convention floor. It has come to the editor's attention that a self-launching Discus is in the wings using the 43 hp Rotax. More on this ship later.

THE FOURNIER RF5B IS RESURRECTED

The news from the 1991 Paris Airshow mentioned a rebirth of the Fournier designed RF5B motorglider from a Spanish company which has bought the plans. I owned a 1972 model for about 8 years until 1990.

It was wood with fabric trailing edges and control surfaces and finished with a urethane paint. Low wing spanning 56+ feet. Empty wt. 1050#. Single wheel lever retractable main gear with fixed outriggers carrying small wheels under the wings. Power was a 62 Hp. VW conversion by Limbach swinging a Hoffmann 3 position fully featherable prop which was manually controlled.

Under power it flew much like any small powered plane. Climb 300 to 700 fpm depending on temperature. Cruise 90-95 MPH on 3.3 Gph of 100 octane. With the prop feathered the rated glide ratio was 27:1. Not great but not too bad. The long wing had a cleverly designed simple release that permitted the outer 10 ft of each wing to be quickly folded back on top of the main wing allowing it to fit in a hangar, however it was a major job to remove the wing completely. Ground handling took some care. The tail wheel only turned 30 degrees each way which, added to the outriggers half way out each wing, soon taught me to be careful how I got around airports. It was equipped with needed instruments and a navcom. As seating was tandem an intercom would have been a great help. Most controls were also available in the rear seat. It was made with true German attention to detail. The Limbach engine had an 800 to 1000 hr TBO and the Hoffmann prop 4-5 years (no hours). Prop overhaul cost 1500 to 2000 dollars with freight. The RF5B was relatively trouble free except several spring annuals found rusted valve seats. It carried an Experimental Exhibition Airworthiness certificate.

Soaring it felt much like a Schweitzer 2-32. It could have used more rudder in a right cross wind condition since the engine rotation was

opposite US airplanes and torque was therefor opposite. The spoilers were quite effective and gave good landing control with or without power. The original outriggers were 1 inch round nylon rods with 4" x 1" wheels. The nylon tended to soften in humid weather and collapse. Replacing them with Delrin solved the problem. At gross weight on a hot midwest day the climb was marginal and needed a thermal to get up at any reasonable rate. Some of the RF5Bs imported to the west coast had Revmaster engines with turbo chargers installed which I would think could benefit any of the imported motorgliders in that area.

It was a good choice for the Ohio Valley area in that to a certain extent it replaced both a light airplane and a glider. However due to limited good soaring days and other circumstances which kept me from using even those days I was not justified in keeping it. When I sold it as far as I could see it had held up well for some 16 years. For an area of better soaring conditions it would probably not come close enough to a high performance sailplane to suit many pilots.

I have heard that only about 16 RF5Bs were brought into this country. Some Ogar motorgliders were also imported in the early 70s. They were a high wing pusher configuration with much the same performance as the RF5B. I don't know how many were brought in. I have heard of at least two RF5Bs being bought back to Europe. I believe one had been modified with an engine and prop out of a Grob which improved performance with about 20 more horse power.



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ROTAX SERVICE CENTERS....

The factory recently sent the following list of authorized centers. The main US office is in Ft. Lauderdale and can provide detailed input on problems;

Kodiak Research Inc. 1575 W. Commercial Blvd
#33B Ft. Lauderdale, FL 33309/Eric Tucker
305-776-9904

Alaska; Artic Sparrow Aircraft/Anchorage
907-349-4101

California; California Power Systems/San Leandro
415-357-2403
Robert Marshall/Brentwood
415-422-9596

Colorado; Leading Edge Airfoils/Colorado Springs
719-632-4959

Florida; Lockwood Aviation/Lake Wales
813-676-0344

Mississippi; S. Mississippi Light Aircraft/Lucedale
601-947-4953

Ohio; Green Sky Adventures/Oswell
216-293-6624

Washington; Eastside Ultralights/ Arlington
206-435-3737

Alberta; A.C. Eltra Aviation, Ltd/Smoky lake
403-656-4207

British Columbia; Kodiak Research Ltd./Vernon
604-542-4151

Reg's Air-Cooled Engines/Surrey
604-581-7414

Ontario; Buzzman Microlight Avia./P.O. Box 310
Holland Landing, ON L0G 1H0
Walter Tadgell & Sons/Strathroy
519-245-1103

Quebec; Centre D'Aviation Recreatif Leger
St. Lambert de Levis
418-889-0423

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Glaser-Dirks TN 826/25 and Rotax Tech Bulletin 505-05;
Problems and Procedures.....

(This is the TN that requires removing and inspecting the prop shaft; replacement of rear prop support mounting bolts. The Rotax Tech. Bulletin is the changeout of piston pin caged bearings to non-caged) One pilot reported a frozen lower piston ring on #2 piston (rear). This resulting in blow-by and indications of heat at the rear plugs (whiter than usual), piston pin and caged bearings dark discoloration and a portion of the

cylinder barrel showing a shiny area. The top ring was still free but the bottom ring had to be broken loose. The caged bearings showed no wear outside of the heat discoloration. Pistons glass blasted and bore lightly honed. New rings, piston pins, bearings gaskets installed. Spark plug threads in head replaced with heli-coils to eliminate galling. Test flight showed higher than usual CHT (235 C) but next engine run was down to 225 C, possibly due to wear in of new rings and honed bore.

CAUTION; DO NOT USE LOCK-TITE on head bolts. These are torqued to 15 ft/lbs and MUST BE RETORQUED after a maximum of 2 hours run-in time. (per Rotax factory FAX). Lock-Tite defeats the purpose of retorquing as the seal of lock-tite is broken. Pilot reports almost all head bolts came down slightly upon retorque.

Prop Shaft Removal and Replacement;

Heavy blows were required to free the shaft of forward housing support. Bearings should be replaced and pressed on if equipment available. Dark residue (corrosion) was found on the prop shaft where it meets the aluminum housing. Upon re-fit, used anti-seize compound.

CAUTION; When removing and reinstalling the screwed attachment of CHT probe wire at the forward right side of engine, be careful not to damage this co-ax connection. It can result in erroneous readings of CHT at the DEI. Proper mating of this co-ax is critical. Not too tight and not too loose. DO NOT FORCE FIT. Anytime the DEI sees over 250C, it blinks OR if the co-ax fitting is loose or not properly mated, the DEI will show a high temp and blink. If the engine is not running, you can be sure the problem is in the mating of this connection. It is believed that if the co-ax fails or the line is parted going to the CHT probe, the DEI defaults to overtemp and the CHT shows over 250C and blinks. Don't forget, if the CHT blinks, so will the volts.

FUEL FOR ROTAX 501, 505, 535;

Bombardier-Rotax advises mixing LL100 and super unleaded 50:50 However, if plugs are changed as often as 12-15 hours, LL100 alone can be used. The 50:1 ratio of fuel to 2-cycle oil for aircooled engines is still valid. Petro chemical based oils are recommended. While he would not recommend an specific brand, the factory rep in Florida said Yamalube R and Pennzoil 2-cycle oil for aircooled engines were o.k.

LIST OF QUALIFIED ROTAX MECHANICS SOUGHT;

Members are requested to forward names and addresses of mechanics that they believe to be qualified to work on the Rotax engines. See List in this issue of factory authorized Rotax Service Centers. Also see SLSA Roster for engine and airframe organizations.

DC-400 SEAT CUSHION ALERT;

One pilot reports his seat cushion slipped forward enough to prevent full up elevator. A positive control check MUST include full back stick. Also, check velcro attachment and modify for a more secure attachment using snaps or other more positive attachment to seat pan.

FUEL LEAKS. A DC-400 pilot found fuel under the seat pan due to a small leak. Check ALL fittings leakproof while running fuel pump. This includes cockpit line at shut off valve and several other fittings in the engine bay.