Self-Launching Sailplane Pilot's Association

N E W S L E T T E R

MAY/JUNE 1988

Peter A. Wiliams- Editor/Acting Pres.

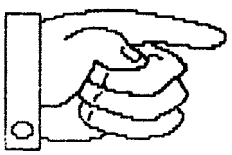
WELCOME TO THE SLSPA!

It looks like we are finally getting off-the-ground! I want to thank all of the founders who supported this idea at Atlanta '88 and the new members who responded to the call. We now have charter members (see list) and are still looking for more. If you are not yet a member, please send in the application form or if you know of a SLS pilot who is not yet a member, pass the application blank to him. A copy of each Newsletter will go to SSA as well as the manufacturer of your bird. Since we are a new organization, I need all of the help I can get from you in the way of articles regarding flights, maintenance and tips for safer operations. Send photos too and we will publish same. Of special interest are the Operational, Maintenance, Repair and Defect History Forms. Please complete and send in ASAP so we can assemble data and get information to the sailplane manufacturers as well as publishing the data in this Newsletter.

I believe we have a story to tell to the Soaring community and will shoot for regular coverage of SLS activities in SOARING Magazine. But I cannot do anything without your input, so please keep those letters and cards coming and I will do my best to put the word out. Again-Welcome and thanks for your interest and support. Ed.

OFFICER ELECTION

Your vote is necessary to establish leadership in SLSPA. Officer positions are open with a proposed slate. Send the enclosed postcard along with your vote and we will have an "official" organization: The next step will be to establish SLSPA as either an Affiliate or Division of SSA. There are long-term advantages to joining with SSA as the powered sailplane may just well be the wave of the future of soaring due to the increasing restrictions of airspace. No other sailplane type has the freedom of the powered ships; freedom to come and go at will and to move into, out of and within controlled airspace.



Vote!

NEWSLETTER FREQUENCY

We plan on at least 6 Newsletters a year published: May/June-July/Aug-Sept/Oct-Nov/Dec-Jan/Feb-Mar/April.
We also plan on the election of Officers each year at the SSA Convention.

ROTAX ENGINE UPDATE

The following comments were made by various SLS pilots at Atlanta '88:

1. The Tillotson Carb. is no longer in production. Parts for the discontinued Carb. are available from Oliver Dyer-Bennet and the DG factory, but as of this writing, the quantity and types of parts available are not known. An update is being requested from the Glaser-Dirks factory.

2. There are two known incidents of one of the small wires coming loose on the magnetos of the Rotax 505 in the DG-400. In one case this caused magneto failure in that no spark was sent to the plugs. These wires are very small and are located on each side of the magnetos. They exit from a rubber block and are normally held secure to the magneto by a plastic tie. There a 4 of them (2 per magneto) . This has been reported to Glaser-Dirks USA and will be followed up with a letter to the factory. An inspection of these small wires is recommended every pre-flight. One pilot soldered the break and cured the problem. Vibration could be the reason. The other pilot put epoxy on the wires to hold them securely. If you have questions, contact Jim Culp or Pete Williams.

3. Another pilot reported that the large door covering the propeller would not always close completely upon engine retraction. He said he was unable to determine what the problem was as it does not occur every retraction.

4. One pilot said he found the engine started more easily when he "cleared" the engine with a short run at 5,000 rpm just prior to idle/shutdown. This is also a good idea just prior to takeoff after a long taxi at reduced rpms as the plugs tend to "load up" during an extended taxi run. Remember that the Rotax runs at its best at full throttle.

FIRST AUXILIARY-POWERED SAILPLANE NATIONALS SCHEDULED AT UVALDE

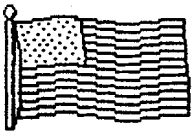
Mainly due to the efforts of Dave Stevenson, we now have the first powered sailplane nationals coming up in August (9-18) in the South Texas hill country. We will fly concurrently with the Open Class. You have most likely been contacted by Dave and I hear he has had a very positive response. This is an excellent chance to not only get together and fly but also a chance to compare operational notes and meet each other first hand. I can hear the CD now "gentlemen-start your engines!" See your copy of Soaring for details! How about keeping me posted Dave on those who are entered.

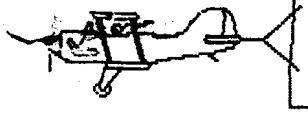
CURRENT SLSPA MEMBERSHIP

Bob Gaines-404-973-1414 (GA) DG-400 s/n
Skip Atwell-312-234-3600 (IL) DG-400 s/n 133
Pete Williams-602-937-8750 (AZ) DG-400 s/n 120
Ralph J. Koerner-(CA) DG-400 KL
David Stevenson-404-266-8848 (GA)DG-400s/n 108
Tom Latham 415-421-0288(CA) DG-400 s/n 147
Frederick Jacobs 203-529-3692(CT)DG-400 s/n 78
Joachim Stuart 213-541-8410(CA)DG-400s/n 38
Peter Blacklin 301-796-1498(MD) DG-400 s/n 98
Jerrol Gates 802-644-5084 (VT) DG-400 s/n 32
Steven Wood 404-436-2745 (GA)DG-400
Don Aitken 415-851-7202 (CA) DG-400 s/n 113
Egon Stockenbojer 203-348-546 DG-400 s/n 88

SLSRE IN THE U.S.A.

We are still trying to determine the actual number of self-launching sailplanes with a retractable engine (includes sustainers) in the US. At latest count, our best estimate is between 60-70. Hopefully, we can get all pilots to join so SLSPA can become a true forum for this type of sailplane. All readers are enouraged to send the names of pilots who fly SLSRE sailplanes.





We need more new members!! Send in the enclosed application TODAY!

TO ALL NON-MEMBER READERS

This initial issue is being sent to all prospective members as well as official members. The next issue (July-August) will only be sent to official members. Please join us at the earliest possible time by mailing in the application form with your $20. Subscription renewal will be 15 March of each year.

MEMBER MAINTENANCE COMMENTS

1. Unable to stow or fully erect engine due to ignition switch interlock problem. Solved by an electrical design revision. The pilot did not provide details. If you have this problem, call or write Pete Williams.

2. Pilot reports some numerical displays on DEI missing and was unable to get schematic of DEI from the factory. The only answer to the problem was to send DEI complete to the factory.

3. Pilot reports Optional rubber wheels for 17M tip wheels are the way to go as the plastic wheels will melt after a long taxi.

4. Check your control stick grip for looseness. If found loose, tape securely at bottom as wires to push-to-talk switch will part as grip moves upward.

5. Keep the fly wheel wiped dry as well as the prop brake pad as engine oil will cause the prop brake to slip.

6. If engine will not crank freely, remove a spark plug to drain excess fuel out of combustion chamber.

7. One pilot claims oil separation in the fuel/oil mixture after 2 weeks causing gummed carbs. He is using Castrol Super Outboard oil and Chevron Hi-Test unleaded gas. Other pilots using LL100 and Yamalube R report no problems.

8. Taxi slowly and turn carefully as the steerable tailwheel fork is tender and will bend on Godzilla hard turns. Best to have a spare.

9. If anyone knows how to replace a missing locking spring at the horizontal stabilizer attachment bolt,please call Skip Atwell at 312-680-5254.

10. Many pilots have expressed a desire to have a stick-mounted wheel brake lever in place of the current dive brake actuation. Three hands seem to be necessary at times to control throttle, stick, radio and brakes!! more on page 3.....

11. One pilot had the cylinder head temperature probe come loose in flight under power. Said it sounded like a flapping window shade. He shut down immediately and landed. This probe is located on the aft cylinder head on the bottom and can be spotted by looking for the electrical lead entering the head of the #2 cylinder. This is a helio-coil and is screwed into the cylinder head. Check it next pre-flight.

12. Check your manual for propeller bolt torque values and retorque/safety wire if not done in the past 25 hours or especially if you fly in a dry climate. One pilot lost his prop in flight due to loose bolts. The wooden propeller shrinks in low humidity conditions. Just follow the manual's instructions.

13. Check the coiled wire spring on the end of the starter rod shaft. If there is wear or binding, this can prevent the starter sprocket from engaging the flywheel during a start.

14. In a windmilling propeller air start, it is best to use 0 flap or negative in order to build up airspeed quickly without too much loss of altitude. If the engine does not crank on an airstart, go immediately to a windmill air start by diving smartly in 0 flap condition. This is no time for troubleshooting, just get the engine running as quickly as possible.

15. Difficulties in starting mentioned by several pilots. Seems to be no set way that works everytime. I find that on initial start about 10 blades crank are needed. Then pause for 5-8 sec ands & try again. When it fires move the choke toward off and keep moving it till engine runs without hesitation. Punching the throttle in and out seems to agitate things as the fuel air mixture is being changed too quickly. Of course, this all changes with outside air temp. and altitude!

Maybe a throttle grip like a motorcycle would be better! If lots of oil and fuel is expelled from exhaust or carb., it is for certain there is a rich condition and the idle mixture and needle valve settings should be checked.

16. Check for broken muffler mounting springs each preflight. Suggest postflight the most important check as everything is still fresh in the mind.

17. If you smell fuel, check the following places:
a. Fuel return hose to main tank . b. Bottom main tank fitting. c. Both fuel cock fittings in fuse.
d. Cockpit fuel cock.

18. One pilot reports starter froze when a brush retaining spring broke and jammed the aramture.

19. Pilot reports engine would not crank on air start. Dove to windmill and started. Ground check revealed starter relay, starter button and limit switch all OK. Jumped starter with no success. Tried to remove starter but found propeller aft tower support does not have the clearance necessary to get starter out. Had to remove this tower. Replaced with new starter. All OK. Suspect internal brush problems. See enclosed instructions on how to remove and install starter on Rotax 505 in DG-400.

20. One report each of DEI failure and engine mount failure.

21. Sticking of spindle drive motor brake appears to occur after a long storage period. To free, simply raise the electric brake pad at bottom of spindle motor with your fingernail. It is spring loaded should "free-up" easily.

SOME STATISTICS

About half of the pilots report doing their own maintenance and troubleshooting.
Average engine hours reported 38.6
Average Airframe hours reported 351
Average Soaring hours reported 982
Average SLS hours reported 347

73% of reporting SLS pilots have had previous powered aircraft time.
55% of the SLS pilots purchased their sailplane used.

MAINTAINING THE ROTAX 505

Members are encouraged to send the names and addressess of qualified A&P mechanics that have worked on their engines. These names will be published so that all pilots will know where help is available. Most A&Ps can work on the 505 if they can get the parts and have access to the Maintenance Manual furnished with the bird. Following the rules for proper clearances and torque values is your best guarantee of engine reliability. If you are unsure of how to go about any repair or maintenence procedure-seek the help of an A&P.

Wipe down the engine after each run and keep an eye out for fuel leaks by inspecting the engine bay. If a fuel filter looks grey-change it. Dump old fuel and flush the tank after an extended storage period or any time the fuel drain check will not yeild clear (non-cloudy) fuel. Flush out your fuel jerry can from time to time. The next time you do a ground runup, have an observer look at the prop drive belt as you note the rpms. When the belt bows out, jot down the rpm and try to avoid those rpms on future runs. At 6,000 rpms, the belt should be rock steady.