Self-Launching Sailplane Pilot's Association

N E W S L E T T E R

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Pete Williams, President and Editor//Jim Culp, Vice President//Issue #7, Vol.2

REPORT ON SLSPA AT SSA '89 CONVENTION....

Motorglider Pilot's Breakfast
Thirtyseven pilots attended of which sixteen owned and flew motorgliders. Bob Dixon reviewed the current concerns involving obtaining an FAA rating in a motorglider. We were advised by Derek Piggott that the requirements in England were closely tied to a regular power plane rating and that U.S. requirements were quite liberal in comparison. The consensus of opinion was that all soaring pilots insist that the current rules for a pure sailplane rating be retained as is and motorglider pilots be required to demonstrate profeciency in operating a sailplane with a power plant. As such, the sailplane with an engine is not a powered aircraft in the true sense that in depends on the engine to execute a landing. SLSPA members are encouraged to respond promptly to a forthcoming NPRMand take a firm stand against any proposal by FAA that places a motorglider in a powered aircraft category as far as a pilot's ratings are concerned.

As a matter of interest, Hans Werner Grosse cautioned all pilots that operating a sailplane with a motor requires new disciplines and precautions due to the extreme degradation of gliding performance with the engine extended and inoperative. Pilots are encouraged to use the manufacturers recommended low altitude limit for engine extraction and attempted start. A landable field should always be nearby as things can turn to a can of worms in a hurry. As a rule of thumb no extraction or start attempt should be made lower than landing pattern altitude.

The last thing the motorglider community needs is a poor safety record. Use your check list and practice 360 and 180 degree turns with the engine out and off to see how much altitude is used. Use landing flaps to simulate the real thing.

Motorglider Competition Pilot's Breakfast
Bud Schurmeier distributed the updated rules for Aux-Powered Championships. A recap of these rules follows:

1. If the engine is used on course, speed points are lost and only the distance is scored. This distance is the total distance flown for the day less an engine on distance factor based on rate of climb and dry L/D per the factory handbook..
2. Self-launchers must self-launch.
3. If you land out, your score is reduced by 20% of the winning score for the day.

Copies of the rules are available from Bud. Carl Herold gace us an excellent talk on how the handicap factors are arrived at. All in all Carl has put forth much effort in this area and it is the editor's opinion that the handicap figures are as close as we can get. Schurmeier advised he had listed only dry handicaps in the rules and that pilot input was required to determine if the wet figures should also be used. As a matter of interest, European scoring rules apply only one handicap factor and do not offer the choice of "wet" and "dry" figures. The current rules for U.S. Aux-Powered Contests reflect Europe's tried and proven system.

DG-400 CARE AND FEEDING PRESENTATION

Oliver Dyer-Bennet's talk was well presented and covered many key procedures. This and other presentations were taped by a Cassete Taping Service and are available at $7/ea. See enclosed Order Blank.

NEW SLSPA BOARD ELECTED

A 5 man Board of Directors was elected at the SLSPA General Membership Meeting:

Pete Williams...President/Treasurer/Editor
Jim Culp..... V.P./ Legal matters
Bud Schurmeier..Member/ Competition matters and West Coast SLSPA Rep.
Tom Dixon..... Member/Central U.S. Rep.
Alan Greer..... Member/East Coast Rep.

The Board voted to examine the benefits of becoming either an Affiliate or Division of SSA. A decision was also made to begin work on incorporating SLSPA as a non-profit corporation. **We need one of our member attorneys to come forward and advise us on this.** continued on Page 2.....

BOARD..continued from Page 1:

The Board also requested the membership be polled to determine if the new corporation's name should remain The Self-launching Sailplane Pilot's Assn. (SLSPA) or be changed to The Auxiliary-Powered Sailplane Pilot's Assn. A voting form is enclosed and membership input is necessary not later than 1 May, 1989. Your vote is important on this issue.

MAINTENANCE ITEMS...

DG-400

Batteries: If, after charging, the DEI shows 12.6-.7 V on a consistant basis, it may be a good idea to remove the batteries and individually check the voltage of each. One member found one of his batteries to be .11Volt lower than the others after charging each battery individually. To check: disconnect cells at main bus and isolate the 2 pairs. Check voltage-they should read the same. To replace use a 6V 10AH battery in the same size to fit the battery box. Normally the supplied battery is a Powersonic with screw post for an airtight connection. A good battery shop can remove the scew posts and reinstall on the new battery. Powersonic batteries are available from battery shops but without the screw posts.

Your batteries are up to par when they can crank the engine between 300-500 rpm. Look at your DEI the next time you start. Note cranking rpms and battery voltage. You may be shocked to see a blinking voltage display showing less than 10V. Note also how much your battery voltage drops when you first turn on the ignition switch to get the fuel pump on line.

Glaser-Dirks recommends changing the complete battery set every 4 years and many starting problems can be traced to low battery power. In a typical start you can draw up to 75-95 amps. The ability of your battery set to handle this amperage load can be checked with a variable load multimeter. Just take your battery set to local shop and have them apply this load. Your best bet is a complete fresh set if you discover a low cell or regularly experience difficulty in starting. Remember that the plugs are not fired by the battery-the mags do this. The battery raises and lowers the engine and provides cranking power thru the starter.

Engine/Prop Doors Fail to Shut

One instance has finally been traced to the fact that the engine never completely "bottomed out" in the bay. i.e. never came to rest on the pedestal at the bottom of the bay. In normal operation you will hear and feel a clunk when the engine strikes this pedestal and the prop door slams shut. (Nice sounds!) Curtis Erwin has had this problem from the beginning and discovered the forward spark plug snap-on connection was binding against the engine mount at the almost retracted position. This did not permit the aft engine support mount to to contact the prop. door linkage system. The result was a partially opened prop door. It is real important to see there is no binding or touching of wires, plug caps etc when the engine is fully retracted. Use a flashlight and carefully look at the top of the engine and the sides. Look for scrapes in the metal foil on the sides and for any chafing of the plug leads or the plug connections.

Engine Door Hinge Pins

These can vibrate out and cause loss of doors or jamming in the open position. Check on pre and post flight inspections.

Canopy Window Rail Deterioration

One pilot reports crazing around the mounting screws with some plexiglass pieces breaking off. Have any other pilots had this trouble? Perhaps the mounting screws were set too tight or climatic changes have a bearing?

Misc.

Brake chatter can be caused by a loose fitting of the backplate anti-rotation pin in the suspension tube.
If the starter is loose on its mounting, check mounting bolts. They may be too long and bottoming out in threaded plate.

PIK 20E

1. Check fuel filter and replace regularly.
2. If starter fails to energize, check relay. If still not successful you may have a defective starter(loose brushes, etc).
3. The engine drive belt is held taut by friction only. Check torque on retaining nut. One member suggests a key to assure no slippage. If prop is not vertical when Xylon Latch is engaged, the drive pulley has slipped.
4. To save battery power, one member uses a jumper start from a car battery for the first start of the day. Shutdown after about a 3 min. warmup.

1978 Ogar Motorglider. 160TT on airframe. 11 hrs since engine O/H. New canopy and propeller. $22,500 Neil Palmer 16905 Chalford Ct. Hacienda Heights, CA 91745 818-913-4484.

Lark IS 28 M2 Motorglider. All-metal, 2-place. Full instruments. Excellent Condition. TT=270hrs. Aux tank gives 7-800 mi. range at 90 mph using 2.3 gph. $21,950. Herb de Vries 714-499-1065 CA

PIK-30 Like new 1985 model with less than 50 hours TT. 15 and 17 meter tips, $42,000 including trailer and instruments. George Foote 603-746-4245 NH

1989 CONTEST SCHEDULE

Region 5 South- May 30-June 3. Tifton ,GA
Bob Grey 404-548-1805

Region 9 July 3-8 Owl Canyon (near Ft. Collins, CO)
Aland Adams 303-226-4352

Auxiliary Powered Nationals-July 18-27, Hutchinson, KN
Bob Leanard 316-722-2183 Remember that 18 May is the last date for preferential entry as the site will be used for both Open/Motorglider and a Regional Contest. Only 60 birds will be permitted.

The regionals above are accepting motorglider entries. A minimum of 3 makes a Class.

As of 15 March, only seven (7) pilots have indicated a desire to enter the #2 Nationals. We will need a total of 12 pilots to seed. Please advise the editor if you are planning on entering.

"HELPS"

The following members are able to assist other members in the operational and maintenance aspects of certain SLS models. Both parties are requested to copy the Editor on any correspondence so that the information may be shared with the membership.

PIK 20E Bob Moore 509-967-3773 WA
DG-400 Pete Williams 602-937-8750 AZ
Grob 109 Bill Rodenberg 916-675-2321 CA
Strojnick S2A Don Boardman 315-339-0009 NY
Discus/Ventus Alan Greer 904-589-9552 FL
HB-23 Hobbyliner Fred Calhoun 213-377-1838 CA
Ogar Ed Caustin 805-929-4508 CA
Lark (IS-28-M2) Jack Glendening 408-373-8633 CA

US-PRODUCED SLS PLANNED..

SLSPA member Sam Walker of Mountain View, CA has recently completed feasibility studies of production site locations for an American-made fiberglass self-launching sailplane.

Sam is working with designer George Applebay to build, test and produce a 15 meter, single -place flapped ship that uses all of the high performance aerodynamic and materials technology found in today's foreign-built ships. A Rotax engine is under evaluation. According to Walker, the list price of the basic ship sans trailer is expected to be under $20,000. For more information, contact Sam Walker at 415-960-1885.

DO YOU STILL HAVE A MOTORGLIDER?

Excerpts by permission from Charlie Webber Editor of SOAPBOX Issue #7. SOAPBOX is the newsletter of the American Aviation Society. The purpose of SOAPBOX, according to Webber, is " to educate its readers that our aviation laws are best explained, interpreted and applied by the FAA whose interests and abilities lie in perverting confounding and eluding them by means of FARs and various internal edicts such as Orders and Advisory Circulars"

Now on to" Do You Still Have a Motorglider?"

FAR 1.1 says: " Glider" means a heavier-than-air aircraft, that is supported in flight by the dynamic reaction of the air against its lifting surfaces and whos free flight does not depend principally on an engine."
The main significance of the motorglider to the FAA is not safety, but that its non-gliding activity tends to invalidate many FARs that apply to powered aircraft. To solve their dilemma, the FAA has quietly defined what a motorglider is by adopting a section of JAR-22 by means of an Advisory Circular AC 21.23-1 (1-12-81):5b which permits certification if the minimum descent rates for the glider, power off, at maximum weight and most unfavorable CG position, does not exceed 3.3 ft/sec (1 m/sec) for single-seat gliders and 4.0 ft/se. (1.2 m/sec.) for 2-seat gliders. A grand-daddy feature was implied for all pre-1981 motorgliders. Does your motorglider meet this requirement?

FAR 1.1 is a regulation and modifying it requires the NPRM process particularly if the rule change has a significant impact on a number of people. Pilots should realize that unless what FAA has done to them is improper, they are now flying in violation of FARs if they lack a current medical and a power aircraft rating. The fact that FAA has not enforced this policy causes many people to feel that all this is merely making waves. It is a well known bureaucratic technique to let sneaky rule making ripen without public uproar so that it will survive public uproar when and if it comes.

What can motorglider pilots do? I suggest they apply for special airworthiness certificates that recognize gliders, if denied, petition the NTSB for review. Backup from SSA/EAA/AOPA would be helpful. SSA's european representative should act to have the motorglider L/D spec. in JAR-22 removed. It serves no useful purpose, even to the superships that possibly meet it. The overall story is told in more detail in SOAPBOX issues 5 and 6. Copies can be obtained for $1./ea from: SOAPBOX 4130 Mennes St. Bldg #17 Riverside, CA 92509 Tel: 714-684-7595"

Editor's Note:

This tempest in a teapot is indicative of the confusion that exists in high places concerning self-launching sailplanes. It behooves all of us to be vigilant and vocal on ANY Advisory Circulars and NPRMs affecting our sport.

SAFETY NOTE..

Positive control checks are not simply checking the connection integrity (and safetying if possible) of all control hookups. Have someone hold the control against stick pressure, BOTH ways. This includes wing spoilers both toward the open and closed positions. The throttle and choke plus prop brake (if installed) control integrity should also be checked at the open (on) and closed (off) positions. Fuel hoses connection and leak integrity is a must after a long sit in the trailer.