

# Self-Launching Sailplane Pilot's Association

N E W S L E T T E R

MAY-JUNE 1989

Pete Williams, President and Editor//Jim Culp, Vice President//Issue #8,Vol.2

## SLSPA TO INCORPORATE....

At this writing, SLSPA is in the process of incorporation as a non-profit organization. Bruce Templeton, an attorney and member of SLSPA has offered his services. We will incorporate in the District of Columbia as a matter of convenience. A copy of the Puposos section of the By-Laws will be published in a forthcoming newsletter after ratification by the Board of Directors. As a matter of interest, The Association is open to anyone interested in powered sailplanes as defined by F.A.I. Sporting Code,Section 3, 1.1.1.,6.1. & 7.4.2..

As soon as incorporation is completed, SLSPA will make application to SSA to become an Affiliate per the 3-2 decision of the Board of Directors. As far as the proposed name change, a majority of the membership who voted by the 1 May deadline requested SLSPA be retained as the name of the association.

## SLSPA FINANCIAL STATEMENT

April 1, 1988-March 31, 1989

### INCOME

Dues.....	\$3,895.00
Sales of Pubs/Decals/Classified Ads.....	136.00
Loan.....	270.00
Total Income.....	\$4,301.00

### EXPENSES

Postage.....	\$ 482.09
Newsletter printing.....	839.00
Decal artwork and screen printing.....	589.00
Supplies.....	181.69
Bank Service Charges/Checks.....	102.55
Repayment of Loan.....	270.00
Telephone.....	180.73
Advertising and SSA '89 Convention...	241.93
Total Expenses.....	\$2,887.62
Bal. in Checkbook 3-31-89.....	\$1,413.38

Membership as of 1 May, 1989: 125



## GREY COCKPIT GELCOAT AVAILABLE..

Do you have chips or repairs to make in your grey gelcoated cockpit? I have Cook's Brand polyester resin gelcoat, color matched for the DG cockpit and other interior areas. 5 Gallons or less available for a LIMITED time. Call: Jim Culp 404-973-1503

## 2nd AUXILIARY POWERED U.S. NATIONALS LINEUP..

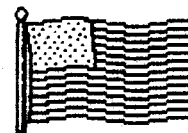
Bob Leonard, Contest Manager advises the following:

### Paid Deposits:

Alan Greer-Ventus  
Robert Sada Nimbus 3DM  
Don Pollard-Ventus  
Ken Ferguson-DG-400  
Oliver Suddard-DG-400  
Fin Tomlinson-Ventus  
Roger Buchanan-Ventus

### Inquiries:

Don Coroneos-PIK-20  
Pete Williams-DG-400  
Bud Schurmeier-PIK-20  
Stan Nelson-Ventus  
Mark Macualay-DG-400  
Bob Moore-PIK-20E



July 18-27, Hutchinson KN. Contact Bob Leonard at 316-722-2183. Bob advises they are still looking for a Contest Director for this Multi-Class event (Open/Motorglider and Regional) and expect to field about 60 ships.

Anyone desiring a copy of the rules, please contact Bob or Pete Williams.

## U.S PILOT SELECTION FOR 1990 WORLD MOTORGLIDING CHAMPIONSHIPS...

Don Pollard advises that the International Team selection method for Motorglider Classes will be the same as the current method of selecting 15 Meter, Standard and Open Class. continued on page 2..

international motorglider championships...continued

Three Classes are established:

**Class 1:** 2-seaters and single seaters with a retractable engine and a wingspan of over 18 meters.

**Class 2:** Same as Class 1 with wingspan limited to 18 meters.

**Class 3:** (Touring Class) 2-seater motorgliders with a fixed non-retractable engine. Participation requires 2 crew members.

According to Pollard, pilot selection will be based on the 1988 and 1989 U.S. Aux-Powered Nationals results.

Six (6) positions are allocated to the U.S. For more information, contact Don Pollard at 703-989-3264.



*Many computer types have asked about the software/hardware used to publish this newsletter. The program is called "Publish It!" by Turning Point Software, Inc. System requirements are 128K RAM. An Apple IIC with an Apple Imagewriter printer is used. To speed things up I use Applied Engineering's Super Desktop Expander Version 5.3.1 Program with Z-RAM Ultra board to boost memory to 512K and load a lot of programs into RAM for instant recall and very fast movement thru the program with no disk drive action whatsoever. ED.*

#### REFUELLING SAFETY...

Source: Australian Gliding/Aug '88 via Bob Moore and Eric Greenwell.

According to the article by Mike Burns, there is a very present fire danger when pouring fuel from a jerry can into an aircraft's fuel tank which can be caused by a static electrical spark discharging from the negative charge in the fuel to the metal of the filler neck on the aircraft. This static electricity, according to Burns, can be generated by the sloshing of the fuel in the jerry can. Several incidents were cited and the following rules suggested:

1. If at a fuel truck or bowser, make sure the aircraft is grounded to the bowser.
2. If using a jerry can, connect a ground between it and the aircraft. If a funnel is used, make sure it is also grounded to the airframe.
3. Only METAL or APPROVED CONDUCTIVE plastic cans must be used.
4. Do not use felt filters as they generate static electricity as the fuel passes thru.

Your Editor has a letter into Glaser-Dirks as to the proper procedure and several items need to be resolved:

- a. When using an electrical pumping system to convey fuel from jerry can into the filler neck via hose, is this system considered "grounded"?
- b. Where on the airframe is a suitable earth ground?
- c. How can an "approved" conductive plastic jerry can be identified?

In the meanwhile, I would suggest not sloshing the fuel around just before filling and avoid pouring using a funnel. Pump, if at all possible from a grounded bowser or truck or rig a ground wire between the conductive pouring can and the airframe, PRIOR to filling. More to come...

#### FACTORY REPORTS...

Concerning crazing around canopy vent windows. Per Wilhelm Dirks: "There is high stress around the mounting screws. We also had cases of crazing due to the use of special plastic cleaners. Mecaplex, a manufacturer of canopies determined this. We (Glaser-Dirks) recommend only cleaning with water of the "Schwabbel" procedure and no plastic cleaner. We use Pronto furniture polish from the Johnson Company."

#### PIK-20E BATTERY PROBLEM SOLVED...

Raymond Carter reports not enough cranking power with the small factory-supplied battery under the instrument panel and modified his system as follows:

Installed an ActionPack GMB 12v 34 amp Marine Deep Cycle battery inside an aluminum box and attached to a 1/2" aluminum plate back of the head rest. The physical dimensions of the battery are 7 5/8LX5"WX6 1/4"H. The battery comes from Walmart.

Ray claims more than adequate cranking power. He then installed a 12X24 Solar Panel from Solar Electric that puts out 1.5amps. The solar panel is on the roof of his hangar and is connected directly to the bird. He even added a Mode C Transponder and claims he has all of the power he needs. The system in the ship weighs about 10lbs and is installed right at the C.G.

#### DG-400 AILERON CRACKS...

Curtis Irwin reports discovering a series of cracks in the gelcoat on the bottom side of the right aileron. These cracks run at a 30 degree angle to the trailing edge of the aileron. He reports the top and trailing edge are normal with no cracks or splits. This is the 15 Meter configuration. No determination has yet been made as to damage to the fiberglass structure of the aileron or the reason for the cracks. Repairs are planned and a report of results will be made.

## INTERESTING MEMBERS AND SAILPLANES...

ASW-228E: Dan Somers reports his 25 meter self-launcher climbs at about 400fpm at a takeoff weight of 1,360 lbs. The engine installation was made by Walter Binder. It has electric extension/retraction, holds 24 liters of fuel and swings a 5.2 ft. prop. A Rotax 505A delivers 43 hp at 6,800 rpm.

JEAN-MARIE CLEMENT is a new member and won the 1988 European Motorglider Championship in Ventus B/T. He is a consulting engineer for the paper industry and lives in Milano, Italy.

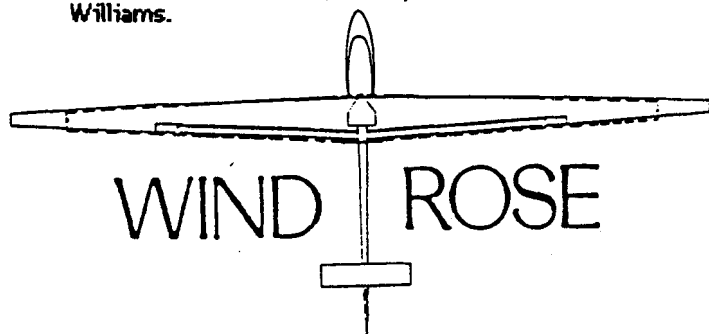
ROBERT SADA is a real estate developer from Monterrey, Mexico and owns a Nimbus 3DM.

JUKKA TERVAMAKI of Helsinki, Finland is the original designer/builder of the PIK-20E prototype (1976). He still flies this ship and has logged over 1,000 hrs.

### BATTERY-WISE...

Most pilots are not aware that continued use of the "float" type charger eventually causes electrolysis and oxidation of the positive plate metallic grid structure within the battery. Another problem of the constant voltage "float" charger is the inability to equalize battery cells. To overcome this, the charger should be turned off now and then to permit the cells to equalize. There is a need for a cyclic charge current that matches the acceptance characteristics of the battery itself. The secret is to put the charging current into the battery as fast as the battery can accept the charge without damage.

There is a charge controller on the market that does all of these things. It can be used with a solar system or wired into a "float" charger. The result is a fully charged battery that lasts much longer and totally unattended charging that cannot harm the battery. If anyone desires more information on this controller please contact Pete Williams.



Jim Maupin at Star Rt. 3 Box 4300-37, Tehachapi, CA 93561 has announced a 15 meter version of the Windrose self-launching homebuilt. Three builders are now working on this ship and Maupin reports the wings will retrofit to the basic 13 meter version. The wings use carbon spars and performance is 38:1 at 51 mph. Minimum sink is 1.85 f/s at 46 mph. Climb is 700 fpm using a Rotax 503 with 46hp at 6,500 rpm. Cost is estimated at \$5,225. Plans are \$225.

## PIK-20E ENGINE DOORS

Bob Moore advises PIK-20E pilots may want to carry a small mirror that can be used to view aft by holding out the sliding window to ascertain the doors are really closed. If not, slow down and work the lever or induce some negative Gs.

## ENGINE BAY FUEL VALVE-DG-400...

One pilot reports this valve closed by itself due to not being totally in the open detent. He was 20 miles out under power when the engine failed due to fuel starvation whereupon he stowed the engine and soared home. Double check is valve to make sure it is in the detent. This incident occurred after engine removal and reinstallation.

## IGNITION BOX BOLTS-DG-400...

A failure of these bolts has been reported (sheared). Suggest retorque and make an integrity check before and after each flight. Vibration has to be the enemy, so check the prop drive belt for proper tensioning.

## IGNITION BOX FAILURE-DG-400...

Reports are still trickling in (most from overseas) concerning failure of these boxes mounted on rear of engine. Rotax has advised the editor Bosch has made a "fix" on this problem. If you have a failed box, return it to Rotax direct citing circumstances and hours on the unit. If a box is faulty, the engine will not run when you select that mag.

## AUTOMATIC ENGINE RETRACTION SYSTEM UNDER STUDY BY GLASER-DIRKS...

Andy Johnson-Laird reports that that he has information from a factory source that Glaser-Dirks is working on a system that upon engine shutdown, stops the prop vertical and lowers the engine into the bay-all automatically. He indicates that the system may be available for retrofit.

## WEIGHING YOUR BIRD...

This is required every four years for the DG-400 or anytime significant changes are made in repairs or equipment carried. Details of C.G. computation can be found on pages 47 and 48 of Maintenance Manual. To truly checkout flight weight, put everything in you would normally put in for a typical flight including yourself. Make sure the leveling bubble on the right canopy sill is centered by elevating the tail otherwise the tail only weight values will be in error and the computed C.G. incorrect. A licensed A&P must sign off this event in the sailplane logbook.