

Category 1 Auxiliary-Powered Nationals Held at Minden, NV

Between May 27 and June 5 Open Class powered sailplanes held a national contest at Douglas County Airport, Minden, NV. Entries included four open class ships spanning over 18 meters and two 17 meter ships for a total of six entries to seed the category as a sanctioned competition. The driving force behind this effort was Ken Shea. Shea's objective is to get more powered open class ships into competition and to establish an American Team for competition in forthcoming World MG events.

This event was a first in that the personnel infrastructure to support the contest was minimal. Tom Stowers was contest manager assisted by Ken Shea on the paperwork end. Tom also acted as operations manager. Doug Armstrong was the C.D.

and weatherman, driving in daily from Reno. Pete Williams was the scorer and read all bargrams. The contest proceeded under the current rules for the class and Bud Schurmeier was contacted by telephone on rules interpretation. Handicaps were applied per the rules permitting the shorter winged ships to compete. Pete Williams dropped out after Day 1 to score. The weather cooperated for days one, two and five and then went sour for two no-contest days. Contest days three, four, six and seven were devalued and day 8 was cancelled due to doubtful weather. Don Hurd in his DG-400M17 lead every day for 5 days only to receive zero points on Day 6 when he failed to load his cameras correctly. Jerry Wenger, Al Leffler and Ken Shea scores were very close all through the contest. See Contest-Page 2.....

Self-Launching Sailplane Pilot's Assn.

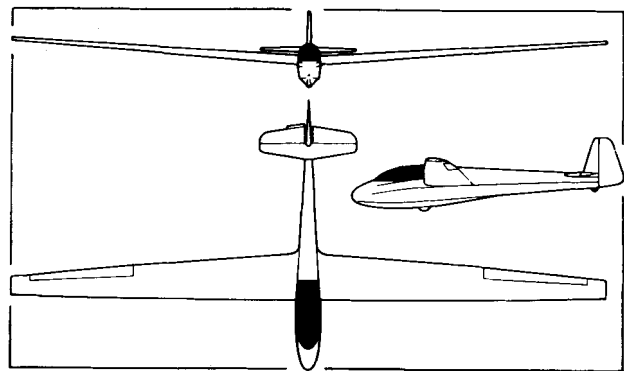
NEWSLETTER

MAY - JUNE 1991

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FOR SALE.....

1/2 interest (\$4,750) in rebuilt 1956 Bergefalke-II. Prefer NW resident near Eastsound WA. Has retractable Rotax 505 engine installed and running. This a tandem 2-place ship with respectable L/D. Fuse yet to be covered. Wings and tail completed. Frank Woodward-206-378-2302
Bill Wells-206-376-2850



MEMBERSHIP RENEWAL FINAL NOTICE II

If your newsletter has a BLUE MARK on the address label, this will be your last newsletter as you have yet to renew for 1991-92. Please send in your check for \$20 or \$25 (foreign) as soon as possible to continue as an SLSPA member. Thanks!

DG-600M REAR ENGINE DOOR BRACE.....

Steele Lipe advises a brace on the left rear engine door designed to keep the door open failed permitting the door to close. This brace is attached to the front engine door and its failure could have caused the engine to close on the closed door during retraction. Closer inspection found the right brace also broken. Glaser Dirks has been advised and a fix is in progress. Lipe is operating his 600M out of Truckee Airport and reports no other problems. Role rates are crisp according to Don Aitken who has also flown the ship. Climb rate during engine operation at an altitude of about 8,000' msl on a summer day at Minden was reported as minimal by Aitken.

Contest continued...

Three of the five contestants self-launched almost every day with Al Martini opting for a tow on days he felt the climb rate of the Nimbus would be marginal. Engine climbs were permitted to 8,000' msl. Both Shea and Leffler elected to run their sustainer engines while on tow. Gate heights were measured on the barogram. Passengers were carried on some days and Don Aitken flew as a guest on the last 3 days in Steele Lipes DG-600M. Enroute times varied from 1.6 to 6 hours. The highest raw speed was posted by Shea at 89.234mph on Day 2s 285.7 mi. task. The longest task was on Day 5-330.2 sm.

PILOT/SHIP	Daily Posit. *	Final Score
Wenger/Nimbus3DM	3,3,3,2,2,1,1	5615
Leffler/Nimbus3DT	4,4,4,3,4,2,2	5506
Shea/Nimbus3T	2,2,2,4,3,3,3	5410
Hurd/DG40017M	1,1,1,1,1,4,4	5002
Martini/Nimbus3DM	6,5,5,5,5,5,5	3156
Williams/DG40017M	5,DNC.....	323

*Cumulative & handicapped.

Congratulations to Jerry Wenger on his win!
There was some discussion on holding the 1992 contest at Minden for both categories.

Motorgliders Permitted to Enter Sports Class in Regional Contests...

Sports Class Rule SR6.7 has been amended to permit motorgliders to fly in Sports Class Regionals without disabling the engine under the following conditions:

- A recording device, acceptable to the CD, is carried in the sailplane which is capable of recording the engine run.
- If the pilot desires to use the engine for launching or retrieve, the recording device must have a time parameter.
- If the recording device indicates the engine was started at any time between the Start and the Finish OR if the recording device should fail, the pilot shall receive ZERO points for the day.

Note: If the engine is disabled, the sailplane may be flown and scored as a pure sailplane.

Editors Note: I would encourage any pilot that has not flown competition in the past but desires to do so, to enter a local regional. If you have a self-launcher, you can launch and relight prior to passing thru the Start Gate and you can self-retrieve. Sustainer engine ships must also run their engine to validate the engine recording system and can also relight prior to Start Gate. We need exposure of the powered sailplane at the regional level to continue to promote this Class of the sport.

GERMAN MOTORGLIDER NATIONALS....

Results not yet known and held May 25-June 7.
Entrants include 4 classes.....49 ships.

- Class 1 (Over 18 meters).....12 ships
7-ASH-25/4-ASW-22/1-Nimbus 4
Class 2 (18 meters and under).....22 ships
5-DG400/3-DG600/9-Ventus CT/5 Ventus CM)
Class 3 (15 meters).....7 ships
5-ASW-24E/2-Discus T
Class 4 (Motorgliders).....8 ships
7-SF36/25/28; 1-RF5 Sperber

1991 Region 8 Soaring Contest.....

June 29-July 7/Ephrata, WA. \$260 Entry Fee.
Powered sailplanes accepted in Sports Class.
Contact Mike Delaney 206-743-4020

Pilot Character Profile.....

As compiled by Capt Russel USAF from studies made largely of male Air Force jet pilots. Compare these traits with your own approach to flying a sailplane.

1. Little tolerance for imperfections seen in others. Self-assured. Achievers. Controllers.
2. Systematic and sequential in management.
3. Team players.
4. Normally first born with close ties to father.
5. Intelligent but not introspective.
6. Hetrosexual
7. Prefer uncomplicated relationships. Emotional involvement an obstacle to quest for "control".

Capt Russel says the main problem is overconfidence and difficulty in saying "I can't". The desire to achieve causes stress and pilots are prime candidates for marital problems in mid-life. According to Russel, the dare-devil behavior shown in the movie Top Gun is not the image to portray to the public.

Seen any of these traits lately at the sailport or especially a contest? Team players is not normally a sailplane pilot attribute. I saw a photo of the real life instructor at the Top Gun School in San Diego..he looked like a 40-year old Kansas farmer. Fly safely. Ed.

FOR SALE.....

Motorglider barograph.....\$150

Ray Carter 904-771-6354 (Jacksonville FL)

LIMBACH ENGINE MECHANIC.....

Has worked on Taifun. Nick Porcel

Lowe Aviation

Lewis B. Wilson A/P

Macon, GA.

PILOT REPORTS---DG-400 MAINTENANCE

Tillotson Carbs Cleaning Procedures: Steve Wood reports failure to attain full T/O rpms and fluctuating RPMs at high output. To solve the problem he cleaned the carbs as follows:

1. Working on each carb at a time, remove jet, idle adjust valve and fuel source line.
2. Clean all removed parts with carb cleaning solvent.
3. Dispense solvent using the aerosol can with plastic straw filling the carb thru the fuel supply line. Inject solvent into the main jet and idle ports. Let all stand for a few minutes.
4. Reconnect fuel line and with the electric fuel pump running and fingers over the open ports, apply suction to the small static vent behind the carb diaphragm. This permits fuel to flow thru the carb. Remove fingers and allow some fuel to flow out of the ports.
5. Turn off fuel pump and reassemble jet and low speed valve. **KEEP SOLVENT OFF OF GELCOAT AND OUT OF EYES.**
6. Repeat on the other carb.
7. Check fuel filter, fuel flow by manual specs and spark plugs. **Disclaimer:** Effect of solvent on rubber, seals and carb diaphragms.

Tillotson Carb Plugs.....

Pete Williams reports running on only the front cylinder with rough running engine during mag. check plus raw fuel coming out of exhaust stack. Investigation found that the rear carb had a small circular pot metal plug loose in the carb chamber which hindered the movement of the membrane causing excess fuel flow into #2 combustion chamber. This "plug" fell out of the chamber as the membrane was removed. Inspection of the face of the carb behind the membrane disclosed the hole from whence the plug came. Plug reinserted and "tapped" in firmly. Cause unknown but suspect vibration and a very cold winter allowing the plug to contract slightly. The next time you look at your carb membranes, look closely at the face of the chamber to find these "plugs" and determine if they are tight.

BLOCKED EXTRACTION-ROTAX 505-DG-400:

Pilot reported an audible clunk during engine extraction and a "bogging down" of the screwjack electric motor. Investigation found that the cable attached to the rear door actuating mechanism was "catching" on the aluminum cooling air duct during engine extraction. Problem solved by rerouting bungee cable positioning cords to a position close to bulkhead and forward toward the cockpit. These are small bungees that lose their elasticity and should be checked annually.

ROTAX 505 FUEL LEAKS/DG-400:

While waiting for a replacement fuel hose set, pilot replaced leaking pressure hoses at carb. Leaks stopped for a while then began again in the return lines from carb. This discovered after ground taxi and occurs when electric pump is turned on prior to starting engine when all fuel is returning to the tank. This is a 5-year replacement item and **MUST** be done on time as the removed hoses in and around the carb were like swiss cheese full of holes. A DANGEROUS SITUATION. There are 3 different types of hoses-Pressure, Return and Vacuum. Color-Coded-Red, Blue, Orange respectively. A Vacuum hose leak will be almost pure oil residue seeping out. Usually at or near the engine driven mechanical pump. Check all connections annually

DG-400 BEA (Automatic Extraction/Retraction System)

Peter How from South Africa reports some problems with the BEA including:

1. Engine eases upwards after retraction. Found loose grub screws securing the collar which secures the fibre brake disc of the spindle motor. Possibly need a detent for the grub screw to seat on.
2. Yellow rear door LED flashing during flight. Found incorrect fore and aft positioning of rear door limit switch which permits the alloy arm to slip off the actuator pin of the switch at retraction. Look for a scratch on the side of the arm signifying the fault.
3. Prop would not stop in the vertical in flight in Auto Mode and only with difficulty with manual brake. The ring gear timing mark was 45mm above the block joint on the left side rather than the right causing the prop to be vertical just after TDC. Repositioned the prop drive belt after some difficulty in loosening the eccentric prop. shaft assy. (See May/June '88 Newsletter Issue for description on loosening the prop belt. Also see page 36, DG-400 Maint. manual Section 4, Recommend purchasing special hook spanner from Glaser-Dirks for this job)

Peter reports only unleaded fuel in his area without alcohol is 83 octane and he continues to use LL100 with no reported signs of lead fouling.

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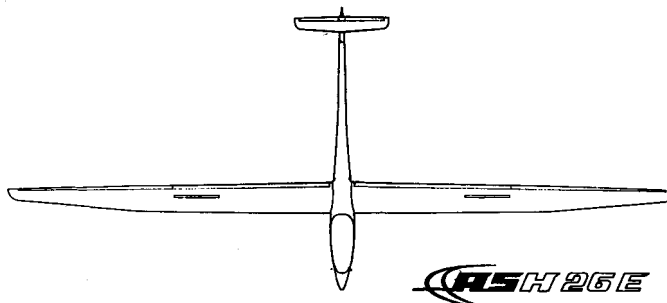
DG-500 M Engine Failure.....

About 6Pm Friday May 24, 1991 Tupper Robinson was taking off runway 30 on his third flight out of Douglas County Airport at Minden. At about 150' agl the Rotax 235 began to lose rpms steadily. Tupper turned right about 45 degrees and prepared to land in the sage brush area between runways 30 and 34. Just before touchdown a large ditch appeared and the aircraft's tail boom struck the birm on the far side. Tupper had applied full landing flap as the ditch came in view and managed to get over it. The tailboom was broken off and the horizontal stab flew off the fin. The main gear was removed from its hard points. Some damage to the right outer wing panel, otherwise the wings were ok and removed easily when derigging. Engine inspection revealed a small hole in the top of #1 piston. NSTB investigation continues.

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SCHLEICHER ANNOUNCES 18 METER SELF-LAUNCHER.....

According to a late release via Peter Selinger from Gerhard Waibel, an all-new 18 meter design called the ASH 26E is in development. Both fuselage and wing designs are completely new. A thickness of 13.4% is reported for the wing with a 14% flap depth. The new ship will be available with or without the engine (type and power unknown at this writing) but the engine hard points will be in every fuselage produced. An L/D of 50:1 is reported at 115 km/h. Empty weight-716 lbs. Max Gross Wt. 1,289 lbs. Vne=174mph. Wing load at max TOW- 50kg/m2.



Fixed Engine Motorgliders

Make/Model	Span	Wing/Ld.	Empty/Gross	L/D	Engine/HP	Climb/fpm XX	T.O. Run XX	Useful Load	PwrLoad	Range
Aerotechnik L-13E Vivat	17M	6.99	1036/1521	24	MIKRON/65	N/A	600'	485#	23.4	310
Fournier RF-10	17.5	8.46	1170/1700	30	LIMBACH/80	600	N/A	530#	21.25	620
Scheibe SF-25C 2000 Falke	15.2M	7.3	925/1430	24	LIMBACH/80	N/A	330	505#	17.87	435
Brasov M2A (IS 28 M2)	17M	8.57	1234/1675	26	LIMBACH/68	N/A	820	441#	24.6	280
Hoffman H-36 Dimona	16M	10	1140/1680	27	LIMBACH/80	N/A	600	485#	21	680
Hoffman HK-36 Super Dimona	16.2M	10.28	1213/1697	27	ROTAX 912A/80	840	575	469#	21.21	N/A
Grob 109	16.6M	8.28	1280/1820	30	LIMBACH/80	530	1410	540#	22.75	540
Grob 109B	17.3M	9.16	1367/1874	28	GROB/90	670	636	507#	20.82	684
Valentin Taifun	17M	9.54	1260/1808	30	LIMBACH/80	630	657	548#	22.6	658
Hobbyliner HB-23	16.4M	8.16	1278/1675	N/A	VW/96	750	525	441#	17.44	500

All motorgliders are 2-place ships. XX=Sea level @ 15C @ Max. Gross Wt.; N/A= Info not available. Performance and Specifications compiled from manufacturers handbooks and may vary from actual performance. Manufacturers and U.S. Dealers:

Aerotechnik Airport Kunovice 686 04 Uherske Hradiste Czechoslovakia	Fournier Aviation 26. rue de la Republique 78100 St-Germain-En-Laye France	Scheibe Flugzeugbau GMBH 8060 Dachau Aug.-Platz-Strasse 23 Germany	Brasov Romanian Aeronautical Ind. Romania	Hoffman HOAC, 1210 Wein Richard-Neutra-Gasse 5 Austria
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Burkhardt Grob Flugzeugbau Am Flugplatz/8939 Mattias Germany	Valentin Flugzeugbau Flugplatzstr. 18, 8728, Hassfurt Germany	HB Brditschka GMBH Str. 42-46, 4053 Naid Austria (Hobbyliner)
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US/Canada/Europe:

Moravia, Inc.(Vivat). P.O. Box 942 Thunder Bay, Ont. Canada, P7C 4X8 807-475-5113	Fournier: None Listed	Brasov: Flite-Lite, Inc. P.O. Box 3187 Miami, FL 33159 305-472-5863	Hoffman HOAC A-2700 Wiener Neustadt N.A. Ottostrasse 5 02622 26780	Grob Grob Systems, Inc. I-75 & Airport Dr. Bluffton, OH 45817 419-358-9015	Hobbyliner HB-Aircraft USA, Inc. 150 E. 74th St. New York, NY 10021 212-517-1625	Taifun None Listed
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