

APS NEWS

The official Publication of the Auxiliary-powered Sailplane Association, Inc.

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ASA Web Site: <www.motorglider.org>

Jan - Feb 2007



Full wing span of the Antares Electric MG - SSA Convention Floor 2007

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How I got my MG into the Basement !

2006 Financial Report

SSA Convention Photos from Memphis 2007

Newsletter by E-Mail?

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asa_electronic_news@mindspring.com

President's Corner

The Memphis convention is now in the books. This was another eye opener.

There was a high percentage of motorgliders on the convention floor. There was plenty of interest in the Antares which was on display for the first time in the US.

Leo Benetti-Longhini announced that he will be the dealer for the "Revolution". This is a new 18 meter design from South Africa that will be equipped with a motor in the future.

The summer fly-in will return to Parowan in 2007. We are already receiving registration forms for the event, so send yours soon if you want to come join us this year. The info and registration form are included in this newsletter. Updates are posted on the website: www.motorglider.org

The soaring season is on the way. I have taken my "First Flight" and suggest that your first flight be with an instructor this year. I also hope to see you in Parowan this summer (12-24 June).

Rick "FD" Howell



ASA Breakfast



Ka1 with Doris Grove and Tom Knauf

SAILPLANE FUSELAGE MAINTENACE DOLLY

By Terry Edmonds

Here in the upper Midwest we have about 4 months of flying downtime during the winter. That is a good time to do preventive maintenance on our flying machines but hangars usually are not heated. I am fortunate as I am able to get my DG-800B in my house basement even though the house was not particularly designed for this kind of thing. I have been doing this for quite a few winters but getting the plane in and out was not an easy task. The big problem was the fuse has to make a right angle turn before the tail was completely through the door. This requires us to literally pick up the nose and make the turn. There that had to be a better way to do it and make handling of the fuselage easier otherwise so I finally got around to designing a special dolly.



The basic idea was to build a four wheel dolly with large castoring wheels that the sailplane trailer fuselage dolly would sit on. This makes for a stable platform that combined with the stock tail dolly allows the fuselage to be moved in any direction. The photos are pretty self explanatory. Dolly height is important so not to make it difficult to slide the fuselage on the cradle and yet allow the main gear to retract and extend for any gear maintenance. Mine is built for a Cobra trailer dolly and the height works out to be 11" from the ground to the top of the platform.



Material List

- 4-wheels 8" pneumatic swivel from Northern Tool & Equipment, part #189210.
- 4-1" square Steel Tubes 24" long
- 2-1" steel Angle 25" long
- 4-1" steel angle 4" long
- 24-2" bolts, nuts and washers

The wheels cost \$18 each and the steel parts can be cut at a welding shop. Assembly is just drilling some holes (a drill press helps) and bolting it together.



TECH TALK

by Gary Evans

LEAK DETECTION

Anyone who has spent time searching for fluid leaks especially in the motorglider control box area buried within the fuselage knows just how frustrating the job can be. Often times the leaking fluid travels some distance from its source making the exact location difficult to pin down. On slow leaking 2 cycle mix the only residue will be the oil as the fuel evaporates quickly. After chasing a fuel leak in mine for months I purchased a TracerLine brand commercial fluorescent dye leak detection kit.



These kits have dyes that can be used with water and any oil based liquid such as motor oil, gasoline or hydraulic fluid (excluding brake fluid). I bought mine at Amazon.com for under \$40. To use you only need to add the dye to the fluid, give it some time to circulate through the system and then check the area with the supplied UV light. The dye will glow at the leak source making the detection process easy.

Check Those Connections!

by Steve Dee

Twice in recent memory I have had occasion to be impacted significantly by poor connections in my motorglider, and I'm not referring to flight controls! The connections I'm talking about are the mechanical connections in electrical systems that can vibrate loose, to the great detriment of powered flight!

The first of these I discovered after a 540 km flight that lasted 8:40 on a strong day flying out of Alamogordo, during which plenty of great lift and turbulence were encountered. After landing with a big smile on my face, I attempted to extend and start the Rotax on my DG-400, and was able to extend it, but not start. The starter engaged, and the engine turned over, but not enthusiastically enough to start (minimum of 300 rpm needed for the ignition to energize).

I mentally wrote this off to the long flight having drained the batteries, and proceeded to tow the ship to parking, where I discovered that I now had no electrical power at all, and could not stow the engine. This of course meant that I could not derig, since the extended engine would not allow the fuselage to fit into the trailer. Two days of trouble shooting lead to discovering one of the bus bars (beneath the floorboards) that join the four 6-volt batteries had mechanically loosened to the point where the electrical connection was lost. These bus bars are connected by nylon stop nuts, but had nevertheless vibrated loose somewhere along the way.

Had I relied on an in-flight restart to retrieve, or prevent an undesired out landing, who knows what might have happened. If the malfunction occurred in flight as it did on the ground, I would have been flying a motorglider pilot's worst nightmare: an engine extended, with no way to start it or retract it!

The second, and more recent occurrence was equally challenging to sort out. After a morning of flight training with my Grob 103SL, we broke for lunch and returned to the airport anticipating a great afternoon of thermal soaring, only to find that the Rotax simply would not start. After some trouble shooting, it was apparent that there was no ignition. My student and I pondered what could possibly change between morning and afternoon, and looked hard for a classic "loose screw."

We found several. After less than an hour of engine run time, the primary grounding strap from the bottom of the forward cylinder had come loose from the engine pylon where it terminates. Also, the primary lead from the starter had worked its way out of the crimp joint and was making contact by only a few small strands of cable. After re-crimping, the starter rpm increased markedly.

The next discovery was much harder to find, and required phone calls to Grob and the scrutiny of several electrical schematics. Tracing connectivity wire by wire with an ohmmeter from the cockpit switches to the ignition, we discovered a bad crimp joint in a lead that precluded ignition from either CDI box getting to the engine. This took the better part of 3 days to find, and about 3 minutes to fix. As you might guess, my patience was considerably challenged. . .

One benefit that came out of this last experience was chatting with Steve at Airscrew Performance in Glendale, AZ. Steve is probably North America's leading expert on Rotax engines, and one of only two factory reps in the USA currently approved to overhaul the certificated 505 that many of us know and love. He helped my trouble shooting along, and assisted greatly in getting me out of the flooded engine scenario that resulted from having no ignition (worthy of another separate article).

The point I want to make is that most self-launchers rely on engines that vibrate themselves (and us) severely during normal operations. Our manufacturers have tried hard to isolate and minimize the impact of vibration on operations, but it behooves us all to check the mechanical fittings of all electrical connections every flight, and take the time to dig down into some that don't show, as well.

The operational conclusion, which I use as a byline for all my Self-Launch Endorsement students, is that you should never extend the engine unless you're in a position to make a safe landing just in case things don't go as planned. It's a whole lot safer to be pleasantly surprised when the engine extends and starts, than painfully stricken when you are counting on one that doesn't.

ASA FLY-IN at PAROWAN

12 - 24 June 2007

Space may be limited. Please sign up early !!

Flights over the Grand Canyon, Zion National Park, Bryce Canyon, and Cedar Breaks are breathtaking !!

Dinners will be served at the airport.

RV's and Camping available space on the airport. Shower available. Motel and B&B's in town.

Tow planes available for non-powered gliders.

Fees: \$150 deposit

Questions? Call Rick Howell, 972-245-0830 or email PatRickHOWELL2@earthlink.net

Fly Parowan web site: www.flyparowan.com

Region 9 Contest (6/30-7/7) (good info on site-seeing and accommodations: <http://parowan.soaringweb.net>)



ASA Soaring Camp at Parowan 2007

Bulletin #1- 18 February 2007

Since we had so much fun last year, we will do this again.

The Minnesota Soaring Club asked that we have a longer camp, so they will have time to see all of the sights in the area AND of course enjoy the soaring. The dates are 12 – 24 June. There is a region #9 contest the first week of July. We also think that June is a better time period (before the summer monsoons).

The camp will be very similar to last year.

We will have:

- (1) More ramp space. The 5 open class gliders will not be in Parowan this summer.
- (2) Jet Smith is working on the menu for meals with the caterers.
- (3) I ask for your preferences for evening programs. Jet will also arrange for Martin Tyner (bird man), a Forest Ranger (info about the Parowan area) and/or a program about Indian culture.
- (4) John Templeton is the Director of Soaring in Parowan this summer. He will provide tows for the summer season. Contact John if you would like to fly any other time during the summer. (cell) 435-669-4544 or JETempleton@charter.net or Maule_Tow@hotmail.com
- (5) RV Parking. Call Dave Norwood (FBO) 435-477-8911
Spaces are available by reservation (12 with electrical hookups).
Camping is also permitted on the airport.

Accomodations

The Utah Summer Games are taking place 8 – 23 June. Many events will take place in Cedar City. A soccer tournament has already caused a shortage of rooms at the Days Inn in Parowan for a few days during the beginning of our camp. It may be necessary to stay in another location for a few days, if the Days Inn is your first choice.

Make your reservations now !!

Ben Barrentine has made a reservation at Cedar Breaks Lodge in Brian Head.

The rates are good and if you are old (AARP) or drive a car (AAA) the rates are better.

Parowan 2007 cont...

www.Cedarbreakslodge.com or 1-888-AT CEDAR

There are also condos and homes availableI can help, if interested.

www.brianheadchamber.com

The **Days Inn** is in Parowan and after the soccer players go home rooms will be available.
435-477-3326 or 888-530-3138

B & B's:

Victoria's www.utahretreat.com or 435- 477-0075 Very good B & B and Gavin Wills stays there when in town.....maybe the skill will rub off !

Red Canyon Lodge www.Red-Canyon-Lodge.com or 435-477-1200 This B&B was used by all of the Germans who visited last summer. The owners now know about gliders. Located just south of Parowan.

Other

Victorian Rose Country Inn www.VictorianRoseCountryInn.com or 435-477-1555 There are four rooms (sleep 2 to 7) with private baths, kitchen, and living areas. Located in Parowan.

Please send a copy of your Glider Insurance Certificate along with a Registration Form and deposit of \$150.00 to:

ASA
c/o Eric Greenwell
222 Thayer Dr.
Richland, WA 99352

If you have other questions, please contact:

Rick Howell
972-245-0830
PatRickHOWELL2@earthlink.net

Great Soaring !!

Rick Howell

ASA FLY- IN at Parowan - 2007
Registration Form
Please complete and mail with deposit by April 1st

Name:

Address:

Phone Number:

Cell Phone Number:

Email Address:

Number in your party (please guess if necessary):

Glider Type and N - Number or Contest Number:

Do you require a tow?

Dates attending: ALL or Just these days_____

Person(s) to contact in case of emergency, name(s), phone and address:

Please mail this application with a deposit of \$150.00 by April 1, 2007 to the address listed below.

The fee for the fly-in will include six catered meals. A final dollar amount will be determined once bids are received from the caterers.

ASA
c/o Eric Greenwell
222 Thayer Dr.
Richland, WA 99352

If you have questions, please contact:

Rick Howell
972-245-0830

SSA Convention 2007



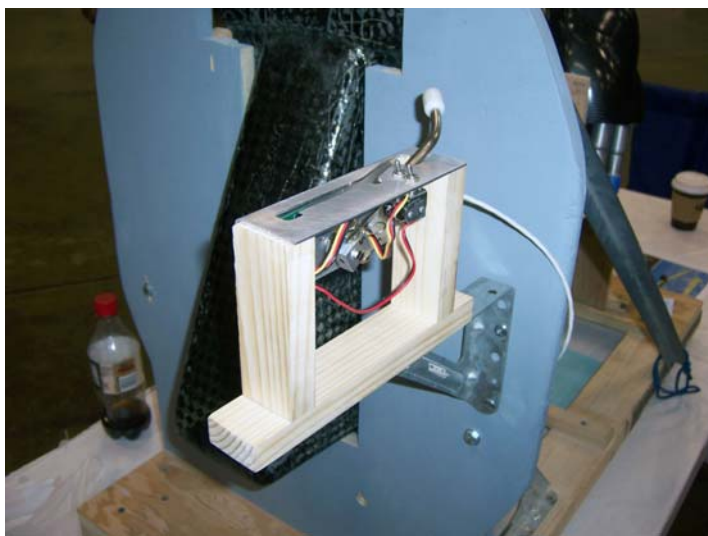
Antares Cockpit



Antares Tail Wheel in Rudder



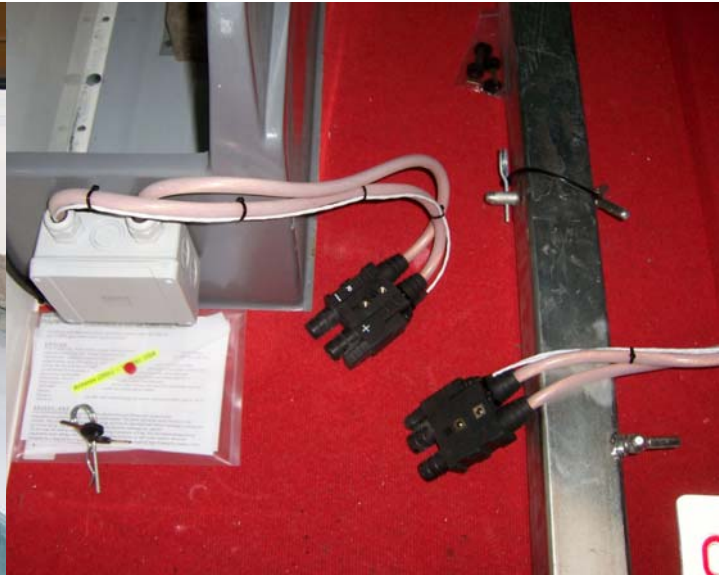
Antares Engine Extended



SparrowHawk Engine Control



SparrowHawk Engine Extended



Antares Trailer showing charging cable attachment to fueslage dolly and battery charging cable



Antares Control Panel

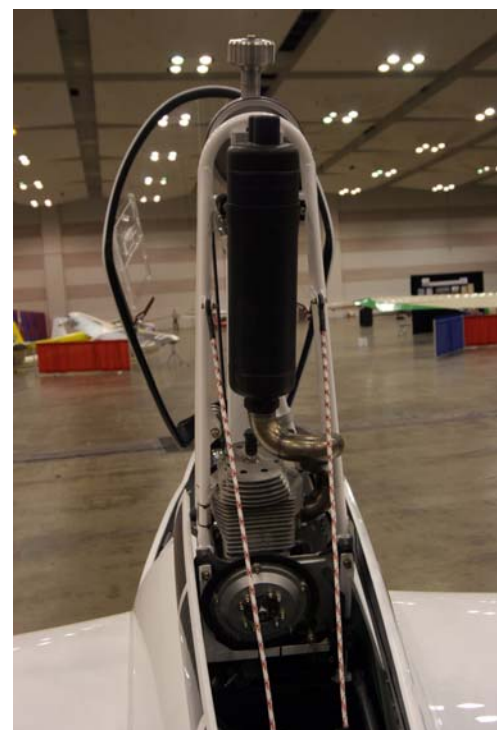


The ASA Booth



Paul Gaines with the original Phoenix

**Silent 2 Engine
Compartment**





Silent 2 Targa

Volker Halbe with DG 1000T



Dave Nadler in the Antares

Paul Remde of Cumulus Soaring

Photos: Terry Edmonds
& Brian Utley



February 1, 2007

Gentlemen:

This is a summary report of our finances.

<i>ASA 2006 Summary Financial Report¹</i>			
	2006	2005	2004
<i>Income</i>			
<i>Dues²</i>	6811	7131	5785
<i>Interest</i>	79	66	40
<i>Sales</i>	44	0	420
<i>Total</i>	\$6934	\$7197	\$6245
<i>Expense</i>			
<i>Newsletter³</i>	4601	4668	3869
<i>Roster</i>	607	440	400
<i>Supplies⁴</i>	0	80	327
<i>Miscellany⁵</i>	410	492	614
<i>Total</i>	\$5618	\$5680	\$5210
<i>Net</i>	\$1316	\$1517	\$1035
<i>Bank Balance</i>	\$16502	\$14900	\$13,514

Note that we now have some multi-year liabilities because dues can be paid ahead several years, so the bank balance is not as “fat” as it appears.

The summary does not explicitly include the 2006 Parowan event, since we haven’t included events explicitly in the past. Perhaps we should, since the bank balance includes profit/loss from these events. The event collected \$5500 in entry fees and paid out \$5255 in expenses (primarily food), for a net gain of \$245. An excellent result due to Rick’s good stewardship. Rick received a detailed listing of payments received and made.

Regards,



Eric Greenwell
ASA Treasurer

¹ Yearly cash basis

² Dues reflect some multi-year payments, first available in 2001

³ Includes professional printing and mailing for members requesting a printed bulletin

⁴ The newsletter editor operates entirely electronically (batteries not required)!

⁵ Includes ASA booth fee and corporation fees

ASA Mission

The Auxiliary-powered Sailplane Association, Inc. was founded in 1988 as a non-profit organization to encourage the design, development and safe use of motorgliders, self-launching and sustainer engine sailplanes.

ASA Membership

Membership in ASA is open to anyone interested in powered sailplanes. Write or call: Brian Utley, ASA Membership Chairman, 9541 Virginia Ave. South Bloomington, MN 55438
Ph: 952-941-5683 email: <Utleyb@aol.com> USA Dues \$20/yr, \$38/2 yrs, \$55/3 yrs. International Dues \$25/yr, \$48/2 yrs, \$70/3 yrs.

ASA Officers

President: Rick Howell 972-245-0830
Secretary: John Sullivan 734-668-6868
Treasurer: Eric Greenwell 509-943-9065
Technical Advisor: Gary Evans 480-380-2431
Membership: Brian Utley 942-941-5683
Safety: Oliver Dyer-Bennet 702-942-5727
Publications: Gary Haynes 720-255-9650
Competition: Rick Howell 972-245-0830
CFIG Training: Steve Dee 901-757-8784
Director: Lloyd "Skip" Atwell 262-348-9488

APS NEWS Publication

Contributors please submit copy and materials to:
Gary Haynes, 9205 Sagebrush Trail, Lone Tree, CO 80124
Ph: 720-255-9650 email: asa_editor@mindspring.com

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It's your publication, so please let us hear from you!

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FOR SALE

Powered Sailplane Instruction & Delivery

Dave McConeghey ATP CFI-Glider Self Launch
Endorsement Kansas 316-409-9624
Email: <mcconehey@cox.net>

RF5B For Sale

Dave McConeghey 316-409-9624
Photos <http://members.cox.net/motorglider>

Scheibe SF-28A

1982 Tandeme-Falke motorglider, ~1200TT, 460 Engine (65hp Limbach 1700EA), custom covers, custom open trailer, Hoffman prop (recent overhaul), new canopy, new muffler and heater shroud. \$47,500 Matthew Poleski, 815-544-3870, <matthewpoleski@aol.com>



Stemme S10V

Stemme S10V with Factory Trailer. Always hangared. Located in NJ. Engine hours 210. Airframe hours app. 400. No Damage History. Excellent Condition. www.rasair.com
Email jojo94@patmedia.net

2005 Carat A

As factory new, with polyurethane finish, winglets and most factory options, including solar, LX7000 GPS, Becker AR4201, Becker txp, Sauer SE 180 HHS engine with dual ignition & Technoflug propeller. A 38/1+ motorglider that fits nicely into a Cobra trailer, and includes one-man rigging. TTAF 65 hrs, TTE 34 hrs. Family matters require sale, \$135,000. AMS-USA (707)942-5727 CA



EDITOR NEEDS HELP

Thanks to Brian Utley, Eric Greenwell, Steve Dee, Rick Howell and Terry Edmonds for contributing to this issue. For the rest of the readers I could really use your help with articles and photos. There's lots of flying being done and a lot of us have digital cameras so it is easy to submit photos. I am always looking for content so please contribute to the newsletter.

