
APS NEWS

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

Volume XVI Issue # 101

ASA Web Site: <www.motorglider.org>

November-December 2004



Mono Lake, California as seen from the eastern shore on 29 September, 2004 at about 3:30PM from 13,000ft msl. The camera's eye is aimed west toward the Lee Vining area in the center of the frame at the base of the Sierra Nevada Mountain Range. The lake was pea green with a totally calm surface. Clouds above the lake are seen reflected on its surface while clouds to the east are casting cloud shadows.

Camera is a Canon Elph Sport with a 23mm lense. ASA 200 color film. Pilot/Photographer: Pete Williams. Glider: DG800B. Hopefully this shot will appear in full color in Soaring Magazine.

FAA MOTOR GLIDER RATING REVIEW

This is a reprint of a request from a Swiss pilot to Dean Carswell inquiring about receiving a USA Motor Glider Rating. Dean's answer is a wealth of information regarding this subject applicable to both US and foreign glider pilots and deserves to be published in APS News

The Questions

I already hold since 1974 a glider pilot rating with passenger flights and touring motor glider in Switzerland. In Switzerland we must renewal the license every two years.

1. Can I receive a US FAA Motor Glider Rating with my Swiss License ?
2. How long is the validity of the US Glider Rating?
3. Do you also have renewal periods ?

I'm interested in the original US Motor Glider Rating, with validity less Swiss Flight License.

The Answers

To answer your question, it is necessary to look at how the US Federal Aviation Authority (FAA) regulates pilots here in the US. Under Federal Aviation Regulation (FAR) 61.75, a person who holds a current foreign pilot certificate issued by an ICAO contracting state (of which I believe Switzerland to be one) may apply to the FAA for, and be issued, a private pilot certificate with the appropriate ratings. Additionally, your foreign pilot license must not have been revoked or suspended, and any restrictions or qualifications on your foreign pilot certificate will be attached to your US private pilot certificate. You also must be able to read, write, speak and understand English. If you meet these requirements, you are entitled to an FAA private pilot certificate – in your case, for a glider.

Continued on Page 6.....

ASA WELCOMES THE FOLLOWING NEW MEMBERS

Greg Chapman (TX)
Angelo Dounoucos (NY)
David Fish (MA)
Bruce D. Thompson (MN)
Frank Allen (TX)
Bob Kibby (TX)
James Needles (IL)
John Welsh (NV)
Richard V. Smith (OK)
Douglas C. Glazier, Sr. (CT)
Adam Bastiani (NY)
George W. Wiederkehr (NY)

ASA Bank Balance as of 10-17-04.....\$4,471.00

The following ASA Members have experience with flying, servicing and maintaining specific models:

Carat	Oliver Dyer-Bennet	DGUSA@aol.com
DG-808B	Gary Evans	garyevans@cableaz.com
ASH-26E	Eric Greenwell	greenwell@charter.net
DG-400	Pete Williams	fl18@pyramid.net
Stemme	David Bingham	d.bingham@verizon.net
Ximango	Jim McCann	jim.durango@jimtec.net
Ventus 2CM	Jerry Kaufman	gjk@fc.hp.com
DG-505MB	Jim Leedy	JELEEDY@aol.com
DG-500M	Tupper Robinson	775-782-4944
PIK-20E	Bob Moore	509-967-3773
RussiaAC5M	Bill Ard	soarmontana@mcn.net
Grob 109B	Rolf Peterson	rolfpete@bellsouth.net
Diamond Xtr	Dan Matzke	Dan Matzke@aol.com
Silent IN	Leo Benetti-Longhini	leo@cafes.net

**THE ASA WEBSITE IS FULL OF
INFO ABOUT MOTORGLIDING INCLUDING
BACK NEWSLETTERS, BOOKS,
COMING EVENTS, LINKS AND MORE.
CHECK IT OUT TODAY!
<www.motorglider.org>
Eric Greenwell-Webmaster**

**Important Notice! If your Sep-Oct 04
APS News had a Pink Slip enclosed
you need to renew your ASA
membership to continue receiving the
newsletter. THANKS !!**

FOR SALE

DG-505MB 20M/22M tips; 107 TT; 31 Engine;
Cambridge GPS/Nav; Fully Equipped; 02; two
parachutes; Jaxida Covers; Cobra Trailer with one-
man rigging. **\$149,000** Bob Moos 413-533-4659
<bmoos@comcast.net>

New Sport Pilot/Light Sport Aircraft Rule Released

Its been a long time coming. The rule was released in July 2004. It is quite lengthy but EAA has digested it down to its basic parameters. An eligible aircraft list has been published which includes homebuilt or production light aircraft, trikes and some UL motor gliders. For more information go to <www.sportpilot.org>.

ALLAN D. PRATT



ASA member Allan Pratt lost his life in a crash while flying his motor glider out of the Minden-Tahoe Airport on October 23, 2004. A seasoned airline pilot with 12,000 total flight hrs including approximately 270 hrs in gliders, Pratt had recently taken delivery of a CARAT motor glider and was estimated to have 30 hrs in the ship. He was an enthusiastic advocate of motor gliders and was seen flying his new CARAT almost daily, weather permitting. The accident is under investigation by FAA officials and the National Transportation Safety Board.

NEW SELF-LAUNCH GUIDE



Guide to Self-Launching Sailplane Operation
Eric Greenwell has extensively revised and expanded his previous edition. with much more material and pictures. This new edition covers more types of powered sailplanes than before, emphasizing common methods and concerns, rather than things specific to only one model. The guide is now available on the ASA web site<<http://www.motorglider.org>> (click to the "Articles On-line" section).



Pilot Profile

Gary Haynes

Editor's Notes: Gary took delivery of DG-808B s/n 323 N801KG this summer after visiting Minden for a checkout with Tupper Robinson and spending some time with other DG-808B owners. He has 2,200 total flight hours with 190 in gliders which includes 30 in his new 808B. Here's his story.

Got my private 25 years ago while I was in college. I still have the receipts and took my check ride at 41 hrs TT and a total cost of \$720 for rental Cessna 150 and instructor time. Over the next several years I added Commercial, CFII, Multi and did some instructing and flew for a 135 charter operator. While managing a Beech Aero Club I added a commercial hot air balloon rating. My first aircraft was a Cameron V-77 balloon named "Big Abe". The registration was NLOKG, for Kathy (my wife) and Gary. Flew Big Abe for several years until my primary crew decided she wanted to sleep in on the weekends. Picked up a commercial helicopter license while I lived in Buffalo, NY and flew part time for a radio station traffic report.

After moving to Colorado I pretty much stopped flying until about 6 years ago when I figured I could buy an airplane and use it for business. Owned two Mooney's during that period but when the airlines really got serious about cutting airfares I couldn't justify the expense. That led to soaring. I always wanted to try it and decided to go for it. Traveled to Seminole Florida three years ago at Christmas time and did my commercial add on at Seminole Lake Soaring. Flew 30 flights, dual and solo, in two days and did my check ride on the third morning. I was really hooked and I saw my first DG- 808S and a DG-505 Really liked everything about the gliders.

I flew for a year with the Soaring Society of Boulder flying Grob 103's and 102's. Then I started shopping. Tried to find a DG-800 and missed on a couple of opportunities. That led to the purchase of an HpH 304CZ, which if someone weren't buying a DG is an outstanding value with excellent workmanship. Then I got an offer on the 304CZ, sold it, started looking again for a DG-800. Since I didn't find anything late model on the market decided to take the plunge and buy a new one. The factory had a position available, someone else had canceled, and the rest is history as they say. I am now the very happy owner of a brand new DG-808B Serial No. 323.

I took delivery of the ship in Houston. On the way back to Colorado I stopped in Huntsville, TX (a stone's throw from death row and many signs on the highways saying "don't pickup hitchhikers") and met a local DAR who issued the Airworthiness Certificate. Took about an hour to do the inspection and then chase the Texas Love Bug infestation away from the glider. On Labor Day I completed two flights, both self launches. The climb rate is a respectable 400-450 fpm at a density altitude of 9,000 ft. Actually a pretty cool day for Salida. My soaring buddies said the climb rate was spectacular, much better than the Piper Cub used by the club. Ship flies great, everything seems to be working ok, though I think I have a ICC sealing problem with the Cambridge 302.

The photo was taken at Salida, CO. Field elevation is 7380 ft. First flight was an aero tow to 9500 feet. Couple of engine cycles and short 1000 ft climbs.

Gary Haynes

ASA Activities at SSA Convention Ontario, CA 10-12 Feb. 2005.

Skip Atwell has scheduled six unique "Show & Tell" presentations alongside various motor gliders on the convention floor. The dealer or factory representative plus the ASA member that owns the ship will explain its systems and answer questions. See schedule below.

For the first time **ASA will host a Booth** at the convention where applications for membership will be taken, various ASA Publications will be sold and questions answered regarding motor gliders. Pete and Charm Williams will man this booth assisted by other ASA members.

Plane-Side Exhibit Floor Presentations

Thursday Feb. 10

9:00am & 1:30pm

Apis

Robert Mudd

11:00am & 2:30pm

Schempp-Hirth

Dave Nadler & Heinz Weissenbuehler

Friday Feb. 11

9:00am & 1:30pm

Alisport

Leo Bennetti-Longhini & Bob Carlton

1:00 & 2:30pm

DG

Oliver Dyer-Bennet & Gary Evans

Saturday Feb. 12

9:00 am & 2:30 pm

Stemme

Brett & Karen Willet

11:00am & 2:30 pm

Schleicher

Kempton Izuno & John Morgan

Saturday Feb. 12 7:30am

ASA Breakfast followed by ASA Board Meeting

Breakfast Speakers:

Tilo Holighaus: Motorized Sailplanes at Schempp-Hirth

Rick Howell, '04 National Contest

PLAN TO ARRIVE IN ONTARIO EARLY!

"SOARING SOFTWARE ACADEMY"

Wednesday, February 9th, 2005

Noon – 5:50 p.m.

DoubleTree Hotel, Ontario, CA

"Soaring Software Academy" is presented by the SSA free of charge to the entire soaring community, and represents a major addition to the convention. These classes are sponsored, organized, and conducted by cockpit and desktop soaring software representatives.

Target audience: Pilots who currently own cockpit PDA flight management and/or desktop flight display and analysis software, as well as those considering the purchase of such software.

Goals: Intensive classes will provide instruction in the use and capabilities of each program, ranging from the most basic to advanced features.

Wednesday, February 9th, 2005 Classroom Schedule:

(check any and all you would like to attend, free of charge!

Walk-ins permitted, but please help us plan for appropriate space)

Noon – 12:50 p.m.

WinPilot 3D

1:00 – 1:50 p.m.

WinPilot ADV & PRO

2:00 – 2:50 p.m.

SeeYou

3:00 – 3:50 p.m.

SeeYou Mobile

4:00 – 4:50 p.m.

StrePla

5:00 – 5:50 p.m.

pocket*StrePla

The Izuno Wave Chronicles Continue

Yes, it was raining here in Cal City, for the first time that I've ever seen. FYI, I self-launched in my ASH-26E on Monday 18 October 04 from the California City Airport at 7:30am. Straightforward to Inyokern, then the Owens Valley was blue. Plus the wind dropped off. Zig-zagged up the valley, then got stuck at the Palisades (W of BIH). Got going again as the wind picked up, no problem on the Mammoth transition, it was just like the March 25 flight earlier this year. By just south of Bridgeport, there was too much cloud cover at lower and upper levels so I turned around. Back in the Owens Valley I was pretty much on the ridge line, while I noticed that by Mt. Whitney the wind dropped off to 23 knots at 17.5K ! The wind picked up from there and I landed at Cal City at 12:44pm.

750km before lunch!

Kempton Izuno



FLYING THE CARAT AN OWNER'S IMPRESSIONS

By Joe Stuart

My impressions of flying the Carat (SN 005) for the full soaring season 2004. Having had no tail dragger experience I took Oliver Dyer-Bennet's good advice and got about two hours of instructions in a Citabria early in the spring. Since the soaring was not all that good to start with, I spent pretty much the first few weekends on familiarizing myself with the airplane (mostly takeoffs and landings). I found the airplane to be a little more difficult in both when compared to the Citabria and I was very glad to have taken the instructions. About mid May I began soaring in earnest. At that time my airplane was stationed at the Apple Valley airport and at times in the Tahoe area and I generally tried to fly up or down the Sierra Nevada Range. I am happy to report that there were no surprises whatsoever.

I continue to be amazed at the quality of the workmanship, the ease of flying this airplane (even though there is plenty of room for improvement on my part in all phases of flying) as well as the reliability of the engine. Having owned a DG 400 prior to the Carat, experience has taught me the value of sticking to some fairly conservative safety principles. One of them is in regards to starting the engine in flight. My minimum altitude for starting the engine, when a landing is planned or imminent, is about 2000 feet above the field elevation (more if the engine is very cold). Even though I have trained to land the Carat as a glider, normally I will land with the engine going. I am very judicious in the application of power during the first few minutes after restart to give the engine and oil time to warm up. A decade of flying the DG 400 has taught me to never fully rely on a successful engine restart in-flight. Even though the Sauer engine is infinitely more reliable I continue to fly this airplane as if it had no engine. I am likewise very happy with the soaring performance of the Carat, but most of all I am enjoying the cross-country flights without a crew on the highway and the ability to fly home whenever I choose. On any given weekend of soaring my time in the cockpit is therefore also actually doubled.

I should mention that my airplane does have dual Bendix magnetos rather than the electronic ignition and I also had the large optional solar charger installed on the fuselage (my decade of owning a DG 400 has taught me the value of a good fully charged battery at all times). The engine always starts immediately (with a little reluctance lately when it is completely cold soaked). This is not unlike cars in the Midwest during wintertime. I consider this to be a very minor problem and I am sure I will have it solved before the next soaring season starts. In closing I would like to repeat that I am a very satisfied customer of AMS and would like to compliment them on the fine airplane they are building and selling. *Joe Stuart*

The ASA News Group

An Auxiliary-Powered Sailplane News Group has been established to promote communications between interested members. The intended purpose is to provide a quick method of asking questions, sharing information and problem solving. The News Group can be viewed at the following address;

<http://groups.yahoo.com/group/ASA-NewsGroup/>

The News Group can be viewed by anyone but posting is limited to ASA members. If you wish to join and are already registered at Yahoo just click on the **JOIN THE GROUP** button and you will need to fill in the specified information to join. When your request is submitted an E-mail stating that you have applied will automatically be sent to the News Group administrator who will approve your request. You will then be able to post messages. If you are not registered at Yahoo you will first have to click the **SIGN UP NOW** button to be register before joining the APS group. There is no charge for registering or joining. If you, re not familiar with news group,s information can be communicated in one of 2 ways.

1) You can book mark the web address and go directly there to read and/or make posts. Or-

2) You can receive each post by E-mail so you do not have to visit the web site after joining to keep up with what's being discussed. If you reply to the E-mail it is automatically posted to the News Group and sent to the other members as E-mail.

Any questions and/or suggestions on our NewsGroup can be posted at the site or sent directly to either of the following moderators.

Gary Evans

garyevans@cableaz.com

Eric Greenwell

engreenwell@charter.net

Continued from Page 1 FAA MOTOR GLIDER RATING REVIEW

The US does not have separate licenses/rating for motorgliders, only a license for gliders (which includes self-launch gliders). To qualify to fly a self-launch glider in the US, a glider pilot must (FAR 61.31(j)(1)(iii)) have received ground and flight training in self-launch procedures and operations, and have a logbook endorsement by an authorized instructor to that effect. No distinction is made between fixed and retractable engine self-launch gliders. Sustainer engine gliders are addressed by their launch method (ground launch or aerotow). The FARs do not specify what the ground and flight training must consist of – that is left to the discretion of the authorized instructor. [There are parallel requirements for ground launch and aerotow launch ground and flight training.]

So you can apply and receive your US private glider license. More complicated is what you would require to show a motorglider owner to satisfy him that you are legally entitled to use your US license to operate his motorglider; exhibiting your Swiss motorglider license and logbook showing ground and flight training from, and signed off by, a Swiss authorized instructor should satisfy this requirement. Also, if ever asked, it should satisfy an FAA official who requested to see your credentials to fly a self-launched glider in the US. The precise requirements depend in part on what the detailed rules in Switzerland are. If you logged flight time as pilot-in-command of a motorglider prior to August 4, 1997, you do not require to meet the ‘ground and flight training’ requirement. If for some reason you do not have the required signed logbook entries, it is always open to you to obtain the required ground and flight training here in the US. If you really want to research the details, the FAA webpage has “Frequently Asked Questions” on its webpage. Go to <http://www.faa.gov/AVR/afs/afs800/docs/pt61FAQ.doc> - the section on FAR 61.75 and look at the questions relating to FAR 61.31. Assuming you are not planning to fly your own self-launch glider in the US, then the owner of the one you are intending to fly may require demonstration of your abilities to an instructor; if that is required, it could easily include the “ground and flight training”.

The next issue is that once you have received your US pilot certificate under FAR 61.75, you will, to exercise its privileges, require to meet the US requirements (which apply to all private pilots flying in the US). The first is that you must, within the 24 preceding months, have received a “flight review” from a US authorized instructor (FAR 61.56). A flight review consists of 1 hour of ground and 1 hour of flight training from an authorized instructor. These need not be done in a self-launch glider, provided your Swiss license authorizes you to fly non-powered gliders. Unless such a person is available in Switzerland, that would have to be done in the US. The other is that, to carry a passenger, you must have made 3 takeoffs and landings in a self-launched glider in the preceding 90 days (FAR 61.57). To fly a glider in the US, you do not require a medical certificate. You must not, however, act as pilot-in-command if you know, or have reason to know of any medical condition that would make you unable to operate the self-launch glider in a safe manner (FAR 61.53(b)). Once issued, your US certificate is valid indefinitely, provided your Swiss license remains in effect and is not suspended or revoked. You must however continue to meet the requirements of FAR 61.56 and 61.57.

Lastly, since September 11, 2001, the procedure to obtain a US license under FAR 61.75 has been made more complicated by the need for the FAA to make a verification of authenticity of your Swiss credentials. The Soaring Society of America (SSA) is able to assist you in advanced handling of this process, although it does take a little time, so you need to plan ahead several weeks. When you finally arrive in the US, you will need to take your credentials plus your Swiss passport to the nearest convenient FAA Flight Standards District Office to complete a formal application and receive issuance of your US certificate. FAA FSDOs are listed by region at <http://www.faa.gov/avr/afs/fsdo/index.cfm> and your travel plans should include a visit in person (a prior appointment is necessary) to whichever office you choose. You can reach the SSA at info@ssa.org or, if you prefer, e-mail me and I will forward your request to the correct person. I’m sorry to have to write at such length, but it is a little complicated! Let me know if you have any questions.

Regards , Dean Carswell

DG-808S TURBO



DG's President Karl Frederick Weber, recently announced the DG-808 self-launching motor glider line would add a sustainer-powered version next year. The power plant is the well proven, small two-cylinder, two-stroke Solo engine. What makes DG's version different is the lack of a gearbox and a small, fixed, high pitch prop which runs at 4,500 rpm with a minimum of vibration. DG expects the glider to achieve a sea level climb rate of approximately 1-1.5m/sec at 120 kph. According to DG engine operation is simple. There is only an additional decompression lever, but that is compensated for by the lack of a starter button. Extending and retracting the engine works via a tried and tested worm drive. Power consumption of the mechanism is minimal as the gas assist strut that does most of the work. There is no starter so an ordinary glider battery is totally sufficient. The DG-808S has a surprisingly low empty weight of approximately 315 kg. More details will follow flight tests.

Delivery: The electronic design is almost complete. The prototype will be shown at the AERO 2005 aircraft exhibition in Friedrichshafen, Germany. Flight tests are scheduled for Autumn 2005 with first deliveries by Spring 2006. Initial serial production will be 10 airframes. The factory is now accepting production position order deposits. Options are also possible in the order of receipt for works number 11 upwards. The Option fee is 2,000 Euros. *Reprinted from DG's Website Newsletter.*

Director of Training & Safety

The mailing of this newsletter has been expanded to include all pilots listed in the ASA Motor Glider Qualified Flight Instructor List. At the Ontario meeting in February 05 the ASA Directors will be considering the establishment of a Motor Glider Director of Training and Safety who will be coordinating with motor glider qualified instructors and the FAA in the revision and updating of the current Advisory Circular regarding training and checkout in a motor glider. This is a safety step forward by ASA to assure training is tailored to the types of motor gliders available today. ASA encourages instructors who are qualified to instruct in motor gliders to submit comments concerning training procedures to ASA and the newsletter editor.



Photo from Yesterday's Wings Kalender 2004 by Equip Werburg & verlag GMBH. Pilot Martens (goggles) converted his "Max" glider to a motor glider with a 3hp motorcycle engine. Circa 1930

Thomas Milko & His DG-800B



"Above photo taken on an island, where I stayed a few days under torrential rain, waiting for the weather to improve. It was a nice grass strip with a small hotel just behind the coconut trees. Wonder, everything was dry inside my DG-800B even after all that rain just a little moisture in the engine bay." says Thomas Milko an ASA member from Brazil who has made very long safaris in Argentina and Brazil far from his home in Sao Paulo without a crew or a trailer.

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 Pho: 952-941-5683
E-Mail: <Utleyb@aol.com> USA Dues: \$20-1 yr, \$38-2 yrs, \$55-3 yrs.
International Dues: \$25-1 yr, \$48-2 yrs, \$70-3 yrs.

ASA Officers

President: Lloyd Atwell262-348-9488
Secretary: John Sullivan.....734-668-6868
Treasurer: Eric Greenwell.....509-943-9065
Membership: Brian Utley.....942-941-5683
Safety: Stan Nelson.....505-776-5080
Asst.Safety: Oliver Dyer-Bennet..702-942-5727
Publications: Pete Williams.....775-265-3877
Competition: Rick Howell.....972-245-0830

APS NEWS Publication

Contributors please submit copy and materials to:
Pete Williams, Editor, APS NEWS, 1033 Dresslerville, Rd. Gardnerville,
NV 89460 USA Pho: 775-265-3877
email: fl18@pyramid.net

Editorial Policy

APS NEWS material is freely contributed. The accuracy of the data and validity of opinions expressed are the responsibility of the contributors. Other publications may publish material printed herein, however a credit is requested. Manuscripts accepted for publication are subject to editing necessary within the confines of space available. APS NEWS is not responsible for lost or damaged artwork, photos & manuscripts.

Liability Statement

APS NEWS Editor has made every effort to ensure the correctness and completeness of the printing and or publication of the material in the issues. APS NEWS Editor has not investigated and makes no representations as to the accuracy or completeness of any information presented herein.

APS NEWS Publishing Information.....

Pete Williams, ASA Publications Manager, is the Editor, and Print Production Manager. The APS NEWS is printed in Minden, Nevada and mailed First Class. Contributors can mail hardcopy text or use Email. Text may be edited as required to fit the newsletter. Photos are always welcome. APS NEWS is delivered to the printer the last week in Jan; Mar; May; July; Sept & Nov. ASA desires input on what the members want in APS NEWS and we are doing all we can to keep it informative and interesting. *It's your publication, so please let us hear from you!*

CLASSIFIED ADVERTISING RATES

50 cents/word, Prepaid for 2 Insertions Minimum. Non Refundable.
Contact Pete Williams for Display Ad sizes and rates.
APS NEWS is published Jan/Feb; Mar/Apr; May/June;
July/Aug; Sept/Oct; Nov/Dec
©2004 Auxiliary-powered Sailplane Assn., Inc.
PRINTED IN THE U.S.A.

ASA is a Division of the
Soaring Society of America



CLASSIFIED

Powered Sailplane Instruction & Delivery

Dave McConeghey ATP CFI motorglider 1507
Browning Ct. Andover, KS 67002 Cell phone 316-
409-9624 Email: <davemcconeghey@hotmail.com>
Web: <www.angelfire.com/ks2/motorglider>

FOR SALE//PIK-20E

1979 454hrs TTAF Rotax 501 Oxygen
Factory Trailer, Parachute \$38,000
303-790-1907 (CO)

FOR SALE

Alisport SILENT-IN, #036, 2002

TTAF 38 hrs. TE 3.0 hrs. easy start FADEC engine, forward
hinged canopy, steerable tail wheel, Microair Radio, Cambridge
302 flight computer, gooseneck IPAQ cradle,
Factory Clamshell Trailer.

\$35,000 (\$32,000 without 302)

727-784-5421 (FL) Email: rogerb@tampabay.rr.com

Roger Buchanan (n/d-j/f)

FOR SALE // GROB 109A

1983 TTAF 550, NDH, GPS/Com Illec Variometer,
Transponder, Turn Coordinator, Strobes
\$45,000 602-770-9245 (AZ)

New Booklet

A 35-page compilation of
14 Motorglider Corner
articles previously
published in **Soaring**.
A good review for existing
motorglider pilots & a
helpful introduction for the
new motorglider pilot.
\$7.00pp-USA
\$10.00pp-International.
n-d;j-f;m-a

Pete Williams, 1033
Dresslerville Rd.,
Gardnerville, NV 89460
USA <fl18@pyramid.net>

Motor Glider Matters



FOR SALE..... Russia AC-5M

New Engine TTAF 50 TTE 6 /Trailer/ Microair
B-40/ Colibri/ All Ground handling Equip/\$30,000
Will Deliver. 972-775-5578 (TX) 1bchbum@flash.net
n-d;j-f;m-a