APS *NEWS*

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Newsletter by E-Mail?

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asa_electronic_news@mindspring.com

President's Corner

Winter is on the way. I hate to bring such bad news, but this statement does apply to the majority of glider pilots in the USA**.**

What should we do about the change in season? I suggest, if your climate permits, flying the glider at least once a month. This will keep the pilot and glider exercised and current.

The SSA convention is in Memphis (FEB 8-10). The ASA breakfast is always a popular event and was sold out last year, so sign up early. The ASA will once again have a booth. Come by and see us.

I will also be working on a fly-in for next year. The consensus of the participants at Parowan was that they would like to return. I am also open to other ideas. Please contact me if you have other thoughts. There will be a regional contest at Parowan in early July 2007.

Rick "FD" Howell

Pres, ASA

SAFETY CORNER

Oliver Dyer-Bennet, CFI/CFIG
Safety Director ASA

Devoted to the enjoyment and safety of the sport of high performance powered sailplanes and motorgliders.

The modern high performance sailplane, is amazingly strong in its structural integrity.

Most current cutting edge design centers around composites. Carbon, glass-fibre and kevlar with epoxy, such as Scheuffler L285 and Scheufler H286, as the, "bonding agents," that hold the aircraft together.

To acheive certification the glider must be certified to a G-force rating of positive +5.3 G's and a negative G-force of -2.65 G's, plus a safety margin.

These airworthiness requirements are known as the Joint Airworthiness Requirements, or JAR-22. These requirements cover sailplanes and motorgliders, and are accepted by such countries as Germany & the USA.

Most German designed sailplanes will go far beyond these numbers. For instance the DG-400M wing went to about +14 G's in its JAR-22, German tests, before the wing went into structural failure mode.

In general most pilots, grey or black out, at around +5 to +6 G's of sustained loads. This means that the G-load structure of the sailplanes is generally higher than the G-load structure of the pilots.

Enclosed is a photograph of a DG-400 wing at our shop. With 3-large, well fed pilots and and one large black Labrador dog, giving an informal positive G-load test, American style, to the right wing of a DG-400 motorglider.

For German LBA certification, the wing is actually tested in a large controlled environment room, that has temperature and humidity controls. The wing is pinned at the root and then anchored to strain gauges, lift bars and recording equipment.

After the room and wing are properly heated, the lift bars begin to pull up the wing until permanent deformation of the structure is achieved, ie. something breaks.

Safety Corner cont.....

The strain gauges and the recording equipment record the tests and the records become part of the certification process with the LBA.

For us, the glider pilots, this means that used properly our gliders can handle anything that they will encounter, in the normal flight and G-load envelope.

This is all part of the design and manufacturing quality control that the sailpane manufacturers go through, to bring us their wonderful aerodynamic designs.

Oliver Dyer-Bennet

ENGINE DOOR PROTECTORS FOR DG-800 SERIES SOLO POWERED SAILPLANES

By Terry Edmonds

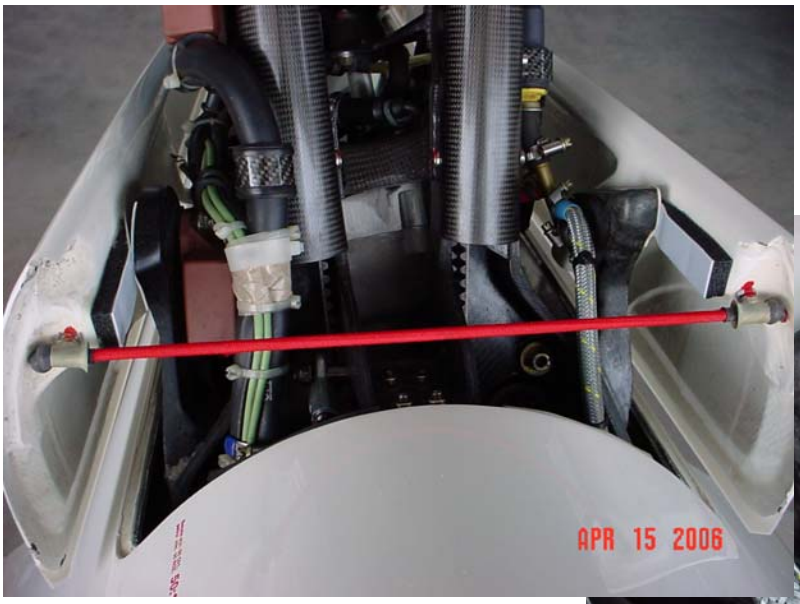
The engine doors on my DG-800B glider vibrate quite a bit particularly when the engine is running at low RPMs. I have had a small problem with wear on the pads that push and hold the doors open.

At the Dallas SSA convention last winter there was a new DG-808C on the floor and I noticed a nice improvement on the doors. The factory is now installing a simple vibration dampener on the doors. It appeared the upgrade could be easily installed on previous 800 series gliders with the Solo engine. I ordered a set from the factory and installed them in the spring. I have flown the glider quite a lot this season and the door vibration is much reduced and the previous wear problem I had seems to have gone away.

Here is the DG ordering information:
Part # 94001085, engine door protectors, 13.51 Euro

Installation is not difficult. Ruff up the area on the doors where the protectors will be attached. Glue on with epoxy. There is a small step where the new Teflon slide is attached to the door that needs to be filled. I built this up with a mixture of flocked cotton fiber and epoxy "flox" and the sanded down for a smooth transition.

This is an easy upgrade to do and may prevent a future problem.



FROM THE DESERT BETA TEST FACILITY

TECH TALK

by Gary Evans

REPLACEMENT OF SOLO PROP BRAKE PAD

The DG version of the Solo crankshaft brake pad used for aligning the prop for retraction is a replaceable part. My glider came with an extra pad and as it was getting near the end of its service life (thickness) I decided it was time to use it. The new pad is a rectangular block of brake pad material bonded to a piece of extruded aluminum angle, which in turn is screwed to the linkage arm. Comparing the old and new pads showed that considerable shaping would be required to match the new pad to the drum. Due to the offset contact angle of the pad to the drum accurate freehand shaping would be very difficult achieve. The approach I used was to remove the clevis pin from the linkage arm onto which the pad is attached. This allowed the oversized pad to be fitted to the arm. Without first disconnecting the linkage the pad is just too large to fit in the available space. Next I wrapped a strip of abrasive cloth around the brake drum. The strip was cut long enough so that I could hold the ends tight on the bottom to prevent it from slipping on the drum. The rubber bands shown on the linkage arm applied the necessary force to hold the pad against the drum. Then holding the abrasive strip in place with one hand I rocked the crankshaft back

and forth with the prop to shape the pad to the drum. The only remaining step was to clean out all sanding dust before replacing the clevis pin and making final linkage adjustment with the two cable end connectors.

Motor Glider Endorsement

By Tom Graham

I remember the day I decided to add 'motor glider endorsement' to my soaring wish list. It was a hot, brain melting July afternoon in Arizona and I was sitting fourth in line for tow at the Tucson Soaring Club. The Pawnee sat at the fuel pump with a magneto issue and refused to start. My fevered mind was imagining what it would take to convert the 1-34 I was waiting to fly into a self-launch glider and could I do it quickly using hand tools, duct tape and the engine of the Honda CB900 I had ridden from Phoenix earlier that morning. The thought of self-launch capability in my soaring future made perfect sense to me that day. Did I mention that it was a hot July afternoon in Arizona?

I soon realized that I faced the challenge of finding the necessary time, funding, instruction, and aircraft availability. I considered locating a qualified CFIG/MG (motor glider instructor) and a suitable ship to train in, within reasonable driving distance, the most important and potentially elusive factor. I could plan the time well in advance and eat peanut butter for lunch for a year but without a CFIG/MG and a ship, I was grounded. In our chosen sport, CFIG's are like diamonds and in short supply, with CFIG/MG's in even shorter supply. I will explain why a bit later. A link on the Auxiliary-powered Sailplane Association's website http://webpages.charter.net/engreenwell/ASA/ lists only sixty-four potential CFIG/MG's nationwide.

Inquiries of fellow members revealed that none of the club's CFIG's were qualified as CFIG/MG's. One member knew of a

motor glider instructor and an aircraft in Sedona. A quick check with the all-knowing internet oracle confirmed this as my only option within the state of Arizona. What a perfect excuse to soar in the beautiful red rock country surrounding Sedona's airport! But alas, one thing led to another and life dealt me several different hands. To cut a very long story short, I found myself back in the drastically cooler climate of the Pacific Northwest far away from the boomer thermals of the southwest and Sedona. However, after my arrival in the Seattle area, the soaring gods smiled down upon me and the move north presented a fantastic opportunity in my quest for a motor glider endorsement by landing a qualified instructor literally in my back seat.

In August 2005 I hooked up with the Puget Sound Soaring Association located at Bergseth Field outside of Enumclaw, Washington. That same month I booked some time with one of the club's CFIG's, Grant Smith, at Arlington Municipal Airport (AWO) for my BFR. While I negotiated the club's 2-33 through stalls and steep turns over AWO, I learned with mounting excitement that Grant was a qualified CFIG/MG AND a Grob 109 was available for rent beneath us at Arlington! This was just too good to be true. Grant is a retired ATP with type certifications in most of Boeing's heavy metal with more hours in the left seat and ratings attached to his ticket than I knew possible. He was the kind of tenured, experienced instructor I wanted. On top of that, the Grob 109 was one ship I was dying to fly. Talk about a winning combination! Right then and there I resolved to pursue training the following spring.

During preparatory work with Grant before we began flight training, I learned a motor glider endorsement was just that…a logbook endorsement. The FAA does not issue a powered glider rating but rather publishes Advisory Circular 61-94 dated 7/31/84 that "provides recommendations, but is not the only means, that may be used by glider pilots who desire to transition into sailplanes or gliders with self-launch capability". For the sake of space, I have greatly abbreviated the information.

1.) Syllabus "A" for those pilots who possess at least a private pilot certificate with an airplane single-engine land rating AND a glider rating.
    a. Three dual takeoffs and three dual landings in a motor glider.
    b. A flight check given by a CFIG/MG.
    c. A logbook endorsement showing you have completed:
        i. Ground instruction including general operating and flight rules of FAR Part 91, familiarization, weights & balance and instruction pertinent the ship you will train in.
        ii. Flight instruction including engine operations, taxiing, performance limitations, emergency procedures, etc.

2.) Syllabus "B" for those pilots who possess at least a private pilot certificate with a glider rating only.
    a. Five hours of flight time in motor gliders, at least two hours of which were in solo flight.
    b. Ten takeoffs and ten landings in solo flight, including at least five landings with the engine shut down.
    c. A dual cross-country and a solo cross-country flight in a motor glider and an instructors endorsement in the pilot's log with a landing at a point more than 25 miles from the airport of first takeoff.
    d. A flight check given by a CFIG/MG.
    e. A logbook endorsement showing you have completed:
        i. Ground instruction including general operating and flight rules of FAR Part 91, familiarization, weights & balance and instruction
        ii. Flight instruction including engine operations, taxiing, performance limitations, emergency procedures, etc.

3.) A grandfather clause for those pilots who held at least a private pilot certificate with a glider rating and can show by logbook entry that he/she has had at least 5 hours of pilot-in-command experience in a motor glider before January 1, 1985.

For the complete text of the advisory circular in PDF format, please visit www.faa.gov, select 'Advisory Circulars' from the right hand column labeled 'Top Requests' and enter 61-94 into the search field.

I began soaring well after January 1, 1985, so I was not grandfathered in before the circular was issued. I do not hold a single-engine land rating, therefore, I would train under syllabus "B". To me the additional training required under syllabus "B" would not be a burden but a welcome excuse to do what I love to do. SOAR!

Advisory circular 61-94 explains why CFIG/MG's are in short supply. To be considered qualified to conduct training and issue an endorsement, a CFIG/MG is one "who holds commercial pilot privileges for single-engine land rating and a glider rating; holds a current FAA flight instructor certificate with a glider rating; and meets the requirements of syllabus "A" in this advisory circular'. Like I said, herds of CFIG/MG's aren't hanging out at glider ports looking for work!

First Training Session

Fast forward to Friday, May 12th, 2006. Grant and I were en route to AWO and the Grob 109 to begin my training. That day we were to complete the dual cross-country portion of syllabus "B". Our flight plan would cover approximately 70

nautical miles taking us from Arlington Municipal (AWO) to Renton Municipal Airport (RNT) via Jefferson County Airport (0S9) near Port Townsend on the Olympic Peninsula.

While I thumbed through the Grob manual struggling to commit Va, Vs, Vx and Vy to memory, Grant quizzed me with those thought provoking ground training questions good instructors like to ask their students. “Tom, you are running through your pre-landing check and your spoilers stick open or another situation like a deployed motor or a prop out of feather increases drag. You feel the need to stretch your glide to make the field. Would you fly faster or slower than the published L/D clean in order to obtain the best L/D for the dirty configuration?”

I quickly searched my memory and confidently replied, “Faster!” “No”, Grant replied, “You would fly slower. Spoilers or a deployed motor increase parasitic drag at a given airspeed reducing your best clean L/D ratio. Flying faster would reduce induced drag but dramatically increase parasitic drag given your dirty configuration.” I visualized a drag curve diagram and mentally shifted the lines around on the graph until it made sense. Dang, he was right! How did I miss that one?

We continued ground instruction at AWO and I had my first intimate exposure to a motorized aircraft equipped for IFR flight. After several hours of cockpit familiarization, weight and balance, engine operation, ground operation, emergency procedures, flight planning and a preflight inspection, we closed the canopy and prepared to depart. We carefully discussed possible land out sites taking into consideration that much of our flight would be over water, as well as some very congested areas at lower altitudes. The Grob’s 30:1 glide ratio would definitely be appreciated, should the need arise.

The heavier weather brewing, due to the infamous Puget Sound convergence zone, had broken during ground training. Scattered showers roamed the area with the wind at 300 degrees and a comfortable 6 knots, the ceiling still somewhat low at 2,000’ and with visibility at 20 miles. Our flight path would take us over some of the more scenic areas of the Sound and the weather was beginning to cooperate. I was definitely ready for this!

We ran the pre-start checklist and the Grob’s 80 hp Limbach fired to life as I pressed the first starter button I had ever seen in a glider. Next I began my first attempt at ground steering a tail dragger. The Grob’s Limbach engine rotates counter clockwise, meaning I would kick in a little left rudder rather than right to keep us straight. Everything I had ever read or heard about taxiing a tail dragger told me to sneak in some right rudder, not left. This combined with being a greenhorn, resulted in a comical first attempt and I wiggled my way like a drunken sailor along the taxiway towards runway 34. Stealing a sideways glance at Grant, I couldn’t tell if that smile on his face was just his good-natured personality showing or my entertaining tail waggling taxi. Following a full power engine check we announced our takeoff intentions to local traffic and rolled onto the runway. We gradually applied full power and started down the mile long runway. Assisted by a few corrective nudges from Grant, I pulled the tail wheel off the ground followed by the main gear and we were climbing away from the tarmac.

Our scenic route from Arlington to Jefferson would pass through the outer area of Whidbey Island NAS Class C airspace, skirt the R-6701 restricted area that lies just to the north and continue through Chinook A MOA and the Indian Island National Security Area. I don’t think Grant could have chosen a more challenging route for a transitioning glider pilot**.** Once airborne we contacted Whidbey approach and R-6701 was confirmed ‘cold’. This allowed us to fly a more direct route to the north carefully avoiding the Indian Island National Security Area (good idea!). Most of my flying in the Seattle area had been where there was relatively light air and radio traffic, so this leg provided a good introduction to ATC communications.

The flight across Puget Sound was wonderful. Between Grant’s in flight instruction covering radio operations and navigation and the absolutely beautiful scenery on the other side of the canopy, I was in heaven. All too soon we were descending towards Jefferson County airport. My approach and landing at Jefferson County, Grant advised, would be accomplished with the engine idling. I would be landing the aircraft as a glider without the benefit of having an engine I could use to fly around the pattern for another landing attempt. OK, no problem here. I was used to a no option, single approach landing. I negotiated the pattern and lined up for final. Almost immediately I understood the ground training caution about the power of the Grob’s spoilers. I mistakenly closed the spoilers just a tad as the two main wheels touched down and ground affect popped us back in the air. A little corrective input from Grant settled us back onto the asphalt and we came to a full stop.

After a post flight debriefing session, lunch and a talk with the locals, we departed Jefferson County for Renton Municipal. The convergence zone had fired up a strong rain shower to the south affecting a direct route to Renton. A slight diversion to the east along the shoreline of Bainbridge Island kept us in the clear. On this leg of the flight, like our previous leg, we would fly between 2,500 and 3,000 feet MSL to avoid the big guys flying into and out of Seattle’s class B airspace.

Before we entered Seattle's airspace we contacted approach and requested flight following to RNT. After a 'standby' and a delay of a few minutes, a discreet code was assigned and radar service was available while under Seattle's 3,000 foot floor until we were 5 NM north of Renton. Renton ATIS gave light winds directly down RW 33 and the tower controller requested a right downwind entry. Following a full stop landing we requested taxi to return to RW 33 for a quick touch and go before our time for the day ended. As we refueled and debriefed, I could scarcely contain my excitement; Grant informed me that I had successfully completed the dual cross-country portion of my training.

Second Training Session

On June 3rd, Grant and I met again at Arlington to work on takeoffs and landings. The forecast called for broken overcast with the ceiling at 5,500 feet, temperatures in the mid to high 60's with 5-7 knots from 280 degrees. Today would prove to be a veritable smorgasbord with several happy hours practicing stall landings and wheel landings.

It was fun and interesting working on stall landings. The normal approach and flare were familiar, however, working the stick all the way back and stalling the airplane just inches off of the runway before settling down on the gear, was a new experience for me.

The wheel landing was even more fun. Flying the Grob onto the runway with a normal approach, but under power, was also new concept to me. I learned that applying enough forward pressure on the stick to reach a zero or even slightly negative angle of attack would be helpful when landing in gusty conditions.

During the course of the day I learned how important it was to keep a tail dragger with long wings like the Grob straight during landing and take off. The thought of finding myself out in the grass along the side of the runway faster than I could say 'groundloop' kept me focused!

We spent several hours working on landings and touch and go's, then Grant pronounced me capable and asked if I felt like a change of scenery and another cross country flight. We turned the Grob's nose east towards the Cascade mountains and flew under power out towards Three Fingers mountain about 20 nautical miles east of Arlington looking for lift. After working up to about 6,500 feet under power, we found ourselves circling the old fire lookout perched atop the tallest of the three peaks or fingers. The raw rugged beauty of the area was stunning and I had neglected to bring my camera.

I shut off the engine and worked the weak lift in the area for a while. Later, Grant asked, "how much altitude do you think we need to safely glide back to Arlington?" Though we were down to 5,000 feet, I felt given the Grob's glide ratio we could easily cover the 20 nautical miles to Arlington. However, the Jim Creek Naval Radio Station antenna array lay between our destination and us. One of the world's most powerful transmitters, this million watt Navy radio antenna is composed of ten massive antenna cables, all more than a mile long, suspended by twenty 200 foot tall towers, spanning the Jim Creek valley. Not something I wanted to run into by accident.

"I'm thinking 6,000 feet would give us a good safety margin." I replied. Grant agreed and took this opportunity to demonstrate how to restart the engine without a starter, such as during a low battery condition, by nosing the Grob down long enough for the increase in airspeed to windmill up the unfeathered prop.
Thanks to some helpful lift along the way, we arrived back at Arlington with altitude to spare and lazed around in some late afternoon lift east of the airport, reviewing what we had covered in our two sessions together. All too soon it was time for me to perform my last engine off stall landing of the day on RW 34.

On the ground, we reviewed my progress to date:

- Logged over five and a half hours in the Grob, compared to the recommended five
- Completed twelve landings, over half of them power off, compared to the recommended ten
- Completed three cross-country flights, one with a landing point farther than the 25 miles recommended
- Completed the necessary ground training and pre-flight instruction
- Logged three of my hours as PIC in lieu of solo time, with along Grant enjoying the ride

The training had been completed, with slight deviation, per AC 61-94.

Grant announced I had earned my motor glider endorsement. I was overwhelmed with a sense of accomplishment and pride similar to when I completed my FAA check ride for my private ticket. This had truly been a rewarding and pleasurable experience. It provided me with a learning opportunity that combined both the powered and unpowered realms of flight, exposed me to operations in controlled and congested airspaces, and put a big smile on my face to boot.

An interesting view on the future price of gliders

from the DG website

The latest developments in prices for glider manufacturers

I really understand your reactions only too well. In fact I can practically hear you groan at the sight of the latest prices of new gliders made in Germany. The least I can do, I feel, is give you some background information on current developments and how these affect our prices.

Can you imagine that your glider gets more expensive because Airbus is developing the A380? And that things will really start getting bad once the Boeing 787 goes into production? Unfortunately that's exactly what's going on.

In spring 2006, our epoxy resin supplier confronted us with a price increase of 25%. We pulled out all the stops and still only managed to knock him down to "a mere" 18%, no further. The reason given? Well, raw material prices, of course. Especially oil prices, as oil is the feedstock. However, more important is the worldwide shortage of essential materials as a result of the terrific increase in demand from EADS for the new Airbus. There is more aviation-grade resin built into just one of those aircraft than we use up in an entire year!

This September, things really became critical:

There is no more carbon fibre fabric available, not of any sort. And again, it is Airbus who are buying up all the roving supplies worldwide, the material the fabric is made of. Most of the carbon fibre comes from Japan, and Japan has virtually exhausted all its production capacities. One shipment has just arrived in Europe, and the yarn is now being woven into fabric everywhere so that we will receive some in a few days' time. However, we will only get a part of the quantity ordered, just as in times of food rationing.

That is why, a few days ago, our wing building department was forced to down tools.
Faced with simultaneous price increases of 15% now and 50% in a few months time, and the current shortages, we have our backs to the wall, as you will understand.

The question is, what will happen first: Will more production capacities come on stream first, or will the A380 go into production first? That will determine whether we will be able to lay our hands on enough raw materials in the coming 12 months.

And when Boeing's "Dreamliner", the 787, is ready we will be faced with the next lot of problems, because that aircraft contains even more carbon components than the A380. The situation is a very very serious one, and we have no idea how it will develop! What did we therefore have to do once again on 1st October in order to cover our costs?

You guessed it .....

Brian Utley
Heads off to Parowan
Will <u>YOU</u> be there next year?

ASA Membership Report

Brian Utley - Membership Director

In the beginning (1988) there was Pete Williams and a few visionaries who believed that there was a place in the sun for motorgliders no matter what the purists had to say. Pete and Bruce Townsend put together the organization, bylaws and legal paperwork and the organization was off and running. Pete, as President and his dear wife Charmagne managed the bookkeeping, newsletter, promotion and whatever else that needed to be attended to.

I joined in 1992 and at the 1993 SSA convention offered to take care of the membership records. Pete breathed a sigh of relief and handed me two very large volumes of membership records. Task one was to translate all the paperwork into computer records and create the software for the processing of membership activity. Now the ASA has grown to 387 active members and 44 business members. Ninety three have been members at least 10 years, 18 of them joined in the founding year. Our international membership spans the globe and we enjoy a close relationship with the major sailplane manufacturers in Europe. This year 46 pilots decided to join the ASA, the largest growth in a single year.

This growth of the ASA and motorgliding is important for the Soaring Society of America because the ASA, as a division of the SSA is helping to offset the decline in overall SSA membership.

The importance of the ASA to the SSA was highlighted when the FAA proposed to regulate motor glider pilots as a separate category of rating. We convinced both the SSA and the FAA to treat powered gliders as principally a launch enabling variation that should be treated in the same way as other types of launch. By this principal glider pilots could be MG qualified by a log book endorsement. Slowly, over time, the SSA gliding competition rules have also adapted to the same principal.

According to our records there are 220 motorgliders owned or on order by our members.

Aeromot -	Ximango	11
Aerotechnic	Vivat	3
Alisport	Silent	4
AMS	Carat	8
Antares		2
DG		
	DG 400	26
	DG 500M	5
	DG 800	20
	DG 808	10
Diamond	Xtreme	7
Dimona	H36	1
Fournier	RF 4D,5D	2
Frigata	J-6	1
Grob		
	103	4
	109	8
PIK		
	20E	8
	30	1
Russia	AC-5M	16
Scheibe		
	SF 25B	1
	Super Falke "E"	1
Schempp Hirth		
	Discus T	3
	Duo Discus T	1
	Nimbus 2 (mod)	1
	Nimbus 3DM	1
	Nimbus 4DM	1
	Nimbus 4M	1
	Ventus 2CM	9
	Ventus 2CT	1
	Ventus BT	4
	Ventus CM	4
	Ventus CT	2
Schleicher		
	ASK 14	1
	ASH 25E	2
	ASH 26E	21
	ASW 22BLE	2
Stemme		
	S10(V)	7
	S10VT	15
Strojnik	SA-2A	1
Taifun	17E	8
Test	Alpine	1
Windex	1200C	1

Soaring Update from Brazil
Thomas Milko reports:

Hello Gary,

Attached once more, the pics, unfortunately both 18m gliders were part of a larger photo, which properly edited had very nice results for electronic midia perhaps not for a printed midia.

Have few other interesting which were uploaded, you may see them at: http://www.guardatudo.com.br/nimbus/luziania2006/fotos2/ http://www.guardatudo.com.br/nimbus/luziania2006/fotos1/

The Ventus photo was taken by me at a final glide, at Luziânia (GO), which is aproximately 50km south of Brazil's capital, Brasilia. There are about 25 gliders stationed at the 2 Gliding Clubs that are near Brasilia, in the North Formosa, which has far more gliders than Luziânia in the south.

Conditions in that region are very good, with cloudbase often going above 2000m agl due to the dry conditions specially at the end of the Winter and Spring, July to September. Although days are short, they can be strong, maybe compared to some dry areas in the US.

The DG800b photo was taken by Pepe, a Spanish pilot flying as a copilot in a Nimbus 3D during the same contest which was run in the first week of September.

All the photos in the attached links were taken in this area. If you feel interesting selecting a few pictures, and need some stories for them, let me know. We had Ventus2C, DG800b, S10, Nimbus4DM as motorgliders, the other gliders were all pure saiplanes, including a Brazilian made biplace glider (called P1), that has an eliptical wing, which was constructed using a consortia of 80 pilots which helped to make this happen. We still need to build the second one to obtain certification, for a future possible production.

Corralling a Carat

Oliver Dyer-Bennet - AMS-USA

A new Carat motorglider was fast approaching the west coast of the United States. It was time to swing in to action and to Corral a Carat from the docks.

The first thing was arranging the custom clearance procedures. Having imported more than 200 gliders, and close to twenty Carats, we have found that a good import broker is worth his weight in salt. Marlowe, a former Barringer distance trophy winner, was our man. This process was initiated by telephone and fax and included both the invoices for the Carat and for the Cobra.

We had an ETA for the RO/RO ships arrival, and from that we could estimate the actual time the Carat in Cobra would be likely to clear customs and be ready to pick up.

Now it was time to arrange the tow vehicle, larger is usually better. Check the tire pressures; the maximum trailer towing pressure is best. Pick out the correct tow hitch. From the ground to the top of the ball, around 18 inches works best, on the Carat/Cobra trailer. Remember to check that the hitch, ball anchoring nut is secure, as we have found a few loose ones over the years.

A review of the wiring connectors, car to trailer should be done. Cobra supplies a good wiring diagram which is helpful. A spare safety chain, about 4 feet long, with quick connects using barrel nuts, at both ends, is added to the list of supplies. Also have a good selection of tools, metric and plenty of them. They should include open and box wrenches, screw drivers cross & flat, pliers wide jaw and electrical, volt meter, some spare wire, duct and electrical tape and a good flashlight.

Since the trailer will not be licensed, a one way moving permit from the DMV is a good idea, before the Cobra hits the streets.

By now good news was coming in from our import broker so it was time to lash down our supplies and head south to corral our doggie. The trip from the Napa Valley to Port Hueneme was going to be about 500 miles and we devoted a full day to this. After making camp at a motel near the docks we made ready for the next days excitement.

By seven the next morning we were in front of the shipping office, Wallenius Wilhelmsen, ready to pay the shipping fees and to get the final release paper work. W & W actually opens at eight am, but we were chomping at the bit. Then it was off to the docks, through the security gate, and to the yard office for some more paper work.

Finally we were cleared to head out to the storage yard and to pickup our Carat & Cobra trailer. As we approached the Cobra we began to visually inspect the Cobra for any outside shipping damage. A careful walk around revealed everything was okay. We than opened the trailer and checked out the inside for shipping damage. Once again, A-Okay.

Now it was time to hook up the trailer to the tow vehicle, check out the lighting, and attach the safety chain and make sure that the trailer brake was off and

the trailer lids were locked. It's also a good idea to either remove the front trailer jack, or to make sure it fully retracted and secure.

After another careful walk around we drove out to the security gate, checked out and drove about a mile down the road, hopped out and double checked everything, including the trailer brakes.

It was time to head north back to the Napa Valley. Keeping the speed down, trailers are limited to 55 mph, we settled in for a long, leisurely, but careful, drive home.

The first few miles are a good time to get a feel for how the rig handles and tows. Things to watch for when towing a long trailer include, cross winds, giving yourself plenty of room when making turns and plenty of clearance from the vehicles in front of you. There is no reason to push this drive. There is about

$200,000 worth of rig, under your helm and when one becomes tired its time to take a rest.

After a nice drive up the central valley of California, we arrived at our home in the Napa Valley and parked the rig in front of our shop.

Tomorrow we would open up the Cobra and deplane the Carat for our first good look at the latest sailplane from AMS Flight. We could hardly wait for the morning sun to come up.

Oliver Dyer-Bennet

ASA Mission

The Auxiliary-powered Sailplane Association, Inc. was founded in 1988 as a non-profit organization to encourage the design, development and safe us 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.

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EDITOR NEEDS HELP

Thanks to Brian Utley, Oliver Dyer-Bennet, Thomas Milko, Tom Graham 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.