APS NEWS

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Landing on perpendicular grass runway which involves an uphill landing and a downhill rollout to the active hard surface runway. Note the FLARM on top of the instrument panel. This collision avoidance system is peculiar to European gliders and tugs. Photo by Ray Konrath.

In this Issue:
Do you have 'THE SPOT'?
Safety Column
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Cruising the California Coast - Carat style
Schleicher Factory Tour
Parowan 2008

NEWS FLASH

Hot off of the Digital Presses
Self- Launch Retractable Engine Sailplanes
Pete Williams definitive book on SMG's
is now available on DVD with bonus features

President's Corner

President's Corner

I wish I had a better Christmas greeting, but I have been spending the last few weeks following the writings of Tim and Susan McAllister. I was very upset when I heard that Herbert Weiss had lost his life at the World GP Soaring Championships in Omarama. Please go to Tim's blog: www.echoyankee.com

Tim is a very good writer and I thank him for sharing his thoughts with us.

Our sport has indescribable beauty and great challenges, but sometimes tragedy......Tim points this out very well.

Before leaving home on our Christmas trip I was going to remove the cover from our chimney. My wife, Pat, told me it was not necessary. I think she already told Santa not to bring the new glider into the house. I'll probably find it in the driveway in the new trailer when we return home.

ASA members please include the Weiss family in you prayers.

Rick "FD" Howell



EDITOR WANTED for SOARING MAGAZINE

The Soaring Society of America is accepting applications for the Editor of SOARING.

We are seeking a person with strong editorial skills and experience to lead our magazine and electronic media to new heights!

This is an "off-site" position which does not require re-location to Hobbs.

Please submit letter of interest and resume to denise@ssa.org

SAFETY COLUMN

Oliver Dyer-Bennet, CFI/CFIG Safety Director ASA

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

In today's safety column we will continue with the information from the Soaring Safety Foundation, safety advisory 00-1. Glider Assembly Procedures, information from the Carat flight manual, and what we have learned over the



years of flight instruction and working in our shop, on gliders.

In past columns we have looked at the reasons for incidents and accidents with gliders. We also looked at good assembly procedures for our beloved gliders.

In today's column we will look at what makes up a good preflight and positive control check.

After checking off the mechanical assembly items that take your glider from a hanger queen to a soaring eagle, a good pre-flight is next on the agenda

When instructing power or glider students, I like to start at the front of the aircraft and walk around in a counterclockwise direction. After all, most glider pilots like to thermal to the left.

Using the Carat owner's flight manual for a guide, under section 4.3, daily inspection;

- "A pre-flight inspection must be carried out after rigging and before the first flight of the day. This inspection takes the form of a walk-around and the following sequence should be adhered to..."
- 1. Starting at the front of the aircraft, check the propeller blades for damage. Ensure that the blades fold out symmetrically, by grasping the tip of a blade and moving it outwards. Check oil level, minimum, lower mark, maximum upper mark.
- 2. Check left front fuselage. Check left tire and LDG, visually check the engine compartment through the landing gear opening.
- 3. Check the left wing and left wing movable flight controls. Also include the spoiler box.
- 4. Check the left wing tip or spoiler, locking pin must be in

place.

In the case of the Carat there are a total of sixteen steps to follow in the pre-flight inspection, before you end up back at the front of the glider.

After the pilot is happy with the pre-flight inspection, a good positive control check, is next up...

The positive control check is best done with two people, the pilot at the cockpit controls, and the helper at the "flippers".

In the case of the aileron, the helper can place his hands together at the back of the palms, create a "V", with the fingers apart, and cup the top and the bottom surface of the aileron, near the pushrod drive point. The flats of the hands will protect the delicate surface structure of the movable "flippers", and prevent finger dents into the, lightly constructed for mass balance, surfaces.

The helper than locks the "flipper", with his cupped hands, and the pilot tries to gently jiggle the cockpit flight control, back and forth, against the fixed "flipper". If everything is good from the cockpit out....., the procedure is reversed. The pilot locks the flight control with his hand, and the helper gently jiggles the "flipper", against the fixed flight control.

The key operating word here is, "gentle". We are not trying to force, or bend things. We are checking to see that the flight controls are connected and secured properly, and safe for flight.

Again, if everything is good, the helper gently lets go of the "flipper" and than the pilot takes the flight control handle through its full range of motion. This full range of motion is best done with the spoiler down and locked, and then with the spoiler fully extended, to check for possible flight control interference.

Speaking of the spoiler, the check is a little different. The helper needs to firmly wrap his mitts around the top of the spoilers spring loaded, composite top plate, and grasp the metal spoiler plate itself.

Both hands and a firm grasp are necessary for this. Then the jiggling procedure is repeated in both, cockpit to spoiler and spoiler to cockpit, directions.

If everything is okay, the helper, gently let's go of the spoiler and yells, "clear", then the pilot, who is holding the spoiler open, gently closes the spoiler.

This will save catching the helpers "digits" under the lip of the spoiler, and an expensive steak dinner, with numerous rounds of beer, to keep the helper a happy camper.

In a future issue of the APS News, we sill go into pre-takeoff procedures for our self-launchers and high performance sailplanes.



TECH TALK

by Gary Evans

VIRTUAL FLIGHT

Last issue the column featured the new flight simulator built into Goggle Earth. To fill in the remainder of your winter break this issue will introduce you the newest and hottest thing to come along in virtual flight.

Hobbyists have mated radio-controlled aircraft with video cameras to put the pilot into the cockpit for never before seen flying action. The new sport is called FPV (First Person View) or Video Piloting.



On the aircraft end a tiny video camera looks forward and sends the signal to an on-board transmitter shown behind the camera with the antenna.

This plane is electric and the device mounted behind the transmitter is an electronic speed controller for the motor.

On the pilot end we have a video receiver antenna. The one shown on the top of the tripod is an 8dBi patch antenna and right below the antenna is the video receiver.



From the receiver the signal is sent to a pair of video goggles worn by the pilot.



The pilot flies the plane using a standard RC transmitter.



Here is a link to some in flight video to give you an idea of the feeling. The one titled "High Enough" is a good one.

http://www.vimeo.com/414571

The equipment used, weather and the terrain determine the range on these systems. Distances up to 5 miles are possible now and testing of new electronics may increase the range way beyond this.

If you want to pursue this sport you will need to first establish a hidden checking account to keep your spouse happy.

Carat Cruising the California Coast

by Olive Dyer Bennet

The plans and preparation for the Carat 1,000 km sailplane flight were well under way, although we were to acheive the 750k flight, at Minden, first.

But now it was time to take a break and enjoy the another side of the Carat.

A Carat cruise up the northern coast of California to near the Oregon border sounded like a good idea.

Throwing camping gear into the back of the Carat, we took off from the Sonoma Skypark airport, in the Bay Area. We set up a course line to the Russian River, near Santa Rosa, and followed the river out to the mighty, and majestic, Pacific ocean.

Where the Russian river meets the ocean, we turned right, dropped down to 800 ft msl, and began to follow the coast line north towards Oregon.

Soon we were crusing along the Mendocino coast looking for whales, and Great Whites, in the Pacific ocean.

Fort Ross, Sea Ranch, Gualala, Point Arena, Albion, Mendocino, Fort Bragg, slipped beneath our wings in serene comfort. Up ahead highway 1, the coastal highway, turned inland and we entered into the remote, "Lost Coast", region of California.

Some years before we had backpacked into the Lost Coast wilderness region and it had taken a week to do the fulllength of the coastal trail. Now the Lost Coast slipped beneath our wings in 10 minutes, and the view was magnificent.

Up ahead was the Shelter Cove airport, jutting out into the ocean. A quick check for other aircraft, into the pattern, a "smooth as a babys bottom", touch down, taxi to the tie down spot and out with the camping gear.

Of course we had no intention of eating beans over a camp stove, so off we went to the nice restaurant at the end of the Shelter Cove runway. The seafood dinner was delicious.

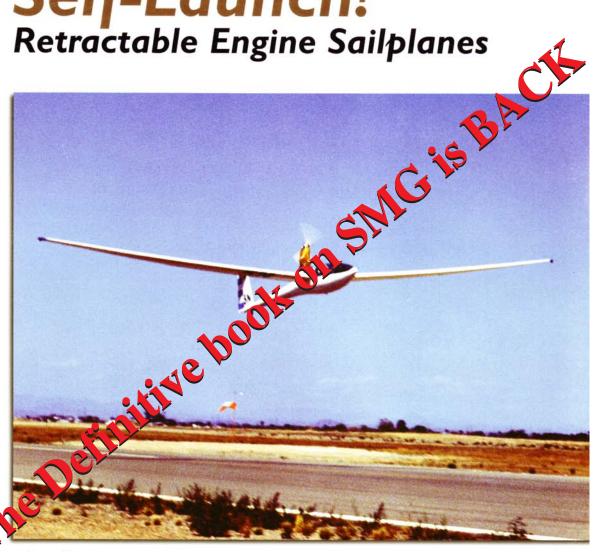


The flight was a fantastic hour and twenty minutes, maybe 3.5 gallons of fuel. Driving would have been on the order of seven hours and 25 gallons of fuel. Shelter Cove is in a beautiful, but very remote area of Northern California.

The next morning, it was, "up and at em", again. Camping gear stowed in the back of the Carat, we blasted off and headed north along the coastal bluffs, and ocean waves, at about 600 ft msl. A very remote area mostly inhabited by seals, pelicans, a few hardy cold water surfers and kayakers,and one Cessna 180 parked on a beach below the bluffs, just above the high tide line.

What was that Cessna doing down there???..... was the pilot, fishing, camping, cold water surfing, had he run out of gas,....,or what?

Self-Launch!Retractable Engine Sailplanes



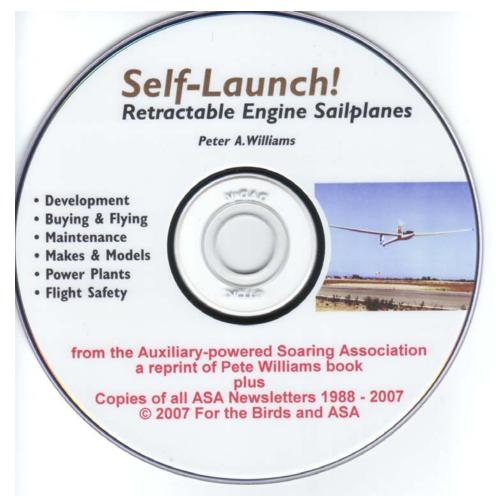
- Development
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Peter A. Williams

Foreword by Donald D. Engen, Current Director, Smithsonian Institution National Air and Space Museum

Yes it's TRUE !!

ASA with permission of Charm Williams is re-publishing Pete Williams definitive book on Self Launch Motor Gliders.



This DVD has the complete book, cover to cover, as well as an addred bonus of every ASA newsletter ever printed through the fall of 2007.

You can get your copy for only \$14.95 + \$4.05 in postage/handling by sending a check to:

ASA - Pete Williams DVD c/o Eric Greenwell 222 Thayer Dr Richland, WA 99352

We will also have copies available for purchase at the Soaring Convention.

Heading north we flew around the point of Cape Mendocino. The cape is famous for its rough and dangerous sailing conditions. Many sailing ships have been lost here. We orbited the old Cape Mendocino light house a few times, took a couple of pictures and than turned south and took up a bee line for home.

Cruising at 5,500 ft. msl we arrived at the Sonoma Skypark airport in no time at all, 1.5 hrs. We entered the pattern, gear down, and made a sweet landing, followed by a nice easy taxi to the tie down area.



Now it was time to rub down the Carat, and get ready to swap lies and eat burgers, with the weekend power pilots at the Skypark aerodrome.

A wonderful adventure.

Add this to your checklist: "SPOT – turn on"

by Eric Greenwell

Motorglider pilots, compared to towed pilots, are more likely to fly alone – no crew at the airport, no other gliders in the air. This means it's less likely someone will know if, and where, they get into trouble.

Sure, cell phones can help (if you have a signal), and a personal locator beacon (PLB) might get search and rescue started. An ELT's automatic activation in a crash might bring help – or maybe not. The older units won't be monitored in a year or so, and the new ones are still expensive (~\$1000 or so) and not many people have them installed

And what if you just want to assure someone that you're OK, even if you are a couple hundred miles away, so they don't have to wait for 5,6, 7 hours until you return to know that? And if you don't return, then what? Cell phones are not reliable in the air, you're too far away to use the radio, and activating the PLB or ELT isn't an option that says "I'm OK".



But now we can be SPOTted! The SPOT Satellite Messenger, a self-contained, battery operated device about the size of a thick PDA, uses GPS to determine it's position, and the one of the low-earth orbiting satellite phone systems to transmit that location. There are

four types of messaging available with a button press:

"Alert" for critical emergencies: the alert, with your coordinates and contact information (name, etc), is sent to a dispatch service that notifies emergency services of your exact location. Unlike an ELT, which can activate automatically in a crash, you do have to push a button on SPOT to notify this service.

"Help" request to your friends and family: Sends a request for help and your coordinates to a customized list of recipients via SMS (text messaging) and/or email. A "retrieve me" button for glider pilots!

"Check in" with your friends and family: notifies your contact list of your location.

"Tracking" your locations: your location is sent every 10 minutes to Spot, Inc., where it's process so it will be displayed on a Google map that can be viewed by your contacts. This sounds like great feature that should be turned on during the pre-flight! Your spouse or friends can follow your flight, and as long as the track keeps growing, you're OK. If you crash, the track won't continue, and you'll be no farther than 10 minutes (less than a 10 mile radius most of the time) from your last track location. That's a relatively small area by search and rescue standards.

I plan to get a SPOT when the season starts in March. Some glider pilots have theirs already. I wish I'd had this on my trip to Alaska!

The SPOT device costs \$150. The message service (Alert, Help, Check in) is \$100/year, and Tracking is an additional \$50/year. For the details, visit their website at www.findmespot.com. You can buy online or go to a local sporting goods store. As you likely guessed, there are far more hunters, fisherman, hikers, bikers, ..., airplane pilots, skiers, and others that are snapping it up, compared to glider pilots!

Happenings at the Schleicher Factory by Ray Konrath

I recently was in Germany to inspect a Schleicher ASK-21 my club is interested in purchasing. Stopped at the Wasserkuppe and had a complete tour of the nearby Schleicher factory (I currently own an ASW-24.)

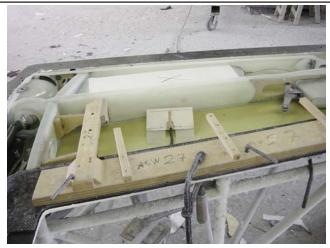
Attached are photos of a flight I made in an almost new DuoDiscus XT at the Wasserkuppe.



Wing Lay-up



Aerial view of Wasserkuppe from DuoDiscus XT



Experimental TXPD Ant in Vert



Engine Assembly Room



Wankel Engine Assembly

ASA FLY-IN at PAROWAN

10 - 20 June 2008

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 and Camping spaces are available 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

Region 9 Contest (6/21-6/28) (good info on siteseeing and accommodations: http:// parowan.soaringweb.net

Parowan 2007 photos by Diane Taylor



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.

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

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RF5B For Sale

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

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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>



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EDITOR NEEDS HELP

Thanks to Ray Konrath, Diane Taylor, Oliver Dyer-Bennet, Eric Greenwell 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.

