

# Radio Controlled Soaring Digest

November 2004 — Vol. 21, No. 11



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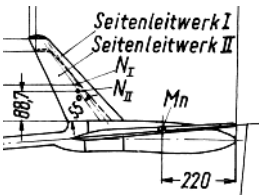
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## About RCSD

R/C Soaring Digest (RCSD) is a reader-written monthly publication for the R/C sailplane enthusiast and has been published since January 1984. It is dedicated to sharing technical and educational information. All material contributed must be exclusive and original and not infringe upon the copyrights of others. It is the policy of RCSD to provide accurate information. Please let us know of any error that significantly affects the meaning of a story. Because we encourage new ideas, the content of all articles are the opinion of the author and may not necessarily reflect those of RCSD. We encourage anyone who wishes to obtain additional information to contact the author.

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# In the Air!

This issue is an exciting one for the *RC Soaring Digest* Team.

As you can see, we've changed the magazine format in a couple of significant ways. The page orientation has been rotated so the magazine better fits computer monitor screens, but pages can still be printed on standard US letter size paper. And *RCSD* has a new letterhead/logo! Tremendous thanks to Gregory Vasgerdsian for working on this project.

While feedback from a couple of "test" readers has been very positive, we'd like to hear your thoughts on the new look and more open feel.

Our cover photo for this month comes courtesy of Dave Beardsley, a fellow member of the Seattle Area Soaring Society and expert photographer. Dave, Ed Lockhart (another expert photographer) and Bill discussed photography for *RCSD* at the Visalia Fall Festival the first weekend in October. Dave generously shared his phenomenal Nikon digital camera and exceptional telephoto lenses so the two day event could be recorded via digital images, and readers can see some of the 2004 CVRC Fall Fest photos beginning on the next page. More Visalia 2004 photos will be appearing in future issues!

*RCSD* has not accepted advertising for some time, so it may come as a surprise to readers to see what appears to be an advertisement on the rear cover. Paul Naton contacted us a few weeks ago and explained he and Bob Breau had created an RC soaring calendar which depicted various RC sailplanes in flight. This was an idea which piqued our interest, but Paul's concept goes further. A generous portion of the proceeds from the sale of these calendars will be going to United States soaring teams! If the calendars sell out, \$5,000 will be going to future youth and adult teams participating in F3B and F3J international events. As long term supporters of U.S. RC soaring teams, we thought it only proper to donate some space in this issue toward a promotion of Paul's idea.

Until next month, "Good soaring!"



# Central Valley RC 31st Annual Fall Soaring Festival Visalia, California October 2nd and 3rd, 2004



A small portion of "tent city" and some of the entered sailplanes.

After several bouts of gentle pestering from fellow SASS members, I decided to experience Visalia — not compete mind you, just experience.

The CVRC field is huge and nearly entirely bordered by cotton fields. There's a large steel roofed structure near the center of the field which serves as the transmitter impound area and event coordination center. The south portion of the field consists of mowed grass which is used as an aerotowing strip, while the north portion is devoted to winch launching. Winch lines stretch out something like 1100 feet, and there's a sufficiently large grassed area set aside as a landing zone.

CVRC limits the number of Fall Fest entries to 325, and this year the flight groups ran from A through EE. During the two day event there were something like 2500 launches from the four club winches. With the exception of a single scoring error in the top ten, everything ran efficiently and smoothly for the entire weekend.

Entrants this year included several world class pilots, but the most spectacular performance of the Fall Festival was turned in on Saturday by teenager Robin McGowan. Robin launched her lightweight glider for a seven minute task and followed a booming thermal way down wind. While many considered the plane a flyaway, Robin brought it back to the field, safely landed in a grassy area, and made the task time exactly on the mark. Incredible!

The Fall Soaring Festival is a full weekend of competition, and also of socialization with others who share a love for RC soaring. Yes, I'm going next year. This time I'll be taking an airplane or two (tailless of course) and competing. Add the first weekend in October to your calendar, too!

Bill Kuhlman

*R/C Soaring Digest*





Right on the spot! Thursday and Friday before the contest saw a lot of pilots taking advantage of the time to practice landings.





Tor Burkhart of the Seattle Area Soaring Society launches his Unlimited Class sailplane. Line was about 50% longer than Tor's used to using.





Energy management is extremely important, particularly during landing. And this is especially true when landing points can determine the winner, as is the case at the Fall Festival. Daryl Perkins nearly overshoots the bull's-eye in this sequence of photos.

This year's event used a rather unique landing task based on a very short "runway." Landing in the center square of the runway

garnered 25 points, the outer areas 15 points. The interesting twist involved the two rectangles directly bordering the center square. These were worth just ten points.

This meant that if you landed on the target, you got 25 points, but if you landed slightly ahead of or behind the target you collected only ten points. What a letdown! If you hit either end of the runway you got 15 points.

This wasn't as exciting as the downwind landings of years past, but was a point of minor aggravation for some pilots who couldn't quite nail the spot. There were a lot of ten point landings turned in.

Notice the horizontal stabilizer in the last frame. The camera captured the image just as the tail hit the ground and the stabs are bent downward from the inertia.



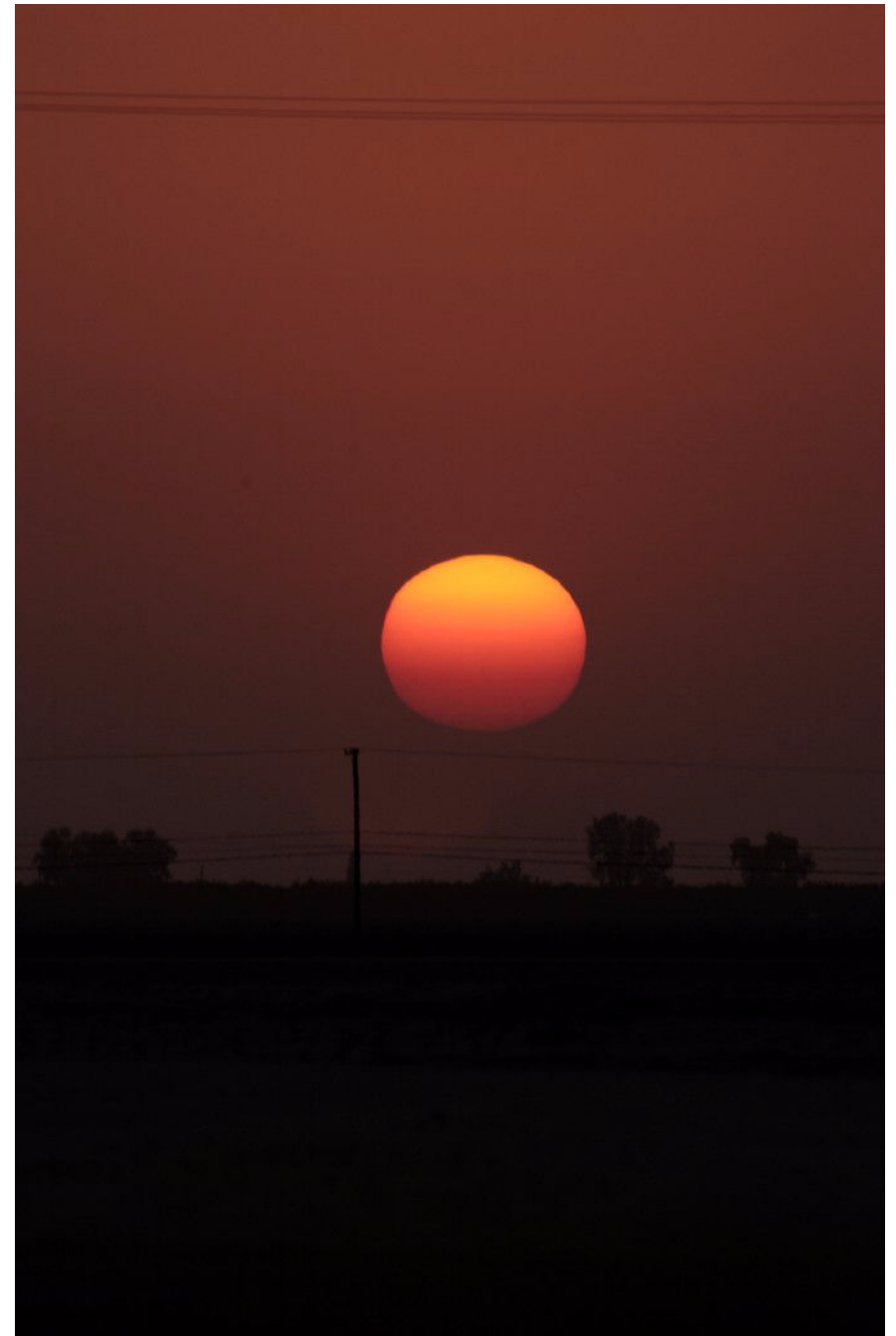
Flaps down and still moving fast, Daryl Perkins brings his Insanity 3.7 around the final turn and toward a landing.





Above: A couple of sleek sailplanes during their landing approaches. Skeds allowed, but some were so effective the aircraft bounced backwards quite a distance after touching down.

Right: A beautiful CVRC Fall Festival sunset.





ABOVE: Terry Dwyer with DAW FoAME-109, Rich Loud (caller) holds Jim's (pilot) LEG F6Hellcat, and Jack Cooper raises his LEG P-63 Kingcobra for identification by far turn workers before the start of a heat in the Foamie Warbird Race during the 2004 Midwest Slope Challenge.

LEFT: The Hellcat is a wonderfully stable, yet agile slope sailplane. It's a joy to fly.



# Leading Edge Gliders

## F6F Hellcat

a kit review by Jim Harrington

I knew this would be a fun project as soon as I opened the box and saw the quality of materials. The quality of the wood and foam was excellent and most of the required hardware was included with the kit. Cost is \$79.95 at <http://www.leadingedgegliders.com>.

For a radio I chose the Airtronics VG6000 although any aircraft radio would work. If the Hellcat is built with three servos (one for each aileron and one for the elevator) as the instructions specify you will need a Y cable to connect the two aileron servos. The instructions start off with very clear and detailed steps, however later steps require some prior foamie experience or a friend to help. The Hellcat took longer to build than some other foam planes, but the good looks and high durability that results is well worth it.

One of the more challenging and scary steps for me was carving the fuselage. Unlike other more box-like foamie planes I have built, this one requires a lot of material to be removed to result in its scale looking shape. The templates provide an easy way to accomplish this and once it started to take shape the rest was easy. I found that starting in the front and working back on one side and then the other worked well for me. Most of the material was removed using coarse sanding block.

The Hellcat uses a fuselage made from four layers of EPP glued together at the factory. This allows for internal carbon fiber tubing for strength and keeps controls and radio gear out of harms way. While there is lots of room for radio gear, the layout can be a bit tricky and I had to carefully locate my big receiver.



Jim selected a bright target tow paint scheme for this project, as shown in the Squadron/Signal "F6F Hellcat in Action" book, to make it easier to see the plane, especially in a warbird race or combat furball. We know from experience that "camo works."



Here Jim puts in some practice laps with his Hellcat, finished in target-tow paint scheme.

For covering I used white Solartex which was primed and painted. This looked great to start with but the paint started to flake off almost before I got to the field. If I had it to do over again I

would either use Solartex closer in color to the final paint or use Ultracote and trade initial appearance for higher durability.

Flight testing was done at Wilson Lake, Kansas in the week leading

up to MWSC 2004. Being an intermediate flyer I wanted to get in all the practice I could before the event and the Hellcat quickly became the plane of choice. It flies fast and smooth and is very

easy to control. It is great at aerobatics and never stalls unexpectedly. Its ruggedness and ability to take “hard landings” means it will be one of my favorites for a long time to come.



# Have Sailplane, Will Travel

by Tom Nagel  
<tomnagel@iwaynet.net>

## SLOPE SCOUTING ON THE INTERNET — Part Deux (Or) The Omni-Slope

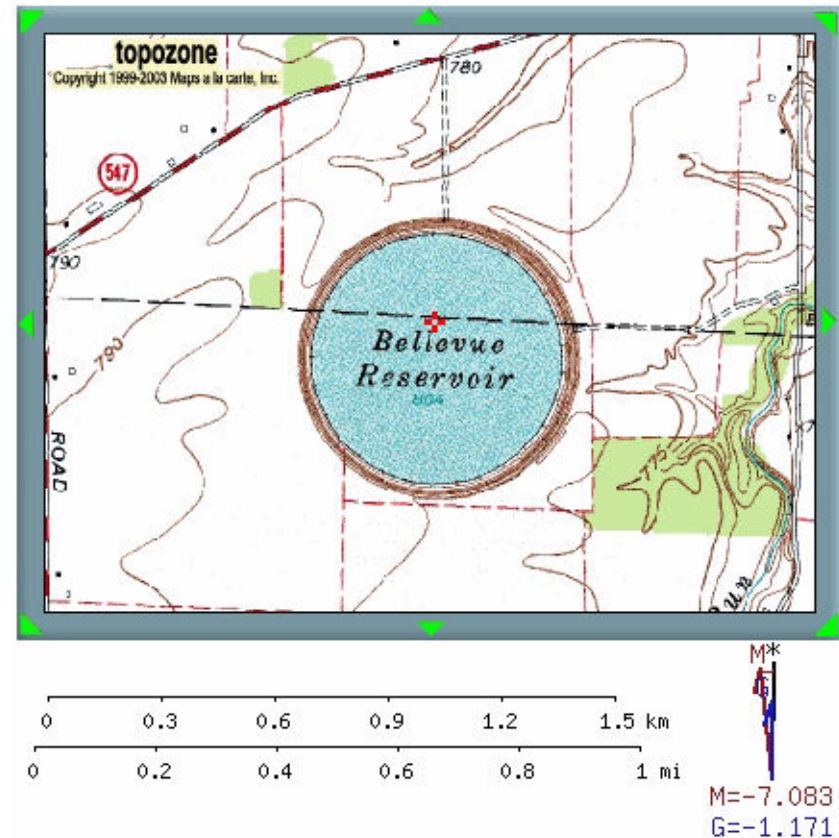
I was scrolling around on Topozone.com looking at the map of northern Ohio. It had nothing to do with flying. I was doing some research for an article on our family history. And all of a sudden, there it was, this little blue circle on the map at 1:250,000 scale.

I had to stop and scroll back, and then zoom in to see what this perfectly circular little dot was. At 1:24,000 magnification the name and nature of the beast were both revealed. It was the Bellevue Reservoir, in Seneca County Ohio, a clearly man-made lake four tenths of a mile wide, an up-ground reservoir with the top of its dike sitting some 35 or 40 feet above the dead flat bean fields of northern Ohio.

Now 35 or 40 feet is not much of a slope. But in northern Ohio,

where the last glacier shaved off anything taller than a groundhog, it is a major piece of topography. With nothing upwind to create turbulence, a 35 or 40 foot slope should be quite flyable. What's more, it sat only a couple of miles off to the east of the route that the family drives back and forth to the cottage on Lake Erie. This could be my long-sought-after norther Ohio flying site, only a few miles from the family cottage!

I jumped to the Ohio Department of Natural Resources web site and looked at Ohio lakes. Bellevue Reservoir was listed as a public fishing site. If you could fish, you could fly fish, and therefore you could fly—at least that was my reasoning. Jim Thomas used to call thermal flying “three dimensional fly fishing,” didn't he?



Topozone.com map of Bellevue Reservoir



LEFT: Take note of landmarks for site entrance. RIGHT: The highest slope site in North Central Ohio looms in the distance.

Labor Day weekend found the family headed up to the lake. I had some lawyerly duties to complete on Friday afternoon. Nancy and the kid would go on ahead, and I would follow a few hours later with the van, the dogs, a new bed for the cottage, and of course, a slope sailplane.

My thought was that since Bellevue Reservoir was perfectly circular, it should be flyable no matter which way the wind was blowing. It could be the Omni Slope, a sort of miniature Lake Wilson. I had the transmitter on charge and the township map book on the seat next to me as I

drove north on Ohio Route 4. I turned right on Ohio Route 547, and started looking for a slope, or at least a sign indicating Bellevue Reservoir. What I found was corn and bean fields. I slowed down and turned back and took a careful second look. There it was, a sort of nondescript low ridge out in the middle of farm fields. There was no sign. There was just an un-marked gravel lane leading off into the distance. I turned down the gravel lane.

As you can see from the pictures, there is absolutely nothing to mark the site, and from the road, the dike around the reservoir

almost disappears. There are a few trees encroaching on the dike, but in most wind directions there is nothing but flat fields out front.

About a half mile later, the lane opened onto a nice graveled parking lot. Heavy iron gates barred the way up to the top of the dike as well as the road that ran outside the perimeter. I cracked the front windows so the dogs would have some air and grabbed my Boomerang and headed up the hill. The dogs appropriated my driver's seat and started canine yodeling as I went

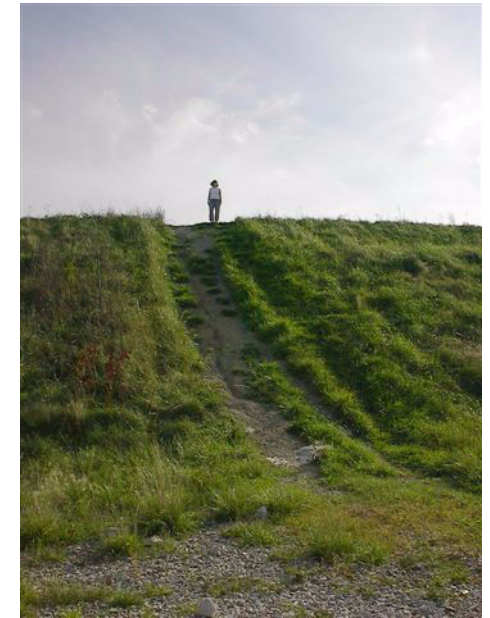
up the dike. Fortunately I was the only car in the lot.

Unfortunately, a little rain shower was headed my way, and the early September winds were light and from the south. The road into the parking lot approached the reservoir from due north. Let's see, pi times the diameter, that's 3.1416 times four tenths of mile, carry the 7, adjust for daylight savings time, plus six per cent sales tax — I was going to have to hike about a mile and a quarter in the drizzle to get to the south facing side of the dike and there was going to be no wind when I got there.





LEFT: The highest slope site in North Central Ohio looms in the distance. This photo was taken with a Meade CaptureView integrated binocular and digital camera combo. See RCSD February 2004 for the HSWT review.



RIGHT: OK, it's only 34 or 40 feet, but it works!

BOTTOM: Scenic scircular (sic) slope site.



This definitely looked like a flyable 35 or 40 foot slope. I shot a few pictures, tossed the Boomerang down the slope toward the van and the dogs, and headed on north to Lakeside, the Methodists and dinner.

My next shot at the Omni-Slope was during the last weekend in September, when Nancy and I had scheduled a one day trip to close the cottage. Two and a half hours up, a couple of hours to batten down the hatches for winter, two and a half hours back. I intended to grab a few minutes to slope on the way home. Winds were out of the northwest, advertised at 5 to 10 m.p.h. I took the Boomerang and the HLG Chrysalis, so I was sure to have something for light winds. The winds had picked up a bit by 4 pm when we stopped by on our way home, to maybe 10 to 12 m.p.h., and it was easy to keep both the Boomerang and the Chrysalis aloft on the relatively small slope face.

If you live in northern Ohio, or are passing through there, and you are feeling the onset of slope withdrawal symptoms, Bellevue Reservoir is worth checking out. I'll be back there to try flying the Omni-Slope next time I pass through that corner of Huron County. Just look for the intersection of Ohio Route 4 and Route 547, a little north of Attica, Ohio; turn east on Route 547 and look for the place where there isn't a sign.

Write if you get lift.

FAI has received the following Class F (Model Aircraft) record claim:

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Claim number: 9857  
Sub-class F5-S (Aeroplane, electric motor (rechargeable sources of current))  
F5: Radio Controlled Flight Category  
Type of record: N°173: Gain in altitude  
Course/location: Ponte Vedra Beach, FL (USA)  
Performance: 3'418 m  
Aeromodellers: Giorgio AZZALIN (USA)& Simone AZZALIN (USA)  
Date: 02.10.2004  
Current record: 2'573 m (09.11.2003 - Raymond COOPER, Australia)

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The details shown above are provisional. When all the evidence required has been received and checked, the exact figures will be established and the record ratified (if appropriate).

#### HELP A FELLOW MODELER!

Mark Shryack is looking for any fuselages or kits/plans for either of these two fabulous sailplanes — the Caproni A-21 and/or the Schleicher ASW-12.

He's had no luck finding anything.

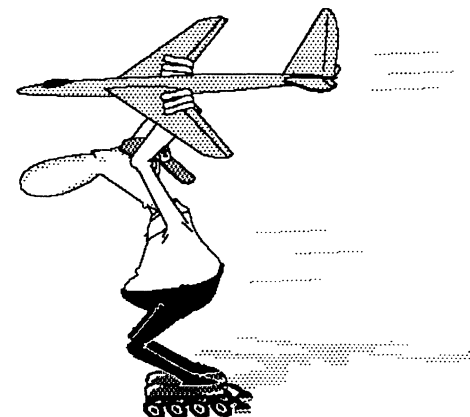
Contact Mark at <Tmshryack@aol.com>



# Gordy's Travels

Gordy Stahl <GordySoar@aol.com>

## Soaring Trophies and the Stories Behind Them



I won or placed in a bunch of soaring contests this year, and now have a wall and shelf full of plaques, certificates, cups, and trophies. Now don't get me wrong, I'm proud of each and every one of them and honored to have been awarded them, but a few really stand out. Some because they represent contests of size, some because of the talent vectored, but some because they are amazing pieces of art or thought.

I got to thinking about this subject on my way back from this year's Visalia Fall Festival. Not so much because of their trophies but more so because Joe Wurts won RES for the first time in more years than he might want to admit to having been involved!

That win sparked the memory of a few years back when he moved and had to clear out some of the hundreds of trophies he'd won over the years.

That got me to thinking about some of the unique pieces I have seen in the homes of soaring legends like George Joy, Chuck Anderson and others. Carved replicas of actual competing thermal ships, or scale planes, made of all sorts of materials and configured on plaques or stands of wood, Lucite or glass, even metals.

One of my group of "most cherished" is a second place from an Ontario contest. Its small, about 3" x 3", wood backed but with a sort of medallion done in gold and red. It's not as fancy as some, but I suppose because it

represents my first international trophy, that gives it a special spot in my heart.

Another is from a contest that is quickly becoming a very important contest, the Cincinnati Pumpkin Fly. This one is held mid-October and is a two day event. Each day has its winners, but there are combined day high point trophies for both Sportsman and Expert. This is a fairly large, wood plaque-based award with a gloss black and gold letter plate in its center, and a plaster Jack-O-Lantern with wings and tail, painted in orange and black mounted on the face. This is a Man on Man competition, heavily contested by some of the most talented soaring guys in the central states.

Recently I managed to win a Thermal Wizard trophy from SASS, the Seattle Area Soaring Society. It is a replica of a full house TD sailplane, complete with wing and stab rods, hand carved from Monkeywood. This miniature is perched on a piece of wire so that it is soaring above the name plate base. The Thermal Wizard trophy is a contest within a contest, created as a challenge to upper skilled pilots, who usually end up taking up the top three spots to shoot for a "tougher" test of their soaring skills.

Another very distinctive contest trophy was created by my own club mates for the Mid South Soaring Championships, a traveling location contest. When held in Louisville, the overall

winner is presented with an engraved Louisville Slugger Baseball Bat!

A lot of thought goes into creating contest trophies by their clubs and organizers, and a lot of great memories are stored underneath them on the wall. So I thought it might be fun to provide a space in the new *RCSD* format to showcase these forgotten trophies and to let the rest of us share the excitement of their pilots/sailplanes achievements.

So how about it? If you have some trophies you would like to show and share stories of the campaign to win them, send in photos and the stories behind them. Try to include where, when, who, and which sailplane was flown, mention competitors' names and events as you see fit. The more detail the better, but even a paragraph caption for below the photo will be fine.

Let's showcase our trophies for all to enjoy, let's respect the contest and efforts they represent.

I'm lucky because I travel; let's let everyone travel through the memories and sights of our contests victors and their trophies!

Looking forward to taking this trip with all of you!



Clockwise from upper left: First Place Cincinnati Soaring Society 2003 Pumpkin Fly, Second Place Central Ontario Glider Group 2002 Man-on-Man Contest, Seattle Area Soaring Society 2004 Thermal Wizard.





### Akaflieg Berlin B 11, Part 1

We first saw plans for the Akaflieg Berlin B 11 in the August 1962 issue of *Interavia*, where a very small outline drawing was reproduced. The article included a table of specifications for a large number of then current sailplane designs, but the B 11 was not listed. A couple of sentences in the text gave the forward sweep angle as 18 degrees, the span as 56.8 feet (well over 15 meters), and the area as 170 square feet. All up weight was to be no more than 795 lbs.

The simplistic 2-view drawing showed a high aspect ratio tailless glider of rather futuristic design. Fascination was immediate, and

the magazine article was retained through high school, college, and the ensuing decades.

Some time later, August 1988, the *TWITT Newsletter* presented a 2-view of the B 11 with a few of the major dimensions.

Still enthralled with the design nearly a decade later, we presented what small amount of information we had, along with what at that time we believed to be an accurate 3-view, in *RC Soaring Digest*, June 1997.

Since the column in *RCSD*, we've tried several times to contact someone at Akaflieg Berlin to acquire more information, but until recently without success.

Our last attempt managed to work its way to some people endeavoring to archive documents related to the numerous school projects. The first document we received was a wind tunnel report of over 100 pages. Included in this document were detailed drawings of the 1/8 scale test model and pages and pages of graphed test results for lift and drag coefficients, pitching, roll and yaw moments, and certain forces generated by the vertical fin and rudder. The last two pages presented photos of the model in the wind tunnel immediately following oil flow studies.

A few weeks ago we received a packet of ten photocopied drawings and photos. These drawings depict the internal wing structure and fuselage framework, and the connection of the wing and fuselage frame. The photos show the balsa skin being applied to the wing structure, a pilot sitting under the canopy in the completed metal fuselage frame, a close-up of the wing spar mounting point, another photo from the rear with the wing attached to the fuselage and the fin and rudder in place, and an

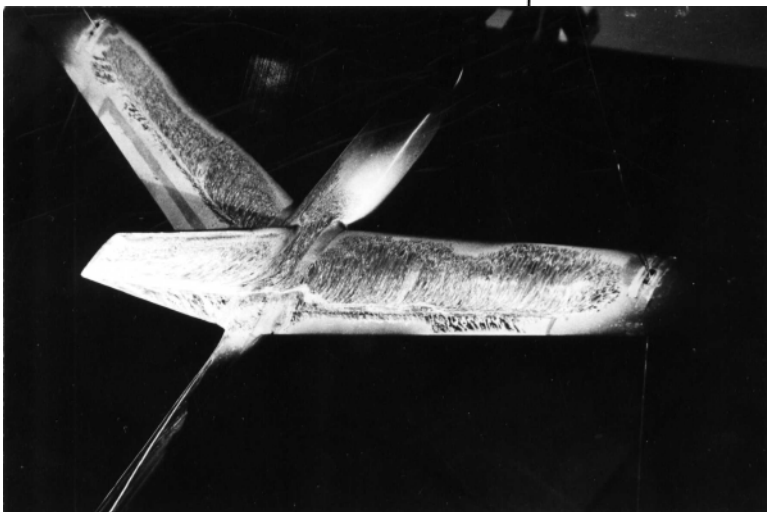
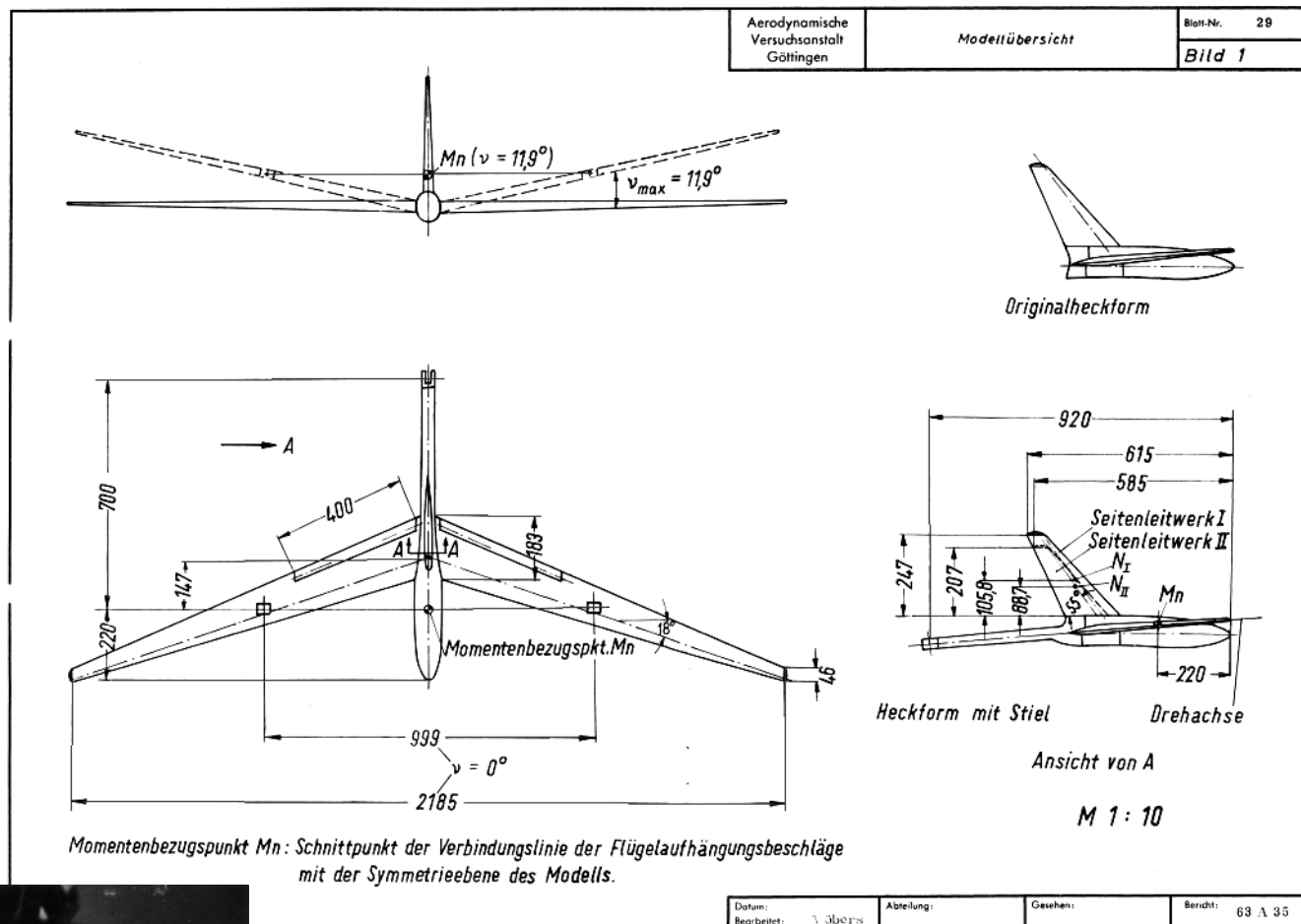
overhead photo of the completed sailplane.

Despite the photo of the completed airframe, we also received word from Akaflieg Berlin that the B 11 never flew. The current interpretation of events, drawn from archived documents, indicates the calculation of the CG location was incorrect. Changes to the airframe to correct the problem would have been so difficult as to be impractical, so the aircraft was destroyed.

The first of October saw a huge roll of plans arrive at the Post Office. These turned out to be 14 large sheets containing scale drawings of the wing internal structure (including details of the wing-fuselage connection), overall canopy contour and cross-sections, fuselage outline in side and top views, details of the wing root rib construction, contour templates for the wing leading edge with spar placement, various views of the fuselage frame components, and details of the forward "false" spar, rudder and vertical tail. Additionally, on four separate sheets we found two preliminary three-views of the B 11, a sweep vs. taper vs. aspect ratio study, an

outline of control system variations, and a finalized overview of the control system linkages.

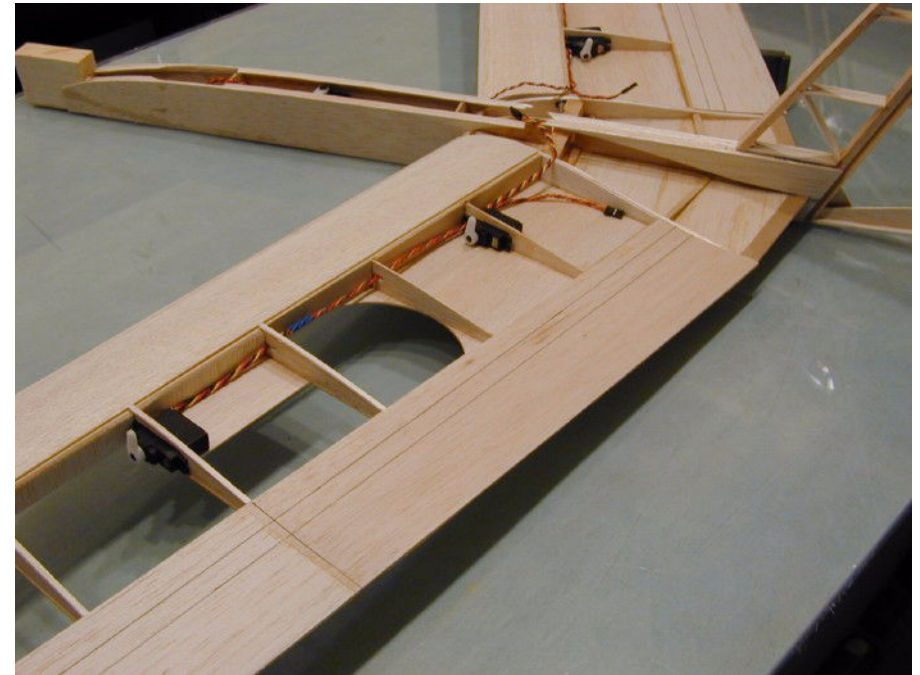
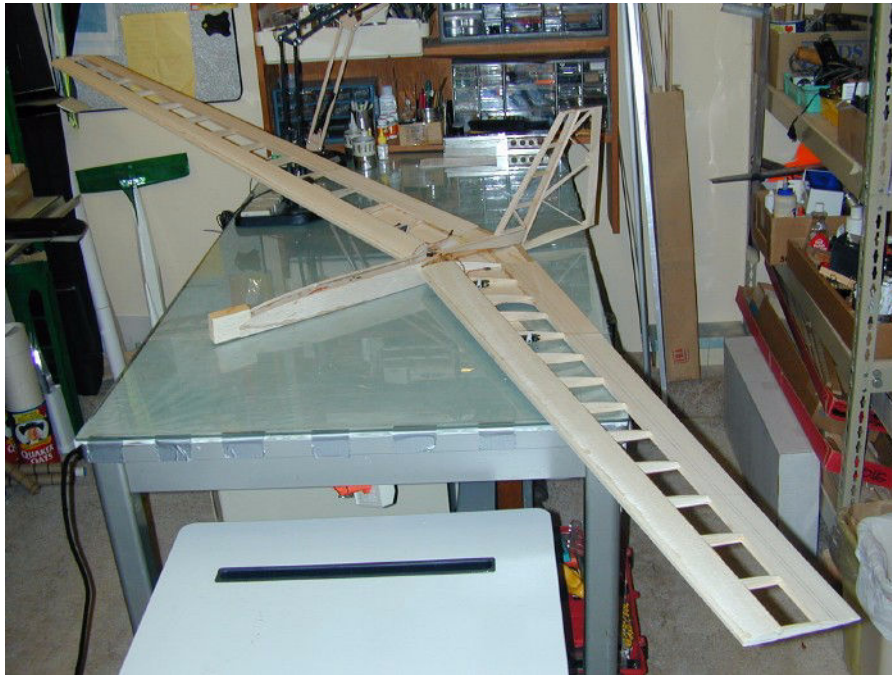
From the standpoint of a modeler, the CG problem which doomed the original is insignificant as it can be easily corrected during construction, either through use of a larger or smaller battery pack or by some other easily implemented method. We now have sufficient information about the airfoils and the control system used to be able to build an accurate and realistic model in quarter scale. The biggest drawback to creating a scale model for competition is the fact the original full size aircraft did not fly. For us this is of no consequence, so we're going ahead with a large scale model.



Above: Plans for the 1/10 scale wind tunnel model which incorporated adjustable dihedral and differing vertical tail configurations to investigate the effects of forward sweep and vertical tail planform on the roll and yaw moments.

Left: Photo of wind tunnel model following oil flow study.





Our B 11 testbed under construction. The forward sweep angle, 18 degrees, matches the B 11 prototype. The root section is the CJ-25^2-09, the tip is the Clark X. The wing was built without twist. The wing servos drive outboard ailerons and inboard elevators, as on the original.

While we figure out the structure for our scale model, we've dedicated some time, energy and materials toward building a test bed with the thought of acquiring some flight experience with a swept forward wing.

In an effort to determine predicted flight performance and controllability, we decided to build a planform of lower aspect ratio with an eight foot span. The lower aspect ratio allows dimensionally taller ribs and hence a proportionally greater

distance between spar caps, while the eight foot span allows four foot lengths of balsa and spruce to be fully utilized.

The wing root chord for this test bed is ten inches and the tip chord is six inches. The tip of the nose is in line with the wing tips. The quarter chord line sweeps forward 18 degrees, as on the original B 11. Wing tips and some upper surface sheeting are still to be added to the framework as depicted in the included photos.

We settled on a D-tube leading edge, cap stripped ribs, and sheeted trailing edge. The control surfaces will be of the same spanwise proportion as on the full size aircraft, but have a larger chord. Each control surface will be independently operated by its own Hitec HS-81 servo.

This model was created using a straight wing plug-in, based on a single 3-view we have. While this did create some problems with the interior wing rod assembly, it does assist in making a

lightweight and strong junction within the wing itself. However, in looking at the drawings and photos provided by Akaflieg Berlin, the full size aircraft had an entirely different wing-fuselage junction line, so this is another item which will need to be addressed while we're researching construction materials and methodologies.

As usual, we'll keep *RC Soaring Digest* readers up to date on our progress.

# Soaring High

by Gregory Vasgerdsian

Greetings! Just back from the Visalia Fall Soaring Festival and all I can say is, "What a great time!" The weather was in the mid-80s, the grass was some three inches deep, and it was just a lot of fun! Besides catching up with a lot of friends, it was great to make some new ones and check out the current stable of thermal duration sailplanes.

## Events

At Visalia I ran into Tom Hoopes of the IMSF who's been a key organizer of Soar Utah, and just finished off the Soar Utah 2004 event. I almost made it this year at the last minute, but the pieces just did not fall in place for me. As Tom told me, "Get working on your projects for 2006!" So that is just what I am up to. And, even if you aren't building something special for the 2006 event, be prepared to come with an arm full of slopers!

Elsewhere, I ran into Ron Sharck (a key promoter of the Torrey Pines Gulls club in San Diego) who is gearing up for the 2005 International Discus Handlaunch Glider Festival to be held next

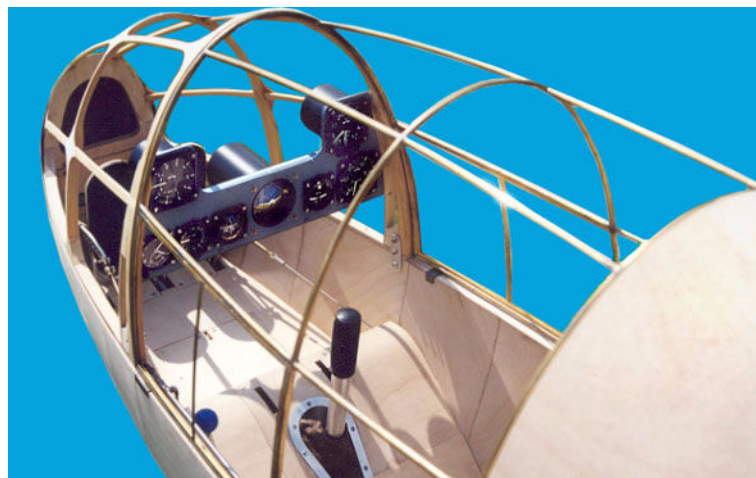
June. The largest event of it's kind, you will certainly not find a tougher group of competitors that know how to have fun. Not to mention that June is a great time to be in San Diego. More on this one to come!

Another event to be mindful of is the Wood Crafters 2005, spearheaded by Ray Hayes of Sky Bench Aerotech. This event falls in May of 2005 and has been on the grow since its inception. The basic idea behind the event is to promote and serve those that enjoy building and flying built-up wood sailplanes. The basic rules are pretty wide open in that fiberglass fuselages, composite strengthened spars and ships with ailerons and even flaps are okay. With a very inclusive rule set and only a few restrictions it is no wonder this format is a winner. To find out more about the upcoming event and the rules set you can go to the Sky Bench Aerotech website at: <http://www.skybench.com>.

While you're there you can also check out the numerous laser-cut wood kits that Ray now offers



The beautiful Rheinland FVA 10b variant. A superb model of a classic gull-wing, high-aspect ratio soarer. Photography by Michael Ohlwein.



A closer look at the Rheinland cockpit. I'm ready to climb in and go fly! Micahel's craftsmanship is clearly shown in this well-done interior – check out the gauges! Photography by Michael Ohlwein.





The Rheinland in flight. Photography by Michael Ohlwein.



You won't find construction like this in ARF! The symmetry of line and the sleek lines of the fuselage are what it's all about. Photography by Michael Ohlwein.

(from Windfree and Legionaire to the Pierce 970 and a whole lot more) and a lot of good information for the experienced and not-so experienced wood builder — check it out!

### Scale Inspiration

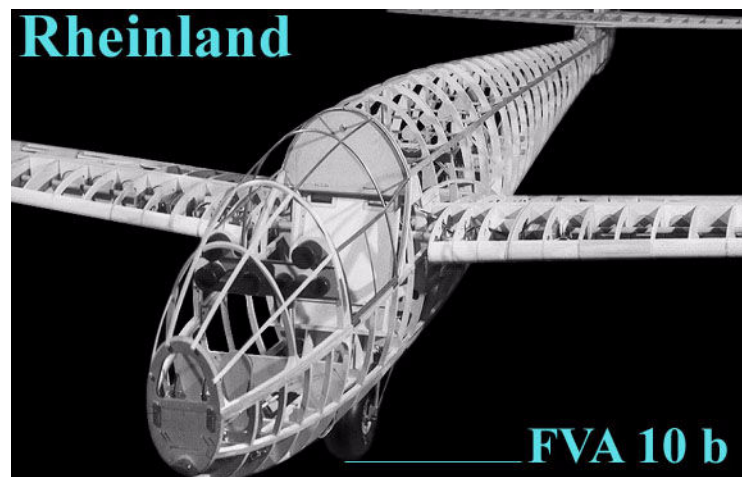
I thought I'd point out a website that is just about my all-time favorite! It's remarkable due to its excellent layout, professional photography and beautifully crafted models. The address is simply:

<<http://www.m-ohlwein.de>>.

When the site comes up it will read in German, but not to worry, simply

click on the British flag to view the site in English. This is the website built by Michael Ohlwein of Germany, and it highlights his passion for incredibly well-crafted vintage scale sailplanes. Of course it's no surprise that Michael is a freelance commercial artist — he is also a remarkable photographer — which you can see in every photo of his models. This is a must see site if you are into vintage scale models, and if you aren't it may well convert you!

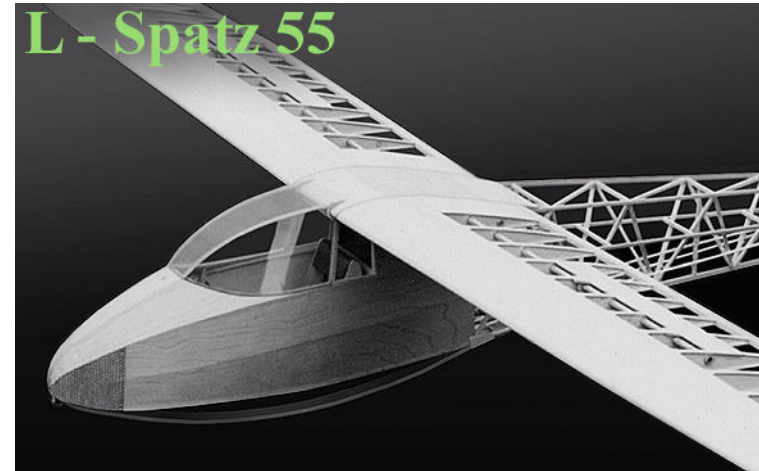
From his Rhineland FVA 10b and Kranich II to his L-Sparrow 55, each model is highlighted with enlarged view images of the model



Michael's Kranich II ready for covering. Michael also has tips on covering and finishing that should prove useful for your next vintage scale ship. Photography by Michael Ohlwein.



Left: More great detailing — this time the interior on the Kranich II. Right: Now here is a super floater! The L-Sparrow 55 sits “in-the-bones” and this photo clearly shows it’s simple, light and beautiful structure. Photography by Michael Ohlwein.



in the build process, finished, and flying. On top of that, Michael's site features images from sailplane events in his photo gallery (Galerie). And there are numerous building and finishing techniques shown and explained in the building tips

section (Tips). Okay, this time I'll go short on the words and let the choice images do the talking — I'll leave the browsing to you!

Green air until next time!



Left: Ready for a tow, the L-Sparrow covered and waiting to ride in the clouds. Right: You'll find quite a few detail shots like this one on Michael's website. Besides his building tips, he also mentions modifications that have been made.



Photography by Michael Ohlwein.





Cirino and Christopher Silva with their Altostratus I model. Photo by David Hall

## **Futuristic Radio-Controlled Model Sailplane Headed to National Air and Space Museum Steven F. Udvar-Hazy Center**

September 30, 2004

San Diego, CA - A 1/5 scale model replica of a futuristic flying wing sailplane built and flown in 2001 by local modelers has been donated to the Smithsonian Institution's National Air and Space Museum for display at the new Steven F. Udvar-Hazy Center in Chantilly, Virginia. The "Altostratus I" was a conceptual sailplane design by Dr. John McMasters, a Technical Fellow of the Boeing Company and was the main character of an article in *Soaring* magazine in February, 1981. This fictional Altostratus I was equipped with many technological advancements including computer assisted pilot control. The original design for the Altostratus I flying wing had a 25 meter wing span and an aspect ratio of 25:1.

In the year 2001, a team of radio-controlled model sailplane enthusiasts decided to recreate this fictional aircraft and demonstrate its true potential for flight in the year it was originally intended to soar. The aircraft was constructed by Cirino A. Silva and Christopher Silva of Ontario, California out of foam, fiberglass, and carbon fiber materials that are common to the hobby industry. An off-the-shelf computer flight simulator was used to determine various expected flight parameters and to provide initial flight testing and evaluation of this unique design. The five meter (16.4 foot) wingspan radio-controlled flying wing was test flown July 6, 2001 by Dr. Gary B. Fogel of San Diego, California at a location near Tehachapi, California. The first soaring flight lasted roughly 20 minutes resulting in a successful landing. Subsequent tests with strengthened wings showed improved flight performance.

This project not only demonstrated the flying capability of the original Altostratus I design but illustrated the ease by which computer simulation and modern aircraft construction materials can be used by the average hobbyist to quickly prototype and evaluate novel aircraft designs without large expense or undue risk to test pilots. Christopher Silva is currently a Mechanical Engineer for the Lawrence Livermore National Laboratories in Livermore, California and Dr. Gary B. Fogel is currently Vice President of Natural Selection, Inc. in La Jolla, California.

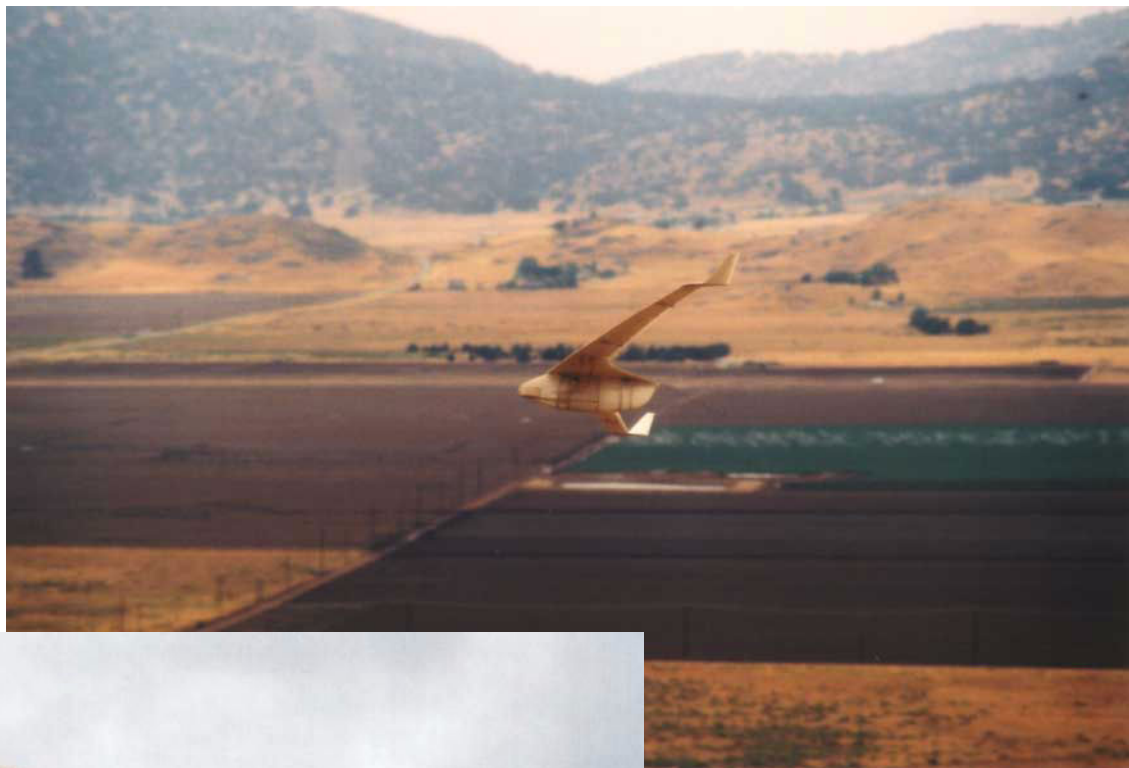
For additional information on this aircraft please contact:

Dr. Gary B. Fogel at  
(858) 455-6449  
<gfogel@natural-selection.com>

or visit:

<<http://www.geocities.com/altostratussailplane>>

The National Air and Space  
Museum Steven F. Udvar-Hazy  
Center web site is at:  
<<http://www.nasm.si.edu/museum/udvarhazy/>>



Left: Christopher Silva launches the Altostratus I model on its maiden flight, July 6, 2001. Photo by David Hall

Above: The Altostratus I during its initial 20 minute flight at a slope to the west of Tehachapi, California, piloted by Gary Fogel. Photo by David Hall



THE  
SOARING  
EXPERIENCE  
CALENDAR FOR 2005

*Finally, a Beautiful Wall Calendar for the Soaring Enthusiast.*

Have you ever browsed the calendar section of your favorite book store and wished there was a cool soaring pictorial calendar among the stale collection of dog breeds and teen rock star offerings?

Well finally, you have a choice.  
The new Soaring Experience  
2005 Wall Calendar is now  
available.

Not only is this the highest quality R/C soaring calendar ever offered, but some of the sales proceeds will be donated to future U.S. soaring teams.

This calendar is a limited edition, and if the edition sells out, publishers Radio Carbon Art and Soaring USA will be able to donate \$5000.00 to future U.S. adult and youth soaring teams which compete in international F3B and F3J competitions. This

money will help these teams buy equipment and offset travel expenses. Selling enough calendars to raise this much money for the teams will be no easy task, so we encourage you to pick up a few copies for the upcoming year. Each high quality calendar is only \$19.95, a very small amount for a true work of art. Club and bulk discounts are available

To purchase calendars online and to see more images from the edition, go to either Radio Carbon Art, <http://www.radiocarbonart.com> or Soaring USA, <http://www.soaringusa.com>.

## More About the Project

The Soaring Experience calendar was the idea of Bob Breaux, who owns Soaring USA, and myself. Bob just happens to own a large



commercial printing company and after seeing some of my recent photographic work, became interested in publishing some of my images. Since Bob's printing company already prints calendars for other companies, it was decided that perhaps a calendar for the soaring community would be a great idea and a potential fund raising vehicle to benefit the always underfunded gliding teams.

Although I am better known for my video productions, I have done professional still photography in the past and have in the past few years been shooting digital stills as well as video. The new breed of high resolution digital SLR's have really rekindled my interest in photography and every image included in the new calendar is digital.

Designing a calendar that I would be proud to display in my office was a fun challenge, but picking the 30 or so shots for the final design from over 3000 pictures proved difficult. There was an entire second calendar of wonderful images that did not make the cut.

I wanted the general theme to be

about the visceral essence of R/C soaring, from a serene summer thermal to Rock n' Roll slope soaring. Each photo had to be special in some way, and reflect and capture the excitement and beauty of the soaring experience.

Bob did a fantastic job printing the calendar and used top quality paper and a special printing process to bring out the detail of the high resolution images. This calendar is truly a unique work of soaring art and well worth the price.

The cover shot is of Torrey Pines local Hoyon Jiang as he launches his tattered Bob Martin Bobcat off the cliff on a perfect early summer day. Bob and I felt this shot captured perfectly the combination of the man made and the natural, the exact moment of flight and release from gravity.

For you photo savvy guys, I used an older Canon D30 digital, with a 100-400

Canon image stabilized lens, though for most of the shots I used my newer Canon D300 six megapixel SLR, with a 70-300 Canon IS lens and a wider angle 25-70 zoom. The calendar was put together totally in Photoshop on my trusty Macs.

### **Support Your Teams!**

Thank you!

Paul Naton  
President, Radio Carbon Art

To purchase a copy of the Soaring Experience 2005 calendar, please contact Soaring USA or Radio Carbon Art.

#### Radio Carbon Art

541-752-9661 m-f 10am - 5pm  
<<http://www.radiocarbonart.com>>

#### Soaring USA

626-967-6660 m-f 9am - 4pm  
<<http://www.soaringusa.com>>

