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**Front cover**: Jeremy Hartmann's 1:2.25 scale Musger Mg 19a is towed to altitude at the JR Aerotow 2013. Photos of the construction of this model and its appearance at the JR Aerotow start on page 30 of this issue. Photo by Peter George. Canon EOS 5D Mark II, ISO 200, 1/500 sec., f11.0, 100mm

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**Back cover**: "Coming in for a landing." Great Blue Heron photographed by Charlie Morey, Charlie Morey Fine Art Photography, <u>charliemorey.com</u>. Lifted feathers prevent the air backflow from reaching the wing leading edge. Nikon D800E, ISO 400, 1/1600 sec., f8.0, 380mm

# *R/C Soaring Digest* August 2013 Volume 30 Number 8

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# In the Air

This issue presents a fairly good mix of tool-making, electronics and technology, construction, club activities and event coverage. We hope you enjoy it!

There are two photographs in this issue which bear your special consideration:

First is the back cover image. We saw this photo on Charlie Morey's FaceBook page a few days ago and were overwhelmingly impressed. Charlie published *Slope Soaring News* a bit more than two decades back (all issues are archived on the *RCSD* web site) and is now a professional photographer. His near daily trips to the Los Angeles Zoo have garnered a large number of truly exceptional photographs. We couldn't resist Charlie's photo of the Great Blue Heron in landing mode as it so clearly illustrates how the upper wing surface feathers flex to delay stalling. Beautiful and instructive. Be sure to check out Charlie's "fine art photography" web site at http://www.charliemorey.com.

The other photo deserving your attention is that of Schalk Human's Vulcan 2B, winner of the Black Eagle PSS Festival trophy this year, on page 20. This is such a wonderful photo of a truly fantastic model that we eliminated the usual page designations so the image could be presented without distractions; it certainly deserves this special portrayal. Our sincere appreciation goes to Shane Swartz for his great skills with the Nikon D90 camera.

We are always searching for ways to improve *R/C Soaring Digest* and feedback, positive or negative, is always appreciated. We can now be contacted at <bsquared@rcsoaringdigest.com>.

Time to build another sailplane!

# Black Eagle PSS Festival

Kevin Farr, kevin@fvdv.co.za

## Enter the D'urbanites

It does appear that 2013 will be that special year, the one you refer to when staring out over the bay, whichever bay you happen to be sitting above, wondering when the wind will arrive, and if it will at all, ever again.

Two Oceans Slope Soarers had earlier this year hosted the supremely successfully aerobatics event and now had a chance to host the 4th Annual Black Eagle PSS Festival in similar fashion.

A few weeks beforehand the forecast had set a pattern of South Easters arriving over the weekend, which is a trend that tends to stick for a while, but Mother Nature kindly kicked the trend to the side lines and threw in three fantastic days of wind, glorious wind.

Dave Greer and Rudi Smook jetted in from Durban, as they do, and the Friday practice session was attended by a few of us TOSSers and D'urbanites with hair on our teeth as a 60 km/h breeze blasted the fynbos clean at the Chapmans peak site.

A few maidens sans damage were taken care of, and the morning session ended with a fair bit of breeze on the mountainside. This was followed by lunch with a great bottle of wine and a mouth watering trinchado under the knife, while watching the rain pelt the trees and tarmac outside at a favorite Hout Bay eatery. You just got to love a Cape Winter.

# Them be large cannons, Sir!

Saturday followed the Windfinder prediction and delivered the most beautiful post-frontal Cape Peninsula morning imaginable. The Navy Cannons up at Red Hill present a truly awe inspiring site. These now silent WWII large scale sentinels protected Cape Town in their day, and now offered us a viewing platform par excellence for the day's static judging.

First the combat class were put to the sword, with Herbie our static judge taking mean aim on any indiscretion, while handing out praise where due, for straight horizontal and vertical stabilizers, etc.

Next were Sportsman's Light Class, and then the heavies in Sportsman's Heavy Class, designed to separate the seriously detailed heavy class from the less detailed light class based on wing loading.

This covered a good three hour session through the differing classes with Herbie maintaining an admirable sense of humor while contestants "attempted to get around him" on a constant basis.

The Master Class involved a showdown between the Super Constellation airliner of Kevin Farr and the Vulcan Bomber of Schalk Human, both scratch-built from plan, with over a year's work involved in each case, and a sight for any PSS builders admiration. The Master Class can only be entered by a scratch built entry, be that foam, balsa, fibre glass, whatever, just as long as it is scratch built.

As if by cue and the static judging wound down, the wind rose up, and we were able to fly a scoring round for the combat class.

This round meant taking your foam/ correx/combat build and gliding a two minute expression session. Keeping in mind that the judge would be looking for scale moves similar to the plane you have modelled, and marking you as such, the lowly Immelmann, 1/2 reverse Cuban 8, rolls and the split "S" all took on a more meaningfully and relevant existence.

The Sportsman's Light also enjoyed a scoring session with the day-glo Impala drawing much attention in this unusual SAAF colour scheme from the 80's.

So ended an immaculate and most enjoyable day of slope competition.

# The Big Day

With all the wind channels barking out loud that we might have a wee bit of a blow on the Sunday, most gathered early on the morning of THE BIG DAY.

With a light breeze in the morning, we waited for wind as we chatted amongst



Hans van Kamp's Hawker Hunter takes to the skies.



Christo Le Roux's Combat Class P-51 Mustang.



SAAF colour scheme Spitfire MK XVI.



Dave Greer's Me 109.



Christo Le Roux's P-40 Warhawk.





Rudi Smook's very unusual Dornier Do 335 "Pfeil." The original served as a heavy fighter near the end of World War II, had a maximum speed of more than 470 mph, and a service ceiling greater than 35,000". The only surviving example of the aircraft is at the Steven F. Udvar-Hazy Center of the National Air and Space Museum.



Kevin Farr's Lockheed Constellation Super G was on the cover of the August 2012 issue of RCSD and made its appearance at the Cape Town venue again this year. Note the camera on the central vertical fin.

TARA.

TWA.



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mates and ate the delicious breakfast rolls and coffee as prepared by the caterers.

Then, as if with a wave of the wand, the wind pulled from the North, through to the North West and set the stage alight for probably the best days sloping seen in many a year.

Combat class took another shot at a scoring round and flew beautifully through the increasing wind. With the wind ticking off the scales at a firm 30+km/h, we set free the two meter P-38 Lightning as the test vehicle for the round of Heavy class and Master class. If the P 38 Lightning flew with ease, all classes were open.

Now, you do not have to fly your class, but will lose the points for the non-scoring round as a result. That is your choice. Luckily every one of our contestants were champing at the bit and the sooner we could get airborne the better. Flying was to be judged by Kurt Macrill, and with the Masterclass called to the air, the Super Constellation Super G airliner was first up on the plate. Straight as an arrow out of hand by master launcher for the day, Jeff Steffen, the Constellation simply revelled in the conditions and flew the sky with ease.

Next was Schalk Human with the one year scratch-built Vulcan Bomber.

After a few hiccups on launch and the



Class of 2013 Black Eagle PSS Trophy Festival.



Kevin Farr's P-38 Lightning, the test-bed for the heavy class. This model graced the cover of the September 2008 issue of RCSD.





Opposite page: Schalk Human's Master Class winning Vulcan 2B. Above: The Vulcan gets a shove. Below: Implala formation. Kevin Farr's day-glo Impala 480 model is on the left, Anton Benning's Combat Class Impala MB 326 is on the right.

Inset: Kevin's day-glo Impala 480 does a fly-by.





Alan Ball's camera-equipped chase-plane gets a launch.

addition of some necessary reflex in the elevator to compensate for the all flying wing, the Vulcan just floated away like an angel and presented a most beautiful sight in the sky while its pace matched the full scale to a tee in terms of visual presentation.

Alan Ball flew a chase plane behind both gliders and got some really fantastic footage on the Go Pro cams. Both gliders landed well and live to fly another day.

And to the Heavy Class we went, with the really large kit planes on show.

The P-40 Warhawk of Christo le Roux flew really well in the moderate conditions, given that it weighs in at a paltry seven kilograms.

The enticing "Ferocious Frankie" P-51D Mustang of Malcolm Riley made its debut and the large and impressive Hawker Hunter of Hans van Kamp cruised with some speed. Finally, the smaller but very willing flyer of Rudi Smook. The unusual and inventive DO 335 Pfiel flew like a treat straight out of hand in its maiden and, I have no doubt due to it's unusual configuration, drew the attention of a crow that had plenty to say about the 4-stab setup.

To say this was the best day of large scale PSS subjects flown on one day on one slope locally, would be an understatement. It was brilliant, awe inspiring and huge kudos need to go out to all pilots on the day who were willing to step up to the plate and take on the challenge.

In the final reckoning, it was the Vulcan of Schalk Human that took the much prized Master Class Black Eagle trophy on the day, Christo Le Roux and the P-40 Warhawk taking the Heavy Class, Kevin Farr and the Impala taking the Light Class, and Christo Le Roux once more taking the Combat Class with the Mustang foamie.



TOSS donated R2000 to the Percy Fitzpatrick Institute of African Ornithology.



Master Class winner Schalk Human.

As usual, a donation of R2000 was made to the Percy Fitzpatrick Institute of African Ornithology as part of the Two Oceans Slope Soarers commitment to the environment in which we achieve pleasure.

A great amount of thanks must go out to all the sponsors who put forward the fantastic prizes for each class, and no one walked away empty handed.

Thanks once again to the caterers for taking the time to ensure all contestants were looked after. Here's to looking forward to next year's event with even more gusto!

Thanks to our sponsors in alphabetical order:

AB Models AMT Composites Clowns Hobbies Chris Leal Hobby Warehouse InterMet Africa Noel – Profpack Southern Hobbies RC Hobby Shop RC Mania

Alan Ball's 550MB video of this event, including footage from his "chase-plane" and Kevin Farr's Super G Constellation, is available at <a href="https://vimeo.com/69843276">https://vimeo. com/69843276</a>>

# PSS 2013 Results

	Expert Class							
Pos	Name	Entry	Herbie	Average Static [180]	Flight		Total	
1	Schalk Human	VulcanB2	142,3	142,3	34		176,3	
2	Kevin Farr	Super Constilation	129,1	129,1	37		166,1	

	Sportsman's Heavy Class							
Pos	Name	Entry	Herbie	Average Static [60]	Flight		Total	
1	Christo Le Roux	P 40E	49,5	49,5	41		90,5	
2	Rudi Smook	DO335	20	20	26		46	
3	Malcolm Riley	P 51 Mustang	29	29	0		29	
4	Malcolm Riley	C47 Dakota	26	26	0		26	

	Sportsman's Light Class							
Pos	Name	Entry	Herbie	Average Static [60]	Flight 1	Flight 2	Total	
1	Kevin Farr	Impala 480	33,2	33,2	38		71,2	

	Combat Class								
Pos	Name	Entry	Herbie	Average Static [50]	Flight 1	Flight 2	Total		
1	Chirsto Le Roux	P 51D	43	43	43	46	132		
2	Kevin Farr	Spitfire	39	39	41	44	124		
3	Noel Cochius	P 51	37	37	41	38	116		
4	Hans Van Kamp	P 51	40	40	37	39	116		
4	Dave Greer	ME109	39	39	38	36	113		
6	SchalkHuman	P47	41	41	33	37	111		
7	Alan Ball	Mig 3	37	37	39	32	108		
8	Alan Ball	Spitfire	33	33	34	34	101		
9	Anton Benning	ImpalaMB 326	36	36	40	0	76		





# how to...

# Seattle Area Soaring Society HLG Clinic June 16 2013

Adam Weston, red.hlg@gmail.com, Rick Jay and Michael Frederick

Hand Launch Glider (HLG) - Radio controlled sailplane launched by hand by the pilot (or a helper). Competition planes are categorized by the FAI by the designation F3K, and are limited to a 1.5m (59.05") span.

Discus Launch Glider (DLG) - A hand launch glider launched by holding onto the wingtip and spinning around in a discuslike motion. Discus launching took traditional overhand (javelin) launches of about 75-100 foot altitudes to over 200 feet.



The Seattle Area Soaring Society (SASS) hosted a Hand Launch Glider (HLG) Clinic on Sunday, June 16, 2013 at Sixty Acres Park, near Redmond, Washington. We planned it to run from 8:00AM with pastries and coffee, a 9:00am start through lunch (provided) and a swap meet at 12:00 PM, with options afterward for more instruction, a contest, or a fun-fly.

This event attracted over 50 participants from around greater Seattle and ended up being one of the biggest club events in years! We feel this was a great way to get new people interested in the exciting sport of HLG's and to help experienced F3K contest pilots improve. The event was such a success we thought we would show what we did, share some lessons we learned, and lend encouragement for other clubs to host their own clinics.

Hand launch in the Seattle area has seen an ebb and flow of participants for decades. We've seen an uptick in contest participation lately, but had the sense that there were some additional pilots out there who might be interested in an HLG event that was more informal than a contest. These folks might be power plane pilots or park flyers who are interested in gliders, or larger glider pilots who are interested in exploring some of the aspects of HLG... Or they may also be folks who have only just started in R/C. We also wanted to attract many of our experienced HLG pilots who wanted to get to that next level in HLG. With this wide range of experience levels in mind, we set out a plan for a clinic or workshop out at our club field.

The structure of the clinic needed to be such that it would include the wide variation in skill levels we were anticipating would participate.

We planned the event so we would have a series of short lectures followed by break-out sessions where we practiced some of the skills we talked about in the lectures.

The key to the breakout sessions is to group pilots by their experience level and then to have some of our local experts available to lead each of those smaller groups.

Fortunately, there were about 10 experienced HLG pilots in the area that we could count on to help with the break-out sessions. With this many experts, experienced pilots were able to share one-on-one time with new pilots, focusing on their particular needs.

Before the event there were three areas

of focus that needed to be hashed out: planning the agenda, advertising, and buying supplies.

*Planning the agenda*: First we set up the plan for the day.

The agenda (below) was based on previous clinics we've held. We typically start with background -- we share what we love about HLG. Then we go into HLG history, with a focus on some of our local celebrities. Next we move into a description of HLG's and basic set-up. Then it's on to the break-out sessions.

We start with a lecture on launching, followed by splitting into three groups-beginner, intermediate, advanced...

Everyone grabs planes, launches, learns, and shares feedback in these smaller groups.

When we come back together we go over thermals, and how to find them.

That Sunday we had lectures by several experts — one with free-flight experience, another with decades of big sailplane experience — for multiple perspectives on thermals.

Finally, we conclude with a lecture on contest flying.

Throw in a BBQ lunch and an informal swap meet and you've got an agenda!

Opposite page: Adam Weston provides the Introduction and History portions of the Clinic.





Dave Banks throws a SoarArm Neos to height...



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*Advertising*: We took a shotgun approach to advertising.

We set out to attract anyone who has interest in HLG's in our area. Some of the outlets we focused on were RCGroups, the SASS club website, emails to all the local R/C clubs and hobby stores, and then something that's relatively new to SASS, advertising through Facebook. Facebook has a number of advertising options. The one we explored was an attendance ad. We were able to choose the interests of our target audience (we chose those living in Washington State who are also interested in R/C). With so many folks on Facebook these days, it might be something to consider for your club.

*Buying supplies*: We planned to provide lunch for all the participants.

The biggest challenge here was gauging how many people would show up! We took a poll on RCGroups, and then looked at those who had signed up to attend on Facebook.

Ultimately we purchased enough food to cover what we guessed would be the attendance, and planned to have someone make an emergency run to the grocery store if more people showed up than was expected. Once again, it helps to have club volunteers.

*Event day*: Once everything was in place, and Mother Nature cooperating, we



John Barnhardt scopes out the launch area.

waited to see who would actually show up.

We were scheduled for Father's Day, which was an additional wild card... Build it and they will come, right? We ended up with over fifty participants at the event! It was one of the largest glider events that SASS has hosted in the last decade.

Schedule-wise, we were a little optimistic... We started late. The lecture

went long. The first break-out session was very popular, and took longer than anticipated. Before we knew it, it was lunch time. However, we continued the lectures while participants were eating. No one left hungry.

The swap meet wasn't a huge success, but several items changed hands, so that was good.

After lunch folks naturally gravitated into





small groups, mixes of those who had knowledge and those who were looking for insight. It seemed like we could have scheduled the lectures and break-out sessions to run all day... and there was lots of talk about next year's event.

Thanks to everyone who volunteered to help with the clinic, we certainly couldn't have done it without you!

#### Schedule of events:

8-9am - Warm-up, coffee, pastries etc.

9am - Welcome, introduce instructors

9:15am - Clinic begins, topics:

- Intro to HLG's
- History
- DLG Walk-Around
- How-To's: Launch, Cruise, Thermal, Land, Relight
- Contests

John Barnhardt

listen and learn.

and Tim Johnson

- Break-Out Sessions with local experts - grouped by skill level beginner to expert

Noon- Lunch and swap meet

1pm - Fun-Fly, Mini Contest, or Clinic Part 2 if enough pilots are interested

For more detail, here's what we wrote in our planning session:

• Meet and greet (food, coffee, warm-up)

• Introduction of instructors, then around the whole class, who you are and where you're from and what your self-assessed skill level is



Adam Weston plays with bubbles, otherwise known as thermal indicators.

• Intro to HLG's - What is an HLG and what is exciting about it

• History of HLG and DLG with a focus on local stars like Dick Barker, Harold Locke, and Phil Pearson

• DLG Walk-Around - details about HLG's and what makes them special, start with Adam and his Encore DLG, followed by other models • Setting up DLG's - throws, mixing, CG, ballast, etc. Start with Adam talking and then break-out sessions based on model design and/or skill level. The make-up of the break-out sessions will depend somewhat on the attendees, their skill levels, and where natural groupings split. We'll have each of the instructors work with a smaller group and lead them through the set-up and/or have them grab their planes for a check-out. This could be intensive with some rank beginners. We may have instructors do one-on-one with those pilots as necessary while the rest of the group moves on.

• How-To's - detailed instructions about each topic: Launch, Cruise, Thermal, Land, Relight.

• Leader talks first with a demo launch going on in the background... Then break-out and talk about launching. Back together for Cruise and Thermal. Break back out for Thermalling. Back together for Landing.

• Contests - Start with the leader talking about contest formats and rules followed by skill level break-outs to discuss what each group sees as their looming challenges... ie:

Group 1 - Do I really want to fly in a contest and prepping for your first contest?

Group 2 - Flying your 2nd-5th contest, how to learn and get better, and not break anything.

Group 3 - Strategy for tracking thermals and going head to head with your competitors, and learning from the top dogs while you're competing against them.

Group 4 - Extracting 20 years



An impromptu hardware clinic discussion.

Diego gets

some time on

the buddy box

with Rick Jay.

of flying world class competitions from the club's top pilots and condensing it all into one break-out session

• Break-Out Sessions - This time break into groups by skill level, etc., with the pilots each with their planes. Work on set-up, launching, thermalling, etc. For those who don't have planes, we are planning to have some buddy boxes/beginner planes available for test drives.

• Lunch

• Swap meet during lunch or about noon, for folks to sell their HLG stuff.

• After lunch is up in the air (pun.) Depending on interest we may continue with instruction, or we may have in informal contest or just a fun-fly.

We hope our little how-to can help your club set up a clinic in your area. There is lot's of information out there on the internet about all different aspects of hand launch gliders, but in our experience, nothing beats the face-to-face contact provided by a clinic or workshop for really learning what it's all about.





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As told to Steve Pasierb, steve@rcaerotowing.com, by Jeremy Hartmann Photos by Peter George and Jeremy Hartmann Two years of construction concentrated over eight months results in one spectacular vintage sailplane

Jeremy Hartmann of Birmingham, Alabama, is a perfectionist when it comes to his models. After all, he owns a popular local hobby shop, The Model Box, so he has to hold himself to a higher standard. His builds are done right in the store in front of the public. Jeremy likes things just so and has thrown out parts and detail features from kits — that others would be overjoyed to have — in lieu of manufacturing his own from scratch. So it's no surprise that he would tackle a "once in a lifetime" build and do it in both short order and with outstanding results.

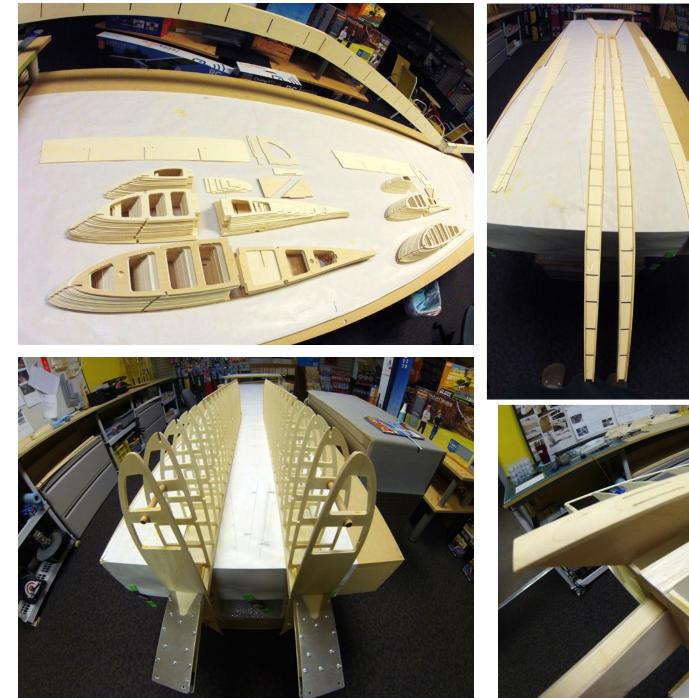
The original full-scale sailplane was built in the 1950's by Oberleichner in Austria as a two-seat trainer. There are still some examples flying today. It features shoulder-mounted gull wings spanning 17.6 meters generating a 1:14.2 aspect ratio. Steinadler translates to *Aquila chrysaetos*, or in English, Golden Eagle.

The Mg 19a eliminated the inboard ailerons that the original Mg 19 prototype featured and gained weight via a program of strategic improvements. The spar was strengthened and the wing now featured a D-box leading edge construction adding further strength. Finally, a turbulator strip was added to the inboard leading edge of the wing.





Fuselage under construction. Bottom photo shows the separated front portion with the joiner section being fitted. The result is a two-piece fuselage that bolts together on the field with a near invisible joint, as can be seen on the title page opposite.



Various stages of wing construction...

Far left: CNC wing ribs, spar in background.

Left: Spars partially assembled.

Lower left: Rib leading edges glued in place. Below: Wings mounted to fuselage, spoiler open.



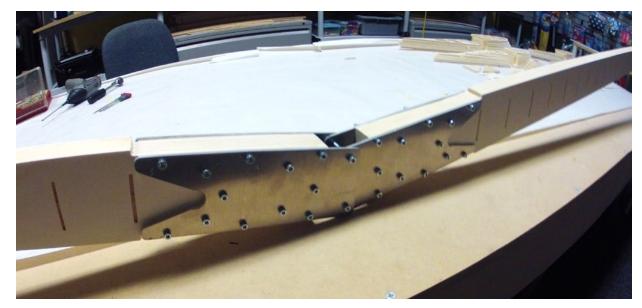
Later years saw 19b and 19c variants produced that eliminated the gull wing and later refined the fuselage and changed airfoils.

Jeremy's Mg 19a in 1:2.25 scale is faithful to its roots, albeit in Swiss livery instead of its original Austrian markings. According to Jeremy, "I spent 8 months building, the last 5 months I put in about 12-14 hours per day, and the cockpit is still not finished to my expectations. My friend Asher Carmichael told my wife Janet, after seeing the build in progress, 'That is, AT LEAST, a two year build!' In retrospect, I now believe he is correct."

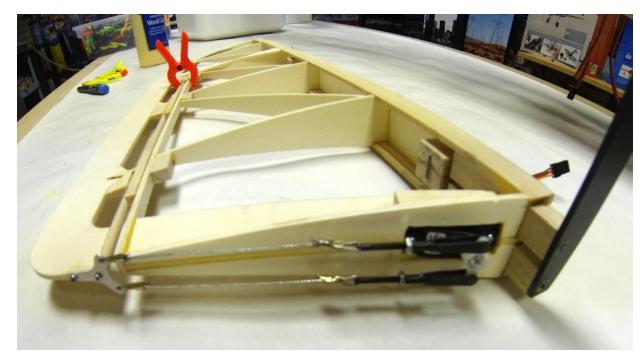
Jeremy continued, "The model itself is CNC cut and I modified the fuselage so it breaks into two pieces for easier transport with the use of four fiberglass rods and studs for disassembly. The model transports in nine pieces; two gull wing sections, two outer wing sections, two fuselage sections, horizontal, vertical and rudder."

"Assembly is accomplished by bolting the two main fuselage sections together with wing nuts. Gull wing is made up of multiple lamination spar connected to the fuselage via two M5 bolts and G10 plates, the outer panel being attached to the gull via a hatch on the underside, with a bolt connecting the two spars with a taper fit."

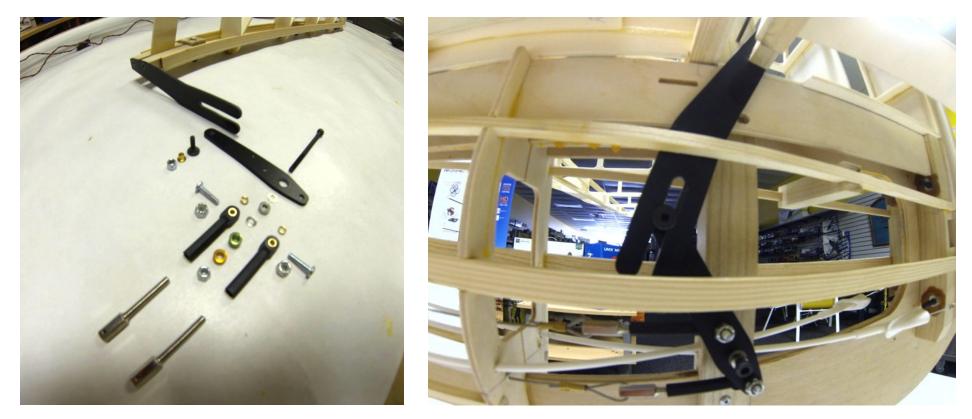
"Unlike other builders, who installed servos in the wing and tail open structure



Main wing joiner assembly. Notice "fishplates" to prevent stress risers.



Internal elevator trim tab pull-pull cabling and servo.



The various parts of the elevator control system. Two JR 8411 servos at the front of the rear fuselage section drive forked arms through a pull-pull cable system. The mechanism slides together as the stabilizer is mounted to the fuselage.

which spoils the silhouette when in flight and light passes through, I installed JR 8711's in the sheeted leading edge of main wings with a crossed over pull-pull system to a completely modified aileron structure, just like the 'real' sailplane. The gull wing sections have upper and lower spoilers activated by JR 8411's."

Jeremy went well beyond reworking servo locations. "I designed and built a unique mechanism for the elevator system, comprised of two JR 8411 servos sitting sideways at the front break of the rear fuselage section, activating a left and right pull-pull system made of G10 ball raced arms with a flanged pin that accepted the two G10 forked arms when bolting on the horizontal with four bolts. The vertical is accepted by the fuselage and horizontal fastened by another four bolts and linked via a pullpull system operated by a JR 8411 which is mounted between the two elevator servos."

"The rudder is then installed using a 2.5mm stainless steel rod and two clevises to the aluminum rudder horn, hand cut, just like the aileron horns. The tow release is made up of five aluminum pieces, hand cut on a band saw, filed and polished (two days of work!), activated by a JR 8411 servo. The landing wheel is attached to the fuselage via a



Left: The balsa master plug for the tail fairing sits behind the finished vacuum-formed finished product of 0.060" styrene. Right: The formed fairing in place, held by magnets at the front and fasteners on the vertical fin. The size of the fairing required a 12 inch by 24 inch sheet of plastic, so a new vacuum box had to be constructed to form the part.

stainless steel tube axle captured by two triple eared bearing flanges, once again hand cut and polished."

"A brake pad was made of aluminum, dipped in rubber tool grip solution, for efficiency and activated by a JR 8711." Jeremy told me that this is "total overkill" and that became apparent after the Steinadler's maiden flight due to its short roll out. It's still cool, though! Another custom item is the tail faring. Jeremy made a master plug from balsa from which to vacuum draw the tail fairing over. This also required him to build a new vacuum box to accommodate the necessary 12 inch by 24 inch sheet of 0.060" styrene. The finished product is held in place by magnets at the front and fasteners on the vertical with a cover plate below to hide the horizontal fasteners. More time well-invested!

The massive model is covered with four 10-meter rolls of Solartex. The gulls had to be covered in four pieces due to size, and then joined at the spar. 3M 77 spray was used to assure adhesion on the undercambered portion of the wing. The outer wing panels were just narrow enough to use a full 27 inch roll. Painting





The custom-made tow release which is mounted below the nose of the Mg 19a.

was accomplished using two-part automotive paint top coated in clear with a dulling agent to give it a scale semigloss finish.

The massive skid adds to the Mg 19a's vintage appearance. According to Jeremy, "Front and rear skids were made of custom made brackets and multiple layers of automotive hose." The stock canopy also found the waste bin, "The kit provided canopy structure but was tossed aside due to lack of scale and custom built with hand cut aluminum hinges. The canopy is also not yet complete as it should have 216 fasteners and aluminum cladding, due to lack of time."

What lead to this extraordinary undertaking in record time? Jeremy simply says, "The reason for the build is that I wanted to have one wooden plane in my stable of planes." Yes, Jeremy, you've done that!

This Mg 19a made its debut at the 2013 JR Aerotow in Monticello, Illinois. Jeremy added his heartfelt thanks to Len Buffinton from Connecticut for taking the controls during the maiden flight and to David Payne of Team Horizon for the maiden tow completed using his new Hangar 9 Decathlon with Desert Aircraft DA120 power.

How did the first flight go? Jeremy says, "Yvonne sure looked nice in the air and landed like a feather!" All of Jeremy's planes have female Swiss names and this one is named after his recently departed Aunt Yvonne.

A wonderful story, a talented builder and a spectacular sailplane!

Schneider-Modell <<u>http://www.schneider-modell.at/></u> The model: Musger Mg 19a Steinadler The size: 1:2.25 scale The span: 7.82 meter The airfoils: HQ 3.5/13, HQ/Oldy 3.5/12 RC Aerotowing <<u>http://www.rcaerotowing.com></u>



Right: Decked out is Swiss livery and ready to fly, Jeremy's 7.82 m Mg 19a awaits a tow at the 2013 JR Aerotow in Monticello, Illinois.



Left: Pulling the Steinadler out for a tow. With a span well over 25 feet, two people are required to move the model safely.



Hooking up.

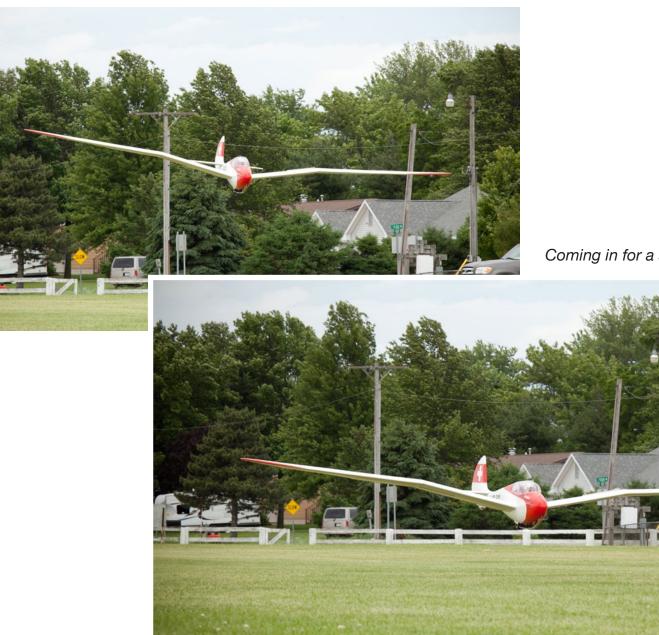


Just starting out.



On tow and looking incredibly realistic.





Coming in for a smooth landing.

R/C Soaring Digest



With some cockpit and canopy detailing still remaining to finish, the Steinadler still looks incredibly realistic. The pitot on the nose, sliding vent openings for the pilots, and instrument cluster all add to the overall effect.



## **9M'S iPS**

### transmitter external battery pack handy clevis tool

Tom Broeski, T&G Innovations LLC, tom@adesigner.com

Here's a "Tom's Tips" on an external battery modification for radios. I used the Airtronics SD10-G for this one.

There are a number of times I need an external battery. I add and switch out batteries for XC and when doing long flights such as the Level V 8 hour slope. I also keep a spare in my pocket when doing TD, just in case I forget to charge.

There are a couple ways to do the modification. The first is to just add a "Y" to the inside battery and let it hang out. The other is to do a more permanent installation.

1: Simple way is to just install the Y, a strip of hook to the battery and a strip of loop to the back of the radio.

See Photo 1: Just a "Y," and Photo 2: Hook and loop.

2: You can just let it dangle. A small notch for the wire might help. I found that I could just lock one side of the battery compartment and it worked fine.

See Photo 3: Dangle.



Photo 1: Just a "Y."



Photo 2: Hook and loop.

I personally prefer a more permanent installation.

1: Install the "Y." I like making up one that just fits.

See Photo 4: Insert internal "Y."

2: Mark where to cut for the plug.

See Photo 5: Mark.jpg)

- 3: Saw or dremel out the notch.
- See Photo 6: Cut.



Photo 5: Mark.

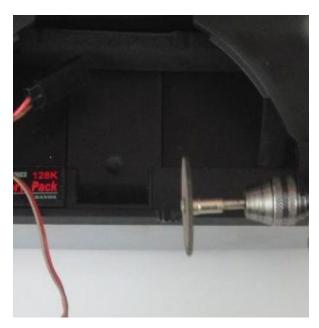


Photo 6: Cut.



Photo 3: Dangle.



Photo 4: Insert internal "Y."

4: File for a nice fit. With the SD10-G it comes out perfectly flush with the internal shelf area.

See Photo 7: File.

5: Glue the female plug in. You can use hot melt, epoxy, thick CA, or my favorite - Goop.

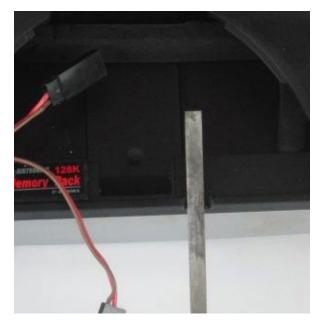
See Photo 8: Glue in.

6: Clean up the glue and you have a nice flush plug.

See Photo 9: Flush plug.

7: Makes for a simple easy to change external battery. Use the exact same type and mAh battery. Don't mix Lipo with Nimh.

See Photo 10: External battery connected to flush plug.



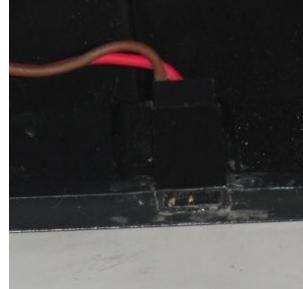


Photo 8: Glue in.



Photo 9: Flush plug.



Photo 10: External battery connected.





This clevis tool is one of the handiest tools I've ever made.

Years ago I tried a couple clevis tools that were just too short or awkward. So I decided to design my own. One of the toughest jobs was reaching in to get the clevis off of a bellcrank in my older planes and ones like my SBXC. It needed to be long enough, but not too long. After playing around a bit, I found that 1/8" rod, anywhere from 8 to 10" long was just fine. I settled on 9", half of the 18" rods I had laying around.

Next thing was to flatten one end and start making it curved.

I found that using a propane torch aided in the process.



1. I started with a rod about 9 inches long...



2. ... flattened one end and started making it curved.



3. I found that using a propane torch aided in the process.



4. I flattened it to about  $\frac{1}{4}$ " wide.



5. I started the curve.



6. I got the main curve looking right.



7. Then I re-curved it to start the final shape.



8. I then curved it back to the final shape.



9. I then curved it back to the final shape.



10. It was important to make sure it was deep enough to get good lifting height.



11. The clevis needed to just fit. Not too tight, not too loose.



12. The tool worked the best with the curve up.



13. It allowed the clevis to be easily lifted off.



14. Now I needed a way to put the clevis back on. I flattened the other end to about 3/16".



15. Bent it about 80 degrees. You can bend it up to 90, but the edge of my vise was a bit rounded. It actually turned out easier to remove, after installing the clevis, with less than a 90 degree bend.



16. I just inserted it in the clevis and twisted it straight.



17. Worked like a charm. The clevis was really easy to put on, even reaching way in on some of my planes.



A final note: There's one last thing. Sharpen the end of the pry bar so it can more easily slide under the clevis.

I've made a bunch over time. You should have a number of them for the shop and tool kit. It saves you from saying "@#! I wish I had that with me."

I made some in polished stainless, put gun blue on some, and have a bunch of rough quick ones stuck here and there.



### New Lithium Battery Technologies from techbriefs.com

#### **3D-Printed Microbattery**

#### First-Ever 3D-Printed Battery

A research team based at Harvard University and the University of Illinois at Urbana-Champaign has demonstrated, for the first time, the ability to 3D print a battery. Their 3D-printed lithium-ion microbatteries

are the size of a grain of sand, and could supply electricity to miniaturized medical implants, compact electronics, tiny robots, and more. To create the microbattery, a custom-built 3D printer extrudes special inks through a nozzle thinner than a human hair. Upon exiting the nozzle, the inks immediately harden into layers as narrow as those produced by thin-film manufacturing methods. Layer by layer, these inks create the battery's anode and cathode. The inks contain nanoparticles of a lithium metal oxide compound, which give the anode the proper electrical properties. A case then encloses the electrodes and an electrolyte solution is added to create a working microbattery. This tiny battery even has an electrochemical performance comparable to commercial batteries in terms of charge and discharge rate, cycle life, and energy densities.

<http://video.techbriefs.com/video/Tiny-3D-Printed-Battery;Power>

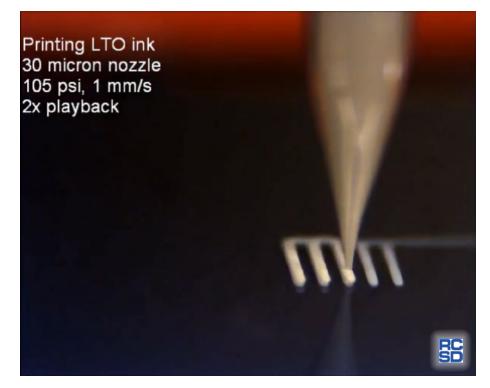
Frame capture from Tiny-3D-Printed-Battery;Power video

#### Towards Better Lithium-Ion Batteries

#### Understanding Lithium Iron Phosphate for Better Lithium-Ion Batteries

Lithium iron phosphate (LiFePO4, or LFP) is one of the newer materials being used in lithium-ion batteries, and it is known to be safer and longer-lasting than the lithium cobalt oxide (LiCoO2) compound used in smart phones, laptops, and other consumer electronics. A barrier to the material's widespread adoption has been that the process by which lithium ions move in and out of LFP as the battery stores and releases its energy is not well understood. Now, researchers at Sandia National Laboratories have confirmed the particle-by-particle mechanism by which lithium ions move in and out of electrodes made of LFP. Their findings could lead to better performance in lithium-ion batteries in electric vehicles, medical equipment, and aircraft. In this video clip, materials scientist Josh Sugar describes the technical approach he and colleagues took to analyze LFP.

<http://video.techbriefs.com/video/Materials-research-for-lithium;Power>



# Kenry Glideola 2013

Chris van Schoor, crasherchris@gmail.com, and Stuart Wallace

As 2013 is the year of "The Gathering" in Ireland, I thought it a good year to kick off this "event." County Kerry where I live is blessed with particularly good slope soaring conditions both terrain and lots of wind, so I thought it might be a good idea to invite people from both other parts of Ireland as well as anywhere else in the world to get together for a few days flying (and craic) in some stunning scenery and epic slope conditions... I have hosted groups from the UK and Finland here before, the idea is now to make this a regular annual event.

The format is an informal "fly what you brung," but, if anyone wants to bring timing gear and set up some racing, that would be great too. In 2010 we had a great day of F3F racing at Annascaul.

The "core" dates this year were 4 – 5 May. As some parties had commitments later in May, they arrived earlier, and others came for the full week after the "core" weekend. As a result I took two weeks leave from work, and ended up flying almost every single day of those two weeks!

The Finnish contingent of Harri and Juha were the first to arrive on the 1st of May, and the three of us had some great flying in conditions ranging from light to good days of lift at Camp (Caher Conree), the "back slope" at Annascaul, and the windfarm just to the north of Tralee.

Every time Harri visits here he leaves me with a big case of "plane envy"! This time around he demonstrated how efficient the 2m Erwin 5 is: even in very light conditions, that plane can rip! Most impressive — or is it actually the pilot each time?!

My house guests, Stuart Wallace - aka "Gromit" - and Andy Burgoune, both from the UK, arrived the Friday evening. The Saturday saw the biggest crowd of the glide-in: I forgot to count, but there must have been 15 – 18 of us on the hill, including five Irish flyers from Counties Clare and Cork. It was a long day and lift never failed!



Entering the ferry to Ireland at Holyhead, Anglesey, UK. Gromit is excited!

I thought it a good idea to hand over the narrative to Gromit; he has written a great blog from the perspective of a "participant," so this is his story:

My Kerry trip started with an afternoon drive 'Oop North' from my Surrey home to meet up with Andy in the Midlands (Shropshire). The border crossing was open and the trip up was uneventful. On arrival Andy was putting the last of his gear in his car. He'd fitted a roof box especially but my first thoughts were that it was going to be a tight squeeze to get all my gear in too... After a bit of puzzle solving we got it all in, models inside and clothing etc. in the roofbox. An overnights B&B with Andy ensured that we'd set off in plenty of time to get the Swift ferry to Dublin from Holyhead.





Andy B's car arrives at Chris's house in Co. Kerry packed to the roof with his and Stuart/Gromit's gear.

Assembling planes on the first day at the Ballincollig wind farm slope, north of Tralee. Tom McPhearson with his new Crossover F3B. On the Friday morning we set off early as Andy was keen to stop off at his local first thing, no not the pub, The Long Mynd slope site. I've only ever been to the Mynd once before which was about 20 years ago on the way back from a PSS Comp in North Wales. On that particular visit I didn't see a darn thing as it was shrouded in thick clag (mist) and rain. On this visit though we could see for miles and I look forward to visiting again for a few days flying. I've got a 5 meter Ventus on the build (still) which would love those big hills.

Stop off number 2 on our Journey was at RAF Valley on the off chance of seeing some flying. We timed it perfectly as a pair of Hawks slowly taxied along close by in front of us with one of the co-pilots giving us a wave at the end of the taxi way before lining up on the runway and taking off. I've always loved Hawks. Back in the nineties I was well into all things PSS. I drew up plans and scratch built a number of WW2 aircraft and also a wide range of Jets, including Hawks.

Rest of the journey to Holyhead went well and we arrived at the Port in good time.

Crossing time on the Swift Fast ferry was scheduled to be only a couple of hours. I always used to feel really ill on ferry crossings but having now done a number of trips on The Oldenberg' to Lundy island these past few years it doesn't bother me so much. Soon after leaving Holyhead though I started to feel rather queasy. It wasn't so much the movement / rolling of the Swift it was the swivel chairs around us that caused it! Any empty swivel chairs were slowly spinning round and round due to the ships movement and it really did make me feel unwell. A move to the comfy seats and a Tom and Jerry video made me feel much better...

On leaving the Ferry Port in Dublin we had a road trip of nearly 200 miles across Ireland before we finally got to Co. Kerry and to our host "Woodstock's" house. It was great to see Chris and his wife Lee again and we were made extremely welcome.

After some excellent Mr and Mrs Woodstock hospitality our first job was to unload all our gear from Andy's car and put into Chris's model <del>workshop</del> <del>garage</del> Warehouse!

Forecast for day 1 of our trip was looking very nice, dry with plenty of wind. The direction, southwest, meant we would be visiting the "windfarm slope." I was looking forward to this one as on our last trip over we didn't visit this site. The next day Chris advised everyone on where we'd be flying and we set off keen to get flying. It didn't take us long to drive to the windfarm slope from Chris's house. After driving up to the top of the hill we took a track which wound its way amongst the wind turbines leaving us Cars parked up behind the Ballincollig wind farm slope, Tralee, Co. Kerry

Very neat PSS warbirds from the Co.Clare contingent. Sadly the green one didn't survive the day....







Luke's Chris Foss Middle Phase and PSS Zero.



Needle 100.

with a short-ish walk to where we'd be flying from.

WOW, what a view greeted us, we could see for miles out over Tralee and the gorgeous Kerry countryside. It felt good to be back in Ireland again and I spent a while just admiring Ireland's beauty. The forecasters had got it right with some sunshine and loads of wind. The slope was excellent to fly on generating really good lift. It was, however, soon to prove a rather eventful day for me. More of that later...

All of us were keen to get flying in the big clean air, and for the first couple of hours the sky was rarely empty of a model or three. Models of all types took to the skies, F3F and sports mouldies, foamies, crunchies and a pair of very nice looking PSS warbirds. I'll come back to the warbirds soon. Pilots were seen grinning from ear to ear and were experiencing one of those oh so rare "crackin' days." First model up for me was my trusty Breta Furio. I've had this model many years now and have always loved it. Whether conditions are light or big, flying it full of ballast or empty my Furio has always been a joy to fly, and It didn't disappoint on that day, either. Huge big aero's, speed runs, practice F3F and general fun flying was had before ending my first flight of "The Kerry Glide- In."

After 30 minutes or so of chatting about all things glidery with others on the trip and watching the flying, I was now itching to get my next model up in the air. I'd brought along my Willow F3F to maiden. It had been ready to fly for ages but the opportunity to get it in the air before this trip just hadn't happened yet. I filled her full of ballast, checked all was working as it should, and waited a few minutes until the skies were empty before getting Andy to launch her out into the big air.

Out she went smooth as can be, I flew her around for a few minutes making only a click or two of trim change till I was happy with her. Rolls were axial, turns were good, dive test was good and the C of G felt good, too. Andy was at my shoulder and was asking me how it felt, I replied saying it felt very nice.

About five minutes into the maiden I decided to bring her in for a

few quick runs close in. I did about four or five runs when on the next one on the left hand end there was a loud "BANG."

I saw a dark Rook / crow sized shape tumbling through the air and a few other "bits," too. I remember shouting "I've hit a bird." My Willow continued rapidly along the slope but was gyrating in all directions. I had no control over it at all. It disappeared around a slight curve in the hill face so nobody saw where it hit the deck. I was gutted, and kept saying I'd "hit a bird." I soon discovered that I had indeed hit a bird but not the sort I was thinking of. On looking around I saw another member of our party (Luke) holding his radio and looking as gutted as I was. It was then that I realised I'd had a mid-air with one of the PSS warbirds.

In 20 odd years of flying this was only my second mid air. No matter how aware of other models and careful you are when flying you have to accept that the possibility of a mid-air, however slight, is always there. I didn't see the PSS warbird at all so I had no chance of taking any avoiding action; I honestly thought I'd hit a bird... A chat with Luke about the incident revealed his philosophy was the same as mine: it was an unfortunate accident that neither of us could have avoided. Handshakes were exchanged before we set off on our hunt for our models.

Roger Hardwick flying to the left; Andy B has just launched his Vampire F3B at the Annascaul slope, Dingle Peninsula.



Vampire and Pace F4H at the Annascaul slope.







Gromit working on repairs in Chris's <del>workshop</del> "warehouse." The kit is all Andy and Gromit's....

Andy B bringing his Vampire in for

a fly-past at the

Annascaul slope.

I walked along the top of the ridge looking down the slope trying to spot anything when I came across one of my tailplanes. Paint on the tailplane revealed that it must have been sheared clean off in the mid air and explained why I had no control after the impact.

After about 30 minutes of searching the warbird pilots found my Willow for me about 2/3 down the face of the hill. I was full expecting that a 'bin bag' was going to be needed for all the bits, however I was to be remarkably surprised with how well it had survived which is testament to how strong and well designed the Willow is.

Repairs began that same night in Woodstock's well equipped workshop "warehouse," and since returning home have been completed.

My "Kerry Glide-In" trip hadn't begun as I'd planned. After returning my Willow to the car and giving it a good look over, amazed at how lucky I was with the extent of the damage, I decided it was time for maiden number two. I'd brought along my Erwin XL. It's a model I bought second hand ages ago but never got round to flying due to having too many toys! With my misfortune for the week already over, surely nothing could possibly go wrong?

So, maiden number two: I filled the Erwin full of ballast and Andy launched her. Once again a good few minutes of flying



Left: Gromit and Gromit's beautiful Jart. Right: "Gromit" (Stuart) photographing Gromit and the Jart at the Annascaul slope.

around to get a feel for her and making the odd click or two of the trims to get her flying hands off and feeling nice.

The dive test was good, rolls were nice, and she turned well and felt nicely responsive to all stick movements. As I was the only one flying at that time it was an ideal time to put her through her paces a bit. Some big aero's, speed runs and F3F runs were flown and I was well happy with my Erwin XL.

At this point a couple of other models took to the sky. Not wanting to have a second mid-air, I decided to walk along the ridge and explore the slope further along by doing a bit of cross country. The slope at the windfarm extends a long way and I was soon well away from where the other models were being flown. As well as the good slope lift, thermals were now coming through. A bit of reflex added saw her repeatedly rapidly climbing to good height. What goes up has to come down, so of course more speed runs were called for 2.

After about 30 minutes I was well happy and the earlier Willow mid-air had been put to the back of my mind. After checking out her response under crow braking I was happy to bring her round a couple of times for landing flythroughs before committing to a landing proper. The fly-throughs were smooth without any rotor so I duly brought her round and landed nicely. The ground was very soft but had tussocky grass all over. On bending down to pick up the Erwin I noticed I'd stripped a gear on a flap servo and the flap hinge itself had partly detached. "B\*\*\*\*r" I said, just my luck, I'd not be having any more flights with my Erwin that day... Annoyed at my second misfortune of the day I took the Erwin straight back to the car without stopping to chat with everyone in the pits area, as I didn't really feel like chatting. I dismantled it, placed it safely on the ground and then unlocked the car and opened up the tailgate and stepped back slightly. What happened next was that I heard a sickening sound that made my stomach churn, my heart stop, and a long string of uncontrollable expletives flow. "CRUNCH!"

The rest of the day I flew my trusty Furio and Wowings Skua having great fun in the good conditions. Between us all the sky was seldom empty of a model or two and everybody enjoyed the day.

Next day was back to the windfarm slope again. Wind strength and lift was much as the day before. Models I flew were my Skua, Skorpion F3B and my Jart.

Flying highlight for me came from flying the Jart. Faaast runs, twinkle rolls, big aero's and above all "crackin" fun. It was the best air and lift I've ever flown her in, my misfortune of the previous day was soon forgotten.

Other highlights at the windfarm were Andy flying his Stingray very impressively, huge big aero's looked sooo nice, Bears' Minivec was loving the big air, and "Harri the Fin"'s Erwin 5 was ripping around.

Everybody enjoyed their time at the windfarm. We couldn't have dreamt of having two such awesome flying days to start off the "Kerry Glide In."

A change in wind direction to the south meant a visit to the slope at Annascaul next. The weather that day was warmer, being sunny with blue skies, the scenery on the drive to the slope and at the slope itself was stunning. The wind was a bit lighter that day and slowly eased more throughout the afternoon. The lift, however, was very good with booming thermals regularly coming through. I flew my 1.9 Carbon Blade most that day and had a "crackin' time" climbing up in the



Jerry launching a rare Chris Foss Phase 5 for Roger ("Bear") at the Annascaul slope



Chris landing his Valentamodel Volcano at the Annascaul slope.

thermals to good height before diving down and enjoying using the speed and gathered momentum to perform big aeros and generally carve up the Irish skies. My Skua again got a fair bit of stick time. Lots of good flying was had by all, and our host Woodstock impressed me flying his Pace F4.

At the end of the day the breeze dropped off and Bear flew his Aroso, a small Depron aerobat kit from a German manufacturer. I was well impressed with this model's performance and miffed that my own "maiden awaiting" Aroso was sitting in "Woodstock's Warehouse." I'd left it there as I didn't think the breeze was going to lighten enough to fly it.

About 10 minutes into one of my Skua flights Andy decided that I couldn't have all the fun in the great lift so he launched his foam Reaper. All was going great till he flew a safe controlled fast low pass. It was, however, just a little lower than planned and his Reaper "landed" earlier than expected. "No worries," I thought, nice soft peaty ground, no damage would be done and the Reaper would be back in the air straight away. After some time had passed Andy re-appeared looking a little miffed and produced an undamaged wing and tail but something important, the bit that holds them all together, was missing, never to be found.

Our day on the slope at Annascaul was excellent, we had great weather, "crackin" flying and great fun in stunning Irish scenery.

The following day saw another slight shift in wind direction to the southeast. Most of Chris's usual slopes tend to be very gusty in this direction, so Chris, Andy and myself went to try out a coastal spot that Chris had spotted on Google Earth. A nice drive through more Irish beauty and we made it to the sea side at Minard Beach (Dingle Peninsula again).

The site itself was a confined small cliff in the grounds of a small ruined castle with a boulder strewn beach below.

Chris showed us how it should be done by flying his Speedo along the cliff edge in the light conditions. I chickened out of flying there! Andy said he was keen to sample the coastal air, but in



Chris landing his Pace F4H at the Annascaul slope.

reality I think he just fancied a paddle. Out his plane went and down she went clattering onto the boulders below, ooops! A scramble down the cliff face revealed no damage to his Foamie so he had another go. Out she went again, ooooops! The tide managed to get the glider a bit wet, but no harm was done and Andy got his day's exercise!

Next day again saw lots of wind. Not to be thwarted though, we flew for a while on some low cliffs in the corner of Inch Beach. The wind speed is slightly less there as there is a backdrop of higher mountains. I think we all had a flight or two there before someone suggested it may be worth investigating some dune flying on the Inch Strand itself.

We set off driving along the loooong flat beach with darkening skies rapidly approaching. After some distance and several minutes of driving I realised that I had the window slightly open and Andy's car was rapidly filling up with sand. Oops again! The sand was soon to become a bigger problem for Roger ("Bear"), his car nose dived somewhat into a softer patch and stopped dead. Luckily, the car was able to drive on when Bear got out!

On reaching the dunes, Andy tried some flying from the bottom of dunes. Unfortunately, the glider was blown over the top, and that's when Andy discovered that the dune sides were sheer, vertical walls! It was a case of two steps forward, The Finnish contingent (Harri and Juha) at the Annascaul "back" slope. Juha flying his Phoenix 2000. Chris's 4m Baudis Salto awaiting its turn.



Andy trying to retrieve his plane that was blown over the top of the sheer dune at Inch Strand.



R/C Soaring Digest



Chris launching his Valentamodel 1:5 scale L-213A at the Caher Conree slope, Camp, Dingle Peninsula.

one and a half steps backward — in the rain which had now reached us — before he eventually hauled himself over the top and retrieved the plane. After that there was only one thing to do, and we all retired to Sammy's Bar on Inch beach for a "cup of tea."

Next day saw another change in wind direction back to the northwest and a trip to Camp. I'd been hoping all week that we'd have some time flying there as I thoroughly enjoyed flying there during our last trip to Ireland. This was another "crackin" big air day" with good lift, blue skies and stunning Irish scenery.

My Jart got another good airing. Its performance always impresses me. Big aero's, twinkle rolls, slooow 4-pointers or fast runs, its quick and fun to fly. Andy enjoyed the same thrill flying his own Jart and Bear flew his Rodent most impressively. Chris impressed us with his aerobatic skills flying his L 213A scalie in the strong wind. I think Scram flew his Typhoon that day.

That was to be our last session of flying during the "Kerry Glide-In 2013" and it was a "crackin" way for it to come to an end. As it was only myself, Chris and Andy of the party left, and a dodgey forecast for our last day, we decided to go head over to see some of Ireland's true beauty in "The Ring of Kerry." I did, however, slip my Skua in Andy's car as it always pays to "be prepared."

The forecast rain in fact stayed away till mid afternoon and we were blessed with some magnificent views. Ireland's natural beauty is truly stunning.

During our trip as well as the flying we had to of course have a few evenings out sampling the Guiness and a meal or two. Chris and his wife Lee made Andy and me extremely welcome in their home and their hospitality was second to none. Lee's cooking was amazing during our stay. Thank you, again, Lee!

Thank you to Chris for arranging/planning a very successful



Valenta L-213A, with the iron-age Caher Conree Promontory Fort in the background.

"Kerry Glide-In 2013." It was good to meet everyone else from the BARCS Forum and I look forward to seeing them on a hill again somewhere.

Our 200 mile return journey back to the Port at Dublin was good, the crossing on the SeaCat was smooth despite the strong wind. A detour was made on our return trip to Andy's we travelled up through the "Mach Loop" to see for ourselves where the jets do their low level flying. Being a weekend there was of course no flying happening, but it was great to see where it happens.

Special thanks to that "Nasty Midlander" Andy B for doing all the driving, booking the ferry tickets, and "dropping me in it" with Mrs. Gromit. <sup>(C)</sup> LOL.



On-the-edge extreme sloping at its best. Bear's Rodent in high winds.

Note: The photo has been darkened only to show up the air-brushed graphics as they are quite light in colour; this makes the background darker. Colours on the model are true. — Chris



## 36th League of Silent Flight Tournament Jerilderie, New South Wales, Australia

Terry Passalaqua, passalaqua63@bigpond.com

On the 8th, 9th and 10th of June, I attended the annual League of Silent Flight tournament which is held at the racecourse in the township of Jerilderie, NSW.

This is an ideal location as competitors come from all over the country to enjoy three days of thermal soaring competition. The racecourse is flat, open, and situated very close to the township on the northern side.

This event has been running for 36 years now and is the largest and most prestigious open thermal soaring competition in the country.

Many competitors arrive on the Thursday before the weekend to get in some practice and relaxed flying before the competition starts on the Saturday.

The LSF Australia and Jerilderie council have a long relationship and so the field is prepared to be in the best possible condition for the event.



I arrived on the Friday afternoon to find many competitors out on the field flying in quite breezy conditions and also flying some hand launch gliders. The weather for the weekend was expected to be fine with light winds.

For this tournament event, competitors are placed into teams with four or five

pilots in each team.

I was in Team 13 with Brian Ford, Karl Knack, Ken Fox and Warren Lewis and with Kevin Smeaton helping out.

The task is to fly a 10 minute flight in a 12 minute working time and to land within the spot landing. Points are determined

on your flight time and how close you get on your spot landing. The scoring is done using a "man on man" system where the winner of each heat is given 1000 points and everyone else receives a percentage of his score.

#### Saturday

The early morning was chilly and clear, with blue skies and no fog. The Lions club of Jerilderie have their caravan open and serving hot food and drinks. There was a gentle breeze, if any, and so winches were set up in an easterly direction. Team positions were sorted and models were put together ready for a great day of thermal soaring. A pilot





briefing was held and the competition got underway shortly after.

The models flying are superb with lots of Supras, Maxas, Explorers, some F3B models and a Genesis that I was flying.

As the morning progressed thermals started to build and before long pilots were getting away into some good lift.

There would often be six to ten models all working the same area of lift so it was critical to keep your eyes on your model. Flying in the direction of the sun made it even more difficult and also there were some curious eagles who wanted to check things out.

At the 1/2 hour lunch break, there was



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the hand launch glider competition for those who wanted to enter.

The flying continued until 4:45pm where we then packed up before dark.

Back to the motel and get ready for the LSF Dinner and Annual General Meeting.

After the meeting an auction was held of modelling and other items, etc., to raise funds for the Australian F3K team.

#### Sunday

Once again it was chilly first up, but the sun was making its way out of the fog which didn't last too long at all and we were left with another clear day. The gentle breeze was still coming mainly from the east and so winch positions were left as they were.

Flying commenced around 9:00 am and by late morning thermals were good and buoyant.

The lift was working well over the grandstand and towards the township.

By early afternoon it was quite mild with sunny skies and big lazy thermals with lots of models specking out... fantastic! It was awesome to watch ten or so models come screaming home and doing some aerobatics after working their way up to incredible heights.

By this time the breeze had shifted around towards the north but launches were still OK. By 4:30 pm the lift had started to weaken but it was a great day and with the expectation of another fine day for Monday, many people decided to leave their winches out overnight.

#### Monday

Another clear day greeted us and before long we were into the flying for the final three rounds of the 15 rounds that we flew over the weekend. My model was flying well and I managed to have some good flights and some not so good over the course of the weekend.

Around lunchtime the perfect flight flyoff was held and this concluded the competition for 2013. Shortly afterwards the presentations were held and everyone was awarded a prize from the generous sponsors of the event. Some competitors stayed on and continued flying while others left for the journey home.

It really was a fantastic competition that was well organized and well run and was flown in ideal conditions.

At a competition like this, you can take away fond memories of a great time that you shared with many other modellers.







