

Radio Controlled Soaring Digest

March 2009

Vol. 26, No. 3



March 2009

Vol. 26, No. 3



Front cover: Sanders Chai's Windrider Fox flies across Washington's Table Mountain slope. Photo by Bill Henley
Canon EOS Digital Rebel XT, ISO 400, 1/1600 sec., f9, 75mm

3 *RC Soaring Digest* Editorial

4 Two Oceans Slope Soarers Aerobatic Competition 2009

Kevin Farr provides coverage of the first slope aerobatic competition in South Africa in roughly two decades. A good number of entries, experienced judges, and good weather made for a memorable event.

13 Southern Downs Soaring Cup

Sponsored by the Toowoomba Amateur Radio Modelling Club, 7th and 8th of March, 2009.

The Tool Room 14 Dremel 6300 Multi-Max

The second in a series of four articles reviewing multipurpose oscillating tools. By Lothar Thole

Podcasts from the Glide Fast Journal 21

Paul Naton, of Radio Carbon Art Productions, has added three podcasts to his blog on TypePad.

New Products from TMRC 22

Tom Martin Radio Control LLC introduces five new scale RC sailplanes and announces the formation of a business relationship with Alex Kolyvanov /AK-Models.

Have Sailplane - Will Travel (Geekily) 25

Tom Nagel shows off his new launch line retriever. Easy, versatile, fun to use, under \$200. Plus you can ride it to work.

Back cover: Mt. Rainier lenticulars serve as a background for Adam Weston's Encore. Photo shot at Tiger Mountain in early December by Phil Pearson.

Canon Power Shot S2 IS, 1/400 sec., f3.5, 29.3mm

R/C Soaring Digest

Managing Editors, Publishers

B² Kuhlman

Contributors

Kevin Farr
Tom Martin
Tom Nagel
Paul Naton
Lothar Thole

Photographers

Dave Garwood
Bill Henley
Kevin Farr
Tom Martin
Tom Nagel
Paul Naton
Phil Pearson
Lothar Thole

Contents page clouds - Steve Holmes

Contact

rcsdigest@themacisp.net
Web: <http://www.rcsoaringdigest.com>
Yahoo! group: RCSoaringDigest
AIM screen name: RCSDigest
Microsoft Messenger: rcsdigest

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 each article is 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.

Copyright © 2009 R/C Soaring Digest
Published by B2Streamlines <<http://www.b2streamlines.com>>
P.O. Box 975, Olalla WA 98359
All rights reserved



In the Air

Bob Hansen, an RC Soaring Digest reader, asked us to include his thoughts on the passing of his RC soaring friend in this issue.

This is a notice of the death of Les Anderson, soaring champion! My friend, mentor, flying buddy, Les Anderson, L.S.F. #13, passed to the other side of the clouds on September 28th, 2008, at Mindon, Nevada, of heart complications. He was 78 years young. His son, Cris Andersonm hired a Grob 2-place sailplane to scatter his ashes over the High Sierras. I met Les in 1968 on Mt. Tam in Marin County, California, flying his trusty Graupner Cirrus. I needed help, and he stepped in to guide me through the landing! We hit it off and we both eventually took sailplane lessons and as time moved on we bought an L-Spatz III sailplane and flew for years in northern California. We got into astronomy and traveled far for dark skies, always scouting for new soaring locations. He moved to Mindon, Nevada, to fly the Sierra Wave and go trout fishing. I'm missing his helpful airplane wisdom, his kindness, and patience, and fish stories. He was a model sailplane pioneer, producer of sailplane kits, winner of many sailplane contests in the 60's, a member of the North Bay Soaring Club and CD of many contests. If I'm not mistaken, he achieved level "IV" L.S.F. He earned his SSA Silver "C" Badge in the L-Spatz, worked for a time on damaged DG sailplanes at Calistoga, California, and was a member of the Silverado Soaring Club. A true friend! -- Bob Hansen

Two Oceans Slope Soarers

Aerobatic Competition 2009

Kevin Farr, kevin@fvdv.co.za



The Two Oceans Aerobatic Competition took place over the weekend of the 31st of January and the 1st of February, 2009. This weekend was the culmination of months of planning by a large part of the Cape Town and upcountry slope pilots and families, to whom we are extremely grateful to for all the time and effort invested in achieving a hugely successful event. This was the first time that an open slope aerobatic competition had been held in Cape Town and maybe South Africa since the late 1980's and so was something new to most of us.

Very few of us had any idea what we were letting ourselves into, but realised there was a need to create, define and implement a level of disciplined flying that had been lacking in our general approach to slope flying, and in that manner improve the overall level of pilot skills present on the slope on any given day.

When the T.O.S.S. (Two Oceans Slope Soarers) committee started planning the event they realised that no matter what, without judges, they simply did not have an event. To that end they called in the help of John Lightfoot,

aka Harry S. Hawk, who is well known to many in the aeromodelling fraternity through the publication of Southern Soaring Club articles, to assist with defining the aerobatics schedule.

Things have somewhat changed since the 80's with regard to aircraft speed and energy retention, and many of the pilots fly v-tailed type speed ships which are not pure aerobatic craft, but would have to do for this event, as time was short and some serious practice required by most.

A format for the competition was decided upon and after much deliberation a sequence of eight manoeuvres was settled upon. This included a split "S," Immelman turn, inverted flight for five seconds, double Immelman, Cuban eight, slow roll, three consecutive loops and three rolls. As simple as these manoeuvres may sound, they are by no means easy while being vigorously blown back at the slope, and staying true to slope aerobatics need for momentum and energy retention while achieving a level of accuracy and grace that would be appreciated by the eagle-eyed judges with score boards in hand.

There was much interest shown country wide, and especially from many of the Durban boys, specifically Dave Greer and Russell Conrath. Dave Greer, sometime previously, had suggested an interesting "Half Pipe" sequence which we felt would be a great variance on the traditional aerobatics routines. This uninterrupted sequence includes the following: a dive to the horizon pulling up into a stall turn, dropping back down onto the horizon, completing a roll, and pulling up into a stall again, back down into a loop, back into the stall turn, dropping down half rolling and pushing through inverted, back into the stall turn inverted, half rolling out and finishing back on the horizon. This sequence was included in the competition as a format where the real test would be energy management throughout the sequence, as opposed to a single manoeuvre with less energy retention required by comparison.

A week before the event there were frantic calls between committee members and pilots alike as to what the weather was going to do... Was it going to rain? And, most important, was the wind going to blow in the right direction

Group photo, competitors and judges, Two Oceans Slope Soarers Aerobatic Competition 2009.

for us to be able to fly at Red Hill, the T.O.S.S. home flying site?

Guessing the wind in Cape Town is a hazardous affair at the best of times as you can quite easily achieve the four seasons in one day based on which part of the peninsula you just happen to be visiting at the time. It's why we like the Cape so much!

The first day of the competition dawned clear and windy just as required, but with a Southerly vent in the wind, rather than the perfect South Easter that was required. Following an entry sign-in and confirmation of frequencies, everybody got a great "goody bag" which included a T-shirt, cap, pen, water bottle and a small torch amongst other things, all compliments of a group of very generous sponsors who are listed at the end of this article .

The 16 pilots who had entered awaited a briefing by the judges and Contest Director. Chief Judge was John Lightfoot, and he was more than ably seconded by Johnny Calafarto, who has much power aerobatic experience and judging, and Andrew Anderson, who has much slope experience from past events, and as far back as the last Nationals. Apart from Marc Wolfe, Damien Hinrichsen, Dave



Above: Red Hill, not a bad event venue.

Opposite page, clockwise from upper left: Kevin Farr with Johnny Calafarto, John Lightfoot and Andrew Anderson; Johnny Calafarto holding court; the three judges (Andrew Anderson, John Lightfoot, and Johnny Calafarto) doing what judges do; the flight line.





Upper left: Russel Conratt, the man and his machine.

Above: Contest Director Kevin Farr in a mild state.

Left: Refreshments at Dixie's at the end of Day 1.



The Competition Arena

Greer and Russell Conrardt, few if any of the other entries had any competition experience.

At 10AM the first round was started and the first competitors went down to the south slope at Red Hill which is not ideal as the wind still held to the South much to the CD's distress.

There was, however, enough lift for the guys to complete the first round sequences. Although not ideal, the first round was completed and as if on order, and much to everybody's delight, the wind swung into the South East and the Cape Doctor began to work its magic. A moderate 30 km/h breeze blew straight up the slope for the next two and a half hours, much to everybody's glee and the CD's evident relief, manifested by something resembling a jig performed in the car park overlooking the slope.

The pre-determined format was to get two pilots up at a time and have them coming through consecutively, one manoeuvre at a time. For those who have not done this type of contest tandem flying before, it can be a wee bit unnerving, as the need to spy on your competitors successful manoeuvre can be a distracting to say the least.

It takes real focus to keep your eyes and mind on your own plane, while awaiting your turn for the next manoeuvre. By the time all contestants had completed Round 1, there were many surprises with some of the less experienced pilots posting points well ahead of a good few of the experienced slope guys who were expected to do a darn sight better. The time well spent in weekend practice sessions was evidently paying off for some.

It was decided that we should have a shorter lunch and try to fly another two rounds while the wind was still favourable. As Anton Benning and Mike Basson were the first pilots in the second round, they launched and climbed for height, but the wind quickly turned Southerly and conditions became shocking in a matter of minutes. Disgruntled competitors and judges alike decided to wait out a possible wind shift later in the day. During this grounding period competitors got much useful feedback and tuition from the judges who gave advice with regard to the calling of a manoeuvre and the importance of the “caller” in the whole scheme of competitive flying.

We had tended to neglect the important role of a “caller” in our practice sessions

so it came as quite a surprise to find out just how important a good “team” of pilot and caller can be on the slope.

Further advise from the judges included leaving a gap between the “commencing” and “now” calls when performing a manoeuvre as any deviation or wing wobble after “now” was called would cause you to loose points even though the pilot had not even started the manoeuvre.

All this added vital information to pilots in the future rounds, which most pilots viewed as being flown far better than the first round.

At 4PM we finally conceded to the weather which had not budged an inch from the Southerly direction, and called things off until the next day. Everybody moved down to Dixie’s, a picturesque local watering hole where we enjoyed ourselves with a few cool ales and where the judges were feted with meals and drinks in an unashamed attempt to soften them up for the next day’s scoring. Sadly this did not work! This was our official event dinner and was taken to with much mirth, resulting in some pilots being a bit worse for wear the next morning, while still sporting huge grins and nursing a well earned headache.

Sunday’s wind direction was forecast as South Westerly which would mean that we would have to hold the event at Soetwater in Kommetjie. The Contest Director was seen driving like a possessed madman around the peninsula at 6AM in the morning in an attempt to see if the wind was in fact from the South West, when a call came through from Theunis van Niekerk asking, “Where you bru, it’s South East!”

The entire fleet of contestants arrived for their breakfast of champions, bacon and eggs breakfast rolls, which the fantastic caterers had supplied on the slope. All were only too happy to see that the wind was firmly out of the South East and the lift conditions were excellent. Once again the flying kicked off at 10AM with more than perfect conditions that were never supposed to exist.

The pilots got stuck in doing their very best and it seemed, in certain cases, put themselves under more pressure as they now had scores to defend from Day 1.

The callers on Day 2 did a much better job and things were a lot more accurate, clean and smooth, although the judges seemed to have stepped up the scoring and were a little more brutal in their allotment of scores. The wind continued

Match Pos	Pilot	Aerobic Round 1	Aerobic Round 2	Half-Pipe Round 3	March Total	Match %
1	Marc Wolffe	154	100	48	302	100.00
2	Damian Hinrichsen	132	101	46	279	92.38
3	Steve Meusel	137	91	46	274	90.73
4	Russ Conradt	122	95	50	267	88.41
5	Kevin Farr	126	84	39	249	82.45
6	Grant Crosby-Emery	130	72	45	247	81.79
7	Malcolm Riley	121	83	*5	239	79.14
8	Theunis Van Niekerk	111	80	35	226	74.83
9	Dave Greer	109	75	39	223	73.84
10	Gus Thomas	113	73	33	219	72.52
11	Bobby Purnell	95	79	40	214	70.86
12	Wayne De La Peyre	79	66	26	171	56.62
13	Jeff Steffen	94	68	8	170	56.29
14	Anton Benning	84	36	0	120	39.74
15	Michael Basson	81	0	0	81	26.82
16	Bill Bewey	33	27	0	60	19.87

Above: Final scores.

Above right: Kevin Farr begins the awards presentation.

Right: Steve Meusel, Marc Wolfe and Damian Hinrichsen, winners all.



to deliver the goods and with some good air traffic control by Martin Keightly on the slope front and his team of Greg Lerm and Nic Steffen in the control area, things ran smoothly and we were ahead of time allocated for the round.

With Round 2 completed we decided to make the most of the favourable conditions and head straight into the "Half Pipe" sequence. Russell Conradt was so excited by the idea that he was seen diving into some fynbos with Dave Greer in hot pursuit. Discussions are still rife as to what that was all about!

For some this was quite nerve racking and the inverted stall turns and negative push into the final stall turn got the better of quite a few pilots. A certain pilot, while being so focused into his first stall turn almost forgot to do his roll on the first pass and if it wasn't for his caller, he would have totally left it out.

Some of the lighter planes which were not ballasted tended to suffer from blow back towards the slope and insufficient energy to really carry through to the next stall turn. The half pipe sequence went quite quickly and the executing of it probably didn't take much more than a minute per pilot.

With the contest completed it took a little while for the scorers to tally the final

scores, while all pilots and judges had a good old tongue waggle. It was during this period that the wind shifted back to Southerly and blew out all the flying for the rest of the day. Somehow we were granted just enough wind from the right direction for two days in a row to get the whole event completed as originally envisaged and the CD thankfully saved a few more grey hairs in the process.

Kevin Farr Chairman of T.O.S.S. then took the floor and thanks to wonderful support from the hobby shops here in Cape Town, proceeded to hand out prizes to each and every competitor. The overall laurels went to Marc Wolfe who placed first, and received an impressive silver floating trophy, which he has to return to defend next year, as well as a first place trophy which he gets to keep as winner of the inaugural Two Oceans Slope Soarers Aerobatics Event. He was followed in a very strong second place by Damien Hinrichsen and in third place by Steve Meusel, who both received trophies to take home and hang on the mantelpiece.

Out of the Durban duo, Russell Conradt placed a great 4th and Dave Greer flew beautifully into 9th position.

Discussions are already at large over the possibility of similar trials in the Durban

area in preparation for next year's event, so that overall as a slope soaring community we can continue to improve pilot skills on a country wide scale.

The official event closed off at 2PM and the competition crew were left to ponder about next year's contest while gazing down at the slope through sunburnt eyelids.

A very generous thank you to all our sponsors:

Clowns Hobbies
Hobby Warehouse
Micton Hobbies
Grant Lyle and Framgram Tools
Russell Conradt from Durbs by the sea
Dave Greer from Durbs by the sea
Iris van der Vlist
Grant and Belinda Crosby Emery
Jeff and Rose Steffen
Theunis van Niekerk
Steve Meusel

and basically the entire TOSS crew who made this all possible and who made sure that each and every pilot received a prize and the judges received bottles of champagne to soften them up for next years event. Now that's what I call forward planning.

So to all the slope soarers out there, next year... be there!



Southern Downs Soaring Cup

7th - 8th March 2009

To be held at the TARMAC Field
Toowoomba Amateur Radio Modeling Club
Event run by

Moreton Region Sports Soaring Association (MRSSA)

Rules: Open Sailplane - will be the standard 10 minutes in 12, with FAI landing bonus. You can fly any (FAI legal) Sailplane and will be allowed a maximum of 2 launches per slot.

Entry Fee \$10.00 (Pay on the day)
4 rounds on Saturday (10.00 am Start)
3 rounds on Sunday (9.00 am Start)
Finish and prize giving by approx. 1.00 pm Sunday

BBQ Lunches will be available (courtesy TARMAC) the field on both days.

Trophies/prizes for:
Open winners
Highest placed non molded model
Highest placed 3channels or less model
Shortest flight

Where is the TARMAC field?

From Toowoomba head south out Ruthven St, past KMart and continue out of town. The field is on the right of the New England Hwy heading south at approximately 14.1kms from the center of town

Accommodation :

Comfort Inn Glenfield is one of the closer Motels and near shops and food outlets

www.toowoomba.com

www.toowoombaholidays.info

For further information contact:

John Donaldson - 07 32636493 or 0417740489

Brian Ford - 07 33564021 or 0409747737



Walk-around... Together... In a future issue of RCSD



EoN Olympia IIb N480LY



EoN Olympia II N606BG

The Tool Room

by Lothar Thole, lothar.thole@gmail.com

Oscillating Tools - Part 2, the Dremel 6300 Multi-Max

This is the second in a four part series reviewing three multipurpose oscillating tools.

Part 1 brought you an introduction to oscillating tools and a review of the Bosch PMF-180 E, available in Europe and Australia. Part 2 covers a review of the Dremel 6300 Multi-Max, available in the USA only. This will be followed by part 3, covering a review of the Fein Multimaster which is available internationally. Finally, part 4 will be a comparison of the three tools.

As a quick summary from last month, oscillating tools are primarily designed for sawing soft metals, wood and plastics, for dry sanding of surfaces, corners and edges, for scraping, and for grout removal using the applicable accessories. The tools do their work by imparting a high-speed rotary oscillation through a small arc of around 3 degrees to the cutting blade or sanding disc. This makes it much safer to use than circular or reciprocating saws, whilst also allowing more accurate control of the cut.



Photo 1. Dremel 6300 Multi-Max

The Dremel Multi-Max also comes in a practical plastic tool case (refer to photo 1 and 2), and is supplied with the following accessories (refer to photo 3):

- a) An MM450 segment saw blade (for wood, plastic, dry wall and other soft materials). This has a diameter of 3", resulting in a saw tooth movement of about 5/64" (2mm) back and forth.
- b) An MM440 plunge cut saw blade 3/4" wide (for wood, plastic, dry wall and other soft

materials). This has a radius of 2.5", resulting in a saw tooth movement of about 4/32" (3.3mm) back and forth.

- c) An MM610 1-3/16" wide flexible scraper blade.
- d) An MM11 base plate for sanding.
- e) A set of 3 assorted Velcro-backed sanding sheets (60, 120, 240 grit).
- f) One Allen key.

Optional accessories available at this time, but not included in the kit:

- a) MM422 BIM (bimetal) plunge cut saw blade 3/4" wide (for non-ferrous metals, wood, plastic and other soft materials). This has a radius of 2.16", resulting in a saw tooth movement of about 7/64" (3mm) back and forth.
- b) MM411 carbon steel plunge cut saw blade 3/8" wide (for wood, plastic, dry wall and other soft materials).
- c) MM500 1/8" grout removal blade. Can probably be used for shaping soft materials.
- d) MM501 1/16" grout removal blade. Can probably be used for shaping soft materials.
- e) MM600 1-9/16" wide rigid scraper blade.
- f) MM70W sanding paper sheets for wood (60, 120, 240 grit).
- g) MM70P sanding paper sheets for paint (80, 120, 240 grit).
- h) MM900 60 grit diamond paper sheets.

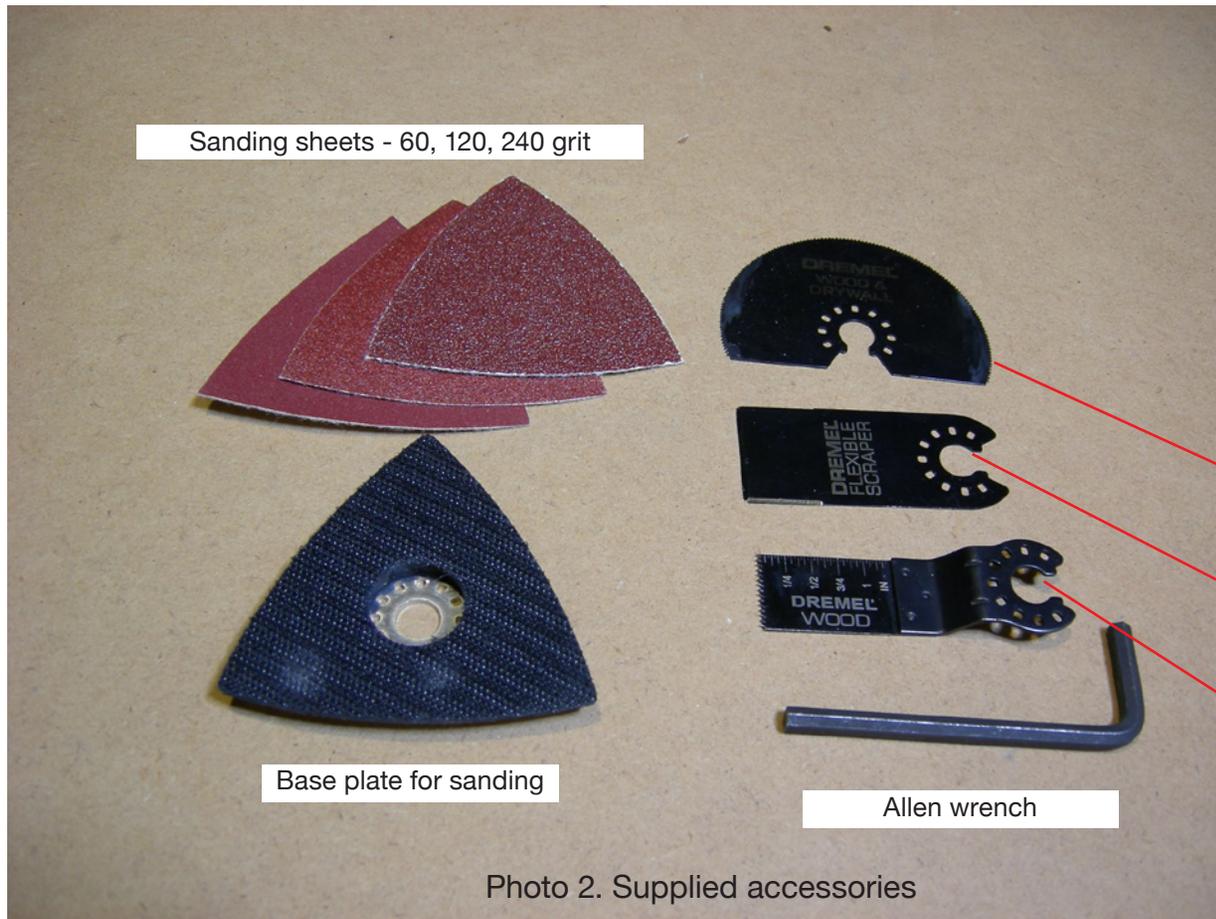


Photo 2. Supplied accessories

Dremel 6300 Multi-Max Technical Data

Voltage rating	120V ~ 60 Hz
Maximum input current	1.5A
No load speed	10,000 – 21,000 rpm
Oscillation angle, left/right	1.5 degrees
Weight	2 lbs. (~900g)



Photo 3



Photo 4



Photo 5

Setting up the tool for use.

- Loosen the Allen screw and washer from the tool holder (visible in photo 4). Unlike the Bosch PMF-180, it is not necessary to completely remove the Allen screw when attaching blades and/or scrapers etc. The blades are 'C' shaped at the attachment end so that they can be slid into place between the tool holder cams and the Allen screw head and washer (see photo 5). However, this does not apply when fitting the sanding plate.
- Align the blade or sanding plate with the tool holder in such a way that the openings in the accessory engage into the cams of the tool holder (see photo 6).
- Use the Allen screw to fasten the accessory to the tool holder. Tighten with the supplied Allen key (see photo 7).



Photo 6



Photo 7



- d) If the sanding plate was attached, ensure that the Velcro backing is free from debris, and apply the appropriate sanding sheet to the plate. Press it against the backing plate with a light turning motion in a clockwise direction.
- e) For a safe and fatigue-free working position it is possible to position the accessories in any snap-in positions in the tool holder (refer to photo's r2 and f6).
- f) The speed control wheel is located at the back of the tool (see photo 8).

Warning! The dust from many materials may contain toxic chemicals. When sanding such materials, work in well-ventilated areas and wear appropriate protective equipment. Vacuum the work area frequently to minimize the dust.

When sanding Styrofoam, attaching a shop-vac is a good idea to keep the mess to a minimum.

Example of Use: Rib templates for Ugly Stick Wing

a) Rib templates for the Ugly Stick wing are cut out using the MM422 BIM $\frac{3}{4}$ " wood/metal plunge-cut saw blade. The rib pattern is transferred to the 1.6mm Aluminum plate using a felt tip pen (see photo r1).



b) The blade is aligned so that the teeth will form a shallow angle with the Aluminum plate when the tool is held horizontally. Applying light pressure, a plunge cut is made through the plate (see photo r2).



c) It is important to let the tool do the work, which also makes it easy to guide the tool (see photo r3). Excessive pressure will result in poor handling and vibration.

d) Cutting only with the tip of the blade makes it easier to follow curves (see photo r4).



e) One rib template has been cut out (see photo r5).

f) The second template is cut out the same way (see photo r6).



Photo r7

g) The ribs, cut out with the Dremel 6300 Multi-Max and the MM422 BIM $\frac{3}{4}$ " wood/metal plunge-cut saw blade, are now ready for finishing. (See Photo r6)

h) After attaching the sanding plate and 120 grit sand paper, the edges are sanded smooth (see photo r7 and r8).



Photo f1



Photo r8

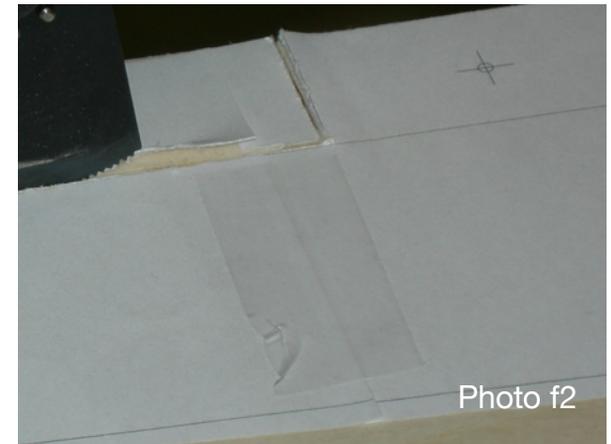


Photo f2

Example of Use: Ply spine for floats

a) Two ply templates are cut out using the segment saw blade. Paper patterns are glued to the ply using spray adhesive (see photo f1).

b) The cut can be started anywhere along the pattern (see photo f2).

c) Cuts can be started from inside corners. This is difficult to achieve with a hand saw. Applying light pressure, a plunge cut is made through the ply (see photo f3).



Photo r9

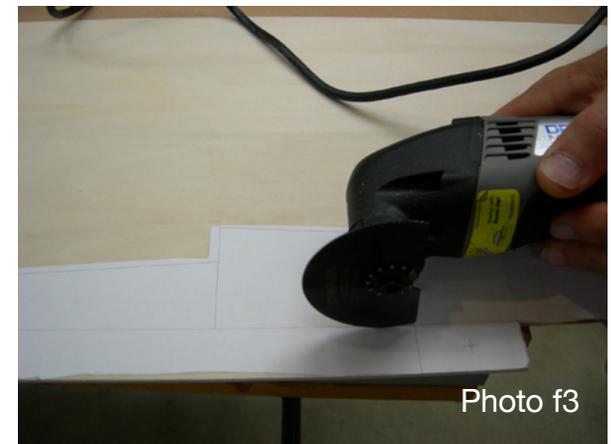


Photo f3

d) The line is followed, taking care that the blade is cutting the ply at a shallow angle. It is easier to navigate bends if cutting with the corner of the blade (see photo f4).

e) Starting the cuts is much easier if the segment blade is mounted so that the lower corner of the blade is at 90 degrees to the ply (see photo f5).

f) Working all the way around, the entire template is cut out (see photo's f5 – f7).

g) Using light pressure results in smooth cuts and minimal 'fringing' when cutting across the grain (see photo f8).

h) After attaching the sanding plate and 120 grit sand paper, the ply template is sanded to shape (see photo f9).



Photo f4



Photo f5

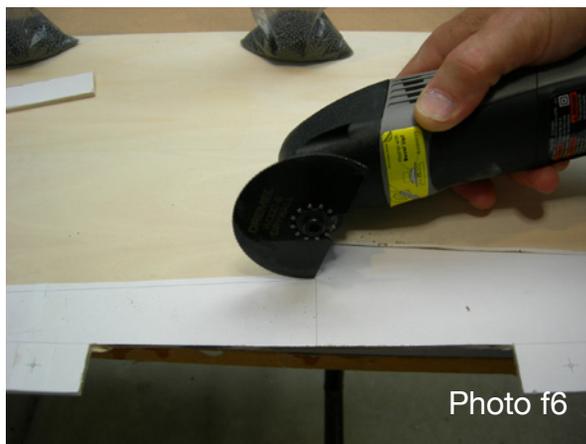


Photo f6

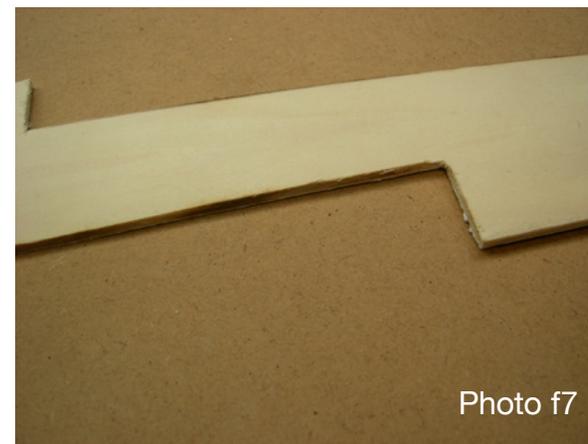


Photo f7

General Observations

The Dremel tool is smaller than the Bosch and Fein Multimaster, and therefore easier to control. It also vibrates less and makes less noise. These factors make it a good choice for finer work.

That's it for this month. Part 3 will cover a review of the Fein Multimaster.



Photo f8



Photo f9



David Hobby



Mike Smith



Charlie Richardson

Paul Naton of Radio Carbon Art Productions has an increasingly active blog at <http://glidefast.typepad.com/>.

Paul's blog is filled with RCA news briefs, previews and clips from RCA DVDs, plus links to specific materials available from RC soaring web sites all over the world.

It's a blog which deserves frequent visits.

In September of last year, Paul started posting MP3 audio podcasts of interviews with notable RC soaring pilots. Three podcast interviews are available as of January 2009 - David Hobby, Mike Smith, and Charlie Richardson.

All three are readily available from the Glide Fast Journal blog main page <http://glidefast.typepad.com/> and can be downloaded for listening at your leisure.



NEW PRODUCTS ANNOUNCEMENT

Five New Schweizer Sailplanes

Brand new for 2009, TMRC has expanded its offerings of vintage U.S. sailplane kits with several designed specifically for the growing sport of aerotowing.

These now include at quarter scale the SGS 1-23 in all variants at 3.3-4.0 meter span, the SGS 1-26B and SGS 1-26E at 3.0 meter span, and the SGS 2-33A at 3.8 meter span.

Just released also are a third scale SGU 1-19 or 1-20 at 3.7 or 4.4 meter span (either wing variant may be built from the plans and partial kits) and a 40% TG-2 or LNS-1 training glider at a whopping 6.3 meter span. The TG-2/LNS-1 may be modeled as either the Army or Marines version with plans and parts supplied by using one of the two available decal sets.

Plans include patterns for parts and the laser cut partial kits employ conventional glider and sailplane building methods. (See the SGS 2-33A sample on the opposite page.) All models are drawn accurate-to-scale using photo and factory documentation and are easily built with intermediate to advanced skills. In addition, building manuals and construction logs are available online to preview the construction features of each or to provide a forum for modelers interested in flying large-scale sailplanes.

Laser cut partial kits include plans and all necessary parts to frame each assembly including notched plywood edges and spars for the empennage, all fuselage bulkhead formers and crutches, all wing ribs, dive brake doors, beds and frames, as well as servo trays and control horns. Not included are leading and trailing edges, wing spars or fuselage truss

members when framed using square stock or hardwood dowel, or wing or fuselage sheeting where required.

Hardware packages of quality Dubro, Sig, Sullivan, K&S and TMRC components as well as instrument panel, cockpit detail, decal kits and photo documentation are available shipped with plans or laser kits.

More than 50 model kits are now available with information and pricing for each found at <http://www.tmrCsailplanes.com> or <http://www.ak-models.com/>

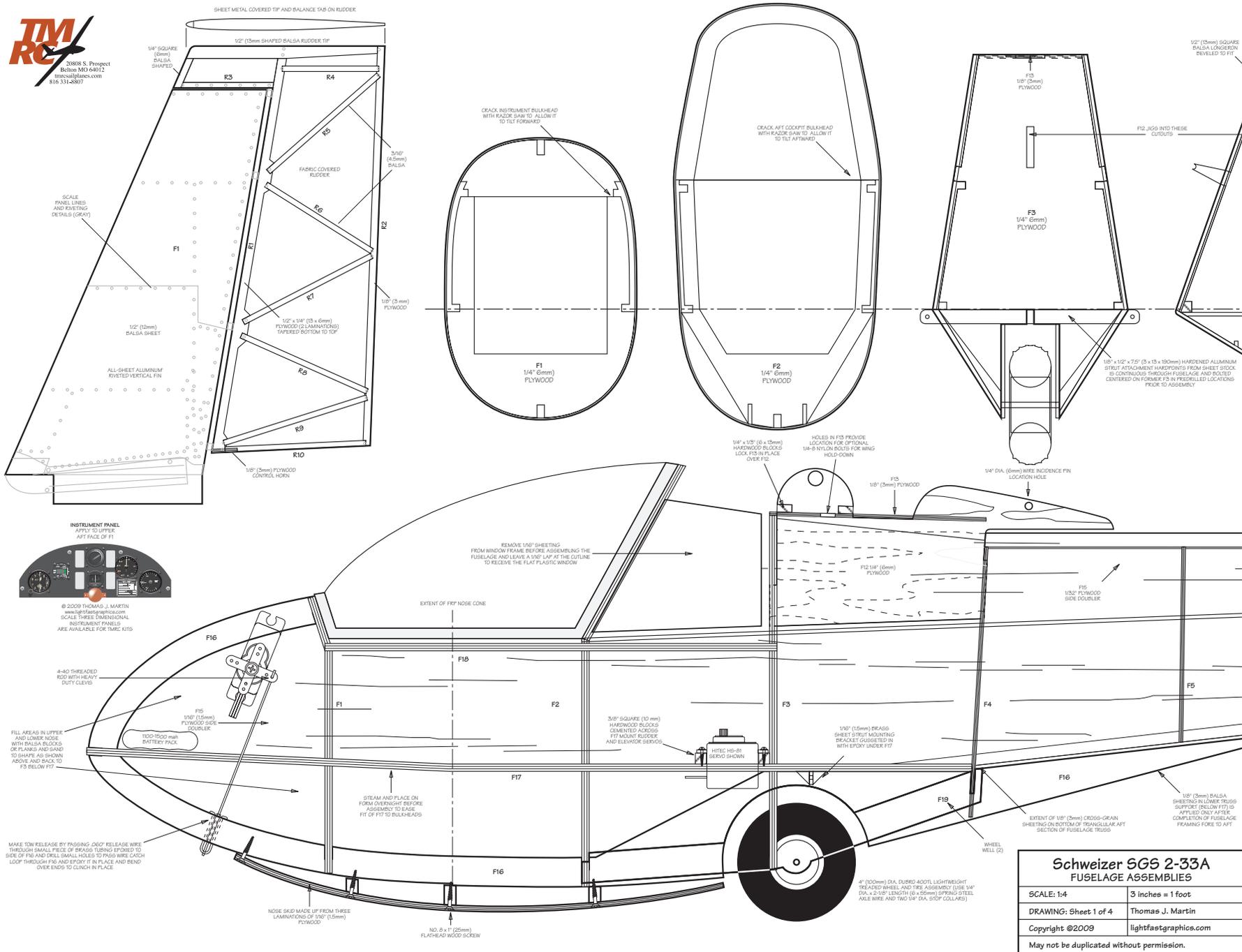
BUSINESS ANNOUNCEMENT

AK-Models Inc. is Now Exclusive Distributor of TMRC Products

Alex Kolyvanov of AK-Models Inc. is now the sole U.S. distributor of the TMRC



20808 S. Prospect
Belton MO 64012
tjmartin@lightfast.com
816 331-8807



**Schweizer SGS 2-33A
FUSELAGE ASSEMBLIES**

SCALE: 1:4 3 inches = 1 foot

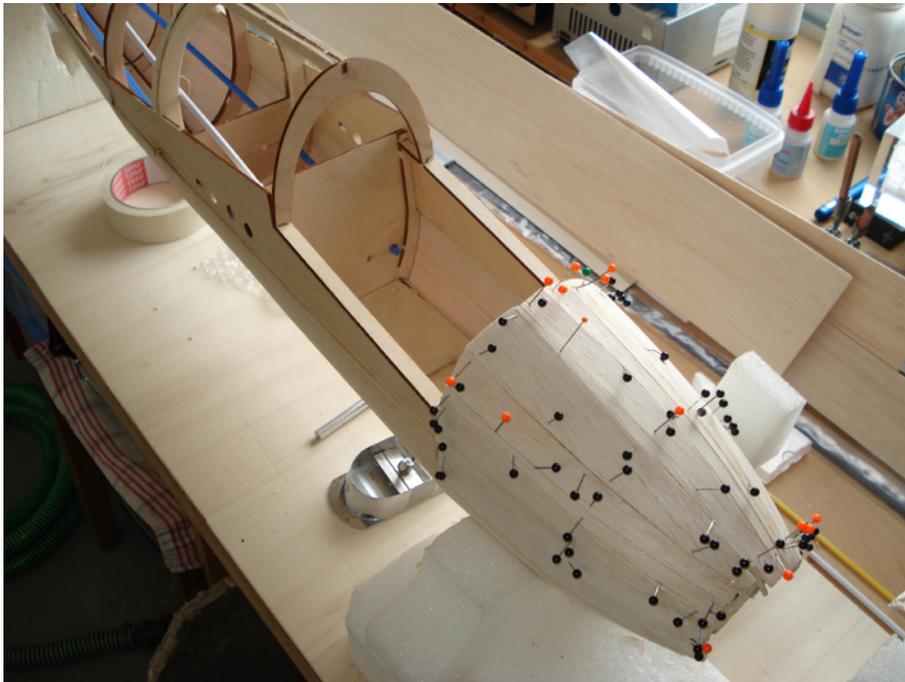
DRAWING: Sheet 1 of 4 Thomas J. Martin

Copyright ©2009 lightfastgraphics.com

May not be duplicated without permission.



Typical framing and construction of TMRC vintage sailplane fuselages consists of bulkheads assembled on vertical and horizontal crutches, all laser cut and matching station point and stringer locations for a completely scale appearance when fabric covering is applied.



A TMRC SGS 1-23 fuselage under construction.

line of vintage sailplane, towplane and parkflyer laser cut kits.

In order to meet increasing demand for these unique, high-quality model kits, AK-Models has assumed all ordering, production and shipping as of January of this year. Available options including hardware kits, long stock, decal and instrument panel kits, cockpit detailing kits as well as plans only, and all products may be ordered *a la carte* from the website.

Tom Martin Radio Control will continue to provide technical support and develop new products and improve and enhance the value of existing products. New for 2009 is the addition of a wider range of large scale U.S. vintage sailplane and towplane models with scale decal options and cockpit and airframe detailing kits.

AK-Models Inc.
 <akm@mchsi.com>
 319 358-6911 tel
 1458 Wetherby Dr.
 Iowa City IA 52240
 <<http://www.ak-models.com/>>

Tom Martin Radio Control LLC
 <tom@tmrcsailplanes.com>
 816 392-8640 mobile
 20808 S. Prospect Avenue
 Belton MO 64012
<http://www.tmrcsailplanes.com>



My New Launch Line Retriever

(or)

Have Sailplane — Will Travel (Geekily)

Tom Nagel, tomnagel@iwaynet.net





I have a new launch line retriever, easy, versatile, fun to use, and inexpensive, under \$200. Plus you can ride it to work.

My new launch line retriever is a bright red Citizen brand folding commuter bike.

I had the bike folded up and in the back of the Element one weekend last summer, so I just packed sailplane stuff around it and headed out to the field. I got a few funny looks as I unfolded the bike and set it up to ride.

The Citizen has little 20" wheels, and the seat and handle bars sprout up on tall stalks.

The Citizen has a fairly high geek quotient.

While the guys were setting up, I biked out onto the field and staked down my high start and then biked the chute down to the launch area.

Then I picked up the winch line and biked it out to the turn-around and back.

As the afternoon passed, I made repeated trips down the field to retrieve launch lines for myself and the other guys. By the end of the day, about half the guys were taking turns on the bike, being good Citizen line retrievers.

If you buy one of these things, you may wind up having to buy one for your wife and another for your 12 year old kid as well.

The Citizen will handle sailplane pilots up to 225 pounds. The six-speed derailleur looks a little low tech, but is sufficient for commuting, and as it turns out, for retrieving.

I took the folding bike back to the field a week or so later, and discovered another benefit of the equipment. We had a new member at the field, and he brought his wife and pre-teen daughter. The husband got interested in the planes, but his daughter was interested in the Citizen folding bike. The Citizen seat and handle-bar heights easily adjust down to 12 year old size, and pretty soon the daughter was riding the Citizen out to retrieve the launch line for all of us, sort of a low tech version of the Winch Trolls at Muncie.

Disclaimer: if you try to retrieve a hose-monster bungee line with the Citizen, you may have to learn how to pedal backwards.

And if you buy one of these things, you may wind up having to buy one for your wife and another for your 12 year old kid as well.

More info at:

<<http://www.citizenbike.com>>

