

The Free Flighter

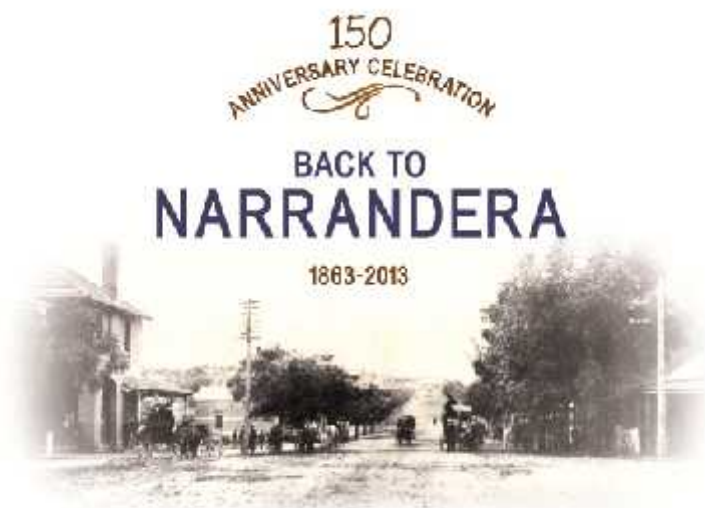
Journal of the NSWFFS Inc

November 2012



Jim Christie

Winding his vintage rubber model a 1956 Joe Bilgri design at Richmond on the 21st Oct



NSW FREE FLIGHT SOCIETY INC.

General Meeting 21st September 2012.



Minutes:

Present: Jim McFall, Goran Milosavljevic, Geoff Mee, Phil Warren, Michael Towell, Barry Lee, Tahn Stowe and Geoff Potter.

Apologies: Roy Summersby, Terry Bond, Jim Christie, Gary Pope, Alan Harvey, Reg Towell.

Tahn Stowe was in the chair as the President and Secretary were attending a team trial event in Dalby Qld and the Vice President was indisposed.

The meeting opened at 19.37 and the minutes of the previous meeting (as published in the Free Flighter) were accepted Moved J McFall, seconded Walter Boliger.

Correspondence in : The current MAAA newsletter was tabled.

Correspondence out: The Free Flighter via email or post as sent to all members, and 66th Nats Bulletin 2.

Treasurers Report: This comprised of the end of year statement and presentation was deferred to the AGM.

General Business:

A report was given by T Stowe of the status of the search for a centralised Free Flight Field. An advert had been placed in The Land (Northern edition) on the 16th August, at a cost of \$1299.99.

Although the ad prompted several respondents none of the properties on offer was deemed to be suitable. The next avenue was to contact Shire Councils in the western region with a copy of the ad and a covering letter. This would be done before the end of September, with Real Estate agents in these areas also being contacted.

66th Nationals bulletin 2 was discussed with Phil Warren asking if ROG of scale models would be possible at Widgiewa. Walter Boliger also made enquiries re accommodation in Narrandera and informed the meeting that he would be attending along with Keith Murray.

With no further business the meeting was declared closed at 20.15.

The next general meeting of the NSWFFS Inc. will be held at the Air League Hall Harris Park on Friday 16th November.

NSW Free Flight Society Inc Financial Summery July-August 2012

Credit		Debit	
Comm Bank Int	.20	Affiliations (MAAA)	8651.00
St George Power Saver Int	28.20	SCC2013 Prizes (reimburse)	345.00
Member registration fees	14,716.25	66 th Nationals Badges etc	751.92
		Scale Rally travel prizes	200.00
		Western NSW maps	87.30
		Ad in The Land (rural press)	1299.99
Total	\$14,740.65		\$11,335.21
St George Power Saver Transferred \$5000 to new term deposit.			
St George Term Investment reinvested for 12 months at 4.6%			

Editorial November 2012

Hi team, I can remember writing an editorial similar to this last year. I think I might have said 'time flies when you are having so much fun'. Two dates you must remember; Friday 30 Nov for the Friday fliers Christmas feast on the field at Richmond and, Sunday 16 Dec for a bbq on the field plus some fun events for the end of year NSWFFS Christmas party. Hopefully SAMS will be there as well so competition will be alive. I am not sure if Santa will be there but I will give him a call. If you are not one of our regular Friday attendees please come anyway it will be good to see you there.

I have issued an invitation to Charlie and Pauline to attend the Friday function. There will be a presentation to Pauline and Charlie for their generosity and permission to use the field.

Get your Nationals entries in now! I know that entries close mid December but it would be good if you can send your entry forms and money to Tahn soonest. Accommodation should not be a problem early in the New Year but an early booking would be sensible. To make matters easier the program states that all competitions will be five rounds or less to give you time to get out of the sun and see some of the local attractions.

The Fuller weekend 20/21 Oct was fun but attendance was down especially on the Saturday. The weather on that day was excellent early and both Roy Summersby and I put up 10 flights before 9.30am. Saturday night saw ten modellers attend a buffet at the at the Sung King Chinese restaurant in Windsor. Our special guests were Charlie and Pauline Saliba. It was a great night except Roy ate most of the food and drank most of the wine. Reg Towell the 'unfussiest' member of the group demonstrated his tolerance with food by not joining the group buffet and insisting on prawns.

The South Australian state champs are up on 24/25 Nov this year and it is the last opportunity for free flighters to qualify for a place in the world champs team. So far looking good we have Roy Summersby, Phil Mitchell, Gary Pope and I representing NSWFFS. The SA comp will be the sealant for the team as 30 Nov 2012 is the cut off date for qualification.

We have confirmation at this stage that we will have four overseas visitors at the AFFS and SCC next year. The following acceptances are Per Findahl; Sweden (F1A), Vasily Beschasy; Ukraine (F1A), Igor Vivchar; Ukraine (F1B), Wacheslav Aleksandrov; Ukraine (F1C). Most of these gentlemen have nicknames so be patient and wait for them to arrive.

On a personal note I have currently lost 10 kg in my weight reduction program and will be in the market for an F1A model in the New Year. Look out for the new rocket propelled president over the next 12 months. Scramble records look out!!!

That's all folks, enjoy your Christmas and New Year and above all be careful on the road.

Terry Bond
President NSWFFS

Last Meeting

Last meeting was our AGM, on reading the minutes from that meeting it appears there were no changes, so I guess everyone is happy. See minutes for the lucky executives who will hopefully steer us through the coming year.

This Meeting Nov 16th 7.30pm

Once again the place is the Air League Hall at Harris Park. If you are not sure where it is give Roy 43410072 or Terry 46472473 a quick phone call for directions. To my knowledge there is not much to be discussed, however there will be some talk on the coming Nationals and may be future team trials rules. After the meeting, for show and tell, Tahn will show us the VIT that he has installed on his Hurricane. Roy is going to bring along his new scale job, a Brandenburg Seaplane which is nearly finished. If you have something of interest, please bring it along and share it with us.

Noticed in FFDU

Phil Mitchell received the credit for three rubber scale models (photos in FFDU) these, were Phil Warrens beautiful models that were flying so well on that weekend.

Friday 30th November

This is the morning (early) that we have arranged for a little pre Xmas party. Over the last few years the Friday flyers have been doing this, and arrange to have Pauline and Charlie, the owners of the field, join us for drinks and nibbles. Pauline gets champagne and flowers, Charlie gets a can of coke (he has to go back to work). It's just a nice way of saying thank you for letting us use their field. If you can join us you are welcome but be early, the Friday flyers start at around 7.00am

Xmas Party Sunday 16th December

This Sunday will be the same as last year with a combined vintage competition between us and the old men from SAM. We beat them convincingly last year, can we do it again?

As well as the vintage comp there will be a ½ hour scramble, combined %, fun fly and a B-B-Q lunch (bring your own food). We will have shade and the B-B-Q available.

Contest & Fixture Calendar 2013

At the back of this newsletter is our 2013 calendar, do hope you like it and plan to make it to as many comps as you can.

October 20th & 21st

This was the Fuller, Scramble and Vintage weekend. Fuller models were few and far between with only Terry and Roy participating. Terry flew a very light Stomper, Roy had his 1.5cc Dixielander. Flying under the original rules they were allowed ten flights, both flyers had done this by 9.30am on the Saturday. Terry was the winner with six maxes, Roy could only manage five. It certainly was a great Saturday morning flying.

Sunday the vintage models were in action early, Jim away with his rubber job and amazingly he dropped one second on his second flight. Roy using his Swiss Miss and Terry once again using his Stomper both did the required three maxes. A fly off was to happen after the half hour scramble. Guess what, by the time the scramble had finished the breeze was up enough from them to not want risking there models, so a tie was decided.

Only three starters for the scramble, Michel Towel, Terry Bond along with a new boy to scramble Peter Jackson. Terry made three strikes hitting his own streamer pole three times in a row, well done Terry. For the record Michel 932sec Terry 690sec, Peter 575sec

Three Strikes

Jim Christie

Strike 1 Sunday July 22nd. Half hour scramble-combined open. Terry, Gary and I were at Richmond early, Terry flying a scramble model which was hugging the ground and was going nowhere.

I decided to fly a small open rubber model without a check flight. With just 800 turns, commenting I would check the drift. She was away and going to the north as she climbed. Terry and Gary watched the model down to the tree line where it was lost against the trees. The beacon signal indicated it was across the river. I drove to Terrace road and found a strong signal which I thought was from not far down the steep cliff face which was covered by dense bush.

On return to base I was roundly condemned for 17 missed Mobil phone calls. Tahn had arrived and with keen young eyes observed the model's red fuselage up a tree on a house front lawn. The owners arrived as I was leaving a note that the model was about 15 meters up their gum tree. My hope was that the wind would release the model. Next Sunday the owner, David rang, and I picked up the model less empennage. The wings had to be recovered and a new tail made. On Sunday 9th September another phone call saying the tail had been found on the outside grass so I called to pick up the relics of tail and boom. Lesson-Always have that check flight or Vola cum cura.

Strike 2 One Friday at Richmond, fine weather before 8.00am with a strong west wind. After flying Terry advised on having a one minute DT. Set the vane timer short (less than 2 minutes) on coupe model C. There was a visibility problem with a haze and low sun shining in the east so the model was soon out of sight. Then loss of signal was a problem. Following the last line of sight past the polo stables I picked up a faint signal but was not able to improve it, then lost it altogether. Returned to base and the infantry (Terry) was deployed with a Yagi aerial, which he operated in the area of the last weak signal but could find nothing. Later a check on my receiver showed the connection to the antenna had failed. The receiver was sent to Vin Morgan for repair of battery tester and connection. I advised Terry, whose response was to get a scanner from his neighbour and my frequency from Vin, so that the models signal could be located.

The following Sunday was a competition day so with Yagi and scanner I sallied forth in the direction of the last week signal and as I got closer the scanner directed me to the left where the model could be seen on its back, just on a rise towards the road. The weak signal received on Friday was perhaps allowed by an intermittent connection to the antenna. Lesson learnt- Check signal before flying or Vola cum Cura.

Strike 3 Sunday, contest day at Richmond, a fine morning with light variable wind. Flying coupe model D (how many coupes has this man got) and it was going well until I neglected to pull the pin on the wind up timer, so last view of the model was high overhead. Terry deployed his Yagi, consulted Vin once again on its set up, and then tracked the model for some time before the signal was lost. Terry and I drove along roads to the west and parallel to the river but no signal. I packed up my gear then drove across the river along Terrace road but no sound came from the receiver, nothing.

Sunday night, Patrick of Green Life Turf Farm rang, model found at 56 Freeman's Reach road, not far from the bridge at Windsor. The model was collected next day, it had suffered some wind damage and repairs to the wing were needed. Also the beacon was missing which indicates some tumbling in strong winds later in the day.

Lesson learnt- Need a fool proof timer system or a smarter operator or Vola cum Cura.

The New 007

The new Bond is coming to a flying field near you. Bond 007, Terry that is, has been just a touch over weight, so has gone on a diet to get into shape for the coming world champs in France next year. At the time of writing he has lost 11.5 kgs (most from his gut).

Even the late Ian Fleming wouldn't recognise him

VALE DAVE HINES. Past 1788 Member Dave Hines passed away 1 November, 2012, after a long illness. Dave was famous within 1788 by flying his Trenton Terror, powered with a PAW 19 Diesel, for the entire ten minutes of the Texaco task, no higher than fifty feet, and landing in the circle with the engine still running. He performed this feat on more than one occasion too. His knowledge of fuel, gained from his qualification as an Industrial Chemist and his many years as a top flier in C/L Team Racing, was, no doubt, a contributing factor. In recent times Dave was heavily into Electric F5B Glider and control line flying with his son Lachlan. He represented Australia in the F5B World Championships a number of times.

Our sincere condolences go to Denise, Imogen and Lachlan.

D'Alembert's Paradox

---by Klotz the Kat

Is frontal area a valid measure of airplane drag? It is not. Thin airplanes and fat ones have about the same drag, everything else being equal. Drag is more closely related to total surface area and shape than frontal area.

But the fat body has to move more air out of the way and move it farther. Doesn't that require more energy? Not necessarily.

Air speeds up as the body pushes it aside and the pressure it exerts on the front of the body drops. Then, once the thickest

portion of the body has passed, the air converges behind it.

Velocity decreases and pressure rises, increasing pressure on the rear of the body and pushing it forward as you might squeeze a watermelon seed out from between your fingers.

If air weren't viscous, the work done in moving air aside would be recovered as it converges behind, and there would be no drag at all. This oddity of physics was discovered by the French mathematician, Jean d'Alembert (1717-1783). It is known as D'Alembert's Paradox.

Reality is more complex. Air develops a boundary layer, which contains turbulent air that is dragged along with the body, thickens toward the tail, forming a wake. The wound that was opened in the air as the body arrived does not heal completely after it has passed. The scar left behind is drag. (Summarized from an article by Peter Garrison in *FLYING*, May 2002.)

See ya at the field. Bring fat sandwiches.

World's Longest Tomboy Flight???

From Mike Meyers mikemyersgln@charter.net

Time to pull out a sea story on that note Bob. It's maybe 1995; I'm at a FF contest at Taft in the fall with a storm front moving through. It's not raining, but there's a low overcast and the air is turbulent. I like to fly Tomboys for sport, with a small diesel on the nose. I was through contest flying for the day at around 2:30 in the afternoon. Time to pull out the Tomboy and have some fun. Around 2:45 I launch it. The model climbs out nicely and drifts north towards the hills. Remember this little bird has a 3 cc fuel tank on it, and the motor can run how long? 2 minutes? 3 minutes max?

I have my Walston transmitter in the Tomboy so I figure I can ride my Trail Bike and find it wherever it lands. It's about 2:55 now and the model has been sucked into the cloud---punched right up into the gray. But hey, I've got my Walston! Well by 3 o'clock I'm at the top of the hill and there's all kinds of electrical interference and I'm not getting a reliable signal or indication from the Walston.

It's getting colder; it's getting darker---and the White Elephant Saloon or the Cookhouse and a drink in the bar and dinner at 6:30 are starting to look pretty good---need to cleanup anyway. So at 5:00, I give up the search and go back to the motel to shower and get the grime and dirt off and get ready for dinner. At 5:45 my cell phone rings just as I step out of the shower. It's a call from my wife in Glendale.

She tells me she's just received a call from the prison at Taft. The front desk said that one of their guards had seen an airplane glide down out of the sky and strike the side of one of the prison buildings at 5:15 pm. That point is about two and half miles or more south of the place where the model disappeared into the clouds. The offending model airplane had been brought to the front desk in the prison reception area. They had my name and phone number on the airplane and I could "come and get it".

Well I dressed in a hurry and jumped in the car to get my Tomboy back---and was only one drink behind the crowd when I got back to town for dinner.

Now my question is: Since I saw it take off (when it left my hand) at 2:45 pm ---and saw it go into the clouds at around 2:55---and the prison guard saw it come out of the clouds and glide into the prison building at 5:15-----did I just have one of the world's longest Tomboy flights?

Inquiring minds in Glendale want to know.

Control Line World Champs

through the eyes of a

Free Flighter

This year the world control line champs were held in Bulgaria. Having a little interest in control line, and never having been to a world control line champs; it seemed like a good thing to do. I would also see Bulgaria and Turkey on the way. This would also mean a must visit to Gallipoli, Troy, and a swim in the Dardanelles. Some things a man just has to do. Back to the contest, on arrival the weather was hot, very hot. This only lasted a few days until a change came through, after that the weather was excellent.

The site was, I thought very good, the speed circle was a five minute walk away from the other events which was acceptable. This site is equipped with a hard stand caged area, club rooms, and a pond for racing tethered boats. I didn't see any of these go, but the models that I saw would have been super fast, as some were powered by OSP 60 on pipe. It is surprising that a country like Bulgaria has such facilities, while we in the lucky country seem to struggle just for a flying site.

F2A speed, not too many surprises there, as the top men seem to know just how to do it. F2B stunt was flown on both concrete as well as grass, each flyer getting a turn or two at each. Wind played hell with them on the first day when the weather front came through bringing the temperatures down to near perfect. F2C team race was run along side the stunt over concrete inside a wire cage, these models are fast, and with three in the circle its hard work in the middle for the pilots. The Aussies have won this event at the last two world champs, and this year they went close to having three teams in the final. As it turned out we ended up with two which gave us 2nd and 3rd well done boys. F2D combat, Tom Linwood was by far the best of the Aussies and should have finished a lot higher up except for a few problems, but that's combat.

I enjoyed my time there just watching and supporting when ever I could. It is entirely different to free flight, as in the early rounds you only get to fly once in the day, so all day for one flight. Free flight when it's your event we get to fly all day.

I strongly recommend that if you get the chance to go to any BIG competition free flight or control line, take it, as you are only on this earth for a short time. There will be plenty of time to sleep and get over jet lag in the next life.

Roy Summersby

Burmese treasure: 'We've done some pretty silly things but the silliest was burying the Spitfires'

Adam Lusher

EXTRAORDINARY plans to raise a lost "squadron" of Spitfires that have lain buried in Burma since the end of World War II were revealed at the weekend as David Cameron, Britain's Prime Minister, visited Rangoon.

A Lincolnshire farmer who devoted 15 years of his life to finding the planes has spoken about his quest to recover them and get them airborne.

David Cundall, 62, has spent

£130,000 (\$200,000) of his money, visited Burma 12 times, persuaded its secretive regime to trust him, and all the time sought testimony from a dwindling band of Far East veterans in order to locate the Spitfires.

His treasure hunt was sparked by little more than a throwaway remark from a group of US veterans made 15 years ago to his friend and fellow aviation archaeologist, Jim Pearce.

Mr Cundall said: "They told Jim: 'We've done some pretty

silly things in our time, but the silliest was burying Spitfires.' And when Jim got back from the US, he told me."

Mr Cundall realised the Spitfires would have been buried as they had been shipped, still in their crates. Before they were shipped to the Far East, they would have been waxed, wrapped in greased paper and their joints tarred, to protect them against the elements.

The first step was to place advertisements in magazines,



Spitfire ... few can fly today.

trying to find soldiers who buried Spitfires. "The trouble was that many of them were dying of old age," Mr Cundall said. He

visited Burma over and over again, slowly building relations with its junta. Finally, he found the Spitfires, at a location that is being kept a secret. Mr Cundall said: "We sent a borehole down and used a camera to look at the crates. They seemed to be in good condition."

In August 1945, the Mark XIV aircraft, which used Rolls-Royce Griffon engines instead of the Merlins of earlier models, were put in crates and transported from a factory in the West Mid-

lands to Burma. Once they arrived, however, the Spitfires were deemed surplus to requirements. The order was given to bury 12 Spitfires without even unpacking them. It is possible that a further eight were then buried in December 1945.

Mr Cundall said: "In 1945, Spitfires were 10 a penny, jets were coming into service. Spitfires were struck off charge, unwanted. Lots of Spitfires were just pushed off the back of aircraft carriers into the sea. On land, you couldn't

leave them for the locals - they might have ended up being used against you."

Ground radar images showed that inside the crates were Spitfires with their wings packed alongside the fuselages. The Britons want to work to restore as many of the 20 Spitfires as possible and get them flying. There are only about 35 flying in the world.

The final obstacle to recovering the Spitfires, however, is political: international sanctions forbid the movement of

military materials in and out of Burma, and it was also feared the regime would not allow any foreign excavations.

But because of the new, reforming stance of the government, the sanctions on movement of military material may be lifted on April 23. With the help of Mr Cameron and his visit to Burma, a deal is being negotiated and hopes are high that it will conclude with President Thein Sein granting permission for the dig.

Telegraph, London

Wire Bending.

From AL Lidberg aalmps@aol.com

Having to bend some serious 5/32" wire for the Powerhouse landing gear, I asked for advice a week or so ago. Someone sent me the attached excerpt from a Flying Models mag so I thought I'd try this method. It works nicely!

Before you head out to the shop, bear with me for a minute or so - and I'll share some wisdom. You know: that's what we acquire while we learn and make mistakes.

To begin with, I only had one Visegrip and it was an old Sears variation, so went off to Walmart and bought another, the only one they had, in the Stanley brand. I ground the opposite corners from the 2 Visegrips' jaws. With the wire marked for bends, I clamped each Visegrip a bit on each side of a mark. The wire was placed in the first major jaw groove, nearest the open end of the jaws. For bends that must all be in the same 'plane', it is important to remember the up/down angle at which the Visegrips have been placed because each bend will require the same placement. Bending takes place on a plane defined by the major part of the Visegrip handles.

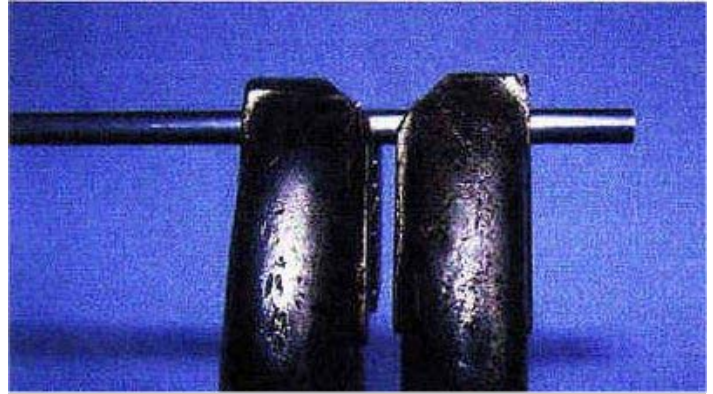
I pulled on the Visegrips and the first thing that happened was that a Visegrip let go! It was the new one and by then, it was obvious what the problem was - this one had curved jaws, such as would be useful for pipe or other round objects, much larger than the wire I wanted to bend. Because the jaws were curved, the first major jaw groove on both the top and bottom had a poor grip on the wire. Because I had ground off the corner of the jaws, I couldn't take the tool back for credit. Determined now to press on with the LG, I got out my little bench vice and tried to bend the 5/32 wire - no joy there as all I could do was to bend it a little as my hands couldn't get enough leverage.

Back on the road to ACE hardware where I found another new Visegrip - the genuine article this time. There was a note saying that they had invented this useful tool in 1924! Ground off the corner from this one and tried again. Now we have something! It does work, and takes surprisingly little hand pressure.

Regarding the 'grind off the corners' exercise: if you want to try bending wire this way, try first without grinding. It might be necessary if one wants a right angle bend, but the Powerhouse bends were all less than 90 deg. The only bends that were difficult were those at the bottom of the rear braces where the parts that join to the main LG were not in the same 'plane' as those of the center portion. It took some visualization to plan the Visegrips' angle for those.

I should point out that even with some space between the pair of Visegrips, there's little space for grabbing the tools so you'll have to get things started with a less-than-perfect grip. Once things start to bend, there's plenty of finger grip room. You may also find that the tools leave some jaw marks on the wire but a little work with a file or Dremel grinder can clean those up. If you start with the no longer common, shiny 'piano' wire, you might not see such marks.

Hope you find this useful!



Charlie Reeves demonstrates how to grind off the inner\upper corners of your pair of Vise Grips (above) in order to more easily bend landing gear for any of your model projects. Charlie is now holding the wire and Vise Grips for the initial bend. Charlie is half way through the bending process (below). Less effort is exerted than you might think in this quick and efficient way of moulding your wire to the shapes you desire. Charlie is now finished with the bend and only slight adjustments are needed to conform to the shapes as drawn on the plans (at bottom). Charlie and Allen chose the 5/32" music wire to show that it can be done. 1/8" music wire or a length of lesser diameter is a mere breeze.



Easy 1/8" Wire Bending. I do not own an anvil or a vise but still need to bend very strong and contrary 1/8" music wire into a shape as drawn on a set of plans. I struggled with this until Charlie Reeves made me aware of an easy method of solving that problem. You need to own two sets of Vise Grips or similar tool.

Charlie taught me to grind off one corner of each of the two tools. You should grind off opposing corners of the lips, and the two corners would be next to each other when both tools are held in parallel to each other. The pictures enclosed probably make a lot more sense as "a picture is worth a thousand words".

Decide where the bend should occur and hold both tools about 3/16" apart. Clamp down on the wire just left and right of the marked bend. The tools and your hands should be parallel to each other, and then simply pull the two tools away from the centre. You will be surprised as to how easy it is to bend the 1/8" music wire into the shape you desire. Fit the bent wire over the form drawn on your plans and begin planning your next bend.

If you have some "inside" bends, like the top portion of a *Nobler* main landing gear, then you will need to pre-plan those bends prior to going on to the "outside" bends. Not that 1/8" piano wire is inexpensive, but you can afford to make a few mistakes with your first one. If planned correctly, the wire will not have too many squiggles in it. Place the completed wire over the plan again and "tweak" the metal until it conforms to the shapes you need.

I have mistakenly bent 3/16" wire and thought that I had a tough piece of 1/8" music wire. Was I surprised to find out that the wire was larger in diameter than I had planned to bend? But, I bent it with only some difficulty. Enclosed are several shots of the procedure, as Charlie Reeves performs it.

Contest & Fixture Calendar 2013

Date	Event	Venue	Time	C/D
Jan 3-8	Nationals	Narrandera	7.00am	5 Wanted
Jan 18	General Meeting	Harris Park	7:30pm	
Jan 20	Scramble, Scale Rally, HLG/CG	Richmond	7.00am – 1.00pm	Jim Christie
Feb 10	State Champ, P30.+ Comb Vintage	Richmond	7:00am – 1:00pm	Gary Pope
Feb 24	Combined %	Richmond	7.00am --1.00pm	Tahn Stowe
Mar 2-3	Hunter Valley Champs	Muswell-brook		
Mar 9-11	Victorian State Champs	Springhurst		
Mar 15	General Meeting	Harris Park	7:30 pm	
Mar 17	1 Hour Scramble, Combined %	Richmond	7:00am – 1:00pm	Roy Summersby
Mar 25-31	Southern Cross Cup---AFFS Champs	Narrandera		SCC. T.B.A.
April 28	State Champs HLG/CG. Rocket Glider, Plus Combined Vintage	Richmond	7.00am— 1.00pm	Jim Christie
May 4-5	Veterans Gathering	Muswell-brook		
May 5	State Champs Scramble, Combined % , Control Line flying BBQ Lunch	Richmond	7:00am – 1:00pm	Roy Summersby
May 17	General Meeting	Harris Park	7:30 pm	
May 26	P30, Diesel Duration, + Comb Open	Richmond	7:00am – 1:00pm	Roy Summersby
June 8-10	NSW State Champs F1A,B,C	Narrandera	8.00am--- 3.00pm	Jim Christie
June 16	Combined Vintage, HLG/CG, P30	Richmond	7:00am – 1:00pm	Gary Pope
June 23	Russell Forth Scramble	Illawarra		
July 6-7	Scale Rally Weekend. Sun 7th ½ Hour scramble, Fun Fly C/L flying & BBQ Lunch	Richmond	7.00am	Tahn Stowe Roy Summersby
July 19	General Meeting	Harris Park		
July 21	Combined %	Richmond	7:00am – 1:00pm	Jim Christie
Aug 11	Combined %, Multiple Entries.		7.00am- 1.00pm	
Aug 25	Scale Rally, P 30, Combined Vintage	Richmond	7:00am – 1:00pm	Tahn Stowe
Sep 8	½ Hour Scramble + Tomboy Mass Launch. Fuller Day, Stomper Dixielander, Zoot Suit. B-B-Q Lunch	Richmond	7:00am – 1:00pm	Chris Dudley
Sep 20	Annual General Meeting	Harris Park	7:30 pm	
Sep 29	State Champs F1G,H,J Combined	Richmond	7.00am— 1.00pm	Roy Summersby
Oct 13	Diesel Duration, P30, HLG/CG	Richmond		Tahn Stowe
Oct 20	State Champs Combined Vintage, ½ Hour Scramble, BBQ Lunch	Richmond	7:00am – 1:00pm	Gary Pope
Nov 10	Combined % Multiple entries	Richmond	7.00am-1.00pm	Roy Summersby
Nov 15	General Meeting	Harris Park	7:30 pm	
Nov 17	Mills Trophy Scramble	Illawarra		
Dec 1	F1G, H J,(Combined)	Richmond	7:00am – 1:00pm	Gary Pope
Dec 15	½ Hour Scramble, Combined Vintage with SAMS + Fun Fly. BBQ Xmas Lunch	Richmond	7:00am – 1:00pm	Terry Bond
Note	All scrambles start as close to	8.00 am as	possible	

Flying with Solar Power



Solar Impulse of flight pioneer Bertrand Piccard with its huge wingspan equal of an Airbus A340.
Foto <http://solarimpulse.com>

When the days in the Northern hemisphere shorten and the sun becomes more elusive, we like to remember the wonderful light and warmth of the sun. Solar energy is one of the foundations of life and humankind's most important energy source - both in the past and in future

Flying with solar power – it's not new

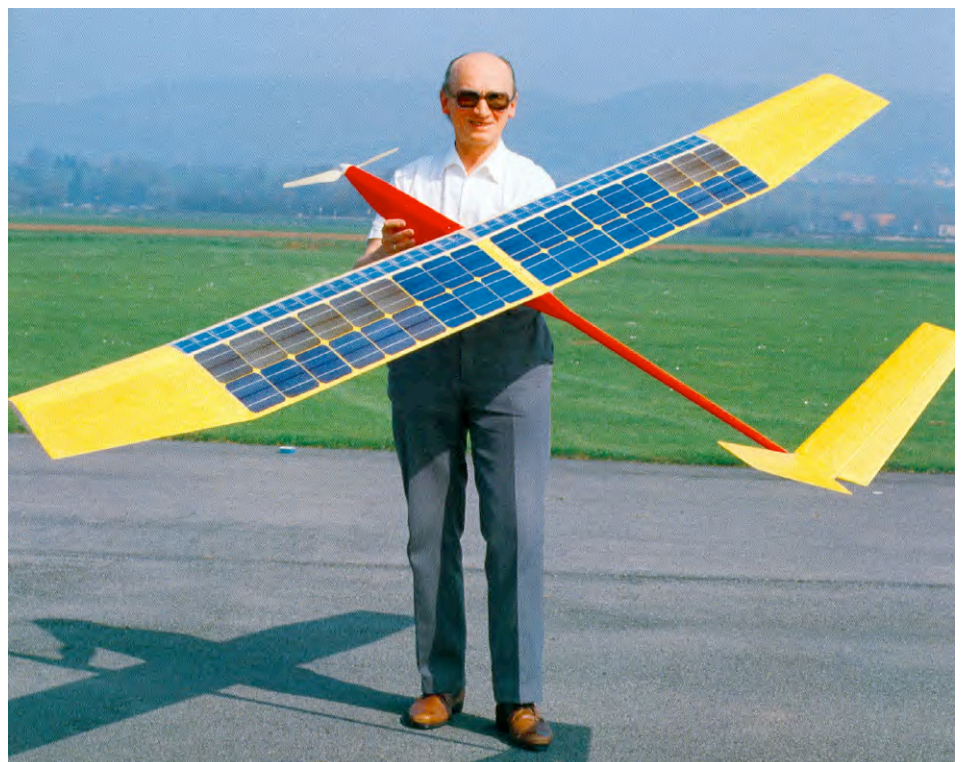
Even the wind that makes leaves swirl through the air, lets birds circle above us and helps gliders achieve rapid climbs is produced through the sun's heat. When viewed this way, flying with solar power goes back to the beginnings of flying. First attempts to supply electrically powered aircraft using photovoltaics date back to the mid-1970s. Today, flight pioneer Bertrand Piccard is even planning a circumnavigation of the world with his manned aircraft "Solar IMPULSE".

The first pioneers of solar powered flights were model flyers

In sunny California, "Sunrise I", designed by R.J. Boucher, flew at an altitude of 100 m for 20 minutes as early as 1974 and later for three to four hours. The two solar model aircraft "Sunrise I" and "Sunrise II" were huge, with wingspans of around

10 m. At the same time, the two German pioneers of electric flight, Helmut Bruss and Fred Militky, were engaged in designing and building much smaller solar models. In 1976, Fred Militky achieved three flights of 150 seconds and altitudes of up to 50 m with his model SOLARIS. At the 5th International Militky Cup in Switzerland in 1978, Helmut Schenk demonstrated his radio-controlled solar-powered model. It operated without a storage battery but could only climb in a cloudless sky.

Helmut Bruss was a major pioneer and sponsor of solar aeromodelling. As a physics teacher, he was able to inspire numerous youngsters to become enthusiastic about solar flying - both inside and outside school. He also wrote several successful technical books and reports on the subject of electric and solar-powered model aircraft.





Solar powered model aircraft of Fred Militky 1976

Flying with solar powered model aircrafts gains popularity

Whereas the specialists – not all of them named above – were limited by the technical capabilities of the time and were initially rather alone with their developments, the early 1990s saw the beginning of an actual boom in solar aeromodelling. Helmut Bruss, a physics teacher, built solar-powered model aircraft at school and also gave courses. Solar flight events and competitions were held throughout Europe. In 1990, the Graupner company launched the "Solar Uhu" as a model kit. This model used the solar generator to charge the storage battery, a concept that made solar flying possible even when using cheap solar cells. Solar aeromodelling courses for young people were held in Austria, Switzerland, etc.



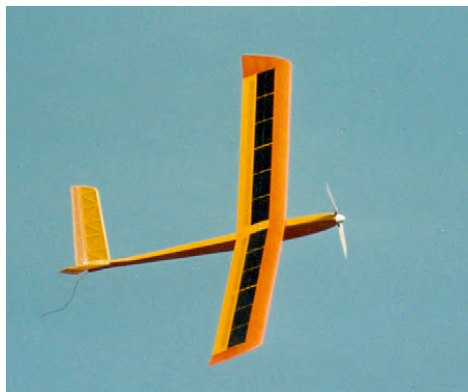
Solar Flight Workshop for young people 1993

CIAM Flyer 5-2012

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Solar Uhu of Graupner 1991. Kit of a solar powered model aircraft



What will the future bring?

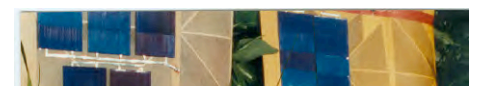
Lately, the solar aeromodelling euphoria has died down a bit, despite the latest technical capabilities such as more efficient generators and electric motors, miniaturisation of electronic

components, modern building materials, etc., that would provide interesting perspectives. In contrast to those involved in model flying as a sport, remarkable developments have been made by scientists in the last few years. For example, the unmanned British solar aircraft "Zephyr" spent 14 days circling the skies of the US state Arizona. However, a flying machine with a span of 18 m can hardly be called a model airplane. The "Sky Sailor", built at ETH Zürich, is much smaller, with a span of 3.2 m. This lightweight plane, weighing only about 2.5 kg, flew for 27 hours at an altitude of 200 to 400 m.



Wolfgang Schaeper is holder of several records. For international scientific studies he uses electric and solar powered model aircrafts.

Foto www.mfg-markdorf.de



Rules for solar powered model aircraft competitions see <http://www.fai.org/ciam-our-sport/f5-electric-flight>

