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FRONT COVER: Lu Hoing launches in the AFFS fly-off as Bruce Hao watches his own winning flight. It was a close finish - Bruce by 2 seconds and Vin Morgan some 45 seconds in arrears. Two wins for Bruce at Narrandera and a big win in the USA - Bruce Hao has come a long way from the Mr Risky character of ten years ago!

Free Flight Down Under Winter 2023

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Free Flight Down Under is the newsletter of the Australian Free Flight Society Inc, a Special Interest Group of the Model Aircraft Association of Australia. FFDU welcomes contributions in the form of articles, letters, pictures, etc on any aspect of Free Flight or related topics. Contributions can be sent to the above address or emailed to the editor. Electronically prepared material is preferred. Please keep photos separate and no smaller than 200 kb each.

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Contents

President's Report3
From the Editor4
AFFS Champs and SCC report5
Queensland F1A and F1B Champs report16
NSW F1A, B and F1C Champs report17
Victorian F1A, B and F1C Champs report18
Construction Corner19
The Development of the Discus Glider21
2023 AFFS Champs report on small gliders23
Boeing Proptown - a Lost Story?24
A Backward Glance (Narrandera 2015)31
Jokes33
State Free Flight Calendars for 202334





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THANK YOU!

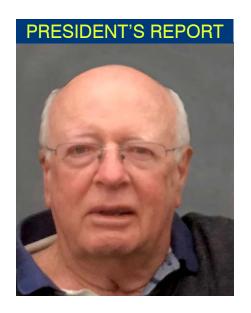
Your name could be here!











2023 AFFS CHAMPIONSHIPS - PRESIDENT'S WRAP UP

Well, the 2023 AFFS Championships and their associated events have been run and won and our experience over the eight days of the AFFS Champs leaves us with a few things to think about. Just so you know; the committee presently have these matters under discussion and will tell you more as we go along.

Firstly, let me say thank you to those members that attended our AGM and the General Meeting that followed. Thanks also for your suggestions and your contribution to the discussion about the format of the Australian team trials and the composition of events we do and/or should, run in the future.

My apologies to those that felt I may have been a bit forceful in requiring motions with seconder when proposals were put forward during the meetings, but we are an incorporated organisation where, in the case of AGM, we need advance notice of any proposal for discussion, which is effectively a notice of motion. In that context I believe that even in a general meeting we need to move, second, and vote proposals that seek to change what we are presently doing as an organisation, as was the case with team trials scope and the make-up of events.

In relation to the events on offer this year, we had a go at separating the G, H & J classes into individual events this year, but hindsight tells us that it

offered no benefit and we are most likely to combine them again next year. Compensation, in the form of other events being added, would follow of course, and presently we are considering restoring Open Power and Open Rubber to the list of events. Oz diesel is also a potential candidate for inclusion and we will discuss these matters further between now and next year.

We think we should have done this earlier, but we are also considering excluding A, B & C models from the Combined % Open event. Considering the three world cup events already on the program for A, B & C, we suggest that there is already sufficient flying opportunity for these classes without giving them a go at scaring potential entries away from Combined % Open. Yes, I know it was won this year by an E36, and we'll keep an eye on that to ensure we don't end-up with any one species dominating the event, but most would agree the thought of taking on a few F1C's or A's or B's also, in Combined % Open could put some people off.

Our next dilemma is the evening indoor event. I, as do many others, find the indoor events highly entertaining, but this year, the Bland Council couldn't see their way clear to agree to a discounted hall hire rate with the result that they will be raising an invoice for \$450 for the 3 hours we had use of the hall. Only 7 people entered the events available, at a cost of \$10 each, so we carry a loss for the indoor HLG and Hangar Rat of \$380 which most will appreciate is not sustainable.

Unless we can get sufficient support for the indoor classes to let us at least break even, we can't see us holding the indoor events next year. Please give this some thought

Next and last: At the two presentation sessions and at the AGM I asked members and attendees to thank those that put the AFFS Champs together and that request was acknowledged with enthusiasm each time, for which I thank you.

Each of the committee members has their role to play in the organising and conduct of the Champs, some more visible than others and some, because of their roles, have more to do than others and I single out Shayne and Shannon in this regard as they carry the majority of the workload prior to and during the event, so they deserve extra applause. I pause here to also acknowledge Warren, our very diligent and enthusiastic CD for the job he does. Yes, Warren receives some compensation, but not enough for the work he does, but it all we can afford based on the CD levy we impose.

This brings me to the point that we need to remember that all of the people involved with the conduct of the Champs are volunteers who generously give of their time, and in some cases some of their own money, towards ensuring the Champs are a success and I include Warren in this as well, and Vin Morgan who also has an important role to play in the AFFS Champs.

So now, here's the thing: I suggest it would be wise for members to make sure they don't take all of this voluntary work for granted!

I confess to having been disappointed to see most attendees, members etc, just packing away their models and saying "see you tomorrow" as they wander off, while those that did all the work to conduct the event, and tried to fly as well, are left to pack up, often leaving the site in the dark, too tired to be bothered doing much else other than find food and hit the sack ready for another earlier start than everybody else the next day.

I would be delighted to see members, committee or otherwise, offer to help each day when it comes to unpacking and re-packing all the gear that goes towards conducting these events, both at Morundah and West Wyalong, so I ask you please to try to give the "workers" a hand!

Let me beat you to it and say that my comments may look like 'people in glass houses throwing stones', but I

should confirm that I'm of little use when it comes to helping out physically as would be obvious to those that see me tottering around the flying field. I apologise for that, but getting old is less fun than I imagined and I have now reached a stage where it's no longer safe for me to try to stand and launch an F1C. I

will need to consider developing a sitting down launch style

Most people don't see the work I do for the AFFS but let me assure you that I do more than enough to qualify me to be able to draw your attention to this problem of leaving the field without offering to help our volunteers.

In my view, if we don't do better in the future, we'll lose some good people.

On the bright side, apart from being at times wet underfoot, we could hardly ask for better flying conditions, we had sunshine and light breezes. Overall, it was a great AFFS Championships. Mike Pettigrew





Well another AFFS Champs is over and the committee has done an excellent job in running the full program at both fields. Undeniably Narrandera is for the big F1 classes but the rain-affected field tortured our feet on some days. It was unfortunate that we couldn't get to the normal flight line because the ground around there was so much better. I walked over it on a long retrieve of my final F1A flight at Narrandera.

But it has been worse - take a look at 2015, featured in my "Looking Back" article. We used the two fields then, but we could only manage one day at Narrandera because of the rain. That was a long time to spend in town or in our motel rooms.

Flying at West Wyalong continues to improve with mown roads joining the flight lines positioned to favour the known breezes. It makes getting around easier and also speeds up relocation when flight lines are changed.

Thanks again to Mike Pettigrew for an absorbing article titled "Boeing Proptown - A Lost Story?". I think you'll enjoy the read.

Gary Goodwin and Warren Leadbeatter have stories of recent builds, Len Surtees outlines the start of DLGs and Vin Morgan and John Lewis have supplied reports of recent State Championships.

Thanks to all contributed articles, I think it's a good newsletter.

Malcolm Campbell

LETTER TO THE EDITOR: I really enjoy receiving and reading about all your flying activities. Thank you so very much for including me on both the FFDU and BFFS magazine mailings.

Because I know so many of the participants personally, it is almost like being there to fly with you all, albeit without the long plane ride. If you are ever up our way, we have a

rack filled with Airfield P 38 Lightning which I recall you enjoyed in LH. Take care my friend and perhaps the Days Inn will be in your plans for February Mike Roberts USA 2024.

AustralianFreeFlightSocietyInc

A Special Interest Group of the Model Aircraft Association of Australia



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45th AFFS CHAMPIONSHIPS Narrandera and West Wyalong 16th - 23rd April 2023 Report and photographs by Malcolm Campbell

NARRANDERA

Like last year, the World Cup events were conducted at Narrandera and the remaining events were flown at West Wyalong. The format seemed to work pretty well this year.

The weather was perfect at both sites but Narrandera was drying out after some recent rain so the field wasn't easily accessible for practice in the days leading up to the event as it was only accessible via 4WD or cars with reasonable ground clearance. Overnight showers Saturday night meant using up the reserve day and starting the events on Monday. The road in was still pretty ordinary and remained that way through the comps.

Kathy and I, like others with small FWD cars, had to be ferried to and from the flight line each day. The AFFS committee worked tirelessly to ensure events went ahead. The first

event, the Widgiewa Cup was put on hold with most practising until noon when the first round started. The event flown close to the road thanks to a favourable wind direction but the fly-offs the following day went across the main road. This meant the AFFS Champs that followed were delayed for a couple of hours as we shifted camp further into the field.

Widgiewa Cup It was good to see internationals again. Bruce Hao chauffeured four Chinese visitors, ably supervised by Yuan Gao, a regular to Narrandera. David Ackery was the lone Kiwi and he flew pretty well. Albert Fathers fell victim to the rough ground with a severe bruise to his heel that sidelined him from all three F1A events. It happened in the second round. Retrievals were difficult for everyone, with rough ground and water patches making for a tiring day. Ian Haigh recorded 120

metres launch with his Shok (almost half of what I get)! Matt Hannaford and he maxed out with Matt winning the fly-off.









June 2023 Free Flight Down Under

There were lots of maxes in F1B with the score sheet covered in red dots. Chinese flyers Litian Yang and Lin Xu "bookended" the five-person fly-off. Craig Hemsworth fell 10 seconds short to place second. Four maxed out in F1C and the fly-offs were long. Shannon Tolmie won convincingly from Shayne McDonald with Chinese flyer Yuan Gao third. F1Bs and F1Cs were landing over the road during the fly-off. Shannon was the only one all week to break the 8minute barrier. Time was lost waiting for all the long retrievals to return. Subsequent relocation further into the field meant the AFFS Champs was delayed until 10.30 am.

AFFS Champs It was decided to fly the first two World Cup events with a 180 second first round, to catch up on time and avoid further delays. With Albert side-lined, only three flew in F1A. Going into round 5 Matt Hannaford was leading until a mistake handed 1st place to Malcolm Campbell.

Bruce Hao won the 4-way fly-off in **F1B**, just 2 seconds ahead of Lu Hoing. Vin Morgan and and Terry Bond were about a minute behind. Gary Goodwin was down to one model, so with four models damaged, he elected not to contest the fly-off.

Like F1B, red dots crowded the score sheet in **F1C**. Five out of seven

were in the fly-off! Missing out were Andrew Linwood and Murray Wilson, the latter being top Australian F2D (CL Combat), son of well-known CL flyer Graham Wilson. It was Murray's first F1C event and he did amazingly well. Gary Pope was the surprise packet in the F1C fly-off, easily out-climbing and out-gliding the opposition with a superb time of 7 mins 40 secs.

The final World Cup event,
NSWFFS's **Southern Cross Cup** was
flown on the Wednesday, from the
same flight line as the AFFS Champs.
The wind had shifted 180° from
yesterday so we got to fly over three
different fields. Tuesday had the best
surface to walk over but Monday and











June 2023 Free Flight Down Under









Wednesday had standing water and cow pot soil making the going tough. Round one was flown with a 240 sec max and it was surprising no F1As managed the time. Ian Haigh finished 20 secs ahead of Malcolm Campbell in F1A by 20 secs, with Matt Hannaford ending a not too flash day.

After the preceding two comps, it was also surprising that no one in F1B maxed out, with the win going to Bruce Hao (his second win). New Zealander David Ackery placed second from Craig Hemsworth, both dropping R4. Dave was a bit disappointed with his scores but I thought he did very well without any support.

F1C managed a two-way fly-off between Shayne McDonald and Roy Summersby, with Shayne flying 10



secs longer than Roy. Yaun Gao missed the fly-off by 4 secs.



With the big classes now all completed, we packed up and headed towards West Wyalong for the Mini events.

AFFS Championships 2023

All 5 Cl	iampionsmps 2025								
Widgie	wa Cup						FO		Place
F1A	Matt Hannaford	180	180	180	180	180	251	900	1
	Ian Haigh	180	180	180	180	180	137	900	2
	Malcolm Campbell	153	148	180	180	103		764	3
	Albert Fathers	180	92	0				272	4
F1B	Litian Yang	180	180	180	180	180	349	900	1
	Craig Hemsworth	180	180	180	180	180	339	900	2
	Gary Goodwin	180	180	180	180	180	305	900	3
	Vin Morgan	180	180	180	180	180	294	900	4
	Lin Xu	180	180	180	180	180	279	900	5
	Bruce Hao	180	180	180	152	180		872	6
	David Ackery	180	161	180	146	180		847	7
	Terry Bond	108	119	153	180	180		740	8
	Graham Maynard	180	6					186	9
F1C	Shannon Tolmie	180	180	180	180	180	488	900	1
	Shayne McDonald	180	180	180	180	180	369	900	2
	Yuan Gao	180	180	180	180	180	346	900	3
	Andrew Linwood	180	180	180	180	180	311	900	4
	Murray Wilson	160	180	180	180	180		880	5
	Roy Summersby	180	180	180				540	6
	Gary Pope	180	180					360	7
Australi	ian Free Flight Socie	ety Ch	ampio	nship	S		FO		
F1A	Malcolm Campbell	92	180	180	180	180		812	1
	Matt Hannaford	180	180	180	128	76		744	2
	Ian Haigh	180	180	0	78	169		607	3
F1B	Bruce Hao	180	180	180	180	180	382	900	1
	Lu Hoing	180	180	180	180	180	380	900	2
	Vin Morgan	180	180	180	180	180	335	900	3
	Terry Bond	180	180	180	180	180	316	900	4
	Gary Goodwin	180	180	180	180	180		900	5
	Graham Maynard	180	177	180	180	180		897	6
	Craig Hemsworth	180	161	180	180	180		881	7
	David Ackery	180	180	180	153	180		873	8
F1C	Gary Pope	180	180	180	180	180	460	900	1
	Shane McDonald	180	180	180	180	180	426	900	2
	Yuan Gao	180	180	180	180	180	405	900	3
	Shannon Tolmie	180	180	180	180	180	381	900	4
	Roy Summersby	180	180	180	180	180	357	900	5
	Murray Wilson	146	180	180	180	180		866	6
	Andrew Linwood	120	180	151	180	180		811	7

Southern Cross Cup

F1A	Ian Haigh	149	180	180	180	95		784	1
	Malcolm Campbell	156	180	180	68	180		764	2
	Matt Hannaford	0	180	49	125	180		534	3
F1B	Bruce Hao	240	180	180	139	180		919	1
	David Ackery	217	180	180	180	140		897	2
	Craig Hemsworth	240	180	180	114	180		894	3
	Vin Morgan	240	180	180	180	105		885	4
	Graham Maynard	157	180	180	180	176		873	5
	Gary Goodwin	200	108	180	180	180		848	6
F1C	Shayne McDonald	240	180	180	180	180	370	960	1
	Roy Summersby	240	180	180	180	180	360	960	2
	Yuan Gao	240	180	180	176	180		956	3
	Andrew Linwood	240	180	180	180	156		936	4
	Murray Wilson	240	180					420	5
	Shannon Tolmie	240	127					367	6

WEST WYALONG

The field was in great condition but changing wind direction would cause a few flight line changes over the three days of competition. The NSWFFS had a number of flight lines mown and ready with clearly defined "roads" that made relocation quite easy.

DAY 1: E36 had the most entries, with eleven flying. Five maxed their first flights and Warren Leadbeatter was leading with Leigh Morgan going into the third flight. Then Leigh

dropped a flight and Vin picked up the baton to grab second from Malcolm Campbell with Leigh relegated back to 4th by her third flight score. Only Warren Leadbeatter's Pearl 222 maxed out. It was quite a close event as the scores show. Roy Summersby maxed out **Combined Vintage** with his veritable Swiss Miss with Ian Haigh's Lamb Climber falling 2 seconds short. Warren Leadbeatter's Stomper was a further 5 seconds behind. It was nearly a 3-way fly-off. Vin did what he does best – assist in the search for Gary Goodwin's lost Eliminator. I





















wonder if it still had Howard Gostelow's address on it? They did find it after a couple of hours about 6 km away, well past the dreaded solar farm.

PAY 2 was a big one. F1G, F1H and F1J were flown together, with separate awards. Kathy Burford, Len Surtees and Malcolm Campbell all flew F1H, making it a Queensland trifecta. Len was using a nice carbon model he acquired from Fred Terzian during his Lost Hills USA visit. He and the model showed promise. Malcolm's Aiglet flew away, in exactly the same direction, and the RDT didn't work, again. This time the DT battery connection may have been dislodged in the previous flight. Another big chase took place, with it

last heard 13 km out, still happily circling after two hours, and it was only 1 pm. The alignment of roads didn't favour getting directly behind the model so it would have been extremely lucky to find it. Vin Morgan easily won F1G with his Deuzio and Roy won F1J, with Harry Sokol's Bounty Hunter stumbling in the 5th round to avoid a fly-off. Harry flew many models at West Wyalong. Tahn Stowe created the day's spectacle when his F1J had the ultimate over-run, 38 seconds of screaming outside loops, the wings creaking in agony as the G forces built up. Needless to say, it wasn't flown again. P30 was also flown, with 8 entries -Terry Bond, Leigh Morgan and Ian Haig were in the fly-off and







they finished in that order with Terry nearly 30 secs ahead.

Scramble was not an AFFS event but was promoted and sponsored by Tahn

Stowe. It was enthusiastically flown by 10 competitors, with 9-year-old Albert Bojec finishing second to Terry Bond. Albert started and launched his own model, and also retrieved it! Young legs and enthusiasm rewarded him well. Starting at 4 pm in light winds, everyone was pretty exhausted when it concluded. It was quite exciting in the centre getting photos,















He launched it to within inches of the roof every time

I certainly captured the spirit of the event. I only got hit once.

Indoor was flown for only a few entrants, with F1N and Hangar Rat being the only classes contested. F1N was a battle royal between Len Surtees and Michael Towell, the latter winning by 0.4 sec with lan Haig off the pace 3 secs behind. With five in Hangar Rat, it was great to see little 4-year-old Lachlan Booth easily win the event, the only one to crest 2 minutes, and he did it three times! Natalie Beckett seems to be a fast learner - she easily filled 2nd place from partner Michael Towell.

DAY 3: I participated in **HLG/TLG**, a class that I may eventually get better at and chased the stars in **CLG**, with me placing 4th and Kathy 6th out of 9 flyers. Len Surtees won by one





June 2023 Free Flight Down Under



Page 12

second from Natalie Beckett with Michael Towell 2 seconds in arrears, probably the closest CLG that I can ever recall. With nine flyers, father and son team of Aaron and Lachlan Booth filled the minor places. Len who was the CD for these events wrote a full report. This is featured on page 22 of FFDU.

Combined Open % had 10 entries. David Shackleford (F1J), Vin Morgan (Duezio) and Andrew Linwood (F1C) maxed out, tying for first place with Terry Bond 1 second behind. My E36 placed 5th, 4 secs behind the winners.

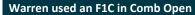
Awards were presented at the farmhouse on sunset and, when all was tallied up, Ian Haigh was Champ of Champs. Appearing below are a few of the "threesomes" as there were a few absentees at the awards ceremony.

The three days of flying were completed in exceptional weather. The AFFS Committee did an exceptional job running all the events at times under difficult circumstances.

The presentation dinner was held at the farmhouse with locally sourced lamb. No one complained about the food and many went back for seconds.

There were at least three I saw steering (lurching) towards a Monday hangover.



















June 2023 Free Flight Down Under

WEST WYALONG

D 20	Tana Dand	120	120	120			454	200	4
P-30	Terry Bond	120	120	120			154	360	1
	Leigh Morgan	120	120	120			127	360	2
	lan Haigh	120	120	120			104	360	3
	Michael Towell	92	120	120				332	4
	Aron Booth	42	104	120				266	5
	N Becket	94	106	65				265	6
	Lachlan Booth	84	58	120				262	7
	Vin Morgan	120						120	8
E-36	Warren Leadbeatter	120	120	120				360	1
	Vin Morgan	91	120	120				331	2
	Malcolm Campbell	111	87	120				318	3
	Leigh Morgan	120	120	67				307	4
	Andrew Linwood	120	63	120				303	5
	David Shackleford	72	111	120				303	6
	Harry Sokol	105	121	73				299	7
	Roy Summersby	120	85	90				295	8
	Aaron Booth	76	120	87				283	9
	Michael Towell	57	90	120				267	10
	Kathy Burford	120	0	120				240	11
F1G	Vin Morgan	120	120	120	120	120		600	1
110	Ian Haigh	120	97	120	70	120		527	2
	Terry Bond	120	73	120	, 0	120		313	3
	rerry bond	120	73	120				313	J
F1H	Len Surtees	0	120	93	120	79		412	1
	Malcolm Campbell	79	55	67	120	0		321	2
	Kathy Burford	85	120	44	0	0		249	3
F1J	Roy Summersby	120	120	120	120	120		600	1
	Harry Sokol	120	120	120	120	40		520	2
	Tahn Stowe	120						120	3
		Туре							
Combined	Roy Summersby	Swiss Miss	S	180	180	180		540	1
Vintage	Ian Haigh	Lamb Clim		178	180	180		538	2
	Warran Leadbeater	Stomper		180	173	180		533	3
	Martin Williams	Stomper		139	180	87		406	4
	Gary Goodwin	Eliminato	r	84	180	0		264	5
	Terry Bond	Ultra Hog		51	111	18		180	6
	,	6			_	-			-

					Max				
Combined	David Shackleford	120	120	120	120			100	1
% Open	Vin Morgan	120	120	120	120			100	1
	Andrew Linwood	180	180	180	180			100	1
	Terry Bond	120	119	120	120			99.722	4
	Malcolm Campbell	120	120	116	120			98.889	5
	Ian Haigh	120	120	110	120			97.222	6
	Warren Leadbeatter	180	157	143	180			88.889	7
	Harry Sokol	123	180	144	180			82.778	8
	Martin Williams	120	39	120	120			77.5	9
	Roy Summersby	35	180	45	180			48.148	10
Combined	Michael Towell	47	60	38	36	60	60	180	1
HLG/DLG	Len Surtees	18	18	46	32	40	35	121	2
	Malcolm Campbell	14	18	14	20	21	22	63	3
CLG	Len Surtees	50	56	47	60	42	60	176	1
	Natalie Beckett	41	28	32	60	55	60	175	2
	Michael Towell	54	34	59	31	30	60	173	3
	Malcolm Campbell	27	22	50	43	24	60	153	4
	Geoff Hungerford	32	33	47	34	19	32	114	5
	Kathy Burford	34	25	30	30	44	22	108	6
	Ian Haigh	34	6	30	21	20	23	87	7
	Aron Booth	3	13	15	14	3	19	48	8
	Lachlan Booth	10	2	2	2	5	5	20	9
F1N	Michael Towell	29.3	29.9	30.8	22.8	28.2	28.8	25.9	28.6
	Len Surtees	24.1	28.5	27.7	27.7	27.2	26.3	33	28.4
	Ian Haigh	28.1	22.2	26.3	23.3	23.9	26.6	26.5	28.2
Honger Det	Lashlan Dashh	120	127	40	120	105	104	200	4
nangar Kat	Lachlan Booth	130	127	18	136	105	104 98	266	1
	Natalie Beckett	96 05	6	4	117	92	98	215	2
	Michael Towell	95 53	42 67	4	92	94		189	3
	Geoff Hungerford	52 16	67	78				145	4
	Aron Booth	16						16	5



QUEENSLAND STATE CHAMPIONSHIPS F1A and F1B

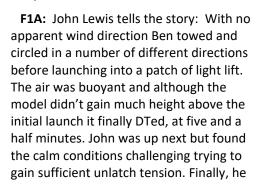
5 May 2023 at Dalby



The Queensland State Championships were flown at Dalby on 6 May. The field was the best it's ever looked and the weather was excellent. Casualties prior to the start were Albert Fathers with a hamstring injury and Malcolm Campbell who had to take Kathy Burford home due to the effects of dehydration from Friday afternoon trimming and alcohol that night. He flew just one token flight on Saturday morning and packed up.

That left John and Ben to fly against each other in F1A. Craig Hemsworth was there for F1B, originally scheduled for Sunday. With just two in F1A and three in F1B, it was decided to fly each event as 3 flights on Saturday, with F1B commencing immediately after F1A.

It suited everyone. Craig and Albert (who timed for Craig) were able to drive home that night and save a nights accommodation, and John and Ben got to sleep in at their motel.



launched and although not high the model was maintaining its launch height until it DTed prematurely after 1 minute.

Malcolm's concerns were for Kathy and he didn't put much effort into his flight. He found the lack of wind made it difficult to achieve a good launch and was down just short of a minute and a half. With the four minute first round Ben was virtually in an unassailable position. Ben and John continued to find helpful air and max their next two flights.

F1B: Craig had no problem maxing his first flight with his all-carbon modern model. Both Ben and John also maxed their first flight comfortably although not getting nearly as high as Craig's model. Both Craig and Ben easily maxed their second flights but John's model was stalling badly both under power and on the glide. A gust of wind had tipped his model over after the first flight and it seems this may have resulted in the tailplane being repositioned below the tailplane.

Craig's third flight maxed comfortably however Ben's model after gaining the best height he had achieved on the day found down air to sub max. John also got high on his 3rd flight and like Ben found a downer to also sub max landing just a few meters off the grassed strip.





F1A results				
Name	Flight 1	Flight 2	Flight 3	Total
Ben Lewis	240	180	180	600
John Lewis	71	180	180	431
Malcolm Campbell	85	Retired		85
F1B results				
Name	Flight 1	Flight 2	Flight 3	Total
Craig Hemsworth	180	180	180	540
Ben Lewis	180	180	168	528
John Lewis	180	76	143	399



STING MK2 GLIDER KITS FOR SALE at Muncie US Nats in July

Kits include Jnr 15" CLG (placed 2nd and 3rd in Australian Nats), 18" CLG (won every State and Nats over past 3 years), updated 32" aluminium wing TLG, available in short kit with viscous timer and ARF set up for RDT.



Contact: lensurtees@hotmail.com Website: stingmk2gliders.com

NSW and Victorian State Champs F1A, B and C

West Wyalong 3 - 5 June 2023

Photos by Natalie Beckett and Leigh Morgan

Sixteen flyers rolled up to the Bryant field the weekend before the King's Birthday weekend (good dates, less traffic, more accommodation) to fly the NSW and Victorian State Champs for 2023.

Vin and Leigh got to WW on Thursday so they were on the field early Friday to enjoy the predicted calm. The wind was indeed very low but there was a bit of drizzle early. It cleared to a fine trimming day as other flyers arrived throughout the day.

Saturday; NSW Champs. There was some fog early but this was cleared by a light wind from the East (a good direction for this field). CD Michael Towell got the contest going at 08:30 in excellent conditions. Sunny, wind 1 to 2 m/s. There were four maxouts in rubber and two in power. The glider flyers dropped a few flights which I think was mainly due to launch problems.

We had a World Champs Team

Meeting after lunch in the house – it is so useful having this facility on the field

It was predicted to be windy on Sunday so the plan was to do the flyoffs later in the afternoon. At 16:00 the ground level wind was a light Westerly (although the prediction was for the Easterly to continue) and a helium balloon also indicated westerly drift so the flyoff launch point was located towards the western edge of the field. The F1Cs (Roy Summersby and Murray Wilson) drifted NE which was satisfactory but the F1Bs (Terry Bond, Vin Morgan, Gary Goodwin, Craig Hemsworth) went N which was not so good. Terry hit a tree although not high and Vin's and Gary's models went out of sight behind trees.

The pies (dinner) were great.

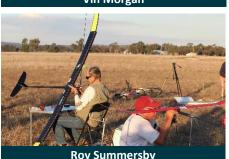
Vic Champs. Sunday started calmish, wind about 2m/s so we flew a four minute first round, but the models went more than a kilometre. After the

first round CD Leigh Morgan changed the rounds to flights to allow longer retrieval time. Vin's first flight went 1.4km and his second went 1.9km. The F1C flyers, being mindful of the upcoming World Championships, chose to stop after flight 2. So did Albert Fathers and Ian Haigh in F1A. Sam Kirby put in a sterling effort with five glider flights and Matt Hannaford flew four. I think he might have broken something towing in the wind. The F1B flyers flew a 2-minute forth flight and then stopped. The wind was a consistent 5 to 6 m/s after about 10:00.

Monday was supposed to be Open Rubber, Open Power and a combined 2-minute event. The day is also a reserve day, having three days improves the chances by a factor of 3/2. In the event Monday was totally unflyable with the wind of Sunday accompanied by rain. We went home.

Vin Morgan















NSW State Championships winners







F1A

F₁B

F1C

F1/	4		F1B				F1C	
NSW S	tate Championships	2023						
F1A	Name						Total	Flyoff
1	Albert Fathers	240	158	144	180	180	902	,
2	Ian Haigh	203	180	180	180	154	897	
3	Tahn Stowe	222	123	0	180		705	
4	Matt Hannaford	106	103	120	145	155	629	
5	Sam Kirby	73	135	100	115	80	503	
F1B	Name							
1	Terry Bond	240	180	180	180	180	960	330
2	Vin Morgan	240	180	180	180	180	960	320
3	Gary Goodwin	240	180	180	180	180	960	315
4	Craig Hemsworth	240	180	180	180	180	960	29
5	Bruce Hao	240	180	180	152	180	932	
6	Graham Maynard	140	12	0	0	0	152	
F1C	Name							
1	Murray Wilson	240	180	180	180	180	960	322
1	Roy Summersby	240	180	180	180	180	960	264
3	Gary Pope	240	24	180	146	180	770	
4	Tom Linwood	240					240	
5	Andrew Linwood	240					240	
							0	
Victoria	an State Champions	ships 2023	}					
F1A	Name							
1	Matthew Hannaford	240	0	180	167		587	
2	Sam Kirby	124	75	180	0	53	432	
3	Albert Fathers	240	180				420	
3	Ian Haigh	240	180				420	
5	Tahn Stowe	154					154	
F1B	Name							
1	Bruce Hao	240	180	180	113		713	
2	Terry Bond	238	180	180	114		712	
3	Vin Morgan	240	180	180	71		671	
4	Gary Goodwin	240	180	115	120		655	
5	Craig Hemsworth	240					240	
5	Graham Maynard	240					240	
F1.0	N							
F1C	Name		100				400	
1	Gary Pope	240	180				420	
1	Roy Summersby	240	180				420	
3	Murray Wilson	31	180				211	

The NSW and VIC State Champs - a second opinion, as seen by Roy Summersby

Quite a few of us arrived about noon on the Friday. Those that were there were treated to a glorious afternoon of very little wind, just perfect for a bit of pre comp trimming.

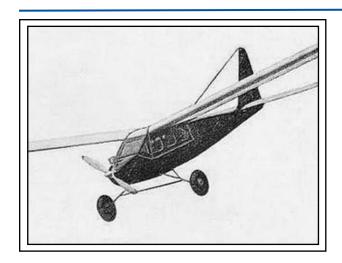
Saturday morning had a light easterly breeze, first round was four minutes then four three minutes rounds. I didn't see anyone with retrieving problems as models were only going about half the field, as you can see by the score's maxes were coming in for each round. To sum up, Saturdays flying was just fantastic, even the six-minute flyoff late in the afternoon was no problem.

Saturday night was a little different from the normal roast dinner. I arranged pie, peas and gravy. The pies were shipped in from Gamain, this was recommended by Jeff Bush, his trade was a pastry chef and he knows cooking, so I took his advice. The night was mild and without wind so we sat outside, great atmosphere with a little wine to wash

down the pies (two each) and followed up with an ice-cream.

Sunday turned out as forecast, south easterly wind. The first four-minute round was just a long walk but the direction was not too bad. Thereafter, the wind had moved to more southerly and this was not in a good direction. My second flight, and at three minutes the model was going over the big stand of trees. I pressed the DT button while it was clear of the trees and, as it had landed only 60 meters from the trees, I decided to quit as I can't afford to lose a model this close to the World Champs. The wind direction did improve a little and the F1A and B flyers kept on flying.

There should have been flying on the Monday but the weather certainly put a stop to that and it was time to head for home, if only the flying had been on Thursday, Friday and Saturday. We will have to arrange it better next year.



A Little bit of Modeling History

On a Wednesday at 1.35 pm the 22nd September 1954 a model took of from the cliffs of Dover and forty minutes later landed in France. This was the model, the Radio Queen, which had proven its self in radio competitions in England. The model was powered by an ED Hunter 3.46 and used a radio system produced by ED. It was a Mk IV reed system set. The take off from Dover Cliffs was under the control by a Mr Sid Allen who then handed over to Mr George Honnest-Redlich, circling in an Auster plane. This was the first crossing of the English Channel by a model aircraft. No doubt there has been many more since.

HEAVE HO WORLD POSTAL Small glider 2023 results

Indoor CLG Junior Category 1 (6" -150n	nm)	Outdoor CLG		
1 Josiah Honaker USA	50 seconds	1	Josiah Honaker USA Jnr	214 seconds
Indoor F1N HLG Category 1	A	1	Justin Honaker USA	247 seconds
1 Josh Finn USA	97 seconds	2	Paul Squires NZ	230 seconds
2 Justin Honaker USA	38.2 seconds	3	Des Richards NZ	208 seconds
Outdoor HLG (winner Heave Ho Troph	y)		Des Michards NZ	200 36001103
1 Lindsay Muffett AUS	51 seconds	4	Graham Lovejoy NZ	185 seconds
Outdoor TLG		5	5 Mike Mulholland NZ	176 seconds
1 Caleb Finn USA Junior	145 seconds	6	Connie Grey NZ	168 seconds
1 Josh Finn USA	278 seconds	OSTAL COMPE	Lindsay Muffett AUS	157 seconds
2 Dan Crews USA	145 seconds	8	Jo Fuller NZ	137 seconds
3 Lindsay Muffett AUS	131 seconds	9	Ron Pilcher NZ	135 seconds
LUCKY ENTRY WINNER		10	Alec Fuller NZ	120 seconds
Dan Crews (Your glider k	it is on its way)	10	Alec ruller INZ	120 Seconds
Dan Ciews (Tour glider K	ic is on its way)	11	Rob Wallace N7	114 seconds

Congratulations to all winners and those that " Had a Go "

A big thank you to Josh Finn from **J&H Aerospace** who again sponsored glider kits for all indoor event winners. All outdoor event winners sponsored by **STING Mk2 GLIDERS** receive kits. Check out my web site for several new items coming in June. Len Surtees stingmk2gliders.com

Construction Corner

Gary Goodwin reports on his Windbag build:

Just a quick update; the "Hindenbag" is ready for its maiden flight this weekend. Hope it still flies OK with the mods I've done to the original kit?

All areas are still pretty close to original, but I did take out the tapered front section of the winglets and added the same area towards the tail to represent the engine housings with dummy props attached!

The swastikas are left-handed, which is a Buddhist symbol for peace and prosperity! Model is covered with laminating film and sprayed with artist acrylic and auto acrylic clear top coat/ fuel proofer. Letters are just permanent marker pen, under clear coat.

Yeah, the fuselage does contribute and they do have a sort of glide/ controlled descent to the flight pattern. They climb out under power, quite stable and steep, so you don't fill the tank! I've got right thrust and down thrust for the climb and will see what happens in the glide and adjust if necessary.

Trimming update:

Trimming is still ongoing, but almost there. It looks like I need some upthrust to get it to climb under power! Have given the model a heap of up elevator and its just about getting its nose up under power. I have reduced the tailplane area slightly and also the side winglet areas for scale effect, which has meant a few changes to the







original trim settings. Just hoping that the glide angle is not too steep, but so far it looks OK, and the climb rate will be more docile than the standard designs, that get very high on even a half tank!

Gary had too many F1B repairs from Narrandera to test and trim so playing with the Hindenbag is delayed until after the big events at West Wyalong in June.

All Icarex ain't Icarex, so take care when buying on eBay



A couple of months ago I bought 3m of Icarex PC31 on EBay, but it wasn't as it seemed.

I applied it the way I always do and it shrank as always - nice and tight. But within an hour it went slack. Further heat tightened it up again, but it wouldn't stay tight. I had a piece of Craig Hemsworth's Icarex and applied it the same way as I did the dodgy stuff. It tightened up a stiff as a drum and never slackened off. In the adjoining photo you can easily see the dodgy (green) one after it was shrunk.

So I contacted the supplier who said: "Hello, friend. I have many customers who have ordered this fabric for the same purpose as you, and they have never had a problem with it, and your methods and processes must be different."

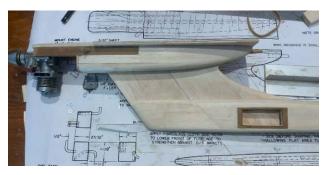
So be warned. <u>Never</u> deal with **giraffewb-5** on EBay. And thanks Roy, for some of the real stuff!

Malcolm









Warren Leadbeatter's new build

I built a Goldberg Hi Thrust 1/2A Viking back in 2006 and it stayed hanging in my garage for 12 years before it was maidened at West Wyalong in 2018. The first flight was fantastic. With a 5 sec engine run it did exactly what it was supposed to do. A couple of flights later something went wrong and it crashed, breaking the wing so I put it away for another day.

About 2 years later after building a new wing for it, I flew it again at West Wyalong . It flew for about 8 minutes after a 1m 30s engine overrun. The DT had been set for a 6 min High Time for the first round, but the engine cut-off did not activate. In a stroke of luck, after the 8 min flight I only had to walk about 50 metres to retrieve it!

So, being such a fun model, I decided I needed to build a full-sized FAI Viking for Open Power. A few others like Roy Summersby, Terry Bond and Andrew Lindwood decided to build them too.

So, I got the plans together and procrastinated a bit, just like the first one. I built a couple of other simpler power models in the meantime, like the Dixielander and a Stomper, and both fly very well. Then in winter of 2021 I finally got into building the Viking. I wanted it to look similar to the 1/2A one I have, that I can still fly in Combined % or F1J events and be competitive.

As it was winter and it was a bit cold in the workshop so I got permission to build in the house on the dining room table. I setup a building board on the dining table and kept it all reasonably tidy so I could put it all away in the spare bedroom when we were eating at the table which was a couple of times a week. The wing build became a bit too big for the dining table so I moved to the kitchen bench for a part of the build.

Once the main build was done, I took it all down to the workshop for the painting and covering stages before returning to the kitchen for final assembly. It has now been ready to test fly for nearly 2 years so I think it might be about time to take it out to the field for a test flight soon.

Warren Leadbeatter









June 2023 Free Flight Down Under

The Development of the Discus Glider

Len Surtees
Queensland, Australia

Mark Benns, who has dominated the UK free flight hand launch glider events since the late 90s, is largely responsible for the growth in the interest in discus launch gliders as an advance in sport of hand launch glider flying. While experimentation with the discus launch approach took place during the latter part of that decade, by the year 2000 Mark had developed and outstanding glider named "2 KAN 25" which turned out to be the defacto prototype for the current "no gadget" approach to the discus configuration.

Mark's new way of looking at the problems inherent in the discus launch approach to glider flying was proven by many trial and error empirical designs and flights until he cleverly thought out a new way to control the trim of his gliders. There were five basic design changes he incorporated that brought discus launch to its present state:

- (a) The tail plane was thickened with a forward high point to increase lift, helping the transition and preventing the model from looping tendencies with its forward CG.
- (b) The tail plane area was reduced to lessen the torsion and tensile loads on the boom during launch.
- (c) The rudder size was reduced to prevent "weather cocking".
- (d) The rudder was airfoiled (airfoil on one side) to help turn the glider to the right, which proved very effective during the high speed of the launch.
- (e) An off-set V-tail configuration was used to help the turn and roll.

Taking a path counter to Mark's developments, very large 60" discus launch gliders were being tried in the UK, but used VIT and VIR mechanisms to effect launch, transition, and glide mode. By their nature, the automated mechanisms made construction very complicated and subject to Murhpy's law.

Mark, on the other hand, employed all of the design changes noted above in a simple "built-in" trim scheme, along with moving the CG forward from 55% to 45% and increasing the wing dihedral to produce a better control of roll on launch and more "bounce" in the glide in all conditions. These changes, coupled with a perfected launch technique, which is essential for consistency (Mark has produced a DVD

showing the correct launching style used by himself and others).

At the 2004 UK Nats, attended by US flier Bruce Kimball and myself, we would head to the local pub after a hard day's competition and have a few beers to recap the day's flying and to discuss the future of HLG, which had remained essentially stagnant for many years. During one such session we dreamed up the concept of having an international indoor HLG contest to help promote the sport and the "Battle in Seattle" was born, although the actual contest was flown at the Kibbie Dome in Idaho at an FAI USA World Team selection trials. (Editor's note:

Obviously, it was difficult to get anything to rhyme with "Kibbie Dome" or "Idaho".)
So it was in July of 2005 that this dream became a reality, with the "best of the best" showing up to do battle for their respective countries—England, Canada, Australia, and America.

At that time everyone had their best traditional "javelin throw" glider in hand, but no one had anticipated the drama that was to unfold before our very eyes. While everyone else was testing and warming up, Mark Benns brought out the first 36" indoor discus launch glider (later named the "SPIN-UP 36") and proceeded to trim for the event. Everyone was mesmerized.

Being confronted by four walls for the first time (all previous discus launch flying had been outdoors), Mark rose to the mental and physical challenge of trimming in a confined space. Although he suffered broken gliders several times, he eventually figured out a way to overcome the odds and began putting up spectacular flights that made spectators out of the other contestants.

I must mention that the flying floor/space was capable of having several contestants flying at the same time, but when Mark really started to get his "SPIN-UP 36" working correctly, all those on the floor melted back to the bleachers to give Mark the floor. They were rewarded with the most memorable event in HLG history.

Bruce Kimball and I timed the official flights which quickly went from around 70 seconds up to a new World Record of 84.8 seconds. One flight was hand caught in the bleachers to avoid damaging the glider, and we estimated that flight would have been well over 90 seconds had it been able to reach the floor!

Unfortunately, on the next flight, Mark's glider exploded on launch due to the structural damage that had occurred earlier. It was fitting that the three World Record holders of FAI F1N (myself, Jim Buxton, and now Mark Benns) could celebrate together. The hair on the back of my neck was standing on end!

To his great credit, Mark gave his time freely to all who asked many questions, such as "How did you do that? What does this do?" and so on. Mark also brought along his 48" outdoor discus glider which he demonstrated at the adjacent outdoor sporting field.

Those who attended and witnessed this significant development in the sport included Lee Hines, Stan Buddenbohm, Jim Lewis, Jim Buxton, Bruce Kimball, Dick Peterson, Ed Berray, Kurt and Kenny Krempetz, Tem Johnson, Bob DeShields, John Buskell, Michael Thompson, Ralph Ray, and others.

Mark Benns can be credited with introducing the simple, low-tech, easy-tobuild-and-fly free flight discus gliders to the world. The most immediate unforeseen consequence is seeing many older competitors who had dropped out of the sport due to arm injuries and age once again returning to competition just to try something new and exciting.

With my two wins of the Australian Nats, Mark's two wins of the UK Nats, and Bruce Kimball's 2006 win of the US Nats, the "SPIN-UP 36" and Mark's revolutionary thinking have firmly entrenched the glider and its designer into free flight history. Thank you, Mark Benns!

Len Surtees

2023 AFFS Champs report on small gliders

Numbers were down this year at West Wyalong but the weather was spectacular allowing all who competed a most enjoyable time regardless of placings. I competed in four glider events taking home two Gold and two Silver medals. What gave me a smile was to see my kitted glider STING MK2 Jnr 15" fly so well in the outdoor Catapult event. They beat the latest USA designs which there were 3 competing. I managed to scrape a win by one second and Michael Towell's partner Natalie came second who beat Michael by one second into third place, now that's as close as it gets, smiles all round especially when two of Natalie's flights came down after two minutes and landed two hundred meters away. Ian Haigh, the dark horse, arrived to fly in the last hour as everybody else had completed their six rounds. We quietly discussed among ourselves that if anyone could beat us it was Ian, with his well built USA influenced glider. Unfortunately

lan wasn't at his best (I think worn out after winning just about every other FF events and winning the Champion of Champions Trophy)
Good luck in France lan, representing Australia in F1A in August 2023.

Indoor HLG F1N was a battle between Ian Haigh, Michael Towell and me. Although I again equaled my last year record high time for the low 7m ceiling, Michael with consistent flights edged me into second place by 0.4 of a second for the best three flights. Congtats Michael you are the King till next we meet. (on going joke between us). Ian shiffted gear from last year having learnt a lot from past mistakes and was only a couple of seconds behind us, well done Ian.

Outdoor TLG / HLG combined was between me and Michael Towell and Malcolm Campbell all flying TLGs. Michael managed 2 max's to win but I couldn't find one with my new updated 32" alluminium wing glider with a F1A / F1B style bottom of wing shapes. After my six rounds and thinking about flight pattern I made one small trim adjustment and without testing the air launched and maxed, next flight also maxed although DT brought it down slightly early, sooo we live and learn. (Looking forward to show this distinctive TLG at Muncie Nats in July, as well take many STING MK2 Kits for sale there.)

I flew for the first time the beautiful F1H that Fed Terzian gave me at Lost Hill in February this year. With no triming adjustments it proved to be the winning glider in a complete novice's hand. Thanks Fred, I'm now hooked on this class of glider; now need to learn how to circle tow and bunt. Both Malcolm and partner Kathy were unlucky not to complete their rounds due to chasing Malcolm's glider (never to be found). Otherwise in good humor Malcolm assures me later that placings would have been different if it didn't fly away.

Len Surtees

BOEING PROPTOWN - A LOST STORY?

This little story isn't really about free flight model aeroplanes, but it's related in a general interest full-size aircraft historical way, however as it concerns the Boeing aircraft factory and others like it during World War Two.

I agree that's a rather tenuous connection to the interests of F.F.D.U readers, but quite a number of modellers are interested in aviation history, so for those that are, this is for you, and I hope you will find it interesting. Our readers who have no such interest should feel free to move on to other articles and I apologise to them for taking up space!



Have a look at this photograph of the massive Boeing B-17 production line taken in early 1943 – a time when the USA was busily concentrating most of its war effort in Europe, mainly in the form of daylight bombing raids.

Aircraft losses in Europe were high, and this required a massive production effort which was spread mainly across the west coast aircraft industry, including companies such as Consolidated in San Diego, Boeing in Seattle, Douglas at

Santa Monica, and Lockheed at Burbank. In addition to these on the west coast, the Glen L Martin company making the B-26, the Maryland and other such aircraft, was based in Baltimore on the east coast.

All of these companies were working their plants 24/7 to meet demand and as a measure of that, the Boeing B17 production line alone was producing 300 aircraft a month!

Now have a look at the lower adjacent photograph taken in 1943 if you would please; what does it show?

Well, you see a brilliant California day and an attractive looking woman kneeling in her garden trimming some shrubs with shears.

She has a 1940's pompadour hairdo, and she wears a two-piece bathing suit and lightweight sandals. You will notice what appears to be a road behind her on the left of the image, and in the background, the neighbourhood slopes uphill to a garage and a house on top. Trees dot the

landscape, and shrubs and walks delineate property lines. It all seems perfectly normal.

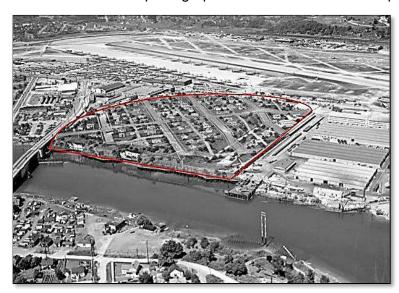
As you continue to look in more detail, you wonder why anyone would garden in that outfit? Maybe she wants to get a suntan, so that explains the two-piece bathing suit, but who trims hedges in high-heeled sandals, and why are those triangles lining the side of the road and where did the footpath go?

And why is she kneeling on chicken wire? Something here is strange, so what is this picture trying to say?

The photo is trying to convey an image of suburbia, of domestic bliss, but beneath that elaborate scene and the attractive lady trimming the hedge, is the Douglas aircraft plant in Santa Monica. The suburbia shown in the photograph above is fake.

The image of the woman doing the gardening shows part only of an extensive and elaborate camouflage system erected over the top of the factory buildings to hide them from being spotted by enemy reconnaissance aircraft.

Now let's look at the photograph below: We see an aerial photograph of suburbia in the



foreground, then a river, more suburbia with a group of factories to one side of them, and then further on, what appears to be an aircraft runway.

That bit of suburbia marked around the perimeter in red, covers an area of 26 acres, but it is also fake!

Within that red outlined area and below the elaborate camouflage, is the B-17 production line of the Boeing plant in Seattle.

This production facility had 30,000 men and women working in it when this photograph was taken, and as mentioned earlier, this plant was producing B-17 bombers at the rate of 10 completed aircraft per day from under this elaborate camouflage.

Your next question is bound to be, why is the fake township there – America didn't come under attack during World War Two did it?

The answer is yes it did, but we need to fill-in some background to answer that properly, so let's go back to Pearl Harbour on December 7, 1941.

The events at Pearl Harbour that day in December, apart from drawing the United States into World War Two, also worried the mainland Americans and left them wondering when and where the next attack might be.

They only had to wait a few months to find out

On 23 February, 1942 just after 7:00 pm, a submarine later identified as I-17 belonging to the Imperial Japanese Navy (I.J.N) surfaced in the Santa Barbara Channel a few hundred yards off a beach located about 10 miles west of Santa Barbara. The submarine then conducted a 20 minute bombardment by firing its 5.5" deck gun at the Richfield aviation fuel storage tanks located on a hill behind the beach.

17 shots, mostly wild, were fired with the closest shell landing in a field 30 yards from the tanks, and others landing more than a mile inland. Little damage was inflicted by the shelling apart from minor damage to a pier and pumphouse, but news of the shelling sparked fears of invasion and a number of other actions by the Americans including the decision to camouflage aircraft manufacturing plants, which becomes the subject of this essay.

The attack by I-17 also caused what became known as "The Battle of Los Angeles".

This event occurred the night after the shelling attack on the Richfield tanks and during a 30 minute fusillade, anti-aircraft guns hurled 1400 rounds of 3" and also some smaller calibre ammunition, into the night sky at a supposed enemy aircraft. There was no enemy aircraft, but about 10 tons of shrapnel and unexploded ammunition fell back onto the city of Los Angeles causing significant damage – hence the name, "The battle of Los Angeles" given to that little known episode of local hysteria. One can't really blame them though

Incidentally, submarine I-17 had previously participated in the Pearl Harbour attack, having been assigned the task of engaging any ships that tried to sortie from Pearl Harbour during the attack, and following that engagement, it proceeded to patrol off the coast of America in an area north of San Francisco before returning to its resupplying position near Hawaii for reprovisioning and then it returned again to the U.S.



I-17 was bigger than you might imagine; It was a B1 class submarine almost identical to I-25 shown here. It was approximately 109 metres long and had the capability to carry a reconnaissance floatplane in a 'hangar'

just forward of the conning tower. The 'plane was launched by catapult and retrieved by a gantry system.

These submarines had a range in excess of 14,000 nautical miles (23,000km) and could reach a top speed of just over 40 km/hr.

There were nine Japanese submarines of this type patrolling the west coast of the United States in the early days of the war and they were tasked with disrupting shipping, which they did very successfully by sinking a reasonable tonnage of merchant shipping, and also taking actions designed to cause panic amongst the local population. As part of that task, the nine submarines were planning to make a coordinated shelling attack of 30 shells each into the west coast of America on Christmas Day – December 25, 1941.

This attack was re-scheduled to 27 December, and then later cancelled altogether, leaving only the attack by I-17 in February of 1942 and the shelling of Fort Stevens in Oregon by I-25 on 21 June 1942.

The risk of aerial attack from carrier-based aircraft was also very real and such action had the potential to inflict significantly more damage than a few shells fired at random from offshore by a submarine. It was also possible, although difficult, for the Axis air forces to reach the U.S mainland with land-based aircraft to mount a bombing raid of even greater magnitude.

Something needed to be done.....

Before we leave submarine I-17, we should expand its story as I-17's claim to fame was that it became the first Axis ship to shell the United States mainland during World War Two.

After the Pearl Harbour attack, I-17 travelled from Hawaii to the west coast of America and arrived there on December 18, 1941 and was subsequently involved in several skirmishes against shipping before being recalled back for provisioning in late January 1942.

I-17 was then sent back to the American west coast to look for targets of opportunity, making landfall on 19 February at Point Loma near San Diego after arriving from Kwajalein Atoll. A reconnaissance party was sent ashore under cover of darkness to verify their location after which I-17 proceeded north until four days later, it attacked the Richfield Oil Tanks on February 23 as noted earlier.

Submarine I-17 remained off the coast of California until mid-March 1942 and was responsible for the loss of some coastal shipping, before returning to Yokosuka. It was then assigned to the western Pacific where it was quite active and successful.

Submarine I-17 was eventually sunk with the loss of 97 crewmen on 19 August 1943 after being engaged by the New Zealand minesweeper *Tui* and a number of U.S. Kingfisher floatplanes. I-17 now lies on the ocean floor somewhere off the east coast of Australia, a few hundred miles southeast of Noumea.

Each of the nine west coast IJN submarines has a tale to tell, but the story of I-17 is included here as it had much to do with the decision to camouflage the aircraft factories.



The next photographs show of part of the fake Boeing township known as *Prop-town* sitting above the B-17 factory and you can see that there were walkways at that elevated level that allowed people (workers at the Boeing factory mainly) the opportunity to walk around up there, see the sunlight, and even have picnics during their meal breaks should they choose.

Their presence added reality to any aerial surveillance photographs that might be taken.

Some more photographs of the camouflage follow before we take-up the story of how this camouflage came into existence:

The trees are made from chicken wire, sprayed with adhesive and then covered in feathers painted to leaf green colour. Some areas are non-trafficable, but there are walkways and some solid elevated spaces for sitting-around and sunbaking.



The theory was that movement on the camouflaged area added enormously to the likelihood of it being taken as real by those photographing it from high level overflights.



The attention to detail is remarkable and for this reason, I've included more photographs than may seem necessary.

The adjacent photograph shows part of the Lockheed camouflage at Burbank – it was also very elaborate and detailed.

Below is another part of Lockheed at Burbank, this time showing a mixture of factories and fake scenery to break-up the lines of the factory buildings rather than complete cover.

Some of the fake township can be seen in the background.

In early 1942 – soon after I-17 fired on the Richfield fuel tanks, Colonel John F. Ohmer was assigned the task of camouflaging the aircraft factories in a project known unimaginatively as "Operation Camouflage".

The Lockheed camouflage project included them painting car parks and air strips green



and lining them with plants to make them look like fields of Alfalfa while the wire, burlap and chicken feathers were then used to cover the entire factory. The camouflage work also



included anti-aircraft gun emplacements and air raid shelters. The planning was so detailed and elaborate that many of the factory workers were sent at random to the upper area to put up and take down washing from clothes lines.

On completion, Ohmer and several officials from the war department flew over the plant at a height

of 5000 feet and Ohmer asked them to identify the Lockheed plant, which they could not do – all they could see was sprawling suburbia as you see in the next photograph.

Colonel Ohmer, who, prior to being given the task of hiding the aircraft manufacturing plants and other related facilities, was in command of a camouflage training centre at March Field in California, and he was a pioneer in camouflage, deception and misdirection techniques.

During the Battle of Britain in late 1940, when the full force of the Luftwaffe was attempting to bring England to her knees, Ohmer visited England and witnessed firsthand how carefully made and



positioned camouflage was so effective. It caused the Luftwaffe to waste thousands of tons of bombs on empty fields.

In addition to his team at March Field, Ohmer received help in camouflaging these selected sites from the movie studios in Hollywood. MGM, Disney, 20th Century Fox, Paramount, Universal, all heeded the call by offering up their set designers, painters, landscape artists, carpenters, lighting experts and prop men.

Ohmer set out to conceal key factories and assembly plants that would be likely targets for a Japanese assault on the Pacific Coast such as the Douglas Aircraft plant in Long Beach, and the Lockheed-Vega aircraft plant in Burbank. The colonel and his crews also began applying these Hollywood techniques to camouflage more than thirty four air bases and their work included the planting of fake foliage as well as the structural cover similar to what we have seen in the photographs in this article.

Maintaining the illusion of a neighbourhood required careful timing and planning. The suburb had to show signs of life and activity. To do this, workers occasionally emerged to relocate automobiles, and through hidden trap doors in the canopy, appeared to take walks on hidden catwalks and pretended to do maintenance work.



Was this massive effort worth the cost and trouble? I doubt we will ever know the answer to that question. If nothing else, it gave a feeling of security not only for the government, but also for the many thousands of workers busily producing aircraft below that mass of posts, wires canvas and fake houses.

There were no recorded cases of enemy action against the camouflaged sites, so we should probably give the scheme our tick of approval. An interesting story none the less!

Mike Pettigrew.

CLASSIC A1 EMAIL INTERNATIONAL 2023

The second 'official' postal contest for Classic A1 gliders will run from June 1st to December 31st 2023. Top three individuals plus top team of up to three flyers will be awarded engraved glass trophies, and thanks to the generosity of Peter Brown, once again the winner receives a complete standalone RDT system.

Eligible models

A Classic A1 is any towline glider of total area not exceeding 18 sq. DM (279 sq. in.), built to a design published or kitted between January 1951 and January 1961.

N.B the 'Ghost', 'Top Kick' and 'Lil' Dip' will be considered eligible for this year's event.

There is no minimum weight requirement. Any form of dethermaliser may be fitted.

Towline 50 metres (164 ft.) maximum. Alternatively launching may be via a 'bungee' containing no more than 20m. of rubber and not exceeding 50 m. relaxed length, anchored to the ground (provided the whole flight is over substantially level ground).

Scoring

All flights for each entry must be made on the same day, using the same model. An individual may make up to three entries, so long as a different model is used for each. Flights must be timed by a person other than the entrant.

The max for the first flight is 30 seconds. If this is achieved, the entrant may make a second flight, of max 60 seconds and so on, the max increasing by 30 seconds each time until a max is not achieved (or flying cannot continue, e.g. because the model is lost or damaged). The total score for each entry is the sum of all flights, including the last sub- max. This should be submitted in the form of an addition, e.g.

30+60+90+112 = 292

Entry

Entry is free of charge. Score should be submitted to stuartdarmonf1a@yahoo.com

or by post to Stuart Darmon, 1 Post Office Cottages, Main Street, Theddingworth, Leicestershire LE176QP, United Kingdom

to arrive no later than January 10 2024. Please include your name, the name of your timekeeper, the design you flew, and the location of your flights. Additional information and photos would be most welcome.





NSWFFS INAUGURAL WEST WYALONG MIDWINTER MINI MAXOUT

Class: F1G / Coupe D	Hiver (10 flights over 2 days)
Class: F1H / A1	(10 flights over 2 days)
Class: F1J / ½A	(10 flights over 2 days))
Class: P30	(10 flights over 2 days)
Class: E36	(10 flights over 2 days)
Class: Oz Diesel	(10 flights over 2 days)

Host: NSWFFS

Date: Saturday 29th July 2023 & Sunday 30th July 2023 **Venue**: NSWFFS, Free Flight Field, West Wyalong

Time: 0800 to 1400

Entry Fee: \$20 per class flown. Payable on arrival

Program: All classes flown each day, no rounds, 5 flights per class each day with running score sheet over the two days. (Hence Mini Maxout)

CD: Shayne McDonald

Contact: email (shayne7@live.com.au) mobile 0428805724

Registration: via email, text message, or phone call, to above details.

A BACKWARD GLANCE Narrandera 2015

This was the year that organisers dread. Perfect weather the day before we start and then rain and wind so persistent that only the indoor components of the AFFS were completed. On the last day, 7 rounds were compressed to 5 rounds and we were told to fly as many events as we could. So there weren't too many flown at Narrandera . We relocated to West Wyalong for the outstanding events and the Southern Cross Cup events. I've included photos from there. It was also the year we got a new committee, a driverless silver Camry sedan performed reverse doughnuts in the car park, and I moved house after 40 years. It was also the year when Roy and Di got hitched.





















June 2023 Free Flight Down Under















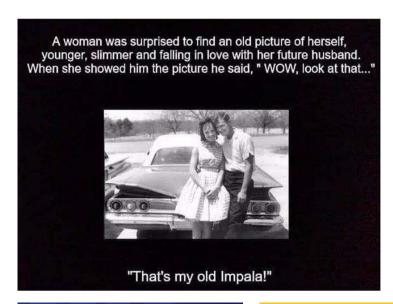






June 2023 Free Flight Down Under







"You know, Ernie, I can't help this feeling that I'm just another day older and deeper in debt."



The people who make fitted sheets need to sit down with the people who make mattresses and get on the same god damn page.

Making the bed shouldn't be like putting a swimming cap over a fridge.

My Kid: I feel like you're always making up rules and stuff.

Me: Like what?

My Kid: Like if I don't clean my room a portal will open and take me to another dimension.

Me: Well that's what happened to your older brother.

My Kid: What older brother?

Me: Exactly.

Everyone talks about leaving a better planet for our children.

Why doesn't anyone try to leave better children for our planet?

All I'm saying is, at any point during that ride through the desert he could have given the horse a name.



Why are hallways in psychiatric hospitals called "hallways"?
Shouldn't they be called psycho paths?



CHAINSAWS... THEY WILL FIND YOU.

Free Flight Calendars for what's left of 2023

NEW SOUTH WALES

June 3-5	NSW State Champs F1A, B, C, O/Power, O / Rubber + Victorian States Champs for A, B, C	W. Wyalong A B Field	8.00am-1.00pm	See separate program for details
June 18	State Champs F1G, H, J + E36	Richmond	7.00am-1.00pm	Roy Summersby
June 30st Flying 1st & 2nd July	Scale Rally, + Trans Tasman, Scale Judging Fri 31 st 1st &2nd Flying. Sun 2 rd ½ Hour scramble, Fun Fly C/L flying & BBQ Lunch	Richmond Sunday BYO Food & Drink	7.00am till dark Trans Tasman	Phil Warren
July 21	General Meeting	Dundas Sport	7.30 pm	
July 29-30	Midwinter Mini Maxout	West Wyalong AB Field	8.00am- 2.00pm	Shayne McDonald
Aug 13	Scale Rally, P 30, Combined Vintage	Richmond	7:00 - 1.00pm	R. Summersby
Aug 25- 27	Cowra Oily Hand Weekend	Cowra		
Sep 10	½ Hour Walking Scramble + Fun Fly B-B-Q Lunch	Richmond BYO Food	7:00am – 1:00pm	John Corby
Sep 15	Annual General Meeting	Dundas Sport	7:30 pm	
Sep 24	Combined % 5 flights + E36	Richmond	7.00am - 1.00	Peter Scott
Oct 1	Combined % Multiple Entries	Richmond	7:00am - 1:00	Gary Goodwin
Nov 3-4-5	Wings Over West Wyalong. All Disciplines Scale Rally. Plus General Flying of all types of models	W. Wyalong A.B. Field	7.00am-Till Dark	Plenty of Room for ALL
Nov 12	Scale Rally +Fun Fly	Richmond	7:00am 1:00pm	Peter Jackson
Nov 17	General meeting	Dundas Sport	7.30 pm	
Nov 24	Friday Xmas Party	Richmond	7.00am - 1.00	Terry & Lyn
Dec 3	1/2 Hour Scramble. Combined Vintage with SAMS & Fun Fly.	Richmond BBQ Xmas	7:00am – 1:00pm Lunch BYO	Aaron Booth FOOD

QUEENSLAND

June	IND F	Sat 3 rd Sun 4 th Sat 10 th Sun 18 th Sat 24 th	8-1pm 8-1pm 3-6pm 8-1pm 12-4pm	Reserve F1A day Reserve F1B day and Fun Fly at Coominya Indoor - Hanger Rat Club Fun Day including P20 (3 flights) & ½ hr Scramble Bar-B-Que & AGM	Dalby Dalby/Coominya BSHS Coominya John's place
July	IND F	Sat 1 st Sun 9 th Sun 23 rd	3-6pm 8-1pm 8 – 1pm	Indoor – P18 Scale State Champs, Trimming and Fun Flying Club power model fun & testing day including E36	BSHS Coominya Coominya
August	CP TIND	Sun 13 th Sun 20 th Sat 26 th Sun 27 th	8-1pm 8-1pm 3-6pm 8-1pm	Mini Power & QDP (3 flights each) E36 State Champs (5 flights) Indoor – Peanut Scale HLG, TLG & CLG State Champs & fun & testing day	Coominya BSHS Coominya
September	P CP	Sun 10 th Sun 17 th Sun 24 th	8-1pm 8-1pm 8-1pm	P30 State Champs (3 flights) and Club 2 min class (3 flights) Reserve Day Club trimming, sports models & limited RC	Coominya Coominya Coominya
October	F CP TCP	Sun 8 th Sun 15 th Sun 22 nd Sun 29 th	7-1pm 7-1pm 7-1pm 7-1pm	Col's Vintage Rally (Fun Fly any Vintage model) 100 g coupe and A1 Glider (3 flights each) Reserve Day Open Rubber State Champs & Club 2 min class (both 3 flights)	Coominya Coominya Coominya
November	F	Sun 5 th Sun 12 th Sun 19 th	7-1pm 7-1pm	Reserve Day Reserve Day Club glider model fun & testing day incl CLG & RC Gliders	Coominya Coominya
December	*	Sat 2 nd	12-4pm	Xmas party & prize presentation	John's place

WESTERN AUSTRALIA

28 May	SLOP/Nostalgia		State/Club	Beverley
11 Jun		38 Antique	State/Club	Beverley
25 Jun	Open Power		State/Club	Beverley
02 Jul		Nostalgia	State/Club	Beverley
16 Jul	Open Rubber		State	Beverley
23 Jul		1/2A Texaco	State/Club	Beverley
06 Aug	F1Q/Open Electric		Club	Beverley
13 Aug		Burford	State/Club	Beverley
27 Aug	Combined FAI		Club	Beverley
10 Sep		Tomboy IC/Electric	Club	Beverley
01 Oct		OT Glider	Club	Beverley

We really need articles for each edition of Free Flight Down Under

SUGGESTED TOPICS FOR COMING EDITIONS:

- 1. Show us your workbench
- 2. What is your favourite motor, with photo
- 3. Send in your aeromodelling profile, with photos
- 4. Recent builds or repairs
- 5. Competition reports
- 6. Handy Hints
- 7. New products, useful supply outlets
- 8. What's good about free flight, and what's not
- 9. Anything about electricity in free flight
- 10. Wanted and For Sale items

It would be wonderful to expand our list of regular contributors





- edition
- Last day of May for the June edition
- Last day of August for the September edition
- Last day of November for the December edition

Don't wait until the last day, sometimes we close off early.