NEWSLETTER OF THE AUSTRALIAN FREE FLIGHT SOCIETY INC

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SPRING 2020

AT LAST! SOME FLYING IN AUSTRALIA!

AUS 75222

- NSW STATE CHAMPS
- WA COMPETITIONS
- QLD E-36 STATE CHAMPS
- NSW SCALE RALLY



FICERSY



FRONT COVER:

Kathy Burford launching her Apache II on one of the BFFS trimming days during the COVID lock down. Many major events were cancelled or postponed in 2020.

Free Flight Down Under September 2020

Volume 52, Number 3

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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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Western Australia Flying Report

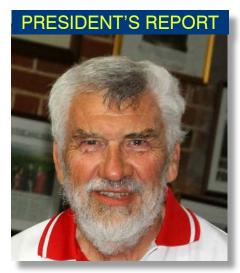




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David Brawn





The Covid Saga Continues....

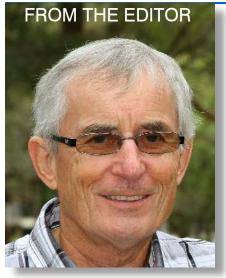
Travel restrictions associated with the ongoing Covid -19 outbreak have continued to frustrate the Team Trial process and now throw doubt on the viability of the AFFS Championships and Widgewa Cup that were rescheduled for 15-21 October.

In the June issue of FFDU, the AFFS Executive Committee outlined the process that we are following during this hiatus, highlighting the aim of ensuring that no potential team members would be disadvantaged by border closures or anything else related to corona virus and outside our control. From a brief survey of some members we determined that a minimum of four weeks' notice of any changes should be given to facilitate attendance by all interested parties. Two possible options were mooted for consideration: (A) continuing with the multi-trial process with the remaining events, and (B) cancelling any selection points acquired so far and holding a centralised team

Subsequently, following concerns expressed by a number of people regarding travel restrictions (and a border closure by the Victorian Government), a notice was sent to AFFS members in July advising that the NSW State Champs, SCC and Vic State Champs would not qualify for Team Trial points. The Vic State Champs and SCC were subsequently postponed to later dates, notionally the Vic State Champs to be held in conjunction with the AFFS Championships in October, and the NSW State Champs and SCC on October 23.

Later on in August, due to on-going border restrictions, a decision was taken that the Dalby events scheduled for 10 -13 Sept events would not count towards team selection, in accordance with the process described earlier. AFFS members were notified accordingly.

Continued on page 4





It's tough to see so many flying events postponed and/or cancelled. Getting out to fly is one thing our Victorian friends cannot do as the COVID crisis continues its deadly path through Melbourne's CBD and suburbs.

Western Australia and Queensland, while locked out of the Free Flight epicentre (NSW), have still managed some low key flying events although some Queensland flyers have adopted a siege mentality, locking themselves indoors and washing everything in sight. With some in their late 70s and mid 80s, they are entitled to their decisions and wise to be careful.

And what is the future for Free Flight Down Under? I was beginning to think it's too hard to continue as editor. I thought I would be inundated with project builds from house-bound modellers. I didn't think the balsa would run out. After all, Bunnings does make home deliveries.

So I was surprised with the response from TWELVE contributors who have inflated the gap between the covers again. Thank you!

Travel restrictions don't look like lifting soon and that puts pressure on any chance of a Team Trial in 2020; but President Paul will say more on that. It's likely that the only major events for free flight in 2020 will be at West Wyalong, and maybe Narrandera. But who knows?

> See you all downwind Malcolm Campbell

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Application forms for AFFS membership or FFDU subscription are available from the AFFS Treasurer, Albert Fathers.

Continuing from page 3

With the number of eligible events rapidly diminishing and the likely number of remaining event dates reduced to just two, the Executive Committee issued a statement concerning the fairness of the multi-trial process and also retaining an overseas score, as follows:.

We commenced the MAAA Approved Multi Trial System (AMTS) with a total of 8 eligible events in Australia plus one result from overseas. It could be argued by some competitors (particularly those who did not obtain an overseas score) that they are significantly disadvantaged by conducting the AMTS with anything much less than the original 8 Australian eligible events i.e. the more events we drop the less they are able to "close" the score gap on those fortunate enough to obtain an overseas score. Obviously the more events we drop due to Coronavirus the more the "fairness" of the AMTS may come into question. Furthermore, some competitors may have difficulty attending one or more of the few remaining events, further exacerbating the situation.

Furthermore, the MAAA International Team selection MOP 24 specifies that the process must be completed no later than 6 months prior to the World Championships. For the August 14th 2021 world championships this means that we need to have it finalised by Feb 14th 2021. This would make it impractical to try to seek MAAA approval and run 6-8 new multi trial events (to satisfy the fairness principle) within that timeframe.

Accordingly, in August the AFFS Executive Committee sought feedback on its recommendation that we proceed with Option B: Single Trial Process, as advertised in the winter edition of FFDU:

B. cancelling any selection points acquired so far and hold a centralised team trial, involving one or two 5 round selection events, either late in 2020 or early in 2021 (if MAAA approves the deadline extension) if and when the State borders are open and if the State organising bodies agree.

Seven responses were received supporting the proposal, while a joint response from the NSWFFS proposed that the remaining four events should still take place if at all possible, but if there were travel restrictions for some states, then these events should not count as team scores.

Note that there are two issues at stake here:

1. Whether the remaining four events are held.

This is a decision for the organisers concerned: The Vic and NSW free flight bodies for the Vic State Championships and SCC, and the AFFS for the AFFS.

As far as the AFFS Championships
/Widgewa are concerned, they are
national events and will only be held if
there are no travel restrictions. Given
that there are current border closures in
effect for Qld and WA (up to October
24), that the NSW border is currently
closed to Victorians, and the need to
provide at least four weeks' notice, it
seems unlikely at this stage that these
events will go ahead. A decision will be
made in early September and AFFS
members notified accordingly.

Whether the events count toward team trial scores and, if not, what will happen. Following the fairness concerns expressed above and input from the members, it is most likely that the overseas score will not be considered and that a single trial system (comprising one or more events) will be held either later in 2020 or early in 2021. We will then need to seek the approval of MAAA for the revised arrangements.

This will be clarified once a decision has been taken on the AFFS Championships and AFFS members notified accordingly.

We are also monitoring the situation regarding the possible postponement or cancellation of the 2021 Free Flight World Championships, though there are no decisions so far. Presumably they can only go ahead if there is completely unrestricted international and internal travel and it is not clear when that might occur. In this regard, Ian Keynes has advised the following:

We had a CIAM Bureau meeting tonight and the general view was that we review the situation at the end of this year and make a decision at that time. It should be before February but possibly not soon enough to eliminate selection events before that.

Please be assured that the AFFS Executive Committee will do our best to take into account the needs of the small number of competitors involved but can't guarantee to satisfy everyone.

Normal Programming Resumes....

It is a relief to hear that some States have resumed local competitions and fun flying events, as reported in this edition.

Paul Rossiter.

Why are there so many women in top-line international F1C?

Maybe Terry Bond has the answer in this newsletter?
See page 21.





COMPETITION

in a COVID-19 Australia



A reduced number of flyers participated this year, due to COVID-19. Still we had ten members flying a total of about twenty models. Some of the non-placing models were Caudron, Nieuport 11, Taylorcraft, Miles Magister, Beaver, Shinden, Piper Cub, FE8, Peyret Taupin, Comper Swift, Atalante GB10, Portsmouth Aerocar, Grumman Hellcat and Sopwith 1½ Strutter.

Many models were not trimmed and suffered minor damage. Short grass and hard ground wasn't kind to themit showed the importance of landing on the undercarriage. Not mentioning any names (PW) but one model when being wound came off the stooge and flew into the winder. Repairs were needed overnight. Another model (TB)

when being wound had the motor peg come through the model causing damage. (PJ) broke his Nieuport 11 on both days; landings were a bit too hard, but I am sure it will fly again. (RS) seemed to be having trouble with electricity. His top flight was about six seconds.

Saturday became breezy after a couple of hours, so we decided to continue flying on Sunday. First event on Sunday was a **Scramble**, run in record breaking conditions and a lot of fun was had here by those fleetfooted young and able bodies. The weather was perfect for flying with barely any wind, so the scramblers did not have big retrievals.

This was followed by **Scale**. Michael Towell flew a semi-scale SE5A but







suffered a broken wing early in the event. Father Reg Towell's Cauldron Racer flew beautifully and, being low wing, it stood out against all the high wing jobs.

Lots of scale models were in the air all day. Lunch was an on-field BBQ enjoyed by all. It was complimented by a low fly past by a Spitfire! This was nice to see as we haven't seen a Spitfire at Richmond for some time. The steep turns were close enough for us to really appreciate its beauty.

The judging for Scale was for flight only and judged by fellow competitors with their choice of 1st, 2nd, and 3rd in Power, Electric and Rubber classes.

Congratulations to all who competed, a good time was had by all. I hope by next year this COVID thing will have settled down so we can hold the Trans-Tasman that was planned for this year. It will be nice to see our Kiwi friends again.

Phil Warren

















Thomas Wielecki gets low down at the Richmond Scale









Richmond Scale Rally Results

Power 1st Roy Summersby Nieuport 17 2nd Peter Scott SE5A 3rd Peter Jackson SE5A

Electric 1st Roy Summersby Grumman Widgeon.

Rubber 1st Phil Warren Lemberger LD 20B

Susan WilfordStinson VoyagerStephen BojecGlobe Swift







Where it all began



September 2020 Free Flight Down Under

West Wyalong battles the elements and COVID-19



This was mainly a NSW show as we only had one competitor from out of out of state. This was Albert Fathers from Queensland who made the trip with his A van and stayed with us till the rains came. The Victorian's that intended to come left their run a bit late and in the end had to stay at home.





NSW State Champs

Most arrived Wednesday morning and were ready for F1B and Open Power on the Thursday. Conditions were very good on **Thursday**, the comp stated at 8.00 am and the 4.00 min maxes were coming

in. We ran one

hour rounds and by round five all four had maxed out. This was the perfect time to try out a DT fly off using a 3 or 4 min flight before DT. Sadly the CD (me) didn't give it a thought and a 10 min fly off was held the next morning, habits die hard. Results were quite close.

Friday conditions were just as good for F1A, C and Open Rubber. F1A saw Albert with a full house of 960 sec. Well done Albert, the only F1A flyer.

F1C saw drops in the first round by Warren and Shannon. Shannon went lean on the climb and could only manage 145; he maxed the rest. Warren who is very new to F1C made 117. The rest maxed out leaving four in a fly off next morning.

Terry Bond didn't put a score in he was happy just to make a few flights as he hasn't flown F1C for a long time.

In Open Rubber, both Craig and Gary maxed out with Bruce dropping his 2^{nd} and 3^{rd} flights.

Once again the perfect time to try out the DT fly-off after a set time, but











the powers to be thought of this after it had started to rain in the night. So the results stand at this stage.

RESULTS:

F₁B

1	Craig Hemsworth	960 + 359
2	Terry Bond	960 + 350
3	Bruce Hao	960 + 341
4	Gary Goodwin	960 + 308

Open Power							
1 Roy Summersby	540						
2 Peter Scott	441						
3 Warren Leadbeatter	370						
F1A							
1 Albert Fathers	960						
F1C							
1 Gary Pope	960						
1 Roy Summersby	960						
1 Shayne McDonald	960						
1 Andrew Linwood	960						
5 Shannon Tolmie	865						
6 Warren Leadbeatter	368						
Open Rubber							

1 Craig Hemsworth

Gary Goodwin

3 Bruce Hao

540

540 417

The light rain kept coming. Driving on the roads was OK but on the field it was certainly at one's owns risk. We held up the flying in hope, but serious flying was not to be. There was some sport flying. Warren trimmed his E36s, one of which is very, very good, and the Miles family were seen flying all sorts of aircraft.

With the lack of flying the bosses got the troops working, and quite a few worthwhile jobs were done. Some of the main jobs were the removal of the wall paper in the lounge. The cutting of the safety net poles to a level height and the removal of the cupboard in the bedroom this makes the room much bigger.

The other good job done was the replacement of the main switch and fuses in the amenities block, this was getting desperate and needed replacing, and it should solve the cutting out problems.

Sunday night. Gary Pope cooked a sit down roast pork dinner with all the trimmings for nine, well done Gary. It was certainly enjoyed by all. The property is improving all the time, and with the rain which it has had over the

last few months, I think we will see good grass cover on the field very soon.

Victorian State Champs

The Victorian State Champs were to be held straight after the NSW Champs. Some of the Victorians elected not to come due to their age and health and others left it too late to leave. The comp was still to go ahead regardless, but at the 11th hour they changed their mind and cancelled it.

It turned out in their favour because the rains came and it would have been a no show. I think without the rain there would have been some very unhappy flyers that had travelled a long way to compete.

Concludes on the next page.....







September 2020 Free Flight Down Under

Southern Cross Cup

The rain kept coming off and on. As well as the rain the main flying field was becoming even more soft and boggy. While it was possible to drive on the roads it was at you own risk if you left the road.

Following a discussion a decision was made to postpone the SCC comp. It has now been rescheduled for the Friday 23rd October. That is the Friday before Wings over West Wyalong. F1A, B, and C, will be run together on the same day.

When we woke up on Monday it was still raining so we all went home as planned. The drive home was wet and there was a lot of water lying around at the sides of the roads. All dams looked to be full so there was an upside to it all I suppose.



So here's to next time!

Roy Summersby





Western Australian Flying Report



Report by Rod McDonald and photos by Paul Rossiter

We finally succeeded in holding a competition this year and although performances, with a couple of notable exceptions, were nothing to write home about I think we all had an enjoyable day. Conditions were a bit breezier than we would have preferred, particularly later in the morning but still quite flyable.

The big winner was Phil Letchford who took both trophies with three maxes in P30 and two in Coupe. Paul Rossiter also maxed out in P30 but sportingly declined to participate in a fly-off leaving Phil as the winner. The result in Coupe was much more clear cut with Phil scoring the only maxes to win easily.





There were seven entrants in P30 and five in Coupe. Results were as follows:

Rod McDonald

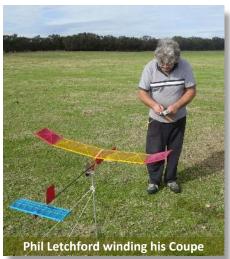


P30 Results	Total
Phil Letchford	360
Paul Rossiter	360
George Carr	289
Rod McDonald	262
Chris Behr	246
Trevor Letchford	193
Greg McLure	dnf

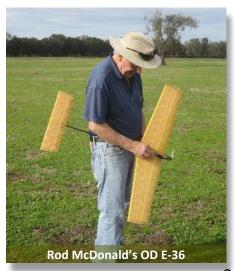


Coupe Results	Total
Phil Letchford	301
Greg McLure	215
Paul Rossiter	160
George Carr	51
Rod McDonald	45







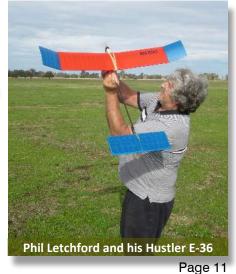




Paul Rosster's Maverick E-36

* George Carr's Weapon of Mass Destruction







BORDERLINE NEWS continues



Queensland Flying Report

Report and photos by Malcolm Campbell

The demographic for our club has kept a lot of our club members indoors these last few months but that didn't stop 87 year old Des Slattery attending whenever the gates were open. We've had a few trimming sessions in June and July plus a couple of power competitions last month. It's been tricky getting good days to fly with some rained or blown out and some postponed more than once. On one occasion, we did a shortnotice swap from Sunday and flew our two comps on Saturday in a perfect window of opportunity.

Malcolm Campbell

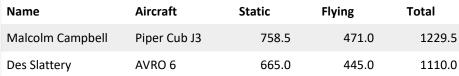
BFFS Mini Power

Name	Flight 1	Flight 2	Flight 3	Total
John Lewis	120	90	75	285
Des Slattery	69	73	120	262
Graham Maynard	58	-	-	58

QDP (Queensland Diesel Power)

Name	Flight 1	Flight 2	Flight 3	Total
Malcolm Campbell	80	90	108	278
John Lewis	62	34	120	216
Des Slattery	-	56	120	176

Scale State Champs







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QUEENSLAND E-36 STATE CHAMPIONSHIPS

Queensland's inaugural E36 State Champs in 2019 attracted ten flyers so to get seven flyers in this COVID year was exceptional. Seven flyers with seven different models made for an intriguing contest. Light winds under 2 m/sec were predicted and this was true for the first couple of hours although there were brief periods of 3 – 4 m/sec at times after 10.30 am when cloud cover increased and it got cooler.

John Lewis and Des Slattery both found poor air with their second flights but they both improved trim and times as the event progressed. Ben Lewis chased glide circle but he really didn't have to worry as he achieved consistently good height in good air to max the day. Des Slattery was a man on a mission with his Lime-E, putting up flight after flight. As expected, he was

first in the air, and he finished with a good max - that made him happy. He was first to depart too - he had a grandchild's birthday party to get to!

I fell 6 secs short of a FO with Ben Lewis. I didn't sufficiently increase the sensitivity on the thermistor, whereas Team Lewis used foolproof fluffies. I was really looking forward to a FO, with anyone. My final flight went up in great air, probably the highest flight for anyone on the day and looked a sure thing, but then it simply fell out of the sky to land 6 secs short of a max. Last years winner Kathy Burford's day started badly when she had to use her reserve model. A problem in the power-train sidelined her Cobra-powered Apache and she fell back to her 1806N-powered Apache. She got a few nice thermals but her final flight was knocked out of the

sky by two magpies that hit her wings 3 times, punching holes in both wing tips, even attacking the nose of her plane. Each hit impacted on her flight time.

Peter Nash's 1806N-powered model flew well all day, only suffering because of the under-powered motor. The climb and transition were perfect and the model held well in the glide. It looked really good, good enough to place third. Graham Maynard struggled all day with a new model that was responding to trimming but he really needed a lead-up day to do a more thorough job.

It was a great day to be out in the open, practising social distancing, with models as far as possible away from their launchers.

Malcolm Campbell







E36 RESULTS

Entrant	Flt 1	Flt 2	Flt 3	Flt 4	Flt 5	TOTAL	PLACE	Maxes	Model	Power
Ben Lewis	120	120	120	120	120	600	1	5	OD Nu-Skool	Cobra
Malcolm Campbell	120	120	120	120	114	594	2	4	Joulebox III	Cobra
Peter Nash	113	120	79	120	120	552	3	3	OD Eclipse	1806N
Des Slattery	118	85	106	112	120	541	4	1	Lime E	Cobra
John Lewis	75	120	115	120	100	530	5	2	OD Spectrum	Cobra
Kathy Burford	95	120	35	120	79	449	6	2	Apache II	1806N
Graham Maynard	43	81	62	66	72	324	7	0	OD	Cobra

Maxes per round 2 5 2 5 3 12

Gamp OVID onstruction

What's happened? Have you run out of balsa, has the C23 gone hard? Seems there has been little building done since the last Digest if the emails I've received are any indication. Perhaps

you've found Home Brewing more productive or found your feminine side in the kitchen? With little in the way of competition and not many articles to use, my job became just a little harder.

RICKY BOULD

Ricky Bould from New Zealand sent me this cute little quartet. Ricky said:-

These were built to see if they are suitable for our small field at Karaka. When the motors are run they feel as if they have at least a 1:1 thrust ratio. Test flying will be at a larger free flight site.

The first E-20 built was the SAM Models Kit that was finished just before the first lock down. The power

is a GWS geared unit with a Peterborough timer and a single cell 120m ah battery and a weight of 36.5 gm.

The Ferry 500 has just been finished and awaiting trimming when we are allowed out. It has a direct drive motor, Peterborough timer and a 2 cell 180 mah battery and a weight of 65 gm Plan was in the June 2019 Aeromodeller and is available on the Peterborough MAC web site.

Miss 35 was started at the end of April as a result of a challenge from a fellow club member who had built 3 of varying sizes. This one has a SAM 35 engine and weighs 215 gm and also awaits test glides and a pilot.

This is the peanut Miles
Sparrowhawk built for the Mooney
cook on Hip pocket Aeronautics run
by Pete Fardell. There were ninety
entrants and over 75 models had been
produced by mid June. This one
weighs 11.4 gm and still needs
trimming. (See Tim Hayward-Brown's article)









September 2020 Free Flight Down Under

ROY SUMMERSBY

Part Two of "The wonderful world we live in"

Continued from page 16, FFDU Winter 2020 Vol 52 No 2



The painting is now finished, and yes, they are the colours that are in the book, (those crazy French). All the small details have been added like exhaust pipes from aluminium tubing, windscreen frame is also aluminium tube, markings added etc.







The model came out on balance and is now waiting for me to take it to the long grass for some test glides and power flights. This will most likely be at Denman, where at present a model just can't get to the ground for the grass, or maybe, West Wyalong in the

oat field as it should be long enough by now.

It has been an enjoyable build and I have learnt a few more tricks in building scale models. Particularly with this one are the attachment of wings, wing struts and the fitting of them.

The list goes on; we never stop learning of better ways of doing things. Finished weight turned out at 485 gm which I think is reasonable for a 900 mm span biplane.

Roy Summersby

Another COVID comes off the building board - the ELIMINATOR



Finding what was a very sad Mk1 Oliver Tiger Cub, I thought what a great vintage motor this would make. These Mk1 Cubs were made in 1953, they are a ball-raced 1.5cc engine and they broke lots of records when John Oliver introduced them. He stopped making them to concentrate on his famous 2.5cc Tigers which were in big demand at the time. There were only 150 Mk1 cubs made so they are quite rare engines. Some very nice work by Geoff Potter has put this old engine back to being useful again, so what to use it in was the next question.



While the paint was drying on the SPAD, I pulled out the plan for the Eliminator. This is a great little model for vintage. I know there are many of them around so why shouldn't I have one. In fact three of them have been built in my model room and none of them were mine, but now I have changed that, as I have built one for myself.

They are quick and easy to build; one doesn't have to think too much. Just what I need another vintage model - I think this will make seven. This model is a bit different to the others. Only a small engine and a wing of just 45.5" span makes it very small in my stable of vintage models. If fact, if you made the wing two piece, as shown on the plan and the fin removable it could be taken anywhere with ease. With the

ribs cut out I was soon up in the back shed slicing up balsa for the long bits that go in the wing and stab. The Eliminator is a simple model, but a

very good one; after all it did win the world champs for its designer Barry Wheeler back in 1952.

It isn't a long build, or one where you had to think how I am going to do this or make that. The model was soon completed and the question was then what to cover it in and what decoration to use. I covered it a little differently, and used up some red Modelspan tissue in the process. I am quite happy the way the barber pole model turned out.

I thought it might come out a bit on the heavy side using an early Oliver Cub but it was ready to fly at 356 gm, that's just over 12 oz (just like the old 8 oz per cc days). I don't know what type of timers Wheeler used to win the world champs in 1952 but I couldn't bring myself to use KSB timers for engine and DT, so I have installed an F1J electronic timer, complete with RDT, after all there is a Mk 1 Cub in the front. Where would you go to get another one of these?

The Eliminator has now had about ten flights and is starting to look pretty good. The original flew a right / left pattern using a trim tab for glide. I know this has worked well on the other Eliminators. At this stage I am staying with the right / right pattern and so far it seems to be working well, but time will tell.

Now with Victoria spreading the COVID-19 around, will we be locked down again? What will be the next model to hit the building board? Time to look at that never ending list.



The beautiful 1952/53 Mk1 Oliver Cub: Roy tells me the motor is very rare and super expensive. I guess he didn't tell Di that?

WAZZA'S WORK aka THE WORK OF WARREN LEADBEATTER



Atomizer - for 1/2 A Texaco



TIM HAYWARD-BROWN

THE MOONEYS

For those who follow the Hip Pocket site - you may be aware that one of the lock-down activities was a Walt Mooney Cook-up. And yes, when I say 'lock-down activities' - a bunch of guys sitting at home in their workshops sanding balsa into the shape of flying machines is hardly what I'd call a change in behaviour. But it kinda gave it the character of noble restraint and community minded social isolation. Don't know what our excuse will be when they solve the virus problem. Back to being a reclusive balsa basher for me I guess!

Anyway. It did give a reason to dive into the old magazine pile and relive the excitement of opening each new month to see what the 'Old Perfessor' had come up with this time. I ended up getting quite involved and

produced three aircraft. The first was called "Viri". This Finnish home-built has more than a passing resemblance to the Comper Swift - but with an even longer nose. Second was the Honey Bee. Walt Mooney (and his wife) were closely involved in the early design, production, testing and promotion of this aircraft. So while there is a very attractive red, black and white later colour scheme, I chose in the end to replicate the early version pictured with the Mooneys.

Third in the series was a **Mooney A-1**. Now Walt had nothing to do with this one except for the same name. A guy called Al Mooney designed a number of similar aircraft back in the 30s. In fact after some research, I found that WM's design was a bit closer to the next model - an A2 or M5. This is by far the heaviest construction-wise and has not flown

at this point. The others have both flown and seem to be going OK (see Honey Bee flight video link below - with youngest son Hugo assisting). When I get a break in the work, and the weather, I look forward to seeing how the Mooney A-1 goes.

https://www.youtube.com/watch?v=t FTeaxcjT-A













ED: Before Tim's enlightening article on these quaint little aircraft, the only Mooneys I ever knew were a looney Australian family in a comedy shown on ABC-TV last decade. Actually the were called the <u>Moodys</u> and it was quite entertaining. Look it up. <u>URL:</u>

LEN SURTEES

TIME TO SET THE RECORD STRAIGHT



After being in the wilderness for nearly 15 years and not flying Free Flight Hand Launch Glider or Control Line Aerobatics during this time I have finally returned to designing and building HLG / CLG (and possibly re-kitting my STING series of gliders being Mk2 versions later in the year) and competing at the young age of 70.

Now to set the record straight regarding my World Record and the World Record set in NZ for FIN indoor hand launch glider Category 1.

FIN - Category 1 is defined as the vertical distance from the floor to the highest point at which a circle of 15 metres can be inscribed below the primary structure of the building (but excluding light fixtures to a height of 8 metres (26'3").

FIN - 3.7.2 Rule states: The number of models eligible for entry by each competitor is three. The competitor "must be the builder" of the models entered.

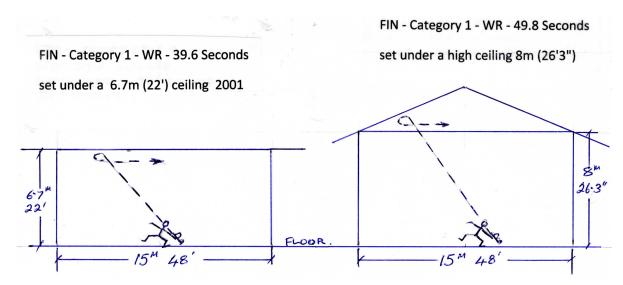
From memory (about 2005 or a little later) I read with interest an article in the FFONZ (Free Flight of NZ) newsletter stating how the local young lad who had a whip of an arm set a new world record of 49.8 seconds which smashed Australian Len Surtees Cat 1 world record (WR) by an amazing 10 seconds. Wow, what a story.

So what are the facts, well

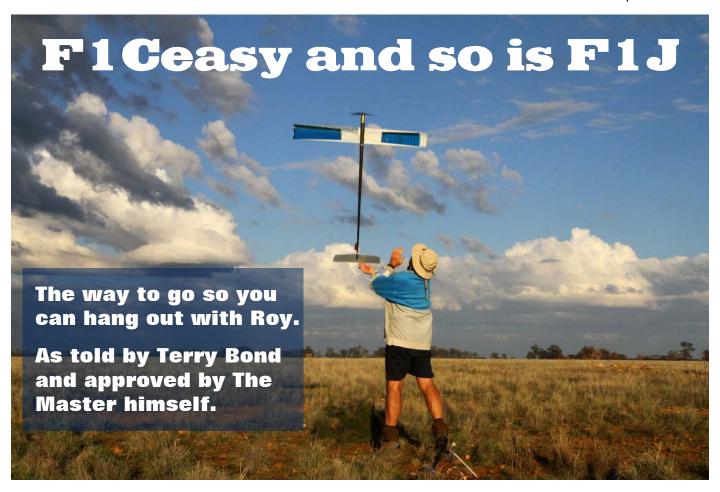
here they are. In 2001 I had the opportunity to be the first to set the FIN- Cat 1 WR at Tamworth. The building although not ideal was accessible and, with two official time keepers and a MAAA official observer, I set the record at 39.6 seconds. This was an exceptional time as the ceiling was flat and only 22' high . My sink rate was 1.85 second per foot (Imperial). In 2005 at a school hall I set the Australian record at 43.8 seconds which still stands, again under a sloping ceiling minimising extra altitude of height. My best time ever under a similar ceiling was timed at 46.2 seconds but unofficial.

To achieve high times of around 50 seconds, the ceiling of the building is so important, see scale diagrams showing the building that I set my WR in and the ceiling to allow highest of launches to achieve close to 50 second flights.

Len Surtees



September 2020 Free Flight Down Under



Concentrating on F1B over the last ten years has resulted in given me RSI in my winding arm. This problem and a desire for a little Variety tempted me into trying another class of model flying. Being a bit of a rev head and an ex-combat flyer guided me to power and noise which I miss with F1B.

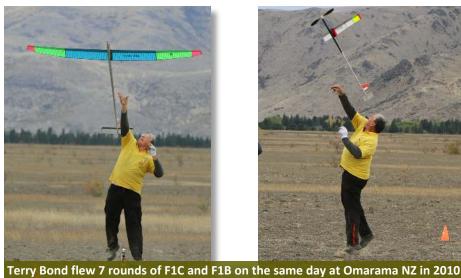
How to get started I asked myself? F1J that's it, I will talk Roy into selling me one of his; he has plenty of them. A few beers and some arm-twisting and I now own a going F1J. I am set to go. Next step, line up Roy for a Friday

morning training session. He tells me what to do and what not to do. I make a launch to the left, and a launch to the right then it all comes together, straight up. Roy, why has it only got one propeller blade? Roy tells me I can have the other blade when I get some more experience! I've already beaten him in one comp and came 3rd in the AFFS. How good will I be when he lets me have the other prop blade.

I now know that I am ready for F1Ceasy. Hey Roy, how about lending

me one of your F1C models so I can use it in the Victorian State Champs? You would have to show me how to fly one of those awesome beasts.

Roy, the one you have lent me isn't one of those gear things with a fourblade prop like you use. Roy puts me in my place. Terry, the only time you start at the top is when you are digging a well. You will start with this one. He gives me a straight drive model with a tiny folding prop, the model is also equipped with flood-off, engine brake, wing wiggler, two stage





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glide, DT and a flap on the venturi to keep the dirt out when I plant it! That's enough to confuse an F1B flyer he tells me.

Before launching I am shown how to set up the model and I run through the systems a few times. Once again I am told what I must do and more important what I must not do. Roy has a couple of check flights convincing me if it all goes wrong it will be my fault. I have two successful launches and I am ready for the comp the next morning.

First round 7.00am I am shaking, I didn't think it was that cold. If I plant this I will have to give him the Volvo? Roy's words ring out in my brain, inspect, inspect, inspect, plus kiss model before launching (he learnt this from Verbitsky; Roy's not that smart). Mustn't launch right, mustn't launch left, must be steep, oops not that steep (nearly on it's back I was told). When I open my eyes the model is in its glide pattern, the second stage glide comes in the model slows, circles and is off in good air for an easy max.

This is a top model even if it's only got a tiny two blade prop, but it sure does turn faster that my F1B props. I return to the flight line smiling with my first F1C max, only have to do this six more and I must make the fly-off. End of round six, 6 x 180 are on the board, only one to go. I haven't had so much fun since the wife left me. This F1Ceasy is great. Round seven, be careful, I know what happened yesterday in F1B. A near mistake but

Roy got me to check again and yes I was one groove short on the DT, thanks Roy.

The seventh launch is good. I now keep my eyes open and see the model climb well settle in its glide and is off in a big thermal for an easy last round max.

Seven maxes in my first F1C comp, what now, should I retire while I have an unblemished record in F1C flying or should I check out the remaining qualifying comps for the next world champs and maybe get a team place? I could swap the Volvo or maybe Karen for a couple of F1Cs. Well maybe not the Volvo. Hmmmm.

The message behind this little bit of dribble is that if you have a well-built and trimmed model and are shown how to set it up and fly it you to can be a winner or at least make successful flights. No, not every flight will max, that's free flight. A good model with NO operator mistakes will give good service and last a long time, the one I was flying Roy has had for years.

F1Ceasy, is even Ceasier Sequel 11 years later.....

Time has rolled on and many improvements have been made to all the FAI categories. One big improvement has been with engine timers. Over the past eighty years we have gone from watching the fuel run down the clear fuel line, to home made clockwork ones, to the KSB style, and then to the Seelig timer.

The Seelig was a big step forward in the 1970s which allowed us to time various functions independently.

After this we had the Russian system which was far more reliable and easier to use than the Seelig. Now we have a very reliable electronic timer from Italy. These timers have been a tremendous leap forward in accurate timing and reliability. They also have RDT (radio DT) making F1C models much safer. Having this option has saved many a model, not only from crashing, but also being able to have some control as to where you would like it to land it.

Carbon construction has been around for quite some time now and it is so good to be able to take a model out of the box and know it will be on the same trim as when you flew it last. Carbon wings don't move like the good old balsa and tissue ones. Believe it or not they are cheaper to buy and fly than F1As and F1Bs.

ROY'S FINAL WORDS:

Since Terry took up flying F1C he has made three fly-offs at three world championships. IF Terry can do it YOU can too. Why not give it a try, it's more fun than you think.

One problem you might have is beating the ladies that are flying at present. You can see by the Maxmen results, they are good, so it must be Ceasey.

ED: Two photos on page 4 should help you identify them!



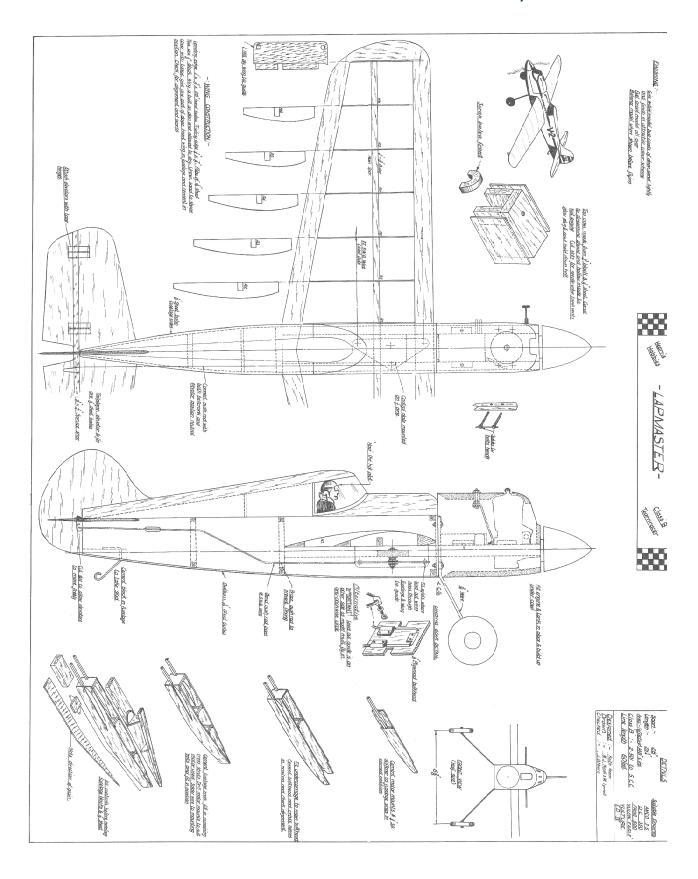


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I'm unsure as to why Peter Lloyd sent me this plan for publishing in FFDU.

Maybe it's a test, with an awaiting prize? Anyone want to guess?

Malcolm Campbell





RETURN OF AN OLD TOSSER Part 1

Story by Chris Edge and Mike Fantham

In early 1996 the Technical Director of British Aerospace Military Aircraft Division (BAe) was approached by the Royal Aeronautical Society to take part in a attempt on the world indoor paper plane duration record as part of the Daily Telegraph/Tomorrow's World Science Week. The instruction went out via internal memo "We (BAe) must win!".

Sensibly Mike Fantham was contacted on February 28th to become, for the first time in his life, a professional aeromodeller. He "recruited" Chris Edge, Andy White, Jeff Newton and Peter Rieden, all model flyers, to meet the challenge. Mike was originally asked to advise a team of young BAe employees but managed to convince the powers that be that, if they wanted to win, they needed model flyers on the job. In just over three weeks, the BAe team developed a plane which did 17.9, 18.1 and 18.5 over three flights in practice, only 0.3 seconds short of the existing world record.

The contest itself, shown under the Tomorrow's World 'Megalab' was held at Alexandra Palace on 22nd March and the BAe team came second with a time of 15.2 seconds. A determined effort was made at Cardington Airship Hangar No. 1 on July 28th to break the world record resulting in a new standard of 20.9 seconds being attained. This time was equalled on the same day by Andy Currey representing the Defence Research Agency. Both these times have been ratified by the Guinness Book of Records as equal world records.

So how did they do that?

RULES

The most important aspect of any competition is to find out what the rules are. In the case of the 'Megalab' contest this was complicated by the restrictions of the filming of the record attempts for the Tomorrow's World broadcast. Numerous requests for clarification resulted in the requirements which are simplified below. The 'Megalab' rules have been compared with those in place when the last world record was set (Ken Blackburn, 18.8 seconds on 17/2/94), those in place for the Cardington attempts, and those that will be in place for records attempts in 1997 onwards:-

	Pre-Megalab	<u>Megalab</u>	Cardington	Post-Cardington		
Paper type	A4 or B4	A4	A4 or B4	A4 or B4		
Max paper weight	150 gsm	80 gsm	100 gsm	100 gsm		
Construction	Construction No pieces cut from the paper can be re-attached. Paper joints can be lightly glued or taped.					
Launch	Standing throw only with no jumping allowed.					
Number of attempts	6/day	6 rounds	6/day	10/day		
n y				*		

Additionally for a world record to be set Guinness require two independent time-keepers to be present and a video to be made of the flight.

DESIGNS

With no previous experience of duration paper planes the logical starting point was with the current record holder. Ken Blackburn. Via the Internet it was found that Ken's design had been published in a book which explained his trimming, throwing and construction techniques. Martin Dilly helped out and we had a copy of the book (ISBN 1-56305-631-3) in record time. A key feature of the design is that the keel to wing joint is flexible. Blackburn uses this feature to allow the wings to fold up during a hard throw and flop open when it reaches its apex. A4 versions of the design (Figure 1) were made and tested in a BAe hangar but the results were poor and times very inconsistent.

Mike felt that a stiffer plane was possible using some additional cuts in the paper before making all the folds. The design was complex to construct (Figures 2 to 3) but was much more consistent due to the stiffer wing/keel joint. Three different pitch stabilities were achieved by carefully modifying the position of the folds (no additional noseweight is allowed) and with these Chris was able to hit the 30 foot high hangar roof with this design and durations improved.

In parallel Andy developed a simple dart design. Like Blackburn's design there was a flexible joint but this time at the bottom of the keel. During launch the keel closes up reducing the projected wing area but at the apex of the climb the keel would spring open increasing the projected area and providing more lateral stability for gliding. It is with this design that our successes have been achieved.

USE OF CAD

The 'Megalab' competition required planes to be constructed from paper supplied on the day and it was obvious that this would present problems for Mike's complex Blackburn derivative. To solve the prob-

lem the fold lines were loaded into lan Kaynes' KPS plotting software and a HP pen plotter obtained to transfer this data to paper. This was a key advantage as on the day of the contest as Mike's design suffered from the low temperature and high humidity whereas Andy's design had much better duration.

Having tweaked and tested Andy's design for maximum performance the plane was unfolded and the fold line co-ordinates loaded into the software. Identical planes were then constructed prior to the first round flight in a matter of minutes. We have subsequently used KPS and ChoiceCAD software with the HP plotter to re-size the basic Andy White plane to produce the world record design (Figure 4).

This method allows flexibility on the day to construct the chosen design to a size that matches the environmental conditions.

ENVIRONMENTAL EFFECTS

Paper is affected by the ingress of moisture. This results in the paper going floppy when the dew point, the temperature at which water is condensed, is approached. At the 'Megalab' contest the low temperature and high humidity resulted in Mike's chosen design being inconsistent. Sizing Andy's design to A5 (one half of A4 size) meant that the plane was now stiff enough to survive a hard launch, albeit at times inconsistently. At Cardington, on the other hand, the opposite was true, leading to a larger size being flyable until rain came in through the roof!

To aid in the matching of the plane size to the conditions, a hydrometer and thermometer have been purchased to log and track flying conditions for future attempts.

PAPER CONSIDERATIONS

So far nothing has been said about the paper. Like any plane the structures needs to be strong and stiff and not surprisingly different paper types have different properties. Whilst we haven't yet got to the stage of testing all paper properties,

weight and thickness of new paper types is now measured as a matter of course. The rules allow a maximum paper weight of 100 gsm which is typical of letter quality paper which is easy and cheap to obtain. We have found this type of material to be much better than the copier paper that we were forced to use for the 'Megalab' contest.

The actual paper used for the world record was fan-fold paper from Chris' home computer, approximately 0.1mm thick and 93 gsm. Flicking the edge gives a crisp feel, suggesting stiffness is high compared to other products. Some 100 gsm paper can be hard to fold and this is another consideration that must be made when choosing paper.

No doubt better paper is available; rumours of special M&K paper becoming available have yet to be substantiated, however.

CONSTRUCTION ISSUES

Having got a good design and good material to make it from still doesn't guarantee success, as we have found. Like any plane you have to make it accurate and true. Remember these planes are being launched as hard as any chuck glider so any mis-folding will result in warps that can make the plane untrimable. To make matters worse even a seemingly perfectly accurate plane need not fly successfully. Ken Blackburn has noted that he builds dozens of planes to the same design and then picks the best half dozen or so after testing; we can testify to this as well.

The use of the plotter is a considerable advantage, however, that has not yet been pursued by others. Knowing that we can accurately draw the same design over and over means that considerable variability is removed from the construction process. This has enabled us to spend more time constructing the planes, up to 15 minutes in some cases, leading to better flight times being achieved.

LAUNCH TECHNIQUES

Ken Blackburn has developed his launch

technique over many years of practice and often weight trains to develop his muscle strength. He notes that the launch should be as vertical as possible, ideally within ten degrees of vertical, with no bank. In order to get as much speed into the plane as possible he crouches down with the plane almost on the floor before extending the arm and back for launch.

Chris has developed a similar technique; however, he is restricted by having broken his arm throwing a chuck glider back in 1978! The key element to the launch is speed and hence weight training isn't felt to be important although suppleness is. There is no doubt the technique is very different from launching anything else and causes significant loading on the back as well as the arm. Limbering up is therefore most important before serious attempts are made. Even then it is likely that few throws can be made in succession without periods of recovery.

FUTURE PLANS

The primary aim is to hold the world record when the 1998 Guinness Book of Records goes to press in mid-year. There are plans to attempt to increase the record at Cardington and in a hangar at Boscombe Down, the work place of Andy Currey, in Spring 1997. As noted both Andy Currey and Chris jointly hold the world record and this needs to be resolved! It is felt our existing design has a duration potential of 25 seconds and Chris has achieved over 21 seconds in practice already. Sizing tests are planned, as it is felt that in good conditions, i.e. low humidity and high temperature, a still larger plane would be trimable and consistent, with the potential for higher durations.

So far no changes to Andy White's design have been made but it is interesting to note that Andy Currey's design is remarkably similar; however, it flies inverted on the glide. This effect is down to the plane's stability and attitude at the apex of the climb, and tests on a similar flight pattern are planned, as well as other changes to further optimise pitch stability.

Other ideas have considered folding wings using perhaps origami techniques to allow wing panels to be stored for launch, using the keel fold effect to keep them in place, and to spring out for glide. Finally Guinness and the British Paper Aircraft Association, who invigilate at record attempts, are keen to pursue a 'technology' class where restrictions on paper cutting and re-assembly are relaxed. This class is obviously attractive to aeromodellers and could result in some very innovative solutions.

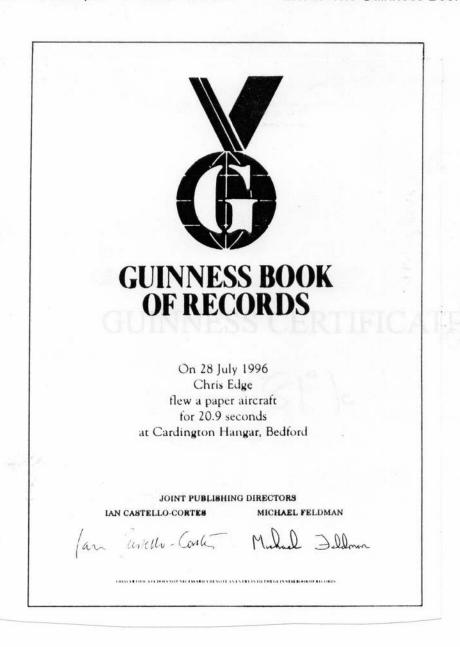
SUMMARY

Over a period of seven months the BAe team have developed a world record

breaking paper plane. Key aspects of this development have included team spirit and motivation, an understanding of trimming techniques, a highly systematic approach to plane construction and perhaps having a good thrower. These planes represent another string to the aeromodelling bow, but whilst simple in form, involve significant new challenges.

FOOTNOTE

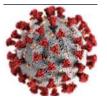
Despite further attempts (and media appearances) during 1997, neither Chris or Andy could improve on the time of 20.9 seconds. However, this is still a world record and duly appears in the 1998 edition of 'The Guinness Book of Records'.



This fascinating story will conclude in the December edition of Free Flight Down Under







There's still not much to laugh about these last six months, so I thought I'd create another COVID Corner

Yesterday I spotted an albino Dalmatian. It was the least I could do for him.

Imagine if in London during the Blitz there'd been a whole bunch of people going "I'LL TURN ON MY LIGHTS IF I FEEL LIKE IT"

I'M GOING TO STAY UP ON NEW YEAR'S EVE THIS YEAR. NOT TO SEE THE NEW YEAR IN, BUT TO MAKE SURE THIS ONE LEAVES!

2020 IS ACTUALLY THE YEAR OF THE RAT.

- We are all in hiding
- We only come out to get food
- We store our food in our home to eat later
- We run away when people come close to us



When Does Season TWO of 2020 Start? I Do Not Like Season ONE.

We're looking for someone who can do the work of six men It's been a great blessing to be at home with the That's a shame, was looking for a full-time job! wife these last few months. We've caught up on everything I've done wrong in the last 20 years.

Always remember the decimal point when ordering a 7.5 mm drill bit



Laughing my mask off

Having some states lock down and some states not lock down is like

having a peeing section in a swimming pool.

The Spread of COVID-19 Is Based On Two Factors:

- 1. How Dense The Population is
- 2. How Dense The Population is



2020 Flying Calendar



. Month		Date	Start	Event	Location
September	IND F	Sat 12 th 12 th – 13 th Sun 13 th Sun 27 th	3-6pm 8-1pm 8-1pm	Indoor - Peanut Scale Team Selection Trials (F1A, B and C) Club Day trimming, Sports models & limited RC Open Rubber & P30 State Champs (3 flights each)	BSHS <mark>Dalby</mark> Coominya Coominya
October	CP CP	Sun 4 th Sun 18 th Sun 25 th	7-1pm 7-1pm 7-1pm	Col's Vintage Rally, LSq/100 and No Frills Wakefield 100 g coupe and A1 Glider (3 flights each) Reserve Day	Coominya Coominya Coominya
November	F	Sun 1 st Sun 15 th	7-1pm 7-1pm	Club glider model fun & testing day including CLG & RC Gliders Reserve Day	Coominya Coominya

NSWFFS Contest & Fixture Calendar 2020



Sep 13	½ Hour Scramble +Fun Fly BBQ Lunch	Richmond BYO Food	7:00am – 1:00pm	John Corby
Sep 18	Annual General Meeting	Dundas Sport	7:30 pm	•
Sep 20	Combined % (5 flights)	Richmond	7.00am - 1.00pm	Peter Scott
Oct 4	Combined % Multiple Entries	Hinton	7:00am - 1:00pm	Gary Goodwin
Oct 23-25	Wings Over West Wyalong All Disciplines FUN FLY	W. Wyalong A.B.Field	7.00am-Till Dark	Plenty of room for ALL
Nov 15	Bowden comp ROG details to come 1/2 Hour Scramble + Scale rally	Richmond	7:00am – 1:00pm	Peter Jackson
Nov 20	General meeting	Dundas Sport	7.30 pm	•
Nov 27	Friday Xmas Party	Richmond	7.00am – 1.00pm	Terry & Lyn
Dec 6	½ Hour Scramble, Combined Vintage with SAMS & Fun Fly.	Richmond BBQ Xmas	7:00am – 1:00pm Lunch BYO FOOD	Terry Bond

LETTERS TO THE EDITOR

Thank you so much for keeping (us) abreast of your Australian free flight activities. FFDU is once again very interesting and educational and now that I know many of the flyers, it is more personal.

Mike Roberts (USA)

The article on small diesels was one of the most interesting model articles I have read.

John Campbell

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SO WHAT HAVE YOU BEEN BUILDING DURING LOCK DOWN? Please send me text in Microsoft Word format with each JPEG photo no less than 500 kbytes.

If you have any other articles please send them too. Variety is the spice of life.

Malcolm Campbell <u>actrain@ozemail.com.au</u>