

The magazine for all those who love Free Flight

THE BFFS DIGEST

June 2024



In this issue:

- ★ *F1H State Champs*
- ★ *F1G State Champs*
- ★ *Club competitions*
- ★ *Club Trimming Days*
- ★ *All the Indoor events*
- ★ *A better Hangar Rat*
- ★ *2024 Flying Calendar*

STOP PRESS!



COVER PAGE:

John Lewis's Bukin F1G powering skywards during the 2024 F1G State Championships, where he placed second behind his son, Ben Lewis. The event was flown in exceptionally good weather.

PRESIDENT'S REPORT



February 2024

Welcome to 2024 and I hope you had an enjoyable Christmas break.

Late last year the grass on Jessie's paddock was thinning and lowering in height as a result of the cows now back on the paddock. Recent reports of heavy rain in the area may have resulted in a changed landscape. Jessie has in the past advised us if it's unsafe to drive on the paddock and if we get this advice, we will advise you by email.

We have a trimming day scheduled for Sunday 11 and a 2-minute event later this month on the 25th so hopefully the paddock will be in reasonable condition and we are greeted with fine weather.

This year's program follows a similar format to previous years however our

participation in contests has dropped over the last few years due to COVID and the advancing age of our membership. I have tried to trim the number of flying days so there are a few more weekends available for other activities like family get-togethers. Most of us like to get models ready for an upcoming contest or just enjoy the day flying your favourite model. So, with a smaller group competing I think any flying day can double as a trimming or general flying day. Obviously if we are flying light weight rubber models or towing gliders in a contest and you want to trim your open power model or fly a small RC model just move away an appropriate distance so no conflict occurs. Six people on the field enjoying the day is better than just three flying in a contest.

I am still trying to confirm our indoor dates. The BSHS facilities manager I was dealing with resigned at the end of last year and although I sent a request in late last year and I hadn't heard anything till early this week after I sent a follow-up. At least now I have an acknowledgement and a contact name. They assured me they would get things organised in the near future.

Finally, I would like to thank Kathy and Malcolm for the wonderful job they did catering for the Christmas and prize giving event here last year. I know Julie was a bit stressed about how to look

FEATURED IN THIS ISSUE:

President's Report	2
Secretary's Report	3
F1H State Champs.....	5
F1G State Champs.....	7
Rubber Fun Day.....	11
F1A and F1B State Champs.....	12
INDOOR	
Delta Dart Comp.....	15
F1L (EZB) State Champs.....	16
F1N (HLG/CLG) St Champs...	18
Construction Corner	
Carbon wings.....	20
The JB Bomb 1cc engine.....	21
Pieter de Visser's Coupe.....	23
Paul Squire's pkt torque mtr. .	23
Phil Mitchell's Scale hangar....	24
Build better Hangar Rats.....	25
BFFS Spy.....	27
Jokes page.....	27
2024 Calendar.....	29



after everyone but, thanks to Kathy and Malcolm and everyone's cooperation and help, it was an enjoyable relaxed occasion.

John Lewis



Jesse lives here now, close to the field, in Blind Gully Road.



EMERGENCY LOCATION ADVICE – phone 000
BFFS Flying Field Coominya
GPS coordinates of the gate are:
27° 26' 74.7" South 152° 26' 28.2" East

R E M E M B E R
FIRST DUTY OF THE
KEYMASTER ON FLYING DAYS:
Text Jesse 0417 077 781

"BFFS on the field"

SECRETARY'S REPORT

Some of our readers may have noticed the March edition was not published this year. Club members of course will know why. We've really had a weather affected start to our flying calendar. SE Queensland copped a battering with flooding rain and our paddock looked like it was next to an inland sea. Cattle were moved to the only two paddocks above the water line, and those were the paddocks that we liked to use! So the two scheduled events in February did not take place for the above reasons.

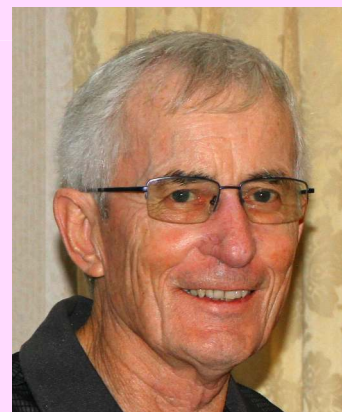
Indoor events were thankfully not affected and went on according to plan, but the F1H State Champs were delayed a fortnight due to further inclement

weather, and were joined with the 24th March Fun Fly day. The weather, although showery and overcast, was excellent.

And then wind caused cancellation of the April trimming day. However, another Indoor event was enjoyed by a small band of stalwarts - maybe we should all go to Indoor; that venue is never affected by the weather!

Albert, Craig, Kathy and I went south for the AFFS Champs and so missed the F1J State Champs at Coominya, which I found on my return has been postponed to a later date.

In this newsletter, you'll read my report on the F1G State Champs, flown in ideal



conditions. Dalby scored one out good day out of two for our F1A and F1B State Champs. And thanks to John, I have all the indoor reports of events flown to date.

Cheers, Malcolm Campbell



F1H State Championships E36 Club event and Fun Fly 24th March 2024

Report and photos by Malcolm Campbell

Julie de Visser launches for Pieter in his first comeback comp

The day did not start too well. I got a text at 6 am from Mati Tabur saying rain was coming to Coominya with more expected for the day. I knew Mark Armour would be on the field early, testing one of his F1Gs. So, I contacted Mark about 6.15 am to get an on-field report and I was happy to learn all was good. The showers actually came in after we left.

Weather for the morning was much like the prediction, overcast with only

light and infrequent spots of rain. Windspeed was low (1 – 1.5 m/sec) and the air temp flat at 20°C all morning. The air was quite buoyant making it ideal for the six club flyers on the field for the F1H State Champs and E36 club event. This was the first time in four months that we have been on the field and we may all have been a bit rusty.

Q'LD STATE CHAMPS F1H: Malcolm Campbell was first away in F1H with

his little Aiglet A1, flying a very large circle, striking and falling over the raised lip of the dam at 1m 57s. The model had to be retrieved from the water and the electronic timer called it a day. Ben and John Lewis both circled and Ben got some nice launches and good height. John's launches were a little less energetic but he also got the height. Both managed to drop a round each and that was the decider at the end as they had four maxes apiece. John was



Ben Lewis loads up for the launch



A gentle release



Ben flew well on the day - well he did win

particularly lucky when the DT didn't activate with one flight landing after 4.5 minutes and another over 3 minutes. Luckily the wind was light enough for them to land within our field. He traced the problem to a tracker cable interfering with the timer.

It was good to see Pieter and Julie de Visser flying free flight again. Pieter has restored a St Leonards' Asteroid that Julie had built with her father in the 80s. Julie said she cut out the

ribs! The model was a little out of trim and I guess Pieter was as well, but he still managed a couple of maxes and third place.

E36 CLUB EVENT: Des Slattery started early with his OD E36 (I suggested he could call it Slatter -E) and enjoyed his three flights. Des retrieved all three in the long grass. Malcolm's model was the standout with a fast climb, good transition and a lovely glide. His DTs were from height and he ended with three easy

maxes. Kathy Burford was still learning her Joulebox launch technique after flying an Apache for so long. The RDT was needed on a few occasions. Her first flight suffered from insufficient bank but the second was a beauty, spiraling up steeply for a very nice max. Another bad launch in her third flight had the model coming down from height, and fast. The RDT folded the wing but saved the model.



Father John off on a very nice day



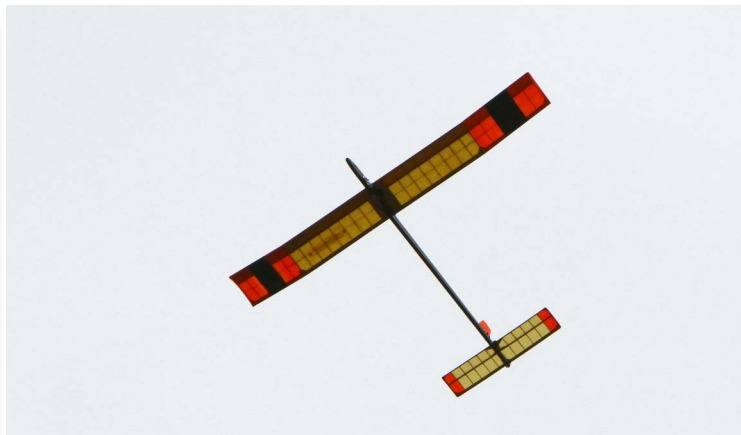
Nice air - I wonder if I set the DT?



Ben and Pieter circling in the same air



Two shots of Pieter's model



It's a St Leonards' Asteroid

Later in the morning Des felt obliged to demonstrate the BMK RDT in his little Linnett. He wanted a good demo so he filled the tank and let it go, the Linnett happily climbing in tight left circles straight through area where John was circle towing his F1H! Three or four times they crossed paths before the Linnett flew out of the danger zone. Of course, Des waited until the model was high enough to enhance the RDT experience for Pieter.

Overall, the field is perhaps a little easier to walk on now and the grass not as thick, but it is growing again with fresh green shoots. So, models did nestle in the grass making a tracker or a very good line essential. Kathy did a great job providing a good variety of healthy morsels and drinks during the morning.

On the way home I looked at Tony's field more closely. He has tilled the soil on half of his paddock (the right half that we have used), no doubt to grow grass like Jesse. The left half is currently still under short grass, and that is a pretty big area and should work for events like Scale and TLG, etc.



Kathy ensured we didn't go hungry



Des's OD E36 - I call it a Slatter - E



Kathy times Des's E36 flight



Only 90, still doing his own retrieves!



F1H winners: 2. John 1. Ben 3. Pieter

F1H results

Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Total
Ben Lewis	120	120	105	120	120	585
John Lewis	120	71	120	120	120	551
Pieter de Visser	120	84	74	111	120	509
Malcolm Campbell	117	-	-	-	-	117

E36 results

Name	Fl. 1.	Fl. 2	Fl.3	Total
Malcolm Campbell	120	120	120	360
Kathy Burford	80	120	35	235
Des Slattery	60	77	95	232



1



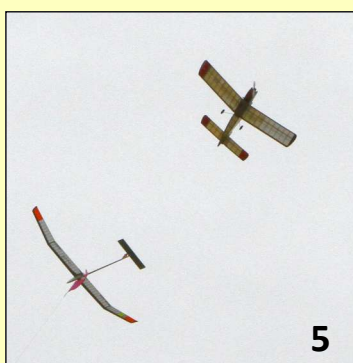
2



3



4



5



6

OLD GUYS CAN BE NAUGHTY. Des gives circle towing John a hard time then eventually DTs out of harm's way. Pieter was impressed!

F1G State Championships

Coominya 5 May 2024

Report and photos by Malcolm Campbell



The style of a winner - Ben Lewis with his Bukin F1G model



Paul Squires (NZ) Gorban F1G



Ben Lewis

The weather could not have been better for a Coupe competition, with very light winds, light cloud and a balmy 25° predicted. It looked like we would have seven flyers, until Graham Maynard realised a vital part was missing from his model. Well, six flying in F1G was the biggest field of Coupes in many years. This time we had an international flyer, Paul Squires from New Zealand. Paul had a relatively new Gorban coupe to fly against the Team Lewis – John and Ben. Pieter de Visser, Des Slattery and Malcolm Campbell competed with traditional balsa coupes. Mark Armour was also there testing the #11

rendition of his big, floating coupe design. He did not compete.

Although we were flying five flights, John and Ben were keen to get the ball rolling, striding out to the field, armed with fluffies, streamers and fully wound Bukin models. They both launched steeply in the cool, overcast conditions, with both models stalling in the climb although Ben's recovered better, to max.

Paul Squires, unfamiliar with local conditions went a bit early and paid the consequence. Des Slattery happily recorded a 72 sec flight and Malcolm beat him by two seconds – two senior citizens flying two very



90 yo Des Slattery - 40 yo Coupe



Paul Squires, with Mark Armour in the background



Des Slattery



Team Lewis, preparing their coupes



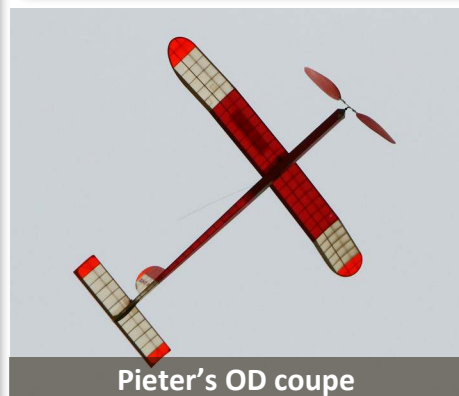
Des's old model



Malcolm's wandering
Tumbleweed II



John Lewis launching, with Ben timing



Pieter's OD coupe

senior models, Malcolm’s Tumbleweed II being 26 years old. Pieter went on to put in very good scores, considering how long it had been since he last threw a coupe up – two maxes and two near misses was an excellent result for him fling a model based upon the Gater Night.

Des had to change models after he broke a prop on his Garricoupe. His flights were a bit short but he was having fun, and that means a lot to Des. Anyway, the 40 year old Bary Dent built model he pulled out went better than the first and, although it stalled to start with, he progressively improved the glide, and his times went up accordingly. Malcolm too was improving his scores, stating he now had rubber that allowed him to wind to his 1998 torque. He broke a

few motors trying and nearly maxed his 2nd flight with an early DT. He didn’t miss his 3rd flight and it became the focal point of the day. It flew for 60 minutes! But that’s another story.

Paul became focused in the next three flights, his Gorban coupe recording three high maxes. But he went too soon in his last flight and, just like his first flight, was down pretty early. He reckons he knows a bit more about the field now so will do a lot better when he returns.

John’s luck changed for the worse when he found poor air with his 4th flight. So, by the 5th flights, things were becoming interesting at the pointy end. It had become obvious to John that he needed to max his last flight because he was trailing Paul by 10 seconds, and Pieter was not so

much a threat, being 38 seconds behind. And John did max, snatching second place after Paul dropped his last flight. Pieter’s credible max made him 4th, only 10 seconds behind Paul.

But the glory went to Ben, the only one who strung together five very good maxes. It was a very well fought contest, flown in wonderful weather.



Boonah flyers relaxing



F1G RESULTS

Name	Fl 1	Fl 2	Fl 3	Fl 4	Fl 5	Total
Ben Lewis	120	120	120	120	120	600
John Lewis	114	120	120	82	120	556
Paul Squires	86	120	120	120	92	538
Pieter de Visser	112	93	120	83	120	528
Des Slattery	72	61	63	80	97	373
Malcolm Campbell	74	113	120	-	-	307

AN UNLIKELY RETRIEVAL

by Malcolm Campbell

During the Queensland F1G State Championships, Paul Squires used his Warm Lift thermal detector to find a suitable thermal and, at the optimal time, I put my 3rd flight into a boomer. I watched it through binos for 35 minutes as it slowly drifted NE, away from the field and gaining altitude. Then it went OOS, but the tracker still indicated its direction.

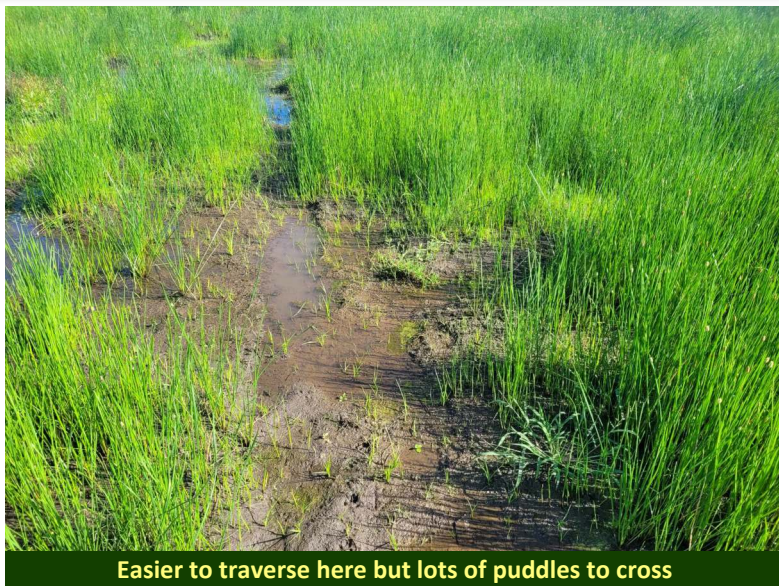
As the signal faded so did my hope of ever finding it. And then the signal got stronger, and stronger, as if it was overhead. And it was! Six elated modellers saw it gently drift by at about 300 feet, and it looked like it was slowly descending. And then it got lift again climbing steadily until it was only visible by young eyes and binos. Then it was gone, heading in a south westerly direction. And then the signal stopped, abruptly. So, it must have landed? The suggestion that it had landed was quickly dismissed by all those who were watching and listening.

Acres of lush green grass hide the muddy waters below

They all concurred it was way too high and, even if the wings fell off, it couldn't have descended that quickly. I rang Vin to ask "Does the signal travel through cloud?" Perplexed by my question he said "Of course it does". So, the model was now lost.

The event continued and we took a photo of the winners. Afterwards, I jumped into Paul's hire car with my trusty yagi tracker and drove around for 45 mins, checking the ground and overhead all the way over to the Kentville Road. Not even a beep, and I really expected that, tracking as we were with no real indicators. So we went back to the field for Paul to test another of his F1Gs. I said I'd go down to the far west side of the field in the chance of getting a signal. And I got one! It was out amongst the reeds, mud and waters of the Seven Mile Lagoon! I followed the signal across three barbed wire fences, several gates and through three paddocks. I was amazed the ground signal was so good. It was a difficult walk with the mud trying to tear my boots off, and this made climbing gates quite treacherous. I walked about 1.5 km before I found it. And the DT had not gone off! My fault.

The 1.5 km walk back was still difficult but I was so pleased that I had an undamaged model. All up, it was a 2 hour walk. So, the tracker didn't lie. It gave me the indication that it had landed. But none of us thought it had, we just thought the signal faded abruptly. I thought maybe the battery was down, but it was new. Had I, at the time, walked 400 metres in that SW direction to the edge of the field, I would have heard it. But who was to know? We all thought it was heading for Gatton or beyond. And the band burner DT? Well, I reckon I didn't pull it on hard enough to turn it on, because it worked perfectly when I tested it during the walk back. My fault.



Easier to traverse here but lots of puddles to cross



Looking back to the flight line, lots of sticky mud and water await

Continues on the next page

Regardless of the outcome, it was an amazing flight to watch, particularly when it flew back over us, taunting us, and then touched down 2 km from where it was first launched 60 minutes before. Thanks for all the pairs of eyes that strained to keep it in sight and for Kiwi Paul Squires who helped in the retrieval, and also Vin Morgan, for a reliable tracking system.

My Tumbleweed II coupe is 26 years old. It's had its wing snapped in half during retrieval on a windy day at our old Wivenhoe field and it's been 50 feet up tree, also at Wivenhoe. It's also been lost for a month at Coominya, and it keeps coming back for more. It also beat Terry Bond's \$1,000 carbon fibre F1G at Narrandera around 2004.

Maybe I should put it in a glass case?



Club Rubber Fun and Testing day

Coominya 19 May 2024

Report and photos by John Lewis



Pieter and Julie de Visser enjoyed the day



It was not an ideal day for testing, with mid-strength wind predicted. So it seemed likely there would be a small attendance. Mark was there early and was joined by John just before 8am. The wind was starting to pick up when John arrived and Mark ceased flying soon after but stayed most of the morning to help out.

Des was unavailable and Malcolm wasn't attending so it looked like that might be it for the day. Then Pieter, Julie and Graham arrived. Due to the wind direction, we needed to operate closer to the lake. This made the last 100 meters of our retrievals a bit bumpy.

John had built two new F1H wings to replace the LDA ones that came with his electronic F1H models. The first glider flew well once released however John's second glider was under-elevated and landed adjacent to a dam. Both models showed promise and John was happy with the new wings. Graham flew his F1B getting it ready for the following Sunday at Dalby. There was a problem with the delayed prop release so hopefully Graham will be able to sort that out. Pieter flew some small rubber models that handled the wind quite well.

The grass height is now around 30 cm in height so the cows are helping us making it easier to retrieve our models.

Malcolm went to the control line field a Willawong but it seems it was too windy to fly there and the shade structure was damaged in a wind gust. The windspeed at Coominya was around 4 m/s in the morning but dropped back a bit by mid morning allowing us to make some test flights but not suitable for fine trimming.



F1A and B State Championships

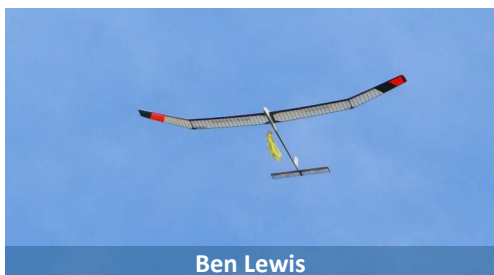
Dalby 25 - 26 May 2024

What a difference a day makes

Day 1 report and photos Malcolm Campbell. Day 2 report and photos John Lewis.



John Lewis



Ben Lewis

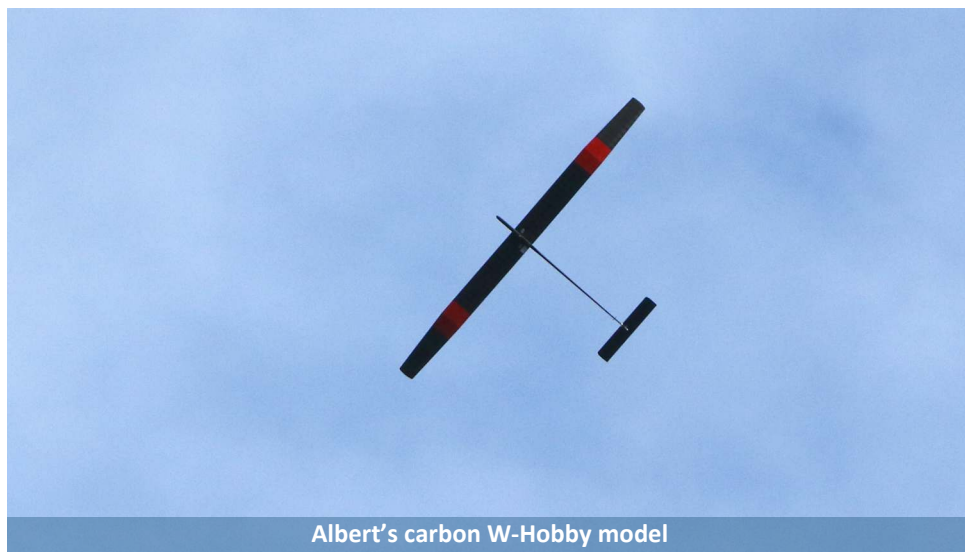
Dalby teased us again with brilliant lead-up weather that stayed that way until the morning of the F1A event. Malcolm arrived a day early and had a successful trimming afternoon with his F1As. However the wind direction was blowing towards the main road so he set up on the cleared dirt paddock, 600 metres east of the clubhouse.

Come Saturday the wind direction remained the same but it was well above the prediction. So we drove as far as we could in our cars to be 800 metres east of the clubhouse. Without crops or stubble as far as the clubhouse, the area was good for circle towing but the wind speed was already above the prediction.

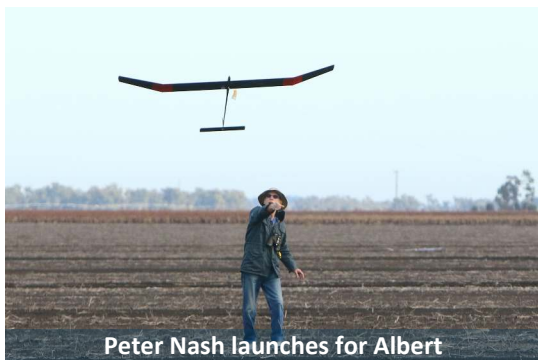
Malcolm and Albert got away early with Albert enjoying the wind up high putting in a 90m launch, and was the only one to record a 4 minute flight. Malcolm released his model too early, the low launch robbed him of the height he was hoping for. Ben overcooked his launch, pulling out low to record a disappointing score.



Albert Fathers hangs on!



Albert's carbon W-Hobby model



Peter Nash launches for Albert

Second flights for all were affected by the increasing wind speed with gusts so no one circled. Albert once again got good height but the model was down in 150 secs, landing nearly a kilometre away, beyond the clubhouse. Ben's model refused to turn, the weather cocking causing a rapid loss of height and another low score. Malcolm loaded up his model too much, the zoom rudder reacted accordingly and he RDT'd it for an attempt, breaking a stab in the process. It could have been worse.

Considering the models would now be over the main road in 3 minutes, we put the event on hold. So, we waited around for two hours and then went back into town for lunch, returning at 1.30 pm to officially cancel the event. It's such a pity when the weather doesn't match our expectations. The question is, do two flights qualify as an event?

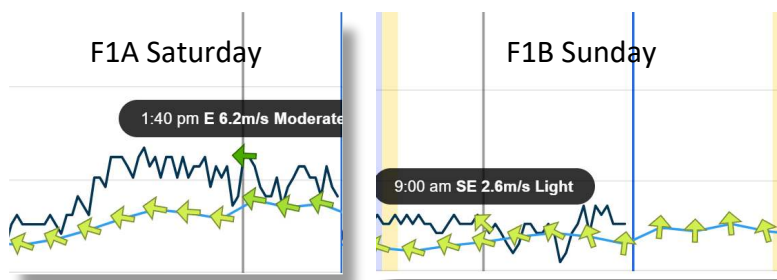


John tows up for his first flight

Name	R1	R2	Total
Albert Fathers	240	150	390
John Lewis	157	152	309
Ben Lewis	73	60	133
Malcolm Campbell	127	att.	127



John launches for Ben



Albert, Malcolm and Kathy went home after lunch. John Lewis picks up the story with the F1B event.

What a difference a day makes



Ben launches from the hardstand centre of the field

Saturday night, 6mm of rain fell however by dawn on Sunday morning there was little cloud and no wind in town. On arrival at the field there was a light cool breeze blowing similar to the day before but a bit less. Graham was intending to come but the wind through the night may have discouraged him.

John and Ben decided to at least make a couple of flights and see how the day progressed. Unfortunately a failed counter on their winder caused both John and Ben to wind to a conservative torque reading. With the wind speed of 2-3 m/s and heading towards the highway 3 minute DTs were set but neither managed the 3 minutes, landing safely in the sorghum stubble.

By the time they were ready to fly again, the wind speed had dropped, encouraging Peter Nash to do some F1J test flying. With the air warming and winder fixed, John wound harder and found some helpful air to easily max. Ben initially looked to be in good air but found sink and landed less than a hundred feet away on the soil just before the stubble.

The overnight rain made the black soil somewhat sticky although the widely spaced stubble was easy to walk through.



Models weren't difficult to find

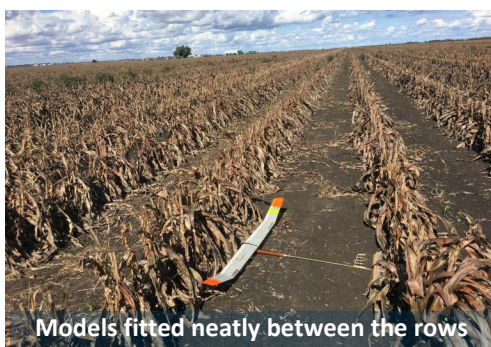


Ben off the ground again

As the morning progressed the wind speed continued to fall and the wind direction became more southerly, with models now flying parallel to the highway and just entering the edge if the stubble or missing it completely.

Surprisingly, it became quite warm with perfect flying conditions. Ben's fifth flight fell just short of a max and, although John was just ahead, finding a downer would reverse the places. A dark cloud had hidden the sun temporarily but after a 5 minute wait the sun shone through and John launched to find some good air and max.

After the disappointing conditions the day before, the weekend ended on a high note with the last couple of flights flying east over smooth flat soil.



Models fitted neatly between the rows



Benny looks like he's on a diet



Peter looks like he was enjoying his Saturday dinner!



And sometimes they didn't go that far



Everyone's a winner. 2. Ben Lewis 1. John Lewis



Peter Nash makes some noise

Name	R1	R2	R3	R4	R5	Total
John Lewis	121	180	180	180	180	841
Ben Lewis	174	123	180	180	172	829

INDOOR 2024

Delta Dart 2 March 2024

Report and photos by John Lewis

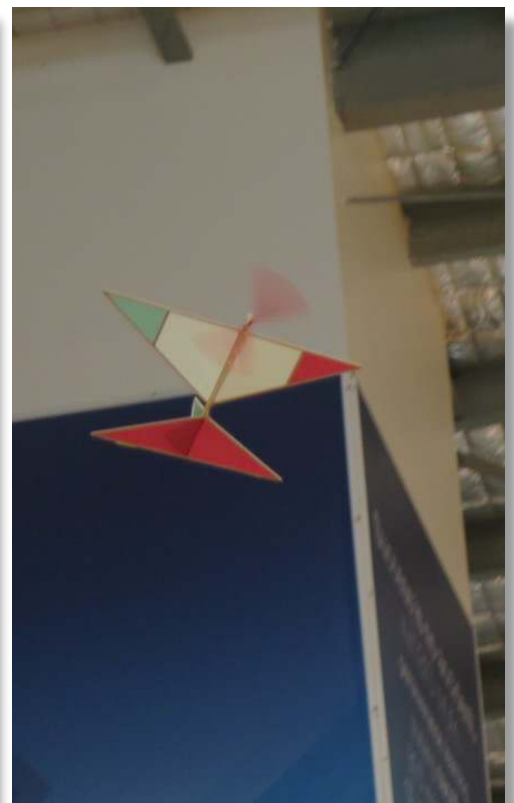


Ben Lewis getting some more height. Three more action shots of his colourful little model below.

We were faced with a number of challenges at the start of 2024 with the weather affecting outdoor free flight events and only getting our dates approved for indoor a few days before our first proposed date. Consequently a few regular indoor flyers had made alternate arrangements for Delta Dart Day.

On arrival there were lots of people still in the hall after a school volleyball tournament. So, after a delayed start John, Brian and Ben set about recording times. John made a strong start with his first flight over one minute. Ben's scores were tantalizing close to breaking one minute but he was unable to achieve a sixty second plus score during the afternoon.

Brian's model was not performing as well as it has in previous years but his scores continued to improve with him achieving sixty seconds on his last flight. John's model performed well on the day but his times were still down a little from previous best scores. In the end it was a very close result for second place with only one second separating Ben and Brian.



DELTA DART RESULTS

Name	R1	R2	R3	R4	R5	R6	Best of 2
John Lewis	67	62	72	64	69	73	145
Ben Lewis	50	58	53	59	58	54	117
Brian Taylor	47	39	56	54	60	-	116



The winning model, in stealth mode?



Brian's model rests on its Esky



Brian used trimming his Scale model as a distraction



INDOOR 2024

F1L (EZB) State Champs

6 April 2024

Report and photos by John Lewis

Early leader John Lewis's EZB

There were two date changes from our original application with our F1L date moved forward one week to April 6. Unfortunately, Larry had made alternative arrangements for the 6th and was unavailable.

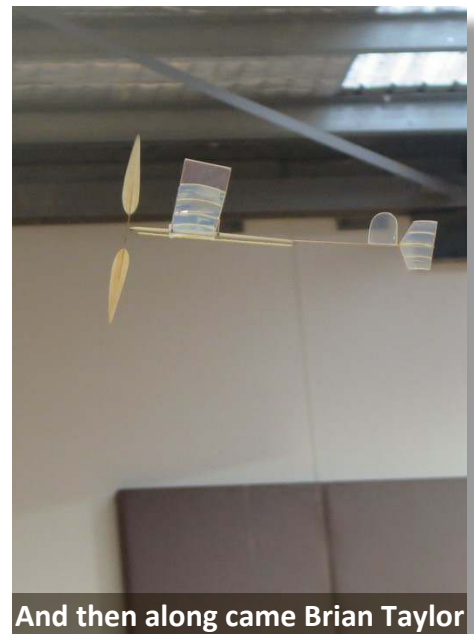
It was good to See Ron and Shiela attending along with Ben's son Ashton and our regular timekeeper Ian Hay. Ron made some good flights after a shaky start getting hung up on two occasions. Sadly, Ron didn't have any times recorded but enjoyed the afternoon's flying.

As with Delta Dart John made a good start and was confident he was in a good position to win the event with

both Brian and Ben having some initial trimming problems. Ben's first couple of flights were around one minute behind John's times but Ben managed a seven minute flight to leap ahead of John.

Brian too was not looking too threatening but as is often the case seems to produce some magic late in the day achieving a contest winning eight minute plus light.

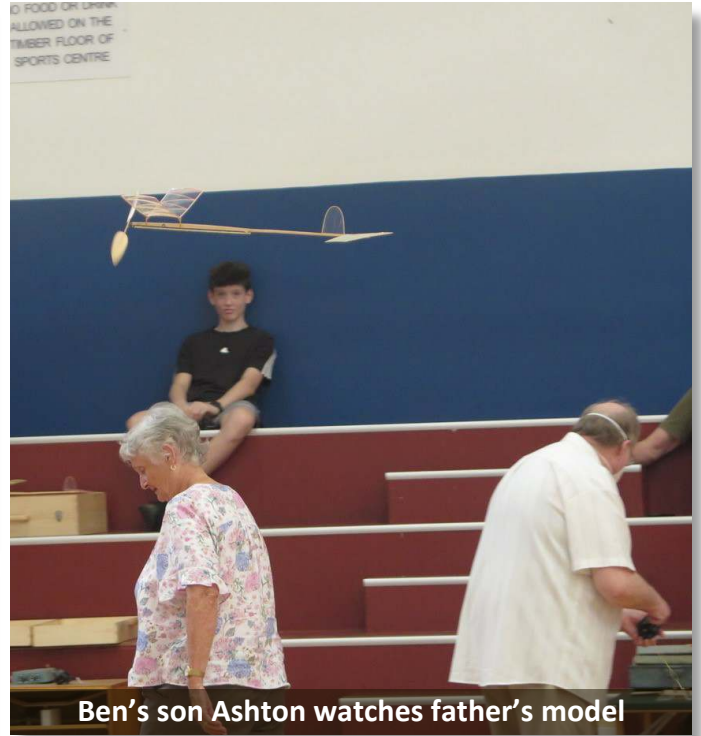
Regardless of the placings there is something special seeing F1L models fly as they slowly cruise around for minutes eventually landing at your feet.



And then along came Brian Taylor



Ben's model blends in well



Ben's son Ashton watches father's model



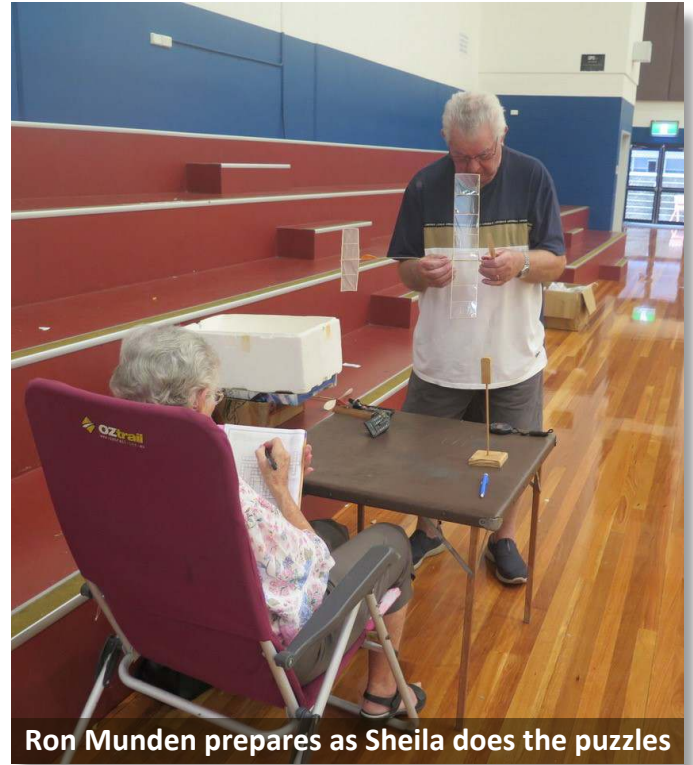
Brian waits as Ben launches



John Lewis's model, I think



John Lewis's model



Ron Munden prepares as Sheila does the puzzles



Ben Lewis's model



F1L winners: 2. Ben 1. Brian 3. John

FIL (EZB) RESULTS

Name	R1	R2	R3	R4	R5	R6	Best of 2
Brian Taylor	0.38	5.05	8.11				13.16
Ben Lewis	4.32	4.40	7.04				11.44
John Lewis	5.35	5.13	4.51				10.48
Ron Munden	No	Scores	Recorded				-



It seems age is wearing out those that could once throw gliders to the ceiling with everyone except Ben opting for a catapult to get their models high enough to be competitive. Len was waiting outside before 3pm and was soon recording scores with a thin rubber band catapulting one of his old hand launch gliders. John had a new catapult glider

he has been trimming on previous indoor days this year and although it was behaving well enough it wasn't producing the times of the model he used last year. Brian had a large former hand launch glider that, like John's new model, was going well but not as well as his former smaller model. Ben was also there early with his son Ashton. Ben spent the first

part of the afternoon coaching Ashton who was flying one of his older sister's models.

Most flight times were in the 30 - 40 second range with Len closer to 40 and Brian and John closer to the 30. Ben was having lots of problems getting his glider to turn after a good transition with his model usually flying into a wall. Len had to leave before

the end of the session but had a commanding lead with a best flight time of 40 seconds. Both Brian and John had numerous flights but they couldn't get much past mid 30's. Young Ashton was getting just under the ceiling and Brian thought he may have been getting the top flight times,

but sadly his flights weren't timed before he hit a speaker box and the tailplane was broken. Ben kept persisting and eventually got his model to perform late in the day when the conditions were cooling. In the end it was a close result between Len and Ben with Ben coming out

ahead. Likewise, John and Brian were in a close contest (flying their older smaller models) for 3rd place. Finally, John was just 0.7 of a second ahead over the best 3 flights. Hopefully Ashton will continue to participate in our indoor flying and become a regular competitor.



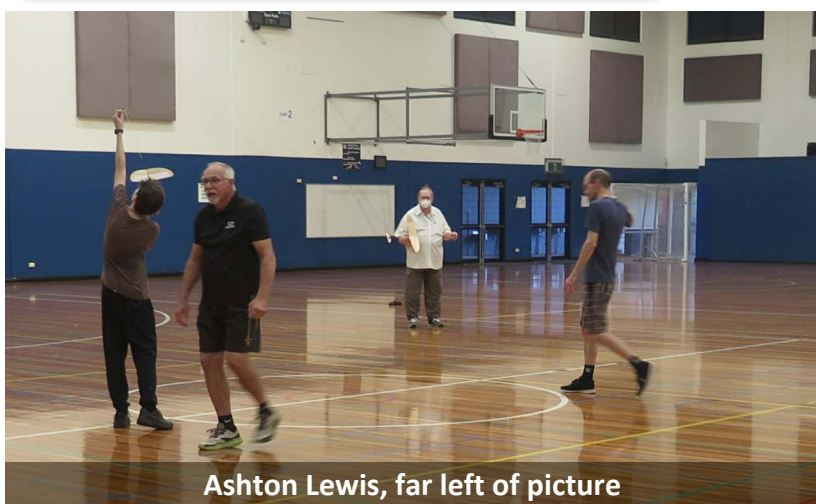
“Ben was the only hand launcher. The other four competitors chose to catapult launch”



Ben Lewis



Len Surtees



Ashton Lewis, far left of picture

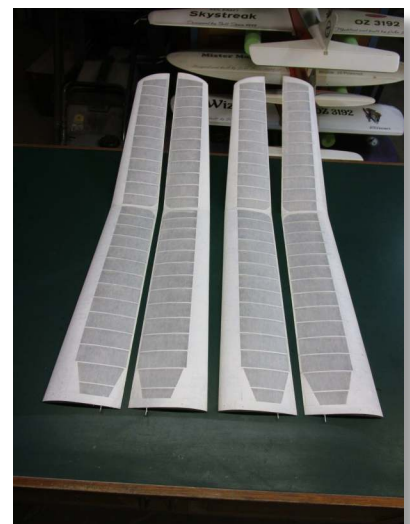
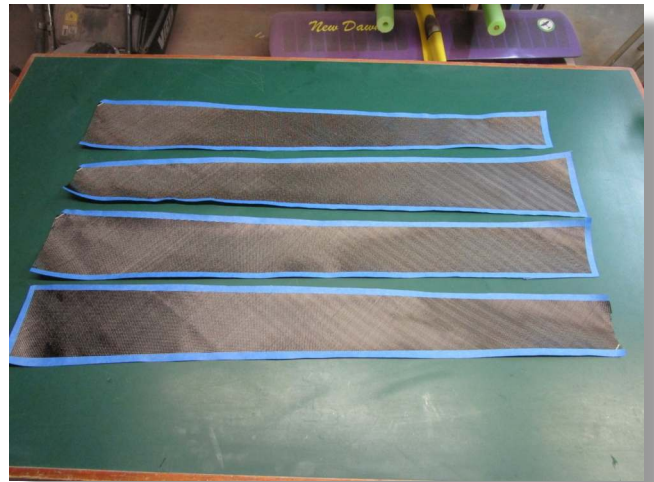
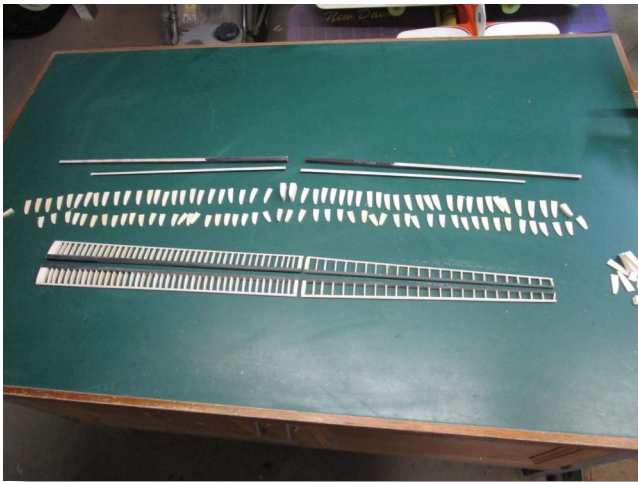


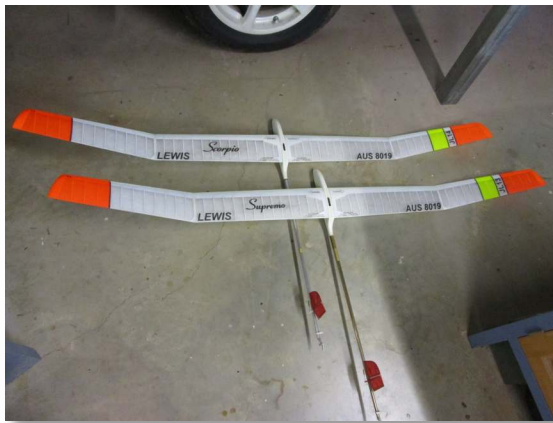
Brian Taylor

Name	R1	R2	R3	R4	R5	R6	R7	R8	R9	Total Best 3
Ben Lewis	33.7	39.1	36.0	40.9	36.5	34.1	39.3	36.1		119.3
Len Surtees	37.6	35.5	38.6	35.5	38.1	5.0	24.0	40.0		116.7
John Lewis	30.6	33.0	31.5	33.8	33.9	36.1	34.6	30.9	37.1	107.8
Brian Taylor	35.8	29.1	28.4	35.4	33.4	32.7	33.9	35.9	34.7	107.1
Ashton Lewis	No	Times								-

CONSTRUCTION CORNER

Pres John has taken time out of his frantic CL construction program to build new wings for his two electric F1Hs. He never liked the LDA section. So here's a selection of photos to follow the progress. Just like a balsa construction but black. That's not quite correct - it's many times stiffer and remains straight for life. The full article is in the June FFDU.

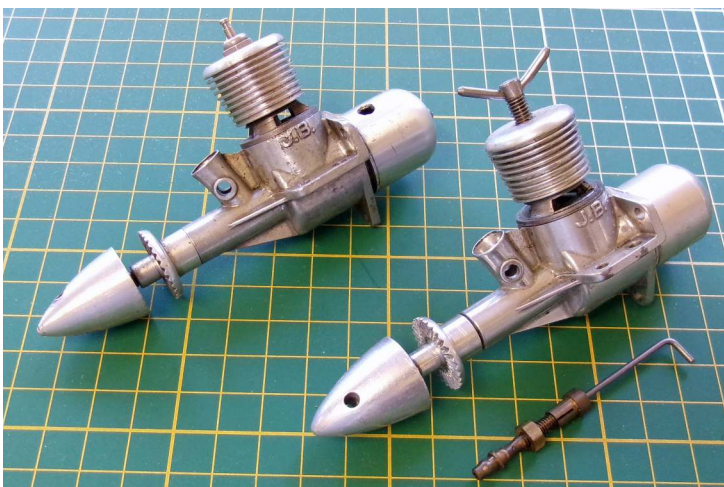




According to John's emails, the elapsed time for the building and painting of the two sets of wings was just four weeks and two days! It pays to do two wings at a time - if you're good enough.

J.B. Bomb 1cc engines

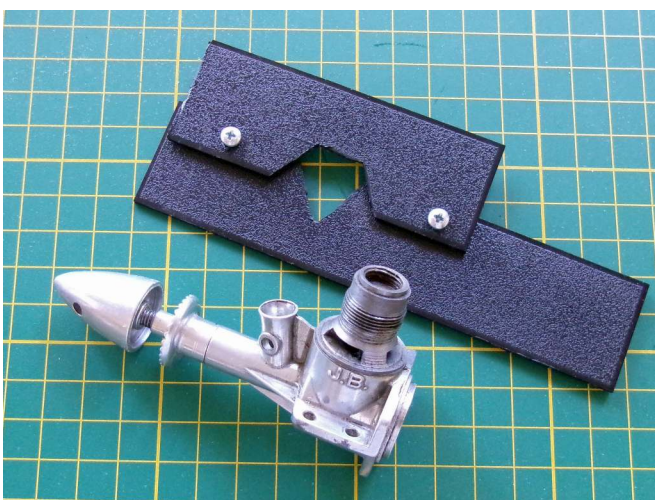
Late 1950s - a report by Brian Taylor



The J.B. Bomb 1cc glow engine is missing the needle valve, piston and conrod. Luckily I have the complete diesel version for comparison. I've had to make a couple of tools to disassemble these engines. There appeared to be no gaskets used. It's metal to metal contact.



After much soaking in some fuel the piston and crankshaft were freed. I tried to remove the cylinder head by using a strap wrench. It unscrewed without a problem.



Next I tried removing the cylinder using the strap wrench. No luck, even applying heat via a heat gun had no effect.

The only way I could see to loosen its grip was to apply a bit of pressure while tapping it gently. I made a tool out of the toughest plastic I had. It slotted into the three exhaust ports. I prefer not to use any metal tools around the exhaust if possible.



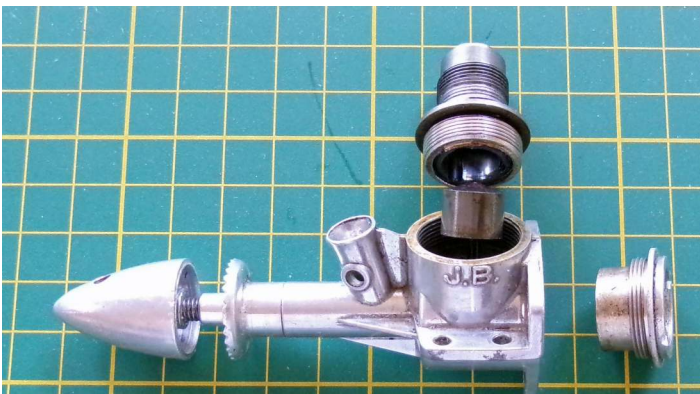
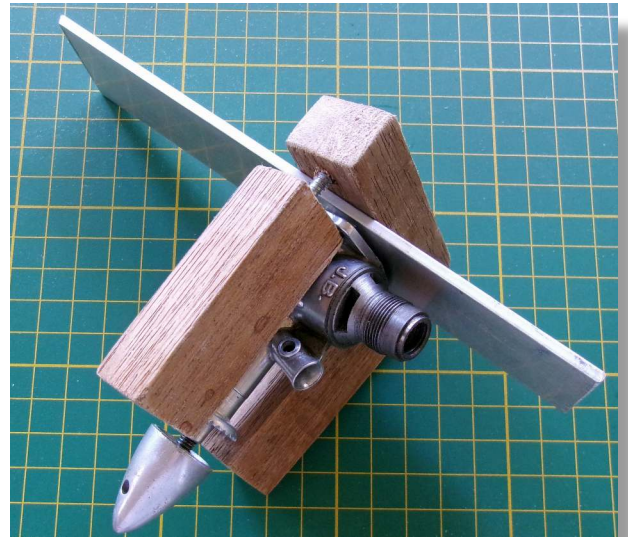
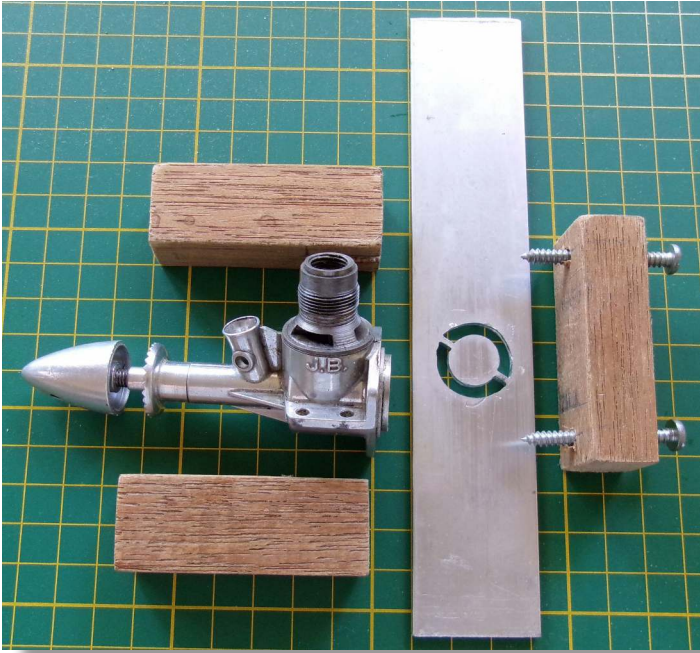
A couple of blocks of wood were used to protect the engine while it was clamped in the vice. Heat was applied then the plastic tool was attached.

Tapping finally had the desired effect and the cylinder could now be unscrewed. The crankcase backplate was similar in design to Cox and many other engines.

This time I used aluminium for the tool.

The idea was to lightly clamp the tool against the backplate while tapping it. Back in the vice.

A bit of heat and some tapping and it was released without damage.



The 1cc engines use a ball and socket joint to attach the conrod to the piston.

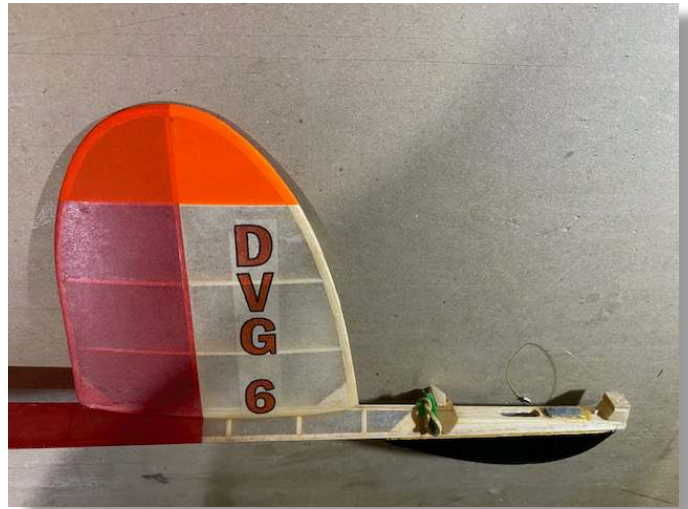
The piston was originally made from a cast iron (Meehanite).

I would like to try and replicate this but I need to do more research. So this project is on hold for the moment.

Brian Taylor

Pieter de Visser's own design balsa coupe

There's something beautiful about old balsa coupes. This is the one Pieter designed, built and recently flew in the F1G State Champs. A picture speaks louder than words. Enjoy.



Paul Squires' simple pocket torque meter, for those flight line final turns



Phil Mitchell's scale models

Phil Mitchell was Australia's top F1A flyer for many years. Phil has a few other interests - catching lobsters comes to mind. But he also build very good scale models that fly well. I visited Paul at his Terrigal home on the way back from the AFFS Champs, dined with him in fine style and took photos of his scale models. You'll see he flies rubber, electric and IC. You never know, he may build a scale glider one day.



Above and right - De Havilland 75 Hawk Moth



Above and right - Sopwith Pup



De Havilland 82A Tiger Moth



Tiger Moth cockpits

The hangar wall also shows Phil's Sopwith 1 & 1/2 Strutter and his electric Consolidated PBV Catalina. Missing are his amazing Fokker F VII b 3M Southern Cross and his large Handley Page 0/400.



News Flash!

Read these 2 articles first
because Hangar Rat is on Saturday 8 June.
Who knows, it may help you win!

Making a longer flying Hangar Rat

By Dave Jackson, New Zealand



I have recently read some articles on the exploits of HR flyers and their journey to increase performance.

Here are some of my thoughts on making Hangar Rats fly longer

1. Make a full size HR! Although the kit available in NZ is good, download the original 20" span version from Outerzone or <http://theplanpage.com/> special things page.

Use stripped ribs etc and try to build as close to plan as possible. My experience is that the closer they are built to plan the better they fly!

2. Build the model light! Aim for around 5g and add ballast to bring the model up to weight! Every HR I have made needed nose weight to fly better. Better to add this than try to trim with incidence or by moving the wing back. A lot of weight saving can be achieved just by avoiding CA glue - this is very heavy! Use thinned balsa cement or white glue instead.

3. Record everything! Get a good set of electronic scales and record all component weights. This allows improvements to be made in the next one. Fractions of a gram all add up when the total is only 5-6g!
4. Use a torque meter to wind! Learn how to wind to torque and almost forget about number of turns. For maximum performance always wind to max torque and back off to launch torque. This will allow more take off turns than just winding to take off torque alone. Record every thing for every flight. Things to note are rubber weight(more accurate and consistent than thickness), Max torque, winder winds, back-off winds, launch torque, flight duration, turns remaining and flight observations.

Try some of these suggestions and I am sure you will increase your HR duration!

<https://youtu.be/TQKv13SfWqE?si=0QyE0DhjzoeuWaO4>

BUILDING A BETTER HANGAR RAT

Firstly, the incidence settings combined with the large fin offset make these models fly “Off the Board” if:

1. The wing and tailplane are warp-free; if not, recover.
2. You move the undercarriage forward from its design location to achieve the correct C of G, do not use blue tack
3. The paddle pop propeller has the correct and the same pitch on the blades (About 35°)
4. All outline corners on the wing and tailplane are gusseted (a durability issue)
5. Ribs sliced from sheet eventually fail in the cross-grain. Laminate two pieces of 1mm soft sheet, 20mm wide, between blocks shaped to the wing section. Slice ribs along the grain (1mm wide)
6. Check porosity of tissue before covering, use only Esaki (Jap) tissue – attach with non-shrinking cement such as UHU blue or slightly thinned PVA - do not shrink or dope
7. Use aluminium tube for prop bearing, not strip, holes will elongate with use and flights will become erratic – bind and cement the tube to the fuselage stick – 2° to 3° side thrust - left or right – it doesn’t seem to matter, it just determines the direction of turn.
8. When attaching wing struts do not use shrinking cement - try 5 min. Araldite or PVA glue. Shrinkage here will undo all the careful work in covering
9. Rubber width – 2mm for a 7gm model. This is sufficient for basketball halls – 3/32” for higher ceilings
10. Target weight for a Hangar Rat should be 6 to 7 gm.
11. The paddle pop props may look very crude, but in practice, they work very well. I have made helically pitched blades and conducted A-B tests on the same model over several flights. The paddle pop prop outperformed the seemingly better helical props. I made two helical props 7” x 8” and 7” x 10”. The latter showed some promise with a 2 min flight after taxiing around for 5 laps, so perhaps a little more trimming will reverse this conclusion – anyway carved props are “illegal”.
12. To improve the prop and make it more crash-resistant, use some 1/8” square Spruce or Bamboo for the hub, then add fiberglass or several layers of tissue over the blade/hub attachment – Hangar Rats have an affinity for walls and slide down to the floor, the prop still rotating and the blade taking all the punishment, resulting in the hub/prop shaft hole being elongated in the process despite the application of Cyano. (While this affinity with walls and ceilings also holds true for the lightweights - F1Ds, Ls and Ms, - these tend to bounce back into “play” on first contact – not so the heavier and higher wing loading Hangar Rats).



Don Boughton

Editor's Note: Don is well placed to expand on this subject, as he surprised us all down at Sandringham when he walked in with three near-identical Hangar Rats – Don always seems to make models in clutches of three! - After overcoming some initial difficulties, mainly sorting out the size of the rubber motor, Don soon had all three exceeding two minutes. Don Bladier and I have been trying to exceed the “two minute barrier” for longer than we care to remember. Don Boughton’s achievements have spawned a rash of Hangar Rat building with Don Bladier currently in the lead.

BFFS SPY



A few years of Free Flight experience in this pair of senior citizens.



Mark Armour's coupe #11



Graham's latest E36

J O K E S

My wife didn't order anything off Amazon yesterday & the delivery driver just knocked on our door making sure she's ok 😊

This could also apply to John Lewis!



Yesterday my husband thought he saw a mouse in the kitchen. He sprayed everything down and cleaned it thoroughly. Today I am putting that mouse in the bathroom!

Last year I joined a support group for antisocial people. We haven't met yet.

I've got a mate who just won a holiday for him and four mates, plus \$4,000 spending money!

He asked me if I was free the last two weeks in October and I confirmed that I was...

The bastard wants me to put his bins out!

I told my boss I needed a pay rise as 3 other companies were after me... He asked which ones? I said "gas, water & electric"

Arguing with a women is like reading the Software License Agreement.

In the end, you ignore everything and click "I agree".



A new airplane has been developed that cannot crash. Made from rubber polymers, it will just bounce. The craft was invented by Boeing, Boeing, Boeing.



Having a teenage daughter is like having a cat that only comes out to eat and hisses when you try and be nice to it.

My best ever **CRASH** photo

Study the photo. Every part of that model tells a story. And **Yes!** I was pretty close to this high speed crash.



Malcolm Campbell
Lost Hills CA February 2015



BRISBANE FREE FLIGHT SOCIETY

2024 Flying Calendar



Month	Date	Start	Events	Location
February	Sat 3rd	12-4pm	Bar-B-Que lunch & General Meeting	John's
	Sun 11th	8-10am	Trimming Day & Fun Flying CANCELLED	Coominya
	Sun 25th	8-11am	Club Day 2 Min Class models (3 flights) POSTPONED	Coominya
March	Sat 2nd	3-6pm	Indoor - Delta Dart	BSHS
	Sun 10th	8-2pm	F1H State Champs (5 flights) and E36 club event (3 flights)	Coominya
	Sun 24th	8-2pm	Dale's Fun Day including P20	Coominya
April	Sat 6th	3-6pm	Indoor - EZB	BSHS
	Sun 7th	8-12pm	Trimming / Reserve Day	Coominya
	Sun 21 st		F1J State Champs (5 flights)	Coominya
	Sun 21 st to Sun 28 th		AFFS State Champs & Southern Cross Cup	Narrandera and W. Wyalong
May	Sun 5th	8-12pm	F1G State Champs (5 flights)	Coominya
	Sat 11 th	3-6pm	Indoor HLG/.CLG	BSHS
	Sun 19th	8-12pm	Club Rubber model fun and testing day including Frog models	Coominya
	Sat 25th	8-1pm	F1A State Champs (5 rounds, R1 240 secs)	Dalby
	Sun 26th	8-1pm	F1B State Champs (5 rounds, R1 240 secs)	Dalby
June	Sat 1st	8-1pm	Reserve F1A	Dalby
	Sun 2nd	8-1pm	Reserve F1B	Dalby
	Sat 8th	3-6pm	Indoor - Hanger Rat	BSHS
	Sun 16th	8-1pm	Club Fun Day including P20 & ½ Hr Scramble	Coominya
	Sat 29 th	12-4pm	Bar-B-Que & AGM	John's
July	Sat 13th	3-6pm	Indoor - P18	BSHS
	Sun 14th	8-1pm	Scale State Champs & club testing	Coominya
	Sun 28th	8-1pm	Club Power model fun and testing day including E36	Coominya
August	Sat 3rd	3-6pm	Indoor - Peanut Scale	BSHS
	Sun 11th	8-1pm	Mini Power & QDP (3 flights)	Coominya
	Sun 25th	8-1pm	E36 State Champs (5 flights)	Coominya
September	Sun 8th	8-1pm	P30 State Champs (3 flights)	Coominya
	Sun 15th	8-1pm	Reserve Day	Coominya
	Sun 22nd	8-1pm	HLG, TLG & CLG State Champs	Coominya
	Sun 29th	8-1pm	Reserve Day	Coominya
October	Sun 13th	8-1pm	Col's Vintage Rally, LSq/100 and No Frills Wakefield	Coominya
	Sun 27th	8-1pm	100gm coupe and A1 Glider (each 3 flights)	Coominya
November	Sun 3rd	8-1pm	Open Rubber State Champs & Club 2 min class (both 3 flights)	Coominya
	Sun 10th	8-1pm	Reserve day	Coominya
	Sun 17th	8-1pm	Club Glider model fun and testing day including CLG & RC Gliders	Coominya
December	Sat 7th	12-4pm	Xmas party and prize presentation	John's place

FIRST DUTY OF THE KEYMASTER ON FLYING DAYS Text Jesse 0417 077 781 "BFFS on the field"

2024 FREE FLIGHT CALENDAR

Ver 2 as at 23 February 2024

CONTACTS: John Lewis 07 3848 4280 Malcolm Campbell 07 3278 7164