



BULLETIN OF THE AUCKLAND MODEL AERO CLUB INC. EST. 1928
November 2017



Mike Fairgray seen comparing Peanut and Open Rubber Laceys at the Morrinsville Indoor contest. *Photo: Des Richards.*



Tomboy & Texaco

Tomboy and 1/2A Texaco will be flown as a monthly competition at either the AMAC field at Karaka or the Tuakau Club field.

Contact Keith Trillo for confirmation of site and possible postponement,
Mobile: 027 460 7180.

AMAC placings count to event Club points

Photo of John Butcher's Tex 39 at Karaka. Photo: Keith Trillo

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Editorial – In this month's bulletin

My special thanks to all contributors this month. The absence of outdoor flying reports due to the late arrival of good flying weather, has created a gap in the usual reports that has been very ably filled in this issue. My thanks to Mike Fairgray for his regular monthly meeting report(s) and also to Keith Trillo for reporting on the Drury indoor night's flying. Mike Mulholland's article on building his impressive Borel Monoplane will be of interest to all scale modellers and his willingness to share details of construction methods that he has developed, is appreciated. Guy Clapshaw has provided us with entertaining, close to home, reflections on how model building and specifically radio flying continues to change. Bill McGarvey's article on Frank Zaic came out of my recent acquisition of some Year-books and the treasure trove of free flight data, in particular, that they have provided over the years. Bill seemed just the right person to provide these insights and his article makes many references to the role that Zaic took in both recording and fostering advances in understanding the theoretical aspects of model flying.

The report on the Club's recent Morrinsville Day shows its great success. I make no apology for repeating the sentiments expressed in reports on earlier Morrinsville days, as it is important to recognise what we have gained. The day brought indoor fliers together from Whangarei in the north and Fielding in the south. It was satisfying to fly with such an able group of modellers. As always, much could be learnt from the informal conversations and the performance of models as well. Whilst it was a pleasure to see a sizeable number of people there, there is still room for the event to grow. The consensus was that considering the logistics for those travelling some distance to get there, a once a year event is about right. I have pencilled in October 7, the first Sunday in October for next year's event. This falls during school holidays and makes it a little easier for some to attend.

On other matters, I have included a notice re the forthcoming Club display on the Warbirds Armistice Day display, that seeks models and support. Details of this will be discussed at the next monthly meeting. And talking of meetings, we could do with more models on the table. Don't be bashful about bringing your projects to the table, as page 28 suggests!

I think that there is just room to add a reminder of how few days there are, taking into account the lead up to Christmas, to complete and trim models for the Nats . . .

Stan Mauger

Slipstream contributions

Contributions of photos and information about latest projects are very welcome for the bulletin. Field reports and articles are too! Please just send them in.

Deadline for articles for the December/January Slipstream is November 25. Earlier would be better for all but flying reports as I will be away from mid-November until the 25th.

Monthly Club Night - Mike Fairgray reports

2-10-17

Present were Ricky Bould, Paul Evans, Mike Fairgray, George Fay, Angus Macdonald, Stan Mauger, Mike Mulholland, Brendon Neilson, Geoff Northmore, Arthur Pearce, Bryan Spencer Don Spray, Keith Trillo and Charles Warren .

Announcements

- Reminder that Morrinsville indoor was being held on the 8th October.
- Club stand at the Ardmore Warbirds, 12th November. Contact Keith Trillo if you can supply models or assist.
- Drury Indoor has been shifted to the third Monday in the month.
- Stan Mauger has been invited back to England to receive the Super Scale Trophy for winning Free Flight Power Scale at BMFA Nationals, at a presentation dinner.

Theme for the night was Models for the Nationals

Geoff Northmore had a plan of the flying wing which he built some sixty years ago. The plan was featured in the latest Sticks and Tissue magazine produced by James Parry in the UK. Copies of this magazine can be received by emailing James Parry at JamesIParry@talktalk.net, to be placed on his mailing list.

Ricky Bould had his new CO2 powered Waco SRE constructed from the MicroX kit plan. He reported that it Flies quite well.

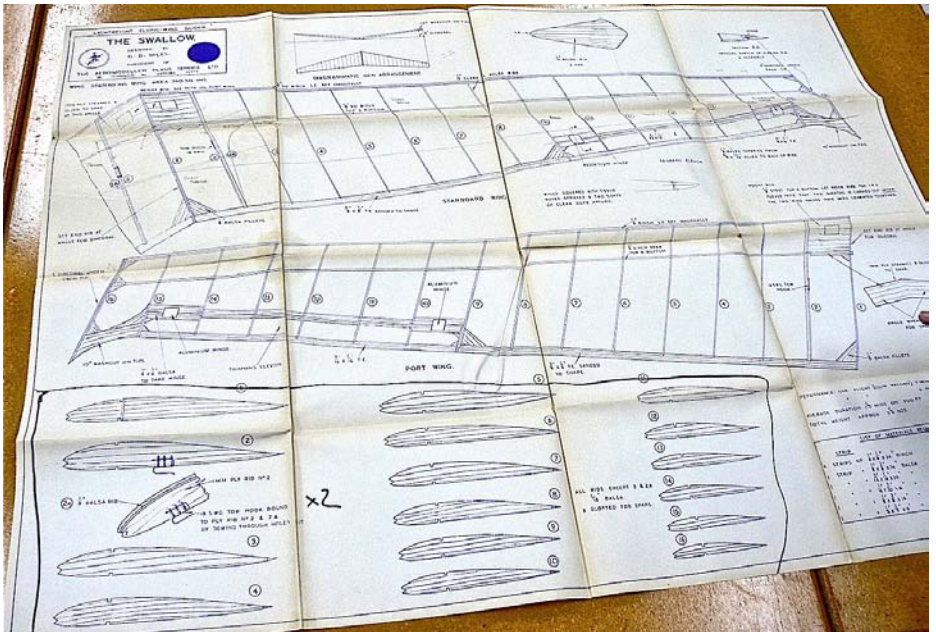
Bryan Spencer had a couple of lipo batteries, motors and a selection of propellers free to a good home. George Fay brought his new model of the Macchi M67 Schneider Trophy float plane racer that had been scaled up from a peanut plan to 28 inches. It's an ambitious build which was yet to fly. It looks striking in its all red colour scheme.

Don Spray's Zlin Akrobat was again on the table with a bit more scale detail but with some more to go, being set to fly once the weather permits a trip to the flying field at Hoteo. Keith Trillo had Don's Mills .75, which he had been trying to get to run on a constant setting. He found that the contra piston was loose in the liner allowing the compression setting to back off. Keith's Diesel bible published by Doctor Diesel recommended that by striking the contra piston with a suitable ball bearing under the hammer head to expand the contra piston or tinning the outside edge of the contra piston for a better fit was the recommended fix. This was not successful so the conclusion was, based on the general wear of the engine, that it was beyond a simple repair. Don was now looking for a replacement .75 Mills.

Keith had his Skipper, powered by a Cox .049, which was proving a difficult engine to get to start easily and run efficiently. Apparently, the saying goes that only a well-worn Cox is a good Cox. So hopefully there will be enough time to sort it out before the Nationals. Keith is also making up his own fuel mix from which he is getting some good results.

Opposite: *What were they looking at?*

Top: Arthur Pearce, Geoff Northmore and Brendon Neilson discussing The Swallow, an APS plan **Left,** brought along by Geoff.



Arthur Pearce had found an old photo print taken before 1943 of the original members of the Model Club which held its meetings in the Modelair premises in Newmarket. With the help of Angus Macdonald, he was able to place names against several of those in the photograph needing identification.

There were not many models or members at this month's meeting, however, there was plenty of discussion around the end table where free magazines and books were available courtesy of Arthur Pearce and Mike Fairgray.

So, ended another club night.



Upper: A promising performer, this Waco SRE was built from the MicroX kit by Ricky Bould.

Left: Light wing construction is evident in George Fay's Macchi M67 Schneider Trophy racer.





Upper: Keith Trillo's beautifully built Cox .049 powered Skipper.

Above: Don Spray has made further progress on his Zlin Akrobat for power scale.



Upper: CD Stan Mauger briefing contestants at the start of the day, at the end of the hall.

Centre: Mike Mulholland getting his Hangar Rat away for a good flight time.



Morrinsville Indoor Day - Stan Mauger

8-10-17

The Club can feel justifiably pleased with the success of the Morrinsville Indoor contest at the Westpac Stadium. It was well-supported and it was particularly pleasing to see new faces as well as the regular fliers at Morrinsville events.

The open space of the Westpac Stadium comprised two basketball courts enabling fliers to open out turning circles and also to take advantage of the high ceiling which was a great bonus for high flying Hangar Rats.

Hangar Rat attracted ten entries and much activity in the hall. Mike and Yolande Mulholland flew light and well-trimmed models in this event to record the two best times. Angus Macdonald recorded good times to make third place. This event had its moments. The highly sited curtain cable used to divide the courts snagged the propellor on Angus's model and some roach pole prodding of both line and model was needed before it became dislodged. Later his model locked into Ricky Bould's Hangar Rat in a firm embrace, in a slow spiral dance to the floor. The movement of the models was like an eerie slow-motion ballet sequence. Plenty of good times were recorded despite the cooler than normal conditions for October.

The two Push E fliers had the event to themselves, but would certainly have welcomed more company in this event. Keith Trillo's model flew for over four minutes making a great time. Modelair Hornet looked brighter, with a number of starters but with just three recording official times. Hand Launched Glider saw more support this time with a good performance by Dave Jackson and other scores not too far behind him.

Kit Scale had overtaken Peanut entries this time with not many points separating the top four places. Alan Reed was welcomed to the fold with his Pietenpol Camper, all other fliers having models flown the same models previously at Morrinsville.

In Peanut Scale Daniel Walker's Lacey proved hard to beat again this year. Keith Trillo, in second showed what a good flight time could be achieved with a well-trimmed Fike. Open Rubber once again called out for more entries, though the standard of building and flying in this class was high. Graham Lovejoy's Stahlwerk is a handsome model and a well-deserved winner.

Glancing around the hall it was easy to form the impression that there were a number of models brought but not flown. The six available hours go quickly and some determination and organisation with well-trimmed models is needed if entry in each or most classes is planned.

The day proved to be thoroughly enjoyable, with many positive comments pointing to good support for the next day scheduled for October 2018. A big thank you once again to all tireless judges, appointed at short notice. Your hard work is appreciated.

Left: Mike Mulholland brought a number of nicely built models but ran out of time to enter them all.

Results

Hangar Rat

	Total best 2 flights
1. M. Mulholland	8:03
2. Y. Mulholland	6:35
3. A. Macdonald	6:12
4. B. McGarvey	5:06
5. D. Jackson	4:85
6. A Reed	4.08
7. N. Walker	4.04
8. D. Walker	3.54
9. G. Avenell	3.17
10. R. Bould	3.11

Push E

	Total best 2 flights
1. K. Trillo	4:17
2. J. Godfrey	0:20

Hand Launched Glider

	Total best 2 flights
1. D. Jackson	51.60
2. D. Walker	44.5
3. G. Lovejoy	43.9
4. P. Squires	34.7

Modelair Hornet

(Target time 33 seconds)

1. K. Trillo	32.2	32.5	33.9
2. A. Macdonald	5.4		
3. R. Bould	6.0		

F4D Indoor Rubber Scale

	Static	Flying	Total	
1. G. Lovejoy	690	445	1135	Stahlwerk RIII
2. S. Mauger	641	330	971	Fleet Canuck
3. R. Bould	580	360	940	Luscombe Sedan

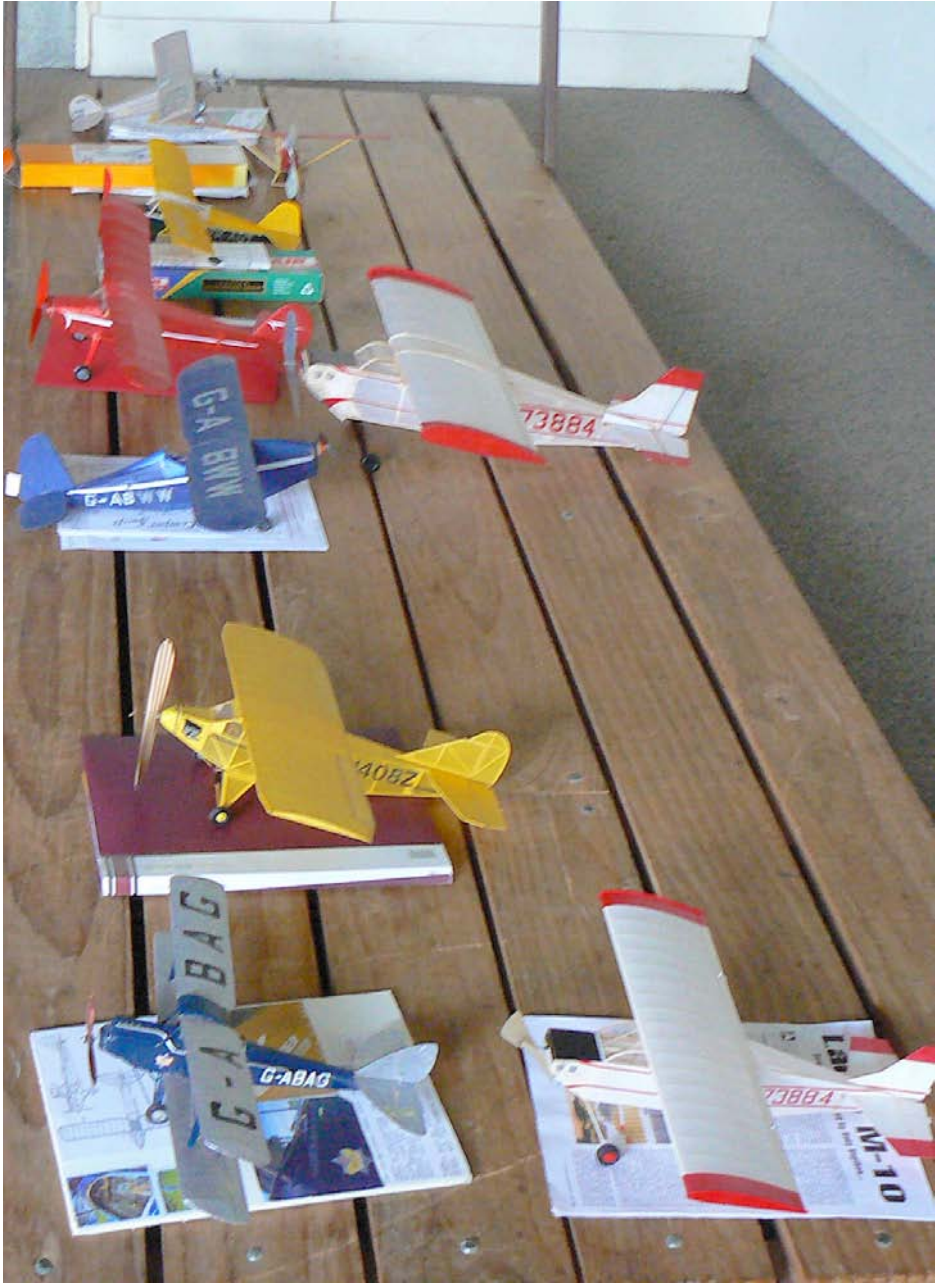
F4F Peanut Scale

	Static	Flying	Ranking	
1. D. Walker	54	0:59	1/2	Lacey M10
2. K. Trillo	42	1:14	4/1*	Fike
3. A. Reed	55	-	1/4	Gipsy Moth
4. R. Bould	43.5	-	3/4	Fike
5. G. Lovejoy	34	0:47	5/3	Lockheed Vega

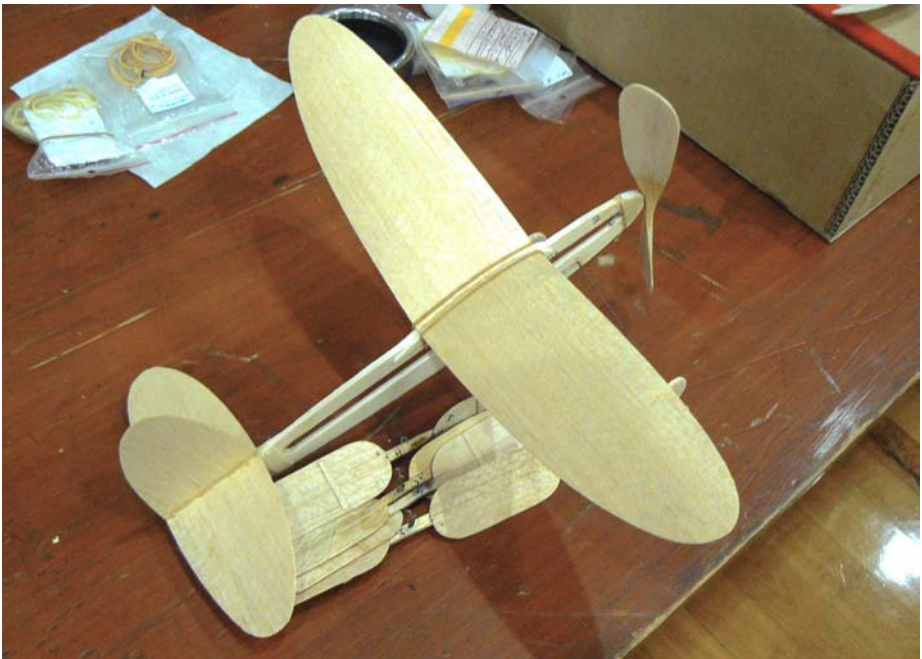
(*Flying decides tie-breaker)

Kit Scale

	Static	Flying	Total	
1. G. Lovejoy	90	57	147	Comet Taylorcraft Seaplane
2. D. Walker	88	58	146	Modelair Auster
3. K. Trillo	88	52	140	Dumas Spirit of St Louis
4. R. Bould	80	58	138	Veron Comper Swift
5. S. Mauger	68	56	124	KK Cessna
6. A. Reed	40	41	81	Peck Pietenpol Camper



Above: Just some of the scale models from Peanut Scale, Kit Scale and Open Rubber, in for static judging.



Top: Ricky Bould winding his Peanut Ol' Ironsides to the right of his disassembled Modelair Hornet. Beyond are his Kit Scale Comper Swift and Peanut Scale Fike.

Above: Angus Macdonald's Modelair Hornet in company with spare Hangar Rat props.

Drury Indoor night – Keith Trillo

16-10-17

This was a fairly quiet night as most of the rubber-powered scale modellers had other commitments, leaving free reign for the R/C flyers. Geoff Burgess flew the following models, PT17, Citabria, Extra and sports Cub. Steve Fifield and Brian Howell flew Embers with Brian coming to terms with flying in a confined space.

Lawrence Lynn had many good flights with his Corsair. Keith Trillo did trimming flights with rubber powered Fike and Spirit, then concentrated on flying his R/C flying Flea, which is easy to fly. By 9.30pm everybody had had their fill, so we had an early finish.



Upper: L to R Geoff Burgess, Brian Howell, Steve Fifield and Lawrence Lynn.

Above: Model line up for the evening.

Borel Monoplane – Mike Mulholland



I have recently recommenced work on the Borel Hydravion after a three month hiatus during which I caught up on all the house and family commitments I had ignored in the lead-up to the Richmond contest in early July. Also squeezed into that timeframe was the prototype build for the Avetek CT4 Airtrainer re-design.

Just to re-cap, the Borel was to have been my entry for this year's Reg Jude rubber scale contest in Richmond but at 1am of the morning we were due to depart I finally had to admit defeat and be satisfied with taking last year's model. At that point the major components still to build included the undercarriage / float struts and the lower kingpost and wing warping actuator. Other than that it's the usual plethora of small brackets and fittings that add so much depth to the model but which can be added over time if you just need to get flying!

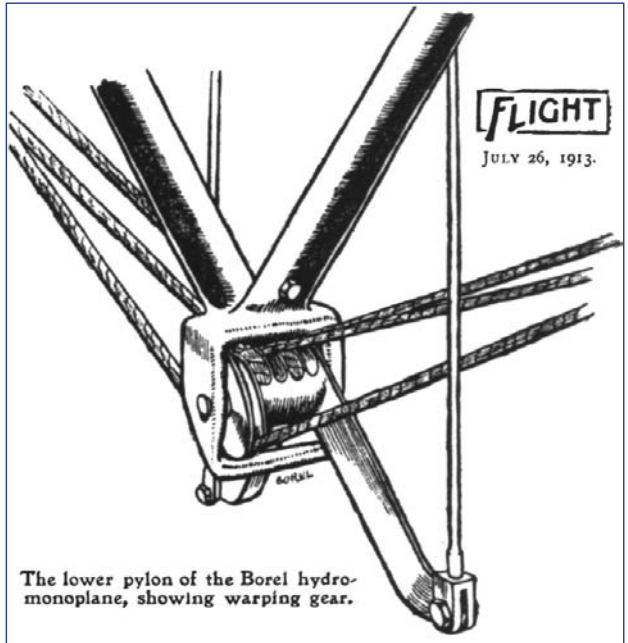
The undercarriage is worth a mention. On the original these struts were welded from flattened steel tube according to a report in Flight some time in 1913. This was a useful reference as we can deduce that the section would have been an oval but not aerofoil as such.



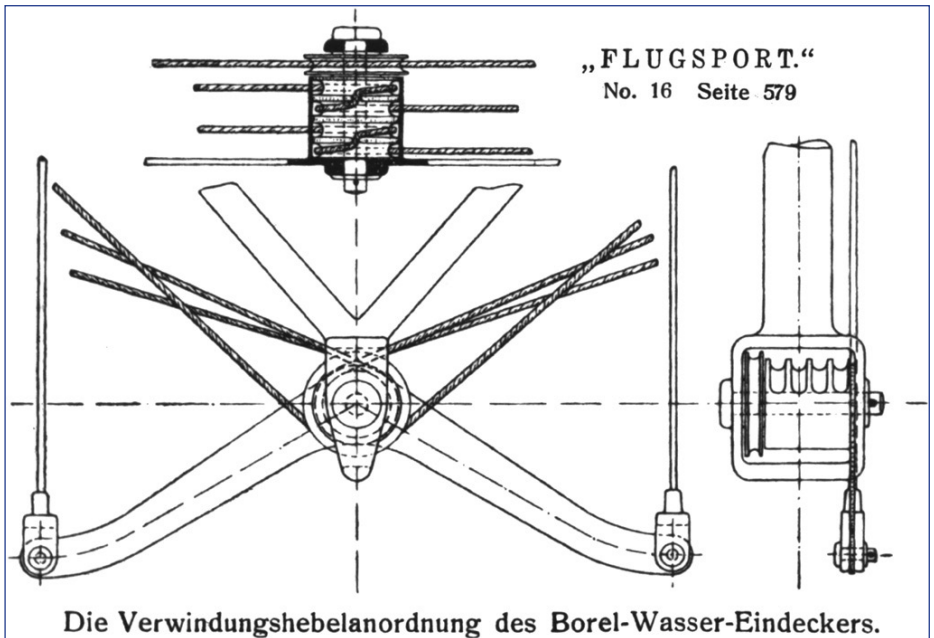
Contemporary drawings show a pronounced web or fillet at the welded joints of this structure. On the model I agonised over material choice for the struts due to the trade off of strength and weight. In the end I reached a solution that provides a reasonable compromise. I went with wooden slat blind wood, which I believe to be basswood or similar. The joints are pinned with very short lengths of 27SWG wire and cyano'ed. They are then filleted with long-setting epoxy which provides resilience and also simulates the welds very nicely. To mitigate the risk of damage that must be inherent in a floatplane landing on terra firma, I made the floats detachable and retained by small magnets. An internal rubber band provides additional insurance against losing one in the air – this would be a disaster as the nose weight is housed in the front of the floats!



The other major component (in the sense that it is both functional and highly visible), is the lower kingpost, which carries the wing warping mechanism. Again I was fortunate to have very detailed contemporary sketches of this from the early Flight article. On the real aircraft this structure consists of a flattened steel tube V joined at the apex by the control mechanism. On the model it needs to be strong enough to resist some unequal side loads from the rigging and the possibility of damage in the event of a knock. For the kingpost I went with shaped bamboo which gives both strength and flexibility. The wing warping mechanism is essentially a bellcrank attached to a drum that the control cable wraps



The lower pylon of the Borel hydro-monoplane, showing warping gear.

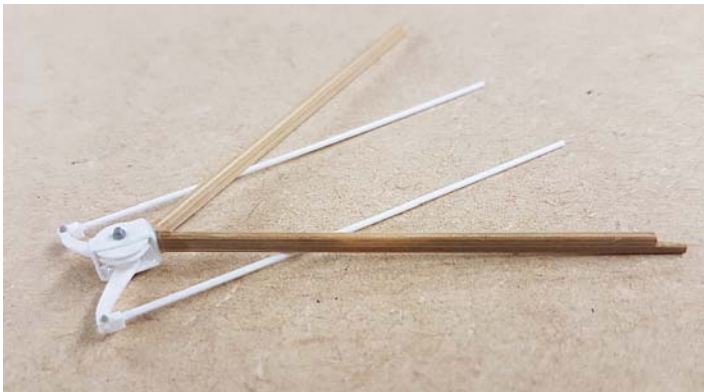


Die Verwindungshebelanordnung des Borel-Wasser-Eindeckers.

around. The bellcrank is actuated by push/pull rods extending vertically into the fuselage where they attach to the control column.

I used 10 thou and 30 thou styrene sheet to fabricate this part. Each part was roughed out and then finished with a knife, jewellers files and fine sandpaper. Some time ago I bought a pack of styrene nuts and bolt heads in different sizes from Alan at the Model Room in Papakura. These are moulded on sheets and you simply trim off the ones you want as you need them. They certainly are the cherry on top. My method for making the perfect discs that formed the pulley is very simple. I cut out squares of styrene a bit bigger than the diameter required and put a pin through the middle of the squares into a block of hard balsa near the edge of the block. I then run this up against my table sander and rotate the square with my knife. Guaranteed success!

The entire part took me close to a whole day to get right but apart from being an opti-visor task (the actuating arms of the unit span about 15mm), it was not especially difficult and certainly adds a lot to the overall effect. Finish is my old standby - matt black acrylic over-brushed with graphite dust when dry (pencil rubbed on sandpaper). This picks up highlights and gives a very realistic metal effect.



Those were the days - or were they?

- Guy Clapshaw

Who can remember the early days of aeromodelling in the 1950s, when 1/16th sheet balsa, rag tissue, piano wire, plastic wheels, pine engine bearers, balsa wood cement, celluloid, diesel engines, secotine and many hours of work went into the construction of a model 'plane? Models were free flight, there was no radio control and they invariably landed in thorn hedges or atop tall trees, necessitating much repair work after every flying session. Then control line came along, invented by Jim Walker, an American, and control line enthusiasts usually took home an undamaged model at the end of a day's flying, but free flight continued to be challenging.

A model project usually started with the order of a plan from one of the model aircraft magazines. I remember sending away one shilling and six pence (\$0.20 cents) to Aero-modeller magazine for a plan of 'Sporty', a very attractive semi-scale free flight biplane of about 800 mm span. After an interminable wait, the plan arrived and I was glad to discover it included a list of materials necessary to complete the model. So after a visit to the local newsagent/model shop to purchase balsa, music wire, glue and other essentials, Dad helped me trace the shapes of ribs, formers, fairings and wing tips and other components onto tracing paper before duplicating the shapes onto wood with carbon

paper. Then began the laborious and painful task of cutting out the balsa components with sharp edged Gillette razor blade, and the ply pieces with a hand held fret saw (no Dremels in those days!) If this all sounds very long and laborious it was !

The in the early 1950s, radio control came along. It is debatable whether it was 'radio control' or 'radio interference' because early R/C sets were single channel 'rudder only' and for some inexplicable reason, the aircraft's nose always dropped in a turn. And the model sometimes misbehaved when flying towards you, turning left when you wanted it to go to your right, and vice versa. The result was almost invariably a graveyard spiral into terra very firma until we learned about orientation.

The transmitter was a large box with an aerial protruding two metres vertically, and control commands were sent via a micro switch on the end of a long wire. One click was left rudder, releasing the switch returned the rudder to central, and two clicks gave you right rudder. Often in times of stress (like a vertical spiral dive) the operator forgot how many clicks he'd given, and the model would head happily away to the tallest tree of nearest deep pond. Aeromodelling was definitely not for the faint-hearted in those days !

But the thrill and challenge of flying drove us to produce our machines, and within ten years, multi-channel proportional control R/C sets became available, and models became more controllable when ailerons, rudder AND elevator were used to co-ordinate turns, and throttle and rudder could be employed to taxi the machine out to the air strip followed by an immaculate take off. Suddenly, model damage decreased as more channels became available and pilots' flying skills increased with experience. But a few problems still remained to make model flying challenging:

1. Models took many hours to construct but only seconds to reduce back to basic components.
2. Our diesel engines were hard to start, and few had reliable throttle control.
3. Saw dust and the smell of dope and diesel fuel were objectionable to other family members.
4. Tissue covering was a specialised art, and a bad covering job would ruin a model's appearance AND flying characteristics.
5. Workshop space (Mum's kitchen table) was only available after dinner.
6. Homework and domestic duties (tidying your bedroom, lawns, washing up) reduced available building hours, thus delaying completion.
7. Twists and warps caused by inexpert building affected performance badly.
8. Diesel fuel got everywhere - on your clothes, car seats, furniture, with consequent industrial action from top management (Mum).
9. Finance (pocket money) was always a problem.

So sometimes we dreamed of a time in the future when models might almost build themselves, engines would be easy to start and control, no oily exhaust residue contaminates everything, and shrinking dope and colour paint are odourless, instant



Any photos of my APS Sporty have disappeared. This illustration is from C. Rupert Moore's cover art for the February 1950 Aeromodeller in which it was featured.

finance is available 24/7, covering is wrinkle free, models are purpose built in factories by volunteer labour, thus removing the requirement for mum's kitchen table, radios are inexpensive and multi-channel (flight controls, throttle, flaps, air brakes, landing gear,) and some magic extra-terrestrial force will take over control whenever we become disorientated. Wouldn't that be wonderful?

* * * * *

OK then, let's imagine it's sixty years later - 2017, and our grandson Hugo is helping us pack our ready-built LT-40 into the station wagon. He didn't have to spend many hours building this model, so he did his homework last night while I checked the model over and installed the radio. Don't worry about fuel spillage on the upholstery, it's electric. Today is grandson Hugo's first flying lesson after a few hours on the flight simulator. We'll use the buddy box for safety and it'll be a lot of fun.

Grandma is humming away happily in the kitchen, making a batch of scones for us when we return from flying.

OK, let's get back to loading the motor car.

"Granddad, can we build a big scale model after I've learned to fly this one? A Piper Cub maybe?"

"Hmm, dunno Hugo. I'm on an old age pension, remember? How are we going to pay for it?"

Grandson Hugo pauses for less than a nanosecond. 'Put it on your credit card, grand dad,' he suggests. "We could collect it on our way home this afternoon and have it flying by next weekend.'

EUREKA! Now we have everything - multi-channel radio control, ready built models, engines that start easily, self stabilising systems, computer flight simulators, pre-covered models, no nasty fumes . . .

But this is only day dream, remember? . . . Or is it?

Wanted . . . Photographs of RNZAF MkIV Vildebeests

That's the Perseus version with the cowled radial engine. I am hoping that someone may have photos from family photo albums or other sources that I may borrow for scanning for my documentation folder.

Pictures of NZ123, NZ122 or NZ121 would really make my day!
If you have any of these treasures please let me know - Stan Mauger

Frank Zaic Yearbooks- Bill McGarvey

In the early 50s I became aware of the name Frank Zaic from references in *Aeromodeller* and *Model Aircraft* to his attendance at European World Free Flight championships, where he was no doubt collecting material and gathering correspondents for his Yearbooks. Little did I know that Frank's competition years were twenty odd years before and he had already produced half a dozen yearbooks, of which I was also unaware.



It was in the mid 50s that I acquired my first Yearbook which was the 55/56 edition distributed by the Betta Model Aeroplane Supply Co of New Plymouth. Drawings and articles in that edition made me realize how much there was to catch up on, notwithstanding it was recent or relatively ancient history. The sheer cleverness of the contributors led me to seek out old editions and collect new. The New Zealand content in each tended to confirm sketchy reports and word of mouth reminiscences of the formative years of AMAC and NZMAA at a time when Gestetnered copies of club bulletins and a dearth of historical reports were the norm. Likewise, the International content filled in some of the gaps in

American and English magazines, both of which tended to report on the basis of their national interests and not the full international scene.



Frank Zaic

From the early 60s international bulletins like S.C.A.T., Northern Area News, Free Flight News, and European equivalents, took over the role of reporting the predominantly free flight scene covered by the Yearbooks, while commercial magazines converted to R/C coverage and all its wonderful works. A detailed biography of Frank may be had from the AMA. Amazon has copies of his books available now, at very reasonable prices.

The editor of *Slipstream* asked me to write an article on the impact of the Yearbooks. What follows is essentially the

The 1935/36 Yearbook began a format of technical articles and drawings of successful designs. The technical articles were mostly Frank's work initially and reflected his technical education and curiosity about things mechanical and aerodynamic. Gradually Frank developed a large international correspondence which produced an increasing number of designs and designer's ideas from around the world. These included contributions from New Zealand. The 1937 Yearbook has New Zealand records accepted by the Auckland Aero Club for 1936, featuring illustrious names from AMAC.

The 1938 Yearbook has a letter from Vern Gray, describing the administrative structure of aeromodelling in New Zealand plus designs by himself (outdoor fuselage plus indoor fuselage), Bill Mackley (outdoor fuselage plus an elegant small glider) and Les Mayne (HLG). At nearly 200 pages the 1938 Yearbook was the typical size of Yearbooks to come and represented a huge amount of labour to produce.

At this point in his career the Second World War intervened and Frank saw service as ground crew with a B-24 squadron in Italy.

The Yearbooks continued after the war with the 1951/52 edition, the first hundred pages of which are devoted to aerodynamic control matters. This is followed for the first time by ten pages on Radio Control design and comment. Power models, in the Power Model section, have adopted the pylon layout and there are a selection of Iron Curtain country designs from Hungary, USSR and Rumania.

There is a selection of New Zealand models too including Bryan Marsh's Silver Eagle III, Vern Gray's record holding outdoor glider, Frank Bethwaite's A/2s and (curiously) Ira Pepperell's 1950 Nats winning speed model.

The 1953 edition saw Frank ease up on his aerodynamic control articles, leaving the theoretical side to the ever increasing number of graduate professionals emerging from universities. The quest to put more and more rubber into Wakefields saw both 'long fuselage' and geared models presented, including Hank Cole's 'Osolong' and Joe Bulgri's "Drifter".

Max Hacklinger's MP11 is drawn and accompanied by an article on artificial turbulence. The quest for pure glide performance was started by Ossi Csapa of Austria with his 1951 winner drawn in the previous Yearbook edition, and continued for a decade.

Our own Frank Bethwaite writes on his 'thermal rudder' on the A/2 drawn in the 1951/52 Yearbook and gives his thoughts on the spiral power climb of his Eta 29 power model.

The 1955/56 Yearbook opened with a long article by Frank Bethwaite on his preparation for and achievement of an FAI R/C Glider record of 3hr 28mins on 17 April 1955, and an FAI Power record of 3h 2min 6sec on 30 January 1955.

Les Wright describes the fairly revolutionary radio gear used in the record breakers and there is reference to Allan Rowe's R6B which was a sensation at the time. Readers with long memories will recall that Ian Barber of Wellington upped Frank's glider record a few years later (November 1960).

The power model section showed quite a few Clipper Cargo and Pay Load examples and a small drawing of a model by Hank Cole with a small variable incidence elevator tab to

control the climb. Shades of things to come.

The reduction from unlimited rubber to 80gm showed in one of two ways – those who put smaller motors in existing designs and added ballast, and those who designed anew. Alan King's single bladed, 13 strand, twin finned, 1954 winner stands out. Standout power model for me is Mike Gaster's 'Gastove' 1955 winner and high climber at Finthen. Rudi Lindner's 1954 and 1955 Nordic winners must have made an impression on me because I eventually built two of the 1955 version and made the 1961 New Zealand A/2 team for Leutkirch, Germany.

The 1957/58 Yearbook again opens with an article by Frank Bethwaite, this time asking for advice on a control problem and presenting a design for an R/C flying boat.

Having built a couple of small flying boats and formed opinions on the best layout, I think the Bethwaite design is spot on. Having the wing shoulder mounted keeps it low, allowing the tip floats to hit the water and correct any wing tipping without having to be mounted on vulnerable stalks below the wing. The high tail is clear of spray and prop clearance is achieved by a pylon mounted motor.

223 pages later the index notes a HLG by Lugg-Watson of AMAC and an A/2 called 'Solar Mist' by Don Watson, which looks remarkably like a 'Satu'.

The 1959/61 Yearbook is a 280 page effort with designs and articles from all over the world. Fred Militky of Germany opens with the 'Electric Free Flight Story' including an expanded sketch of his 'Silentius'. Following this is a description of Ian Barber's World R/C Glider Duration Record in November 1960 of 9hr 4 min from the Upper Hutt Aeromodellers.

The 1960 Cranfield Power flyoffs are described round by round and the 'Famous Five' designs drawn in the Power section. A reduction of Wakefield rubber allowance from 80 to 50 grams is reflected in designs shown in the Rubber section. It was noticeable that power train details were receiving attention in the form of substantial shafts to retain straightness, ball race mounted to reduce friction. Bond Baker's 1958 winner is shown along with Bill Cook and John Malkin's 1959 Wakefields from the Upper Hutt club.

The Glider section opens with Juri Sololov's A/2 2nd in 1957, then Gerald Ritz's 'Continental' winner in 1959. Ron Moulton then describes the Finnish team's infallible method for detecting thermals by waiting for the right kind of breeze, and wearing lots of exposed skin. Bill Cook's Nats winning A/2 and Pat Clark's A/1 'Konini' comprise the New Zealand content.

The Indoor section has a nice collection of tissue and microfilm examples in various sizes. Most would be suitable designs if real Indoor ever got going again in New Zealand.

The 1965/65 Yearbook was the last. Fred Militky writes about his first flights with an indoor electric R/C model in a salt mine 660 ft below ground. RC gliders get a burst, then the Power section presents the 1963 and 1965 World Champions' plus the 1963 runner-up. The 1963 contest was at Weiner Neustadt in Austria and I flew Wakefield and A/2 in the New Zealand team. The power flyoff was interesting because Frigyes (the winner) had a fast, flat, 21/2 turn climb with the Moki singing its heart out, and Galbreath

(runner-up) a near-vertical straight climb. I went upwind some distance to get a good view of their respective climb heights and it turned out the winner got higher by about 20-30 feet on the final flight.

Paul Lagan's '18 Tons' and Harry Winn's 65 model both appear as entries in the 1965 contest in Finland, while with Brian Roots' 'Solar' payload model joins a large selection of 1/2A designs.

In the Rubber section the 1963 and 1965 Wakefield winners appear by Loffler and Koster respectively. Vladimir Zapachny's interesting Russian model is shown, along with Polish and Italian models incorporating egg box and diagonal structures. John Malkin's 'Miser' and Devon Sutcliffe's 'Eleanor Too' make an appearance for New Zealand and a dozen Coupe d'Hiver designs finish up the section.

The Glider section starts with the 1961, 1963 and 1965 World Champ winning gliders by Averianov, Erichsen and Bucher respectively.

My German proxy in 1961 sent me a description of how solid balsa wings were constructed at the time. Erichsen's 'Miss Molly' used this form of construction and was the only one to max out at Weiner Neustadt in 1963.

At the conclusion of the A/2 event an amazing demonstration was put on by the winner and his helper. The helper was a powerful young man and Erichsen sat on his shoulders holding the model while the helper charged upwind. Erichsen launched the model from the helper's shoulders, then paid out line until the model was released high overhead.

Among the glider designs are examples by Brian Roots of Wellington Club, a Jedelsky A/2 by Angus Macdonald and a Jedelsky A/1 by John Malkin. The Indoor section had a full selection of models by designers well known at the time. This included the 'Diddle Dip' by Charlie Sotich and the 'Breeze' by Larry Ranger, both Easy Bs and the latter popular in AMAC. The outdoor HLG section includes the Zingara IV by Gary Bowden, an iconic New Zealand design made world famous in New Zealand by the Roskill club.

My collection of Zaic Yearbooks has been, and continues to be, a source of inspiration and a reminder that there is very little someone else has not thought of before. Everyone should put them on their Christmas wish list.

Reference

Academy of Model Aeronautics (2005). *The AMA History Project Presents: Autobiography of Frank Zaic.*

AMAC Static display Ardmore 12th November

The Club will be putting on a static display of models at the **Ardmore Warbirds Armistice Day**. Contact Keith Trillo on 298 4161 if you can supply models or assist at the stand.

Calendar **November**

For information about the location of club fields and cancellations or postponement of flying, contact the field stewards.

KARAKA

Sundays

Tomboy Extravaganza (for Club points)

Flying can take place between 10am and 2pm
(9am to 3pm for gliders and other silent models)

NDC RC Vintage events

E Rubber Texaco, 1/2E Texaco and Classic IC Duration
(also see Hoteo FF list).

Aggregate model trimming, Cloud Tramp trimming

Karaka Steward

Keith Trillo 09 298 4161 027 4607180 careith@hotmail.com

HOTEO

Call the field steward if you would like to go up and do some free flight and vintage flying there.

NDC FF Vintage events (also see Karaka RC list)

P30, Catapult Launched Glider, Hand Launched Glider, Coupe d'Hiver, Free Flight Glider Duration and A1 Glider.

Hoteo Steward

Paul Evans 479-6378 ziply@xtra.co.nz

AKA AKA

Saturdays & Sundays

Intending fliers should phone Brett Naysmith to confirm that there will be flying.

Instructors

Brett Naysmith

Aka Aka Steward

Brett Naysmith 09 235 8803 brejo@xtra.co.nz

CONTROL LINE

As advised

Control line flying
Intending fliers should phone Stan Mauger to confirm where and whether there will be flying.

C/L Steward

Stan Mauger 575 7971 stanm09c4@gmail.com

INDOOR EVENTS

Ellerslie

Tuesday November 14

Michael Park School Hall

Indoor radio flying (7.00-10pm)

Drury

Monday November 20

Drury School Hall

Hangar Rat (7.30 - 10pm)
- For Club points.

Indoor Steward

Bryan Spencer 570-5506 bspencer@xtra.co.nz

Carterton

January 3-7

New Zealand nationals

refer www.modelflyingnz.org website

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Club subscriptions

NZMAA Affiliation is mandatory for Club flying

Senior \$50 (+\$75 NZMAA) **Family** \$55 (+\$75 NZMAA)

Junior \$10 (+\$20 NZMAA) **Social** \$40

Intending members with current NZMAA affiliation pay only the AMAC sub

Please make payments to

The Treasurer Auckland Model Aero Club

Mike Fairgray,

3 Kanohi Tce Mangere Bridge 2022, Auckland

NEXT CLUB MEETING AND NATTER NIGHT

Monthly club meeting

7:30 PM

Monday November 6, 2017

ASME Clubrooms, Peterson Reserve, Panmure.

Theme: Unorthodox model aircraft

**Your current projects, models, plans, engines and
photographs are also welcomed for the table**

Trading table:

Buy, swap and sell

Visitors or intending members welcome