



# ScaleNews

2/19

Official Newsletter for Free Flight Scale flying in New Zealand  
produced by the Free Flight & Control Line Scale SIG



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# Nationals programme **Free flight scale**

December 30

6.30 – 8.30am

9.00am

Registration 12.00noon until 6pm

6.30pm

December 31	Day 1	Power Scale Kit Scale	RC1 with RC fliers RC1 with RC fliers
January 1	Day 2	Rubber Scale CO2 & Electric Scale	Free flight field Free flight field  Control line scale on grass A&P grounds.
January 2	Day 3		Indoor events in the Hall Peanut Scale, Kit Scale, Open Rubber Scale

## F4A Power Scale Team Trials at the Nationals, for next year's Trans Tasman.

The New Zealand Team to contest the Hope-Cross Trophy for F4A Power Scale class at Richmond, NSW in July 2020 will be selected from the highest scoring entries in this class at the 2020 Nationals at Carterton. If there are insufficient competitors available from Nationals F4A placings, the Free Flight & Control Line Scale SIG will co-opt other free flight power scale fliers deemed to be suitable to fill these places.

Free Flight contest day

# Indoor flying at Morrinsville

**Sunday October 6, 2019**

- **F4D Rubber Scale, F4F Peanut Scale**

Flown to FAI rules.

Refer to link on MFNZ website under Scale FF & CL SIG

- **Kit Scale**

Flown to rules on MFNZ website under Scale FF & CL SIG

- **Hangar Rat, Hand Launched Glider**

MFNZ rules

- **Modelair Hornet**

AMAC rules

## Come and join us

**Venue:** Westpac Stadium Hall, 21 Ron Ladd Place, Morrinsville

**Programme:** **9.45am** Arrive and unpack ready for start time  
**10.00am** Hangar Rat, HL Glider and Modelair Hornet Scale static judging until 12.30pm  
**12.30pm** Peanut Scale, Rubber Scale, Kit Scale  
**3.45pm** Prizegiving.  
**3.55pm** Hall vacated.

**Fliers Entry: \$20.00**

## Spectators welcome

Contact Stan Mauger 09 575 7971, stanm09c4@gmail.com for Hornet rules and more information

**NEXT SUNDAY**



Organised by the Auckland Model Aero Club Inc  
in conjunction with the Scale Free Flight & Control Line SIG

A periodic publication with news of interest to free flight and control line scale modellers in New Zealand and beyond.

## Editorial

Free Flight & Control Line Scale  
Special Interest Group  
of Model Flying New Zealand

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Mike Fairgray (Treasurer)  
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George Fay  
Mike Mulholland  
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The opinions expressed in this newsletter are not necessarily those of the editor or the Free Flight & Control Line Scale SIG or of Model Flying New Zealand.

### COVER PHOTOGRAPH

George Fay's Rubber twin PE2 had the sky to itself in this view at the Richmond Scale Rally hosted by the NSW Free Flight Society last July.

Thank you to all who responded positively to the first Scale News. It's now time for another issue. This month I am pleased to bring my reports on The Richmond Scale Rally held in the middle of the year, and the British Model Flying Assoc. August Nationals where Scale free flight and Radio Control classes were flown. As those who have ventured overseas will agree, making the journey by air with model boxes and other luggage, calls for planning and effort. However, it is worth it all, otherwise why would we go again and again? Whilst there really is no substitute for making contact in person with other modellers in our same flying discipline, I hope that the reports will give a record of models and aspects of the flying.

Next year's Richmond free flight scale weekend in July will be for the two now established trophy events. The Hope-Cross Trophy is awarded for F4A power scale in a Trans-Tasman Trophy Team event. It is in recognition of the work that David did along with the late Lloyd Willis and with Martin Dilly, in promoting this as a provisional FAI class. The Reg Jude Trophy will also be awarded in remembrance of this well known free flight scale modeller. New Zealand flyers wishing to be considered for the team should plan to fly in F4A Power Scale at the January Nationals. See the details opposite.

Closer to home, the Morrinsville Indoor contest day is almost upon us. The FF & CL Scale SIG looks forward to your support and participation to ensure the continuity of the annual event. It is also a good opportunity to test models under contest conditions prior to the Indoor scale Nationals events.

A programme of Nationals Free Flight Scale events and venues is included opposite. I hope that this year we will see good support of the classes offered. A notable addition this year is the unofficial Memorial Flight Class. Details are listed on page 13. I hope that some models will be brought to help to get this class under way.

I have put together much of the content of this issue but like most editors would welcome more contributions from others. The building articles were really appreciated, but it would be great to have many more for issue No3. I see the newsletter as also being a means of sharing photographs of aircraft that may be good scale modelling subjects. I am hoping that the Auster presented this month will be of interest. There are of course, many more subjects, especially local historic or current aircraft that would be worthy of inclusion in future issues. At a simpler level, please send in photos and brief accounts of any scale model flying that may be of interest to others. I would also welcome descriptions of building processes that may enable us to build better models. Scale News can help to promote free flight scale modelling, but it needs your support to do this.

Good luck in Morrinsville and Nationals events . . .

Stan Mauger



SCALE MODELS AT A PREVIOUS MORRINSVILLE DAY  
Mike Mulholland brought these beautifully built Kit Scale, Open Rubber Scale and Peanut Scale models.

# Richmond Free Flight Scale Rally NSW

Since the first issue of Scale News, a group of New Zealand scale flyers have joined their Australian counterparts at Richmond, West of Sydney for the annual free flight scale event there. This year it was a scale rally, which did not exclude competition flying. Next year it will be the Hope Cross Trophy Event for F4A power Scale class, in a contest between New Zealand and Australian teams. As those familiar with the flying site will attest, it is a turf farm with short cut grass, still springy enough for landings. There is usually a bare earth area as well, excellent for take-off runs. As usual both days started with fog (sometimes it's a light mist) that burnt off during the morning and as usual morning conditions were perfect for flying free flight scale classes. Whilst there was steady flying activity in the competition classes, many models were also flown for the pleasure of enjoying the venue by the crowd of twenty or so free flight scale enthusiasts there.

A change this year was the introduction of static judging available on the day prior. Many had their models processed on the day before, allowing more time for flights. As with last year results were announced at a lunch on the field on day two. The Richmond weekend provides opportunity to make contact with other scale modellers, on the field and also at the Saturday night dinner.



TOP LEFT: Phil Mitchell attempting a take-off with his Sopwith 1½ Strutter.

TOP RIGHT: Phil's Electric Catalina twin.

CENTRE LEFT: Stan Mauger's Vickers Vildebeest on the judging table.

CENTRE RIGHT: Peter Jackson with one of his WWI biplanes for small diesels. This one was an SE5a for a Schlosser.

## Rubber Scale

All Models entered in Rubber Scale recorded qualifying flights and the standard of both building and flying was high. Phil Warren had three unusual model subjects including a Portsmouth Aerocar Twin, a Peyret Taupin and a Lemberger LD20B. The Aerocar managed modest flight times, but his Taupin flew well despite its tandem wing arrangement. The real performer, however, was his Lemberger that put him in top place. With only three points to separate it was Mike Mulholland's splendid Sopwith Triplane built from the VMC kit and beautifully detailed. It managed good duration and looked great in the air. Ricky Bould was also delighted with the way his new Westland Widgeon performed, out for its first airing. Stan Mauger brought out his now elderly Fairchild F-24 that still managed fifth placing, closely followed by Reg Towell's Caudron Racer, Roy Summersby's Focke Wulf 152H and Keith Murray's Taylorcraft O-57.

## Kit Scale

The inclusion of Kit Scale was an impetus to new models appearing. Mike Mulholland stole the show with his delightful Keil Kraft (3/6D) Lysander. Many have gazed at this kit and doubted its ability to fly, give the tiny wing area. Mike demonstrated how well this model can fly if built light enough. His model was a worthy winner of the event. Yolande Mulholland and Noelene Lyon took second equal with their two beautifully built kit scale models that they had dubbed 'Audrey' Auster, an Avetek AOP9 and 'Betty'

Beaver a DHC Beaver from a Dumas kit. They each won a wager of \$100, by two modelers who last each committed to building a kit scale model for the event but didn't come up with the goods! Both Keith Murray and Phil Warren were close on their heels with Taylorcraft and Bellanca, respectively. Maris Dislers was unfortunately whisked away for medical care before those of us arriving on Day One could see his Bird Dog flying. Roy Summersby's Nieuport 17 was one of the few i.c. entries in Kit Scale.

Several of the New Zealand contingent have been attending Richmond scale weekends as far back as 2004 so are now familiar competitors. There is a great spirit of camaraderie which makes these events most enjoyable and highly recommended for anyone with an interest in free flight scale flying.

If you wish to join those coming to Richmond in 2020 get in touch with anyone on the Free Flight & Control Line Scale SIG committee. The team trials for the 2020 Trans Tasman will be held at the Nationals in January.

STAN MAUGER



TOP LEFT: Phil Warren's Lemberger LD20B climbing away nicely in Rubber Scale.

CENTRE LEFT: Reg Towell receiving some assistance with his Kit Scale Caudron Racer.

CENTRE RIGHT: Phil Warren setting up his unorthodox Peyret Taupin.

LEFT: Don Spray had a number of flights over both days with his CO2 powered Piper Pacer.

LOWER RIGHT: George Fay with his Pe-2 between flights.





TOP: Ricky Bould's CO2 Comper Swift lived up to its reputation for consistent smooth flights.

CENTRE LEFT: Brought out for another day's flying, Stan Mauger's Fairchild F-24 flew well in the calm conditions.

CENTRE RIGHT: Roy Summersby starting his Kit Scale Nieuport 17 whilst conferring with Terry Bond.

ABOVE LEFT: Phil Warren's Portsmouth Aerocar Rubber Twin

ABOVE RIGHT: Phil's Bellanca Skyrocket from the Flyline plan.

F4A Free Flight Scale	Model	Score	Place
Phil Mitchell	Sopwith 1/2 Strutter	1572	1
Stan Mauger	Vickers Vildebeest Mk4	1467.5	2
Roy Summersby	Royal Aircraft Factory FE8	1359	3
Bob Craine	Curtis Kittyhawk P40N	1281.8	4
Ricky Bould	Auster AOP9	957.8	5
Roy Summersby	Sopwith Swallow	899	6
Tery Bond	Royal Aircraft Factory SE5	872.9	7

#### Outdoor Rubber Scale

Phil Warren	Lemberger LD20B	1476	1
Mike Mulholland	Sopwith Triplane	1473	2
Ricky Bould	Westland Widgeon	1325.4	3
Stan Mauger	Fairchild Ranger	1280.7	4
Reg Towell	Caudron Racer	1260.5	5=
Roy Summersby	Focke Wulf 152H	1260.5	5=
Keith Murray	Taylorcraft O-57	1221.7	6

#### Kit Scale

Mike Mulholland	Lysander	150.1	1
Yolande Mulholland	Auster	146.6	2=
Noelene Lyon	DHC-2 Beaver	146.6	2=
Phil Warren	Bellanca Skyrocket	144	3
Keith Murray	Taylorcraft	142.9	4
Maris Dislers	Cessna Bird Dog	134	5
Roy Summersby	Nieuport 17	133.5	6
Ricky Bould	Comper Swift	108	7
Phil Mitchell	Howard DGA6	95	8
Warren Leadbeatter	P40 Warhawk	89	9
John Clements	Druine Turbulent	67	10
Reg Towell	Erco Ercoupe	58	11



ABOVE: Yolande Mulholland and Noelene Lyon both pleased with second equal placing and wagger win, in Kit Scale.

ABOVE: Mike Mulholland about to launch his Sopwith Triplane in Rubber Scale, a great flyer.

# BMFA Free Flight Scale Nationals

Even though I have attended the August Bank Holiday weekend BMFA free flight scale nationals a number of times, I never cease to be amazed at the scale of the contest. The venue, RAF Barkston airfield located in Lincolnshire near Grantham, becomes a camping/caravan ground as well as a space large enough to hold concurrent control line and scale events. Apart from the range of control line events, both radio control and free flight scale classes are contested. Radio Scale is flown throughout the day and the three main free flight scale classes – IC Power, Rubber power and CO2 & Electric, in two sets of two rounds in the evenings over two days. Other free flight scale classes for APS and MA plan designs, kit scale, and Credgington Trophy for flying only, all had been flown at a May Nationals also at RAF Barkston.

Static judging for free flight scale events was completed during the day, on the first day and whilst this was in progress there was time to wander around the trade tents and avail oneself of modelling items hard to get without resorting to web purchasing.

There was also the opportunity to wander around the amazing models in the static judging tent and to meet other competitors, many of whom have previously only been known as names on modelling magazines or on websites. There is also the Sunday Swap meet that could result in some great buys!

This year the wind was stronger than we tend to fly in, in our own nationals, but with the opportunity to post pone over several days, we have a better chance of getting better weather. The airfield location offers two great advantages making the journey worthwhile quite apart from the rest of the experience – an amazing runway, wide enough for take-offs at any angle and a huge grassed area around runways, suitable for model flying. Providing engines are either easy starting or at least kept warmed up, the rounds system presents no real problems for the IC power class. The question is always whether to hold

back on putting in flights when conditions seem breezy, or to ensure that some attempts are made anyway.

One interesting change in the briefing this year was a reference to electronic stabilisation aids. Working on the principle that pendulums and other aids have been used in free flight scale models for many years, a more modern electronic version should be allowed. Since the Nationals this topic has been debated on Hippocket with viewpoints supporting both sides of the fence.

Despite the sometimes turbulent conditions there were a number of great flights. Models using stabilisation aids flew without the usual weather created disturbance and such aids certainly make difficult subjects like some low-wingers more controllable. The Nate and Zero flown by Ivan Taylor and Steve Glass's DHC Chipmunk all flew impressively with assistance from stabilisation control, but the standout flight of the day for me was Ivan Taylor's TSR2 electric ducted fan powered model which flew a fast rock steady climb and cruise and then a very scale-like descent.

Ricky should be happy with his well-proven Comper Swift in CO2/Electric that handled the breeze well and looked great in the air. Ricky's AOP9 and my Vildebeest proved that they still need work. Nevertheless it was a great Nationals and well worth all the work in getting models there.

STAN MAUGER



*ABOVE: Stan Mauger's Vickers Vildebeest during run up before flights.*

*RIGHT: Ricky Bould pleased with his Comper Swift's flights.*

(Photos: Alex Whittaker)







*TOP: Andrew Hewitt's Eindexer was beautifully detailed and flew well enough to make third place.*

*CENTRE: Chris Brainwood's Hawker Tomtit handled the conditions well and looked great in flight.*

*LEFT: Derek Knight's electric powered Tiger Moth had a number of nicely made details and was top in static as well as winning CO2/Electric event.*

*(Photos: Alex Whittaker)*

## Results

### Scale Free Flight IC

1. B. Dennis	RE 8	1595.00	1574.00	3169.00
2. S. Glass	IC DHC-1 Chipmunk	1690.00	1353.00	3043.00
3. A. Hewitt	Fokker EIV Monoplane	1515.00	1501.00	3016.00
4. I. Taylor	Claude ASM2b	1675.00	1324.30	2999.30
5. G. Tilson	Fokker EIII	1630.00	1246.00	2876.00
6. C. Brainwood	Hawker Tomtit	1282.50	1445.00	2727.50
7. M. Smith	Sopwith Snipe	1000.00	1590.00	2590.00
8. I. Lever	Auster AOP9	930.00	1273.00	2203.00
- S. Mauger	Vickers Vildebeest	0.00	1412.00	1412.00
- B. Lea	Spartan Arrow	0.00	1312.00	1312.00
- R. Bould	Auster AOP9	0.00	1202.00	1202.00

### Scale Free Flight CO2/Electric

1. D. Knight	DH82a Tiger Moth	1745.00	1794.00	3539.00
2. M. Smith	Handley Page	1947.00	1522.00	3539.00
3. B. Dennis	Caproni Ca100	1875.00	1435.00	3310.00
4. I. Taylor	TSR2	1700.00	1478.00	3178.00
5. R. Bould	Comper Swift	1500.00	1167.00	2667.00
6. S. Glass	Hawker Typhoon	990.00	1441.00	2431.00

### Scale Free Flight Rubber

1. I. Taylor	Zero	1780.00	1526.00	3306.00
2. B. Dennis	Jungmann	1410.00	1569.00	2979.00
3. D. Knight	Auster	1535.00	1189.00	2724.00
4. P. Fardell	Comte AC-4	1800.00	801.00	2601.00
5. P Briggs	SE5a	0.00	963.00	963.00



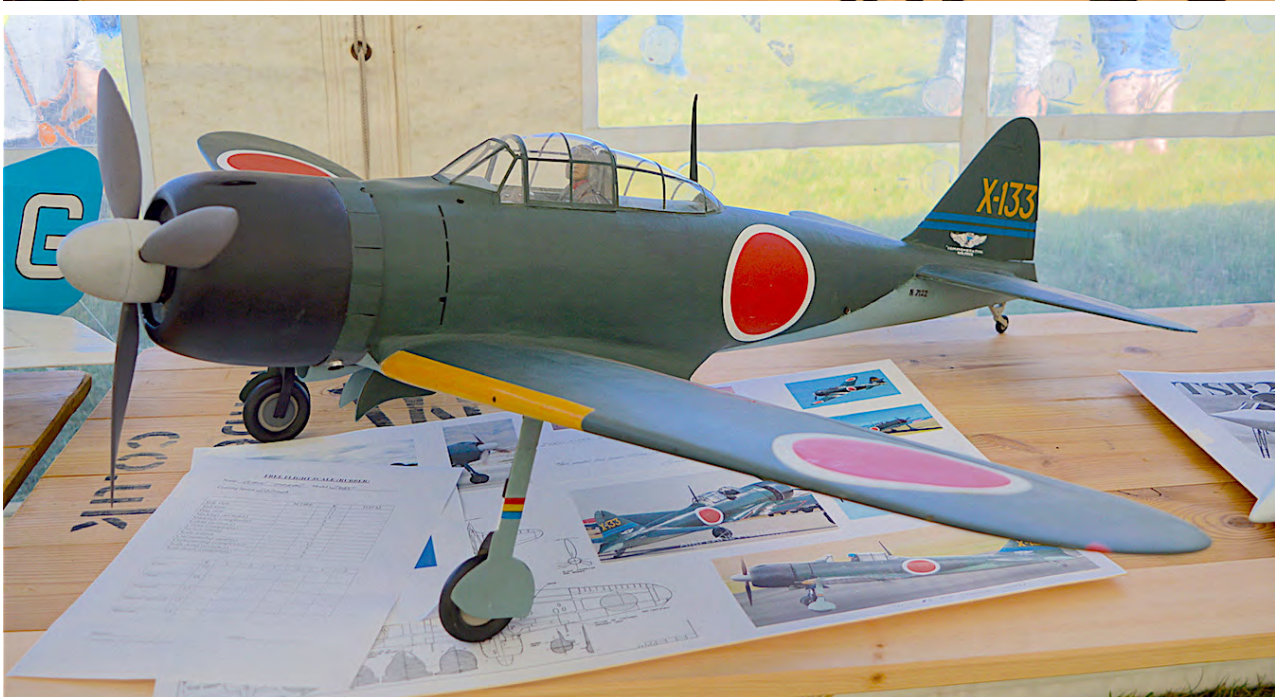
ABOVE: Ivan Taylor's Claude ASM2b with nicely detailed weathered finish, awaiting the judges' scrutiny.

OPPOSITE

TOP: Bill Dennis took top honours again in Super Scale with his well proven RE8.

CENTRE: Steve Glass had his DHC Chipmunk flying very smoothly in breezy conditions.

RIGHT: Ivan Taylor's Zero gained a high flying score and with good static marks won Open Rubber.





TOP: Ricky Bould 's AOP9 had been developed further since last Nats, with the aid of factory drawings for tricky bits.

ABOVE: Mike Smith's superb Handley Page twin awaiting static judging.

RIGHT Pete Fardell entered his attractive Comte AC-4 adapted from the Aero Modeller plan, in rubber. It flew nicely.



# New Event

## Memorial Scale

### A new class for older models

#### Memorial Flight - an unofficial event at the Nationals

In order to trial the provisional rules for Memorial Flight, a new free flight scale class, this will be flown concurrently with power scale and rubber scale events at the Nationals. This new event is to allow flyers to fly models constructed by other modellers now no longer with us or able to complete them. The class is for flying only. The usual requirement for the model to be built by whomever enters it is therefore not required in this scale class. It is hoped that many interesting or even yet to be completed models built by others may be brought out to be flown once again.

#### Memorial Flight Provisional Rules

1. Models must be built by someone other than the flyer entering them.
2. The 'Builder of the model' rule does not apply.
3. There will be no static judging.
4. Models may be engine, electric, rubber or CO2 powered.
5. Flying is based on Kit Scale flying rules with some adjustments to K factors as below.

They are as follows:

Take-off (optional),	Up to 20 points
Initial climb,	Up to 20 points
Descent and landing approach	Up to 20 points
Realism in fight	Up to 40 points

(speed, 'sit', stability and character).

Contact Stan Mauger, FF & CL SIG Chairman for further information

Phone +64 9 575 7971

Email stanm09c4@gmail.com



Jack Godfrey built and flew the Stahl Stinson Voyager and Fairchild Ranger both now to be flown by another flyer, in Memorial Flight class.

# Auster MkI/III

Here is a gem for all Austerfiles. The Auster I is about the simplest version of the basic Auster aircraft and the MkIII, if I am not mistaken, is essentially the same aircraft with a more powerful engine. The photographs of the MkI were taken at Hendon recently and Australian readers will no doubt be able to find existing MkIII aircraft to photograph and model. The AutoSketch drawn plans were produced by Derek Buckmaster some years ago and are still available as tiled pdf pages that build into a small rubber powered model, from <http://dbdesignbureau.buckmasterfamily.id.au/plans.htm>

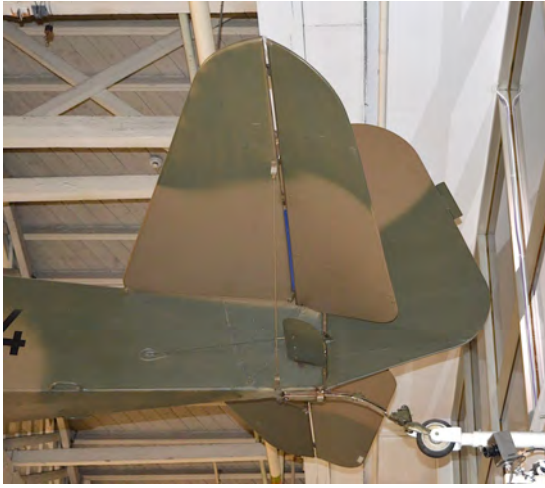
Go to this source for the remaining plan pages. I have plenty more detail photographs of the MkI as jpgs, if anyone would like them. Incidentally, with the move by some museums to reduce their collections and going to interactive entertainment aimed at family visitors, it becomes increasingly important to photograph favourite aircraft whilst they are there.

STAN MAUGER

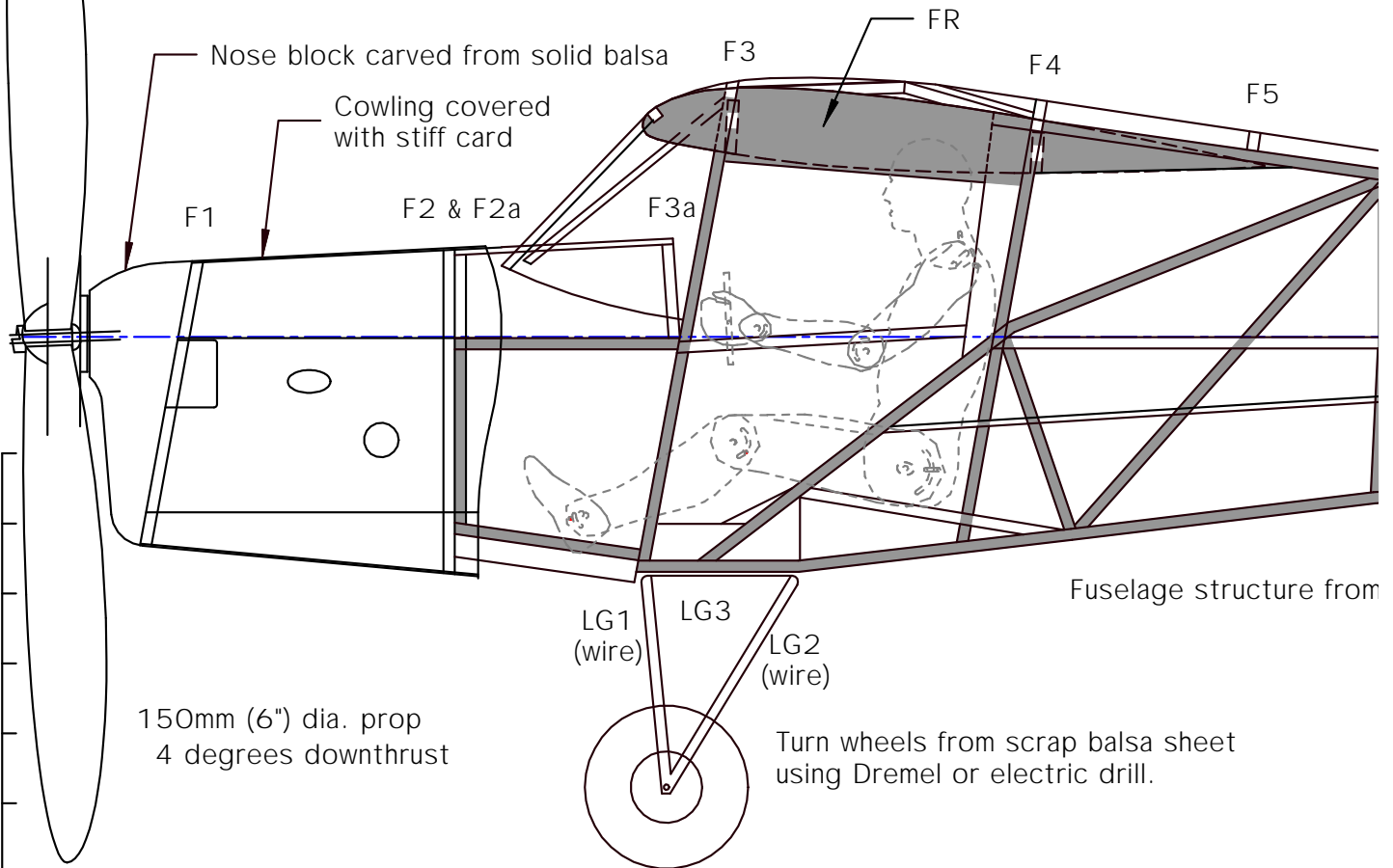
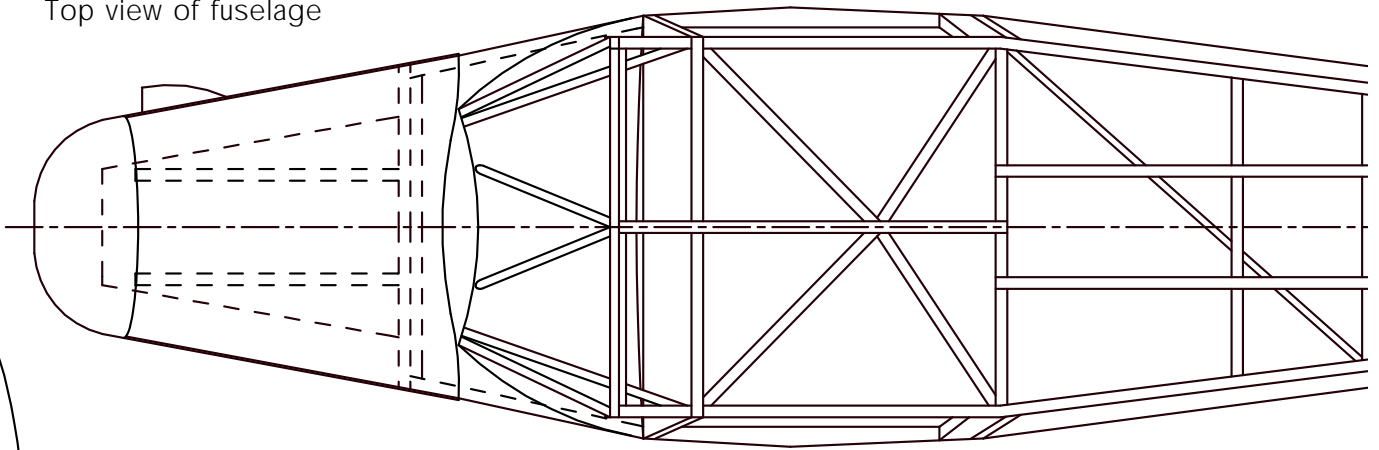


*Here are a number of useful views of the Museum's Auster MkI*

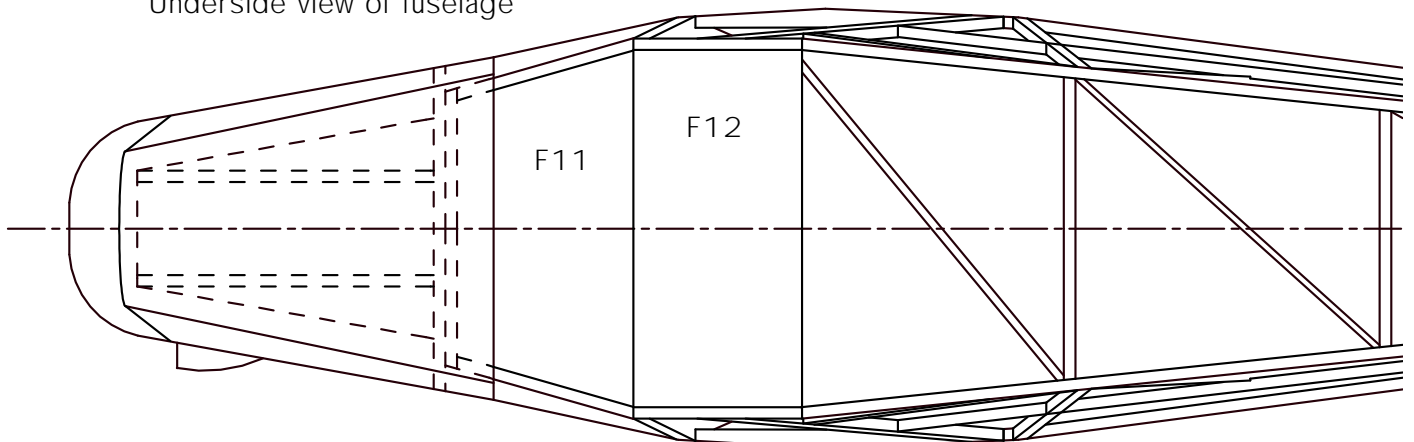




Top view of fuselage

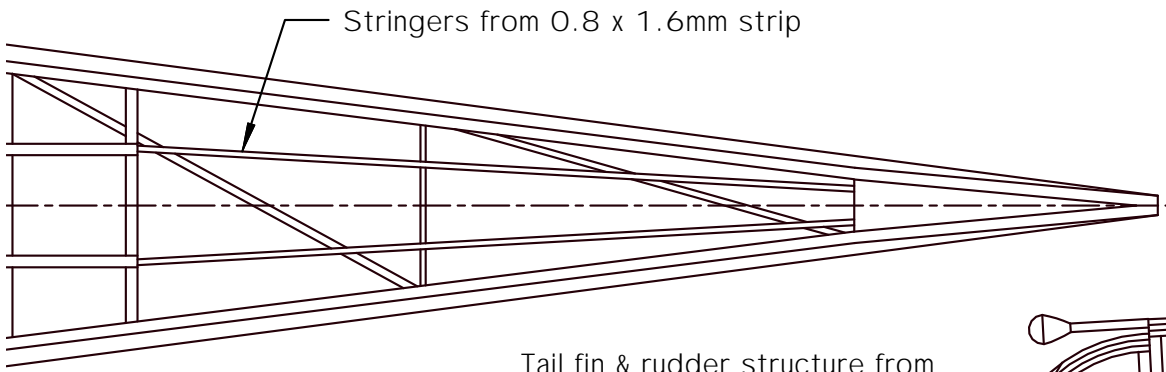


Underside view of fuselage

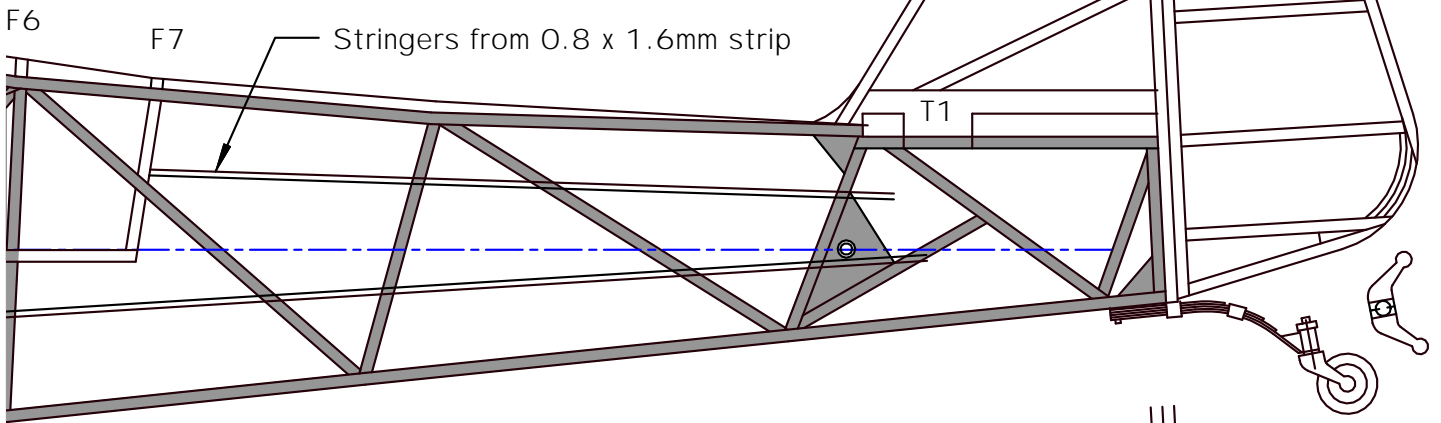


Reference scale in cm

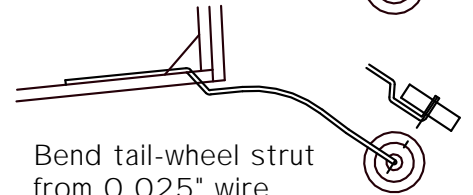




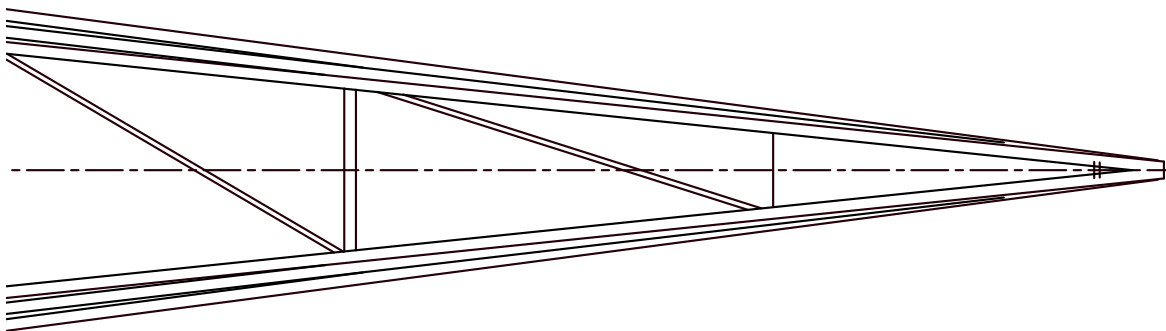
Tail fin & rudder structure from 1.6mm square. Curved outlines laminated from 3 layers of 1.6mm x 0.8mm balsa.



1.6mm square unless noted



Bend tail-wheel strut from 0.025" wire. Laminate spring from thin card over wire.



# Builders' models

## John Henson's Spitfire Mk

John Henson has sent a photo of his 30" span rubber powered Mk 21 Spitfire. This is not a recent model, it is of the Griffon contra prop aircraft, and to be truly scale it of course has retracts. It uses a gearbox to run the contra props. The retracts work with a pair of release arms and a small clockwork timer. The model is a stable flyer but needs long grass to ensure that the contra-props don't get broken.



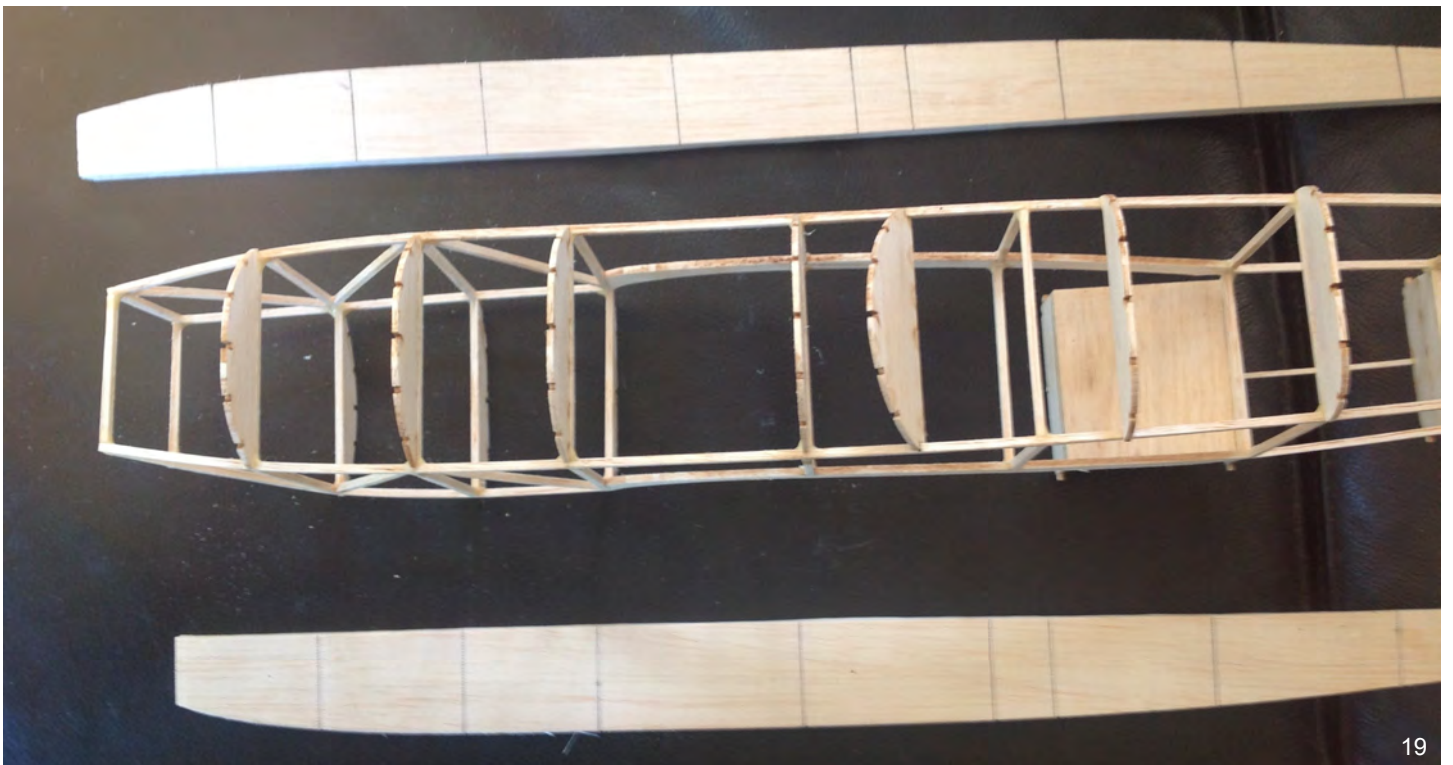
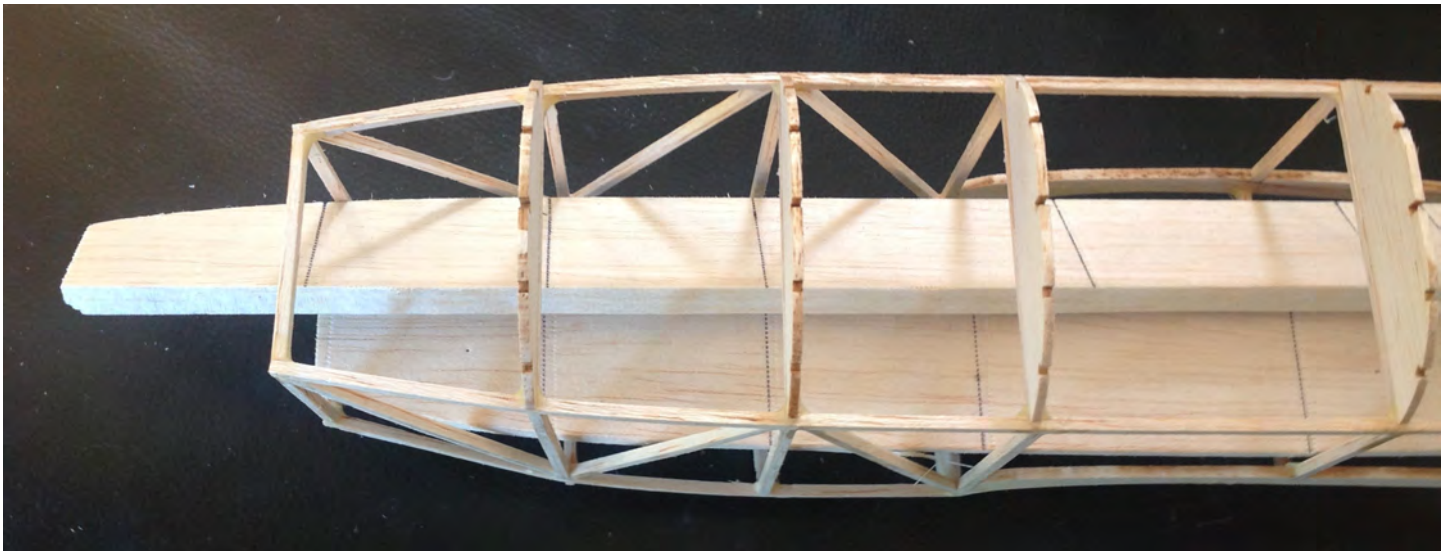
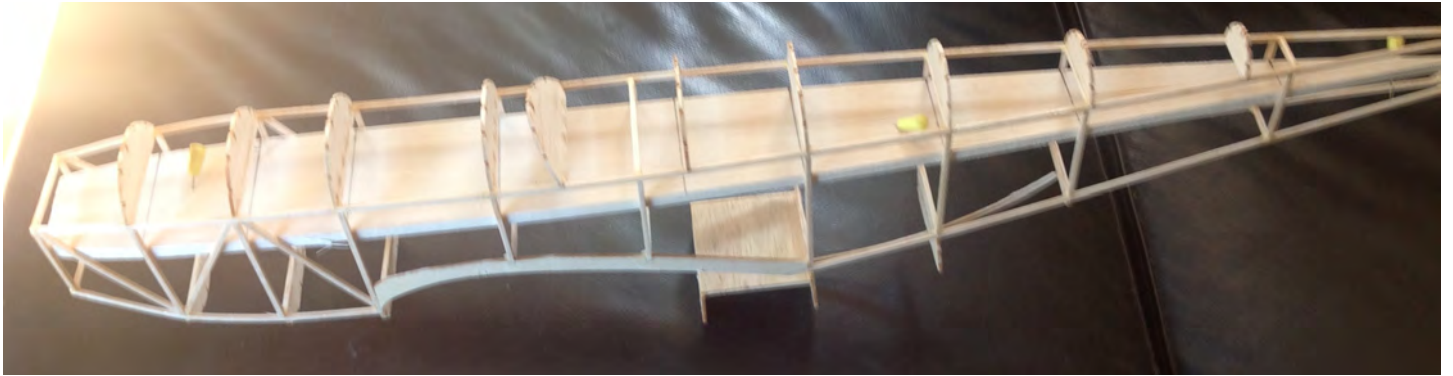
## Al Baker's DH Hornet

*A rubber powered twin.*



## Al Baker's method for straight fuselages

Al's method for building straight fuselages is in his words, "so simple. Just cut a former out of 3/8 to the inside dimensions of the fuse, cut longwise into two/three pieces, hold together with pins, build the stringers up, and then pull the pins out and slide the former, now in 2/3 pieces, out the front."



## Steve and Daniel Warner's Pilatus Porter

Steve and Daniel are making great progress with their Airsail Pilatus Porter for rubber power. Steve says "The great thing about these kits is they can be built on a small board that can be moved off the dining table so you can build in the warmth rather than the shed.

We have learn many things during the build.

1 Heat shrink tissue only shrinks in one direction.

2 Be careful you don't melt the plastic components when trying to get the tissue to shrink.

3 Sometimes when you are having trouble it is best to make a cuppa tea and let the dust settle.

