AVANZ NEWS

Newsletter of the Vintage Special Interest Group of Model Flying New Zealand #172

COMMITTEE NOTICES

In this Issue

Changes to Battery Rules in 1/2E-Texaco and E-Texaco

Voting on the remits concerning changes to battery allowances in 1/2-E Texaco and E-Texaco classes has finished. Rule changes require a minimum approval of 75%. The battery size remits had 85% approval, and so are passed. At this time, the changes have yet to be ratified by MFNZ, but this is a formality and fliers in these classes can make alterations to models if required.

Vintage rules on MFNZ's website will be updated as soon as possible and the new battery reqirements will be applied to contests from this point on and to the next Nationals.

For convenience, the remit changes are reproduced on page 3.

On the Cover: *Keith Trillo's Kea*
NZ Logo: *Number 8 Fence Wire - see Miscellaneous page*

RC Vintage 1/2E Texaco and RC Classical 1/2E Texaco

- In Rules 5.4.2 and 5.7.2 replace the present wording with:
  All Radio Control General Rules (see Section 2) apply, except Rule 2.1.6. There is no wing loading rule.

- In Rules 5.4.3 and 5.7.3 replace the present wording with:
  'Dry weight' is the weight of the model without the drive battery.

- In Rules 5.4.4 and 5.7.4 replace the present wording with
  Maximum dry weight is 18 oz and maximum wing area is 350 sqin.

- In Rules 5.4.5 and 5.7.5 replace the present wording with:
  The drive battery is LiPo with maximum manufacturer's rated capacity chosen from one of the following:
  a. 44 mah per oz dry weight if 1 cell is used (1S),
  b. 22 mah per oz dry weight if 2 cells are in series (2S),
  c. 14 mah per oz dry weight if 3 cells are in series (3S).

RC Vintage E Texaco and RC Classical E Texaco

- In Rules 5.5.2 and 5.8.2 replace the present wording with:
  All Radio Control General Rules (see Section 2) apply, except Rule 2.1.6. There is no wing loading rule.

- In Rules 5.5.3 and 5.8.3 replace the present wording with:
  'Dry weight' is the weight of the model without the drive battery.

- In Rules 5.5.4 and 5.8.4 replace the present wording with:
  There is no upper or lower limit on dry weight.

- In Rules 5.5.5 and 5.8.5 replace the present wording with:
  The drive battery is LiPo with maximum manufacturer's rated capacity chosen from one of the following:
  a. 34 mah per oz dry weight if 1 cell is used (1S),
  b. 17 mah per oz dry weight if 2 cells are in series (2S),
  c. 11 mah per oz dry weight if 3 cells are in series (3S).

Vintage Events at the next Nationals

The programme below is the result of co-operation between the Free Flight, Scale Free Flight, and Vintage SIGs.

NATIONALS PROGRAMME for Vintage FF, FF, and Scale FF

REGISTRATION Mon.30th December	DAY 1 Tue. 31st December	DAY 2 Wed. 1st January	DAY 3 Thur. 2nd January	DAY 4 Fri. 3rd January	DAY 5 Sat. 4th January
	Vintage FF Power	Nostalgia Power	F1A-B-C Combined	Open Power	P-30
VINTAGE FF	Vintage FF Rubber	Nostalgia Rubber	Kiwi Power	Open Rubber	Mini Combined
FREE FLIGHT	Vintage FF Glider	Vintage Catapult		Open Glider	E-36
7 am - 12 noon	Vintage Precision	Small Power			
		Classic Comb R/P/G			
		Vintage Precision	Vintage 1/2A Texaco	Vintage 1/2E Texaco	Classical 1/2E Texaco
VINTAGE RC		Classical Precision	Vintage A Texaco	Vintage IC Duration	Sport Cabin E Texaco
9 am - 4 pm		Open Texaco	Vintage E Texaco	Vintage E Duration	Vintage E Rubber Tex
			Classical E Duration	Classical E Texaco	Classical IC Duration
SCALE FF	F4A FF Power	F4D FF Rubber	Any postponed	Any postponed	
	Kit Scale	CO2 / Electric	outdoor FF Scale	outdoor FF Scale	
EVENING FF	Aggregate	HLG / CAT Glider	Peanut	IHLG	
and INDOOR SCALE	Social Function ???	Radian	Kit Scale	Hangar Rat	
			Open Rubber Scale		
		VINTAGE SIG AGM			
ADMINISTRATION		VRC AWARDS	VRC AWARDS	VRC AWARDS	VRC AWARDS
		VFF AWARDS			

Greetings All,

An update on our activities at Awatoto Field. The Vintage movement at MFHB is alive and well and growing. The club build of six classic Night Trains following my model has been a great success with all flying apart from Bill's which is now finished and awaiting a test flight. At the last Thursday (23rd May) vintage morning session we had six turn up so ran an impromptu Classic E-Duration competition, the task being 3 x 5 minute flights off a 20 second motor run with some excellent results. Some models are still being set up and trimmed, and pilots getting used to the powerful vertical climbs. Once that is all settled there is going to be some pretty stiff competition with maximums all round and fly-offs needed.
What an historic moment, an actual club competition at Model Flying Hawkes Bay's Awatoto Field !

Our idea is to run an annual Vintage Championship with all competition results going towards the total regardless of whether the comps be official or just impromptu as per yesterday. Brett is the keeper of records and runs the above excel spreadsheet. Just turn up and have some fun. If there is a planned comp we'll notify it, otherwise we can run impromptu ones if there are enough and interested, or just fly for fun as Barry and others do. It's all about enjoying the Vintage experience with no pressure other than what you want to apply to yourself.

NDC is also gaining interest and momentum now that we have a number of qualifying models for the various classes. Today I flew my REBEL, re-powered with an ASP 30 Four stroke glow motor in the RC Vintage Open Texaco competition and managed a couple of half respectable 8 minute flights.

R/C VINTAGE CLASSICAL DURATION

23/05/2019

NAME	MODEL	FLIGHT	FLIGHT	FLIGHT	FLYOFF	GRAND TOTAL
BARRIE RUSSELL	NIGHT TRAIN	300	300	300		900
GRANT FULTON	NIGHT TRAIN	285	300	300		885
BRETT ROBINSON	NIGHT TRAIN	300	274	300		874
DEREK BARBER	NIGHT TRAIN	300	240	235		775
GAVIN SHUTE	NIGHT TRAIN	195	300	181		676
STAN NICHOLAS	NIGHT TRAIN	166	277	179		622

TOTAL POINTS

BARRIE RUSSELL	23
STAN NICHOLAS	15
BRETT ROBINSON	11
GRANT FULTON	9
DEREK BARBER	4
GAVIN SHUTE	2

Check the Vintage rules to acquaint yourselves with what each event requires and come out to get some practice for the NDC events. When we get good weekend forecasts later (preferably a Saturday morning, otherwise Sunday) we will post and organize competitions.

This morning the conditions were idyllic and I had a few playmates so we ran a fun Vintage Precision comp with a contrasting reversal of form from last Thursday with Stan managing to assert his superiority by one second from new boy Grant , flying his re-engined Playboy which now has a Wow vertical climb !

What to say about this one?…….It has been tough to find a weekend with two flyable days this month but Levin did come through in the end. Saturday, apart from a brief shower, was very flyable with my favourite Nor' Westerly wind direction. Big dark clouds kept rolling through with lift under all of them I'm sure. This is a met condition called a "Dirty High" Weather Stew (Cox) tells me. The wind was lighter than forecast so it was possible to thermal fly them, sometimes to great heights. Sunday was just about identical but wind speed was higher and it did become a day of just pointing into wind.

Turnout was small, perhaps the smallest, I have seen for one of these events. Those who came were keen though. Flying was continuous with much of it being just for fun. Not everyone is contest oriented and we shouldn't forget this about our vintage scene. A lot of it is about old airplanes, older modellers, a good chin wag with our mates and yet another cup of coffee from the club house. Oh, and some flying too but not necessarily contest flying.

The GN also features free flight and we had Chris Murphy and Graham Lovejoy along flying their unguided vintage models. They spent much of the day chin wagging about this more purist form of the hobby and going through plans and mags in the club house. Graham is an ace Catapult glider flier and brought along some excellent plans for me. He easily demonstrated 65 seconds with a vintage cat glider and I now have the plan but not the 6 pound balsa stock from which his was crafted.

Kapiti was well represented. Warner, Terry and Owen can be depended on to turn up and share a smile and chuckle or two. Bryan T made it both days and it was good to see Stu Hubbard on Sunday as well, both from Ashurst. Locally, Jonathan represented the Levin club. A number of my Wellington club mates couldn't make it this time and we did miss them. My soaring mate Barry Hall came along though and flew a Buzzard Bombshell leant to him by Trev Glogau. He did a bit of ALES flying too with his Aloha. What a contrast. The Aloha is the latest lightweight "you beaut" carbon F5J machine from Ukraine. A real weapon and a reminder of how far our hobby has come in 80 years. The Hawkes Bay guys would have come if the weather had looked better. They made the right call.

I personally flew a lot on Saturday and had a very good day maxing out a number of classes in the outstanding lifty conditions, even knocked off 800 points in Precision. On Sunday I tried the unlimited class E Texaco but the wind was so fierce at that stage that times suffered. Seeing all the lift going through and not being able to circle downwind with it was frustrating. That and having to use down elevator to stay overhead.

Jonathan flew his new giant Jumping Bean setup for E Texaco. Built light too at 6 oz. sq ft. Flight potential looks great and I'm hopeful it will have outstanding still air performance with the power train we have figured out on Motocalc.

As usual, the club and Jonathan in particular, were great hosts. Excellent nibbles from Gill and BBQ curtesy of Jonathan. Thanks Levin. Let's hope we will have a few more of you there next time.

Cheers, Allan Knox CD

Vintage Prevision												
Allan Knox	Scram	1938	bonus	12								TOTAL
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	Flyoff	Landing	score	
3.03	20	200	3.03	20	200	3.00	20	200	3-00	20	200	800
Warner Summerton	Playboy	1940	bonus	10								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
3.03	20	200	2.57	20	200	2.51	20	200	600			
Bryan Treloar	Red Zepher	1936	bonus	14								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
3.07	0	187	3.07	0	187	2.53	20	200	574			
Jonatahn Shorer	Junior 60	1946	bonus	4								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
3.07	0	187	3.07	0	187	2.53	20	200	571			
Owen Stewart	Playboy	1940	bonus	10								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
3.07	0	187	3.07	0	187	2.53	20	200	565			
Stu Hubbard	Junior 60	1946	bonus	4								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
3.07	0	187	3.07	0	187	2.53	20	200	545			

1/2A Scale Texaco	Event 128											
Allan Knox	Cub	1/2A Bonus	120									
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	Flyoff	Landing	score	TOTAL
8.07	20	560	7.56	20	560	7.34	20	560	8.27	20	620	2300

Open Texaco	NDC Event 129					
Allan Knox	Lancer	1938	bonus	12		
Flt 1	Landing	score	Flt 2	Landing	score	TOTAL
14.39	0	891	15.30	20	920	1811

Vintage E Texaco 2 rounds unlimited						
Allan Knox	5 Foot Gas	1938	bonus	12		
Flt 1	Landing	score	Flt 2	Landing	score	TOTAL
7.46	20	498	12.23	0	755	1253

Vintage Electric Duration												
Allan Knox	Scram	1938	bonus	12								TOTAL
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	Flyoff	Landing	score	
5.15	20	320	4.57	20	320	5.10	20	320	5.40	20	360	1320
Jonatahn Shorer	Viking	1940	bonus	19								
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL			
4.51	20	320	5.27	20	320	4.57	0	307	947			

Vintage IC Duration									
Allan Knox	Cumulus	1937	bonus	13					
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL
5.05	20	260	4.41	0	253	4.42	20	260	773
Bryan Treloar	Airborne	1938	bonus	12					
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL
3,28	20	240	DNF			DNF			240
Owen Stewart	Playboy	1940	bonus	10					
Flt 1	Landing	score	Flt 2	Landing	score	Flt 3	Landing	score	TOTAL
3.24	20	234	DNF			DNF			234

Left:
Warner and
Southerner

Right:
Owen with
Playboy

Left:
Jonathan with
Jumpin' Bean
(Pole-vaultin' Bean?)

Right:
Barry and the *Aloha*

TUAKAU CONTEST and RALLY 25-26 May CDs Dave and Tony

Firstly on behalf of Tony and myself I'd like to thank all those that turned up to fly our last scheduled competition and rally event for the 2018 - 2019 season. We could not have planned the forecast any better if we had tried so to have had two successful events in a row, April and May is a rarity. Thanks also to those who did not fly but helped out as additional timers and spectators, this is always appreciated.

Many of us drove through patches of thick fog to get to Tuakau but once at the field we were pleasantly surprised by clear skies and sunshine. The early morning air on both days could only be described as “dead”, not surprising given the chill in the air. It was only after 10.30 a.m. that the air began stirring. Not only did we begin to warm up but the planes started an upward trend also.

The weekend also marked a change to the flying rules for the five E Texaco classes we fly. The previous rules that specified rounds with maxes and provision for an unlimited fly-off were substituted for a rule that specifies two unlimited flights, both counting. Under the new rules there is no fly-off and the end result is final. All other classes remain the same. I think everyone that flew in the classes pertaining to the new rules enjoyed the new format, I certainly did and to my knowledge no one was heard grumbling. Not in my ear anyway.

Per ardua ad astra

For some reason or another Vintage Precision seemed to be waning as of late with very few entries but on this occasion there were seven entries with Mr bullseye himself Don Mossop still taking top honours and also taking out Vintage E Duration with a perfect 3 round score and fly-off. However Don was pipped to the post in Classical Precision by David Gush.

In the Classical E Duration event Dave Crook just held off David Gush. One thing I’ve come to notice with these Classical E Duration aircraft, Dixielander, Glow Worms and Night Trains etc. is even though they are far more streamlined than their bulkier Vintage counterparts they either have a tendency to want to come down rather quickly or don’t want to come down at all. Yes I know it’s the air but you can’t wait around all day waiting for the good stuff !

Speaking of not wanting to come down, Keith Trillo test flew his Korda Stickler to a 51 minute flight in round 1 of E Rubber Texaco. I’d like to say it was all hot air but as I was there I know just how cold it was. Keith being the very skillful builder and pilot that he is proved you don’t always need a thermal, but the one or two that did come along certainly helped. Following behind Keith the Vintage E Rubber class is certainly taking off (no pun intended) with more of these aircraft appearing at every event. A very challenging class to build and succeed in.

If you haven't already read it, there is an excellent article about E Rubber Texaco designs in the June MFW written by Wayne Cartwright. Check it out on page 41, and build yourself a winner over winter. Amongst the entrants it was great to see Bernard Scott back at the field flying a number of his aircraft in the 1/2A, A and Open Texaco classes. Wayne unfortunately was unable to fly but helped Bernard out as timekeeper.

The E Sports Cabin Texaco yielded a good number of entries also with Keith's Kea coming out on top closely followed by John Butchers newly built Buzzer. David Squires also flew his new plane in the E Sports Cabin which I believe was in the process of test flying. Another plane making its first appearance was Don Mossops MG2 built for the E Texaco Class. Don had a few test flights but the aircraft was not flown competitively on the day.

Again, thank you to all the usual suspects that turn up and fly and help make the Vintage SIG what it is, with special thanks to Doug Baunton who often makes the trip north from his home in New Plymouth. Doug also joining the E Rubber fraternity with his Golly Wock. Also, thanks to David Gush who supplied the lunchtime BBQ. Awesome.

Happy building over winter everyone and Tony and I will get back to you once we have the 2019 – 2020 season events in place.

Regards, Dave and Tony

Above: Don Mossop's new *MG2*

Below: Keith Trillo's *Stickler*

E-Rubber Texaco VooDoo

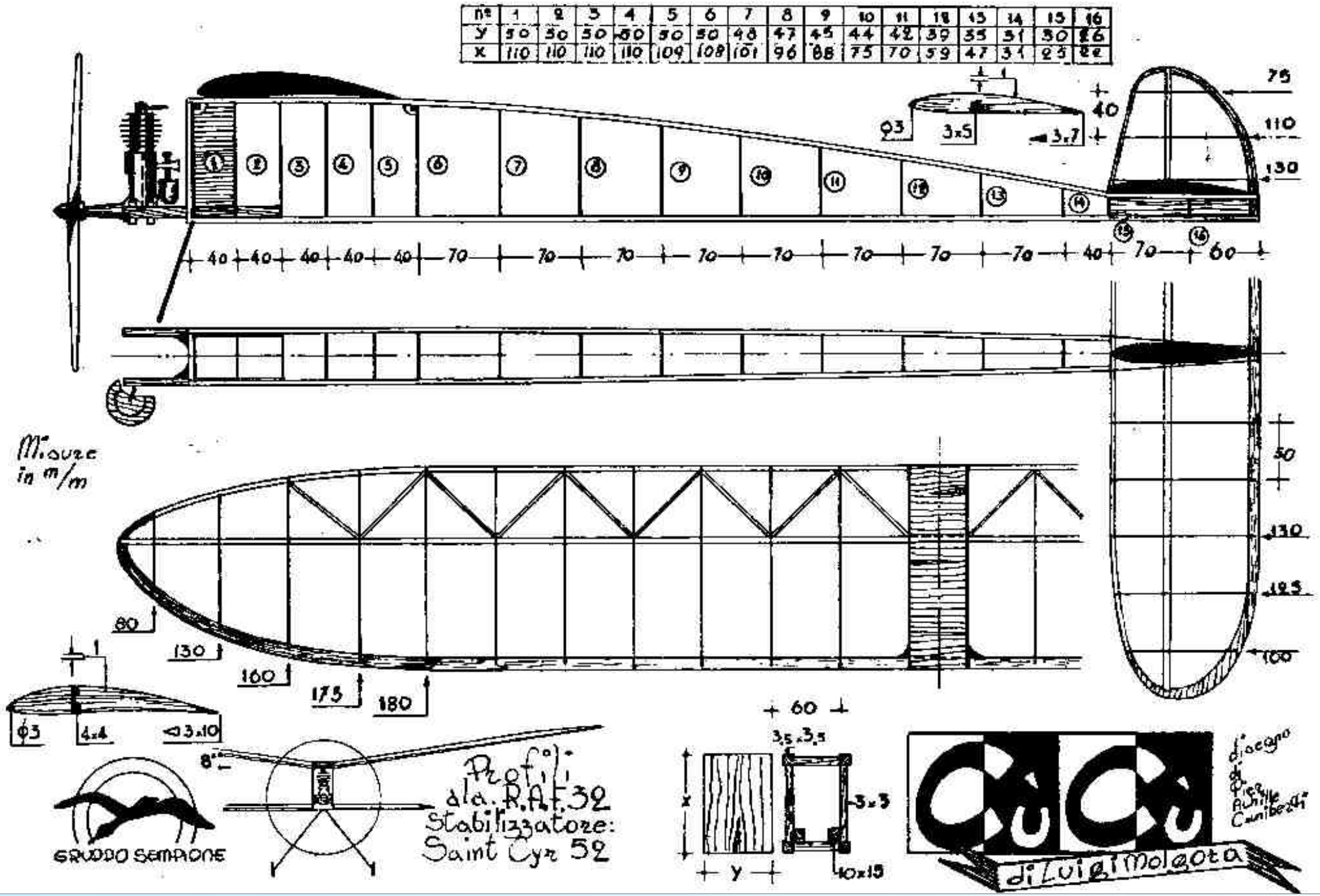
Barrie Russell

Just to confirm I'm serious about the E Rubber *VooDoo*, I made a start on the port wing. As suggested I've used a balsa lower spar. Fiddley work with those 1/16th ribs but there is no hurry so taking my time and we'll get there. Just how light can I go? I guess some, but I don't want to pass the point of no return. I'm going to cap the ribs with 3mm x 1.5 balsa strips - the laminate should lend strength.

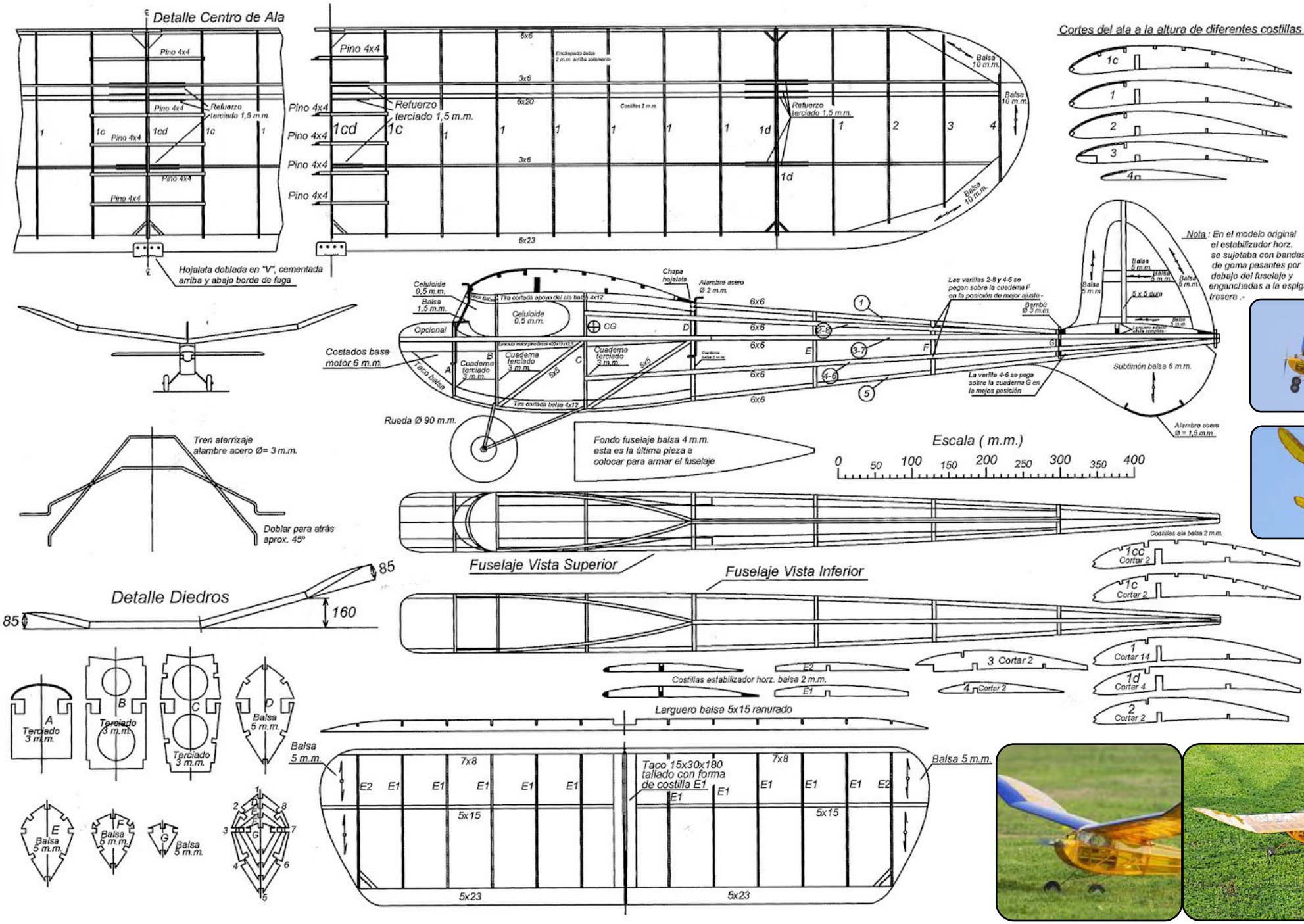
One half wing is finished and awaiting its clothes. It has come out at 1.5 ounces, so if I can match it with the other half and allowing for the dihedral brace joiner and glue and the covering, I'm hoping it will be just under the target I've set. Fingers crossed. I'm estimating the motor / 2 batteries / regulator / ESC / Prop & spinner/ 2 servos and leads will be close to 5 oz.

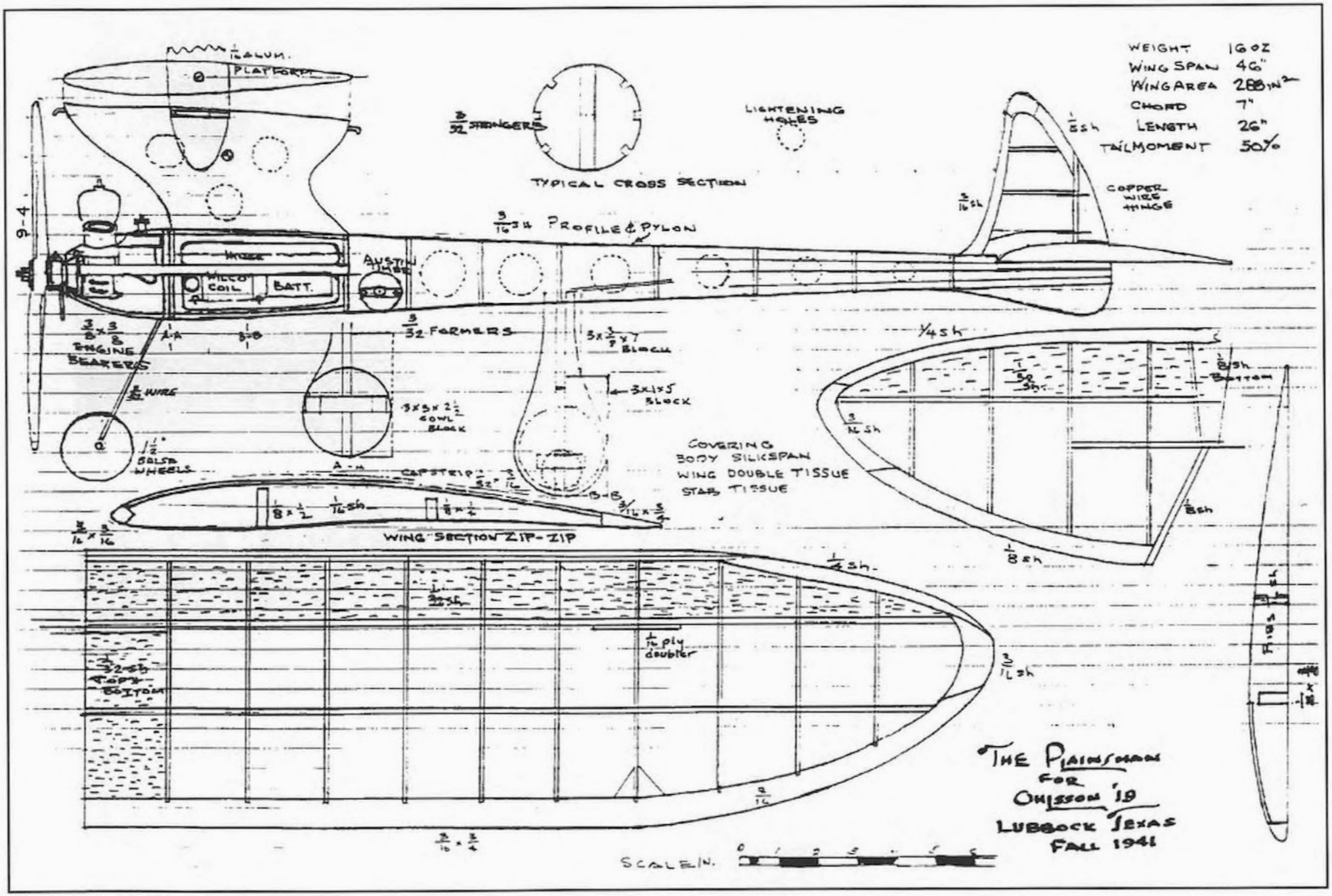
At a wing area of 3.6 sq ft, my wing loading target of 4.5 oz sq ft gives an all up weight 16.2 oz. That means I have to build the fuselage and tailplane etc at around 6.5 ounces and that's going to be a challenge, it will be new territory but I guess I have to start learning somewhere. I'm starting to wonder already if the wing is over built…. Who knows.

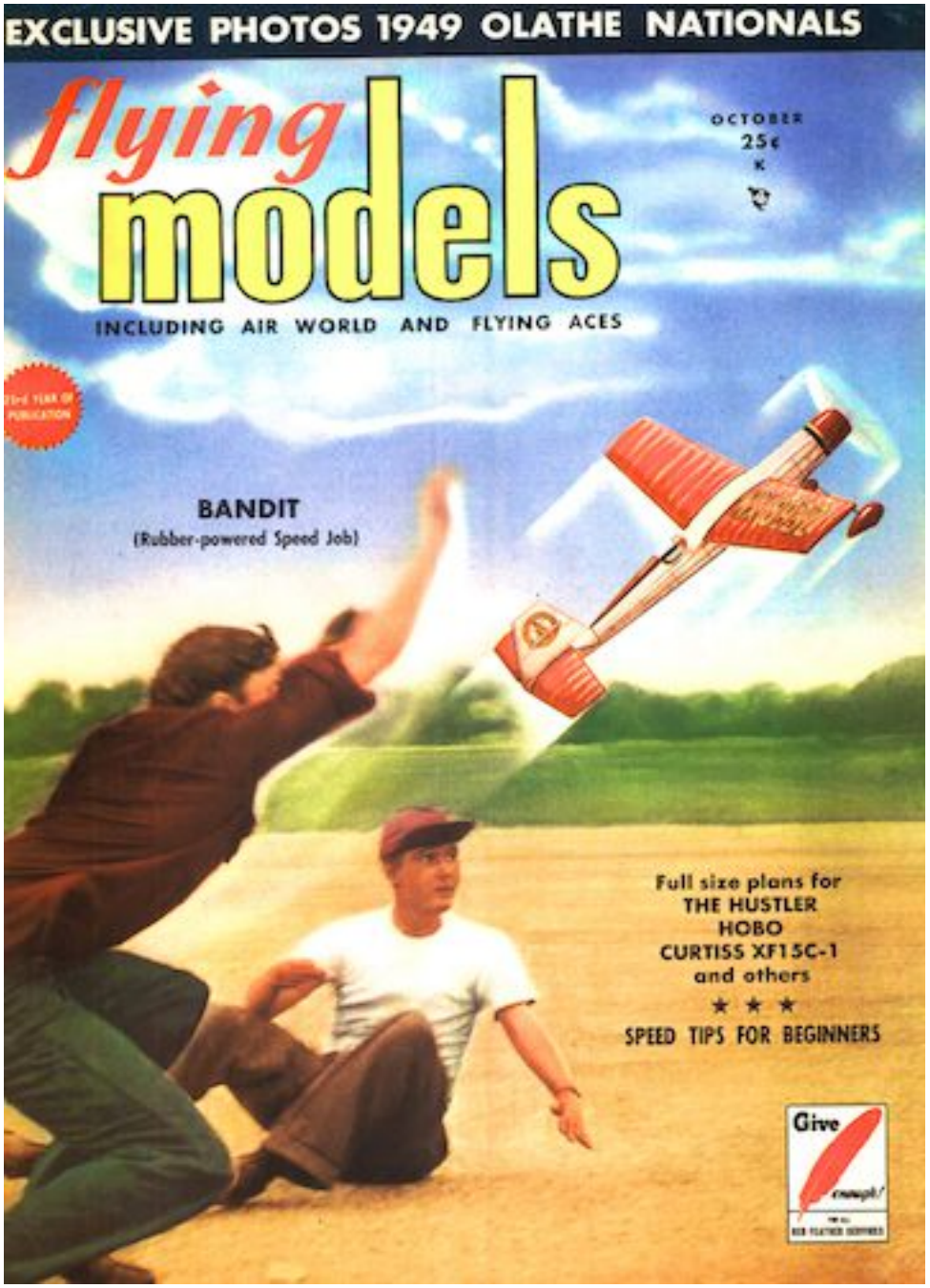
Wish me luck. Cheers, Barrie.


Misure in m/m
Profili ala. R.A.F.32
Stabilizzatore: Saint Cyr 52
GRUPPO SEMPIONE
di Luigi Molgora

SAN JOSE 1948 Antonio Arria




WEIGHT 16 OZ
WING SPAN 46"
WING AREA 288 IN²
CHORD 7"
LENGTH 26"
TAILMOMENT 50%
TYPICAL CROSS SECTION
LIGHTENING HOLES
PROFILE & PYLON
FORMERS
ENGINE BEARERS
WILLCO COIL
BATT.
COPPER WIRE HINGE
COVERING
BODY SILKSPAN
WING DOUBLE TISSUE
STAB TISSUE
WING SECTION ZIP-ZIP
SCALE IN.
THE PLAINSMAN
FOR
OHLSSON '19
LUBBOCK TEXAS
FALL 1941


EXCLUSIVE PHOTOS 1949 OLATHE NATIONALS
flying models
OCTOBER
25¢
INCLUDING AIR WORLD AND FLYING ACES
BANDIT
(Rubber-powered Speed Job)
Full size plans for
THE HUSTLER
HOBO
CURTISS XF15C-1
and others
★ ★ ★
SPEED TIPS FOR BEGINNERS
Give
rmnpl!


JUNIOR MECHANICS AND
MODEL AIRPLANE NEWS
MACFADDEN PRICE 15 CENTS PUBLICATION
MARCH
1930
"CLOUD-HOPPING" PIRATES
Boy Hero Foils Air Mail Brigands
By T. A. BRODERICK
Continuing-
COURSE IN MODEL AIRPLANE DESIGNING
HOW TO BUILD: (FULL SIZED PLANS) – CURTISS ARMY FALCON AND SAVOIA S-55 FLYING BOAT

Did anyone ever succeed with the hare-brained schemes presented in the early aeromodelling press? ... *Prof. T.N.Bobrovsky??* Yeah, right!

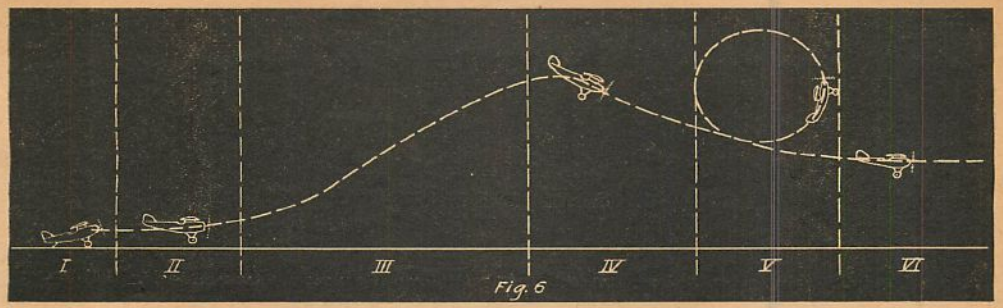


Fig. 6

HOW TO STUNT Your Models by Automatic Control

A Device Easy to Make for All Types of Planes

By Prof. T. N. de BOBROVSKY

IT is the dream of every model enthusiast to see his models loop, bank, spin and go through every stunt that the experienced pilot does with his airplane.

In the fascinating history of model flying, the first model to perform automatically controlled trick flights was witnessed at the second annual model meet in 1908 in Paris, France. The model was made by Levilleux and Fordu and flew in circles, spirals and figure 8's. This was the first model equipped with an automatic device to move the tail surfaces while in flight.

Several commercial toy models appeared on the markets of Europe shortly afterward that were supposed to do figure 8's and spirals, but, like most well advertised and overrated models, most of these failed to do what was expected of them. From that time on, up to the present, very few successful stunt flying models have been made. I have seen several models equipped with an automatic parachute dropping device, or models capable of making one loop. However, this looping model made the loop as soon as released from the hand and landed as soon as the loop was completed.

However, the model builder gets a helping hand from the scientific flying model experimenter. There are several important phases of aviation with which we are not quite familiar; for instance, the spin. Flying models have proven themselves very effective means for experimenting with these unfamiliar phases of flight.

In the first place, the flying model needs to be so constructed that it will enter and come out of a required maneuver while flying normally. This requires automatic, movable surfaces.

In this article will be found a description of one of these automatic controls that I have used successfully since 1912. Of course, the device used at that time was very crude but, keeping in step with the progress in aviation, I have improved it since then. This device can be used in the common fuselage model, as well as the scale model. As a rule, it was used on models varying from three to six feet, but it will also function on smaller models.

The construction of this device is very simple, light and causes no center of gravity disturbances. With a little skill, it can be made by any model enthusiast and its uses are unlimited.

This little apparatus will enable a model to get off to a quick start, do fast climbing, figure 8's, ziz-zag flights, loops, barrel rolls, upside-down flights, tail and flat spins, stalls, whipstalls, land at low speed; or, in other words, any stunt or trick flight at all.

It can be used on a speed model to retract the landing gear after the take-off and to lower it again before landing. In the case of an amphibian which lands on water or land, it can be used to change the propeller pitch while in flight. Its other uses are to operate a variable camber wing, to drop small bombs or to release parachutes, etc.

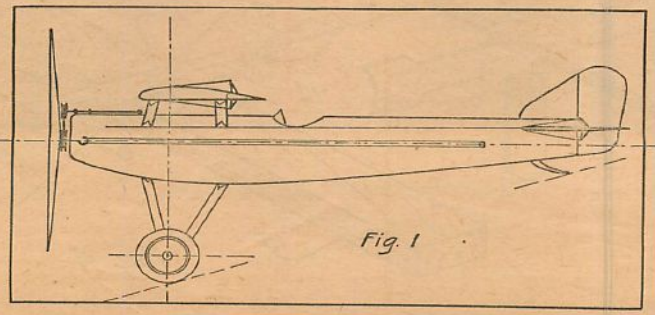


Fig. 1

Figure 1 shows a side view of a high-wing monoplane which is rubber driven. Its construction differs from the ordinary flying mod-

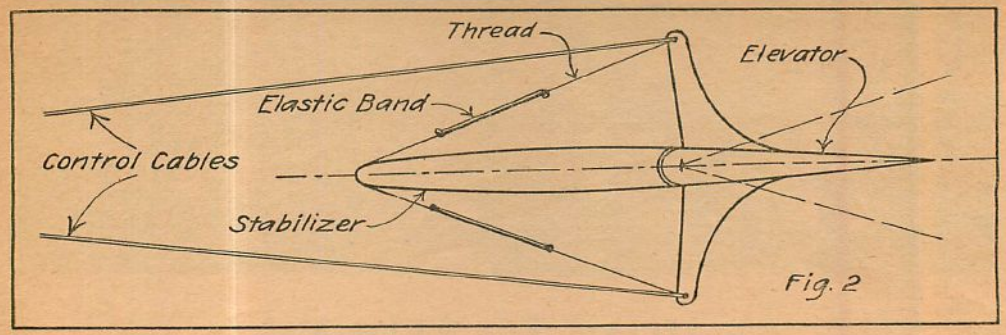


Fig. 2

el only so far as the ailerons, elevator and rudder are movable as on the full-sized plane. It is important that all these surfaces should move freely.

These control surfaces are held in normal position with thin threads and elastic bands, as indicated in Figure 2. The elastic bands should be fresh and of the same size throughout.

As shown in Figure 3, a small wooden pulley (2) is fastened to the propeller shaft (1). This pulley is connected with an elastic band (3) with a pulley above it (4). The position of the pulleys can also be seen in Figure 1. Pulley (4) is attached to a long, fully threaded thin steel shaft (5). It can be seen then if the rubber motor (6) revolves propeller (7), the transmission (3) will also set shaft (5) in rotation.

The diameters of the two pulleys (2 and 4) are identical. As can be seen in the drawing, shaft (5) revolves in two metal bearings (8). On shaft (5) will be noted a small nut (9) to which a small arm (10) is soldered. The thin arm (10) slides in a narrow slit cut in the wooden base (11), which extends from two bearings (8).

As shaft (5) turns, and since nut (9) cannot turn with it on account of the small arm (10) being in narrow track (11), it will move toward rear bearing (8).

It is essential that this device be made to operate with as little friction as possible, which will not necessitate using any more rubber band for motive power than usual.

Figure 4 shows how a small metal strip (12) is attached to nut (9). To the right and left side of the device described above, two strips of narrow balsa (13) are glued to the fuselage of the model. Out of aluminum make a few strips (14) and fasten one with a screw (15) to the balsa wood strip (13); at the *b* end of this aluminum arm (14) fasten a thread (16) and connect same to the rudder, as shown in Figure 5.

See what happens.

As the rubber motor is wound up and the propeller released, elastic band transmission (3) sets threaded shaft (5) revolving, also, and nut (9) starts to move toward the rear.

During this time the model has taken off and is flying straight ahead. When the arm (12) on nut (9) touches protruding arm (14) and presses against it, string (16) is correspondingly pulled, which in turn pulls the rudder to one side. The result is the model makes a turn!

If the *a* end of aluminum arm (14) is long, the rudder will be held to one side longer; if the arm is shorter, the turn will also be shorter. As the arm (12) on nut (9) passes beyond reach of the aluminum arm (14), the pull on the thread (16) ceases and the elastic bands shown on Figure 2 automatically pull the rudder back to its normal position.

Any number of these small arms (14) can be attached to the balsa wood strips (13) on either side of this device and their *b* ends attached to any one of the controls, depending on what stunt you (*Continued on page* 42)

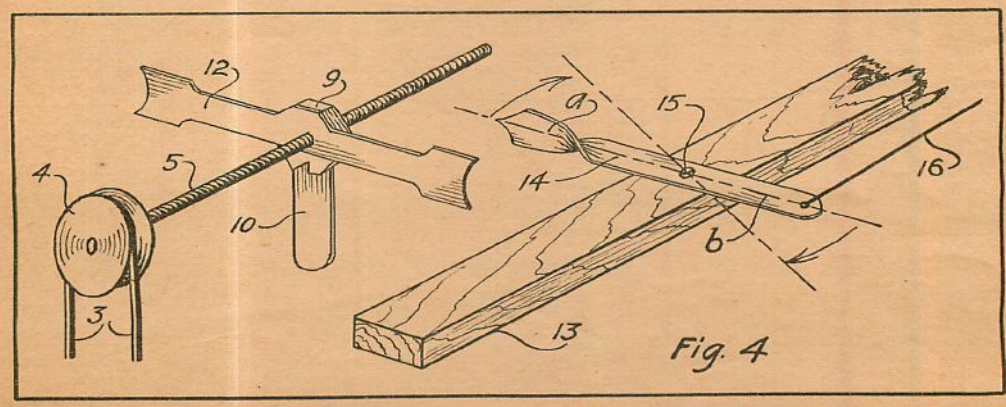


Fig. 4

RC Leader Boards 2019

The purpose of the Vintage SIG Leader Boards is to increase enjoyment of competition flying by showing fliers how well they are doing relative to others.

There are many new scores from the NNI events at Airsail and Tuakau and from the Gareth Newton at Levin. Scores posted since the last AVANZ News are in red.

The E-Texaco class listings are complicated due to rule changes during the year. Postings of records will be resumed when the rules are fully settled.

Any scores signed off by an independent timekeeper may be submitted for the Leader Boards. The flights do not have to be at a contest but are, of course, governed by the Vintage Flying Rules. I receive from organisers the scores from SIG-run contests and NDC, but send all other scores to me at rwcartwright4@gmail.com.

Please email me if you spot any errors or omissions.

Wayne Cartwright

Scores in red are new to this year's leader boards

Precision Classes

Vintage Precision

Record: A Knox (2017), J Shorer (2018) and D Mossop (2019) 600 + 200

1.	D Mossop	600 + 200
2.	B Russell	600 + 180
3.	J Butcher	600 + 178
4.	B Robinson	600
5.	W Summerton	600
6.	J Ryan	599
7.	S Cox	590
8.	L King	589
9.	A Knox	589
10.	D Baunton	589

Classical Precision

Record: B Harris (2016) 598

1.	D Squires	596
2.	D Mossop	595
3.	B Russell	591
4.	J Butcher	584
5.	B Robinson	584
6.	D Thornley	563
7.	D Gush	556
8.	T Gribble	512

Duration Classes

Vintage IC Duration

Record: S. Cox (2019) 780 + 500 + 391

1.	S Cox	780 + 500 + 391
2.	A Knox	780 + 381
3.	D Thornley	772
4.	K Trillo	740
5.	W Summerton	713
6.	B Russell	700
7.	B Treloar	689
8.	T Beaumont	680
9.	J Ryan	656
10.	R Anderson	635

Vintage E Duration

Record: B Harris (2018) 960 + 600

1.	D Mossop	960 + 373
2.	B Russell	960 + 366
3.	A Knox	960 + 360
4.	K Trillo	960 + 300
5.	S Nicholas	960 + 21
6.	B Harris	960
7.	J Shorer	947
8.	S Hubbard	886
9.	B Robinson	876
10.	G Fulton	817

Classical IC Duration

Record: D Thornley (2017) 900 + 600

1.	D Thornley	714

Classical E Duration

Record: W Cartwright (2018) 900 + 600

1.	B Russell	900 + 560
2.	B Robinson	803
3.	D Crook	769
4.	D Gush	506
5.	B Harris	459
6.	D Mossop	300
7.	D Squires	238

Texaco Classes

Vintage 1/2A Texaco

Record: A Knox (2018)		*1500 + 1833*
1.	A Knox	1500 + 826
2.	J Butcher	1465
3.	B Scott	1440
4.	J Ryan	1375
5.	K Trillo	968
6.	R Anderson	840

Vintage A Texaco

Record: A Knox (2018)		*1860 + 1870*
1.	B Treloar	1860 + 832
2.	J Butcher	1860
3.	K Trillo	1850
4.	A Knox	1844
5.	B Scott	1831
6.	R Anderson	1755
7.	I Munro	1666
8.	A Baker	1580
9.	W Summerton	1436

Vintage Open Texaco

Record: B Treloar (2018)		*1840 + 1703*
1.	B Treloar	1840
2.	B Scott	1830
3.	A Knox	1811
4.	S Cox	1724
5.	I Munro	1365
6.	J Butcher	928
7.	W Summerton	876
8.	A Baker	822
9.	D Gush	535
10.	T Glogau	373

Vintage 1/2E Texaco

Three rounds plus fly off:

1.	D Crook	1480 + 1179
2.	A Knox	1480 + 1075
3.	B Russell	1480 + 907
4.	T Gribble	1480 + 653
5.	B Robinson	1428
6.	J Shorer	1011
7.	B Spencer	970
8.	D Barber	889

Two unlimited flights 180 mah battery:

1.	K Trillo	1654
2.	J Butcher	1616
3.	W Cartwright	1159
4.	D Squires	949
5.	R Anderson	770
6.	T Gribble	670
7.	B Russell	606
8.	D Gush	119

Two unlimited flights 360 mah battery:

1.	K Trillo	2624
2.	P Townsend	2569
3.	T Gribble	2422
4.	B Spencer	1705
5.	D Squires	1559

Classical 1/2E Texaco

Three rounds plus fly off:

1.	T Gribble	1072
2.	D Crook	893

Two unlimited flights 180 mah battery:

1.	W Cartwright	1079
2.	J Butcher	386

Two unlimited flights 360 mah battery:

1.	P Townsend	1799

Vintage E Texaco

Three rounds plus fly off:

1.	A Knox	1860 + 1956
2.	B Russell	1860 + 1400
3.	D Crook	1860 + 1074
4.	K Trillo	1860 + 796
5.	S Nicholas	1857
6.	J Butcher	1740
7.	A Knox	1732
8.	B Robinson	1141
9.	J Shorer	1098

Two unlimited flights:

1.	D Crook	2852
2.	K Trillo	2745
3.	J Butcher	1808
4.	D Squires	1572
5.	B Russell	1364
6.	A Knox	1253
7.	D Baunton	1109
8.	T Gribble	946

Classical E Texaco

Three rounds plus fly off:

1.	T Gribble	1800 + 2669
2.	K Trillo	1800 + 735
3.	J Butcher	1639
4.	D Crook	1156

Two unlimited flights:

1.	K Trillo	1739
2.	T Gribble	1715

2019 Nationals, Temporary Rules:

1.	K Trillo	2160 + 1244
2.	D Gush	2160 + 862
3.	J Butcher	1534
4.	W Cartwright	1430

Vintage E Rubber Texaco

Three rounds plus fly off:

1.	J Butcher	1860 + 1839
2.	D Crook	1860 + 1215
3.	T Gribble	1860 + 907
4.	A Knox	1785
5.	D Gush	1240

Two unlimited flights:

1.	K Trillo	5022
2.	J Butcher	4188
3.	P Townsend	3153
4.	D Crook	2664
5.	T Gribble	2321
6.	W Cartwright	2223
7.	D Squires	2005
8.	D Gush	1999
9.	D Baunton	1812

Sport Cabin Texaco IC

No score recorded to date.

Sport Cabin Texaco E

Record: K Trillo (2019)		*4457*
1.	K Trillo	4457
2.	J Butcher	2149
3.	T Gribble	1454
4.	D Squires	1235
5.	B Russell	1285
6.	D Crook	828
7.	R Anderson	385

Scale Texaco

Record: A Knox (2019)		*1680 + 620*
1.	A Knox	1680 + 620
2.	D Baunton	499

Tomboy IC

Record: R Anderson (2015) 1432

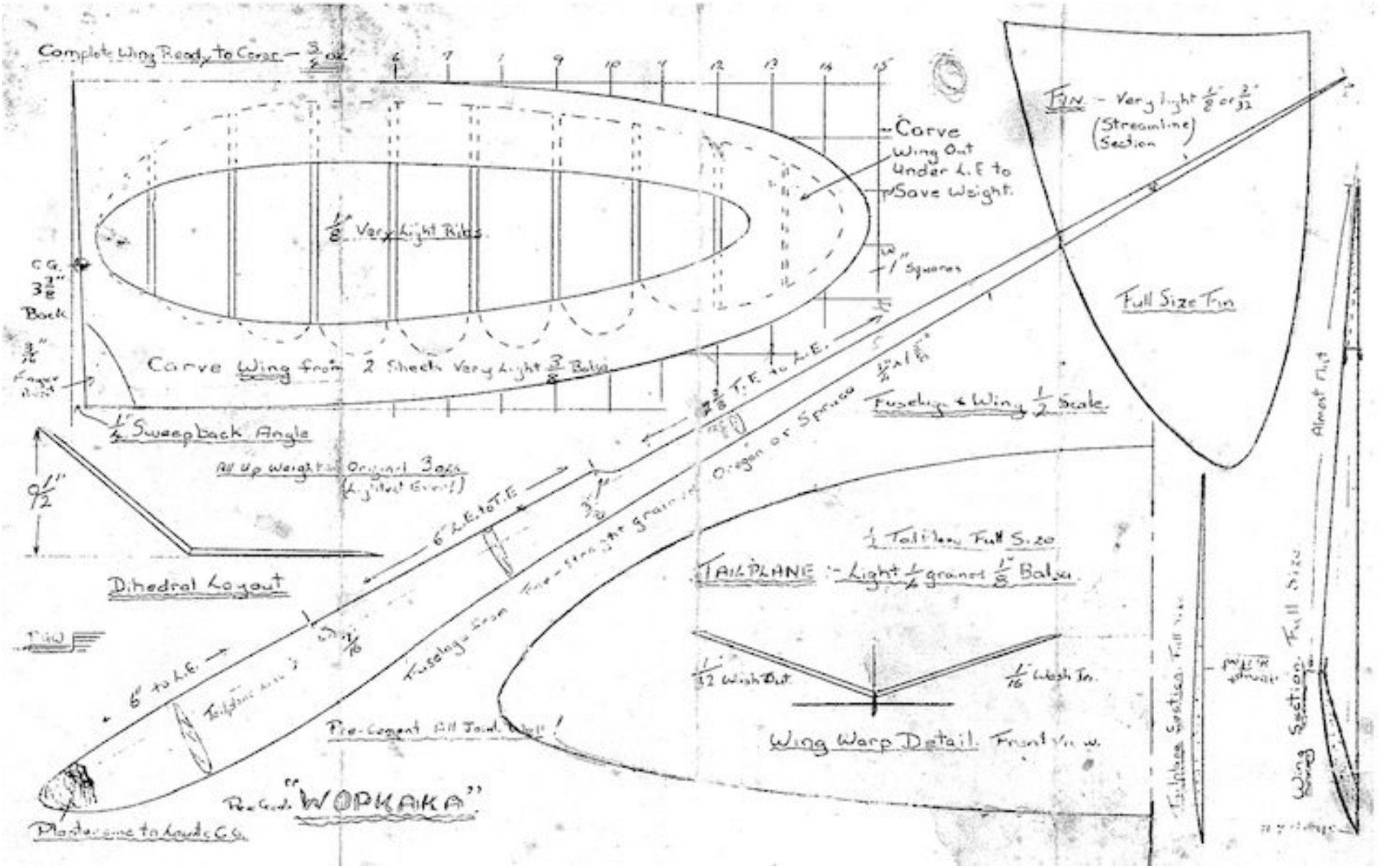
No score recorded to date in 2019.

Tomboy E

Record: S Grant (2014)		*1935*
1.	K Trillo	1317
2.	D Squires	1154
3.	B Spencer	945
4.	B Russell	895

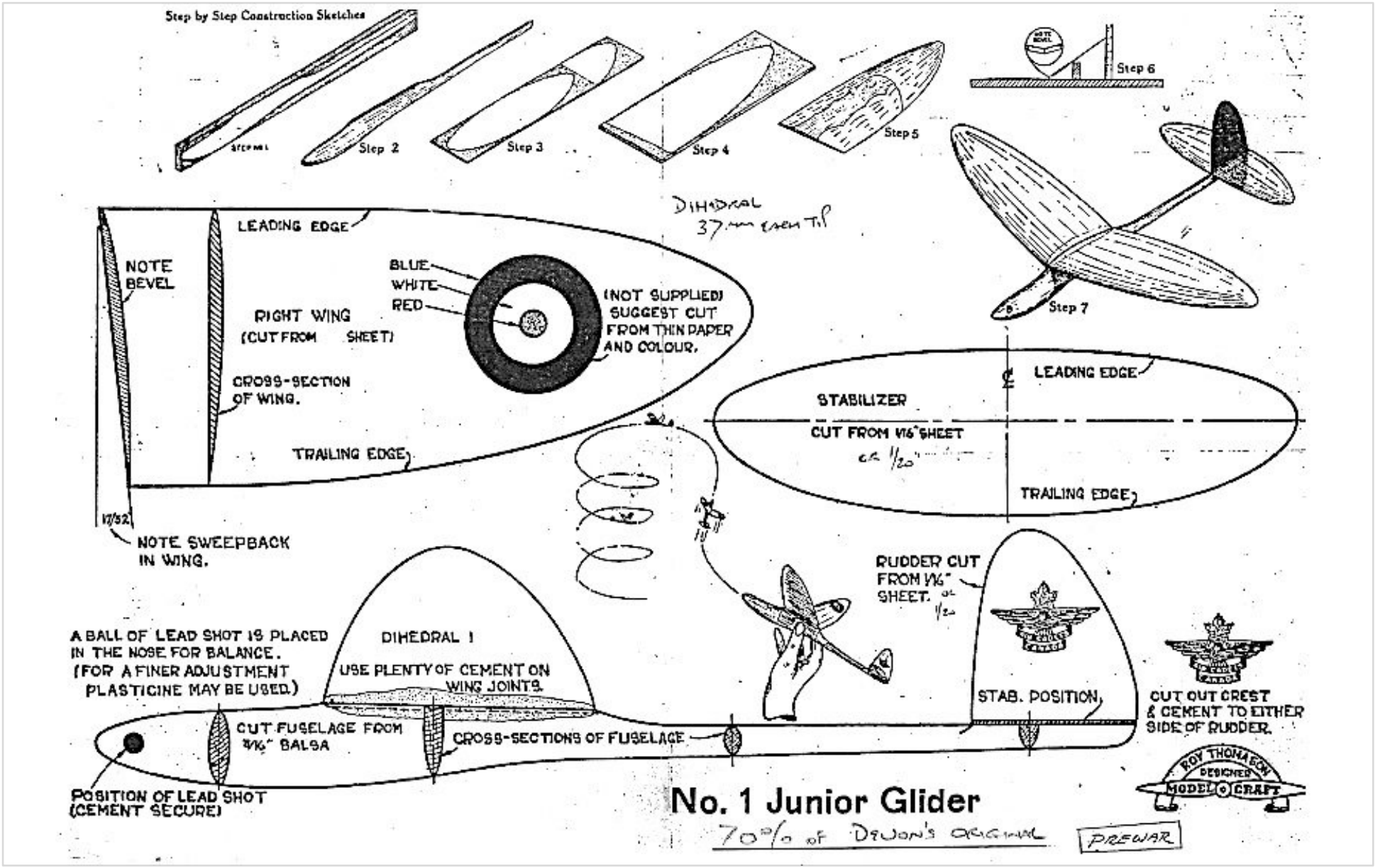
WOPKAKA HLG Designed by "PGW" Graham Lovejoy

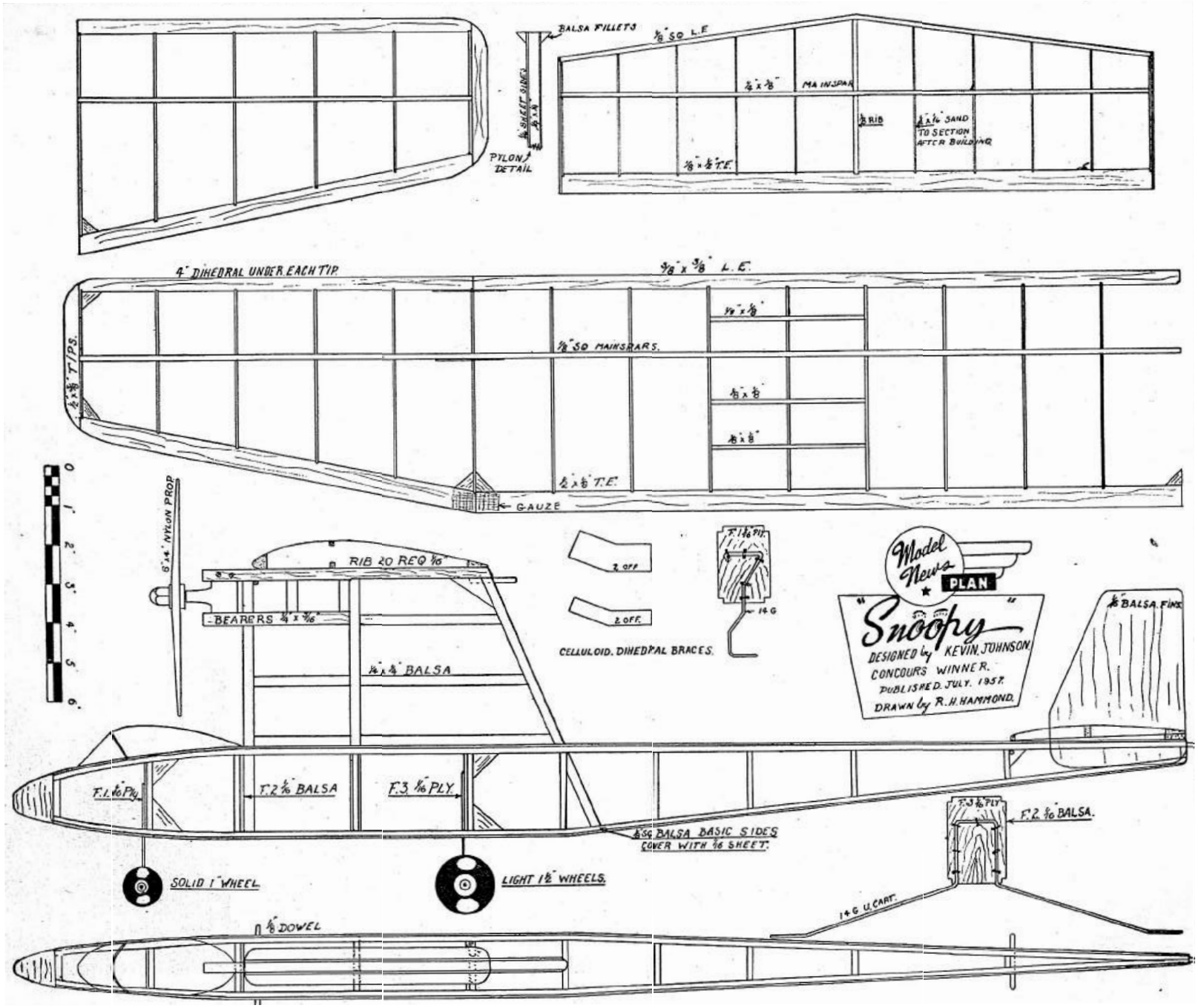
This HLG is likely to be a NZ design. It was found in a box of plans in the Levin MAC clubhouse and may have belonged to Ivan Treen or perhaps to Ivan's father. It has a 1950's look to it. At half size (14.75") it would make a nice CAT glider if its history were known. Do you know who PGW was, or anything about the design? *Graham Lovejoy*



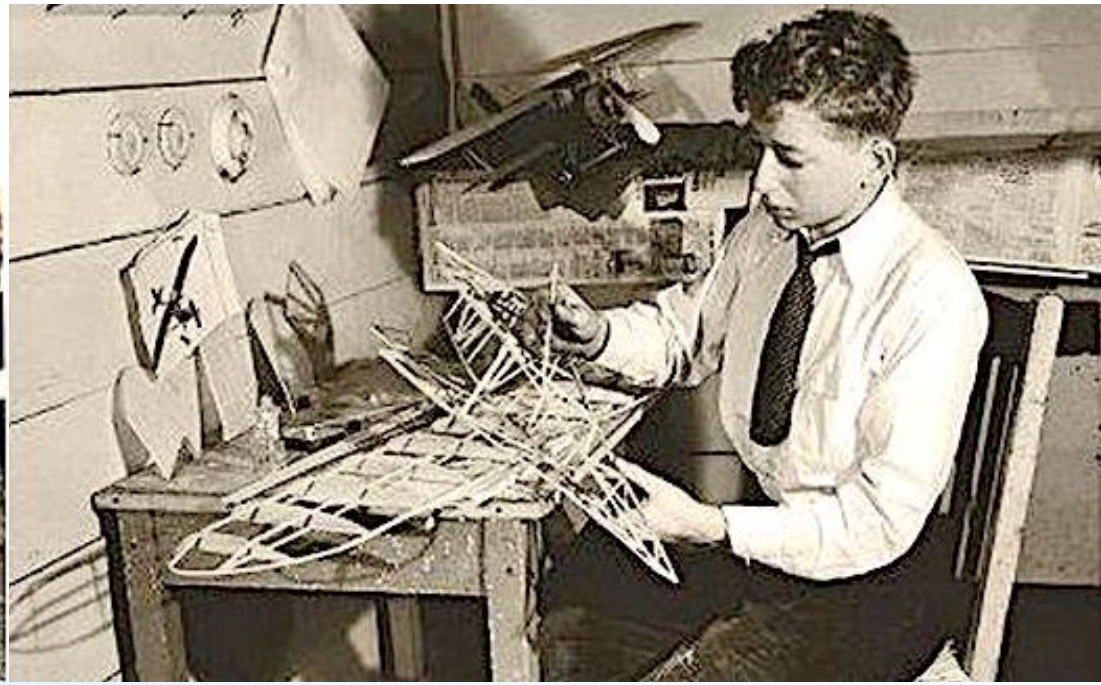
No.1 Junior Glider Canadian Air Cadets Graham Lovejoy

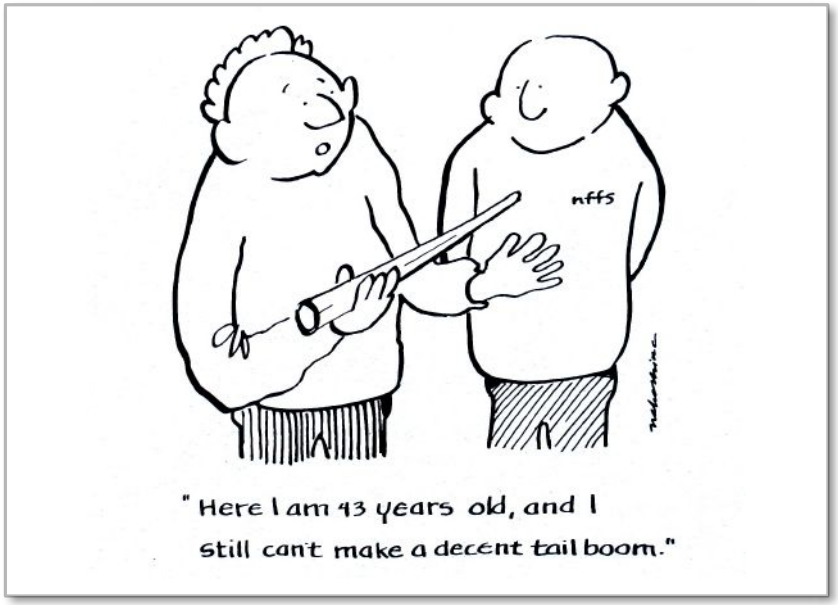
This is the first in a series of designs for the Canadian Air Cadets, perhaps to encourage "air mindedness" during WWII. I have another in the series, a cabin rubber design. Date of No.1 is unknown. Devon Sutcliffe noted *prewar* on the plan, but it looks more 1940's to me. *Graham Lovejoy*




BALSA FILLETS
⅛" SQ L.E
⅛ x ⅜" MAINSPAR
⅛ RIB
⅛ x ⅛" SAND TO SECTION AFTER BUILDING
⅛ x ⅜" T.E.
⅛ SHEET SIDES
PYLON DETAIL
4" DIHEDRAL UNDER EACH TIP
⅜" x ⅜" L.E.
⅛" SQ MAINSPARS.
⅛ x ⅜" TIPS.
⅛ x ⅛" T.E.
GAUZE
6" x ¼" NYLON PROP
RIB 20 REQ ⅛"
BEARERS ¼ x ⅛"
¼ x ¼" BALSA
2 OFF
2 OFF.
CELLULOID DIHEDRAL BRACES.
F.1 ⅛" PLY.
14 G
Model News
PLAN
"Snoopy"
DESIGNED by KEVIN JOHNSON
CONCOURS WINNER.
PUBLISHED JULY 1957.
DRAWN by R.H. HAMMOND.
⅛" BALSA FINS
F.1 ⅛" Ply.
F.2 ⅛" BALSA
F.3 ⅛" PLY.
⅛ SQ BALSA BASIC SIDES
COVER WITH ⅛ SHEET.
F.3 ⅛" PLY
F.2 ⅛" BALSA.
SOLID 1" WHEEL
LIGHT 1½" WHEELS.
⅛" DOWEL
14 G U CART.

FIRST ANNUAL CONFERENCE OF THE NEW ZEALAND MODEL AEROPLANE ASSOCIATION at NEW PLYMOUTH, 1936





Vintage year at Taft, 1991. Paul Lagan and Rex Bain with *Jay's Bird*

ICON 172 : Number 8 Fencing Wire

The introduction of steel fencing wire of various gauges in the 1860s allowed the rapid construction of low-cost fencing and this was quickly adopted for use on New Zealand sheep Number 8 steel wire soon became the preferred standard.

From the early 1960s, lower cost and lighter weight but more difficult to work high-tensile 12½ gauge 2.5 mm steel wire has largely replaced number 8 wire for New Zealand fencing. Since 1976, when New Zealand adopted the metric system, number 8 wire is officially referred to as 4.0 mm gauge wire, although the older term "Number 8 wire" continues to be commonly used.

As a consequence of the ubiquitous use of number 8 wire in New Zealand, remote farms often had rolls of number 8 wire on hand, and the wire would often be used inventively and practically to solve mechanical or structural problems other than fencing. Accordingly, the term "number 8 wire" came to represent the ingenuity and resourcefulness of New Zealanders, and the phrase "a number 8 wire mentality" evolved to denote an ability to create or repair machinery using whatever scrap materials are available on hand.

The Waikato Museum runs an art award named after the wire.