



Points of Interest:

- Presidents Report.
- SIS or SAM Incentive Scheme - Peter Scott
- Competition Reports from Yass, Hunter Valley Champs, New England Gas Champs.
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- Oldtimer Glider Report - Grant Manwaring.
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NEWSLETTER

No. 176

MAY-JUNE 2012

WORTH NOTING:

The Cowra Oily Hand Diesel Days is coming up on 24-26 August, 2012. Accommodation is always in short supply at Cowra so if you're planning to go book yours early. For further information contact Andy Lockett - 02 6342-3054.

And while we're at it accommodation at Cootamundra can be difficult so don't miss out for the Oldtimer weekend on 20-21 October, 2012.

Other Oldtimer event still to come this year is the Eastern States Gas Champs on 29-30 September, 2012, at Wangaratta, VIC., and the Oldtimer weekend at Muswellbrook on 10-11 November. 2012.

The AEFA (Australian Electric Flight Association) is starting to promote Electric Oldtimer Events. One was recently held at Goulburn and another is planned later this year. They have published a set of rules which are loosely based on the MAAA Oldtimer Rules. These rules are able to be downloaded from the following URL: http://www.members.westnet.com.au/stingray_f5b/electric/rules/Electric_Old_Timer_Rules_2010.pdf

An interesting event being promoted by AEFA is the Height Limited Oldtimer event. This event involves the use of a simple height limiting device fitted between the receiver and the electronic speed controller. This device will stop the motor after 30 seconds or at a given height, whichever is reached first. This tends to keep the motor and battery requirements to a lower level and places more emphasis on piloting skills. Quite an enjoyable event.

Please be sure to let Peter Smith (Condo) know whether or not you will be at the Golden West Oldtimer Comp at Parkes on 21-22 July and he needs to know numbers for catering. Also advise whether you plan to camp at the field. \$10 fee for a camp site for the weekend and power is available from the shed. See below.

Golden West Oldtimer Competition - Parkes

21-22 July, 2012 - Parkes Miniature Aero Club Inc. - Nelungaloo Field

** Program: Saturday Standard Duration, Gordon Burford, Duration.
Sunday Tomboy (45 min round), $\frac{1}{2}$ A Texaco, Texaco.

** On field catering and camping (\$10 per site for weekend)

Please call Condo (0423 452 879) or Email (peter_condo@yahoo.com.au) with your intentions for catering purposes and camping sites by 17 July, 2012.

** Motel - Spanish Lantern (02 6862 3388) Corner Peak Hill Rd and Pioneer Street.

** Must bring 2011-2012 MAAA Licence or written proof of payment of fees.

** Get together on Saturday Night.

For further information contact Peter (Condo) Smith on 0423 452 879.



Duration Times is the official Bulletin of SAM 1788

SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA 1788 Inc.

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		Committee Members: Basil Healy, Ian Connell.	
		Email for Duration Times - iwa@internode.on.net	

Oldtimer Events for 2012.

July	21-22	Golden West Oldtimer Competition	Parkes	Peter J. Smith	0423 452 879.
August	24-26	Oily Hand Diesel Weekend	Cowra	Andy Luckett	02 6342 3054.
September	29-30	Eastern States Gas Champs	Wangaratta	Peter J. Smith	0423 452 879.
October	20-21	Oldtimer Weekend - Coota Cup	Cootamundra	Basil Healy	02 4341-7292.
November	10-11	Muswellbrook Oldtimer Weekend	Muswellbrook	Simon Bishop	02 6543-5170.



From the President:

A great weekend at Tamworth - see report in this issue.

I notice that we seem to be down on events for Nostalgia and Antique. We used to run Antique at Tamworth. The general format needs looking into so that we may run some of these events at the smaller contests.

I note that Parkes is running Standard Duration, Burford, and Duration on Saturday and Tomboy, ½A Texaco and then Texaco on Sunday.

There will be a committee meeting at Parkes. The committee has come up with the SAM Incentive Scheme. See details elsewhere in Duration Times.

Basically we are trying to get more fliers to the smaller contests. A point score is being devised with a trophy/cash prize for the winner.

Our next contest is Parkes, look forward to seeing there.

Peter Scott.

From Jim Rae,
jsrae@netspeed.com.au

I know this is nit picking, but we don't want everyone rushing out to dispose of their BB Taipans.

In the GB results Amazoom was listed as having a PB engine when in fact it has (at the moment) a BB engine.

It was the only BB in the first nine placings, which indicates that, either all the serious competitors are using PB's, or else the BB engines are unfairly handicapped by the 35 sec motor run.

If you look at the test results in Maris Disler's book I think the second is more likely.



Golden West Oldtimer Event 21-22 July, 2012.

From Peter J Smith - peter_condo@yahoo.com.au

Hi, the events will be:- Saturday - STD Duration, Burford then Duration
Sunday - Tomboy, ½A Texaco then Texaco

Camping at the flying field is \$10 a "site" for the weekend with power available.

Facilities are septic toilets and washbasins. No showers yet.

See advert re this event on the front page.



S.I.S. or SAM INCENTIVE SCHEME.

From Peter Scott, President SAM 1788.

Starting on the 1st July we are introducing an incentive scheme to encourage more fliers to more contests - especially the smaller events - which could and should be a lot bigger. If we don't encourage the numbers to grow then the chances are that we will lose some of these events.

1. The incentives - \$250 cash to the winner after 12 months with a special trophy to keep.
2. Only SAM 1788 members are eligible.
3. Ten contests throughout the year are eligible. Results from only eight to count. So, you don't have to fly all ten contests but those who do can pick their top eight results.
4. Points for each event at each contest count, including Tomboy. 1st place receives 10 points down to 1 point for 10th place.
5. All results to be printed in Duration Times so everyone can follow progress.

First contest to count will be the Golden West Oldtimer Event at Parkes on 21-22 July, 2012.

The ten contests for the SAM INCENTIVE SCHEME each year are:

Orange Oldtimer - 2nd & 3rd February, 2013

Hunter Valley Champs. (Muswellbrook) - 2nd & 3rd March, 2013.

Wyong - March, 2013

Canowindra - Easter 2013 (28th March to 1st April, 2013)

Yass - April

Tamworth - 15th & 16th June, 2013.

Parkes - July

Wangaratta - 5th & 6th October, 2013

Coota Cup - October

Muswellbrook - November

Final dates and times will be printed in Duration Times.



1/2 A Winners - Dave Markwell 2nd, Rex Brown 1st, Dave Paton 3rd, at 2012 30th SAM 1788 Champs at Canowindra.

2012 HUNTER VALLEY CHAMPS - MUSWELLBROOK

The 2012 Hunter Valley Championships were re-run on 19-20 May at Muswellbrook in lieu of the washed out dates of 3-4 March.

Oldtimer was flown on Sunday 20 May but unfortunately the attendance was low, no doubt due to the Champs receiving very little publicity and certainly none at all for the re-run dates.

But those who were there had a good day and it has been mentioned that next year both Saturday and Sunday will be available for Oldtimer events to be flown.

Results - Duration

1. Peter SCOTT	1941 Playboy 112%	McCoy 60	1260	545
2. Dave BROWN	1938 Bomber 85%	Saito 56 4/	1260	432
3. Geoff POTTER	1938 Bomber 85%	Super Tiger 40	1233	
4. Ian CONNELL	1941 Playboy	Saito 62 4/	1159	
5. Basil HEALY	Megow Chief	YS 53 4/	1017	
6. Bob MARSHALL	92% Playboy	OS 40 4/	637	

Results - Texaco

1. Steve WHITE	1938 Bomber	OS 40 4/	1800	1118
2. Basil HEALY	75% Dallaire	ASP 32 d	1800	593
3. Peter SCOTT	1938 Bomber 85%	Irvine 40 d	1800	342
4. Ian CONNELL	1938 Bomber	OS 60 4/	1800	227
5. Dave BROWN	1938 Bomber	TTiger 54 4/	1800	139
6. Geoff POTTER	1939 Powerhouse	Sparey 5cc d	1253	
7. Bob MARSHALL	1938 Bomber	OS 61 4/	DNS	



Flight-Line at 2012 30th SAM 1788 Champs, Canowindra.

Belconnen Model Aero Club Yass Old Timer Meeting.

From Grant Manwaring.

With all the best intentions Belconnen Model Aero Club again held its Old Timer class competition on 12 & 13 May 2012 at the Yass club field at Jerrawa NSW. Unfortunately the weather thought otherwise with high winds on Saturday and rain stopping events on Sunday. Entry numbers were down, no doubt flyers looked at the weather map and decided otherwise.

Saturday morning saw the first round of Tomboy flown with three entries. The event was won by Peter Scott, Basil Healy second with Jim Rae in third place. Peter Scott's flight of 7 minutes was good considering the wind conditions.

Next was the Burford event with five entries. Jim Rae scored three max flights to take out first place, Grant Manwaring second with Peter Scott in third place.

Duration was held after lunch with six entries. The wind speed had increased resulting in some damage to models, generally on landing. The event was won by Peter Scott flying a Stardust Special, Saito .62, second Jim Rae with the Lion Cub, Saito .56 and third Grant Manwaring flying a YS53 powered Playboy.

An enjoyable meal was partaken of at the Yass Motel on Saturday night.

Thanks to the helpers for manning the BBQ, Max Rixon, Jim Henderson and Mike Masters, they did an excellent job in providing eats and drinks. Also thanks to the Yass club for allowing the use of their field for the weekend.

In view of the weather conditions I will be looking to move this event forward into April next year. Conditions in the area are generally better and more predictable in April.



Peter (Condo) Smith's McCoy 60 powered Playboy gets away . Below L: Peter Scott with his Duration Playboy. Below R: Condo and Basil Healy with his Dixielander & Alan Brady, assisted by John Bradburn, and his Stardust Special .



Results:

Tomboy

Peter Scott	437
Basil Healy	287
Jim Rae	227

Burford Event

				Rd.1	Rd.2	Rd.3	Rd.4	Total
1.	Jim Rae	Amazoom	BB	229	300	300	300	900
2.	Grant Manwaring	Lil Diamond	PB	156	300	209	300	809
3.	Peter Scott	Jaded Maid	PB	215	175	260	188	663
4.	Basil Healy	Dixielander	PB	188	300	145	out	633
5.	Alan Brady	Stardust Sp	BB	178	300	out	out	478

Duration

				Rd.1	Rd.2	Total	
1.	Peter Scott	Stardust Spl	Saito 62	274	268	542	
2.	Jim Rae	Lion Cub	Saito 56	255	162	417	
3.	Grant Manwaring	Playboy	YS53	160	242	402	
4.	John Bradburn	Playboy	Saito 56	109	out	190	
5.	Geoff Potter	Playboy	TT46	out	out	0	(flight times 293 & 221)
6.	Peter Smith	Playboy	McCoy 60 Spk	out	0	0	(flight time 232 & 0)

From AVANZ News No.125 - An Electric Tomboy by Editor Graham Main.

Yes, I know it has been done by others but I thought that maybe those that are not so au fait with electrics might get something from my work.

I have both an RC and FF version of the Tomboy powered by a Mills .75 that I fly fairly regularly when the weather permits.

With my existing duo I have one set of wings between the two as well as the removable wheels that I use for both versions, so for the electric RC version it was only a fuselage and tail group that was needed. A bit of fiddling with the fuselage plan to accommodate the electric motor, speed controller or ESC and battery saw a layout established and the parts assembled.



With a couple of 8 gram servos for rudder and elevator and a small Dymond receiver the set up has worked well. Now the real info is the power setup.

Well for the motor I have used a 36 gram "Park Flyer" type that revs at 1300 rpm/volt (designated Kv in the motor specs), mainly because that is what I had. With the specified battery for the Tomboy Postal comps of a 2S, 7.4volt Lithium Polymer (LiPo) of 350mAh capacity the motor running speed should be around $7 \times 1300 = 9,100$ rpm. I usually look for a figure of around 10,000 rpm so this seemed to be close enough. I use a 15 Amp Speed controller (ESC) as that is what I had as well.

Now to prop sizes. The smaller the prop the less current is drawn and so provided it will fly the model then that is the one to go for as you are looking for a long run for the Postal Comps. A large prop drags more current from the battery. With a light Tomboy you do not need much power to have it flying well.

Now my Tomboy weights around 12 oz, as a rule of thumb for this style of model, it will need around 50 watts of input power to fly. It is nice to have more so you can fly in a breeze but you have a speed controller so you can start fast and then when at height you can cruise about on lower throttle.

I have the advantage of having test equipment so can check current draw and watts that, so that takes the guessing out of the game, and allows one to pick on a good prop size.

The motor specs had sizes from 7x5 to 9x4.5, but these drew 8 or so amps at full speed when I was looking for more like 2 amps for duration. At 2 amps and 7 volts you only have $2 \times 7 = 14$ watts so the model is literally on cruise. After testing I used a 6x4 propeller that brought the full power down to $3 \text{amps} \times 7 \text{volts} = 21$ watts and cruise (about half throttle) to $1.5 \text{amps} \times 7 \text{volts} = 10.5$ watts.

Amazingly low aren't they but in the calm conditions I have flown in so far, the model flies a treat with minimal interference required by radio. At full power the model climbs as well as my Mills powered model while in cruise it can hold its height gain nicely.

I would expect that the model would fly on one of the smaller 25 gram motors as well and you could use a lighter ESC of say 8 to 10 amp range to further reduce weight. The battery size is given but if you go for one of the higher specification types with a 35C rating or more that will give you more efficiency and duration.

A 2S 350 mAh battery has a watt-hour rating of $7.4 \text{ volt} \times 0.35 \text{ amps} = 2.59$ watt-hours.

So if you are running at say 15 watts on average you might expect to have a duration of $2.59/15 \times 60$ minutes = 10.35 minutes, I have had flights of 15 minutes in light conditions with good air so the equation is quite a good guide.

My set up is the following:

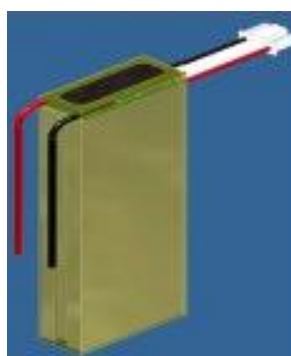
Motor:	Waypoint 2208-30 36gram 1300 Kv.
ESC:	Waypoint 15 amp with a 2 amp BEC (that is plenty for the two servos used).
Battery:	Revolectric 2S 350 mAh 25 C rating.
Propeller:	Standard Master 6 x 4.



WAYPOINT 2208-30 TURN,
1300KV, 36G BRUSHLESS
MOTOR



WAYPOINT
HIGH PERFORMANCE
15A, 3S ESC with 2A BEC



REVOLECTRIX
RED 350 2S 7.4V
Size: 7 * 34 * 50 mm
Weight: 22 grams
Discharge Continuous: 25C
Discharge Pulse: 50C
Max Charge: 6C



STANDARD
MASTER
6 X 4
PROPELLER

New England Gas Champs - Tamworth 16-17 June, 2012.

Contest Report from Peter Scott.

A great, fun weekend with good flying. A variety of conditions; windy though reasonable; cool yet warm and sunny. All seasons in one weekend.

I thought that the turn-up was poor for what used to be a major contest. Eight entries is not good. We had one local entry on the Sunday in $\frac{1}{2}$ A Texaco. Maybe our SAM Incentive Scheme points score format will make next year a more strongly contested event.

The first event on Saturday was Burford and won by Jim Rae with his Amazoom. This model has been transformed by a fast BB motor and gets to a very to a very good height. Very useful in the poor conditions, i.e. cold and windy - difficult to find lift.

Dave Paton - top cane toad, brought his mobile palace and timekeeper/cook with supermarket trolley to carry home the spoils, but only managed second in this class with his Stardust Special. He pushed me into third spot.

Duration was next up. Conditions the same, cool and windy. I left the big Playboy in the van and flew a standard size with a Saito 62 4stroke. The results give the picture. It was a very even contest with the fly-off times similar. Nice to see Sarah and Tim in the fly-off.

Next day, after a night of rain, it was sunny with variable breezes. The $\frac{1}{2}$ A Texaco contest had the normal battles with those infernal Cox's. I managed to beat Dave Brown and Basil Healy into 2nd and 3rd places. Very enjoyable.

After lunch, available from the clubhouse at a very reasonable \$3, came Texaco. Calm enough to fly the big Lanzo Record Breaker with the Anderson Spitfire sparky. First time out for this combination. Model flew very well, the air however didn't play the game and I missed the fly-off by a few seconds. My last flight was a joy - into lift and miles up, probably would have stayed there forever, or so it seemed. The fly-off was a huge come-back for Ian Connell with the old, reliable Bomber and OS60 4 stroke. Second was Dave Brown with Dave Paton 3rd. Dave's motor cut in the fly-off and gave him a disappointing 43secs. Jim Rae picked on a tree with surprisingly little damage - to both tree and model. Offers of help with a quick repair were refused. A contest in which a little bit of good air was very hard to find, as the results show.

Prize giving saw Dave Paton with his supermarket trolley which he filled, including Top Gun. Well done Dave. It was great to see him at the contest and thanks for the cheese, snacks and wine.

I received the Brian Potter Memorial Trophy for $\frac{1}{2}$ A Texaco. We gave the Tamworth Club a donation of \$100. It would have been more if we had more entries. They kept a permanent BBQ on all weekend and the facilities were great. We really appreciated them.

I flew my EDF Vampire as a demo, then it was goodbyes 'til next time.

A huge 'Thank you' to Basil Healy who, as CD, did a great job.



Dave Paton congratulates Jim Rae after the Burford Event.

Results 2012 New England Gas Champs Tamworth.

Gordon Burford

Jim	RAE	Amazoom	Taipan plain	900	419
Dave	PATON	Stardust Spl	Taipan plain	900	295
Peter	SCOTT	Jaided Maid	Taipan plain	822	
Basil	HEALY	Dixielander	Taipan plain	766	
Grahame		MITCHELL	Dream Weaver	Taipan plain	478
Tim	WRIGHT *	Spacer	Taipan plain	368	

Duration

Dave	BROWN	Lanzo Bomber 85%	Saito 56 4/	1260	395
Jim	RAE	Lion Cub 130%	Saito 56 4/	1260	389
Dave	PATON	Playboy 105%	YS 63 4/	1260	389
Peter	SCOTT	Playboy	Saito 62 4/	1260	364
Basil	HEALY	Megow Chief	YS 53 4/	1260	342
Tim	WRIGHT *	Playboy	S/Tiger 40 2/	1260	329
Sarah	WRIGHT *	Blitz Buggy	Saito 62	1260	271
Geoff	POTTER	Lanzo Bomber 85%	Super Tiger 40	1026	

$\frac{1}{2}$ A Texaco

Peter	SCOTT	Lil Diamond	1080	630
Dave	PATON	Stardust Spl	1080	607
Basil	HEALY	Atomiser	1080	569
Garry	WHITTEN	Baby Burd	1080	437
Jim	RAE	Pine Needle	1080	219
Dave	BROWN	Bomber	1080	
Grahame		MITCHELL	Stardust Spl	1053
Sarah	WRIGHT *	Schmeadig Stick	217	

Texaco

Ian	CONNELL	Lanzo Bomber	OS 61 4/	1800	1043
Dave	BROWN	Flamingo	O&R 60	1800	911
Dave	PATON	Lanzo Bomber	Irvine 40 d	1800	43
Peter	SCOTT	Lanzo Recd Breaker	Anderson	1794	
Tim	WRIGHT *	Lanzo Bomber 87%	OS 40 4/	1740	
Basil	HEALY	Dallaire 75%	ASP 32 d	1673	
Sarah	WRIGHT *	Lanzo Stick	Irvine diesel	1610	
Jim	RAE	Dallaire 75%	ASP 30 4/	931	

Top Gun

Dave Paton

* Junior competitor



Above: Texaco winners - Dave Brown 2nd, Ian Connell 1st and Dave Paton 3rd. Right: Winners in Duration - Jim Rae 2nd, Dave Brown 1st and Dave Paton 3rd.



Above Left: Jim Rae receives one of his trophies from SAM 1788 President Peter Scott.

Above Right: Dave Paton from Queensland being awarded the Top Gun Award for the 2012 New England Gas Champs, Tamworth. (Note the other bundle of trophies clutched in Dave's left hand. Quite a haul. Congratulations Dave.

Left: Peter Scott displays the Brian Potter Memorial Trophy for 1/2A Texaco, awarded annually at the New England Gas Champs at Tamworth.



"My doctor told me to avoid any unnecessary stress, so I didn't open his bill."

R/C Old Timer Glider

From Grant Manwaring

The 30th anniversary SAM1788 Championships at Canowindra have come and gone, but what a great turn out for Old Timer Glider. Three years ago we had 5 entries, 2011 there were 10 and this year 21 entries with 18 actually flying the event. The event held on Thursday afternoon on the well prepared flying field provided great start to the Easter weekend

Congratulations to David Beake 1st, Mike Walsh 2nd and Max Newcombe 3rd and to all the contestants who flew in the event and helped make it a success. A variety of models, both new and old were flown, three Frog Princes, two each of Thermalists and Thunderking and an impressive Leprechaun by Ian Dixon from WA. The models handled the conditions well, with a few incidents thrown in for good measure.

Thanks also to those who assisted with running the event, the line retrievers, winch operators and helpers, without their help the event would not have run as smoothly on the day.

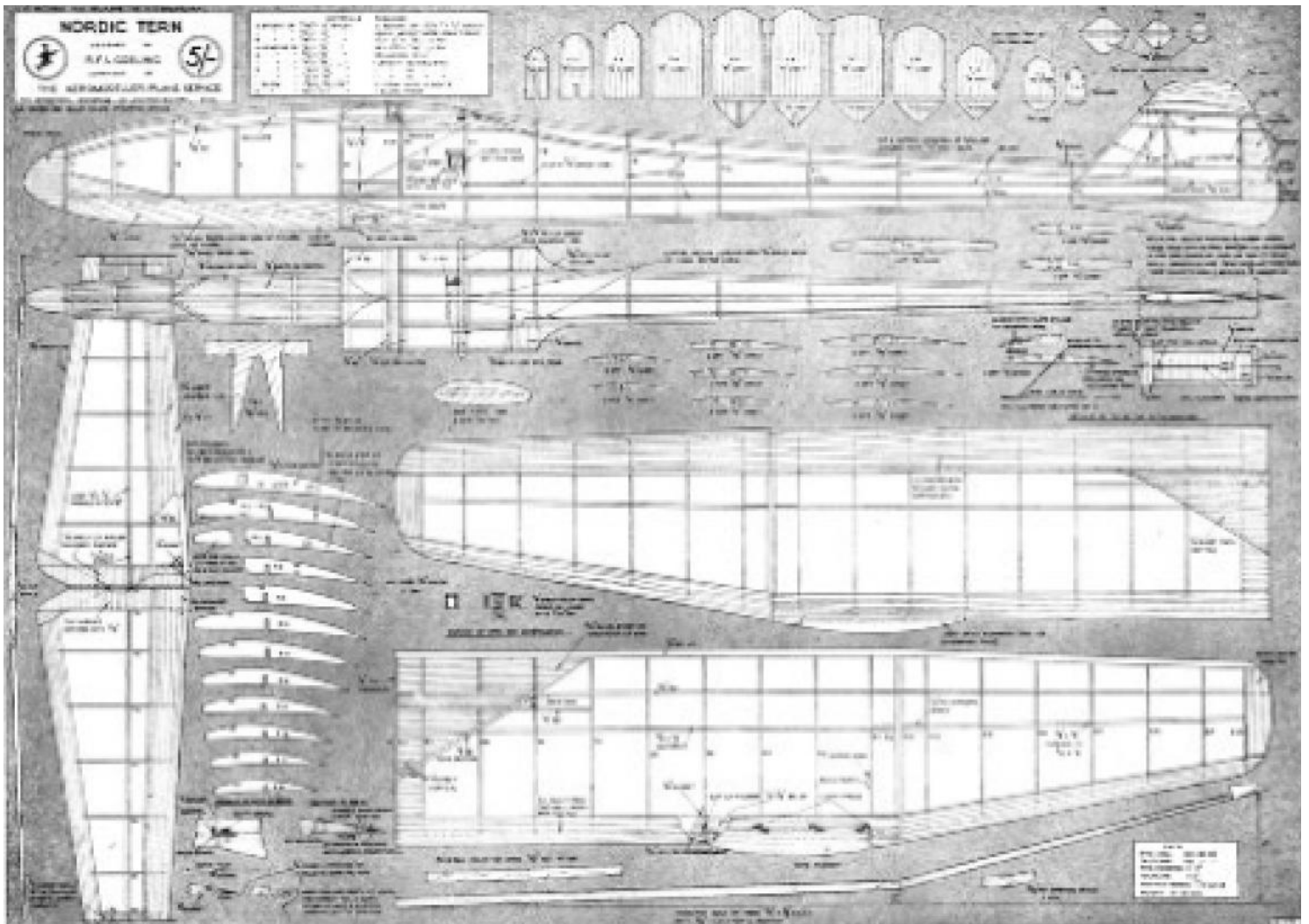
Now that we have a good number of gliders built I will be looking at getting some glider events as part of our SAM1788 competitions or as standalone days. This will allow these models to be used more, for flyers to become more used to winching and the general flying characteristics of the models. If required I will also set up another test day in February 2013 similar to Goulburn test day this year. More on this in the next Duration Times.

Several flyers spoke with me at Canowindra, and having seen the models fly are intending to try this event. Between Basil Healy and myself we can make plans available and can help with advice. Our contact details are listed below. Also courtesy of Bruce Ramsay I now have full size plans for the Nordic Tern (see opposite) and Moby Dick. Any of these plans are available at cost.

<u>Contact Details:</u> Grant Manwaring 7 Arthaldo Court Nicholls ACT 2913 Email: grantandmary7@gmail.com.au Telephone: 02 6241-1320	Basil Healy 4 Casuarina Close Umina NSW 2257 Email: basnpat@tac.com.au Telephone: 02 4341-7292	Dave Brown - Model Draughting Services 2 Carey Street Wallerawang NSW 2645 Email: daveb@ix.net.au Telephone: 02 6355-7298
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Below: The tree that ate Basil Healy's Movo F7 Oldtimer Glider at Canowindra. Unfortunately the tree didn't spit it out and a ladder assisted rescue was required. Very minor damage was sustained and the glider is already serviceable for the next Oldtimer Glider event. Photos by Liz Harman and Karen Paton.





REVIEW of recent CONTROL-LINE and FREE-FLIGHT activity

From David Owen.

The 2012 SAM 1788 Championships, held at Canowindra over the Easter break, were an unqualified success. A very large number of entries in F/F, C/L and R/C events, coupled with mostly excellent weather conditions and great field preparation, resulted in a truly memorable five day Champs and one of the best in recent years. Interstate visitors particularly enjoyed themselves, with a number promising to return in future years. Two excellent C/L circles were prepared by



Above: "HAY EWE" one of the interested on-lookers at the Canowindra SAM Champs (also Paul's pet?).

Below: Well-known Sydney flier, Ian Smith, with a Frog 180 powered model, one of a fleet of interesting vintage control liners he flew at Canowindra.



Paul Farthing and I would like to thank Paul for his contribution to the success of C/L events at the Champs.

The Phantom Shield event ran smoothly, stretching over two days with 20+ entries over the four classes. Once again, the established racing format proved popular and successful, with virtually all recording 3 times. The overall winner was Gary de Chastel flying in Class 3 with his CS Oliver powered Phantom. Class 1 was won comfortably by Richard Sutherland, with the best performing ED Comp Special seen in many years. Peter J. Smith won Class 2 with his MVVS 2cc powered Phantom and a scorching 72.73mph. The new Class 4, for Schnuerleported engines, was won by Peter Cutler, flying a Fora powered entry. Some observations from me follow:

Firstly, there is a tendency for some entries to present without spinners and with very small canopies. I like to see some effort from entrants to build Phantoms that look like the original design! The faster models are still manageable on 35' lines, so I feel there is no need to go to longer lines, as talked about last year.

Following some comments about the eligibility or otherwise of the MVVS 2cc engines used by Peter Smith and Laurie Chetter, I asked Peter to send me an example to examine. I can confirm that whilst the MVVS engine does have some similarities to Schnuerle-ported, I do not consider it to be a Schnuerle-ported design, as the transfer ports do not oppose the exhaust port, as in a true Schnuerle configuration. So this engine remains in Class 2 for non-Schnuerle engines. It will be hard to beat, but there are some fast Tyros out there too. Thanks for your help on this issue, Peter.



Above: Gary de Chastel with his Phantom/CS Oliver, overall winner of the Phantom Shield for 2012. Below: Jim Rae and his MPJet powered KeilKraft Champ achieving 47.44mph.





Phantoms (and some Champs) everywhere at the 30th Canowindra. SAM 1788 Champs.

excelling themselves. The field looked and was superb and the large crowd of fliers and helpers, many with their wives and partners, thoroughly enjoyed themselves over the two-day event. Special mention must be made of the on-site coffee van, which was a nice modern touch and seemed to be very well patronized over the weekend. Once again the club put on the Saturday evening dinner in a large on-field marquee, with a backdrop of illuminated electric models flying around. This evening format is vastly superior to the old idea of the Saturday night restaurant or club meal and everyone was very relaxed and enjoyed the excellent catered food. Congratulations to the Muswellbrook team and we all hope to do it again next year.

The F/F model for this year, the Model News Piper Cub, proved to be very popular and quite a number were seen flying around sedately on Saturday and Sunday mornings. Cubs ranged from old and plain, like mine, to virtual Scale F/F Comp standard, as in Dave Simon's and Dave Murrell's models. The C/L model this time was the very attractive Kawasaki Hien and again many were seen on the field. This is a great flying little stunter and lends itself to colorful paint schemes, as demonstrated over the weekend. C/L flying was pretty much continuous, with both circles in action for much of the time.



Warren Leadbetter's Electric Cub at Muswellbrook 2012 Vets Gathering.

This year there was no ballot, as such, for the choice of models for 2013. Having received two strong suggestions as to suitable



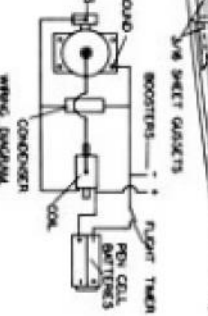
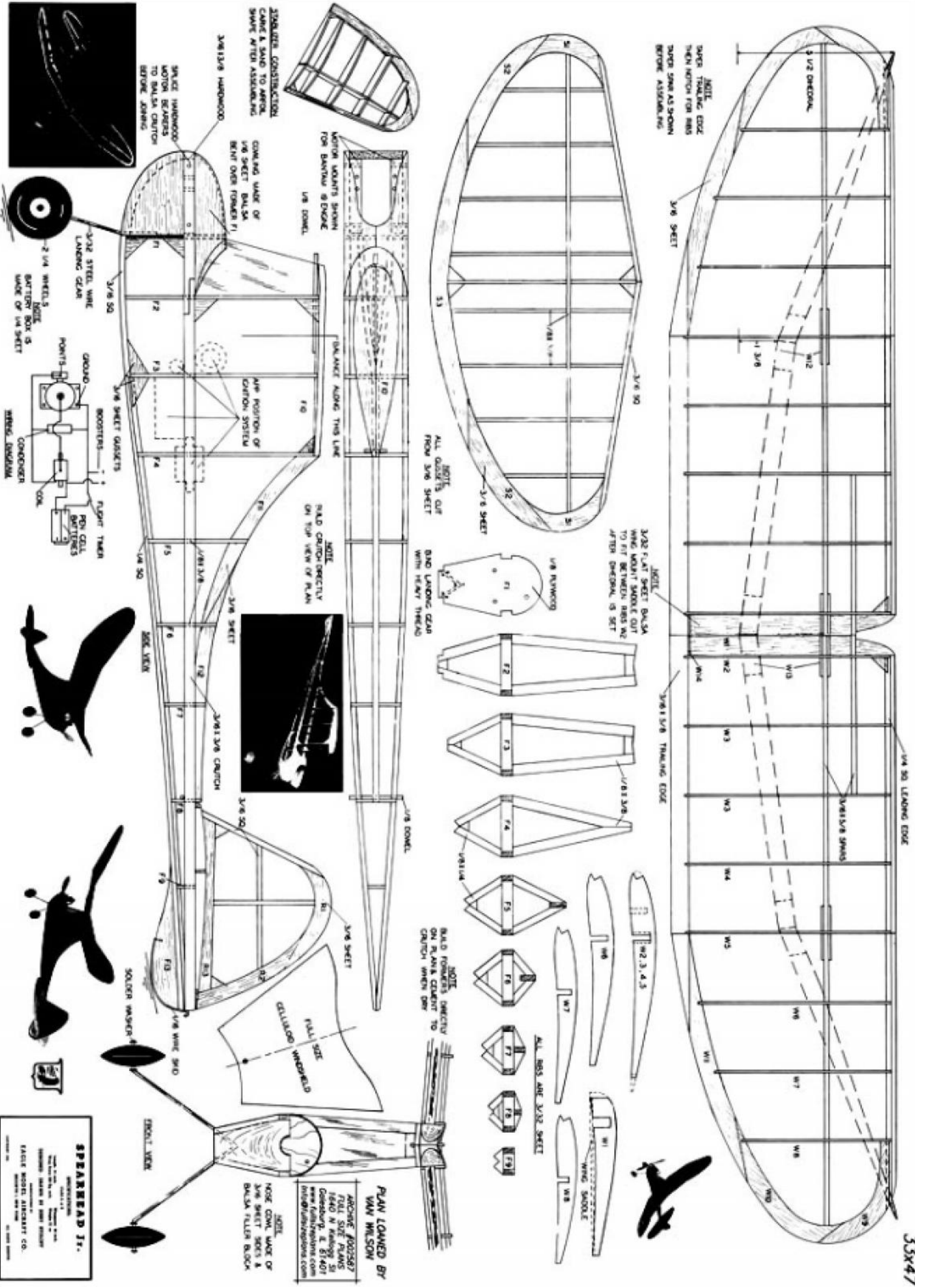
David Murrell's Kawasaki Hien with McCoy 19 at Muswellbrook 2012 Vets Gathering.

Australian designs, I bit the bullet and made an executive decision to go with the 1956 Scramble Winner by Cyril Marsden (thanks Howard Gostelow) for F/F and the Kutlass flying wing for C/L (thanks Roy Summersby). Both model choices were well received by the modellers at the Vets, much to my relief! Partial kits with plans for these models are in preparation now by Dave Brown. Contact Browny and make an early start for next years Vet's Gathering.

This year we ran the new KeilKraft Champ class for the first time and we had six keen entrants. The entries were split between Mills and MPJet engines, the latter powering Jim Rae's winning model at 47.44mph. Earlier doubts about the use of 35' lines on the small Champ were soon dismissed, the models handling even windy conditions with no drama. One problem which did arise was the inability of some of the entrants to complete 12 laps on the small tanks fitted to these engines. Jim Rae showed it was possible by angling the rear-mounted tank over to the outside of the circle. So we won't be reducing the number of laps next year and all entrants now have plenty of time to sort their fuel systems out before next year.

In late April, only a few weeks after the SAM Champs, many of us headed to Muswellbrook for the very popular Veteran's Gathering for 2012. This year the Muswellbrook club excelled themselves.

Next DT will have a round-up of C/L and F/F activity in other states, particularly in Tasmania and Queensland, as well as a report on the 2nd Old Phartz and Friends event in Coffs Harbour at the end of this month (June).



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Tandy Walker

Tandy has been a life long modeller for over 68 years and has built and flown control line stunt and combat, free flight, radio control sport, and quarter scale.

Since his retirement in 1993, he became a life member of the Society of Antique Modelers (SAM).

Tandy is dedicated to building and competing old timer models in the annual SAM Championships held in Indiana and Nevada on alternate years.

On Tandy's Website:

<http://tandysmodelplanes.com/>

he shares his lifelong interest in model aviation through the construction details of the various model projects he has completed as well as those projects he is currently working on. It is a work in progress and the information will be expanded and updated in the coming months. Well worth a look.

Left: Tandy with his fleet of Fubar-X models.

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Diesel Cox Engines and thoughts and theories on 1/2A FF Texaco

From Mike Myers mikemyersgln@charter.net

I went out to my Cox engine draw and discovered that the Cox .049 with the pukka diesel head (brass Tommy bar and brass contra piston) has moved on to some other owner. I got it from a young English modeller who'd brought it over here for one of the late 80's early 90's "50th Anniversary Anglo American Wakefield Contests". He'd made the head and the conversion. As far as I could tell it was otherwise a box stock Cox .049 (okay, I know that Cox had 10 different cylinders for its various Cox .049 permutations).

I did run it on the test stand before it passed out of my hands. It ran just fine. But I never put it in a model because it was just one more of many small diesels I had, and so it never found a home in an airframe.

It strikes me that Leroy Cox intended for his 049's to be high revving screamers and designed and ported them for high rpm operations. And the Mills .75 and all the other little sideport diesels were intended to be long stroke torquier, slow revving engines. What would be interesting would be to take a PAW .80 cc engine - FRV and all - apart and measure the various dimensions vis a vis a Cox .049 Tee Dee engine.

As a non-engineer, fuel economy theories are speculation on my part - and no more than that. I think that, on a volumetric basis, there are more BTU's of thermal energy in kerosene than in methanol; there may or may not be more BTUs in diethyl ether than there are in methanol. Certainly back in the hey day of 1/2A FF Texaco there were dark whispers that certain competitors found it useful to "spike" their 1/2A Texaco FF fuel with some gasoline for more energy.

And the supposedly superior fuel economy of small diesel engines over small glow engines could be one of three things - and perhaps others:

1. Higher BTU or energy content in a mix of kerosene, ether, and castor oil (1/3, 1/3, 1/3 being the classic mix for late 1940's era English diesels) than in say the 80% methanol, 15% oil, 5% nitromethane mix for a 1/2A Texaco FF glow engine;
2. Better torque, longer piston stroke, different porting on a diesel engine vis a vis a Cox - with the ability to use a larger diameter more efficient propeller
3. Or simply the benefit of running at a lower RPM. I know that in 1984 or 85 or so I was inspired by hearing reports of some character (I'd never heard of him before then) who was flying 1/2 A RC Texaco using a great big prop and getting the engine to run for 10 or more minutes at 1,400 rpm.



Home-brew Cox .049 diesel conversion.



Various Cox .049 Engines

The "character" was Eut Tileston of Carmichael California. I thought I'd like to see if I could get a Cox reed valve to run a whole tank through at just 1,400 rpm. I reasoned that every revolution of a 2 stroke engine used a finite quantity of fuel. Lower revs mean lower fuel consumption on a time basis. So I went out and set up a test stand to see what I could do. I used the stock 8cc fuel tank from a Cox Black Widow. I used different numbers of head shims, sometimes using as many as 5 of them to lower the compression ratio. I used a series of large props, bushing them with a Goldberg 3/32 wheel collar - which is a perfect fit for the 5-40 prop screw on Cox engines. I experimented with different glow fuels, but had the longest engine runs using a quart of ancient

5% nitro glow fuel I'd bought from Tony Naccarato. It had probably been sitting in Tony's backroom for a dozen years before I bought it. I used a tach and a stop watch to measure results.

I know that current SAM RC rules restrict the size of the propeller you can use in 1/2A RC Texaco. So my results are more interesting for guys who fly FF 1/2A Texaco. The SCIF 1/2A Texaco contests allowed 8cc of fuel; the SCAMP 1/2A Texaco contests allowed 15 cc of fuel (these are figures from say 1985 to 1995 or so - I think most of the contests these days allow 8 cc which is the stock Black Widow/Golden Bee tank).

What I found was the bigger the prop, the slower the motor and the longer the motor run. I have the figures written down somewhere, but didn't lay my hands on them today. As I recall, I had a nearly 13 minute motor run using a nylon 12x6 propeller



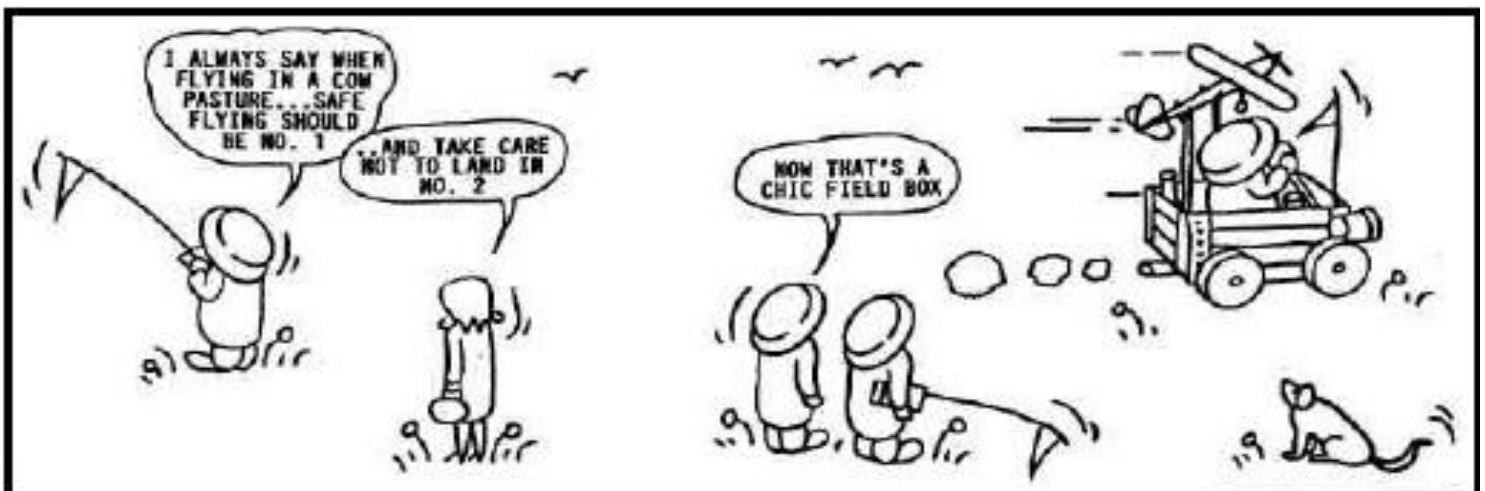
running at about 1,800 rpm. I never could achieve the 1,400 rpm run the tank out figure that Eut supposedly had done. Motor run time was directly correlated to rpm. Motor rpm was sensitive to propeller diameter, but not so much to prop pitch, i.e. the Cox would turn a 10x6 prop about as well as it turned a 10x4 prop. Motor run time on the reed valve engines was also affected by venturi diameter. Cox's reed valve tanks had venturi diameters ranging in size from .059 to .092 inches. You wanted a tank with the smallest venturi diameter you could find, so the motor was sipping rather than slurping its fuel. I searched, but the smallest diameter I ever found was .062 - so I used that tank.

My response to those lessons for the 1/2A FF Texaco event was to prepare a box of "1/2A Texaco props". They were propellers from 7 inches up to 11 inches, each bushed with a Goldberg 3/32" wheel collar. I'd take them and my model to a contest, and try to put up a trim flight. I'd use the biggest diameter/pitch prop I had that would still allow the model to ROG. I tended to run low nitro fuels - usually 5% and sometimes 10% because I thought they ran longer than the high nitro fuels for the same volume. It was easy enough to tell

when the prop was too big - the model would just trundle across the desert floor and never get off the ground. Some other 1/2A Texaco competitors went the other route, using high nitro fuels for higher RPMs in the hope the model would climb fast to a great height. Certainly Sal Taibi used to punch things up there with a hot Tee Dee .049 and a smaller prop at high rpm. Either approach won its share of contests.

The 1/2A FF Texaco rules did not restrict contestants to a Cox reed valve engine. Witness Sal running a Tee Dee .049. Ron Boots tried a lot of different engines. I seem to recall his efforts with a WenMac .049. There were others who liked the Medalion, or the Cox "product engines". There was probably a McCoy or an OK Cub in there from time to time. Mik Mikkelson tried to build a big, light paper kit of a scaled down Miss Fortune X or King Burd, using a Cox Pee Wee .020 for power. Mik was a rubber guy and usually had trouble with engines, but he was able to put that airplane up at a few contests after wrasslin' with the Pee Wee each time. Charlie Yost and I finally concluded that Cox reed valves were just too finicky and settled on the Norvel Big Mig .049 engines. They're nice front rotary valve engines, seem to have decent enough torque for at least an 8 or maybe even a 9 inch prop and weren't fussy about dust and dirt - what's not to like about that?

To some extent the 1/2A FF Texaco event is a crap shoot. Your model will be in the air for quite a while if your engine run is good for 7 or 8 minutes. And if the model blunders into a thermal, you'll win the contest. If it doesn't, you won't. Winning single flight times in the event were frequently between 25 and 35 minutes - having a timer with good eyesight helps a bunch. And the event was and is almost as much fun as it's possible to have outdoors while you're standing up.



Van Wilson's mandatory equipment for winter flying in Alaska.



Brawn beats Brains every time! Condo and Mick Walsh. Trophy is the '38 Antique Perpetual won by Condo at 30th SAM 1788 Champs 2012.

From
Hank Sperzel
hsperzel@cox.net

I just got to build one of these things!

Can you imagine sticking this thing on the prop shaft of a Nelson turning about 25,000 RPM?

This device was in the May 1942 issue of Air Trails. The May issue sold for a whopping 15 cents!

SIMPLE RPM INDICATOR FOR GAS MODEL ENGINES

BY MANLEY MILLS

WITH THE ENGINE RUNNING, HOLD THE ERASER TIP OF THE INDICATOR AGAINST THE END OF THE PROP SHAFT. USE A STOP-WATCH TO FIND THE NUMBER OF SECONDS IT TAKES THE LARGE GEAR TO MAKE ABOUT 4 COMPLETE TURNS. NOW MULTIPLY THE GEAR RATIO BY THE NUMBER OF TIMED TURNS, TO OBTAIN THE NUMBER OF ENGINE REVOLUTIONS DURING THE TIMED PERIOD. CALL THE RESULT "A". NOW DIVIDE THE STOP-WATCH READING INTO 60 TO GET "B". R.P.M. EQUAL AxB. FOR EXAMPLE, IF GEAR RATIO IS 130:1 AND GEAR MAKES 4 TURNS IN 5 SECONDS, - A EQUALS 4x130 OR 520. B EQUALS 60÷5, OR 12. 520x12 EQUALS 6240 - R.P.M. OF ENGINE.

From Karl Gies skyland@midrivers.com

Here is my story and I'm sticking to it. I built a 44" ws Tomboy in 1968 and it is powered by a Cox. Baby Bee .049 but will probably switch it to a diesel. I did not know about diesels when it was

It is a most satisfying flyer - I have hundreds of flights on it wearing out one engine and never had a more stable gas model. I have only crashed it once with minor damage to the starboard wing.

I have a stab dethermalizer on the Tomboy but still vividly remember a flight without lighting the d.t. I have an eyedropper tank on it and turned it loose w/a full eyedropper. It got fairly high but was quite visible.

On the way down it caught a weak thermal and it hovered at about 200-400 feet, sometimes going up twice as high but still in sight, just bouncing around, and we ran underneath it for approximately four to five miles.

This was highlighted by a German Shepherd dog attacking us about half way and since it was a rather large dog this was a major distraction. I luckily found a pruned tree limb being in a fruit orchard. I got a very good head shot on the dog as he was in the air and it really dropped him. It was either the dog or Karl.

I looked back up in the sky and there was the Tomboy but some distance away from us. It finally got out of the thermal and landed on the edge of a small strip shopping centre. This was in Milpitas, California and the local shopping area was several car miles from where I taught at Rancho Milpitas junior high school but we ran a much straighter route through the orchards.

I had a student with me who was in my after school model airplane club and this made quite an impression on him. I think that the vicious dog got my heart going more than anything. There are junk yard dogs and orchard dogs. I have had a lot of exciting moments in my life but this model chase stands out vividly with the dog attacking us and getting the model back.

