



Points of Interest:

- From the President.
- Progress report on 30th SAM Champs.
- R/C Oldtimer Glider - Grant Manwaring.
- Results and report - Eastern States Gas Champs at Wangaratta.
- Control Line and other matters - David Owen.
- Engine Analysis - ED Mark IV Diesel.
- Coota Cup Oldtimer Results and Report.
- The Back Page.

BULLETIN
No. 172
Sept - October
2011

DURATION TIMES

WORTH NOTING:

From Roland Friestad cardinal.eng@grics.net

It is with deep sadness that I have to report that John Worth passed away Sunday Evening October 23, 2011, at 10:22 pm.

From SAM Treasurer Gail Scott

Gail is seeking historic photos of past SAM events, articles, members and models for inclusion in a special collection of photos as a commemorative feature for the 30th SAM Championships in 2012.

Members can email their electronic photos to Gail at qualmag@optusnet.com.au. Please send a high resolution copy of the photo. If it is a scan of a printed photo please scan at 400 dpi. Alternately you can post your print to Gail at the address on page 2 of this Duration Times.

It is hoped to be able to produce a commemorative CD of these photos for distribution to SAM Members.

Postal Vote re Change of Date for the Eastern States Gas Champs.

SAM 1788 Members will receive a Postal Vote with this Duration Times. Please consider the points raised re the proposal to change the date for this event and send in your decision to the SAM Secretary as soon as possible but no later than 30th December, 2011. Thank you.

Vale Dawn Stevenson

Members are advised that Harold Stevenson's wife, Dawn Stevenson, passed away recently and SAM1788 sends its condolences to Harold for his loss. Dawn was one of the gang at SAM 1788 events for more than 25 years and was Harold's "right hand (wo)man" at all SAM 1788 events. Many fliers at Oldtimer events will have fond memories of Dawn and her friendly, caring and helpful ways towards them. She was always good for a cuppa and yarn anytime.



Muswellbrook Oldtimer and Electric Glider Weekend November 12th-13th, 2011.

Competition Events

SATURDAY:

- * 9.30am Start - Gordon Burford & Oldtimer Duration,
- * Vintage and Balsa built-up gliders handicap event.

SUNDAY:

- * 9am Start - 1/2A Texaco then Oldtimer Texaco,
- * Vintage and Balsa built-up gliders handicap event.

Non-Competition Event

- * Electric Glider Fun Fly.

BBQ both days for breakfast and lunch - Drinks, Tea & Coffee available all day.

Check the web site for entry fees, rules and other information regarding this great weekend.

www.mdmas.org.au

For information contact:

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Simon Bishop 0429 453 286 Email vicepresident@mdmas.org.au

Duration Times is the official Bulletin of SAM 1788

SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA 1788 Inc.

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Upcoming & Provisional Oldtimer Events for 2011 - 2012.

| | | | | | |
|-----------|-------|--|--------------|-----------------|---------------|
| November | 12-13 | Muswellbrook Oldtimer Weekend | Muswellbrook | Simon Bishop | 02 6543-5170. |
| February | 4-15 | Oldtimer at Orange. Alan Brown Memorial. | Orange | Stewart West | 02 6331-9822. |
| March | 17-18 | Wyong River Oldtimer Weekend | Wyong | Basil Healy | 02 4341-7292. |
| April | 5-10 | SAM 1788 Championships | Canowindra | Basil Healy | 02 4341-7292. |
| May | 5-6 | Veterans Gathering | Muswellbrook | Simon Bishop | 02 6543-5170. |
| May | 13-14 | Belconnen/Yass Oldtimer Weekend | Yass | Grant Manwaring | 02 6241-1320. |
| June | 16-17 | New England Gas Champs | Tamworth | Basil Healy | 02 4341-7292. |
| July | 21-22 | Golden West Oldtimer Competition | Parkes | Peter J. Smith | 0423 452 879. |
| August | 25-26 | 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: Looking back at Wangaratta and forward to Cootamundra; that's how I am at the present. We all thought that Wangaratta was going to be a disaster weather wise, it was certainly forecast that way and didn't look good Saturday morning. But, by 11am the rain stopped and flying commenced. We cut one round off each contest and it all worked well. The Friday, Saturday and Sunday nights at The Sydney Hotel were very good with fast service, great food and plenty to chat about. By the end of the weekend we actually made a small profit! Wonderful!!

I personally would prefer to see the weekend moved away from the long weekend to two weeks before. Some wish it to stay on that long weekend, so the committee are asking members for their preference. Please fill in the questionnaire and let the committee know your preference.

I spelled out the Free flight rules for Vintage Power last time in Duration Times and have been asked about the Tom Boy/ Cardinal Free flight rules. They are:- diesel or spark motors that were period to the models, plain bearing only. 1cc upper capacity limit (believe me, a hot shot motor in either of these models is a fast way to crash). Models must be original size and true to plan. 3cc is the max fuel allowance and it is a ratio event. I would suggest that a D.T. timer is essential.

Please don't forget to try and get to Muswellbrook. The locals are running the standard contests so it will be the standard four plus glider. It's a great flying field with top facilities. If we want these events to continue we must make the effort to patronise them.

I include a picture of my latest model - a 1954 Slick Stick for Vintage Free Flight. The motor is a Webra Mach 1. There will be a special prize for the place getters in this class at Canowindra.

Talking of Canowindra, the committee are working on this event. Several details have been tied up and your Hon. Secretary is working like a beaver contacting people and organising every the little detail.

Cheers, Peter Scott.

SAM Championships 2012 - Progress report from SAM Secretary Basil Healy.

Arrangements for the presentation dinner and the Saturday evening barbecue are almost complete. Cost of the presentation dinner will be in the order of \$25 - \$30 per head depending on the menu selected. We are still looking for a group to do the "on field" catering. I am currently awaiting a reply from the Canowindra C.W.A. There will also be a commemorative shirt.

2012 SAM Championship Programme.

| | | |
|---------------------|------------|---|
| Thursday 5th April: | 8am | Free Flight - Vintage Power then Tomboy - Cardinal power/ratio (3cc tank max). |
| | 1pm | R/C Oldtimer Glider. |
| | 1pm-5pm | Control Line Phantom and KK Champ racing. |
| | 4pm | R/C Tomboy. |
| Friday 6th April: | 9am - 11am | Processing for R/C events. |
| | 9am - 11am | Control Line Phantom and KK Champ racing. |
| | 11am | R/C Nostalgia. |
| | 12.30pm | Lunch. |
| | 1pm | R/C $\frac{1}{2}$ A Texaco. |
| | 8pm | SAM 1788 Annual General Meeting - CWA Hall, Canowindra. (Lucky door of engine provided by Peter Scott) |
| Saturday 7th April: | 9am | R/C Gordon Burford Event. |
| | 12 noon | Lunch. |
| | 12.30pm | R/C Oldtimer Texaco. |
| | 7pm | Barbecue at Bogwood. Buy, Sell and Swap Meet. Indoor Helicopter event (3 channel control only). |
| Sunday 8th April: | 9am | R/C '38 Antique. |
| | 12 noon | Lunch. |
| | 12.30pm | R/C Duration. |
| | 6.30pm | Presentation Dinner and Raffle. |
| Monday 9th April: | 9am | R/C 2cc Oldtimer. |
| | 12 noon | Lunch. |
| | 12.30pm | R/C Standard Duration. |

Dave Brown has agreed to receive the entries, compile the score sheets and collate the results for each event.

Contest Directors: So far Peter Scott, Basil Healy and Geoff Potter have offered their services. Any other offers would be welcome.

That just about covers things to this point in time. There are still a few loose ends to tie up before I can sit back and relax.

Cracked cases on Ohlsson's can sometimes be prevented by careful checking and fitting.

From Bob Angel samrcflier@verizon.net

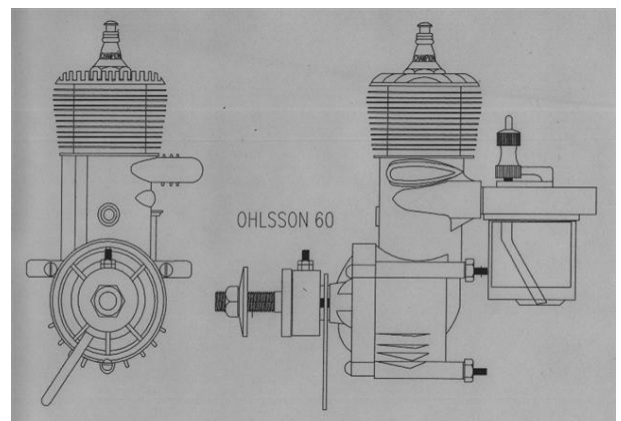
(SAM 26 Newsletter)

Some O&R's have a "ganging of tolerances" problem that results in the broken cases. The front plate has to be a snug fit in the case, or the three bolts alone won't keep it from starting to move with the pounding the crankshaft takes while running. The front plate fit is tapered so it gets snugger as you push it into place.

But that fit can be too tight on some engines, especially if parts have been swapped. Tightening the bolts on that taper can crack the case outright, or it might crack upon cooling after a run, when the thin case loses heat and shrinks faster than the greater mass of the front plate.

The solution is to carefully do a trial fit of the front plate to the case without the gasket in place. If the fit becomes too tight, stop and dress down the front plate until the fit is just snug, not excessively tight. You could easily loosen things too much on a lathe, so I just use a fine tooth safe file to do this job. A safe file is one which has teeth only on opposing sides, but is smooth on opposing edges. That helps the file remove metal only on the tapered surface and not on the gasket face.

You could use machinist's blueing dye inside the case edge to identify the tightest spots, but I've not found that to be necessary. Usually you can get a feel for the high spots by just wobbling the front plate when it's almost seated.



R/C Old Timer Glider

From Grant Manwaring

As mentioned in the last issue of Duration Times, we will be holding a glider event test day at the Muswellbrook meeting, this will give us an opportunity to fly the gliders and get more familiar with winch launching. Both winches have new 100lb line installed. I am hoping for a good roll up for this event. I am also looking to hold a test day / event early in 2012, at a central location. More details in the next Duration Times.

In anticipation of a larger number of entries at the 2012 SAM Champs at Canowindra, the Old Timer Glider event has been scheduled for Thursday 5th April 2012, from 1.00pm - 4.00pm. This timeslot allows 3 hours to run the event over 4 rounds and not impact on other events. Tomboy event is scheduled at 4.00pm - 5.00pm Thursday after Oldtimer Glider.

From discussions with fliers, there is interest in the event for 2012. I spoke with Dave Paton at Wangaratta and he and others from Queensland have intentions to build a glider, some of the Victorians are talking about it as well. Alan Laycock has returned from overseas with a partial kit for an Italian design. Also from Canberra David Beake has a new Thermalist and Ian Harman has a DG67 ready to go. I have also built a Thermalist for this event.

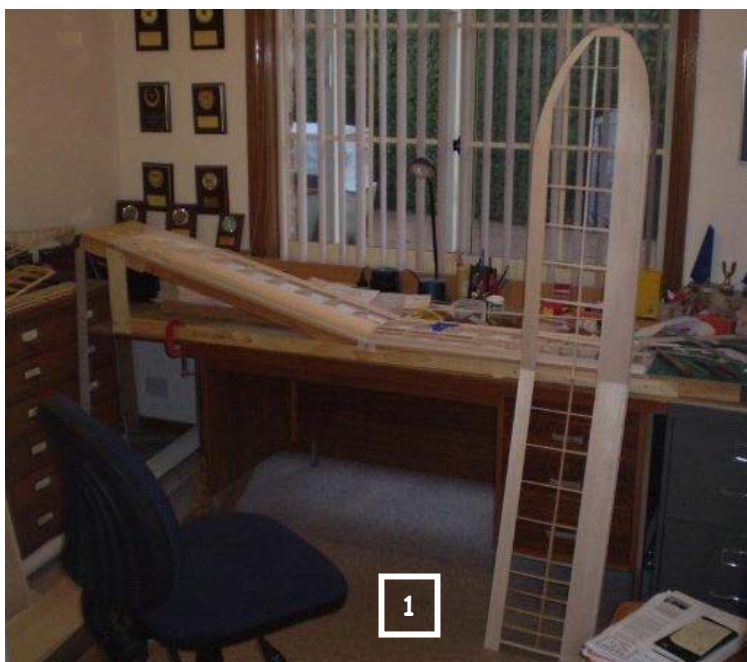
My winter building project this year has been a Thermalist glider. I started this model 12 years ago, completed the fuselage and tailplane. I have retained the original fuselage, built a new tailplane, fin and wings. Wingspan is 11'6". It is a big model but should fly really well. Covering will be red tissue/doped fuselage, translucent yellow Monokote wings, tailplane and fin. I now have the model finally sanded and ready for covering. I have included some photos taken through the building of the model. The Thermalist plan was published in Duration Times No 170. I have a full size and a 75% size plan I can make available if you want to start building.

Once again both Basil Healy and myself can help with plans and I have previously listed them in Duration Times. Check them out in the back issues. Dave Brown can also cut partial kits and he has a number of glider plans on file. Now is the time for you to get started on your entry for 2012.

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1



2



3

Photos:

1. Wing construction - each wing panel was built on wing jig and each panel is 90% complete at this stage.
2. Fuselage completed. Shaping and sanding noseblock. Noseblock has been hollowed out for lead ballast.
3. Rigging wing and tailplane to fuselage. Wings retained on $\frac{1}{4}$ " steel rods inside brass tubes which are laminated into spar assemblies. Tailplane bolts to fuselage.



Photos:

4. Final assembly, all hatches in place, pilot and canopy in place, this is a big model to move around.
5. All components ready to cover and finish.

Grant advises that he has a full size and a 75% size plan I can make available if you want to start building.

Also, don't forget that there will be a glider event test day at the Muswellbrook Oldtimer weekend on 22-23 November, 2011, where you will have an opportunity to fly your gliders and get more familiar with winch launching.

For more information contact Grant Manwaring or Basil Healy - see contact details on page 4.



A winch photo from Cootamundra.

Basil Healy took advantage of the wide open spaces at Cootamundra to fit new line on both of the electric winches which will be utilised in the Oldtimer Glider event at the 2012 SAM Champs at Canowindra next Easter. The measuring wheel used is laying on the ground to Basil's left.

This will ensure that both winches will be of equal length and quality and should ensure that delays which occurred last Easter, when there were numerous line breaks, should be less of a problem next Easter. Also the new, high quality line is a little stronger than last year.

Grant Manwaring and Basil Healy are doing everything possible to ensure the success of the Oldtimer Glider event in 2012 so get your oldtimer glider built and tested asap.

Photo is from Peter Smith (Canberra).

A Frank Ehling true story....

Many years ago I became interested in chasing down some of the trophies won by the early model airplane participants who lived in the Washington, D.C. area.

Frank Ehling was living in the Laurel, Maryland area and I drove to his home. A gentleman friend answered my knock on the door and came outside so we could speak - evidently Mr. Ehling was inside taking a nap. I asked how many trophies were still left from his many years of competition. "Most all of them I expect" the man told me.

I asked if I could see them, and he said "Well, not very easily....we were putting in this cement driveway last year and about a yard of concrete short, so the delivery man asked if we had anything to use as fill to add to the concrete....We pulled out all the trophies and dropped them into the concrete as it was being poured, so they are save forever, but not accessible....."

Reed Martin

Cabin John, Maryland

reedbanjo@verizon.net

EASTERN STATES GAS CHAMPS

WANGARATTA 1-2 OCTOBER, 2011.

RESULTS**'38 Antique**

| | | | | | |
|---------|-----------|------------------|-------------------|------|------|
| Grant | MANWARING | RC1 | Burford 5cc d | 1200 | 1121 |
| Peter | SCOTT | 1936 RC1 | Whirlwind 60 | 1200 | 661 |
| Basil | HEALY | 1936 RC1 | Sparey 5cc d | 1200 | 464 |
| Dave | BROWN | 1938 Flamingo | O&R 60 | 1200 | |
| Michael | WALSH | Westerner | Anderson Spitfire | 1200 | |
| Dave | PATON | Thunderbird | Burford 5cc d | 1086 | |
| Steven | GULLOCK | 1936 RC1 | Burford 5cc d | 985 | |
| Barry | BARTON | California Chief | DC 350 d | 876 | |
| Kevin | FRYER | 1936 Red Zephyr | McCoy 60 | 600 | |

Gordon Burford Event

| | | | | | |
|----------------|-----------|-------------------|--------------|-----|-----|
| Peter R. SMITH | Ollie | Taipan plain | 600 | 459 | |
| Peter J. SMITH | Spoofem | Taipan plain | 600 | 440 | |
| Dave | PATON | 1942 Stardust Spl | Taipan plain | 600 | 351 |
| Robert | SMITH | Faison | Taipan BB | 600 | 313 |
| Basil | HEALY | Dixielander | Taipan plain | 600 | 173 |
| Steven | GULLOCK | Swiss Miss | Taipan plain | 600 | 125 |
| Ian | HARMON | Little Diamond | Taipan plain | 600 | |
| Grant | MANWARING | Eliminator | Taipan plain | 600 | |

Nostalgia

| | | | | | |
|---------|-------------------|---------------|----------|-----|-----|
| Peter | SCOTT | Ultra Hogan | K & B 40 | 840 | 464 |
| David | BEAKE | 1944 Swayback | K & B 40 | 840 | 436 |
| Michael | WALSH | Hyphen | K & B 40 | 840 | 431 |
| Peter | Van de Waterbeemd | Spacer | K & B 40 | 591 | |
| Geoff | POTTER | 1944 Swayback | K & B 40 | 252 | |

Duration

| | | | | | |
|----------------|-------------------|--------------------|----------------|------|------|
| Peter J. SMITH | 1941 Playboy 112% | McCoy 60 | 840 | 1617 | |
| Dave | BROWN | 1938 Bomber 85% | Saito 56 4/ | 840 | 1405 |
| Michael | WALSH | 1942 Stardust Spl | YS 63 4/ | 840 | 1114 |
| Dave | PATON | 1941 Playboy 105% | OS 61 4/ | 840 | 1041 |
| Kevin | FRYER | 1936 Cumulus 92% | OS 46 FX | 840 | 720 |
| Peter | Van de Waterbeemd | 1938 Bomber 85% | Saito 56 4/ | 840 | 712 |
| Robert | TAYLOR | 92% Cumulus | YS 63 4/ | 840 | 687 |
| Peter | KEELY | 1938 Bomber 85% | OS 56 4/ | 840 | 579 |
| Peter | SCOTT | 1941 Playboy | Saito 62 4/ | 840 | 519 |
| Grant | MANWARING | 1941 Playboy | YS53 4/ | 840 | 369 |
| Steven | GULLOCK | 1936 75% Dallaire | OS 52 4/ | 840 | 268 |
| Geoff | POTTER | 1941 Playboy 111% | TTiger 46 2/ | 840 | |
| Basil | HEALY | Megow Chief | YS 53 4/ | 714 | |
| Grahame | MITCHELL | 1941 Playboy | Super Tiger 34 | 639 | |
| Barry | BARTON | 1936 RC1 | OS 46 FX | 550 | |
| Brian | DOWIE | 1941 Playboy | OS 46 2/ | 467 | |
| David | BEAKE | 1941 Playboy Cabin | Dooling 60 | 420 | |

Texaco

| | | | | | |
|----------------|-------------------|-------------------|--------------|------|------|
| Robert | TAYLOR | 1938 Racer 75% | O.S. 61 4/ | 1200 | 1196 |
| David | BEAKE | 1938 Bomber | OS 60 4/ | 1200 | 1195 |
| Kevin | FRYER | 1938 Bomber | Irvine 40 d | 1200 | 1158 |
| Steven | GULLOCK | 1938 Bomber 85% | Enya 53 4/ | 1200 | 1081 |
| Pat | KEELY | 1938 Bomber 85% | Magnum 52 4/ | 1200 | 1032 |
| Basil | HEALY | 75% Dallaire | ASP 32 d | 1200 | 1026 |
| Grant | MANWARING | 1938 Bomber | OS 60 4/ | 1200 | 1017 |
| Dave | PATON | 1938 Bomber 85% | O.S. 36 4/ | 1200 | 985 |
| Peter | Van de Waterbeemd | 1938 Bomber | ASP 61 4/ | 1200 | 820 |
| Dave | BROWN | 1938 Flamingo | O&R 60 | 1200 | 795 |
| Peter | SCOTT | 1936 Buccaneer | Forster 99 | 1200 | 724 |
| Michael | WALSH | 1938 Westerner | Anderson | 1200 | 718 |
| Geoff | POTTER | 1938 Lanzo Bomber | O.S. 61 4/ | 1200 | |
| Brian | DOWIE | 1938 Lanzo Bomber | OS 61 4/ | 1135 | |
| Ian | HARMON | 1938 Bomber | Enya 53 4/ | 600 | |
| Peter R. SMITH | 1938 Valkyrie | OS 60 4/ | 560 | | |

Top Gun

Top Gun (Champion of Champs) was Dave Paton from Queensland Vintagents SAM 84.

Tomboy

| | | | |
|----------------|-------------------|--------------------|-----|
| Grant | MANWARING | Irvine Mills .75 | 538 |
| Peter | SCOTT | Scholloser 1cc | 523 |
| Peter R. SMITH | ME Heron 1cc | 491 | |
| David | BEAKE | Irvine Mills .75 | 464 |
| Basil | HEALY | Mills .75 | 302 |
| Peter | Van de Waterbeemd | Doonside Mills .75 | 232 |

1/2a Texaco

| | | | | |
|----------------|---------------|---------------------------|-----|------|
| Dave | BROWN | 1938 Bomber | 720 | 3241 |
| Dave | PATON | 1942 S'dust Spl | 720 | 2956 |
| David | BEAKE | 1942 S'dust Spl | 720 | 2919 |
| Robert | SMITH | 1941 L'Diamond | 720 | 1762 |
| Barry | BARTON | 1942 S'dust Spl | 720 | 1590 |
| Basil | HEALY | 1941 Atomiser | 720 | 1270 |
| Peter | SCOTT | 1941 L'Diamond | 720 | 353 |
| Michael | WALSH | 1942 Kerswap | 720 | 259 |
| Grant | MANWARING | 1941 L'Diamond | 720 | 145 |
| Ian | HARMON | 1941 L'Diamond | 720 | |
| Greg | LEPP | 1942 S'dust Spl | 633 | |
| Kevin | FRYER | 1941 Atomiser | 623 | |
| Peter R. SMITH | 1938 Valkyrie | 522 | | |
| Peter | Van de | Waterbeemd 1941 L'Diamond | 510 | |

THE EASTERN STATES GAS CHAMPS 2011.**Report from Basil Healy.**

Things did not look good for the Eastern States Gas Champs when we encountered strong winds and the occasional shower of rain on the trip south and they did not improve any when we were greeted by steady rain on Saturday morning. Anyway, we gathered at the flying field and at 9am we made the decision to re-assess the situation at mid-day, following a look at the weather pattern on Robert Smith's I-Pad. (A'int modern technology great!).

Meanwhile the Wangaratta Club's canteen did a great job of providing cups of tea and biscuits. The SAM Committee also made use of the time to hold a meeting to discuss progress on the 2012 Championships organisation.

After a further check on the weather situation and an early lunch '38 Antique got under way at about 12.30pm. About halfway through the shortened event (three rounds, two to count) we had to come off the field due to another shower of rain, but flying resumed about 15 minutes later.

The Gordon Burford Event and Nostalgia events followed once more to the shortened format and proved to be uneventful until the fly-off. Grant Manwaring's Eliminator was seen to be performing the most extraordinary aerobatics under power and did not settle down until he shut the engine down. To add further to his woes the landing was outside the designated area.

After a bad engine run and a mediocre glide time I brought my Dixielander in to land just off the end of the cross strip to be followed by a big splash. I had landed in the creek! The model was undamaged, the receiver and servos dried out O.K. but battery

pack did not.

With the completion of the Gordon Burford and Nostalgia events at about 4.30pm it was decided to call it a day and try to stage the remaining events to the same shortened format on the following day.

Saturday evening about 25 people gathered at the Sydney Hotel for a very enjoyable meal. We had a separate room all to ourselves.

Sunday morning dawned fine and clear with hardly any breeze at all. Tomboy was first up with only 6 competitors but no shortage of good natured ragging of one another. Grant Manwaring made up for his disastrous fly-off the previous day by winning this one. Duration followed and was dominated by the spark ignition engine powered Playboys with their 40 second engine runs. Unfortunately David Beake's Dooling powered model did not make the fly-off.

Then it was time for $\frac{1}{2}$ A Texaco. Conditions were almost perfect for these little models and two thirds of the competitors made the fly-off. What a fly-off this was! We all launched into a massive thermal right over the field and settled down for the long flight. Twenty-one minutes only got me 6th place. The three Daves were conducting their own quiet battle at great height under a cloud, but it was Brownie who finally came out the winner with a flight of 54 minutes.

Then it was time to prepare for Texaco. After a few ribald comments from Robert Taylor about whether his old four-stroke engine could stand up to the 10% nitro fuel supplied we started flying. There were no dramas during the event until the fly-off when, with three quarters qualified there was going to be a severe shortage of time-keepers. However, with the help of the Wangaratta Club members and a few of the competitors wives, we managed. Times achieved in this fly-off was nowhere near as high as those recorded in $\frac{1}{2}$ A Texaco due to a cool light breeze which had sprung up.

Trophies were presented by Peter Scott, the SAM 1788 President. Champion flyer for the week-end was Dave Paton from SAM 84 Vintagents, Queensland. Congratulations Dave.

From Bruce Ramsay auscanav@bigpond.com

Greetings to all my SAM friends. Thanks for DT171 - always good reading. Currently divorced from my modelling for a few months due life's commitments. I'm up at my place in Gayndah QLD, but all good generally.

Just did my PPL renewal so that's always good at almost 68 yrs. Pics of planes I work on up here, my daughter Caroline, little Jimmy 1 year old and his grand mother Marion.

Will be at Canowindra Easter. Cheers Bruce Ramsay.



Ray Heit and his Scram

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Phone David Owen 02 4227-2699

The GB Day at KMFC and other Weighty Matters

From David Owen

Kuringai Model Flying Club hold an event each year dedicated to maintaining the memory of Gordon Burford and his wonderful contribution to Australian aeromodelling. This is a control-line day and consists of fun events which include aerobatics, speed, vintage A team race and Sabre trainer fly-by. Models must be powered by one of Gordon's engines, though this year the event was broadened to allow the use of other Australian-made engines.

The culmination of all this is the Concours event. This is open to Australian model designs only and brings forth quite a number of very well-prepared and finished models awaiting the popular vote. This year the clear winner was Steve Thomas from Wollongong, whose very attractive Ki-61 Hein, powered by one of the early T2.5cc diesels, took out not only the Concours, but the Aerobatic event as well. The Hein is a Geoff Pentland design, which was kitted by Kookaburra in the late '50s. It is also the C/L choice for next year's Vets Gathering at Muswellbrook. The kit is available from Dave Brown and builds into a sleek, light 44" stunter, suitable for 2.5cc diesels and glows.



Certificates were awarded to place-getters in the various categories, whilst the winners took home very nice, engraved beer steins. Congratulations to all the KMFC members who put on this excellent event. We are all looking forward to next year.

Model Choices for the 2013 Vets Gathering.

Each year at the Vets' participants are asked to vote on the model choice for the following year. Next year, the chosen models are the aforementioned Kawasaki Hein (C/L) and the Piper Cub (F/F & R/C). Also next year (2012), we will be deciding the C/L and F/F models for 2013.

I am pleased to say that I already have three starters: the C/L Kutlass from Roy Summersby, the F/F 1956 Scrambles Winner (a Cyril Marsden design) from Howard 'Gossie' Gostelow and the C/L Model News Fokker Tripe from Mark Nelson. Any one of these would be a worthy choice, but I would like to have others. The eligible designs must be Australian in origin and I welcome suggested entries for the vote.

The KK Champ for Phantom Racing at Canowindra SAM Champs next year.

I get the impression that the simple Champ will be a popular choice next year. Full details of the event were published in Duration Times No. 171, but I did neglect to add that the winner of the Champ class will also be noted on the Phantom Shield. The little MPJet Classic diesel will be well-represented, with several fliers buying one specifically for this event. Eligible engines are the Mills .75 and variants and the Classic.

Americans fly diesels too!

The following interesting story came from a good friend of mine, Ed Solenberger. Ed lives in Santa Rosa, great wine country near San Francisco. He loves engines and has taken the time to make some runners out of the discredited Deezil, an early American diesel disaster. Here's Ed's story:

Another popular Concours entrant was Roy Summersby's Kutlass, a 37" stunt wing design from well-known Victorian modelers Blackham and Hyde. The Kutlass was also offered as a kit back in 1955, with over a thousand being sold. Roy's beautifully built example was powered with a seldom-seen Glo Chief 29 ballrace glow, which was marketed for a brief period around 1963.

Displays of engines from Australian builders such as Steve Rothwell, Rob Jenkins and myself were added to those from Gordon Burford and created much interest.



Rod Jenkins engine display at KMFC Burford Day.

" Over half a lifetime ago, I joined thousands of youngsters who sent their lawn-mowing money to that Great Hobbystore, Gotham Hobbies for a "Real Deezil Motor"

Each passing day seemed like a lifetime, with anxious trips to the mailbox, to see if my treasure had arrived. In due time, the small package arrived. However, even with the help of the friendly local chemist, who formulated what he thought was the best diesel fuel known to man, the engine refused to even try. I wrote to Gotham and never received a reply. Time passed and life went on.

A few weeks ago, I was awakened from sound sleep by the phone next to my bed. A very pleasant voice, with a New York accent, said that he had found my letter, and there was a box in the warehouse labelled "OS Pistons". He said he had always thought they were for OS Max engines, but they were, in fact, oversized pistons for the DEEZIL and he was sending me 3 new pistons, and hoped they would fix my engine, at no charge!

Hearing my voice, my dog put her cold nose on my neck, and only then, I realized that I was sitting on the bed, talking into my slipper. (this is what too much NAPA wine does to you - David)

Recently, I spotted what looked like the DEEZIL in the old ads. Not the ones folks are selling on EBay, but one of earliest ones. Hurray, this one was very well made, and properly fitted, so that it was capable of actually running! After adding a tank and a better prop drive, it did exactly that. Not only that, but it has flown my 1/2 size 1934 Lanzo RC1.

I have spoken with many Old Timers and none have ever seen one run, let alone fly a model. Is it possible that this an historic first?"

Well, we don't know whether Ed is the first to fly a model with an original Deezil, but his RC1 looks great. Thanks for the story and image, Ed.

There is no Free Lunch

That's right, and in return for rabbiting-on I am allowed a brief plug.

The current OWEN ENGINES Price List is at: www.modelengineneeds.org/oea and there you will find great stuff, such as MPJet, PAW and Schlosser engines and useful modelling accessories.

As the Harvey Norman ads say..... .GO!!!!

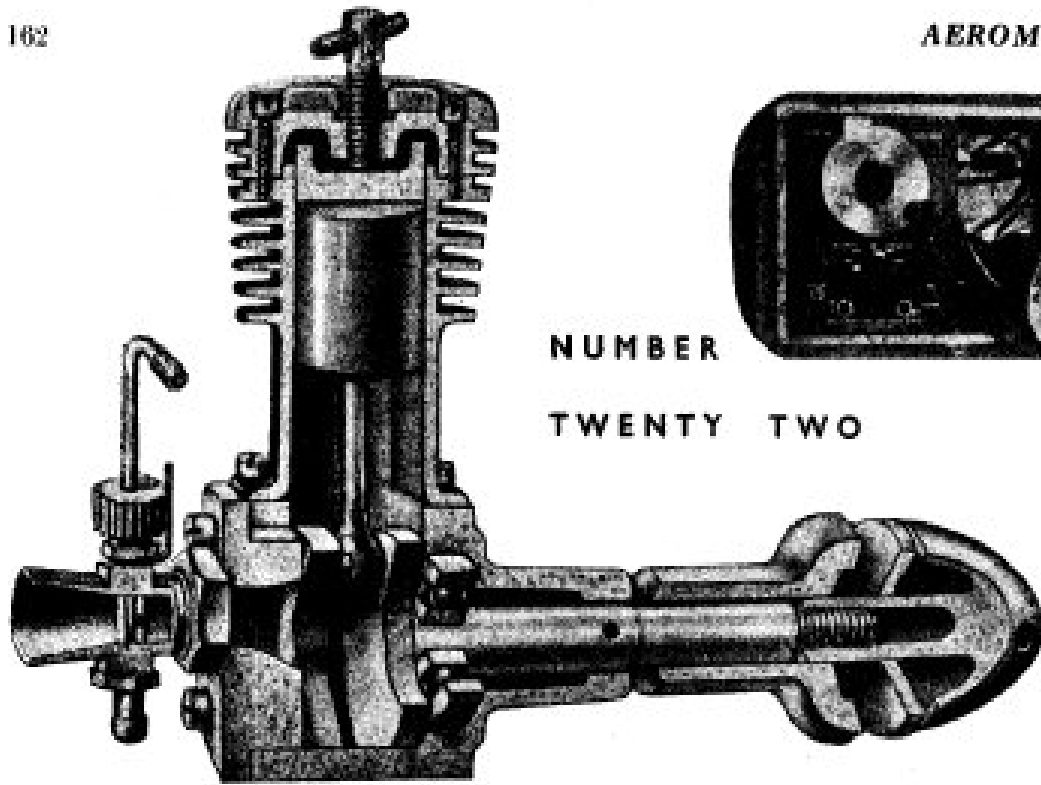


Above: The engraved beer stein awarded to the winners at the KMFC Burford Day.

Left: The Owen Engine display at the KMFC Burford Day.

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AEROMODELLER March, 1950



NUMBER
TWENTY TWO

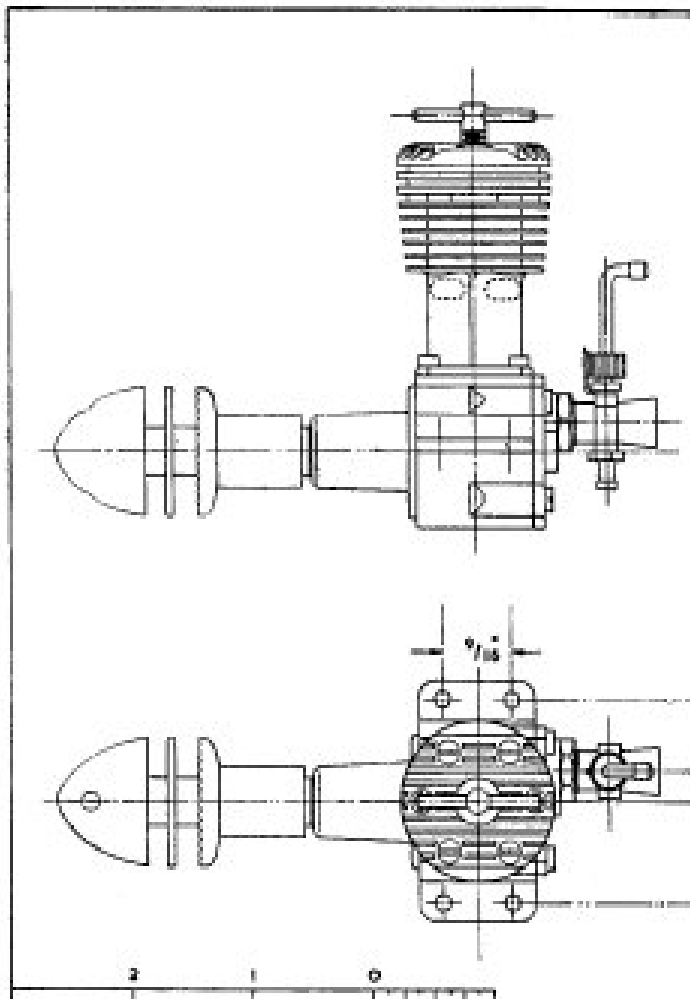


THE great popularity of control-line flying has had its repercussions in the model engine sphere, and we have lately seen the advent of many new designs from manufacturers of long standing. The aeromodeller has now a formidable array from which to make choice, as the new engines are mostly additions to the existing ranges. This is all to the good, especially as the new models invariably show that manufacturers are quick to profit from experience, and are capable of making their products better

The E.D. Mark IV.

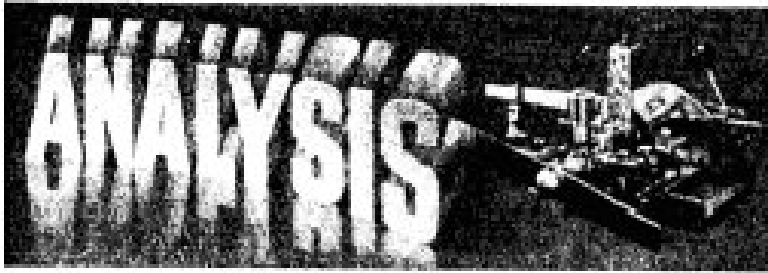
and better. Improvement seems to run along the lines of more efficient porting arrangements, the increased use of rotary-disc inlet valves, and the incorporation of ball-bearing crankshafts. These factors, coupled with an intelligent use of suitable materials for the more highly-stressed parts, have resulted, in the main, in engines of reliability and power not deemed possible a few years, or even months, ago.

The E.D. Mk. IV Diesel is a good example of this fortunate trend, and shows that British engines can equal those fabulous output figures given by American manufacturers; of which we were, perhaps unjustly, rather sceptical in the past. The test results of the present engine show that a unit of just over 3.5 c.c. capacity can yield an output of more than $\frac{1}{4}$ horse-power. Aeromodellers in general do not, perhaps, quite realise what this means, but may be moved to a better appreciation by remembering the fact that it has been reliably computed that a strong man can develop about $\frac{1}{3}$ horse-power in an all-out effort for a short time. This proposition may be somewhat difficult to grasp at first sight, but may be better understood if one imagines a 10 in. propeller coupled by suitable gearing to a hand crank. How many of you think that you could turn the airscrew at 10,000 r.p.m.? Assuming that one could turn the hand crank at 100 turns per minute, it would be necessary to gear up the airscrew in a 100 to 1 ratio. Translated into terms of pulleys and belt, this would mean a 1 in. pulley on the airscrew with a driving pulley, attached to the hand crank, of 8 ft. 4 ins. in diameter! It is hoped that these observations may help to bring to life the



March, 1950 AEROMODELLER

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BY

L · H · SPAREY

graceful little curves which appear in these pages.

As for the qualities of the latest E.D. engine the power curve really says all that there is to say. It may be mentioned that it ran consistently at all tested speeds, and seemed exceptionally happy at those above the 10,000 r.p.m. mark. The engine was not exceptionally sensitive to throttle control, and a fair latitude in needle setting could be permitted without noticeable effect. Similarly, the adjustment of the compression lever was not unduly fussy, so that the engine was extremely easy to handle.

TEST

Engine : E.D. Mark IV 3.46 c.c. capacity Diesel.

Fuel : E.D. "Competition."

Starting : Pulley-and-cord used for convenience of test, but engine started without trouble when experimentally hand-started from time to time.

Running : Extremely consistent at all speeds, but especially so at the higher ranges. Behaviour under various loads was characteristic more of a 4-stroke than a 2-stroke. At no speed range was fluctuation and hunting evident. There seems to be a slight vibratory period at around 9,000 r.p.m.

B.H.P. : A maximum output of 285 b.h.p. was found at 13,300 r.p.m., although but slight output variation was evident between about 11,400 and 14,900 r.p.m. Between these speeds a drop from maximum of only 015 b.h.p. was noted. Output is exceptionally consistent at the higher speed range, and it may be said that the engine is running efficiently at any speed between 10,000 and 15,000 r.p.m. Beyond this speed power falls rapidly, while at the other end of the scale a marked decrease is noted below about 7,000 r.p.m.

Checked Weight : 8.5 ozs. less tank.

Power/Weight Ratio : 360 b.h.p./lb.

Remarks : Engine was run-in for 1½ hours continuous running at 4,000 r.p.m. No mechanical trouble experienced throughout test. The engine is noteworthy for its high power output, easy handling, and consistent running qualities. Also for the fact that the measured b.h.p. is in excess of that claimed by the manufacturers whose figure is 25 b.h.p.

GENERAL CONSTRUCTIONAL DATA

Name : E.D. Mark IV.

Manufacturers : Electronic Developments (Surrey) Ltd., Kingston-on-Thames.

Retail Price : £4. 12s. 6d.

Delivery : Immediate.

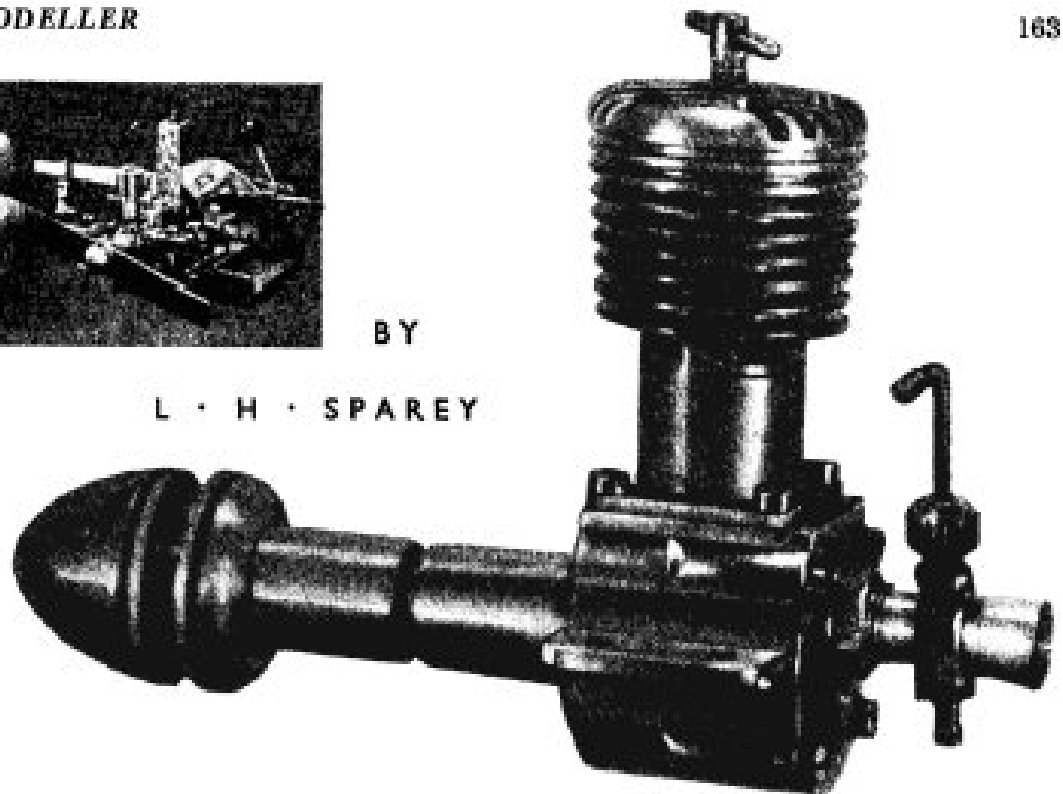
Spares : Immediate.

Type : C. I. Diesel.

Specified Fuel : E.D. Standard Fuel.

Capacity : 3.46 c.c., 21 cu. ins.

Weight (bare) : 8½ ozs.



Compression Ratio : 18 : 1.

Mounting : Beam, upright or inverted.

Recommended Airscrews : 9½ × 6 ins. to 11 × 5 ins.

Flywheel : 2½ ins. diameter, 4½ ozs.

Tank : Separate.

Bore : .656. **Stroke :** .625.

Cylinder : Hardened steel, flange fitting, attached to crankcase by four screws.

Cylinder Head : Dural. Finned. Attached by six holding-down screws.

Crankcase : Die-cast aluminium alloy.

Piston : Cast iron. Flat top. No rings. Contra Piston : hardened steel. Adjustment by Vernier screw.

Connecting Rod : Hardened steel. Floating bronze bush big end.

Crankpin Bearing : Floating bronze bush.

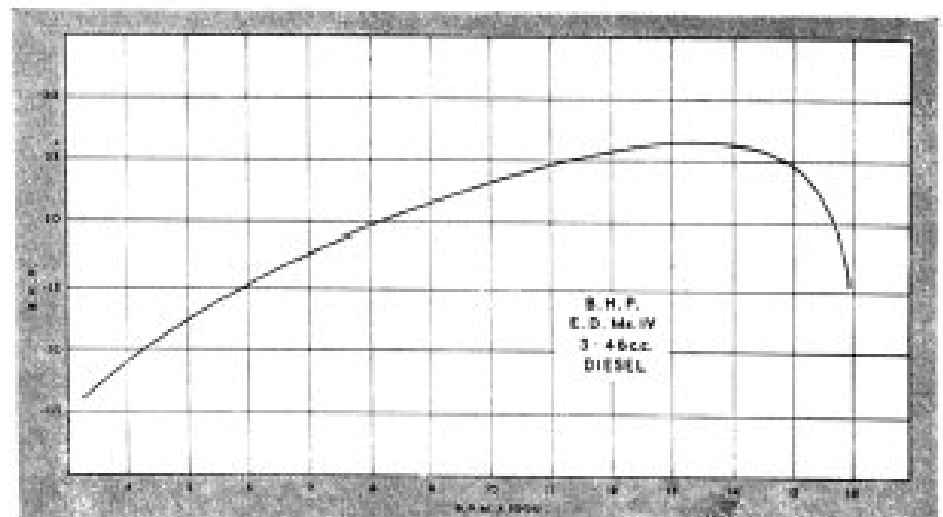
Crankshaft : Hardened steel.

Main Bearing : Single ball-race inner, plain outer.

Little End Bearing : Plain.

Crankshaft Valve : Disc induction.

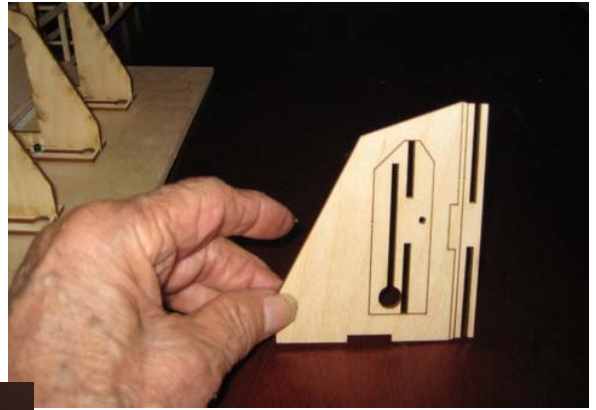
Special Features : Big end designed to prevent scouring of crankpin, easily replaceable when worn. Transfer ports machined in cylinder skirt. Outside cylinder skirt is cam-turned to maintain even section. Ball-race crankshaft.



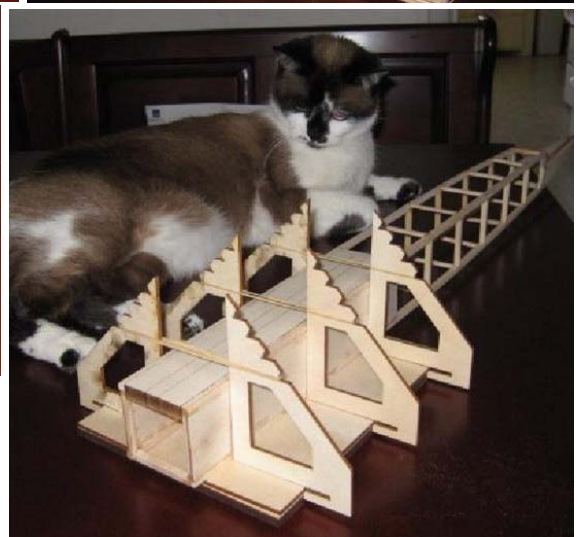
IDEAS FOR USEFUL BUILDING JIGS FOR WINGS AND FUSELAGES.

**From Bob Holman Plans
Laser cut parts for Oldtimer Models
<http://www.bhplans.com/>**

NEW LASER CUT PLY BUILDING TRIANGLES
THESE ARE LASER CUT FROM 1/8" BIRCH PLY AND INCLUDE THE LOCKING BASE SO THAT YOU CAN PIN THEM TO THE BUILDING BOARD.
AVAILABLE IN 3", 5 1/2", AND 7 1/2" - 10 FOR \$5.00 + SHIPPING



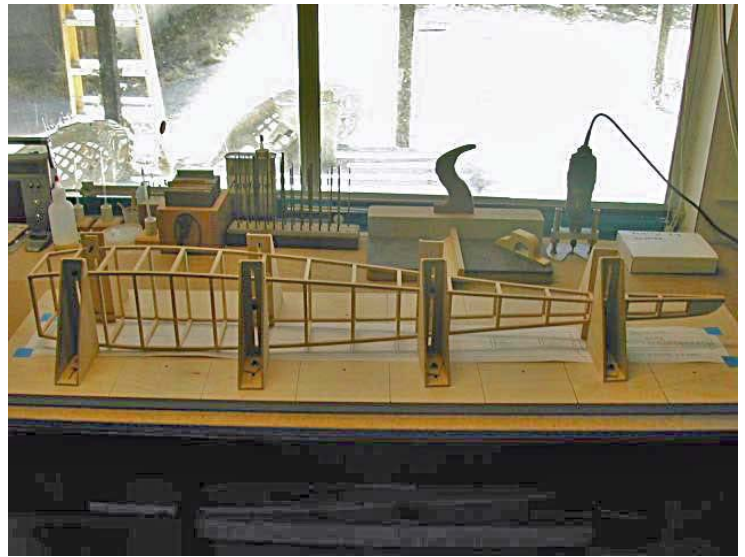
NEW LASER CUT RIB GUIDES (PICTURED ABOVE)
LASER CUT FROM 1/8" BIRCH PLYWOOD. INCLUDE LOCKING BASE SO THAT YOU CAN PIN THEM TO THE BUILDING BOARD.
3 SIZES AVAILABLE FOR 1.25" HIGH RIBS 1/16", 3/32" AND 1/8".
PICTURED ON THE RIGHT: 2 SIZES FOR 3/32" AND 1/8" RIBS, 3" OR 4" HIGH.
SOLD IN PACKS OF 10 FOR \$5.00 + SHIPPING



FUSELAGE JIG FROM BOB HOLMAN. (PICTURED RIGHT)
PICTURE OF A LASER CUT FUSELAGE JIG THAT I HAVE AVAILABLE. HAVE SOLD A FEW.
HOLES FOR THE BLIND T NUTS. UPRIGHTS ARE LASER CUT IN 3 PIECES.

Fuselage Building Jigs from Dan McLeod mcgdci@adelphia.net

Here is the fuselage jig I made for ideas if you are wanting to build your own.
Note that the whole model may be built off and above the fixture.



COOTAMUNDRA OLDTIMER WEEKEND - RESULTS.

22-23 October, 2011.

'38 Antique

| | | | | |
|----------------|---------------|--------------|------|-----|
| Peter J. SMITH | 1938 Standby | Madewell 49 | 1800 | 900 |
| Dave BROWN | 1938 Flamingo | O&R60 | 1800 | 763 |
| Peter SCOTT | 1936 RC1 | Whirlwind 60 | 1800 | 618 |
| Basil HEALY | 1936 RC1 | Sparey 5cc d | 1745 | |
| Tim WRIGHT * | 1938 Pixy | ED comp Spl | 1524 | |

Gordon Burford Event.

| | | | | |
|-------------------------|-------------|--------------|-----|-----|
| Peter R. SMITH | Ollie | Taipan plain | 900 | 419 |
| Robert SMITH | Faison | Taipan BB | 900 | 379 |
| Peter J. SMITH | Spoofem | Taipan plain | 900 | 292 |
| Peter Van de Waterbeemd | Dixielander | Taipan plain | 767 | |
| Tim WRIGHT * | Spacer | Taipan plain | 707 | |
| Basil HEALY | Dixielander | Taipan plain | 300 | |

Duration

| | | | | |
|-------------------------|-------------------|-------------|------|--|
| Peter J. SMITH | 1941 Playboy 112% | McCoy60 | 1260 | |
| Geoff POTTER | 1941 Playboy 111% | TTiger46 2/ | 1207 | |
| Peter SCOTT | 1941 Playboy | Saito62 4/ | 1136 | |
| Peter Van de Waterbeemd | 1938 Bomber 85% | Saito56 4/ | 1097 | |
| Michael WRIGHT | Sunduster | Saito62 4/ | 1036 | |
| Tim WRIGHT * | Bomber 92% | Saito56 4/ | 946 | |
| Dave BROWN | 1938 Bomber 85% | Saito56 4/ | 750 | |
| Basil HEALY | Megow Chief | YS53 4/ | 653 | |
| Robert SMITH | 1941 Playboy | Saito56 4/ | 23 | |

Nostalgia

| | | | | |
|--------------|---------------|----------|------|--|
| Peter SCOTT | Ultra Hogan | K & B 40 | 1260 | |
| Dave BROWN | Civy Boy | Merco 61 | 588 | |
| Geoff POTTER | 1944 Swayback | K & B 40 | 149 | |

1/2a Texaco

| | | | |
|-------------------------|------------------|------|-----|
| Basil HEALY | 1941 Atomiser | 1080 | 721 |
| Dave BROWN | 1938 Bomber | 1080 | 649 |
| Peter SCOTT | 1941 Lil Diamond | 1080 | 532 |
| Tim WRIGHT * | 1941 Atomiser | 1080 | 360 |
| Peter Van de Waterbeemd | 1941 Lil Diamond | 1080 | 309 |
| Robert SMITH | 1941 Lil Diamond | 1080 | 116 |
| Sarah WRIGHT * | Schmeadig Stick | 1080 | |
| Peter R. SMITH | 1938 Valkyrie | 0 | |

Texaco

| | | | | |
|-------------------------|--------------------|----------|------|-----|
| Robert SMITH | 1938 Lanzo Bomber | OS60 4/ | 1800 | 633 |
| Steve WHITE | 1937 Lanzo Stick | OS40 4/ | 1800 | 541 |
| Basil HEALY | 75% Dallaire | ASP32 d | 1776 | |
| Dave BROWN | 1938 Flamingo | O&R60 | 1744 | |
| Peter SCOTT | 1936 Sup.Buccaneer | Foster99 | 1680 | |
| Tim WRIGHT * | 1938 Bomber 87% | OS40 4/ | 1663 | |
| Peter Van de Waterbeemd | 1938 Bomber | ASP61 4/ | 1639 | |
| Peter R. SMITH | 1938 Valkyrie | OS60 4/ | 1547 | |
| Geoff POTTER | 1938 Lanzo Bomber | OS61 4/ | 1194 | |

Coota Cup Winner

Peter Scott.

Texaco. Six of the eight starters made it to the fly-off including the two juniors, Sarah and Tim Wright. Unfortunately Sarah lost sight of her model during the fly-off and we have no idea which way it went. Peter R Smith also had a fly-away during Round 2 but we were able to get a good line on the way it went and it was recovered about an hour later. Dave Brown didn't have a cloud to hide behind this time so he and I had a good tussle over the hay shed in some weak lift which I eventually won. Texaco was remarkable for the lack of maxes recorded. Only two fliers achieved three maxes, Robert Smith and Steve White. There was a breeze blowing but it was not very strong, but thermal activity was almost non-existent. Robert Smith came out a clear winner.

Peter Scott presented the trophies to the winners and place-getters the John Pettit, the President of the Cootamundra Club, present the "Coota Cup" to Peter for the top score for the week-end.

COOTAMUNDRA OLDTIMER WEEKEND.

22-23 October, 2011.

From Basil Healy.

The "Coota Cup" Revived. Saturday dawned fine and warm with little or no breeze at all. Having set out the witches hats to define the landing area the previous afternoon there was nothing left to do but collect the entrants model data and prepare to fly.

Antique got under way at 9.30am with five entries, three of whom made it to the fly-off. Tim Wright experienced problems with fuel venting from his tank with the engine running but Peter Scott offered a fix to the problem and he then went onto record a max. Peter "Condo" Smith won the fly-off.

Next was the Gordon Burford Event and Nostalgia run concurrently (a practice which we will not be trying again!). Geoff Potter experienced problems trying to keep his K&B 40 running in the air. Peter Scott won the Nostalgia event with three maxes. There was no fly-off in Nostalgia. Burford was a "Smith Benefit" with Peter R. first, Robert second and Peter J. third. I crashed in the second round when a wire joining the two halves of the battery pack broke. Damage to the model was minimal due to the long grass.

Duration was flown in the afternoon in conditions that were not conducive to achieving maxes. Thermal activity at height was evident at times but below about 500ft sink was the order of the day. Only Peter "Condo" Smith made three maxes so there was no fly-off.

Saturday evening we had a meal at the Central Hotel and a convivial conversation afterwards.

Sunday morning saw us back at the field for 1/2A



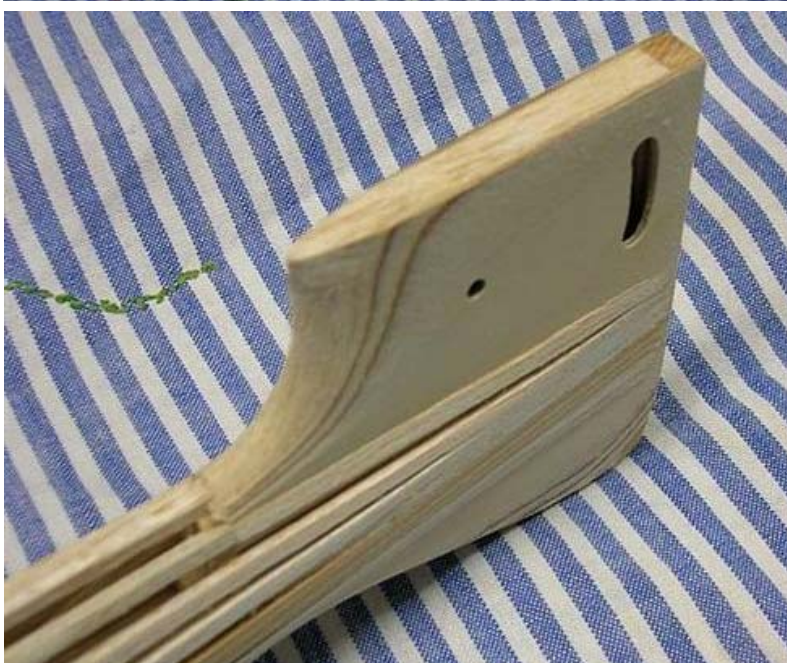
Here it is—the new and different motor unit you've been waiting for at a price any model builder can afford. It's SKY-KOIL 32! A light, sturdy spring-type motor made of the best obtainable polished spring steel music wire. A single strand of this .032" wire will support a dead weight of 255 pounds.

There is little danger in crash landings. The motor distributes the shock, and protects the fuselage. You no longer need excessive bracing or complicated design.

Comes complete ready to install, with tested plans for a lightweight, easy-to-build model, all for only \$1.29!

MAIL COUPON WITH ONLY \$1.29

ROKWELL INDUSTRIES, Inc.
3924 Juniata Street, St. Louis, Missouri
Enclosed find \$1.29. Please send me one complete SKY-KOIL 32 motor unit. If I am not thoroughly satisfied I will return motor within ten days for a full refund.



Works of Art from Argentina by Alfredo Hebron, above R/C Oldtimer Glider "Airone" and below So Long packed for travel by air to the SAM Champs in USA.



How does Kevin Sherman get that "purty colour" on his models?

An interesting article useful for larger rubber and gas models, published in the February 2003 issue of the "Flight Plug," the newsletter of the Southern California Ignition Flyers, Mike Myers, Editor.

Kevin Sherman writes about how he colours his models, which he covers with Polyspan. He says he uses House of Kolor Kandy paints, which are translucent. House of Kolor has been selling custom auto paints since the mid 1950's. In any event, here's Kevin: "The House of Kolor product is called an intensifier. I checked on the House of Kolor website and there are about 20 colours to choose from. We have found that it takes about 1 ounce of intensifier per quart of thinned nitrate dope. The intensity of the colours build as coats are added, so it is important to put it on fairly even so it doesn't look blotchy or streaky. After covering with polyspan, we brush 4-5 coats of 50/50 nitrate dope. We very lightly sand the covering with 400 grit paper (don't sand much or you will go right through the dope over the ribs). If numbers are desired, we put them on at this point. We use black tissue numbers, and apply them with acetone over the doped polyspan. Because the candy paint is translucent, you can paint it right over the numbers, and they will not be covered up. When done, it actually looks like the numbers were applied over the candy colour. If numbers are applied, we put an additional couple coats of dope over them. We then are ready to apply the candy colored nitrate dope. We put three even coats, letting it dry good between coats. Don't try to get all your colour in one coat, as it will only cause problems. If you are not proficient at painting, spraying your coats in opposite directions is recommended (cross coating). After three coats of tinted nitrate dope is applied, we let that dry until it does not smell, and has gassed out all the thinner.

There are 20 different Kandy colors available. We fuel proof with Fuller Plast. One even coat does the job. It is a two part clear, and dries fully in about a day, depending on the weather. If the nitrate dope has become "milky" because of moisture in the air, it does not matter. The Fuller Plast will turn it back to perfection when it is applied. I have shot Plast on dope that was almost white from moisture in the air, and it turned it translucent in seconds. It is a great fuel proofer, and has excellent properties for extended life. We have used this method for about 10 years, and the Kandy paint does not fade at all (like most of the dyes do). The covering still looks almost as good as new. I am sure I missed a few things, but that is the basics of our methods. I use a cheap touch-up gun, similar to what you can buy from Harbor Freight. I think I paid \$25 for it. It holds about a 1/2-1 pint of material. I have a compressor and water trap system for the air supply. I buy the Fuller Plast at a local paint store called, "Fuller O'Brien". I think they may be just a local paint store. They offer it in gallon quantities, and it is about \$70 per gallon. It does do a lot of models though, so the price per model is quite low. Al Heinrich at Aerodyne sells it in smaller quantities."

Kevin Sherman

FOR SALE Ignition coil assemblies with transistor - ready to go. \$70 **FOR SALE**
 Peter Scott (02) 9624 1262. qualmag@optusnet.com.au

"Eagle" SAILPLANE

71" SPAN HIGH-PERFORMANCE OPEN CLASS SAILPLANE FOR BEGINNER OR EXPERT!

THE CENTENNIAL OF FLIGHT 2003 AUSTRALIAN AEROMODELLERS TRIBUTE

WING CONSTRUCTION: BUILD WING PLANT ON PLY OR OTHER STIFF, CURVED SURF IN PLACE OF CURVED SURF. A CURVED SURF IS NOT NECESSARY.

FLYING INSTRUCTIONS: 1. ... 2. ... 3. ...

GENERAL: ...

WING DIMENSIONS: ...

TAIL DIMENSIONS: ...

EVIDER DIMENSIONS: ...

IMPORTANT: ...

~~ THE BACK PAGE ~~

From Peter "Condo" Smith, peter_condo@yahoo.com.au

During the Albury Nats Don Southwell and Grahame Mitchell lost models on the Table Top flying site (part of the Hume Weir). I stopped to check the flying site again on the way home from the Eastern States Gas Champs at Wangaratta and I thought, "MAY BE I FOUND THEM!"

So can the pictures I took of them be included in DT and maybe Grahame and Don might recognise them. Ha Ha!!



By the way, the water at Table Top was 90 meters closer to toilets and BBQ area this October compared to 2010!



Some silks compared. from Dave Plumpe <plumpe@mindspring.com>

Thanks to the discussions on silk a week or two ago (2003), I decided to try some from fabric suppliers on the web. I ordered five yards each of 5mm Habotai and 3.5mm Gauze from www.silkconnection.com at US\$1.75 and US\$2.07 per yard respectively. Even I can afford that!

They arrived today, so I made some measurements to compare with some I had from decades past (maybe 30yrs since I last covered with silk):

| | | | | |
|------------------------------------|-----------------|--------------|----------------------|----------------------|
| Esaki #3 Light Weight (30yrs old): | 9.4 gm/sq.yard | .0018" thick | 100x140 threads/inch | \$17.50 sq.yard now? |
| K&S Heavy Duty (30yrs old): | 14.0gm/sq.yard | .002"thick | 100x130 threads/inch | \$17.50 sq.yard now? |
| 5mm Habotai (silkconnection.com): | 16.0 gm/sq.yard | .0022" thick | 120x160 threads/inch | \$1.75 sq.yard |
| 3.5mm Gauze (silkconnection.com): | 12.1 gm/sq.yard | .0037" thick | 80x100 threads/inch | \$2.07 sq.yard |

Thickness measured with dial caliper under moderate pressure. Same eyeball that counted threads/in.

The 5mm Habotai is lots heavier than the Esaki #3, so isn't a suitable substitute for those smaller planes. It does have a tighter weave, so should fill with fewer coats of dope, but will likely use more total dope because it's thicker.

The 5mm Habotai is pretty close to the K&S, except for price. Just a little heavier, but should be easier to fill. And did I mention, it's lots cheaper! I think I'll use it to cover a 72" J-3 Cub in another month or so.

The 3.5mm Gauze might be useful for straining fuel. They all smell about the same when smoked. Want another opinion? My wife says the Habotai "feels nice".