

Points of Interest:

- President's Message.
- Making up Ignition Systems - Tandy Walker.
- Building Dixielander fuselage - Basil Healy.
- Electric Oldtimer - Lou Amadio.
- Back in the 50's - David Owen
- Letters from our Members.
- FARCON Competition Results.
- The Infamous GHQ Engine - Roy Bourke
- Haunted by an Aircraft Pt.2 - Basil Healy.
- The Back Page.

BULLETIN No. 153
July - August
2008

DURATION TIMES

Worth Noting Vale Alan Trinder: G'day, Just a brief note to let you know of the passing of Alan Trinder. Alan started a company called "Old Fashioned Hobbies" and produced a quality range of old timer kits. He regularly competed at Canowindra and had a lot of friends throughout the modelling fraternity. Alan passed away 21st. May, 2008, at Camden hospital. Thanks, Garry Henderson-Smith <hyphen_1@aapt.net.au>

* * * * *

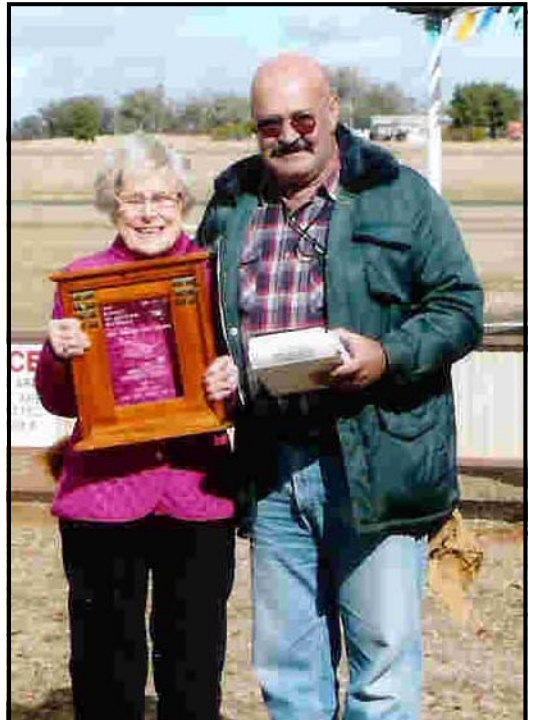
FARCON - Condo and Paul Farthing would like to than the Cowra Model Aero Club for the use of their flying field and their conduct of the Canteen for the recent FARCON Competition on 23-24 August, 2008. It greatly enhanced a very enjoyable and different competition and was appreciated by all competitors.

* * * * *

Frank Ehling 1/2A Texaco Postal Challenge - At the SAM 51 meeting last night we were discussing the Frank Ehling Half A Texaco Postal and realized that no one had heard of a date. This morning I called Mike Clancy, Pres of SAM 27 and all round good guy, at least mostly. Mike says that the event will happen at the end of Sept and beginning of Oct and that an announcement will soon be forthcoming, or words to that effect. Mike is a busy guy but he does get things done! So everyone should start planning and preparing for another great international postal. This late date may favour the guys in the southern hemisphere more than an earlier date. The real southerners have always been extremely competitive even without the late date.
 Ken Holden. kdholden@gmail.com

* * * * *

If SAM membership fees have not been paid then this will be the last printed DT you will receive. If you would like to receive DT by email in addition to your printed copy so you can enjoy the colour picture then send your email address to the Newsletter Editor. Remember the Editor is always grateful for any input from members for DT. Pictures of your latest creation or an article on how you built it is always well received. Editor's email address is on page 2.



Mrs. May Potter presents the Brian Potter 1/2A Texaco Memorial Trophy to Ian Connell at the recent New England Oldtimer Gas Champs held at Tamworth on 14-15 June, 2008. Full results for New England Gas Champs at Tamworth appeared in DT152.

2008 EASTERN STATES GAS CHAMPS
WANGARATTA, Victoria.
4th-5th October, 2008.

SATURDAY 4/10:- 10am ~~ GB Event ~~ 11.30am '38 Antique ~~ 1.30pm Oldtimer Duration
 SATURDAY EVENING ~~ Get-Together at local Eatery
 SUNDAY 5/10:- 9am 1/2A Texaco ~~ 12 noon Oldtimer Texaco

Catering at the field with excellent facilities. Camping on the field permitted

For further information contact Paul Farthing (02) 6364-0264 (home)

Duration Times is the official Newsletter of SAM 1788

SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA 1788 Inc.

President:	Paul Farthing	"Bogwood" Lockwood Road, Canowindra. NSW. 2804.	02 6364-0264.
Vice President:	Basil Healy	4 Casuarina Close, Umina. NSW. 2257.	02 4341-7292.
Secretary:	Dave Brown	19 Tweed Rd, Lithgow. NSW. 2790.	02 6353-1529.
Treasurer:	Gail Scott	44 Ravel Street, Seven Hills. NSW. 2147.	02 9624-1262.
Newsletter:	Ian Avery	17 Kalang Road, Kiama. NSW. 2533.	02 4232-1093.

Email for Duration Times - iwa@internode.on.net

UPCOMING OLDTIMER EVENTS FOR 2008-2009

Sept-October	Frank Ehling $\frac{1}{2}$ A Postal Event - Final dates yet to be announced - SAM 27 USA are hosts.			
October 4-5-6	Eastern States Gas Champs	Wangaratta Vic.	Dave Brown	6353-1529.
October 25-26	Glenn Simmons Memorial Oldtimer	Lithgow AC	Dave Brown	6353-1529.
November 8-9	SAM 600 Cohuna Oldtimer Weekend	SAM 600	Brian Laughton	03 5989-7443.
November 15-16	Muswellbrook Oldtimer Weekend	Muswellbrook	Simon Bishop	6543-5170.
November 30	Haddon One Day Event	SAM 600	Brian Laughton	03 5989-7443.
February 7-8	Alan Brown Memorial Oldtimer	Orange MAC	Peter Johnsen	02 6362-9410.



From the President: Hello there, hope everyone is well and enjoying some good flying. I find this is a good time of the year to get some building done. We had an excellent weekend once again at the Rebel Oldtimer at Hexham although there were a couple of unfortunate fly-aways, hope they have been found by now. It reminds us of the need to waggle those controls before you go.

FARCON was a great weekend and I am sure enjoyed by all who were there. Hope to run it again next year. Thanks to the Cowra MAC gang who lent us their flying field and ran their usual great canteen. Much appreciated guys. Hope everybody is getting ready for the upcoming Eastern States Gas Champs at Wangaratta and the Lithgow Bash in October. I am looking forward to them both and will round off the year at Muswellbrook. No official word yet about the MAAA Nats. What are the organisers doing??? I ask you!!!! It also seems that we have a new poet and didn't know it - see the BACK PAGE. The SAM 1788 Poet Lauriat position is now vacant with the passing of John Abbott so we might have a likely starter, what do you think? Cheers for now, keep flying safely and I will see you down the track. Paul Farthing. SAM 1788 President.

INTERNATIONAL TOMBOY POSTAL COMPETITION

1st October 2007 to 30th September 2008

This competition is for maximum duration of a timed R/C Tomboy flight in competition or sport flying. Models are to be to the Vic Smeed Tomboy design, of 36 inch span and using any type of Mills 0.75cc diesel fitted with a standard 3cc bowl tank with two channel control.

Prizes will be given for the first 3 places.

All claims should be made within 1 month of the flight being made to the Event Organiser
Tony Tomlin, 122 Marlow Drive, Sutton, Surrey, UK SM3 9AS
Email pjt2.alt2@btinternet.com



Saturday 25th October, 2008 - 9.50am briefings, 1st Round 10am
'38 Antique, then Gordon Burford then Duration

Saturday Bistro Night Out, at Colonial Motel 02 6352 1655

Sunday 26th October, 2008, 9.30am - 1/2A Texaco followed by Texaco

MAAA Rules apply to all events Country BBQ and Canteen

Sponsored by: * Kelletts Hobbies * Model Draughting Services

Contact Dave Brown 02 6353 1529 or daveb@ix.net.au

Making up Ignition Systems

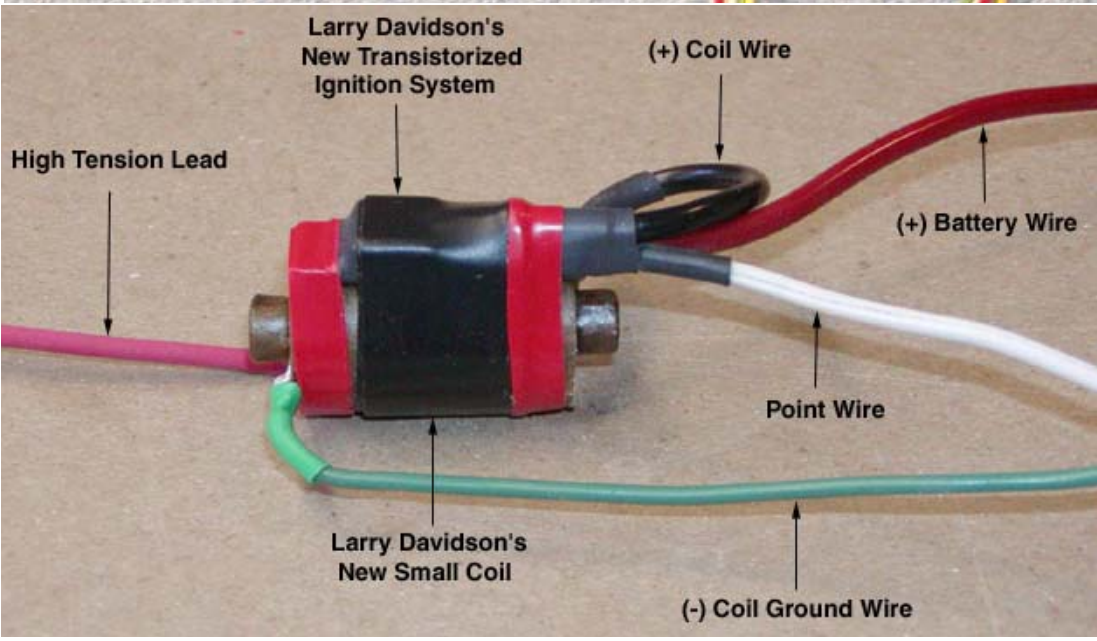
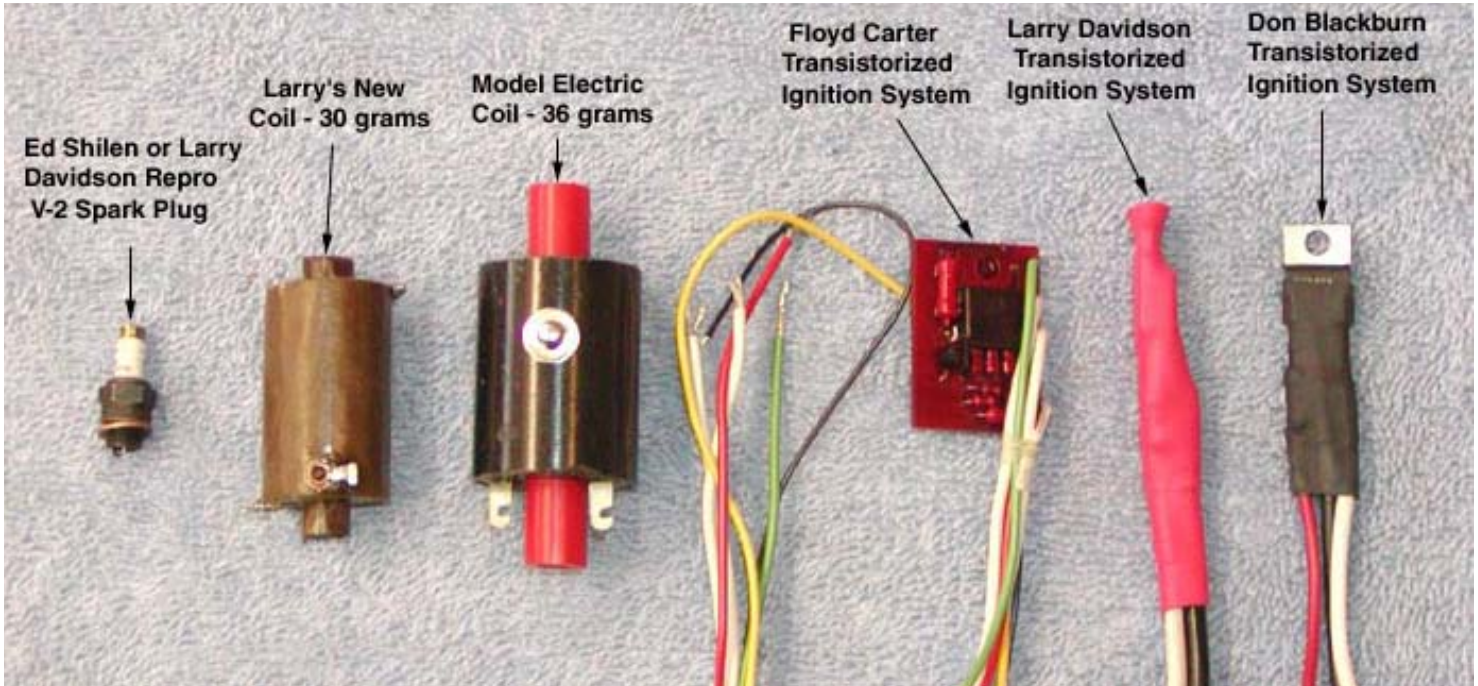
From Tandy Walker. <tandyw@flash.net>

I have been working with a long time modeller up in Oklahoma helping him get started building Old Timer models for this year's SAM Champs. I sent him the picture below to show him what ignition components were available for his use. In particular, I pointed out Larry Davidson's new small lightweight coil and matching transistorized ignition system. Even though Larry's coil is smaller and lighter, his transistorized ignition system was bulky, a little long, and with very big wires.

Since I wanted to use Larry's new small coil and transistorized ignition system in my new Playboy Junior, I started working with how to get Larry's components into a smaller package. One of the first things I did was to cut off the large diameter red heat shrink tubing encompassing Larry's transistorized ignition system to reduce its overall length. As it turns out, there is another shorter and smaller diameter piece of black heat shrink tubing underneath the red one.

Next I bound the transistorized ignition system to Larry's small coil with a wide band black plastic electrical tape into a single unit. I cut the large black wire to length, bent it around, and soldered it to the (+) coil terminal (which is clearly marked on the coil) as per Larry's instructions. I soldered a red high tension wire and a green coil ground wire on to the coil's terminal and bound the unit on each end with 1/4" red tape.

As shown below, this makes a nice little compact ignition unit that will fit up against the back face of the Playboy's firewall. I made a foam lined fixture to secure this ignition unit to the firewall.

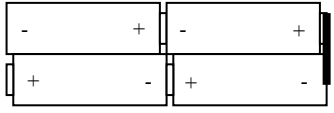


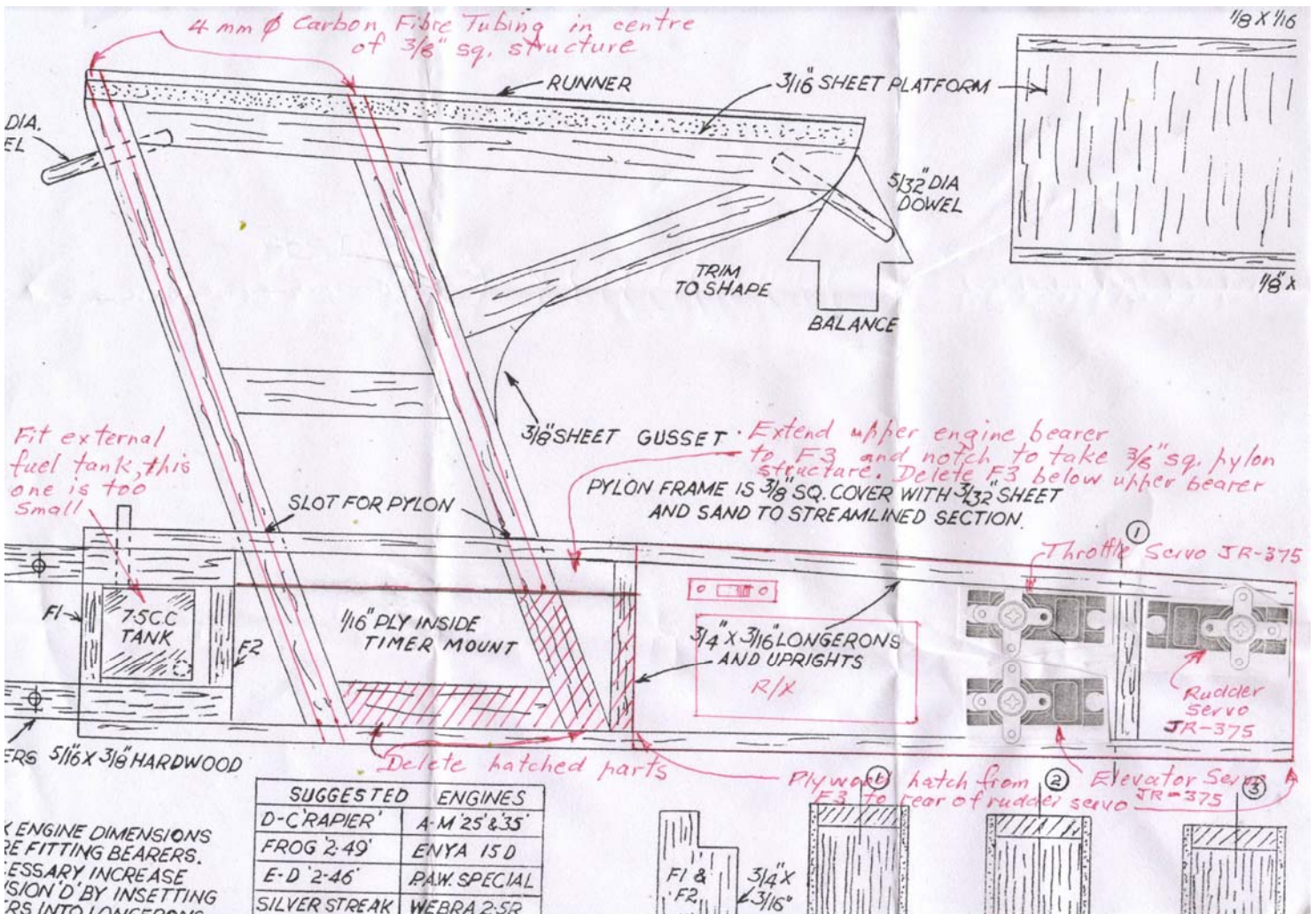
Do you need a resistor in the High Tension Lead with 2.4 Ghz Radios?
 I'm using a 1K resistor instead of a 10K in an Anderson powered RC-1. Radio is the Futaba 6EX 2.4 GHz. I tested smaller resistors until I got down to under 400 Ohms, when I began to get some interference. Couldn't quite get to zero, so I settled on 1K as being a safe low amount of resistance for my setup. But that could vary in another installation.
 From Bob Angel
 <samrcflier@verizon.net>

Building the Dixielander Fuselage.

from Basil Healy.

Herewith the modifications to the Dixielander fuselage:

1. Pylon structure - make from two layers of 3/16" sheet, cut groove and fit 4mm dia. Carbon fibre tubing in centre then epoxy together.
2. Extend upper engine bearer back to F3 and notch to take pylon structure. Delete lower portion of F3 and pylon structure. Delete lower portion of F3 and pylon shown hatched in plan below.
3. Delete the internal fuel tank, it is too small for a 40 second engine run. Fit an external saddle tank on R.H. side of about 15cc capacity.
4. Reinforce 1/16" fuselage sides with 4mm plywood back to F3.
5. A 1/2mm plywood hatch is fitted on L.H. side extending from F3 to just behind the rudder servo.
6. An additional bulkhead is installed immediately to the rear of the rudder servo to support the L.H. fuselage side.
7. Radio installation - batteries are 900mah AAA NiMH configured as shown: 
8. The batteries are fitted under the pylon in the space created by the deleted structure.
9. The servos are fitted as shown on plan with output arms protruding through the plywood hatch.
10. All controls are by cables.
11. The receiver and switch are positioned as shown. N.B. The receiver must have the connections on the end. There is insufficient room in the fuselage for side connections.
12. Control surfaces:
 - Wings - 1/4" wash-out on tip panels, centre panels flat.
 - Rudder - 2" wide at base (in line with top of fuselage)
 - Elevators - 2" wide and extended from one rib outboard of centre to one rib from tip.
 - C of G - As per free-flight plan, on trailing edge.



Electric Old Timer - Balancing with lightweight power systems

From Lou Amadio.

Old Timers often end up tail heavy, especially if you fit a lighter motor than that for which the model was originally designed.

The problem is worse for stubby nose models such as the Lanzo Bomber or the Playboy Senior.

Good building practices can often dispense with the need to add lead to the front end. These include constructing an ultra-light tailplane, utilising lightweight coverings, minimising fuselage weight near the tail, etc, etc.



Stardust Special with nose extension as indicated on plan.



SOY Bomber plan with extended nose.

The extension also allows the motor battery to be located further forward. In my case I cut a hole through F2 to fit the motor battery up against F1. The outrunner motor was radial mounted in front of F1. The final weight of the 70% model (1700mm span) was under 1Kg giving it an excellent power to weight ratio.

What if you want to build a model where a nose extension was not considered in the original design? In this case common sense should prevail. If an extension can be added that does not give an aerodynamic advantage then it should be allowed. The extension should follow the original lines of the fus and should be the minimum required to balance the model. For electric powered aircraft the motor battery must be brought forward the same distance as the motor thus minimising the extension required.

But what if you have done all of these and the model is still tail heavy? The last recourse is to move the heaviest items further forward of the CofG. This is often done by extending motor beams or motor plate as the case may be. For radial mounted motors the answer may be to fit a spacer between mount and firewall.

We have found that electric OT aircraft are almost always tail heavy so are looking for either innovative designs or solutions that provide the flexibility from the start. An example of the former is the Stardust Special, a model designed from the outset with an extendable nose thus allowing the use of lightweight motors. The picture above is my Stardust built from a Dave Brown kit. You can see that the motor is radial mounted at the front of the nose extension. The motor in this model weighs just 50g and the main battery 40g - not a lot to counteract the largish tail.

My other model which is also normally hard to balance is a Lanzo Bomber. This time Peter Henderson put me onto a Spirit of Yesterday kit that comes with a proper nose extension. (see <http://www.hobbyclub.com> and search for SOY).



Outrunner motor mounted on extended nose allows for easy balancing.

Western Australia Report

From Paul Baartz.

SAM270 Old Timer Duration 2008

The 2008 event was held at Mundijong on 29th June with a 9.30am start. The weather was a bit wintery however it was quite flyable and despite one small rain squall which halted proceedings for about 20 minutes, the conditions were reasonable and improved gradually throughout the morning. Seven entered the event and six actually flew, all of these used four stroke engines to make use of the 32 second engine run, and most managed at least one maximum flight of seven minutes. Rod McDonald retired his model due to structural damage, having recorded two maxes and looking good for a fly-off spot, however this was not to be. Only one flyer achieved the three maxes needed for the fly-off although Alan Trott missed by only six seconds while Ian Dixon destroyed his chances with an out-landing following a max flight on his last attempt.

SAM 270 Old Timer Standard Duration 2008

This event was held on Sunday 6th July at Mundijong under absolutely splendid weather conditions being fine and cool, with light variable breezes. Eight flyers entered and all flew with most achieving at least one maximum flight of six minutes. Three qualified for the fly-off by having a score of 3 maxes from the allowed four flights. Ian Dixon missed the fly-off by a mere twenty seconds, which was a shame as his model was flying very well once he got the engine behaving properly. The fly-off was held under light lift conditions and all three achieved respectable height so it evolved into a gliding competition and the result hinged on where the lift patches were and who was lucky enough to find them. All flights in the fly-off exceeded twelve minutes. Newcomer Troy Latto showed a good bit of form and will be a threat once his model is sorted and trimmed. As is usual for this event all entrants used the OS Max-H .40 engine fitted with a variety of propellers (all 10 x 6 as per the rules).

Tomboy Challenge 2008

The 2008 Tomboy challenge was held on Sunday 3rd August 2008 at Mundijong and attracted twelve entries. The weather conditions were near perfect with a light cool southeasterly breeze and about 20% cloud cover. No apparent lift patches were in evidence at all throughout the whole competition or if there were any, no flyer managed to find them. The format for the Tomboy challenge is for each entrant to have 3 flights with no maximum flight time and the best flight time out of the three counts as the score. Fuel allocations are based on the style of engine, which must be 1.00cc or less. Special run times are calculated for electric powered models, thus allowing all types of power in the one competition. This year only one electric powered model was entered and was competitive. Several entrants withdrew, due mostly to structural damage caused in the main by heavy landings. Rick Rumball could not coax his Cox TD.051 into a reasonable run time but persisted until the end of the competition manfully. Most used the smaller of the wing span options from the plan.



Duration Results:

1. Paul Baartz	85% Bomber/ Saito.62fs	1260
2. Alan Trott	85%Bomber / ASP.61fs	1254
3. Ian Dixon	170% Kerswap/ Magnum.61fs	1216
4. Rick Rumball	85%Bomber/Magnum.61fs	1184
5. Rod McDonald	160%Kerswap/Magnum.61fs	1134
6. Kevin Hooper	75%Bomber/ASP.61fs	851

Standard Duration Results:

1. Paul Baartz	Playboy/ MaxH40	1080 + 947
2. Ray Sherburn	Playboy/ MaxH40	1080 + 897
3. Alan Trott	85%Bomber/MaxH.40	1080 + 79
4. Ian Dixon	Stardust Spl/MaxH.40	1060
5. Rod McDonald	Hayseed/MaxH.40	1017
6. Gary Dickens	Playboy/MaxH.40	977
7. Rick Rumball	SuperQuaker/MaxH.40	869

Tomboy Results (scores in seconds):

1. Ian Dixon	Mills .75	529
2. Greg McLure	PAW 1.00	429
3. Richard Sutherland	Mills .75	393
4. Rod McDonald	Cox Baby Bee	362
5. Adrian Dyson	PAW .80	356
6. Peter White	PAW 1.00	281
7. Paul Baartz	Norvell 1.00	275
8. Troy Latto	PAW 1.00	259
9. Tony Iacopetta	electric b'less	258
10. Gary Dickens	Mills .75	214
11. Rick Rumball	Cox TD 0.51	
11. Graeme Cooke	ED Bee	



BACK IN THE '50s (Part 5) From David Owen

In earlier parts, we have looked at mainly British diesels and some smallish glows which were commonly seen on flying fields in Australia in the period from the end of the Second World War up into the early '70s. For sentimental reasons, as much as any other factor, there was a lasting attachment to products from 'back home' for many years after the war.

But the availability and exchange of modelling magazines started to alert blokes to the existence of attractive engines from other countries. For example, the German Webra and Taifun diesels started to appear in Australian model shops in the early '50s and were immediately popular amongst sport fliers. Not all of them offered advantages over British engines and our own Sabre and Taipan. But they were different and that added a certain cachet. Someone who turned up on the field with a Taifun Tornado, or a Webra Mach 1 diesel commanded respect. Here was the Aussie cringe in action, and as we'll also see when we look at the larger glows later on, it was alive and well in the modelling scene.

The extensive German Taifun range was designed by Hans Hornlein. These were very attractive engines, the various models having distinctive appearance coupled with brilliant anodizing. All had superb pressure die-cast crankcases and shapely but dangerously-pointed spinner nuts. They were beautifully packaged with exhaustive instructions and included a ready-cut and drilled beech test mount.

While there were earlier Taifuns, the brand really took off in 1954 with the introduction of the 1cc Taifun Hobby. This was a compact, neat little engine which offered a high level of performance for its size and was ideally suited to a small stunter or a power ratio model.

The next Taifun size-wise was the Hurrikan, a twin ballrace 1.5cc competition diesel. It featured reed-valve induction and as a consequence of its rear venturi location, never achieved real acceptance. Nevertheless, it was a crisp, powerful runner and again was quite popular in FF power duration models.

Following the Hurrikan, there were two International-class 2.5cc diesels, the plain-bearing Rasant, which had a propensity for shaft breakage, and the really great, twin-ballrace Tornado. This latter engine was the step-up from the ED Racer for the writer's A Class teamrace aspirations. Although it was no more powerful than a good Racer, it was lighter and did not have those awkward exhaust stacks and rear venturi.

As time went on, the original Hobby and Rasant diesels were replaced by later versions, neither of which had the same crispness or appeal, in the writer's opinion. The shaft problems of the early Rasant were no doubt corrected and there was certainly one major improvement. The fragile wire-type needle valve was replaced by a much sturdier design with a threaded thimble and an efficient, pressed-metal clicker.

This feature alone would have saved a lot of pocket money, had it been adopted earlier, as the wire-type needles broke when you looked at them!

There were later Taifuns, all beautifully built, but none of which had much impact in Australia. These were the Orkan, a 2.5cc twin ballrace diesel which could have threatened the Oliver and Eta had it been fully developed and with factory backing; the Blizzard, a stylish 2.5cc reed-valve diesel which was rather heavy and was panned by the critics for being a vibrator; the Zyklon, a single ballrace 2.5cc diesel which appeared in R/C form only, as did the Bison, a forgettable 3.5cc glow.



Taifun Tornado



Webra Mach 1



1cc Taifun Hobby 1954



Taifun Rasant Mk. 1



Taifun Zyklon



0.8cc Webra Piccolo Mk. 1

The German Webra range paralleled Taifun in many ways and was also distributed by the massive Graupner organization. The smallest Webra was the 0.8cc Piccolo, a very- short-stroke diesel which rapidly became one of the most-hated engines around. It was nearly impossible to start and ran on a much smaller prop than traditional free-flighters were used to. It was replaced in later years by the much-improved Piccolo-11 in both diesel and glow versions, but the damage had been done.

The 1.5cc Webra Record was well-liked, as was the 2.5cc Winner, both plain-bearing, shaft rotary valve, sport diesels. They performed well and were subsequently up-graded as the years went on.

Webra's International 2.5cc class engine was the compact, short-stroke Mach-1 diesel and glow. This was a twin-ballrace engine with rear disc-valve induction and it soon became popular for FF Power. High fuel consumption, a consequence of the type of porting used, ruled the diesel version out of contention in A Class teamrace events. The later Mach-11 was a bulkier engine which, like the Taifun Orkan, could have had more racing potential with the proper development and backing.



Taifun Orkan



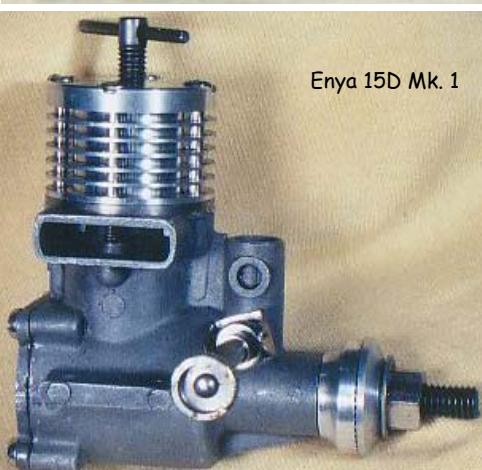
Taifun Rasant Mk.2

Webra Winner 2.5cc
1954

Later Webra engines included the 2.5cc frv Komet and the rear-disc 3.5cc Bully, both twin ballrace diesels; the 5cc Big Ben Glow and the superb, expensive 7.6cc Boxer Twin. The latter was developed from the Ruppert flat twin which was momentarily dominant in early European R/C events in the hands of experts such as Hans Stegmaier. Both the Webra and Ruppert twins featured air pumps which were used to power R/C actuators.

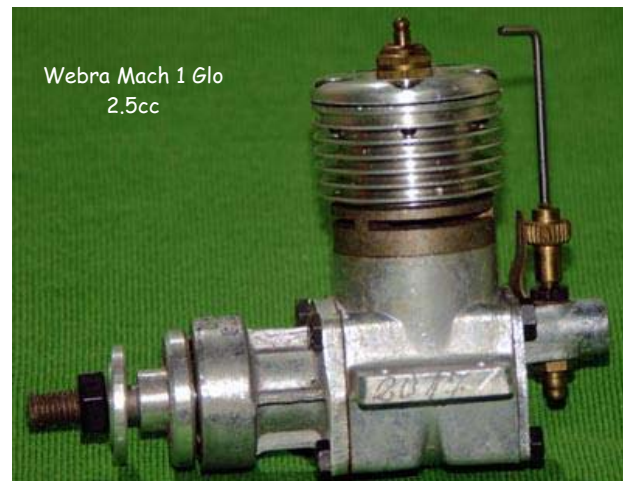
Like the Taifun engines, the earlier Webras were cursed with the wire-type needle. This also was replaced with a superior design in later years.

In 1956 the Japanese firm of Enya surprised us all with a 2.5cc diesel, the Enya 15D. This was a very modern design, frv engine with a single ballrace and a unique form of cylinder porting, similar only to the MVVS diesels from what was then Czechoslovakia in the Communist block. Whilst delivering exceptional performance, this porting was responsible for unresponsive cold-starting, when after what seemed like a lot of fruitless flicking, the engine burst into life. Hot starts were not a problem.



Enya 15D Mk. 1

A great engine, the 15D proved to be exceptionally powerful and soon became very popular, with many contest successes to its credit. The writer moved up from the Tornado to a 15D and managed to avoid the shaft breakages which soon became commonplace. This problem was accentuated by the 'couldn't give a bugger' stance of the Australian

Webra Mach 1 Glo
2.5cc



Enya 15D Mk II

importer, Bill Evans, who carried a minus quantity of spares! The original 15D was replaced a few years later by the 15D -11, but by that time contest flyers had moved on to the Eta and Super Tigre diesels.

Not to be outdone, O.S. countered the Enya 15D with the twin ball-race OS 15D. It looked like a \$million, but unfortunately it was a dog. Most critics focussed on the keyed contra-piston which was intended to keep the glow-engine type transfer baffle from imminent disaster, but the real problem was the totally inefficient combustion chamber shape which resulted from the baffled piston. Though expensive, many, including the writer, rushed to buy an OS 15D thinking it would be the engine to beat, but repented with similar haste when its shortcomings became apparent. The engine was soon withdrawn from the market and OS used the diesel crankcase design for the rare OS 15-Speed glow engine which was used quite successfully in Japanese C/L Speed events.

The smaller Japanese Kondo firm also marketed an interesting range of diesels in this period. This included an 049, a 15 and a 29. Few were seen in Australia.

The Italian Super Tigre firm also marketed small to medium range diesels for sport flying and again few of these earlier engines were seen in Australia.



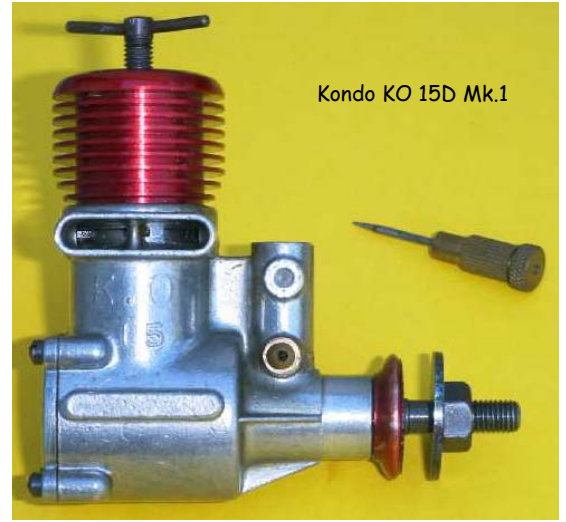
OS 15D



Webra Rekord 1.48cc Diesel

seen in Australia. In later years, the ST G20 and G15 diesel variants were very popular, but outside the scope of this article.

Cheers. David Owen. August 2008.



Kondo KO 15D Mk.1



Super Tigre G27



OS 15-Speed Glow



Webra Bully Twin



Taifun Blizzard



Kondo KO 5cc Diesel



Taifun Hurrikan

LETTERS from MEMBERS

From Dave Brown, SAM 1788 Secretary:

In reference to Jim Rae's letter about the Texaco fuels, and the "unwritten rules".

Jim has failed to paint the whole picture, but is one of a group of people it seems, so I won't further refer personally to any one in this reply.

All the rules are written in the Allocation section, but it seems that some want to ignore clause (v).

Bottle A and Bottle B run 3cc per pound, any changes to that will make it Bottle AB, and runs on 2cc per pound, simple.

Competitors are entitled to use blended fuel, it is just that these guys do not want to comply with the "written" rule that changes their allotment from 3cc per pound to the allowance allowed for "your own fuel", 2cc per pound.

Competitors have every right to blend the supplied fuel, (I don't think the organisers will cough at the cost or anything like that) but it is changed supplied fuel (Bottle AB), and no longer the **same** as the other guys "have" to use under the current supplied rules.

It can be pointed out that some guys find that the engine runs a little better on a blended fuel, and therefore 2cc per pound has been the rule, for obvious reasons, and for quite some time.

I hope that this becomes a little clearer in the interpretation of the written rules over what may have been said in pilots briefings.

Dave Brown - *CD for 25 years and still learning how to bend the rules back straight.*

From Peter Scott.

It never fails to amaze me how many fliers fail to put a bit of thought into the safety aspect of their modelling.

How many times I've heard the tale of no control, 'plane is crashing, flight batteries were flat. (But I only charged them this morning).

It's like going out and driving your car without a fuel gauge. For under \$20 a battery indicator, which weighs almost nothing, will show you before each flight the state of your batteries. No, I'm not selling them! I learnt from experience. Is \$20 too much to pay for not destroying your model?

The other thing that has gone out of fashion is painting the prop tips white or yellow. This clearly shows the outer arc of the prop when running and would greatly reduce the damage done to peoples hands. Five minutes could save a lot of pain.

The rule book also insists that it's mandatory that the time-keeper asks for sight of the control surface working before launch of model. We still see the odd model launched with the radio turned off.

From Peter (Condo) Smith:

Hi, just a short note. Congratulations to the Yass club on a very successful first Old Timer comp, well done. Although I did not fly at Yass I had an unusual occurrence, I was sledged. Now I have been sledged by the best flyers in Australia but never by a newbie.

The newbie came out of the wood work all flash and brash, "Condo, you've won your last trophy", he said to me as he strolled off to have a pee. Although he gave some cheek it was apparent he wasn't meek. I think his name was BEAKE, David Beake. I look forward to our next meet.

Flying tips:

- If you see him (DB) in a thermal, join him, if it's a big thermal share it with him.
- If small fly VERY close to him, newbie may let you have the thermal to yourself.
- Watch his model VERY closely, if in lift join him, if in sink fly elsewhere.
- Let him take off first and when he is in lift take off and climb in lift.
- If he wants a time keeper ALL time for him and don't forget to tell him he had an over run, even if your not his OFFICIAL time keeper.
- When he finds lift and you're his timer tell him there is a bigger thermal DOWNWIND.

Welcome back to Old Timer David Beake. Oh David, the weight you just felt is the target on your back I just painted. I love a challenge, so let me know all the comps you are going to fly in the next twelve months and I will be there, phone 0423452879. Please make my day.

Sledge me, ha, ha, ha, Condo.



FARCON Top Gun, Condo - I missed you Mr. Beake!

From Keith Murray <kmur3388@bigpond.net.au>:

That picture on the front page of DT152
It's Baaaaasil!

I remember Basil Healy's HE162 well, he made it when we both lived at Chester Hill.

A very brave attempt at a very difficult F/F choice.

I later acquired the Jetex 350 from Basil and lost it in a cornfield at Richmond, along with the wing which came from Basil's So Long wakefield model. Still have a lot of Jetex stuff, but no wicks.

FARCON CONTEST

From Peter Scott.

A terrific weekend! The weather on Saturday was clear and sunny with a fair breeze easing as the day progressed. Sunday was the same but dead calm. Down to tee shirts in the afternoon. Not a big turnout but it paid for the trophies, which were rather nice.



2cc Duration flight line.

The first contest each day was 'Tomboy' for one hour. Longest flight over the weekend to count. Seven fliers took part.

Next contest, on Saturday, was Std Duration. I flew an RC1, which finally managed a couple of maxes. Then we flew Nostalgia.

Sunday's first event, after Tomboy, was 2cc. I think Condo won this while I managed second with my cub powered Zoot Suit. I believe that Jim Rae was third.

Antique was our last event and flown in perfect conditions. The fly-off was between Basil Healy with his Sparey powered RC1, turning a 16" prop, Condo flying his Cumulus and myself with my Whirlwind powered RC1 which came out top in the end.

After the presentations, Condo winning the Top Gun Shield, Brownie flew his Panther jet, which was a magnificent sight.

Many thanks to the Cowra club for their hospitality and good food. A big thanks to Condo and Farthing for running the contest. I sincerely hope that it becomes an annual event.



Basil Healy and Ian Connell with the RC1 and Dixielander.

FARCON COMPETITION 23-24 AUGUST, 2008 - RESULTS:

Tomboy

Peter	SCOTT	Tomboy	521
Paul	FARTHING	Tomboy	455
Jim	RAE	Tomboy	448
Ian	CONNELL	Tomboy	442
Basil	HEALY	Tomboy	439
Brian	PAYNE	Tomboy	390
John	DIDUSZKO	Tomboy	201

Standard Duration

Paul	FARTHING	1941 Playboy	OS 40 H	1033
Peter J.	SMITH	1941 Playboy	K&B 40	992
Peter	SCOTT	1941 Playboy	K&B 40	952
Brian	PAYNE	85% Bomber	OS 40H	583
Basil	HEALY	Feather Merchant	OS 40 H	503

Nostalgia

Peter J.	SMITH	1954 Spacer	K & B 40	1260	671
Basil	HEALY	Sunstreak	? ? 40	1260	580
Peter	SCOTT	1953 Spacer	OS25	1248	
Dave	BROWN	Civy Boy	Merco 61	1228	
Jim	RAE	1954 Gold Dust	OS Max 29	1227	
George	CAR	1953 Stomper 120%	OS 25 2/s	1207	
Paul	FARTHING	1950 Hyphen	OS 40H	L/O	

2cc Duration

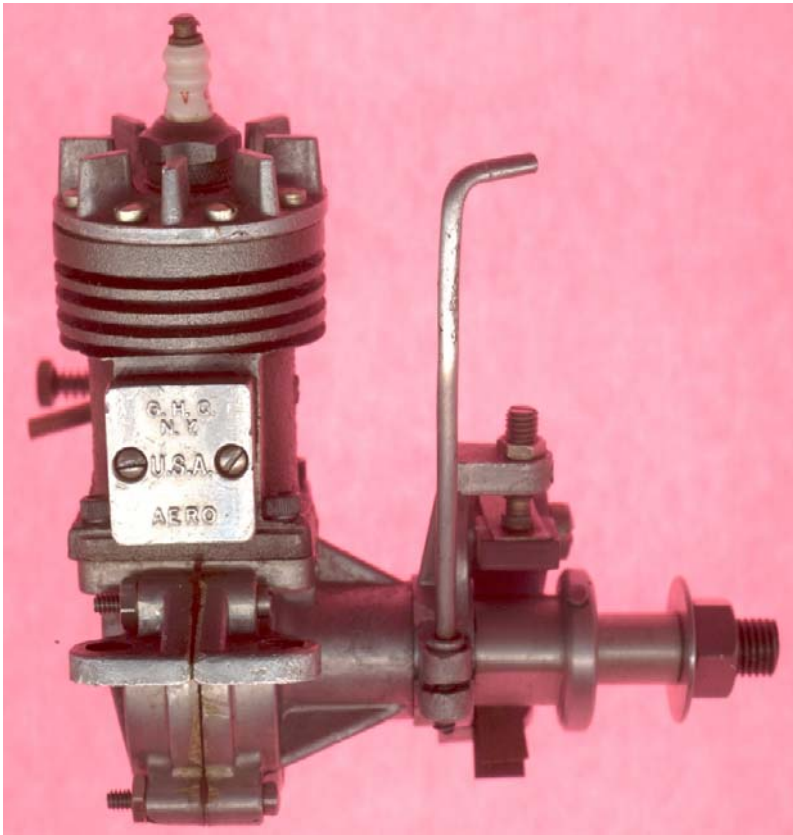
Peter J.	SMITH	1953 Spacer	AE 1.5cc Diesel	900	634
Peter	SCOTT	Zoot Suit	Oliver Cub	900	366
Jim	RAE	Spearhead Jnr	Taipan 1.5	900	268
Dave	BROWN	Crescendo	Taipan Tyro	894	
Ian	CONNELL	1953 Spacer	Oliver Cub	763	
Basil	HEALY	Sunstreak	Taipan 1.5	591	
George	CAR	Dixielander	Magnum 10	478	

'38 Antique

Peter	SCOTT	1936 RC1	Whirlwind 60	1800	906
Basil	HEALY	1936 RC1	Sparey 5cc d	1800	776
Peter J.	SMITH	1938 Cumulus	OK Super 60	1800	344
Jim	RAE	1938 Pixy	ED Hunter 3.46	1790	
Ian	CONNELL	1938 Scram	Sparey 5cc d	1500	

Top Gun Peter (Condo) Smith





The Infamous GHQ Engine

From Roy Bourke, Canada.

It is ironic that, of the thousands of designs of model aircraft engines that have been produced worldwide, one of the most famous is the GHQ Aero .52 cid. This was a spark ignition engine that outsold the pioneer of all model engines, the Brown Junior. Over 100,000 of these heavy cast-iron GHQ's were produced. It was the only American engine that was continuously manufactured and available throughout World War II. And today, any engine collector that wants one should have little problem in finding one in mint condition. GHQ's have a reputation of never wearing out because so few were ever made to run, much less to successfully fly a model airplane.

The GHQ was born the Loutrel in the early 1930's, quite a decent engine for the time but not really in mass production. In 1934 its designer, Pete Loutrel, sold the design to the GHQ Model Company, a subsidiary of *Americas Hobby Center*, one

of the oldest and largest mail order hobby houses in the United States. GHQ manufactured quite a decent and extensive line of flying scale rubber kits in successful competition with Comet, Cleveland and other famous kit manufacturers. But the company's reputation started its downward plunge when the GHQ engine was introduced in 1936.

The GHQ simply wouldn't run, or at least was very difficult to get running. Some say the engine was ported to run clockwise (in fact some claim it wasn't ported at all, as a fuel saving measure!). Others claim the problem was the timer, which offered too much resistance when run counter-clockwise.

Whatever the reason, one can just imagine 100,000 modellers each flipping a prop endlessly in the vain hope of converting the occasional hard-earned "pop" coaxed from the engine into a continuous burst of energy that lasted long enough to propel his model skyward. But it was amazing what low price and wartime availability did for sales of this cantankerous engine. If you had lived in the 1930's, when \$20.00 represented two weeks' wages, which engine would you have bought? A Brown Junior at \$21.95 or a GHQ at \$12.50? And if you were really frugal, you could get a kit to make the GHQ engine for \$8.50! Then as word started to get around about the GHQ's reluctance to run, the price was dropped to \$5.00 for the kit, and thousands of gullible buyers believed GHQ's advertised performance claims (truth in advertising didn't exist in the 1930's!!)

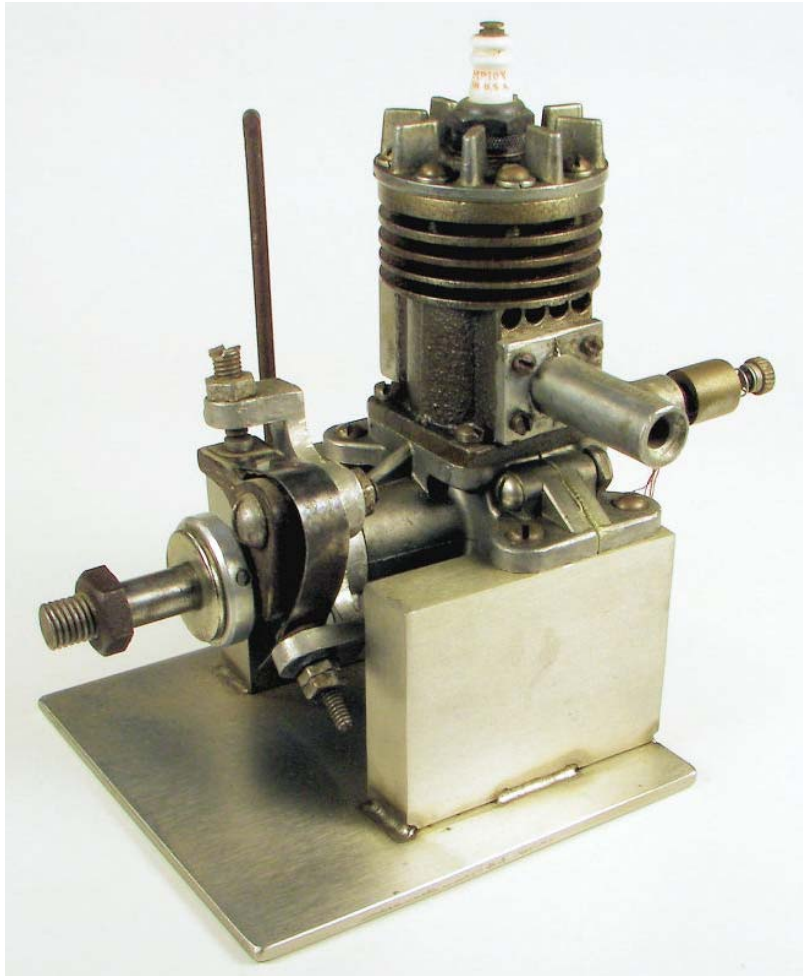
American involvement in WW-II came along in 1942, and with it severe shortages and restrictions on the supply of metals (even pot metals) that were needed for arms production. Virtually every US model engine manufacturer ceased production, every one that is except GHQ! So it was pretty easy for the engine-buying public to conveniently forget the GHQ's growing reputation,



and succumb to the hopes of getting a gas model flying with an available engine (whose price had now climbed back up to \$20.00!). And the GHQ remained in continuous production throughout, except for a brief period when the entire staff of the GHQ production shop (a garage in the Bronx) was fired. (GHQ's were assembled by members of a motorcycle gang hired for the purpose, who were caught spiriting engines out the side door in their lunch buckets and were immediately fired *en masse!*)

With the end of the war came a huge resurgence in manufacture of model engines by reputable companies that were quick to respond to the needs of the multitude of engine-hungry modellers at home or returning from wartime duty overseas. These were good engines, engines that actually ran, and their success and popularity soon sounded the death knoll to sales of the now-infamous GHQ.

If you ever see a modeller wearing a hat with the lettering "GHQ Racing Team", don't laugh too hard! There are modern modellers who have taken on the challenge not only of getting GHQ's to run, but to actually use them in a special class of R/C pylon racing! And if you really want to get some performance out of a GHQ, and have access to machining facilities, I understand that replacing its piston and cylinder with the piston and sleeve of a Veco .61 will make an engine that really smokes! Wouldn't that be something! A Lanzo Bomber screaming skyward, powered by a customized GHQ !!!!!



Glow Plugs - Why Do They Fail?

by Clay Ramskill, Casper AirModelers - FlightLine

The "ignition system" in our engines is in the main, the glow plug. The other vital ingredient, compression, actually determines the ignition timing, so it can't be totally ignored. But usually its the plug that gives us the problems.

Why DO glow plugs fail? There are four likely probabilities, five if you count old age. Yes, old age! The plugs operate by using a catalytic (chemical) reaction with the alcohol in our fuel to maintain their heat; as the plug gets "old", it gets more and more covered up with combustion byproducts (carbon, etc.) which hinders the whole process.

Of the other four, LEAN RUNS is probably the most prevalent - not so much that the engine was running lean, as it was HOT. Too much heat, and the element fries and shatters, or even melts.

TOO MUCH BATTERY power is another failure mode - very related to the above paragraph. Your battery should heat the plug to a nice bright orange or red orange color; if the plug glows white hot, it just isn't going to last. It's bad enough that we subject a tiny little element glowing hot, to the pressures of combustion. But if we add more VIBRATION to the situation, we get trouble. Unbalanced props, loose engine mounts, etc. may all add up to plug failure, especially in combination with too much heat.

Another plug failure mode is from FOULING. The element is very small, and located down in a well. It doesn't take much trash flying around in your combustion chamber to foul (and ruin) the plug! Aside from the obvious dirt coming through the intake or with the fuel, the fouling can come from metallic sources, usually a result of bearings coming unglued, or from excess carbon deposits in the engine. If the combustion chamber is full of caked-on carbon, pieces of that can, and do, come adrift and end up fouling the plug.

A quality plug run in a sport engine should last for dozens of flights If they don't, its probably not the fault of the plugs - its time to look elsewhere for the source of the REAL problem.

HAUNTED BY AN AIRCRAFT - Part 2.

(The One that Kept Coming Back on a Truck!) From Basil Healy.

At about the time I said farewell to A98-338 for the first time we started receiving the "D" model Cessnas for embodiment of the same modifications that we had done on A98-338. Twelve months later we got the "E" models for the same work.

Towards the end of the "E" model program an Army truck arrived again with A98-338, in a very dismantled condition. While landing on an unprepared field the aircraft had dropped the right-hand wheel into a wombat hole and wrenched the undercarriage leg off and bent the right wing this time. Our Engineering Department very quickly amended the repair drawing for the landing gear attachment area by adding a note "Typical for port and starboard sides". That was their sole involvement in the repair. The repair progressed quickly this time because not only were we working from previous experience, but we had the repair on the opposite side to compare with what we were doing. One wit described it as our three dimensional drawing in mirror image. Appropriate I thought.

A new starboard wing arrived from Rex Aviation but was all bare metal. The Army specification called for all parts to be finished in primer. Six weeks later we got our wing. It must have come from the factory! We then had to do the modifications for supply dropping before fitting it to the aircraft. Re-assembly and test flying went off smoothly, so once more I said farewell to A98-338.

After that we started receiving some of the Army Cessnas, which had seen service in Vietnam, for overhaul. These were in pretty poor condition and needed a lot of work to bring them back up to scratch. There was also a modification program to fit Winjeel wheels and brakes and I often wondered whether A98-338's encounter with the wombat hole may have prompted this modification.

We were also carrying out overhauls on the Army's Sioux helicopters which had seen service in Vietnam. These aircraft were also in poor condition. They were also a nightmare to work on because almost everything could be assembled at least two ways and sometimes more! The maintenance manuals became very well thumbed and dog-eared volumes as we struggled to get the hang of re-building and re-rigging these little monsters. I swore that Murphy was on Bell's design staff.

It was while checking the engine installation on one of these that an Army Lieutenant approached me with a work requisition in his hand to replace the ADF sense aerial and repair a damaged tailplane tip on a Cessna. I took him up to our Commercial Department chap who raised a company job number for the work to be done. The Lieutenant was the pilot of the aircraft which he advised us was at Holdsworth. We gathered up a crew of three plus myself, the necessary parts and headed for Holdsworth following the pilot who had an Army car.

Imagine our surprise when he did not turn into the Army Air Base by headed down the Heathcote Road! Some way down the road he stopped at a gate with an ominous red flag beside it and signs warning of unexploded ordinance. We were in the middle of a live firing range! About a kilometre or so down a dirt road we finally came to an airstrip carved out of the scrub and sitting despondently on the end of it was A98-338!

Investigation of the damage to the ADF sense aerial, which was suspended below the fuselage, gave me grave doubts that whatever had struck this had first struck the propellor. Inspection of the rear face of the propellor tips revealed suspicious stains which could have been tree sap. While the rest of the crew were attending to the aircraft, I wandered down to the end of the airstrip to see if I could locate whatever the aircraft had struck. The airstrip was composed of a yellow road base type material and towards the end, where it had not experienced much use, it was covered in small stones about 1/8inch in diameter. In these stones I could clearly see the main wheel tracks of the Cessna. Further along these were joined by the tailwheel track, just before the main wheel tracks ceased. The tail wheel track continued for about twenty yards after the main wheel tracks ceased. Hell, I thought, this guy really lugged that plane off the ground!

Looking toward the scrub at the end of the strip I noted a neat rounded valley cut through it with a small shattered sapling on the left side. This was obviously what had caused the damage to the tailplane tip. The ADF sense aerial was not to be seen and I had no intention of wandering into the scrub to find it for fear of treading on an unexploded projectile of some sort!

Returning to the aircraft, I quizzed the pilot as to just what had happened because I was starting to have very grave doubts about putting my name in the Travelling Log to certify this aircraft as flyable. It appeared that the pilot was acting as a Forward Air Controller during a live firing exercise when the officer in charge of the exercise was not satisfied with the degree of correction being given by the pilot. He requested the pilot to land on the adja-

cent strip and climbed aboard the aircraft to see for himself, whether the pilot was giving incorrect instructions or whether his gunners were ignoring the instructions given. Anyhow, it was a hot day, there was no wind and the officer was apparently quite weighty, all of which added up to a very close call for both of them.

I then decided to check the tracking of the propellor blades. This was accomplished by standing a toolbox on end and measuring to the back face of each blade as we rotated the propellor. It was 1/2inch out of track so I had no hesitation in declaring the aircraft, "Unserviceable, subject to shock load check of engine and propellor". The pilot was not amused! He would have to explain to his commanding officer which he had an unserviceable aircraft in the middle of a firing range that was, in all probability, holding up a major live firing exercise until it was removed.

We packed up and returned to Bankstown and a week later A98-338 followed on the back of a truck. Once in the hangar, we wasted no time in removing the engine and propellor and sending them off to be shock load checked. We also decided to replace the repaired tailplane tip with a new item.

It was while doing this that we noticed that the tip of the tailplane could be moved fore and aft about an inch. We removed the tailplane and were horrified to find a bracket holding the lower end of one of the trim screw jacks was broken and the one was cracked. We re-built A98-338 and returned it to the Army. I never saw the aircraft again mainly because the Cessnas were replaced by Pilatus Porters.

I succumbed to the inducement of more money and accepted a position in the Planning Office. You've guessed it, they gave men the Sioux Helicopters and Pilatus Porter work to do! I just could not seem to get away from Army aircraft!

ADF Aircraft Serial Numbers - RAAF A98 Cessna 180A - A98-338



Photograph provided by Mike McCarthy, Taken Amberley in the 1960's.

Pre-delivery was N5038E. Delivered 15/04/59. To 2AD 21/04/59. To Base Sqn Canberra 12/05/59. To 16AOP FLight. Had an 'Incident' in the circuit area at Canberra, 03/12/59. Pilot: SQN/LDR H K McLoughlin. To 16 ALA Sqn 02/12/60. To Dehavilland 12/04/61 for survey submission and repair. To 16ALA Sqn 05/06/62. To Dehavilland 12/07/62. To 16ALA Sqn 24/08/62. Crashed and destroyed at Purga near Amberley, Qld on 15/03/63 after hitting power lines and crashing in a field. Pilot: Lt G Lilley 13998 was slightly injured. Struck off 11/04/63.

Tips and Techniques

by *Gerald Sullivan*

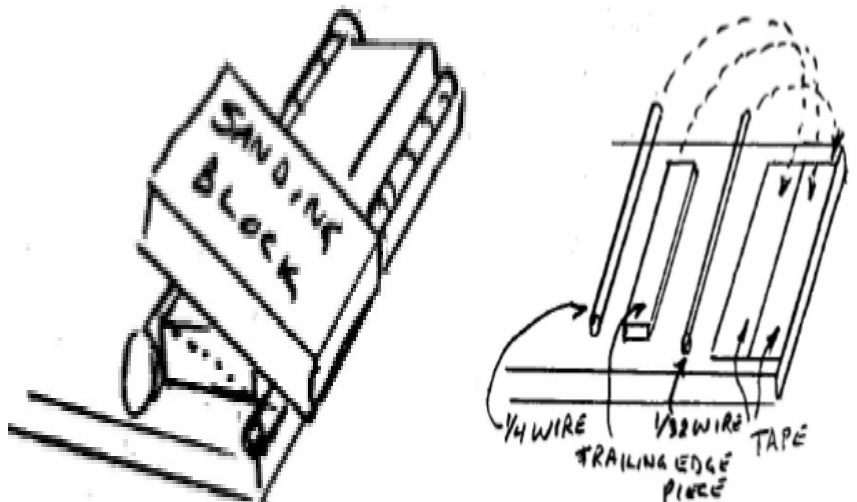
An article published in the September 2004 Scale Staffel Newsletter of San Diego, Gerald Sullivan, Editor You might have seen this idea before for sanding tapered trailing edges. I picked it up from Don Ross Rubber Powered Model Airplanes. Funny from where you get additional ideas.

The August 2004 issue of Flying Models (FM Clinic) described a double sticky tape usage to hold small parts to a board for sanding. Michael Ramsey uses a double-sided tape from Anchor Adhesives. I have found that common variety double tape from Longs (or 3M brand) works really well in sanding leading and trailing edges to shape.

Combining the two ideas, put a couple of tapes side by side along the edge of a straight board. I use some Melamine covered MDF from Home Depot. Place a 1/32 inch wire near the edge, then your leading/trailing edge stock, then a wire whose diameter is the thickness of your work piece.

If you are not too brutal about it the wires will stay in place. Sand away until you hear a screeching sound all along the wires.

This is a one shot, so replace the tape for more edges...



~~ THE BACK PAGE ~~

DALBY 2008

Peter (Condo) Smith. <peter_condo@yahoo.com.au>

There was movement in Queensland, as word passed along the chain,
Condo was coming back to take home their trophies again.

There was Carey & Paton & Slattery too, Hardy & Walsh, to name but a few.

"He's trying to steal our trophies, it really isn't fair!" these people in Queensland were crying in deep despair.
The trip was long and boring, the flights were short and sweet, Condo had his Nelson tuned absolutely to its peak.
It was Farthing, a man of MANY words, who tried to give the Queenslanders hope, "Condo's only human, if not, the weather may prevail."

The day dawned, bright and red, and Condo fairly jumped right out of bed.

The briefing was given, and prayers were said, but Condo only had winning in his head.

Burford was first, the rounds went great, Condo was chafing at the gate.

The fly off came and Condo was first away, but too soon it became clear, he wasn't up there to stay.

Duration came and the rounds they progressed, and Condo's Nelson was doing its very, very best.

Sunday came and so did the wind, so we all stood around wagging our chiny, chiny, chins.

Monday came, windy still, but hey we decided it's time to play.

Texaco first, Mitchell's away, and he got the very first max of the day.

With the rounds all done, a few faced the gun, although both Condo and Farthing were still having fun.
The Climb and Glide, the premier event, the wind was still blowing as we took to the sky, and a Queenslander left us high and dry.

Then '38 Antique arrived late in the day, and Condo's Cumulus was making much hay.

The fly off arrived and we faced the run, and young gun Walsh came home with a very late run,

A young Queenslander, you son of a gun!

The field was great, the absolute best I have seen. Old friendships renewed, old enemies seen.

Trevor was there, talking away, and please God, help us, when he gets it all together one day.

Well, Dalby's done and dusted for 2008, but Condo had bolted well before they could shut the gate.

Condo and Farthing, after a weekend so grand, hatched a plan as they drove homeward across our wide brown land.

If we stop and lock the border gate, we will keep the Queenslander Trophy hunter's out of our State.

Condo '08.

Scone world champ

SCONE'S Grant Potter is a newly crowned world champion.

He and his team mate Hugh Simonds, of Sydney, set a world record in France - twice.

They are currently on their way home and it will be the first time the perpetual trophy has been out of Europe.

But their chosen race is not the Tour De France, not an equestrian event and has nothing to do with the Olympics.

Simply put, they race a control line model plane.

Grant's wife Debbie Potter proudly said the two had 'done brilliantly'.

"No Australian team has ever been in the final before," Mrs Potter said. "It's also the first time in more than 20 years that a Russian or Ukrainian team has not been in the final."

Grant, 35, and Hugh had to overcome some obstacles, one of the greatest being contesting the grand final twice.

The model planes are flown in a circle and controlled by a pilot in the center holding a handle connected to two thin steel wires.

Hugh is the pilot while Grant is

the mechanic.

In the first final, which included last year's champions, two of the three competitors tripped over one another. Grant and Hugh continued flying and managed to set a new world record.

However, the teams put in a protest and the final was contested again.

Not only did they win a second time, they also shaved another two seconds off their world record time.

"It's an extremely technical thing to do," Mrs Potter explained. "Grant has been competing for most of his life and it comes down to the pilot's skill and the pitcrew skill, knowing whether the fuel or compression needs adjusting or what needs to happen. They have two very clever brains working together."

Mrs Potter said that when they were waiting for the processing of their models after the race they were busy signing autographs, and many of the Russians were keen to purchase their equipment to see how it was done.

"Grant has built a new fuel tank and they all wanted to get a look at the technology but they didn't sell," she said.

The international class is F2C. A pilot and a mechanic compete as a team to fly small 350-gram, 65-centimetre wingspan semi-scale racing models over a tarmac or concrete surface.

The lines are 15.92 metres long.

Three pilot and mechanic teams compete simultaneously in the same circle, and the object is to finish the determined course as fast as possible.

The important catch is the tank size is limited to 7cc (about one and a half teaspoons) and two to three pitstops for refuelling are needed during the race.

The mechanic stands at a pit area outside the marked flight circle. He starts the engine and releases the model at the start signal and then stands alert for refuelling.

The ground time of a good pitstop is less than three seconds.

The race course is 100 laps or 10 kilometres and the grand final is double that.

Flying speeds are around 200 kilometres per hour which means the pilots have to turn one lap in 1.8 seconds. Line tangles aren't that common as the penalty normally is a wrecked model.



RECORD: Scone's Grant Potter is part of a two-man team that has been newly-crowned model plane racing champs.



Congratulations to Grant Potter and Hugh Simonds for their historical win at the Control Line Team Race World Championships. The Australian F2C (control-line Team Race) team won the World Championship in a time of 6m 13s !

It's great to see Australia up there on the podium. Well done Grant and Hugh !