



THE GEEZER



OFFICIAL JOURNAL OF THE W/A MODEL AERO CLUB (INC) AND
SAM 270 WESTERN AUSTRALIA

Issue 13: December, 2011



EDITORS RANT..

As yet another year spins in to the ether and I contemplate my ever diminishing life span, it comes time to reflect on the year that was. This year has truly been one of the most satisfying and fruitful of my entire aeromodelling life. New projects have marched off the building board in rapid succession; new disciplines have been tried relatively successfully; new acquisitions have proven their worth and while my competition season has not been as successful as I would have wished, the enjoyment of seeing SAM270 flourish and expand has more than made up for that. The Geezer is an ongoing source of pleasure – both in the putting together and distribution – and its worldwide readership provide positive and encouraging feedback that makes it all worthwhile. Finally, I have the joyous anticipation of another Easter in Canowindra (2012) where I can kick back and enjoy some of the BEST thermalling conditions in the country among the BEST in the SAM business in Australia. I tell you folks, it doesn't get much better than that!

Having said that, we have a lot to look forward to closer to home as SAM270 kicks off the contest season in March. We have a full calendar of SAM 270 events, not to mention AWA contests and the NATIONALS in April/May 2012. Those of us that enjoy free flight can look forward to SLOP, Open Power and Fuller events as well so its all happening! Get your plans out, buy some wood and get cracking over summer and if your planning on coming to Canowindra – book your accommodation!

While we are on the subject of SAM270 – congratulations go out to Ian 'Dicko' Dixon for being the inaugural winner of the "Paul Baartz Shield" in 2011. Ian has had another stellar year, taking out or placing in all but two SAM270 events, scoring 25 points and richly deserves to be the first name on the SAM270 champions trophy. It was a long gap back to Rod McDonald who was second in the points tally with 16, followed by Richard Sutherland in third place with 14. The man who graciously loaned his name for the Trophy was a creditable fourth, despite health issues early in the year forcing him to leave events before the flyoffs. A BIG thankyou must go to Rob Bovell who threw himself in to the organization and running of the SAM270 and AWA contest season with gusto and did a fantastic job! Rob's casual but no nonsense style made participating in the contests a real pleasure and the larger turn out to events this year reflects this.

There will be no Geezer in January as I will be doing the usual holiday thing – ie staying with the in-laws in Bunbury drinking their booze and eating their food so I will take this opportunity to wish you all a happy Xmas and Merry New Year.

Troy "Zeek" Latto
Editor-that's-large

SAM 270 Nostalgia – Sunday 6th November 2011 - Oakford

Sunday saw the running of the inaugural SAM 270 Nostalgia event. Seven keen pilots turned up to compete for the shiny new trophy kindly created and donated by Ian Dixon. Weather conditions were far from ideal with a moderate to fresh breeze blowing in from the north west, this kept the air temperature down and very little lift was to be found by the pilots. This meant the contest was reduced to a climb and glide event, with only two very skillful pilots managing to each record one maximum flight of 7 minutes. Most flights averaged around four minutes. The upshot of this was there was no need for a fly-off to decide the final placings.



A nostalgic lineup..Stomper, Swayback, Playboy Cabin and Slicker..

Greg McLure put in four consistent flights and after his one discard had enough points to take out first place. Rod McDonald initially appeared to be a non starter, however a loan of some CA from the well equipped Rob Rowson and some tuning advice from Gary Dickens, saw Rod fly manfully into second place, achieving one maximum flight along the way.



Swayback ready for launch. The as yet undiscovered split pylon made for some interesting flying!

Ian Dixon was a model of consistency managing to claim third place. Richard Sutherland recorded the only other maximum flight of the day but only managed fourth place.

Rob Rowson's well stocked Mobile Workshop is renowned throughout the club and is regularly put to good use. Kevin Hooper was a client of Rowson's Workshop after his tail feathers broke loose. A quick repair saw Kevin back in the air, but unfortunately an out landing ended a flight that could have been a maximum. Further tail feather damage saw Kevin's day cut short.

Troy Latto managed to split the pylon on his Lanzo Swayback when it was picked up by a passing willy-willy. Fortunately this was discovered after his final flight for the day and he could wait until he was home in the workshop before attempting repairs. Rob Rowson was unlucky breaking his pylon after only 2 flights, and even with his wealth of spares and skills he decided it would be far wiser to retire and complete the repairs in the relative comfort of his home workshop.

Several pilots flew models that were previously flown as Burford Duration models, with alternate engines being used to good effect.

Results:

1 Greg McLure	Ollie	OS25	915
2 Rod McDonald	Fubar	OS20	911
3 Ian Dixon	Stomper 200%	OS40H	808
4 Richard Sutherland	Ambition	Enya 19	718
5 Troy Latto	Swayback	OS40H	665
6 Kevin Hooper	Playboy Cabin	K&B 40	405
7 Rob Rowson	Slicker	OS49	340



The winners circle: Ian "Dicko" Dixon 3rd; Greg "Fish" McLure, 1st; Rod "Big Mac" McDonald 2nd.

Overall a good turnout for a new event on the SAM 270 calendar. This was our first trial event for Nostalgia and given the level of support it should be possible to have this event sanctioned by AWA as a State Event in the near future.

Finally I would like to thank all the competitors and the other club members who turned out for their help and assistance throughout the day.

Rob Bovell.

SAM 270 Half A Texaco Electric – Sunday 20th November 2011 - Oakford

Clear blue skies greeted the 8 pilots who turned out to fly in the inaugural SAM 270 Trial Electric Half A Texaco event. The morning started out with a fresh easterly breeze which abated in time to allow the contest to get under way. Lift was very light but most competitors had little trouble achieving the maximum flight time of 10 minutes.

Electric Half A Texaco is very different but still very similar to the normal Cox driven madness that we are all used to. The main difference being the ease of starting and a profound lack of noise. The basic electric set-up is relatively inexpensive, coupled with relatively small model sizes this makes for a good introduction to electric flight. Some pilots claim to be able to achieve 20 minute motor runs from their modest set-ups.



Our new northern pit area was used again – quite successfully!

Regular Geezer columnist and electric modelling fanatic Peter "Greengrass" Everitt had a less than successful day (by his standards) with battery charging problems causing plenty of frustrations and leaving him 16 seconds shy of the flyoff. Ray Sherburn battled on manfully with an aircraft that was a little bit too heavy to be competitive but he resolved to build something lighter and really show us what it was about next year!

John Voak whilst looking more like the invisible man in his improvised face protector, travelled down in his camper van and was able to provide a most appreciated cold beverage after a great days flying.



John "Invisible Man" Voak in his trademark fly protection gear

Results:

1 Rod McDonald	RC1	1800 + 992
2 Paul Baartz	RC1	1800 + 976
3 Ray Silbereisen	Dalaire	1800 + 758
4 John Voak	Lil' Diamond	1800 + 687
5 Troy Latto	Coronet	1800 + 646
6 Richard Sutherland	Lil' Diamond	1800 + 0
7 Peter Everitt	Anderson Pylon	1784
8 Ray Sherburn	Bomber	1688



Rod "Big Mac" McDonald 1st; Paul "Dalai Llama" Baartz 2nd; Ray "Hiho" Silbereisen 3rd. The electric kings for 2011

Six pilots managed 3 maximum flights resulting in the need for a fly-off to sort out the final placings. In a first for a SAM 270 event a mass launch was declared for the fly-off. This was possible due to the support of non competing club members coming down to the field, enabling all pilots to have their own timekeeper. I must admit it was a great sight to see six aircraft launched en-mass without incident. This format made it fairly easy to tell the final placings as it was last down wins.



Richard "Cox" Sutherland and Big Mac talk electric tactics

Overall another great turnout for the second new event on the SAM 270 calendar. Judging by the support shown this event appears to be popular, given this it would be pleasing to see it flown again in some form or another during 2012.

Finally, this being the last Contest for 2011 I would like to thank all SAM 270 Members who either came down to the flying field to compete or generally help out during the year. It has been my pleasure to run the contests for 2011. I have learned a lot about Old Timer flying and thoroughly enjoyed myself along the way.
Rob Bovell.

JUST A MINUTE..

WAMAC. Minutes of general meeting held on: FRIDAY 11TH November 2011

Held at: 20 Granville Way, Willetton

Meeting started at: 8pm with the president Ian Dixon in the chair.

Members present: I.Dixon, P.Baartz, G.McLure, G.Cooke, R.Bovell, B.Slynns-Daniels, D.Hope, R.Rowson, T.Latto, K.Hooper, H.VanLeeuwen, P.Everitt

Apologies: G.Dickens, A.Trott

Visitors: nil

Correspondence inwards: Duration Times, Sam 2001 (Italy) newsletter, AWA Secretary regarding nationals and nationals bulletin number one.

Correspondence outwards: 'Geezer' to members, request regarding nats events to AWA Secretary, articles on OT flying to Windsock editor

Treasurers report:

Balance at bank: \$14,603.49

Account for payment: B.Slynns-Daniels \$376.00 for ether purchase.

Club has 19 members and 8 associates.

Moved report received and account paid: P.Baartz, seconded H.VanLeeuwen and carried.

Minutes of previous meeting:

were confirmed as circulated to members.

Business arising:

I.Dixon is managing sales of ether at \$20 per litre.

Christmas BBQ: Ian will submit an account for expenditure incurred at next meeting.

General Business:

Contest calendar for 2012: discussion over holding a weekend with two or three events most likely at Merredin events probably SAM 270 Texaco on Saturday afternoon and SAM 270 Burford and 1/2A Texaco on Sunday morning with BBQ lunch afterwards.

Canowindra 2012: possibly 5 members attending, if anyone intends going they need to organize accommodation early.

Electric OT at Nationals was discussed; club will organize a CD, as P.Everitt will be absent at the time of the events.

Competition results:

1/2A Texaco State Champs:

1. R.Sutherland
2. P.Baartz
3. T.Latto

Nostalgia trial event:

1. G.McLure
2. R.McDonald
3. I.Dixon

There were 7 entries for this event.

Meeting Closed at: 8.44pm

HOLD ON TO YOUR COX DEPT..

(This month we continue a series of articles aimed at unlocking the mysteries of that blighted piece of model aero engineering – the Cox .049. This comes courtesy of our resident engine guru, Richard Sutherland. Read on!)



Everything you wanted to know about the 1/2A Texaco motor

(OR the science and witchcraft of the reed valve 049)
By Richard Sutherland

Props

When swinging a large prop slowly, the Cox motors run hotter than when running at the design RPM. This can cause the piston to expand disproportionately and result in the motor stopping. Cox produced the Texaco glow head with more cooling fins to help the motor run cooler, however the real solution is to select a piston/cylinder fit that is quite loose to allow the piston to expand without sticking in the cylinder.

Hence a motor with a well run-in (almost clapped out) fit is needed. New motors are readily available on eBay, however these will need considerable running to become a good Texaco motor, so it is often easier (and cheaper) to select parts from a number of well used motors, than spend the time to run-in a new motor.

Note: a new (or tight) motor should be run-in by starting with a small prop (5x3) and then gradually increasing prop size as the motor can handle the load.

Note: a varnish like material can build up on the inside of the cylinder (especially if using castor oil based fuel). This varnish can cause the motor to stick and overheat and should be removed with fine steel wool.

The 049 pistons are generally interchangeable and are attached to the con rod with a ball joint. With lots of running this joint can become sloppy. A 'reset' tool is available and every competitor should have one to tighten the ball joint when necessary.

Note: If using an extra large prop (12"), you may need to reset the ball joint very often (every dozen or so runs!)

The exhaust ports should be aligned fore/aft when the cylinder is screwed into position on the crankcase. This rarely occurs by chance but can be achieved by facing the crankcase mating surface (with 600 wet & dry) or using shims between crankcase and cylinder. Looking at where the piston sits at TDC will indicate which is best (if piston is below the top, then facing is best, if above the top, then shims are best). This alignment is best for power and is probably less critical for economy.

Note: with a 'single small bypass' cylinder and exhausts aligned fore/aft, the motor will be 'handed' i.e. the bypass will either be on the left or right of the motor and this could potentially influence whether the motor runs best clockwise or anti-clockwise. Might be worth some further experimentation.

Crankcase/crankshaft

Most crankcases you see are machined from extruded section, although some diecast crankcases were produced in the late 1970's in an unsuccessful attempt to reduce costs.

The type of crankcase doesn't matter, the important thing is that the crankshaft spins freely in the crankcase without any play.

There are reports of crankshafts 'galling' the inside of anodised crankcases (as used on the Golden Bee and Black Widow) and seizing the motor. I imagine this only occurs at very high RPM so it shouldn't be an issue for a Texaco (economy) setup.

The Cox Venom 049 was fitted with a tougher counterbalanced crank shaft (and Davis Diesel makes a similar aftermarket item), however the standard crank is fine for Texaco.

Mufflers

The use of a muffler will reduce power but increase economy. The power loss is significant and it may depend on the individual model as to whether the economy/power trade-off is worthwhile.

Note: Only a piston/cylinder combination without SPI should be used with a muffler.

Glow heads/gaskets

There are several different types of glow head, the main ones:

Part No. #??? - low compression, hairpin "W" filament – used on some early reed valve 049s;

Part No. # 302 or 325 - low compression, coiled filament – used on most reed valve 049s;

Part No. # 1702 - high compression, coiled filament – supplied on the Tee Dee 049s and 051s; and

Part No. #315 - low compression, 5 fin Texaco head, coiled filament – supplied on the Texaco 049s.

For economy, the low compression glow head is best and the high compression head should be avoided. There is no real advantage in the 5 fin Texaco head when you have an appropriate piston/cylinder fit.

The glow head seals to the cylinder via a copper gasket, and often a number of these gaskets are needed to get the right compression. A good starting point is 4 gaskets. If shims have been used between the cylinder and crankcase (for alignment or to remove SPI) then less gaskets may be needed.

I recommend using only a 1.2v NiCad or a 1.5v dry cell to light Cox glow heads as some glow drivers can blow the filaments. A Cox glow head should give years of service when using 1.5v or less. I use a 4000mAh NiCad.

Note: Even though a glow head may look to be in perfect condition, it may not perform properly.

The Australian rules state a head tapped for a standard glow plug may be used should Cox heads become unavailable. Millions of these glow heads were made, hundreds appear each month on eBay. They will never become "unavailable" - not a very practical rule.

Back-plate and Needle Valve (NV)

The fuel tank back-plates were originally made of metal, although the later versions (from about 1987) changed to plastic (Delrin?). Most back-plates have an air filter mesh visible from the rear, although some versions do not. The back-plate itself does not affect economy, but the fuel pickup tube needs to be replaced with a slightly longer tube that reaches to the bottom of the tank. This is necessary because the standard configuration is for control line use and has the pick-up positioned on the right side of the tank to make use of centrifugal force. It is somewhat fiddly to get the fuel tube in the correct place when reassembling the motor so some flyers replace the plastic tube with a piece of 1/16 or 3/32 brass or aluminium tube that has been bent to shape and epoxied into position.

The NVs fitted to these back-plates have 64 threads per inch (TPI). There can be air leaks around the NV which may cause erratic running, and it is worthwhile pushing a piece of fuel tube over the NV to ensure a good seal.

Note: The NVs fitted to the Cox motors without integral fuel tanks have 128 TPI. I have seen the metal back-plates modified to use the 128 TPI NV, and this will allow more precise NV settings. I am not sure that this modification would be legal for competition though?

Note: There is a small o-ring which seals the fuel tank to the back-plate. If damaged, a suitable replacement can often be found in a disposable cigarette lighter (one with an adjustable flame).

Fuel

As a kid in the 1970's, I had only limited success with Cox motors. With hindsight, I realise the two main problems were:

- 1) Cleanliness – a pissant piece of dirt that wouldn't even bother an OS 10 (or larger) motor can clog your Cox 049 completely.
- 2) Fuel mix – I used the inexpensive club fuel (4 to 1 methanol/castor). Cox motors like Nitro, the more the better, and running them without Nitro promotes finicky handling.

Cleanliness – it is absolutely essential to keep your fuel (and motor) as clean as possible – for reliable operation this is probably the most important point – so double filter your fuel (use several layers of silk or even a coffee filter) the fuel needs to be absolutely clean – dirt can easily clog the small carburettor passages or stop the reed valve from sealing.

And don't forget that the air intake is located at the bottom of the back-plate – the very part of a model that digs into the 'dirt' on a hard landing.

Oil – Cox International recommends a minimum of 20% oil of which at least half is castor oil, however at low RPM, the loads on the motor reduce and so does the need for lubrication. With a well run-in motor, the oil component of the fuel can be reduced considerably from what would be considered normal. Some flyers have strong preferences for castor and others for synthetic – I don't want to enter that debate. I personally don't have a preference and usually use a 50:50 mix of castor/synthetic. Some motors will tolerate less than 10% oil, although this may reduce the working life.

Methanol - the energy in the fuel comes from the methanol – to maximise run time you need to maximise the amount of methanol.

Nitro - Cox motors run best on high Nitro fuels, the more Nitro – the higher the power, and the better the handling. However with lots of Nitro economy suffers, the motor will be most economical with no Nitro in the fuel. It is thus a balancing act to use the minimum amount of Nitro that gives reasonable handling.

Petrol – petrol has about twice the energy of methanol (which is the reason ignition motors are more economical) and substituting petrol for a percentage of the methanol can improve economy, however I have never tried this, and I imagine it would be at the expense of handling. Also petrol may not be compatible with plastic components such as the fuel pick up tube, plastic reed valve or back-plate.

Assembly

When assembling your motor face the mating surfaces as necessary (with 600 wet & dry) and check or replace the gaskets to ensure a good seal and no fuel or air leaks. You don't want your precious fuel leaking out! If using a spring starter, make sure it doesn't rub on the thrust washer or prop.

Note: New parts can still be obtained from Cox International at www.coxengines.ca Complete Babe Bees, glowheads, reeds, gaskets etc are all available.

Concludes in February..

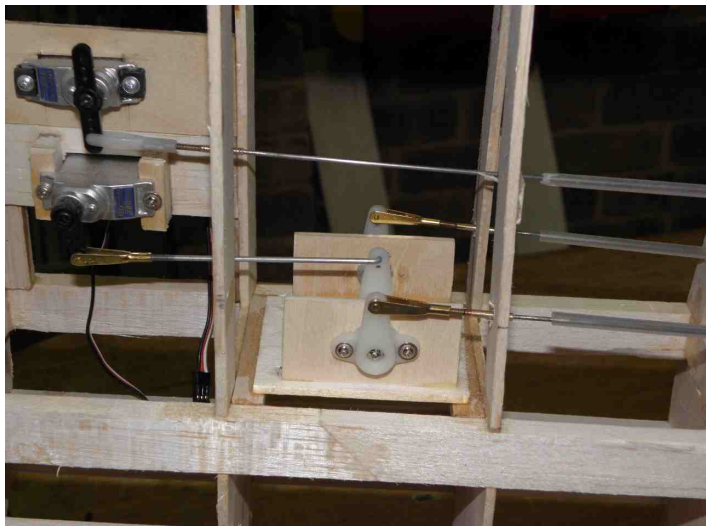


DECONSTRUCTION PAGE..

More from the world of Green Grass this month with construction photo's of his Electric Pacer..



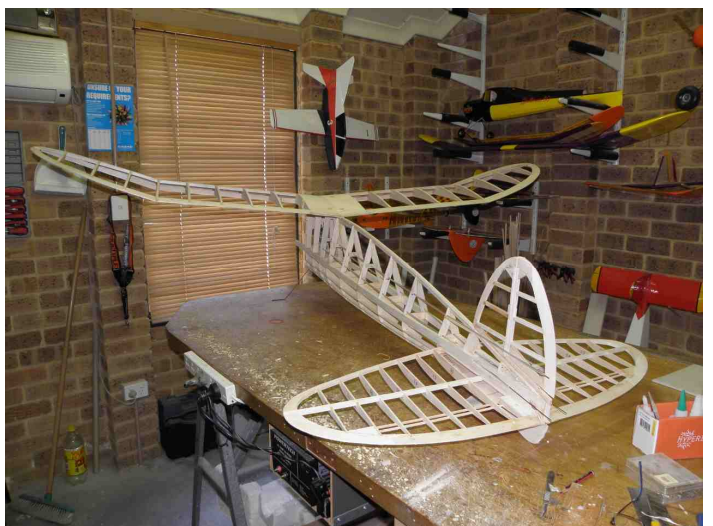
Pacer assembled



Greengrass pushrod system for dual elevators..



Wing retainer system using two hooks and lacky bands..



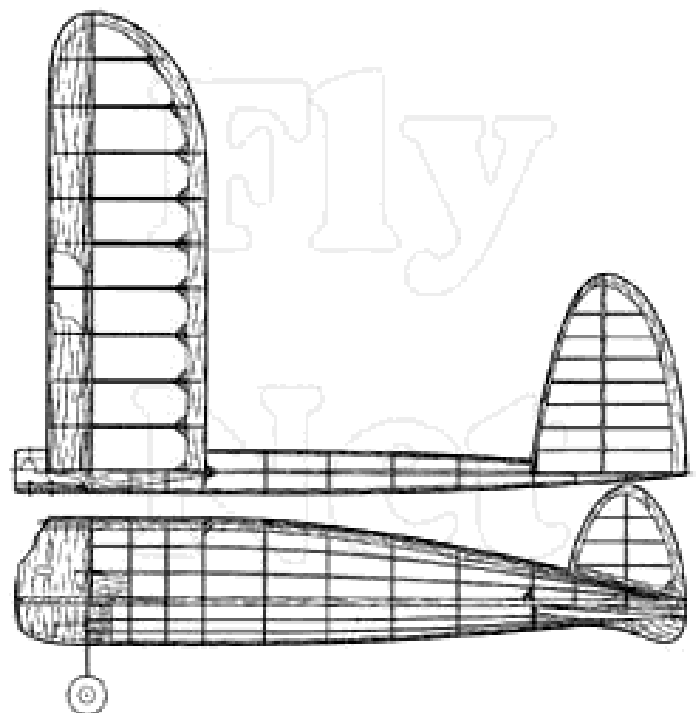
Rear view with its unusual upside down tail..

	Model Name	Pacer C (Tai)
	Approv. Country	USA
	Sam Type	OldTimer
	Date yy/mm	42/02
GoTo SearchPage	Designer	Taibi_Sal
	Kitter	?
	Publisher	Model Airplane News
	ProjSpan inch	58.84
	DevSpan inch	60.00
	Chord inch	10.00
	Fuselage type	Nocabfus
	WingSection	NACA 6412 - 12%
	Also Known As	



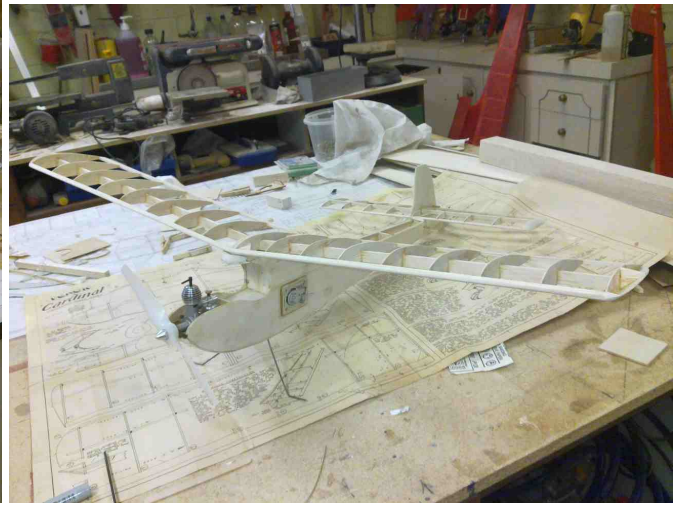
Notes:-pic Roger Left Feb 2004, MB plan #274-OT, Drawn by Phil

Source: www.boundy39.com



DICKO-STRUCTION PAGE..

Not to be outdone, Dicko has been burning cyano and snorting balsa on his march to Canowindra glory. Here are two of latest: The Mercury Mallard for 2cc duration and the Veron Cardinal for the Cardinal free flight event..



Mallard with Taipan Tyro attached – not much room for radio! Cardinal with CS Mills 0.75 and Timer installed

WHAT ITS ALL ABOUT DEPT..

A few months back I was handed a framed photo of myself sitting in a paddock surrounded by disassembled models. John Voak, the photographer, said as he handed it over: "To me, this epitomises what aeromodelling is all about – sitting in a paddock on a warm spring day surrounded by planes". I must point out that at the time the photo was taken I was attempting to fix a recalcitrant engine (yes – it was a cox 049) and wasn't feeling very happy about things but I was touched that someone thought I was worthy of a framed photograph. I humbly received the photo and hung it in my workshop.

Recently the latest batch of photo's from the Electric 1/2a Texaco event arrived and as I was sorting through them when I came across the mass flyoff launch. It was a beautiful day with plenty of lift, competitive aircraft and a bunch of pilots all raring to go! The mass flyoff was a joy to behold and be part of and this, to me, said "That's what its all about!"



CONTEST CALENDAR FOR 2011

Date	Event	Type	Location	Start time
March 27	1/2A Texaco	SAM	Cardup	9.30am
May 22	Burford	SAM	Cardup	9.30am
May 29	Texaco	SAM	Cardup	9.30am
June 5	Open Duration	SAM	Cardup	9.30am
June 19th	38Antique	SAM	Wanneroo	9.30am
July 3rd	Std Duration	AWA	Cardup	9.30am
July 17th	Std Duration	SAM	Cardup	9.30am
July 31st	Burford	AWA	Cardup	9.30am
Aug 14th	Open Duration	AWA	Cardup	9.30am
Aug 28th	Tomboy Rally	SAM	Cardup	9.30am
Sept 25th	38 Antique	AWA	Wanneroo	9.30am
Oct 9th	Texaco	AWA	Cardup	9.30am
Oct 23rd	1/2A Texaco	AWA	Cardup	9.30am
Nov 6th	Nostalgia	Trial	Cardup	9.30am
Nov 20th	electric O/T event	Trial	Cardup	9.30am

Note: The Nostalgia and electric O/T events marked in **BLUE** are **TRIAL** events for 2011 run by SAM270. Events marked in **RED** are **AWA State** events run by WAMAC. All other events are club events run by SAM270

2011 SAM270 "PAUL BAARTZ SHIELD" FINAL RESULTS

SAM No.	Name	Points
SAM27017	I Dixon	25
SAM2706	R McDonald	16
SAM27024	R Sutherland	14
SAM2701	P Baartz	13
SAM2703	R Rowson	12
SAM2704	T Latto	9
SAM27021	K Hooper	8
SAM27023	G McLure	8
SAM27013	A Trott	5
SAM27019	R Bovell	4
SAM27025	L Isitt	3
SAM27025	R Sherburn	3
SAM27010	G Eyres	1
SAM27012	G Dickens	1
SAM27016	J Voak	1
SAM27026	B Slyn-Daniels	1
	P Everitt	1
SAM2702	P Spencer	-
SAM2705	D Hope	-
SAM2707	D Bentley	-
SAM2708	D Gibbs	-
SAM2709	G Sayers	-
SAM27011	R Hoogenkamp	-
SAM27014	H Van Leeuwen	-
SAM27015	G Cook	-
SAM27018	R Rumble	-
SAM27020	C Behr	-

"Paul Baartz Shield" criterium

SAM270 is presenting all club events for the 2011 flying season. Participation is open to **all** AWA affiliated pilots but **trophies and points will only be awarded to SAM270 members**. SAM270 membership is automatically awarded to new and re-joining WAMAC members and numbers will be allocated on a sequential basis. Once you are allocated a SAM number, its yours for life and it will not be re-allocated. An entry fee for each event will be charged to cover costs of trophies and engraving. Points are allocated thusly: First place 4 points; Second place 3 points; Third place 2 points; One point is awarded for flying in the event.

OFFICE WALLAHS..

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CLUB MEETINGS

Meetings will be held on the second Friday of every month at Paul Baartz's place - **20 Granville Way, Willetton**. Meetings kickoff at 8pm sharp, The waffle kicks off about 10 mins later. Bring yourself and a sense of humour. Tea and coffee will be provided. Stronger Beveridge's are at your own expense and will be gratefully consumed when you're not looking.

CLUB PLANZ LIBRARY

The club has a growing library of old timer and nostalgia plans for your delectation. The catalogue is available from Ian Dixon. The simple rule of the plans library is: If you borrow it, copy it and bring back the original! If you have a plan that you would like to donate to the library, see Ian and he will snatch it from your trembling hand!

RANDOM PICTURE PAGE..



The Invisible Man and Greengrass – superheroes of electric modelling..



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