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BULLETIN No. 164

May - June

2010

***** SAM 1788 MEMBERSHIP FEES FOR 2010-2011 ARE NOW DUE (1-7-2010) *****

The completed Membership Renewal form (enclosed in this Newsletter) and fees should be forwarded to:

SAM Treasurer, 44 Ravel Street, SEVEN HILLS. NSW. 2147. by 31 July, 2010.

SAM 1788 FEES:

EMAIL SENIOR SAM MEMBER	\$ 15.00
NO EMAIL SENIOR SAM MEMBER	\$ 25.00
JUNIOR SAM MEMBER	\$ 5.00
FAMILY SAM MEMBER	\$ 5.00
SAM SPEAKS MAGAZINE (USA)	\$ 40.00

AFFILIATION FEES TO MASNSW: (includes MAAA Inc.)

E-MAIL SENIOR	\$ 114.00
NO E-MAIL SENIOR	\$ 124.00
E-MAIL PENSIONER	\$ 108.00
NO E-MAIL PENSIONER	\$ 113.00
E-MAIL JUNIOR	\$ 60.00
NO E-MAIL JUNIOR	\$ 65.00

DURATION TIMES



Vetrans Gathering at Muswellbrook 2010. Great weather and very enjoyable weekend. See you next year?

The event order is as follows:

Sat 8.30 - Registrations.

Sat 8.45 to 9.45 - Tomboy.

Sat 10 to 12.30 - 2cc.

Lunch

Sat 1.15 to ?? - Standard Duration.

Sunday 8.30 to 9.15 - Tomboy.

Sunday 9.30 - Nostalgia followed by lunch.

Sunday 1.15 - '38 Antique.

Dinner for Sat Night will be organised.


Farcon Cup 21-22 August 2010

at

Cowra MAC's Milroy Field

(Bangaroo Quarry Road off Canowindra Road)

<http://www.cowramac.asn.au/main.html>



Information - Condo 0423 452 879

Golden West Oldtimer Competition - Parkes

24 & 25 July 2010

Parkes Miniature Aero Club Inc

Nelungaloo Field

(GPS: 33d 08m 38s South 147d 59m 55s East)

Saturday 10am: Burford and Duration.

Sunday 9am: ½A Texaco and Texaco.

Bring along your Tomboy too.

Contact: Peter (Condo) Smith - 0423 452 879




Duration Times is the official Newsletter of SAM 1788

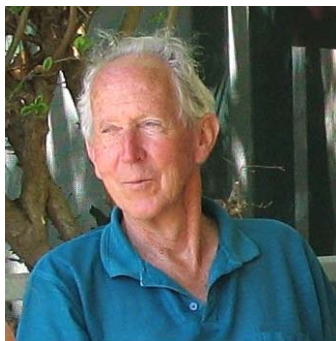
SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA 1788 Inc.

President:	Basil Healy	4 Casuarina Close, Umina. NSW. 2257.	02 4341-7292.
Vice President:	Peter Scott	44 Ravel Street, Seven Hills. NSW. 2147.	02 9624-1262.
Secretary:	Peter J Smith	"Yarralee", Condobolin. NSW. 2877.	0423 452 879.
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 2010

July	24-25	Golden West Oldtimer Competition	Parkes	Peter (Condo) Smith	0423 452 879.
August	21-22	FARCON Oldtimer	Cowra	Peter (Condo) Smith	0423 452 879.
August	28-29	Oily Hand Weekend	Cowra	Andy Lockett	02 6342 3054 .
October	2-3	Eastern States Gas Champs	Wangaratta	Peter (Condo) Smith	0423 452 879.
October	23-24	Lithgow Oldtimer	Lithgow	Dave Brown	02 6355-7298.
November	13-14	Muswellbrook Oldtimer	Muswellbrook	Simon Bishop	02 6543-5170.



From the President: The big news since my last report has been the testing of David Owen's Taipan 2.5 diesel replica. Testing was carried out to compare its performance with four original engines of the same model.

Needless to say the original engines varied considerably in performance despite the fact that the piston and cylinder fits were what would be considered acceptable for normal use. There was a variation of almost 1000 rpm between the best and the worst so the two best performances were chosen for comparison with the replica engine, using the same fuel and propellers. The replica engine out-performed the best of the originals by 200 rpm and was much easier to start when hot. This I put down to the better fits and

clearances on the replica engine.

David reports that almost the whole production run has been sold and that very few are headed for engine collectors. This being the case I anticipate that a lot of these engines will be used in the Gordon Burford event.

Meanwhile, a copy of the engine test report has been sent to the chairman of the Old Timer Rules Committee of the M.A.A.A. A small change will have to be made to the rules of the Gordon Burford event to permit the use of replica engines. Both the chairman and I do not anticipate any problem with this change.

In my last report I touched briefly on the mid-air collision between the two Lanzo Bombers at the SAM Championships resulting in the motor being found some 45 metres away from where the models landed locked together. I was timekeeping at the time, heard the crash when they met, and looked up to see two models descending vertically while locked together. I would estimate their height at that time to be no more than 300 feet.

Now what brought me to re-open this subject was when somebody asked me why the engine was thrown so far away from the rest of the models. After giving it some thought I realised that there was an awful lot of kinetic energy available from the two 5½ pound models flying at 22 feet per second. Suffice it to say that my calculations revealed that it was more than enough to break the aluminium engine mount and propel it, with the engine, 150 feet sideways with about 30% of that energy to spare! That last 30% would have been used up bringing the models to a stand-still.

The point which was brought home to me was that even the somewhat sedate Lanzo Bomber is still a dangerous missile, even on the glide, let alone when that 16" meat cleaver on the front is turning at 5,000 rpm.

Fly safely,
Basil Healy.

Oily Hand Diesel Days
Cowra MAC
28-29 August, 2010.



at
Milroy Field
(Bangaroo Quarry Road
off Canowindra Road)

<http://www.cowramac.asn.au/main.html>

Information: Ian Cole
02 6342-4162 or 0427 015 792

Belconnen & Yass Oldtimer Meeting

15 & 16 May 2010

From Grant Manwaring

Once again this event was held at Jerrawa, a village to the north of Yass. The weather this year was absolutely superb, 18 - 20 degrees with light variable winds and clear skies. Entry was down on due to several flyers who normally attend having other commitments over this weekend.

Five events were flown over the two days with a 20 minute Tomboy slot each day. Notable was Basil Healy's first round Tomboy flight, 17 minutes and had to land. Fly offs were need in all classes. Texaco event drew the biggest entry with 15 flyers with 6 making the fly off. The fly off ran some 25 minutes with Make Masters coming in third

ably assisted by Max Rixon. Congratulations Mike.

It was good to see newcomers Peter Van de Waterbeemd and Fred Burman having a go at these events. The both enjoyed their flying and will come back again.

Thanks to the Belconnen and Yass clubs for there support of the meeting, also to those who helped with the food catering, ground preparation, and all the other tasks needed to make it a success. Put this event on your schedule for next year, great weather, good friendship and great flying with plenty of thermals are assured.



Above: Lunch Break prior to the start of Texaco. Perfect weather ensured a relaxing and enjoyable weekend.

Below: SAM 1788 President Basil Healy presents Belconnen member Mike Masters with his third place trophy in Texaco. CD Grant Manwaring congratulated Mike on his first-time placing in an Oldtimer event.



Belconnen & Yass Oldtimer Results

Gordon Burford Event

Paul Farthing	Pencil	PB	900	1469
Jim Rae	Amazoom	PB	900	1403
Grant Manwaring	Eliminator	PB	900	1294
Alan Brady	Stardust Sp	BR	900	1287
Bob Smith	Faison	BR	900	1166
Wayne Harris	Spacer	PB	900	900
Basil Healy	Dixielander	PB	884	
Peter Van				
De Waterbeemd	Dixielander	PB	845	
Fred Burman	Lanzo Bomber	PB	549	

Duration

Grant Manwaring	BomberSaito62FS	1260	1663
Bob Smith	Playboy Saito62FS	1260	1641
Peter Van			
De Waterbeemd	Bomber Saito56FS	1197	
Basil Healy	Megow Chief YS53FS	1189	
John Bradburn	Bomber Saito62FS	1154	
Jim Rae	Lil Diamond ST34	1024	

1/2A Texaco

Bob Smith	Lil Diamond	1080	2008
Grant Manwaring	Lil Diamond	1080	1888
Don Southwell	Stardust Special	1080	1517
Geoff Malone	Lanzo Racer	1080	
Jim Rae	Pine Needle	1080	
John Bradburn	Long Cabin	861	
Peter Van			
De Waterbeemd	Lil Diamond	852	
Basil Healy	Atomizer	785	

Texaco

Paul Farthing	Bomber OS60FS	1800	3423
Grant Manwaring	Bomber OS60FS	1800	3319
Mike Masters	Bomber Enya53FS	1800	3146
Basil Healy	Dallaire 75% ASP32D	1800	3075
Jim Rae	Krupp Enya46FS	1800	2552
Bob Smith	Bomber OS60FS	1800	0
Wayne Harris	Bomber OS60FS	1800	0
Peter Van			
De Waterbeemd	Bomber Enya60FS	1789	
Geoff Malone	Racer Enya 53FS	1200	
Graham Parkins	Record Breaker OS60FS	1117	
Don Southwell	Bomber 85% Saito40FS	1008	
Alan Brady	RC1 Burford D5cc	805	
Alan Laycock	Anderson Pylon OS60FS	777	
John Bradburn	Dallaire 75% OS40FS	0	
Max Rixon	Bomber 85% OS40FS	0	

Tomboy

Basil Healy	Mills 75	1036	366	1402
Alan Laycock/ Graham Parkins	Irvine Mills 75	382	424	807
Peter Van				
De Waterbeemd	PAW 80	170	48	218

New Rules for the Phantom Shield at the 2011 SAM Champs, Canowindra.

From David Owen.

Following on from the very popular Phantom Shield conducted at this year's SAM Champs, Peter Scott and I, as joint convenors of the event, have devised some changes for next year. As originally promised, changes would be made from time to time to prevent the event stagnating and to further increase interest.

A new category for Schneurle-ported engines will be added, and existing categories slightly re-defined.

The basic rules still call for a full-size Phantom, built to either the Mk1 Phantom drawing, or the later Mk2 Phantom, as kitted by KeilKraft. You are expected to build your Phantom within the spirit of the event. This means retaining the dihedral, the external lead-outs and the 1 $\frac{3}{4}$ " (45mm) spinner. In the unlikely event you are unable to find a suitable spinner, then the 1 $\frac{3}{4}$ " nose ring must still be used. Diesels only must be used and the nominal maximum capacity is 2cc. As speeds inexorably rise, you may nominate to fly on 35' lines for 12 laps from a standing start, or 42' lines for 10 laps from a standing start. Lines are measured from the centre of the handle to the centreline of the model.

The revised engine categories are as follows:

- Class One: any piston-ported engine (eg. Mills, ED Comp Special, Deezil and similar)
- Class Two: any plain-bearing, non-Schneurle engine (eg. AM, Frog, Taipan, PAW and similar)
- Class Three: any single or twin ballrace, non-Schneurle engine (eg. Oliver Cub, ED Fury/ Super Fury, Taipan TBR, PAW BR and TBR, Taifun Hurrikan, Frog Viper and similar)
- Class Four: any Schneurle-ported engine (eg. Jak, Fora, some Oliver Cubs, some MVVS, some Enya, and other specialist combat or team race engines and similar)

Note: if you wish to use an engine which you feel is not clearly defined by these rules, or an engine about which you are uncertain, please contact either Peter or myself well before the event for a specific ruling.

As before, the fastest time in each Class next year will be compared to the fastest time recorded in the same Class in 2010. The entrant who achieves the highest percentage increase across all Classes will be declared the overall winner and will hold the Phantom Shield for the next 12 months.

As the new Class Four has not previously been run, there is no baseline time against which to compare the 2011 time. In consideration of this anomaly, we have decided to record each year the fastest speed recorded against all entries. The successful entrant will have his name and the winning speed recorded on the Shield. It is probable that the first name recorded will come from an entrant in Class Four.

Finally, to encourage more entries in Class One, we have decided to introduce a take-off mat which should result in trouble-free take-offs for these less-powerful engines. The take-off mat will be available to *all* entrants regardless of Class.

We are looking forward to at least 20x entries in the Phantom Shield next year. If you haven't already flown in this fun event, consider entering at the 2011 SAM Champs. You are welcome to contact either Peter Scott or myself if any assistance is required. If you feel you may be a bit wobbly on your pins after all these years, we can even fly your Phantom for you! For any further information contact David Owen (02 4227 2699 or owendc@tpg.com.au)



John Quigley's own design from his youth, the "4Footer", just about ready for its maiden flight.



Above: David Owen's new TP2.5 Diesel test engines fitted to his Sabre Trainer. It is reported to be running very well and hauls the ST around in excess of 80mph. Model was flown at the 2010 Vetrans' Gathering



From Condo -Tamworth O/T

Well, Tamworth has been run and won. If global warming is going to produce weather like we had a Tamworth this year then bring it on. Two perfect days, no wind and no cloud.

This is the second year at our host's, TARMAC, new flying field and it's a very nice field to fly at. As to be expected, the club is quickly establishing itself at this site to the same high quality of it's previous field. A large shed and new toilets have been completed and a sealed strip is not too far off. Congratulations to TARMAC and thanks for hosting this event once again.

Burford was first and Jim Rae was top dog followed by Bob Marshall and Jim Hardy, so the spoils were spread around. I think it's Bob's first top three place, but may be mistaken. Well done bob.

Dinner was supplied by the Somerton Roadhouse at a very good price - \$5 for a hamburger and can of drink - even McDonald's can't match that, so thanks for the support.

Duration was after lunch and the fun began. The rounds progressed well and 9 hopefuls fronted the fly off. Potter even maxed twice with a Swoose which is no mean feat with that BIG tail. As is often the case those who found lift beat those who had horsepower but it was fun never the less. Good eyesight also helped as the lift was far away. Well done to Rutledge Rob who almost won by a country kilometre.

Dinner was at Toby McGuire's pub, and was filling as usual. This year they didn't loose Grahame Mitchell's dinner order so he looked happy and well fed. Geoff potter was there and talked non-stop all night.

1/2A was first on Sunday and the weather was perfect. Every one made the fly off except Condo, oh, and Potter. There were thermals around and Grahame Mitchell had his break through win in 1/2A to loosen the hold by the Tamworth fliers on the Brian Potter Memorial Trophy, followed by Jim Rae and Dave Brown. Well done Grahame.

Well, the Top Gun was looking good as there were three people separated by a point after three events. Texaco, after a nice dinner again supplied by the Somerton Road House, produced some interesting rounds. Whitey, flying his newly covered, easy to see Bomber, scored a max by flying a small thermal at 200 feet, and to prove it was not a fluke did it again in the next two rounds. But in the end height is might and Dave Brown won from Jim Hardy [the only Queenslander to come this year - maybe we should make him a New South Welshman], followed by Team Whitey.

There were not many bearded people there this year but that's life, and we all had fun. Texaco proved disastrous for Jim Rae and thus Dave Brown was Top Gun for 2010.

New England Gas Champs, Tamworth 19-20 June, 2010.

Gordon Burford

Jim Rae	NSW	Amazoom	pb	900	533
Bob Marshall	NSW	Lil Diamond	pb	900	467
Jim Hardy	QLD	Swayback	pb	900	466
Rob Rutledge	NSW	Spacer	pb	900	403
Peter Condo Smith	NSW	Spoofem	pb	900	308
Dave Brown	NSW	Eliminator	pb	900	328
Basil Healy	NSW	Dixielander	pb	900	300
Grahame Mitchell	NSW	Dream Weaver	pb	900	dnf
Ian Avery	NSW	Blitzkreig	pb	805	
Geoff Potter	NSW	Fifteen	pb	dnf	
Keith Murray	NSW	Bomber	pb	dnf	

Oldtimer Duration

Rob Rutledge	NSW	Playboy Cabin Saito62FS	1260	1100
Dave Brown	NSW	Bomber 85% / Saito56FS	1260	894
Peter Condo Smith	NSW	Playboy 106% Profi40	1260	756
Jim Hardy	QLD	Playboy 105% YS63FS	1260	716
Basil Healy	NSW	Megow Chief YS64FS	1260	665
Ian Avery	NSW	Bomber 80% Saito56FS	1260	486
Jim Rae	NSW	Lil Diamond SuperTigre34	1260	422
Grahame Mitchell	NSW	Playboy OS40H	1260	dnf
Adam Tjanavaras	NSW	Bomber YS63FS	1260	dnf
Geoff Potter	NSW	Swoose Enya53FS	986	
Bob Marshall	NSW	Bomber 75% OS52FS	310	
Tony Bensley	NSW	Playboy OS52FS	178	

Oldtimer 1/2A Texaco

Grahame Mitchell	NSW	SDS	1080	867
Jim Rae	NSW	Pine Needle	1080	817
Dave Brown	NSW	SDS	1080	810
Bob Marshall	NSW	Lil Diamond	1080	782
Rob Rutledge	NSW	Kerswap	1080	691
Tony Tjanavaras	NSW	Bomber	1080	600
Tony Bensley	NSW	Bomber	1080	543
Jim Hardy	QLD	Lil Diamond	1080	536
Basil Healy	NSW	Atomiser	1080	509
Ian Avery	NSW	MG	1080	489
Adam Tjanavaras	NSW	Atomiser	1080	180
G Whitten	NSW	Baby Burd	1080	0
Peter Condo Smith	NSW	Lil Diamond	986	
Geoff Potter	NSW	SDS	236	

Oldtimer Texaco

Dave Brown	NSW	Lanzo Stick Marden60spk	1800	1175
Jim Hardy	QLD	Lancer Enya41FS	1800	850
Team White	NSW	Bomber OS40FS	1800	616
Basil Healy	NSW	Dallaire 75% ASP32D	1766	
Jim Rae	NSW	Krupp Spl Enya46FS	1742	
Geoff Potter	NSW	Bomber OS61FS	1301	
Grahame Mitchell	NSW	Dallaire Enya60FS	780	
Tony Bensley	NSW	Red Zephyr OS40FS	742	
Ian Avery	NSW	Bomber 80% OS40FS	704	
Bob Marshall	NSW	Bomber 85% Saito40FS	dnf	

Winner of Brian Potter 1/2A Texaco Memorial Trophy - Grahame Mitchell
Top Gun of meet - Dave Brown



Ohlsson Tuning tips #1 - Connecting Rod Alignment.

By Bob Angel

From: SAM Speaks #93 Jan/Feb 1990

OHLSSON TUNING TIP #1 - Connecting Rod Alignment: One of the early things to look for when tweaking an O&R engine is to check the alignment of the crankpin in the conrod hole. I've found a fair percentage out of alignment, i.e., the conrod hole is not at a right angle to the frontplate mounting face on the case. Correction by replacing or straightening the rod is necessary for the engine to spin freely at peak RPM.

Fully retard the timer to lilt the moving point off the crank cam, and remove the prop nut, washers and three casebolts. Loosen the frontplate by rotating it to save the gasket. Then pull the frontplate forward along the crank about 1/4", letting the crankpin stay solidly in the conrod. Hold the engine upright with the crank pointing to your right, so you can sight across the flat surface machined on the casefront.

Hold the outer crank end so neither the frontplate nor conrod can slip in or out along the shaft. Now gently move the outer end of the crankshaft up and down in the conrod hole, while observing the relative top and bottom gap between the frontplate and its mounting surface. Repeat this with the conrod/piston in both their full up and down positions. You are trying to determine whether the rod hole points at a reasonable right angle to the frontplate mounting surface.

Another method is to remove the front end entirely and use a 1/4" drill bit in the conrod hole and observe it against a right angle template on the casefront. If the rod isn't aligned insert a close-fitting drill bit and bend up or down a bit as necessary. Go easy, the rods bend easily. Re-check and tweak as necessary.

(Note: May 2010: The early production Ohlsson 60's had an aluminum connecting rod, and they were subject to bending if the engine met with an abrupt stop, and repair/re-alignment was required as indicated by Bob's comments. Later production 60's came out with a sturdy cast steel connecting rod. It was shaped like a dog bone. This one didn't suffer from the earlier versions woes and would have to take a heck of a whack to bend it. The rods were interchangeable and if an early (bent) aluminum rod is encountered it is suggested to replace with a later steel rod (and the later crankshaft with the 1/4" counterbalance web thickness if available) to prevent future problems).

Ohlsson Tuning Tips #2 - Timers.

By Bob Angel

From: SAM Speaks # 105 June 1992

OHLSSON TUNING TIP #2 - Timers. The O&R timer has a tendency to loosen and drift offsetting. It's hard to tighten the two holding screws enough without distorting the timer housing. They need frequent re-snugging. It helps to use Loctite #290 on the threads and to snug them just short of distorting the housing. Loctite works best if put on clean dry threads before assembly. But in the field, it seems to help just to loosen the screws a little, flush what threads you can see with drying solvent (alcohol, acetone, gasoline, etc.), then put a drop of Loctite where each screw enters the timer arm, and re-snug the screws.

I had an O&R 60 which was stuttering at high speeds (only). Stuttering can be caused by a dirty plug, weak batteries, loose wiring, dirty points, weak coil, etc. The wiring was solid, and a new plug and fresh battery charge didn't help. A continuity light showed the engine had only about 15 degrees dwell. The points probably had excessive gap to begin with, but they were probably sent "over the hill" by repeated tightening "tweaks" of the fixed point nut during frequent engine changes. This squashed the insulating washer just enough to open the points almost completely. With low dwell, an engine can sound ok at slow speeds, but at higher speeds, the points aren't closed long enough for the coil to build up enough energy, and the miss develops.

Some people bend the moving point to adjust, but I don't recommend this, unless the geometry of the whole timer assembly is so far off, that's the only way to make it work. Original O&R moving points are very hard and can be broken this way. It's slower, because you have to disassemble the timer, and "cut and try", but I prefer to stack small washers under the insulated point for adjustment. You only need one insulated washer inside the timer housing, and the other washers can be either insulated or metal. While the insulated point is removed, grind a small flat on either side of the round point surface with a fine wheel, so you can use small forceps to hold the point while installing the nut. The small amount of metal removed will never be missed, especially with a transistorized ignition system. Try for about .007' to .011 point gap, but gap usually isn't critical on an Ohlsson as long as you end up with dwell in about the 60 to 100 degree range.



Ohlsson Tuning tips #3 - Leaks.

By Bob Angel

From: SAM Speaks # 95 May/June 1990

OHLSSON TUNING TIP #3 - LEAKS. O&R prevented any possibility of a head gasket leak with their blind cylinder design, but they do leak in other places. I once found one that wouldn't seal at the spark plug. It turned out that the plug sealing surface atop the cylinder was not square with its threads. I had to touch up the top surface with an end mill to square it. But that was a rare (I hope) one-time occurrence. If your Ohlsson bucks, snorts, backfires, and especially if it bangs unmercifully on your starting finger, first check that the spark is retarded with the points opening about 10 degrees or less before the piston reaches Top Dead Center (TDC). Then check for a crankcase leak. The surest way to find a leak is to attach a fuel line and squeeze bulb to the spraybar intake fitting, plug the intake and exhaust openings, Immerse the whole thing in water, squeeze the bulb and find where the bubbles are coming from. Don't leave a ring in Mama's sink.

Two of the Ohlsson's favorite leaks are at the frontplate gasket and the cylinder-to-crankcase seal. If you see not bubbles there, check the sideports's intake tube for looseness by trying to rotate it in the case.

If the frontplate seal leaks, check the gasket first. These gaskets are commonly available from engine collectors and such, but you can make an acceptable one yourself from appropriate material. Sometimes you'll find that even a new gasket doesn't seal the case. That's usually due to distortion around the case screw mounting holes from over-tightening or a frontplate fit that's too tight in the case. The frontplate is often a tad oversize in diameter where it enters the case, so don't over-torque the screws to get a fit. A friend had his nice new O&R case crack in this area, and it showed signs of an interference fit with the frontplate. A machinist would turn down the frontplate in a lathe. But, working carefully, you can do an acceptable job with a flat, fine cut "safe" file. A "safe" file is one having no teeth along its edges, so it's safe to file with the edge in light contact with the surface.

You'll sometimes find small leaks around the spraybar-to-Intake tube joint. These should be sealed with tiny fiber gaskets. Silicone goop" may help solve the problem if the spraybar is actually loose and wiggly.

Now, let's talk about the really tough one the cylinder-to-crankcase gasket. I've heard it said that using glow fuel destroys these gaskets and, while I have some doubts, there's no use tempting fate. This leak is most often in the bypass area because that's where the case casting is the thinnest. The leak is usually easy to spot with the engine running by observing fuel bubbles oozing out there. It sometimes doesn't seem to cause any real problem if it doesn't worsen. One of the strongest 23's I ever saw ran with a constant stream of bubbles oozing out the front. The problem is that it will not cure itself and should be fixed.

HELP! I'll toss out some things I've tried and heard, and if anyone reading this can help, I'd like to hear from you for a follow-up article. I've cleaned the gasket edge and area with gasoline, then methanol, and applied Loctite. I've even tried to force in some thin Hot Stuff, forced in a bit with a pin point. However, I've never run these engines extensively enough to see if the fix was permanent.

I've never tried it, but that method can be enhanced by wrapping the gasket area with fine silk thread before applying the sealer. Nylon thread or dental floss might do as well.



O&R 60 FRV converted to glo.



I suspect that if you removed the piston, flushed out the bypass insides thoroughly, inverted the cylinder and injected the right "goop" with a hypodermic through the exhaust and bypass openings, you would get a good seal at the bypass.

The "proper" fix, of course, is to remove the cylinder, install a new gasket, and replace the cylinder.

(Note: As of May, 2010 there is only one Ohlsson repair expert that can replace the crankcase seal. It is a job that requires special tooling, a special gasket material and several special jigs to set up in order remove and install (spot weld) the cylinder.
 Contact: George Tallent, P.O. Box 251, Pichacho, Arizona 85241. USA. (520) 466-7655.

Ohlsson Tuning tips #4 - Movers and Shakers.

By Bill Schmidt

From: SAM Speaks # 98 Nov/Dec 1990

Ed note: This article was featured in Bill's "home" chapter SAM 56 newsletter. It also ran as part of an O&R tuning series in the SAM 26 newsletter, and in other newsletters as well. Bill feels it is valuable enough to share, and we agree. Here's Bill:

Ohlsson Tuning Tips #4 - Ohlsson Balancing: Many of the old spark ignition engines were real vibrators and really shook your model. I've talked to many older modelers and mentioned this fact to which they replied, "We didn't know the difference; we just flew them!"

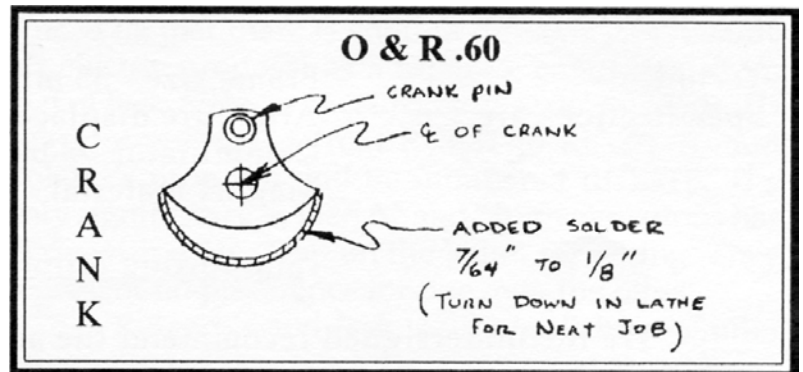
One of the worst examples of this poor internal balance is the Bantam .19. This engine is beautifully and lightly built except for the piston. This is turned from iron bar stock and is paradoxically heavy by comparison to the other parts of the engine. The counter balance on the tiny crank is miniscule and cannot be increased due to clearance requirements of the rotary valve and rod. I once tried to fly a Bantam .19 in an "A" Ignition Playboy. The plane became a blur whenever the engine was running. I tried everything to correct the out of balance condition but gave up when the spot welds shook loose on the NiCad battery pack and it crashed. The Bantam looks nice on the display stand.

Have you looked at a new O.S. or Enya engine? Even though the piston is light aluminum or iron in the small sizes, the crank counterweight is quite large. We are told that a single cycle engine cannot be truly balanced, but a formula exists that comes as close as possible to the physics involved. Take 1/8 the weight of the rod and 1/4 the weight of the piston and put it on the crank counterweight. This states it in general terms.

Now, the O & R .60 is another example of a vibrating engine. This is because it has a cast iron piston and a large displacement.

A lot of power is lost in this shaking and vibrating. I have found that by adding solder to the outside edge of the counterweight of the crank on an Ohlsson.60, a much smoother engine is obtained as well as a couple of rpms (250). This applies to side port and FRV models. Put only about 1/8" of solder on the crank and check for piston clearance on bottom dead center. The other Ohlssons have light weight drawn sheet steel pistons and do not have the same problem. I found it necessary to use muriatic acid to properly tin the crank to securely accept the solder. Be sure to clean up after the job is complete to prevent corrosion. Do not overdo it and put some on the back side of the counterweight. You will exceed the amount required and end up over balanced as bad or worse. Stick to the 1/8" on the edge and enjoy your new engine. I consider this modification the single most important change you can make to an Ohlsson.60.

(Note: May 2010-Ohlsson 60 crankshafts were issued in different crank counterweight thicknesses. Early production offered a crank counterbalance web thickness of 3/16". Later production changed to a 1/4" web thickness in order to improve on balance.)



Some history and tips re O&R engines.

from Charlie Reich. sam1781@bellsouth.net

The 1947 radial mount Ohlsson may weigh a little more, but as you know the 1947 Ohlsson was the only one offered with a an optional steel beam-mount accessory included in package. The radial mount engines were the strongest running Ohlsson's from any previous crankcase beam-mount O&R engines produced. The 1947 production came in all sizes .19, .23 and .60. Some radial mount 1947's perform as well as the later front rotor Ohlssons.

In 1947 the tooling was changed which provided reshaped thicker vertical port ribs within the previous smooth intake induction port/channel. This re-porting provided additional volume of inducted passage flow on the 19's, 23's and 60's. Consequently the 1947 Ohlsson was (and is) a real hot rod compared to earlier versions. The 1947.60 received not only the side-port enhanced passage design but also the first Ohlsson version with the large exhaust stack. The 1947 .19's and .23's received the enhanced porting but retained the small exhaust stack. In 1948, after the old crankcase inventory was exhausted the .19's and .23's gradually morphed to rotary front intake induction and large exhaust stacks.

The radial mount Ohlsson cost more to produce (two components for crankcase and mount) and the mounting was wider and therefore not easily interchangeable with the earlier Ohlssons. The modelers didn't like the radial mount because the rear intake tube, fuel tank and needle valve had to be mounted behind the firewall, creating fuel filling and needle valve adjusting problems due to lack of accessibility behind the firewall.

The steel beam-mount was also wider and required extensive modification to older wooden beam mountings to install on pre-existing models. Another difference was the thin steel beam-mount dropped the C/L of the crankshaft about 1/4" lower than the standard beam mount engines. Because they weren't easily inter-changeable with the older beam mount Ohlssons, and the



new radial mount firewall installation and fuel adjusting problems, they never caught on with the modeling fraternity. Because of the slow acceptance by the modeling fraternity the 1947 radial mount Ohlsson's were only produced for one year.

Tip #1

Don't shy away from buying one of the 1947 (beamless) radial mount engines. They are excellent and the strongest running Ohlsson's out of all the other beam mount production. (Because of the unique design they are not a hot item with some collectors, and usually sell for less than the other crankcase beam-mount O & R's. Aero-Electric sells the replica steel beam-mount for the .19-.23 and the .60 if you need one.

Tip #2

The C/L of the crankshaft mounts below the top surface of your beam mount rails when using the steel mount. The steel beam-mount can be modified so it mounts the engine at the same level as the crankcase beam mount O&R's. Turn the steel mount upside down and use a Dremel tool to grind away some of the rear of the metal mount to fit around the rear of the crankcase, to install the mount inverted.

Keep 'em Flying! Charlie Reich.



DOUG SPRENG 1932-2010.

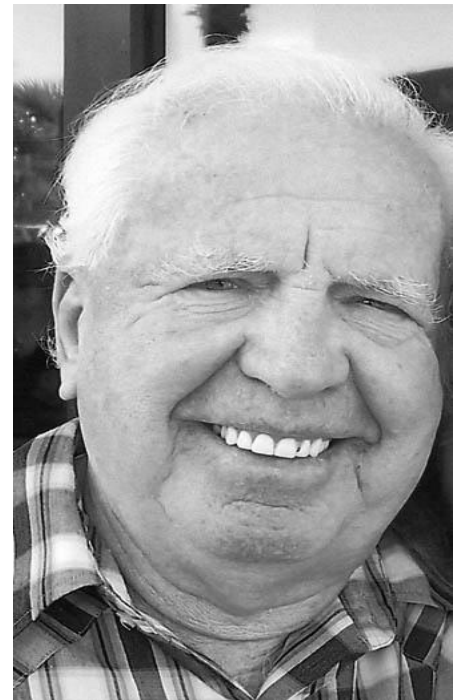
From Alan in the UK on R/C Universe.

I recently heard that Doug Spreng passed away on 19 April 2010. Doug was a true pioneer of digital proportional and along with Don Mathes developed the first commercial digital system called Digicon in the early 1960's.

The key to the digital systems was the concept of controlling the servo position by varying the width of a pulse. This method, still in use today, was invented by Doug and even the variation in pulse length from 1ms to 2ms remains the standard. He did not patent the idea so made no money from it, the idea was copied by every other R/C manufacturer and this led to the rapid development of these systems.

Later in the 1960's he came over to the UK and developed digital R/C systems here, namely Sprengbrook and Stavely.

It should also be remembered that he was a top international R/C aerobatic pilot and designed some of the best models of that period. The Stormer, Thunderstormer and Twister come to mind. He was a real character and I remember meeting him shortly after he came to the UK, when someone asked him about the demise of an earlier model he replied "I tried a vertical nine", typical of his humour.



Glider Guiders at the SAM Champs, 2010.



OS60FS, as it was found, after being knocked out of Alan Brady's Bomber in a mid-air at the SAM Champs, 2010. See President's report in DT163.



When Love Fades...

Last night I was sitting on the sofa watching TV when I heard my wife's voice from the kitchen. "What would you like for dinner my Love? Chicken, beef or lamb?" I said, "Thank you, dear, I'll have the chicken." Her voice raised about one octave as she replied, "You're having soup, you dope. I was talking to the cat."

DIESEL FUELS

From Alfredo Hebron aherbon@coopenet.com.ar

Fortunately with a little effort we can get Ethyl Ether in Argentina ("pro analysis" 99% quality), and a modeller from Chile (our neighbour country), get Dii-3 and sells it among FAI Team Racing modelers in Argentina and Chile.

Few years ago, during some time Dii-3 was really hard to get in our country, so some team racing modelers started to make some experience with a commercial "Top Diesel" from Bardahl ignition improver you can purchase in any gas station for diesel cars. That's the product ...

After some research with an engineer from Bardahl, they knew this product was Dii-3 mixed with plain kerosene in a % very similar to the 1.5 to 2.5 % we need for our engines.

So the team race people started to mix their fuels with good result in a % replacing the kerosene between say 50 to 80% of the total volume of kerosene used normally in their fuels.

Obviously using this solution they almost lost the control of kerosene quality, but it worked.



From Mark Venter re Diesel Fuels

mventer@xtra.co.nz

I still have Amyl Nitrate and only use it for the cold weather we have at times here in New Zealand. For many years I never bothered to use any additive and used std 1:1:1 mix. Still do not believe that any DII is required unless in extreme conditions. Nowadays I have two mixes that I use.

General flying mix:

20% Castor, 35% Ether, 45% Kerosine (Jet A) (plus up to 2% DII if you want but I seldom bother)

Contest mix:

15% Castor, 35% Ether, 50% Kerosine (Jet A) & 2.5% DII

There certainly is a difference between the two mixes and it is most noticeable in starting in colder weather.

I have two square glass bottles, old Olive Oil bottles, (500ml & 1litre) that I have engraved the amounts and %'s on in the above formulas so all my brews are exactly the same.

However, as I mentioned, for many years I flew with the above in 1:1:1 mix (in warmer climes) and really cannot say with any certainty that the engines ran any worse on it than they are on my current brews.

Announcement from OWEN ENGINES

July 2010

The little MPJet Classic 0.6cc Diesels, which have been very popular for Tomboy R/C events, are expected back in stock mid-July. The large 3cc tank will be included with these engines. The earlier clear-plastic plastic tank will be dropped following some problems in the field. Those engines on back-order will go out straight away.

I will be away overseas throughout August and September, though you may contact me by email if there are any questions I can answer during this period.

However, if you want delivery before October, new orders for MPJet, Schlosser and PAW engines must be in my hands no later than the 31st of July. The new replica Czech Super Atom 1.8cc diesel, as well as further Letmo 2.5 diesels are also expected.

Production of the final parts for the new T2.5cc diesel will be resumed immediately upon my return to Australia, with deliveries expected to commence not too long after.

Many thanks for your continuing orders.

David Owen, OWEN ENGINES

ph 02-4227 2699

owendc@tpg.com.au

GORDON BURFORD (VH-155)

From David Owen .

Some personal thoughts about my long association with Gordon Burford, following his passing on 12th March 2010. This is a re-write of my address to a GB Testimonial Dinner on 30th April 2000.

When I think of Gordon, I am reminded of the fact that he has influenced our lives - you can't say that about everyone!

He has influenced the lives of modellers of my generation by providing us with top quality Australian engines with which we were able to successfully pursue our hobby.

Sabre, Taipan and GloChief engines were stocked in small and large stores virtually Australia-wide. Their ready availability was a major factor in showcasing model flying and popularising our hobby for a period of over twenty-five years, until production ceased in the mid 1970's.

Gordon's continuing efforts to improve his engines have contributed to the development of the newer and more sophisticated engines we are now using, and so his influence has continued to this day.

He could be described as an internationalist, taking every opportunity which presented itself to talk to overseas engine manufacturers, learning about new designs and trends. His knowledge and open manner have endeared him to well-known engine builders such as John Brodbeck, Duke Fox, Ron Irvine, Gig Eifflaender, Garofoli and others, in many cases resulting in friendships which have lasted for many years.

Gordon was never a Luddite, always embracing new ways, and always open-minded. He listened to other people's ideas and suggestions and in the event he was persuaded of the merit of change, embraced it without self-defence or rancour. This was one of his greatest strengths.

Gordon always strove to give full value to Australian modellers who purchased his engines in good faith. Many experienced his generosity in making good a problem with one of his engines, and let's face it, the model engine is a very sophisticated product, which requires extreme care both in manufacture and operation.

In my case, around 1960, I recall the cast-iron crankshaft bush on my Sabre 49 coming loose and turning in the housing. This was replaced at no charge, with the comment that the bush had not worn out, but failed in service. Bear in mind that my Sabre 49 was built in 1951 and I purchased it well-used and second-hand several years later. No doubt many would have similar stories.

Following Gordon and Josie's move to Currumbin in the late 70s, Gordon was besieged with budding engine-builders, such as Ivor F and myself. I can say without any fear of argument that no one was turned away. Gordon patiently helped us all, both with advice, assistance and materials, hoping no doubt to foster at least one other Australian model engine manufacturer. Whilst some limited production of model engines has resulted, I am sad to say that this dream of his was never fully realised.

I enjoyed many visits with Gordon and Josie in Currumbin and people were always dropping in to talk to Gordon and partake of Josie's hospitality. Speaking of which, I am reminded of the time a well-known modeller helped himself to some of Josie's cookies, as was usually done. However, in this case, the jar contained what were referred to as the Possum Cookies, specially prepared by Josie for these nocturnal pests. I would love to have told Ron Morrison of his error, but following Gordon's example, resisted the urge. Ron, too, is now gone.

Celia and I in turn were delighted to have Gordon stay with us in Wollongong on a number of occasions. He loved going to restaurants and enjoying good food. He was always good company.

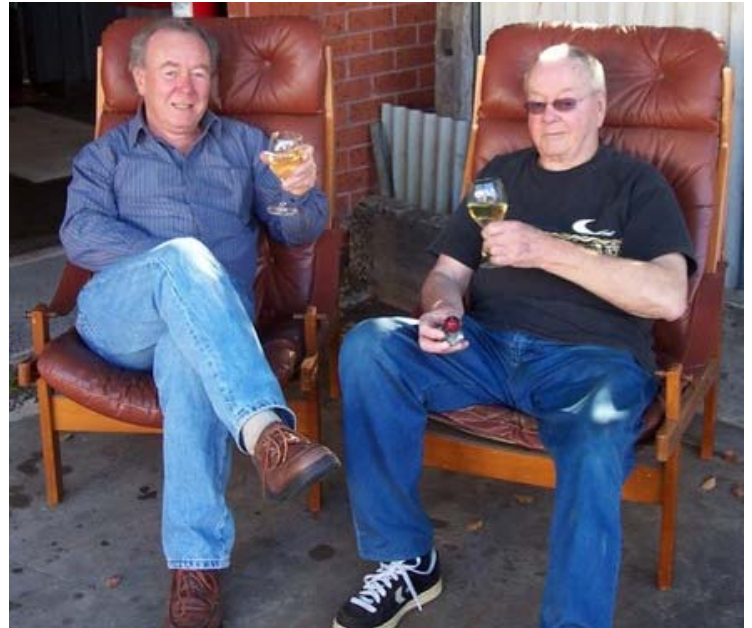
Gordon moved here in 2000 and we worked together on the GB 5cc replica and other projects, culminating in a decision to continue building engines and trading as GeeDee Engines. But following uncertainty surrounding my health at the time, Gordon decided to return back to Currumbin the following year. We stayed in touch, but the pressures of earning a living meant that engine building for me was relegated to lower priority, and in any case, Gordon's interest



was turning to other forms of power, particularly electric.

Possibly Gordon's most vivid memory of me, certainly one which would have remained with him for the rest of his life, is the time in 1989 when I drove through a six-lane intersection in the middle of London, totally oblivious to the fact that the lights were red at the time. Always calm under duress, Gordon made no comment at the time. But I'm sure he tensed every time after that episode when I was driving and approached a traffic light. We travelled to local, national and international contests and meetings, often with Josie and Celia, and always had a most enjoyable if not victorious time.

I will always have tremendous respect for Gordon and value the friendship we had. He taught me so much about model engines and particularly their manufacture. More importantly, he showed me the virtues of calmness, of letting go of troubling matters and of relinquishing grudges and anger. Not always easy to do, but I truly hope some of that wisdom has rubbed-off!



GB and DCO reach agreement on Taipan, May 2006

VALE GORDON BURFORD (1919 - 2010)

Gordon Burford was Australia's premier model engine designer and manufacturer. The thousands and thousands of engines he produced and sold under the GB, GeeBee, Sabre, GloChief and Taipan names encouraged and sustained aeromodelling in this country for over 50 years.

Gordon was a modeller too, starting with rubber in the early 1930s and progressing to become a very competitive Indoor and Wakefield flyer prior to the Second World War, along with his lifelong friend, Boyd Felstead. Following the war, Gordon (VH-155) pioneered control-line flying in South Australia, alongside other luminaries such as Bill Evans, Jack Black and Mal Sharpe.

He was a well-known and respected free-flight contestant for many years, before turning his interest to old-timer flying in the mid '70s. He built specialist engines for old-timers and was always on hand to offer advice and assistance to other modelers. Gordon was known around the world for his engines and modeling expertise, having made several overseas trips to England, France, Italy and the US.

Gordon Burford was born in Adelaide on the 3rd August 1919. He grew-up during the Depression years, aiding his father who was a beekeeper. He then trained as an aircraft instrument fitter prior to the outbreak of WW2. Enlisted in the 2/27th Brigade, Gordon was pulled out just prior to its embarkation for New Guinea and instructed to continue his instrument work. This order was to be of anguish to him for the rest of his life, though it undoubtedly saved him from the fate which befell so many of his compatriots.

In 1942, Gordon married Josie Harding and, into the stable family which ensued, four sons were born. Following the cessation of hostilities, Gordon could see an opportunity to manufacture model aircraft engines in Australia. He convinced Josie that he could support the family in this manner, and purchased a lathe, a tool and cutter grinder and a hone. He initially made just three 5cc diesels, based on the Sparey design which had recently been published in England. Two further 5cc diesel designs, based on the very successful American Drone engines, were then produced in quantity to provide a living for the Burford family. By the mid '50s, Gordon Burford had built thousands of Sabre diesel and glow engines, most being sold on the local market. These engines introduced so many young and old Australians to the joys of aeromodelling and elevated Gordon's small firm to International attention.

In 1957 he adopted the Taipan and GloChief names for his engines. His son Peter was now working full-time with his father and was to contribute his own design and manufacturing ideas. Production of Burford engines increased dramatically in the '60s and '70s, with well over 100,000 engines being built at the Gordon Burford and Co. Pty. Ltd. factory at Belfast Street in Grange, South Australia.

In 1973, Gordon passed the Taipan business to Peter's control, and directed his energies to the interests of Australian aeromodellers, taking the position of Federal Secretary and Treasurer to the MAAA. In this, he was very ably assisted by his wife Josie, and they remained in this capacity until 1984. During their tenure, the MAAA was pro-

gressed from a relatively small organization to one with access to the Australian Government and an enhanced presence at the annual CIAM Meeting of the FAI in Paris. Gordon loved these overseas trips and forged a long-lasting, personal association with many prominent people in the international aeromodelling scene. Influential people such as Ron Moulton, Peter Chinn, Ron Irvine, Henry Nicholls, John Brodbeck, Duke Fox, Sandy Pimenoff, John Pond and others were now brought up-to-date with the Australian modelling scene, and Australian modellers started to move out into the world as a result of these introductions. That is one of Gordon Burford's greatest legacies.

In 1983, Gordon and Josie were granted MAAA Life Membership for their work with the organization. In 1985, Gordon was awarded the prestigious Paul Tissandier Diploma by the FAI for services to aeromodelling. He was inducted into the MAAA Hall of Fame twice. First in 1983 for services to aeromodelling, and again in 2000 for being a 'Competitor at the 1938 Nationals', the first such national event held in Australia.

Around 1980, Gordon and Josie moved from Adelaide to Currumbin in QLD and built a unique house to Gordon's design. In the large attached workshop, he built many of the specialist and replica engines for which he was so well-known in later years. He also provided unstinting assistance and advice to Aling Li, of the Thunder Tiger company in Taiwan and to smaller engine builders such as this writer. Josie passed away in 1998, ending for Gordon a marvelous marriage which had lasted for nearly 56 years. Finally, Gordon embraced CO₂, compressed air and electric power and in his latter years flew small models in a local reserve. He never lost his interest in model engines though, and was always ready to discuss and quietly advise people with a similar interest.

Gordon Burford passed away on the 12th March, 2010, following a fall at his home in Currumbin. He will be greatly missed by all who knew him, who knew of him, or who merely flew models with his engines.

We extend our condolences to his sons, Peter, Don, Richard and Mark, to their wives and partners and to Gordon's grandchildren and their families.

David Owen (VH2198), Wollongong NSW 2500. 14th March 2010.

From Browny - Kits for 2011 Vets Gathering Free Flight and Control Line models.

I have the two models for next year ready to go. Will do the Muswellbrook Special price (about 30% off) until the end of the Dalby Nats. The Binatang has ribs, dihedral brace, and formers, and the plan, \$20 plus postage, (Fuse sides and tails not done, as free flighters like to select their wood for these bits.)

The Gladiator I have done 2 front formers, cowl ring, fuse sides, tails, ribs, flaps, w/tips, and the plan, \$50 plus postage. (Ribs have jig tabs for straight wing.)

After the Nats, will be normal price, at \$35 and \$76 respectively. To order contact Dave on 02 6355 7298 or Email daveb@ix.net.au

Penny's quit as President.

Doubt if he really; meant

to throw us all to disarray

No more Easter "Bogwood" Play ???

Gone fishin' up on Snowy's Heights

where rivers run and fish do bite.

Done more than most for OT fliers

Time to follow own desires

B²



Gordon with two long time mates, John French and Adrian Bryant.



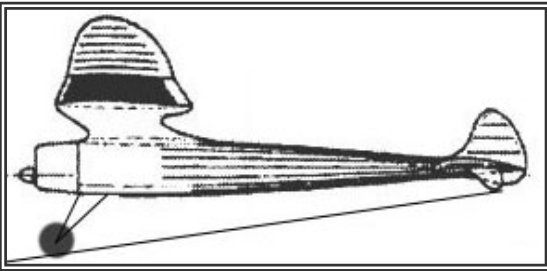
Jim Fullerton specially built his "Sportster" which was proxy-flown at the 2010 Vetrans' Gathering at Muswellbrook. The Sportster was the Free Flight design for 2010. Mills 1.3 power.

CARL GOLDBERG'S 1940 COMET SAILPLANE

(by Tandy C. Walker)

As a young boy living in Oklahoma City, we used to ride our bikes to Schmidt's Model Shop next to the Villa Theater out on 23rd Street. Ray Matthews had a beautiful white silked Comet Sailplane with a green Orwick engine hanging from the ceiling in that shop and I used to stand and admire it for hours. The Sailplane has remained somewhere in back of my mind for most of my modeling life. I purchased a copy of the original Comet plans for the Sailplane in the mid 1990's just to look at. Several years later, Jim O'Reilly did the CAD parts drawings and Bob Holman laser cut the parts for the Comet plans, which I bought and put away with my plans. However, I knew that building this model would require a long-term commitment of time and focus.

In 2008 it was announced that the 2009 SAM Champs was going to be called the Comet Model Champs, and my interest in the Sailplane was again aroused because "the model of the year" could be any SAM legal Comet model. I have always been concerned with the original retractable single strut landing gear. However, with encouragement from Gene Wallock and Sergio Montes, I laid out a conventional two-wheel fixed landing gear configuration with a two-wire strut landing gear. Surprisingly, this did not detract too much from the Sailplane's beautiful lines as shown at left.



On October 31, 2008, I started the Comet Sailplane as my winter building project and placed an order for a Series 20 McCoy 60 replica ignition engine with Woody Bartelt.

I have been a model builder for over 67 years, but after only a couple of months into the construction, I discovered that the Sailplane was the most difficult, complex, and challenging project I had ever undertaken. There was absolutely nothing simple or straightforward about this model as the fuselage structure above shows. Even the five panel wing structure shown above took an unbelievable amount of time to build. I worked on this model continuously for over ten months, slowly solving the construction problems as they arose, completing the project on September 9, 2009.

The Series 20 McCoy 60 ignition engine and fuel tank installations are shown on the right.

Construction was strictly as per original Comet plans with necessary modifications for incorporating a radio control system, rudder and elevator control surfaces, and the two-wheel fixed





landing gear. The covering consisted of orange and yellow silk over Poly-span Lite with 14 coats of thinned nitrate clear dope air brushed with one clear satin coat of Klass Kote. The painted trim was Tamiya flat black acrylic and the black vinyl graphics were made by Cajun Graphics out of Utah.

Due to family problems, the new Sailplane never got into flight test and the Walker's never made it to the 2009 SAM Champs. However, Sailplane flight tests are planned for this summer and Tandy and Sue are looking forward to bring the new Sailplane to Muncie, Indiana, in September for the 2010 SAM Champs.

Tandy with His Completed Sailplane. Photo taken on September 10,

Picking Thermals

An article by Peter Brocks, which is stolen here from the November 2001 Ontario-based Sam 86 Speaks, who in turn stole it from the August 2001 Bat Sheet.

Picking thermals has to do with feeling the subtle changes in the environments, which, to the untrained, are not apparent. Therefore there is no simple recipe.

Tools: Mylar streamers, fast sampling thermistor devices, fluffies, bubble machines, piggybacking (on) birds, and other models.

Early morning: The air is buoyant neutral, small rises in temperature possible (as little as 2° F).

Midday: Strong thermals (boomers) develop that exceed the sink rate of models, rise in temperature can be a few degrees with wind calming, wait until a cooler breeze (fill) is felt and the temperature clearly drops. Do not launch right away, especially with fast, higher climbing models. Wait 10 to 20 seconds, depending on wind velocity.

Late Afternoon: Thermals stay closer to the ground, tend to be larger size. Smaller rises in temperature (1°+ F). Be patient; fly over dark areas.

Strong wind: Wait for a three- or four-second lull of lower wind velocity; launch immediately at an angle to the wind.

No wind: Watch streamers to see center of building hot air column. The rising air circles counter clockwise. Wait for light air movement indicating fill. Be patient as the air rises very slowly. When launching, place the model in the center of the rising air.

Cold front: Rising air precedes the rain and the breeze. Good air is still present even when rain starts.

Flapping: If wind is moderate and ground surface is warm, then flapping a shirt or running or driving under the model will release rising air.

General Rules: Do not launch if there is a chance that the sun might soon come out of the clouds. Do not fly if other models are launched when a conscientious decision to launch has not been made; rather watch other models behaviour. Most of the time flying a little later will give better results. Concentrate and take in your environment.

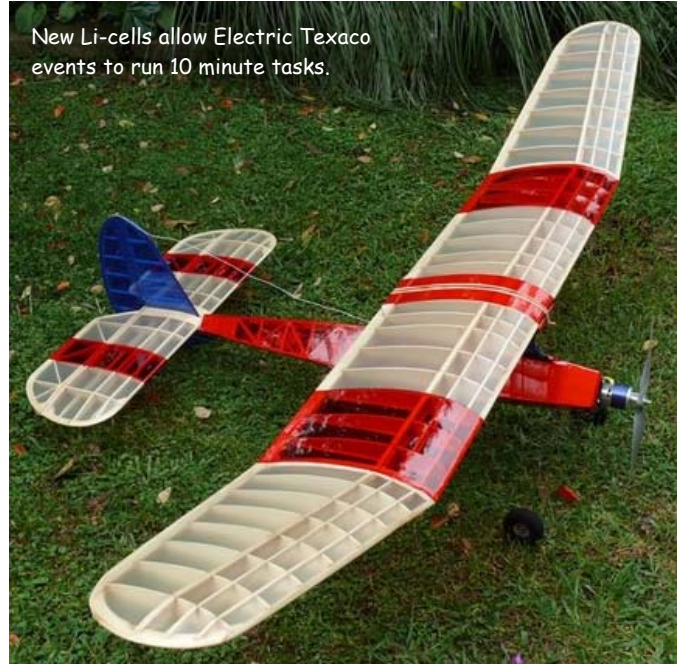
Electric Old Timer Report.

From Lou Amadio.

Rule changes for 2011

It is proposed to make the following changes to Electric Old Timer contest rules from 2011:

1. Electric Texaco and Electric 1/2A Texaco event times will be reduced from 15 min to 10 min. Battery energy will be reduced from 90 to 60 cell.mAh/Oz of model weight.
2. Electric LMR will be dropped from the rules (not contested since the rules were formulated) and Height Limited Old Timer will be introduced as a new contest. Height Limited OT will be a 7 min contest with a single motor run to 200 meters using a CAM height limiter (or similar).



Why make changes?

Anyone involved in competition invariably gets upset when rules are changed as it often means equipment becomes obsolete. The proposed update is no exception but considered necessary to address some long-standing issues:

- The original rules for power systems were based on developments using Nicad cells. No one currently uses Ni based power systems in competition.
- Lithium cells are used by all serious competitors due to significant weight savings and superior power delivery for a given capacity. Li cells have developed to the extent that most are now suitable for contests. It is possible to buy competitive batteries up to five times cheaper than those available only a few years ago!
- The improved power-to-weight of new LiPo cells has allowed us to reconsider the underlying parameters for energy events such as Texaco and 1/2A Texaco.

Electric Texaco Changes:

Texaco events are based on flying until the allowed "fuel supply" runs out. When Electric Texaco was first considered, the smallest Nicad cells that would allow a model to climb at a confident rate would last around 10 minutes. Consequently, the contest duration was set at 15 min to encourage the thermal side of the event. The energy rule was set to the equivalent of 90 cell.mAh/Oz to allow different size models to compete.

First suggested by Peter Henderson, shorter flights are desirable to improve contest time schedules but are only possible using the latest cells. Li cells with high C ratings (typically 20C or better) allow a reduction of battery energy by 1/3 (ie to 60 mAh/Oz) and along with it, the task time to 10 min. Fortunately, the new Li batteries are also relatively cheap.

Electric 1/2A Texaco changes:

1/2A Texaco was always based on a simple energy rule that allowed a choice from 3 batteries: 6 Ni or 2S Li or 3S Li. In reducing the task time from 15 min to 10 min, only one battery really makes sense and that is a 2S 460mAh max LiPo. The motor for 1/2A should weigh ~50 grams. Suitable motor would be 1250Kv with 8x6 prop or 1500Kv with 7x5 prop. Current draw should be no more than 10A for optimum duration. If building a new model aim for a loading around 6 Oz/ft².

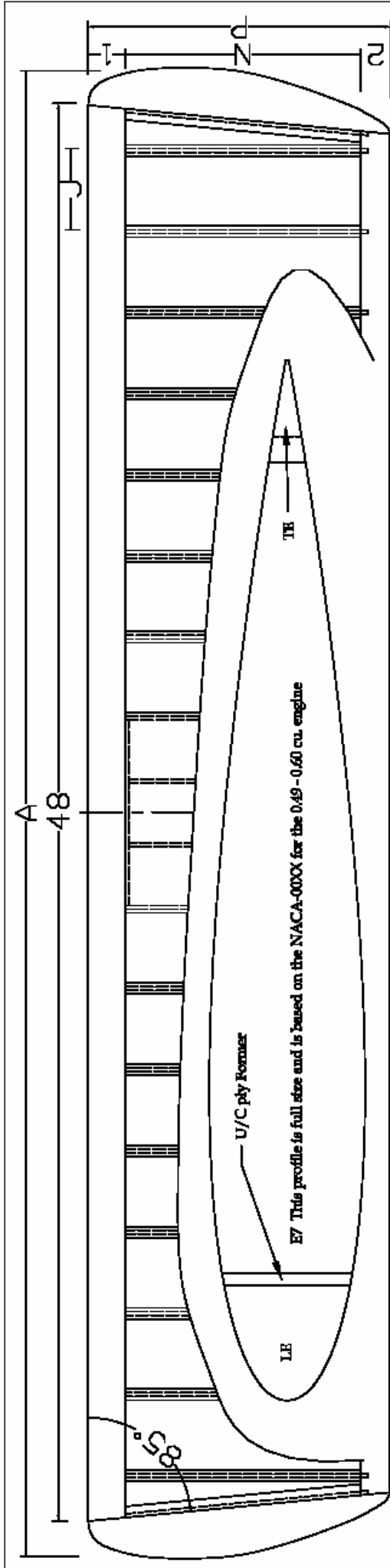
Height Limited Old Timer:

Height Limited Old Timer is an adaptation of height limited electric glider (HLEG) and came about as a suggestion from three times Electric Duration champion Gary Andrews. Gary lamented

having to buy the latest high performance batteries each year to stay competitive. By its nature, a height limited event contains the power race because you have up to 30 sec to climb to the set height. Duration models may be eligible but a dedicated HLOT competitor would consider the weight savings from using the MINIMUM power to climb to 200m in the time allowed. More on this in the next DT.

Event	Max Time	Flights counted	Launch Requirements
Electric Texaco	10 min	best 3 of 4	ROG
Electric Duration	10 min	best 3 of 4	ROG
Electric 1/2A Texaco	10 min	best 3 of 4	ROG optional
Electric Height Limited	7 min	best 3 of 4	ROG
Electric Nostalgia	7 min	best 3 of 4	Hand launch OK

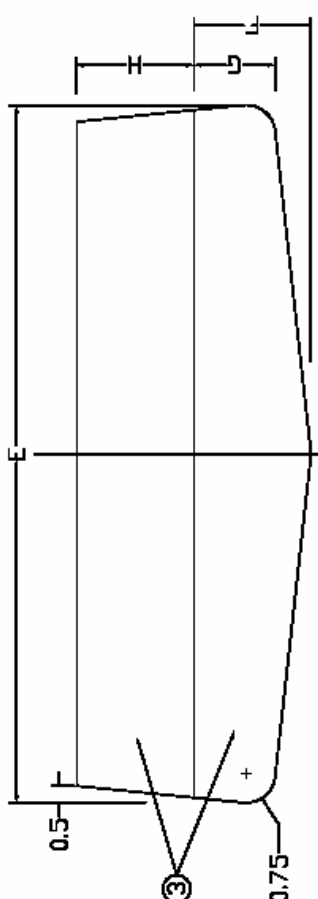
Summary of Electric Old Timer Contests for 2011



Space the beams to suit the engine as no dimension was given on the original drawing.
 The undercarriage is mounted on a ply plate at the back of the wing LE.
 No accommodations were given for the control gearing location on CC.
 A CG of 30% is usually a good place to start.
 Tip weight you can place your self.

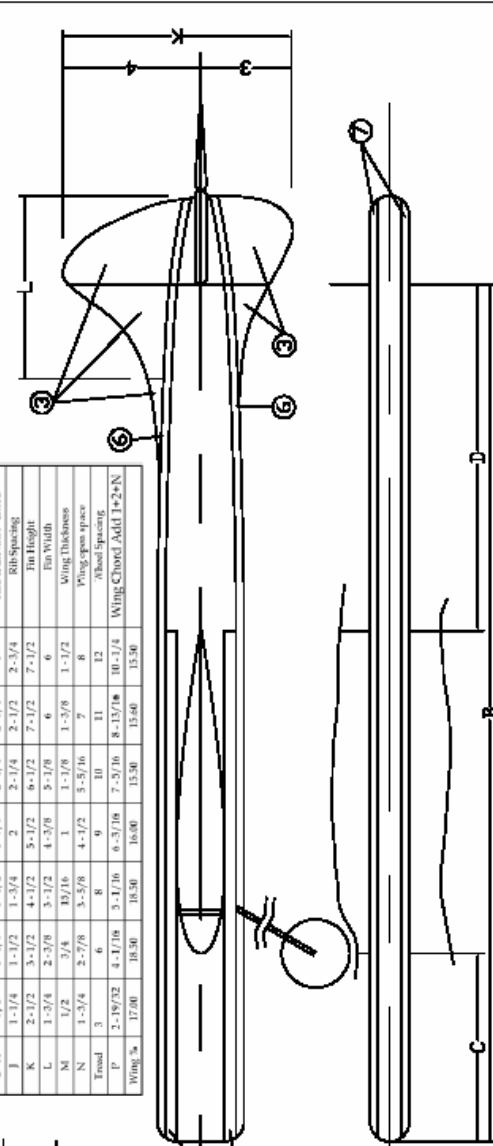
	E-1	E-2	E-3	E-4	E-5	E-6	E-7	DESCRIPTION
Engine	A-100	0-09	0-09-0199	199-0299	299-036	036-049	049-065	Wing LE
1	15/32 SQ	11/16 SQ	13/16 SQ	15/16 SQ	1 SQ	1 1/2 SQ	1 3/4 SQ	Wing TE
2	7/32 x 3/8	1/4 x 1/2	5/8 x 3/4	5/8 x 3/4	3/8 x 1	1/2 x 1	5/8 x 1	Fin & Sub radial
3 & 4	1/16	3/32	1/8	3/16	3/16	1/4	1/4	Engine beams
5 & 6	3/32 x 1/4	1/8 x 5/16	3/16 x 5/16	1/4 x 5/16	5/16 x 7/8	3/8 x 3/4	3/8 x 3/4	Fuselage
7	1/32	1/16	3/32	1/8	3/16	1/4	1/4	Wheel Churn
8	5/8	3/4	1	1-1/2	2	2-1/4	2-1/2	U/C Wire size
9	0.040	1/16	3/32	3/32	1/8	1/8	1/8	Wing Spun
A	12-1/2	20	26	32	38	45	50	Nose to tail string line
B	7-1/4	13	16-1/2	21	24	29	32	Nose Length
C	1-1/2	2-3/8	3-1/8	3-7/8	4-1/2	5-3/8	6	Wing TE tail LE moment
D	2-3/4	4-5/8	5-7/8	7-3/8	8-3/4	10	11	Sub Spun
E	4-1/2	7-1/4	9-1/2	11-1/2	13-1/2	16-1/4	18	Stab Tip Chord
F	1/2	7/8	1	1-3/8	1-7/8	2-1/4	2	Stab & Elevator Chord
G-H	3/4	1-1/8	1-1/2	1-3/4	2	2-1/4	2-3/4	Rib Spacing
I	1-1/4	1-1/2	1-3/4	2	2-1/4	2-1/2	2-3/4	Fin Height
K	2-1/2	3-1/2	4-1/2	5-1/2	6-1/2	7-1/2	7-1/2	Fin Width
L	1-3/4	2-3/8	3-1/2	4-3/8	5-1/8	6	6	Wing Thickness
M	1/2	3/4	13/16	1	1-1/8	1-3/8	1-1/2	Prong span space
N	1-5/4	2-7/8	3-5/8	4-1/2	5-3/16	7	8	Rib Spacing
O	3	6	8	9	10	11	12	Wing Chord Add 1+2+N
P	2-19/32	4-1/16	5-1/16	6-3/16	7-5/16	8-15/16	10-1/4	Wing %
Wing %	17.00	18.30	18.30	18.60	18.90	19.20	19.50	

Typical weights with wing ribs
 Chassis system is showed probably four legs



Dear Modeler
 This plan was drawn from Vic Smead's book "Model Flying the First Fifty Years" and is from the period 1949-50.
 Some notes and shortcomings about the reference.
 This reference has been published elsewhere and the Smead version is a faithful reproduction of the original.
 The tank is mounted inside the wing and located in the outboard panel, if an ignition system is fitted it is in the inside panel.
 The RI size is for compressed air which is popular in the US, and the tank is the wing and outboard of the fuselage.
 The control system is located externally and on the bottom of the fuselage.

For the E-7 size, I have made the assumption the LE is 48 inch and the rest of the wing ribs around that as no measurement is given for the LE.
 The angle of the outer wing ribs I have guessed to look right as no measurements have been given. Like wise the tip angle of the tail. Also no ratio is give for the amount of the fin above and below the fus so I have drawn it to look "right" and added some dimensions.
 I have added some table descriptions to assist finding where they are on the drawing. I have added up the three component measurements of the wing chord to add the ease of knowing the full chord width.
 The rib thickness have been slightly rounded, as 0.5% in 8 inches is only 0.040 inches. E1-2-3 have been rounded to 18%; B4 is 16% and E5-6-7 is 15%.
 The wing profile was based on the NACA-000X.
 Should make a good simple model. Regards John Quigley



Sheet 1 of 1 Frank Ehling's "EASY"
 Drawn by John Quigley 10.07.2008





SAM 1788 President Basil Healy's "Gull" is his latest creation and it has now been flown. Needs more downthrust from all reports.

Opposite page and above are photos of construction of the beast and the innovations by Basil to complete the build.

Basil never fails to build interesting and rarely seen models and to his credit they always fly very well.

But in this instance I think he has raised the bar somewhat. Basil, is there anything harder to build that you are planning to complete in the near future?

All credit to Basil and congratulations for building such models - a true Oldtimer fanatic. Great job Basil.

Basil, we are all now waiting for a full flying report, please.

Stall Speed is a Misnomer

By Bruce Cronkhite

This short article is prompted by a batch of traffic on the EFLIGHT mailing list on the Internet related to the difficulty of determining the correct landing speed for a model. The reason this is difficult is that there is no such thing. There is, however, a correct approach Angle of Attack.

Many people worry about slowing their model down to a reasonable approach speed for fear that the model will stall. Consequently they fly too fast on approach, and run off into the mulch, or the local equivalent.

The U.S. Navy had the same problem when trying to get pilots to land on carriers. It is critical that the airplane approach the deck at the slowest possible speed consistent with some margin above stall to account for turbulence and other unavoidable occurrences while on final.

The Navy discovered that while their airplanes of different sizes and configurations had widely varying stall airspeeds, they all stalled at very nearly the same *Angle of Attack*. This is regardless of type, number of wings, or prop or jet. This angle of attack is very near 15 deg. Not pitch angle, but *angle of attack*.

So the Navy developed a system of measuring and referring to AQA by a system numbered in *Units*. In this system a 'Unit' is approximately 2 deg, modified by some small quantities determined from the flight test data on the aircraft itself.

Now here's the magic. ALL Navy airplanes stall at 30 units AOA. Sure. There are some Navy pilots who can keep an airplane under control at higher than 30 units but they probably graduated from test pilot's school, and were working hard the whole time.

Well, what does that mean to us? Ready for this? Learn to see your model's angle of attack on final approach. You certainly can see 15 deg. so if you are less than that you *won't stall* if your model is aligned along your approach slope; you're going too fast at too low an angle of attack

That is the reason that I tell my students to keep the model fuselage level with the ground on final approach. This is a neat crutch that stabilizes the AOA at a reasonable number less than stall, but higher than supersonic, regardless of the angle of approach.

Try it.

From the Silent Electric Flyers of San Diego Newsletter 2000

~~ THE BACK PAGE ~~

Choosing a pet.

Paddy tells Mick he's thinking of buying a Labrador pup. "Bugger off," says Mick, "haven't you seen how many of their owners go blind?"

Deeply profound thoughts by men.

Two men are out just fishing quietly and drinking beer. Almost silently, so as not to scare the fish, Bob says, "I think I'm gonna divorce my wife. She hasn't spoken to me in over 2 months." Charles continues slowly sipping his beer then thoughtfully says, "You better think it over, Bob. Women like that are hard to find."



Fire!

"Follow the recommendations"
says Larry Allen

WELL, you have heard all the stories and some of you may have read the warnings - well, read on and take my advice as I am speaking first hand. Look at the photos. I nearly lost my house on the 18th June 2010 due to a li-po battery fire. Thanks to the fire brigade getting to the house promptly they prevented the fire moving to the house. Very, very close. Too close for my liking.

I left the battery in the jet to charge it, I checked the temperature and all felt and looked ok. I went inside to turn on the DVD and sound for the kid's movie night. I heard a bang, "Bang Up she went". I rushed outside, too late. First, I guess the jet started to burn with the left over fuel in the tank, then the bench it was sitting on, then the fire moved around the shed and one thing fuelled another. Nothing left to burn, all gone in twenty minutes approx.

I have been in aero modelling for thirty-odd years and li-po's are a blessing and a curse. You can't be too careful; read the warnings and take heed. Say it again, read the warnings and follow the safety recommendations to the letter. Luckily the house did not go up. IT COULD HAVE. Have a very close look at your shed and what's inside and the layout and how a fire may travel, see what you can lose from a fire. Is your shed a garage attached to the house? I shudder to think where I would be sleeping tonight if my shed had been attached to the house. Charge outside, away from everything, in an ammo box, or some other fire proof box; keep the batteries stored in fireproof box away from everything and don't leave the batteries for a minute.

DON'T FOLLOW THE SAFETY PRECAUTIONS AND YOU RISK LOSING EVERYTHING. Thank goodness my family is safe and my house is only singed. **Forwarded by Ray Datodi and published with Larry Allen's permission.**

