Points of Interest:
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- Members' Comment.
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- Western Australia Report from Paul Baartz.
- Compressed Air Motor Bash.
- O rings for Cox Engines.
- Pinch Hitter by Paul Plecan & Gil Sherman.
- Electric Oldtimer from Lou Amadio.
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- Mel Anderson engines.
- The Back Page.

BULLETIN No. 158
May - June
2009

DURATION TIMES

WORTH NOTING: From Peter (Condo) Smith: At the SAM1788 Committee meeting held in Tamworth over the New England Gas Champs weekend at Tamworth, the question was raised about what we should do with the Coota Cup event which has not been supported by MASNSW for some time now. The Committee would like the members' input as to whether SAM should run the event to give members another comp to fly in. So the question is: Do the members want another event and in what month would suit them best.

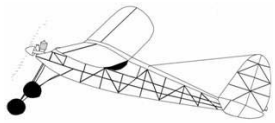
From Ned Nevals, SAM 27 <nedn@napanet.net> SAMTalk Moderator:
On behalf of SAM 27, our club CD Ed Hamler and Miriam Schmidt, I would like to extend an invitation to everyone on SAMTalk to visit Elk Grove, California, USA, this fall, one week before the Comet SAM Champs in Boulder City, Nevada.
We have a fun 3 day meet with a great facility and wonderful food and fellowship at one of the nation's best sites for Vintage Aeromodelling, The Schmidt Ranch.
We chose the weekend before the SAM champs to enable our friends who are coming out for the SAM Champs to come a week early and enjoy the contest and take a leisurely sight-seeing journey to Las Vegas. If you are driving a distance to get to the SAM Champs, what better way to break up the journey than to take in another SAM contest along the way. Below is the link to our web site information with all the *events held, from Brown Junior Texaco to Speed 400 LMR.*
Entries are a flat $5 per event and prizes are paramutual-payout cash with a hand-crafted mug for first place, made by Bob Holman. There is an on-site catered banquet dinner Saturday evening with Napa wines and great fellowship and Sunday we raffle off some great prizes in addition to having a great contest day.
Ever wonder why fourth place is so coveted at the Crash & Bash? It's because everyone wants one our *pink* ribbons for that place. Seriously, you will never have as nice a time at a model contest as you will here.
From Dave Brown: I have worked up the RamRod. Kit has fuse sides and formers, tails, flaps, ribs, wing tips and fillets for the tips. No sheeting, block or spar materials.
Muswellbrook price (open to anyone, till Christmas) is $60 with plans, $53 without plans.
I will discount the $53 components for multiple orders to same address, by 10%, can't discount the plans, $7 each set.
I will be cutting the orders I have already that I can deliver this week the rest will come in normal priority.
Taking orders by phone and email. Browny. <daveb@ix.net.au> Phone: 02 6355-7298

SAM 1788 MEMBERSHIP FEES FOR 2009-2010 ARE NOW DUE.
A MEMBERSHIP RENEWAL FORM IS ENCLOSED WITH THIS DURATION TIMES.
NOTE: MEMBERSHIP FEES ARE REDUCED BY $10 IF YOU NOMINATE TO RECEIVE DURATION TIMES BY EMAIL.

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.

Farcon Cup 22/23 August, 2009.
at
Cowra MAC's Milroy Field
(Bangaroo Quarry Road off Canowindra Road)
http://www.cowramac.asn.au/main.html



We will organize Dinner for Sat Night on the day when we have numbers. Condo.

Duration Times is the official Newsletter of SAM 1788

SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA 1788 Inc.

President:	Paul Farthing	"Bogwood", Lockwood Road, Canowindra. NSW. 2804.	02 6364-0264.
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Newsletter:	Ian Avery	17 Kalang Road, Kiama. NSW. 2533.	02 4232-1093.

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UPCOMING OLDTIMER EVENTS FOR 2009

August	22-23	FARCON Competition	Cowra MAC	Paul Farthing	02 6364-0264.
August	29-30	Oiley Hand Diesel Days	Cowra MAC	Ian Cole	02 6342-4162.
October	3-4	Eastern States Gas Champs	Wangaratta	Paul Farthing	02 6364-0264.
October	24-25	Glenn Simmons Memorial Oldtimer	Lithgow MAC	Dave Brown	02 6355-7298.
November	14-15	Muswellbrook Oldtimer	Muswellbrook	Simon Bishop	02 6541-5577.

From the President: Hello once again. Hope everyone is well and enjoying their Oldtimer activities. The past couple of months has been quite busy on the competition front.

First comp for me was the combined VIC/SA Oldtimer State Champs at Cohuna in Victoria. David Beake was the only other 1788 member in attendance and he had quite a good comp. I only managed to wave the flag in Texaco. It was an enjoyable weekend and the full set of results are on the SAM 600 Web Page.

Then we had the Yass Oldtimer weekend at the end of May. This is the second time the Yass and Belconnen clubs have combined to run the event. This year the weather was not as good as last year (windy) which was a shame as some did not get their models out. It was a good rollup however and we were assured it would run again next year - something to look forward to. Despite the weather I think we all enjoyed ourselves, thanks Yass and Belconnen. There is a report and results in this DT.

The Queen's Birthday weekend saw the QLD State Champs at Dalby on again hosted by SAM 84 Vintagents. I did not go this year as I had farm chores to do but SAM 1788 was represented by Dave Brown and his crew and Grahame Mitchell. I still hear people marveling at the great flying site and facilities at Dalby, seems to be better every year. Word is that QLD is going to run the Nats at Dalby. All reports indicate another successful event.

The following weekend was the New England Gas Champs at Tamworth. This was held at TARMAC's great new flying field at Somerton, about 35Klms NW of Tamworth on Gunnedah Road. While we were there the club members were erecting their new boundary fences and their club house slab was already down. The weather was perfect on Saturday and a little overcast on Sunday but great flying conditions on both days. It was good to see Dave Paton and Jim Hardy from Qld and local member Tony Tjanavaras win ½A Texaco with his Baby Burd. I believe that all present thoroughly enjoyed themselves. Thanks again TARMAC for a great weekend. Results are also in this DT.

Don't forget there is no Rebel Oldtimer this year because of flying field negotiations, normally it's on the last weekend in July, but it will be on again next year.

The Farcon Comp is coming up on 22-23 August and the Oily Hand Diesel Days 29-30 August, hope to see you there.

Membership Fees: SAM1788 Membership Fees are due on 1st July, 2009. It has been decided to offer a reduced membership fee for SAM1788 for those members who nominate to take the Duration Times by email rather than a posted printed copy. This will save you $10, but you must complete and return a Membership Renewal Form to the SAM Treasurer and include your email address. This is a major change for SAM1788 and all members' co-operation is essential to make this successful.

The 63rd MAAA Nationals will be hosted by Victoria at Albury at the end of this year (Dec 2009/Jan 2010). This will be a traditional Nats combining CL, FF and RC events, with the attendant indoor and other social events. Plan to be there, many are looking forward to this event.

I was advised of the passing of Fred Stebbing from SAM 600 last Wednesday. On behalf of SAM 1788 members I would like to offer our condolences to Fred's family at this time. His funeral will be at St Thomas Moore Church in Canadian Bay Rd Mount Eliza at 1 pm on Wed 1st of July.

Neil Molloy has been poorly of recent times but a report has been received that he is home after and extended stay in hospital. All the very best Neil. Safe Flying to all….

Paul Farthing. President SAM 1788.

Members Comment:

How Things Have Changed……

Years ago when SAM 1788 had their own set of rules there was a great outcry from other Old Timer groups operating in Australia that we were out of step and doing the old timer movement harm by having different rules. Foremost amongst our detractors, and urging us to fall in to line with the other Sam Chapters in using the MAAA OT Rules for a truly National set of rules, was SAM 84.

Well guess who has gone on their merry way and are now using rules that are not common to the MAAA and all other SAM chapters in Australia. YES, good old Queensland!

The current rules change is over [May09]. Why are you not using the National MAAA Rules for your events? Why don't you take your own advice (you so freely gave to 1788 in the past) and stick to the MAAA OT rules like the other Sam chapters. We fought long and hard to get the rules we want, but you now undermine those efforts so you can use your own rules. Keep Old timer together by not going off on your own little Rules trip. Peter J Smith. SAM 3019.

Oily Hand Diesel Days
Cowra MAC
29-30 August, 2009.
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

VALE BEN SHERESHAW. Dear SAM Members and fellow modelers: Today I have the very sad duty of reporting the passing of my father, Ben Shereshaw, noted model airplane and engine designer. A formal obituary with contact and service information shall follow within the next few days. He was Ninety - Six years young! He suffered from complications of congestive heart failure. Family members were at his side. He always remembered the wonderful hospitality of the SAM members at the 2001 Sam Champs… It brought tears to his eyes to see as many as 60 Scientific Mercury's on the flightline in Nevada that year. Sincerely, Jon B. Shereshaw jon@nac.net (Received 12 May, 2009)

Below: Ben Shereshaw (on right) with Bill Taylor of Oaklahoma and Bill's 63% Shereshaw Cumulus.

WESTERN AUSTRALIA REPORT from Paul Baartz.

SAM 270 OT Standard Duration 3 May 2009

The weather was reasonable with a light to moderate northerly breeze, probably the most difficult direction in relation to our new Cardup field but still flyable. The long dry, warm Indian summer continues in WA and this was good for the competition but strangely there was not a lot of good lift apparent on the day.

Six entered and flew and only Alan Trott recorded the three maximum scores to qualify for the fly-off so automatically becoming the winner. Rod McDonald failed by just four seconds to make the fly-off and keep Alan honest.

One flyer who shall remain nameless, managed to put his model into some trees on the fence line of the paddock but about 200 metres from the landing area, however it was retrieved with only very superficial damage. Apart from this the event was incident free and enjoyed by all.

All entrants used the old reliable Max-H .40 motor, while the 85% Bomber was the most popular design accounting for half of the entrants.

SAM270 OT Texaco 31 May 2009

Despite dire weather forecasts from the weather bureau of storms and rain the conditions on the day were near perfect with wispy high cloud, little or no breeze and no rain at all. The forecasts must have kept a few away and only five turned up to fly, strangely no maximums were recorded as despite the good conditions very little lift was around and if there was no-one could find and use it.

Alan Trott suffered a seniors moment and was 'flying' Rod McDonalds model while his own crashed happily to earth in the adjacent paddock, effectively putting him out of the event. Sean Dickens only managed one flight and spent the remainder of the time trying manfully to coax a reasonable run out of his motor.

SAM 270 OT Duration 21 June 2009

Held on Sunday 21st June at Cardup and with good weather that no one would have predicted in the preceding 4 or 5 days when winter was in full swing. It was still slightly cool but the winds abated and at most times the conditions were very light with a mainly southerly wind direction.

Eight entered and flew, Sean Dickens only managed one round having inflicted some structural damage to his bomber, and while the conditions were good it was still difficult to find a maximum flight of seven minutes. Only Ian Dickens managed a full book of three maximums and this gave him the win without the formality of a fly-off. Mark Sherburn was a bit unlucky being only twelve seconds short of a full book and slipping into second place with this score. Several others landed outside the designated area and ruined good flight scores in the process.

Photos:
Top is Alan Trott's Scram on a landing approach.
Top Left: Rod MCDonald and his MG2.
Below Left: Rick Rumball prepares his Bomber.
Below: Paul Baartz's 85% Bomber in Texaco setup.

OT STANDARD DURATION RESULTS:

1. Alan Trott	85% Bomber	1080 1260
2. Rod McDonald	Foote Westerner	1076
3. Ian Dixon	Stardust Special	989 1205
4. Les Isitt	85% Bomber	868
5. Rick Rumball	Super Quaker	846
6. Kevin Hooper	85% Bomber	751

OT TEXACO RESULTS:

1. Paul Baartz	85% Bomber/OS.40fs	1512
2. Rod McDonald	MG-2/Magnum.52fs	1452
3. Rick Rumball	85% Bomber/Magnum.61fs	1086
4. Alan Trott	Scram/ASP.61fs	438
5. Sean Dickens	70% Bomber/Magnum.30fs	297

OT DURATION RESULTS:

1. Ian Dixon	175% Kerswap/Magnum.61fs	
2. Mark Sherburn	Playboy/Magnum.52fs	1258
3. Alan Trott	Scram/ASP.61fs	
4. Ray Sherburn	Playboy/Magnum.61fs	1185
5. Rick Rumball	85% Bomber/Magnum.61fs	1182
6. Les Isitt	85% Bomber/Magnum.61fs	1176

SAM 270 OT 1/2A TEXACO 19 APRIL, 2009.

The first Old Timer event for the year was held at Cardup on Sunday 19th April. The weather was fairly calm compared to the preceding week or so, which had mainly boisterous Easterly winds and hot and dry conditions. It was still quite warm but the gentle breeze and lack of cloud made for near perfect conditions.

Seven entered the event and proceeded to try their luck with the Cox engines, with John Taylor admitting defeat after gallant attempts to coax his engine into performing in a reasonable manner.

Despite the conditions several flyers managed to land outside the designated area and thus destroyed some really good flights and in two cases ruining the chance of qualifying for the fly-off.

Every flyer recorded at least one maximum flight of six minutes and most could have made the fly-off with a little luck.

Only two achieved the three maximum flights to qualify for the fly-off which was held in chancy conditions, Rod McDonald after achieving great height under power, so much so that he spiraled the model down a bit to make sighting it easier, then lobbed it into a sink area and finished in second place as a result.

O/T ½A TEXACO RESULTS:

1. Paul Baartz	55% RC-1	1080 + 461	5. Rob Rowson	50% Dallaire	942
2. Rod McDonald	Stratostreak	1080 + 437	6. Ian Dixon	50% Bomber	916
3. Gary Dickens	Atomiser	1068	7. John Taylor	50% Bomber	dnf
4. Kevin Hooper	Stardust Spec	1005			

COMPRESSED AIR MOTOR BASH.

From Wout Moerman <w.moerman@amd.ru.nl>

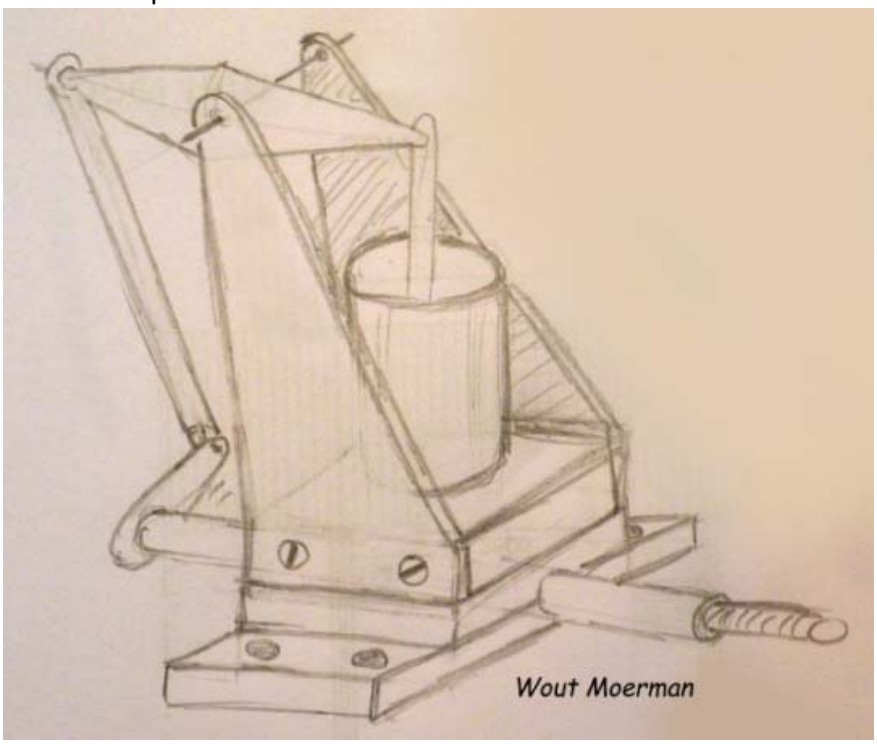
I just posted a sketch of my design in Small Flying Arts:
http://www.smallflyingartsforum.com/cgi-bin/yabb2/YaBB.pl?num=1205415085/140

Material is K&S brass tube in 4 sizes, two sizes for the cylinder and piston, two sizes for the crankshaft and casing.

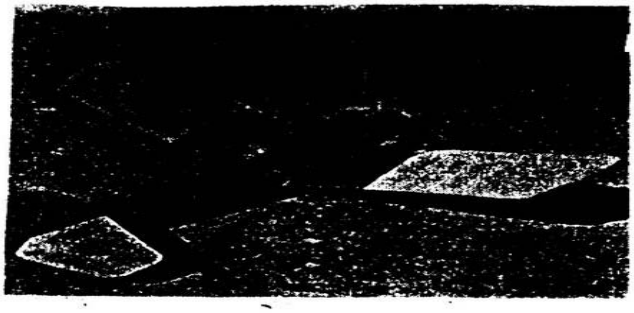
I didn't look for any particular size, but just tried all sizes to find the best fitting couples. These give a rather good fit without too much friction or leakage. Perfect for me as I don't own a lathe.

The outer diameter of the cylinder is 8 mm, of the crankcase 5 mm. I use a block of willow drilled at 8 and 5 mm to join these together, and this block will also take the intake pipe and outlet.

On this moment I've been collecting materials and making sketches and I'm about ready to start sawing these tubes in the correct length.



The Aeroflyte Spitfire Squadron on parade at the 2009 Vetrans Gathering at Muswellbrook.



This prototype of "The Sportster" was built quite successfully by 13-years-old Terry Summers, of Glen Iris, Melbourne.

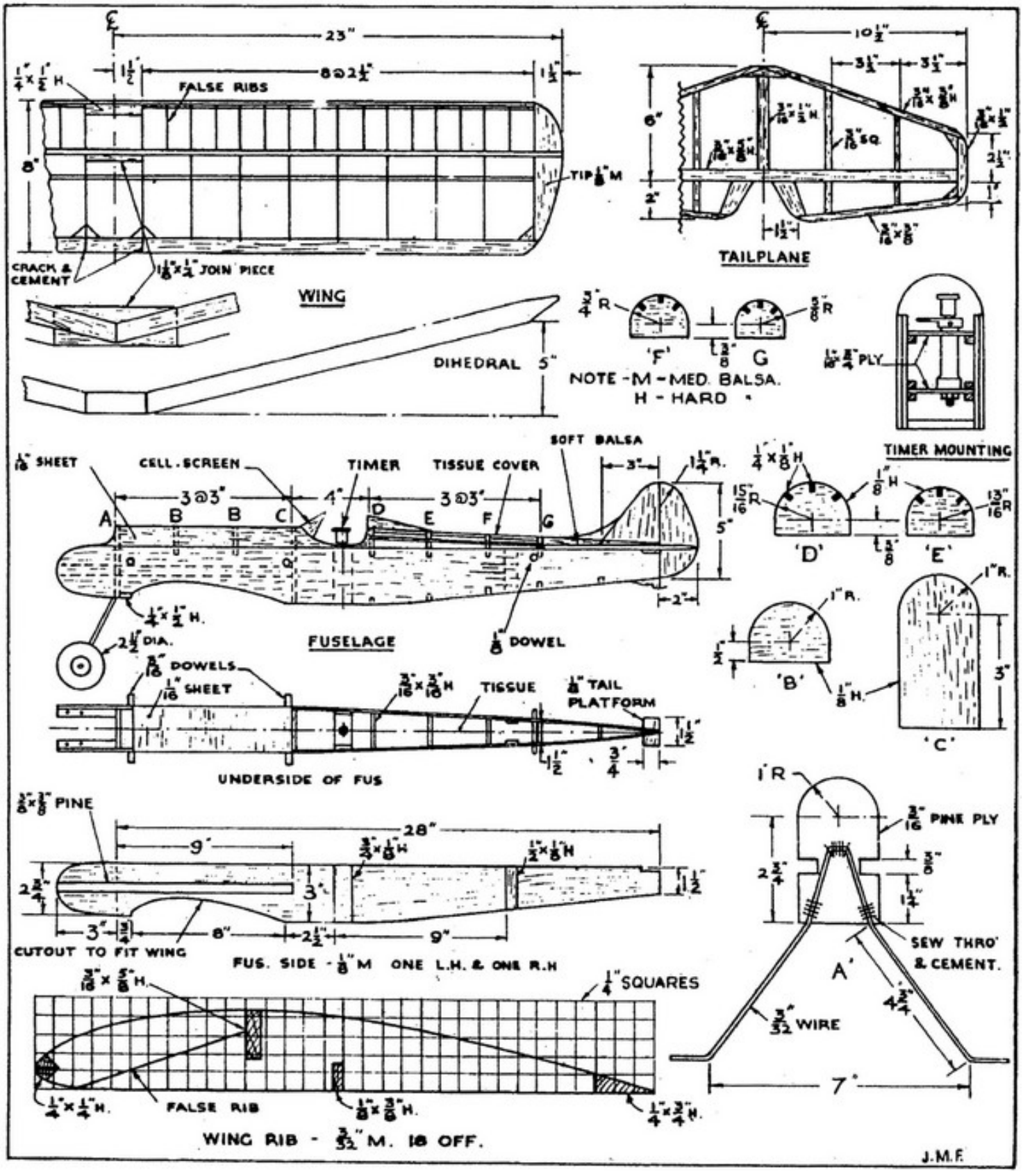
Free Flight/RC Model for 2010 Vetrans' Gathering at Muswellbrook

THE "SPORTSTER

Designed by Jim Fullarton especially for those who like to fly just for fun, the "Sportster" has a snappy, full scale performance, and can be flown on fairly long motor runs without the fear that it will lose itself, as so often happens with the floating type of contest model. Construction should be simple enough to suit anyone.

Details of construction are on page 18.

46 AIRCRAFT, November, 1950



Tom Wilson on O-Rings for Cox Engines.

An article published in the April 2006 Southern California Ignition Flyers newsletter, Mike Myers, Editor

The Cox .020 and .049 reed valve engines use a small rubber o-ring to seal the joint between the venturi tube and the backplate. Over time, the o-rings deteriorate, and the seal at that joint leaks fuel or air or both in unwanted quantities. Long ago and far away, in a distant land, hobby shops were on every corner - and every one of those shops had Cox repair kits or spare parts. Those days are long gone. And, even if you could find a Cox repair kit, the passage of time means that o-ring(s) contained in the kit are ready to go south on you, if they haven't done so already. So what do you do? Well I've hacked off pieces of fuel tubing with a razor from time to time, trying to make my own o-rings with somewhat limited success. Tom Wilson suggests a better way to do that. He takes a piece of fuel tubing of the appropriate diameter, puts it INSIDE a piece of brass tubing, and pulls it through until the short length needed to make an o-ring is exposed. He then cuts it off using a new steel double edge razor blade. If the end of the tube is cut at a 90 degree angle, you should be able to slide the side of the razor blade down the end of the tube and get parallel sides to your new "o-ring".

Some people don't like to "roll their own" and would like to buy ready made. Well o-rings are widely used in industrial sealing applications in all sizes and shapes. There's a Seattle based outfit - 0 Rings West, www.oringswest.com telephone 1-888-722-2602 that stocks o-rings of all types of materials and sizes. While they sell in small quantities, small quantities for such suppliers include bags of 50 or 100 o-rings. I'm not certain which material Cox used for its o-rings (different materials have differing levels of resistance to alcohol and oil) and don't know the exact size needed. I intend to get my digital calipers out and measure the venturi tube O-ring seat on some representative Cox Pee Wees and Babe Bees. I expect that 0 Rings West will have the correct size, and with a little review of the different kinds of materials used. I ought to be able to come up with the right o-rings. If I do, I'll "spread the wealth" among club members at whatever my cost is. While we'll wind up with several lifetimes' supply of 0-rings, at least they'll be "fresh" from the 2006 vintage.

Ben Shereshaw and Ray Arden Glow Plugs

In 1940 a person named Ed Chamberlin formulated and developed a hot new model engine fuel called "Liquid Dynamite" to replace the old gas and oil mix. *(Somewhere in this time period WW II broke out, Liquid Dynamite became a war material, no longer available to the public, and other matters took precedence over developing model fuel)*. After the war ended Ed resumed the fuel testing along with Ben Shereshaw and his Bantam .19 engine. During the test they shut the ignition off, and much to their amazement, the engine kept running. Quickly removing the spark plug they realized that the ground electrode had broken off and the center electrode was glowing red-hot which allowed the engine to continue running.

Ben, ever the engineer, experimented and wound small Nichrome wire elements to replace the center electrode making an early prototype glow plug; however the Nichrome material didn't prove successful and burned out very quickly.

During this same time period, Ray Arden was also experimenting with the same Liquid Dynamite fuel on his Arden 19. Ed Chamberlin excitedly advised Ray of his and Ben's discovery regarding the engine running on after ignition shut-off. Ray experimented further and discovered that an alloy of platinum and iridium wire provided a superior catalyst for methanol and the modern glow plug was officially born. Ray Arden quickly acquired a Patent.

Ben Shereshaw obtained manufacturing rights from Ray Arden and Ben thereafter produced thousands of glow plugs for OK-Herkimer in his Miniature Motors factory.

Bob and the Blonde

Bob, a handsome dude, walked into a sports bar around 9:58 pm. He sat down next to a blonde at the bar and stared up at the TV. The 10 pm news was coming on. The news crew was covering the story of a man on the ledge of a large building preparing to jump.

The blonde looked at Bob and said, "Do you think he'll jump?" Bob said, "You know, I bet he'll jump." The blonde replied, "Well, I bet he won't."

Bob placed a $20 bill on the bar and said, "You're on!" Just as the blonde placed her money on the bar, the guy on the ledge did a swan dive off the building, falling to his death.

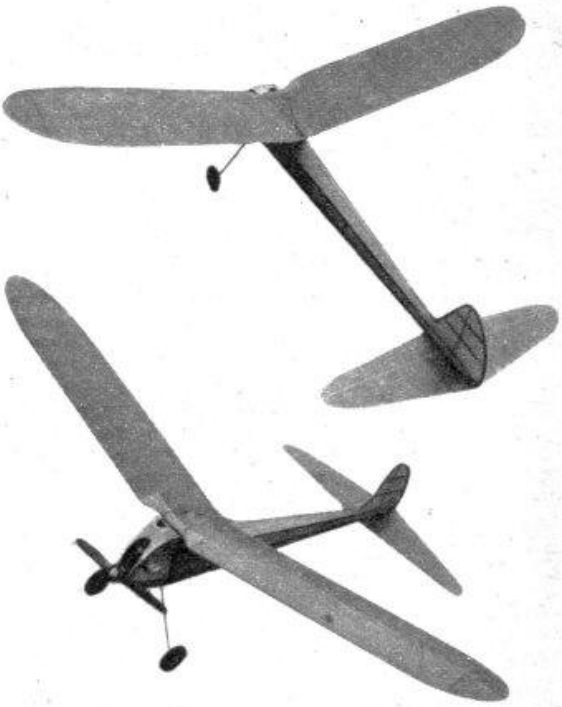
The blonde was very upset, but willingly handed her $20 to Bob, saying, "Fair's fair. Here's your money." Bob replied, "I can't take your money. I saw this earlier on the 5 pm news, and so I knew he would jump." The blonde replied, "I did too, but didn't think he'd do it again."

Bob took the money...

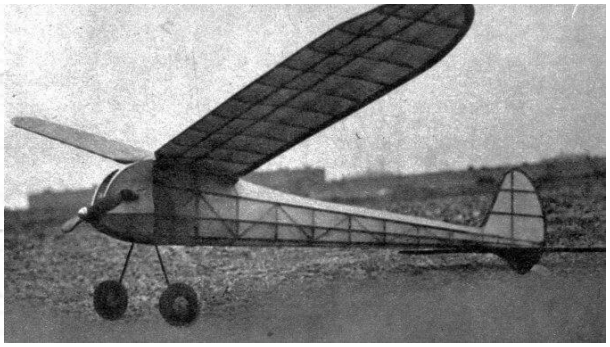
Pinch Hitter

BY PAUL PLECAN
and
GIL SHURMAN

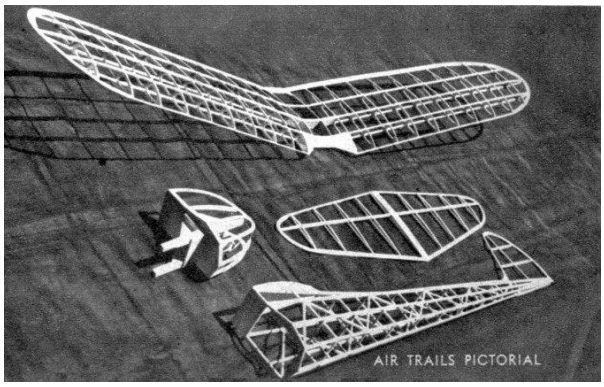
No balsa? Don't worry! Learn all the secrets of hardwood technique by building this "substitute" gas job.



Designer Plecan shows how to use simple framework and still have looks.



Try this job on your Class B motors and see for yourself the advantages of hardwood construction. Neat cowl and sleek lines for performance.



HERE y'are, boys -- a gas job, complete, ready to fly, without even a splinter of balsa in it. Here are some of the advantages: First, it's cheaper, as you can always pickup some scrap pine or spruce and have a friend strip it for you. Second, the all-hardwood construction makes possible a tough and resilient framework that can "take it" better than any balsa model. The design lends itself to contest work very well -- what with its thin flying surfaces, general sliminess, high-lift airfoil, generous moment aria, and reflex section stabilizer airfoil. If you have a Rogers 29 or similar motor on hand, try building this unusual ship.

The original model gave the authors quite a shock in that it didn't quite reach weight rule, necessitating additional doping and heavier batteries. The most outstanding characteristic, however, is the flexibility of the model. Subjected to plenty of flying and transportation manhandling, the model is still in perfect condition. Impacts have shattered the tissue at times, but the framework is still as sound as the day it was assembled.

You, too, can make the Pinch Hitter. It's easy. First, two main side frames are constructed of 1/8" square pine, spruce, or what have you. Even mahogany is O.K., but don't saw the legs off the family piano! Almost any type of glue can be used, as parts of the original model were held together with Weldwood, Casco, and regular cement. No difference in strength has been noticed, but it should be mentioned that three coats of cement were used where formerly one sufficed.

Allow the main frames to dry by working on some other part to take up your time. The cross pieces are now cut out according to the lengths given in the top view. The two sides should be assembled directly over the top view before adding stringers. See sketch on plan for details of braces that run through fuselage to support the stringers. Odd lengths can be used here, as they will be trimmed to exact size before the stringers are added. These braces should be fastened to the cross braces and uprights with a few turns of thread and at least two coats of cement to secure them in place. Since the rudder is so simple, it may be assembled right on the fuselage once the curved sheet pieces have been cut out and the outline cemented together. All that remains is to fit the spar in place and bend the cap-strip ribs around it. Do not forget to taper the last inch of the spar tip so that it blends into the thin curved-sheet outline above it. Wing-mount formers W-1 are now cemented in place, care being exercised that they remain flat while the cement dries, providing a smooth area for the wing to rest on.

The stabilizer is constructed next. Pin down the outlines directly on the plan and place the bottom rib cap strips in their respective positions. The spar is tapered now and fitted in place, followed by bending the top rib cap strips over it to obtain the desired camber. Cut the bottom portion of the rudder to outline shape and cement to the cambered side of the stabilizer.

The wing ribs are cut out of 1/16" sheet pine *en masse*, once a motor-driven jig saw has been located. Maybe one of your friends has a vibrator-type saw, which will be highly satisfactory. Cut eighteen sheets of wood to the necessary width and length, and after they have been lightly nailed together, trace the main rib outline on the top one. Now you can go to town with the saw, but be careful, as an airfoil with smoothly blended curves is the only type that is efficient.

Cut the trailing edge short on two of these ribs to obtain the # 11 ribs. The tip ribs (#I2) are now cut out, followed by cutting

out the center-section ribs (three required) which are split vertically to allow space for the spar joiners. Assemble both panels on a flat surface and allow to dry well. After propping up the tips 6-1/4", the spar joiners may be added (see sketch on plan). After the cement or glue has dried, cover the center-section leading edge with two-ply bristol board or similar material to strengthen the center portion that has a "cut out."

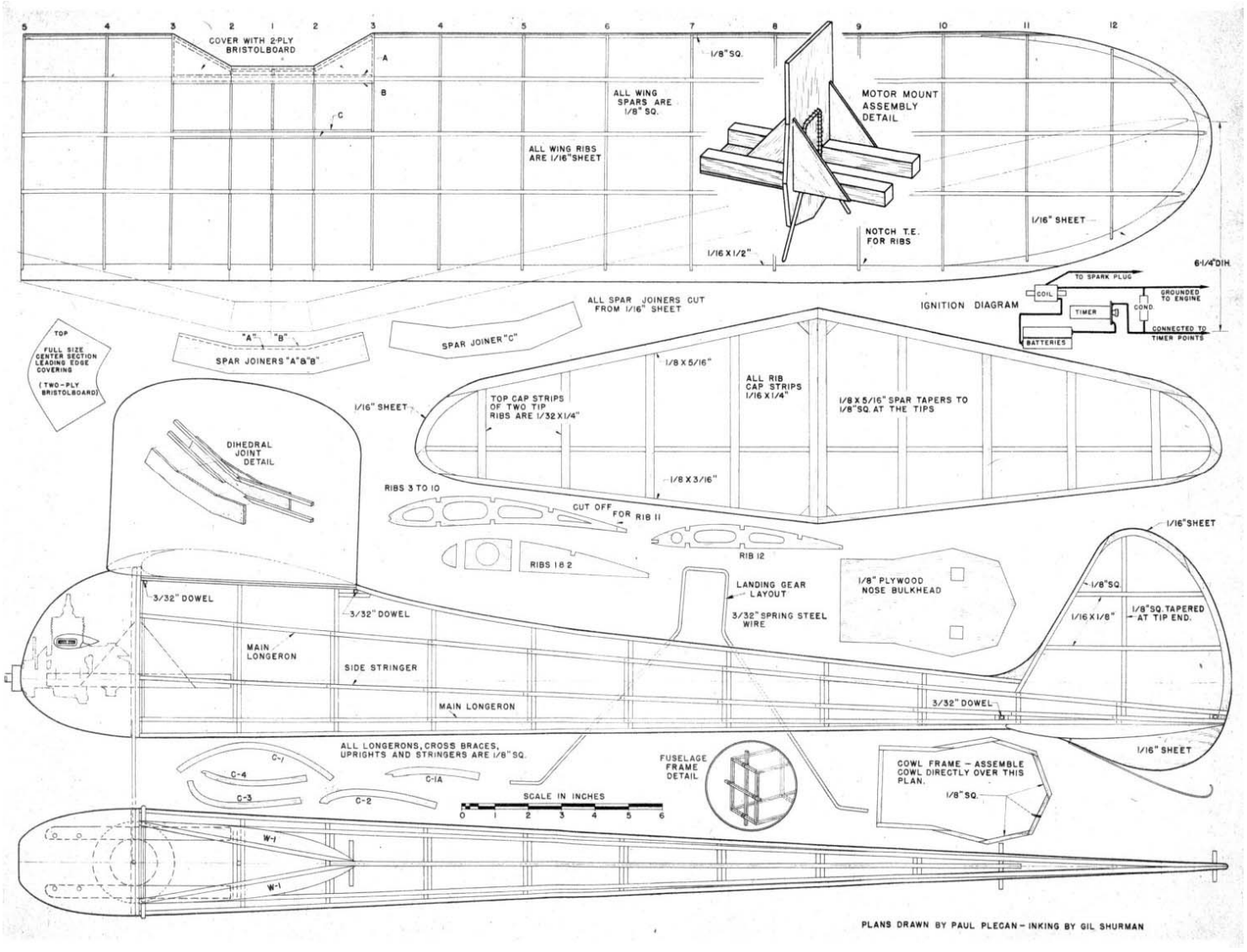
Use colored silkspan for covering all the framework now assembled. Spray all covered areas with water and allow to dry. Pin wing and stabilizer down so that warping will be minimized while the tissue is drying. Three coats of clear dope should give the model a slick appearance and help protect it against spilled oil and gas. A wide stabilizer platform may be cemented to the bottom of the fuselage to steady the stabilizer, but it is not absolutely necessary.

The motor mount is now assembled. The sketch of the assembled mount should clear up any questions. The full-size pattern for the nose bulkhead appears on the plan. After inserting the 3/8" square motor runners in the nose bulkhead, gussets should be added to reinforce them. Fill in the bottom rear of the motor runners to obtain a platform on which the battery box is fastened later. The landing gear is bent to shape directly over the plan and should check with the full-size pattern before it is fastened in place. Drill small holes in the bulkhead and "sew" the landing gear on with fine copper wire. Cement or glue should be applied liberally now to give the nose and landing gear plenty of strength.

After slipping the wheels in place, solder retaining washers on. Follow the diagram given on the plan when assembling the ignition system. Use a hot iron and don't skimp on the quality of solder or flux, lest you let yourself in for a mess of trouble later. Although designed for the most compact unit possible, the ignition arrangement may be deviated from if desired. Only remember that moving the heavy parts, such as coil or batteries, will shift the CofG, spoiling the flying set-up.

The cowling is made by assembling a light framework of formers on the plan and covering with two-ply bristol board. After covering with silkspan, cut cooling hole and make a paper exhaust stack to direct the exhaust away from the fuselage. If an Austin timer has been used, a hole should be cut in the top of the cowl for access to the timer handle. It should be noted that the timer on the original model was trimmed on one side to allow it to be cemented nearly flush with the nose bulkhead.

Scanned From November 1942 Air Trails



Electric Old Timer

National Electric Flight Rally Report – Easter 2009

From Lou Amadio

Electric Old Timer was almost a non-event at Cootamundra this year. The class of competition is struggling to attract competitors and seems to be caught between two apparently disparate disciplines. IC (gas) OT events under the SAM banner are well supported as is Electric Glider under the AEFA. The marriage of the two, OT aircrafts with electric propulsion systems, seems to be a difficult one and currently not attracting many from either camp.

In 2009, EOT was originally scheduled as an Australian National's event but could not attract the minimum number of competitors to be listed. The fall-back position was to run it as an AEFA event. To this end, Peter Pine came to the rescue and included EOT in the Cootamundra NEFR programme. We were lucky that the field was still available and that the day proved to be one of the best weather wise.

Six pilots registered for Duration and four for Texaco and 1/2A. This year we had a new competitor and he proved to be a dark horse indeed.

Electric Duration

The best three out of four flights were to be counted. Four pilots achieved perfect scores in the booming conditions so a fly-off was necessary. Gary Andrews (100% Playboy) managing to stay up the longest in that last critical flight. New boy Laurie Baldwin (70% Bomber) came second and Geoff Burling (105% Playboy), and last year's champion, came third. Geoff felt that the level of competition has been raised since 2008.

My 66% Bomber suffered a folded wing catastrophe in the third heat while climbing vertically, probably the result of an underlying structural defect from a previous heavy landing. This also put me out of Texaco as the same model was entered in both comps.

Electric Duration Competitors at the 2009 Cootamundra NEFR.
L to R: Gary Andrews, Laurie Baldwin, Lou Amadio, Geoff Burling, Mike Colston and Peter Henderson

This year all Duration models had a 35 sec free-motor-run. To account for different sized models, the battery was scaled to the wing area using the following formula: 1600 cell.mAHr/sq ft WA. For example, the winning Playboy had 900 sq in wing area so the battery energy allowance was (900/144)x1600=10,000. Dividing by the number of cells (Gary chose 3 LiPo) gives a maximum battery capacity of 3333mAHr. Gary used a Hyperion 3S 3200 mAHr pack. When we look at the mix of results, the formula is proving to be successful.

Electric Texaco

There is no doubt that Texaco is a very lay-back comp but those who try it will admit that it is still not easy to win. The lower power needed also means that it is cheaper to set up a Texaco model compared to a similar sized Duration model. On average, a Texaco model can compete with around 1/3rd the power of a Duration setup.

The other difference is that in Texaco, the motor battery is sized to the weight of the model at the rate of 90 cell.mAHr/Oz. The winning model weighed 33 Oz dry. Battery energy was therefore 90x33=2970. The model used 2 LiPo cells so maximum battery capacity is 2970/2=1485 mAHr. In the contest the model was flown with a 2S 1450 mAHr pack.

This year rookie Laurie Baldwin took top honours in his first competition outing with an OT model. Laurie is very

Electric Texaco Competitors. L to R: Lou Amadio, Peter Henderson, Mike Colston and Laurie Baldwin, the eventual winner

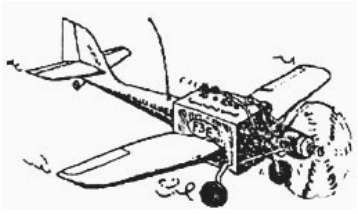
skillful at finding thermals but was most humble in his victory address at the end of the day when he confided that he had taken on board building and power setup tips from his fellow EOT Competitors. Such is the level of sharing.

1/2A Texaco

1/2A comps are always fun to compete in, all the more so against your mates and on a perfect day as well. The models are limited to either a 2S 700mAHr or 3S 450MAHr LiPo battery pack.

Electric 1/2A Texaco Competitors. L to R. Geoff Burling, Mike Colston, Lou Amadio and Peter Henderson, the eventual winner

Peter Henderson (Dallaire) won after three hard fought heats with Mike Colston (Airborn) second and Lou Amadio (Playboy) third. Peter was postal champion last year in all three disciplines but found that competition does not stay the same for long, even with the baby OT models! At the end of the day everyone was happy, even the author who totaled his Bomber when it folded a wing! The consensus was that we do it all again, and the sooner the better. If you have not tried EOT, we hope you will join us one day.



AEFA EOT COMPETITION RESULTS - COOTAMUNDRA 2009

EOT 1/2A TEXACO		Overall		Fly-Off				Rank
		Flight	Best 3	Flight	Flight	y, n	Fly-Off	
Model	Pilot	Points	Points	Min	Sec	On Field	Points	
Dallaire	Peter Henderson	2700	2700	21	2	y	1262	1
Airborne	Mike Colston	2700	2700	20	16	y	1216	2
Playboy	Lou Amadio	2700	2700	19	48	y	1188	3
Playboy	Geoff Burling	2700	2700	15	24	y	924	4

EOT TEXACO		Overall		Fly-Off				Rank
		Flight	Best 3	Flight	Flight	y, n	Fly-Off	
Model	Pilot	Points	Points	Min	Sec	On Field	Points	
70% Bomber	Laurie Baldwin	2700	2700	25	53	y	1553	1
70% Bomber	Peter Henderson	2700	2700	24	33	y	1473	2
75% Dallaire	Mike Colston	2578	2578	18	30	y	1110	3
66% Bomber	Lou Amadio	2700	2700				0	4

EOT DURATION		Overall		Fly-Off				Rank
		Flight	Best 3	Flight	Motor	y, n	Fly-Off	
Model	Pilot	Points	Points	Sec	Sec	On Field	Points	
100% Playboy	Gary Andrews	2400	1800	870	34	y	870	1
70% Bomber	Laurie Baldwin	1800	1800	814	35	y	814	2
105% Playboy	Geoff Burling	2063	1800	720	35	y	720	3
70% Bomber	Peter Henderson	2367	1800	353	34	y	353	4
66% Bomber	Lou Amadio	1783	1783				0	5
75% Dallaire	Mike Colston	2333	1781				0	6

NEW ENGLAND GAS CHAMPS - TAMWORTH - 13/14 JUNE, 2009.

Gordon Burford

1st	Paul Farthing	Pencil	PB	900	1210
2nd	Grahame Mitchell	Dream Weaver	PB	900	1154
3rd	Robert Rutledge	Spacer	PB	900	437
4th	Jim Hardy	Swayback	BB	900	388
5th	Jim Rae	Amazoom	PB	900	337
6th	Peter Scott	Jaded Mail	PB	900	312
7th	Basil Healy	Dixielander	PB	900	282
8th	Bob Marshall	L/Diamond	PB	900	232
9th	Jon Fletcher	Zoot Suit	PB	900	142
10th	Dave Paton	Golden Boomerang	PB	900	0
11th	Potter/Brown	Fifteen	PB	563	

Duration

1st	Dave Brown	85% Bomber	Saito 56	1260	784
2nd	Peter J Smith	106% Playboy	Proffi 40	1260	746
3rd	Robert Rutledge	Playboy	Saito62	1260	657
4th	Peter Scott	112% Playboy	McCoy 60 ign	1260	614
5th	Paul Farthing	Playboy	Ys53	1260	607
6th	Jim Hardy	85% bomber	Ys63	1260	532
7th	Grahame Mitchell	Playboy	ST34	1260	454
8th	Dave Paton	Playboy	OS 61	1260	0
8th	Basil Healy	Blitz Buggy	Saito 62	1260	0
10th	Robert Smith	Playboy	Saito56	1213	
11th	Geoff Potter	Sunduster	McCoy 60 glo	1165	
12th	Jim Rae	Little Diamond	Saito 56	1127	
13th	Ian Avery	E S Gas Champ	OS32	639	
14th	Jon Fletcher	Playboy	YS63	447	
15th	Adam Tjanavaras	85% Bomber	YS63	420	
16th	Bob Marshall	85% Bomber	OS52	0	

½A Texaco

1st	Tony Tjanavaras	Baby Burd	1080	628
2nd	Dave Brown	Stardust Spl	1080	542
3rd	Peter J Smith	L/ Diamond	1080	539
4th	Robert Smith	L/Diamond	1080	491
5th	Paul Farthing	Stardust Spl	1080	486
6th	Peter Scott	Stardust Spl	1080	398
7th	Grahame Mitchell	Stardust Spl	1080	397
7th	Toney Bensley	Bomber	1080	397
9th	Team Avery	MG	1080	373
10th	Dave Paton	MG	1080	352
11th	Garry Whitten	Baby Burd	1080	309
12th	Robert Rutledge	Kerswap	1080	304
13th	Jon Fletcher	Kerswap	1080	252
14th	Basil Healy	Atomiser	1068	
15th	Jim Hardy	MG	1006	
16th	Jim Rae	Skyrocket	959	

Texaco

1st	Dave Paton	75% Dallaire	ASP32 Diesel	1800	1795
2nd	Paul Farthing	Bomber	OS 60FS	1800	1710
3rd	Peter Scott	Record Breaker	Forster 99	1800	1406
4th	Basil Healy	Lanzo Stick	Enya 60FS	1800	941
5th	Dave Brown	85% Bomber	Saito 56FS	1800	900
6th	Rob Smith	Bomber	OS 60FS	1800	780
7th	Ian Avery	80% Bomber	OS40FS	1800	733
8th	Jim Hardy	85% ARF Bomber	Saito 56FS	1800	612
9th	Peter J Smith	Bomber	OS60 FS	1800	0
10th	Jon Fletcher	Bomber	OS60 FS	1710	
11th	Tony Bensley	Red Zephyr	ASP 61FS	1496	
12th	Jim Rae	75% Dallaire	ASP 30FS	DNS	

Another great weekend weather-wise, fine, sunny and warm with light winds on Saturday and overcast/sunny and cooler on Sunday with very good flying conditions on both days. Looking forward to next year. Top Gun - Paul Farthing.

Top: Duration flying in very pleasant conditions on Saturday. Right: Queenslander visitor Dave Paton with his Playboy/OS61 combo. Flame out in fly-off was most annoying for Dave. Below: Texaco on Sunday .

To the Members of the Tamworth Aeromodellers Club.

Just a small note to thank your club and members for there efforts in making the New England Gas Champs a success once again.

The new flying field was well presented considering you have only been there for such a short time. Once you have finished the building projects, it will be the envy of many clubs.

On behalf of SAM 1788 I wish you every success and hope we can fly the New England Gas Champs there again next year.

Peter J Smith - "Condo"

YASS OLDTIMER WEEKEND.

From Grant Manwaring.

The second Yass O/T event was held over the weekend 30 & 31 May 2009 in very cold and windy conditions. The conditions made flying pretty uncomfortable with many flyers electing to leave the models in the car and wait for a better day.

Five events were run this year, the results show the models and engine combinations used.

The intention this year was to fly Tomboy over both days, 1/2 hour time slots around midday with longest flight from each day to count towards the final result. This event is proving very popular but requires reasonable conditions. Both long and short wing versions were flown.

Competitors enjoyed an over night stay at the Yass Motel with a dinner and get together on Saturday night. An enjoyable night was had by all.

Thanks to Yass Model Aero Club for once again making the field available for the event and to Belconnen club members for organising the event and providing the food and support.

Results:

Gordon Burford Event

Peter Scott	Zoot Suit	PB	900	1596
David Beake	Lucky Lindy	PB	900	1424
Jim Rae	Amazon	PB	900	1373
Paul Farthing	Pencil	PB	900	1278
Peter (Canberra) Smith	Ollie	PB	900	1203
Peter (Condo) Smith	Stardust Spec	PB	900	1183
Basil Healy	Dixielander	PB	185	185

Duration

David Beake	Bomber 85%	Jet 40	1260
Grant Manwaring	Playboy	YS53	1240
Robert Smith	Playboy	Saito 62	1172
Jim Rae	Lil Diamond	Saito 56	1159
Peter Scott	Stardust Spec120%	Saito 62	992
Geoff Potter	Playboy	Enya 53	861
Peter (Condo) Smith	Stardust Spec	Nelson 45	512
John Diduszko	Bomber 85%	Magnum 61	290
Basil Healy	Blitz Buggy (out)	Saito 62	217
Paul Farthing	Playboy 112%	McCoy 60	0

Tomboy

Basil Healy	288	John Diduszko	133
David Beake	255	Peter Scott	0
Jim Rae	143	Don Southwell	0

1/2 A Texaco

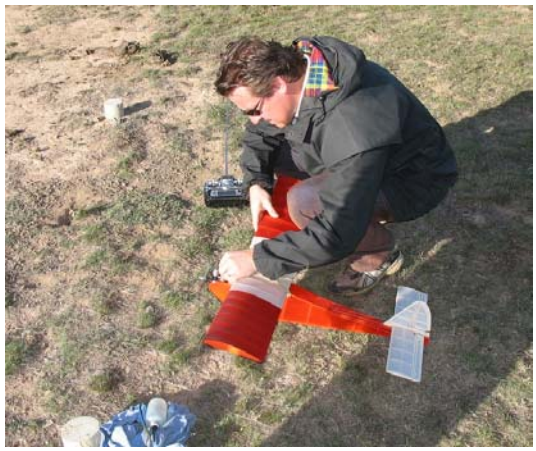
Paul Farthing	Stardust Spec	1019
Robert Smith	Lil Diamond	966
Basil Healy	Atomiser	933
David Beake	Stardust Spec	766
Peter (Condo) Smith	Lil Diamond	556
Peter Scott	Lil Diamond	332
Peter (Canberra) Smith	Valkerie	0 out
Geoff Malone	Lanzo Racer	0 out

Texaco

Peter Scott	Bomber 85%	GB500	1200
Grant Manwaring	Bomber	OS60FS	600
Graham Parkins	Record Break	OS61FS	0 out
Roy Bray	Bomber	TT 54FS	0 out

(Third place awarded on best flight score)

Top: Burford was the only event requiring a fly-off and was flown in the best weather of the weekend.
Above & Right: David Beake from the Belconnen Club had a good weekend - winning Duration with a lot of HP and second in Tomboy with little HP.
Below: The excellent canteen and support facilities again provided by the Yass and Belconnen clubs.



The Internet Craftsmanship Museum Presents:

Mel Anderson

From hot rods and motorcycle engines to innovative model engines

By Tim Dannels, Publisher, *The Engine Collector's Journal*

Mel Anderson made his first model airplane in 1922, powered by rubber. After many rubber powered models, he thought there must be a better way, and in 1919 he made a two cylinder engine powered by compressed air. It was made from brass fishing rod ferrules and is believed to have been the first engine with a front rotary valve.

Mel grew tired of modeling and his interest shifted to hopping up Model T Fords and motorcycles. After a few years of playing with two-cycle motorcycle engines, he thought, "Why not an engine for a model airplane?" In 1932, Mel made his first model engine. It was massive with a 1.125" bore and 1" stroke and an all-up weight of 28 ounces (See Photo 1 below). In spite of its size and age, the workmanship of the Anderson .90 was superb and was a hint of the many fine designs he would later perfect. The cylinder is a well machined iron casting, topped off by a German Bosch spark plug bigger than some of the 1/2A engines he would later build! The piston is cast aluminium with 3 rings. The aluminium crankcase provides for radial mounting only. Automotive points are used on the adjustable timer and the prop hub assembly is a miniature of full-size aircraft design. Carburetion is through a dual throat casting with a throttle and high and low speed venturis. The word "ANDERSON" is cast around the back of the crankcase.

Mel decided that, while it ran well, the engine was too big for practical use and set out to make an engine more suitable for model use. The front rotary intake on the air motor worked well so he incorporated it on his next gas engine. It had a bore and stroke of 7/8" and a displacement of .525 cu. in. Mel, as he did on the large engine, made his own patterns, core boxes and castings. It was all aluminium with a cast iron sleeve. The piston and sleeve were lapped with the fit tighter at top dead center, a trick Mel learned from his Indian motorcycles. It had an updraft carb and is believed to be the first gas engine to use a front rotary valve and a true needle valve. The name "ANDERSON" is cast on the bottom front of the case. The plug was made by AC as a watch chain ornament in an advertising campaign (Photos 2 & 3).

In 1936 Mel teamed up with Bill Atwood to design the Baby Cyclone engines. After a short stay, Bill Atwood left Aircraft Industries and Major C.C. Mosley to begin his own long line of engine designs. Mel Anderson stayed on and took the Baby Cyclones through several stages of development. In 1939 Mel designed the famous Super Cyclone and developed it further through several models. After WWII, Mel started his own manufacturing company. The Anderson Spitfire was the first engine he manufactured. Styled after the earlier Super Cyclone, the Spitfire was more robust and delivered quite a bit more power. These started as .60 cu. in. displacement engines, but switched to .65 shortly thereafter. Mel was very quick to jump on the small 1/2A wagon with his beautiful Baby Spitfire. This was followed by a series of small engines.

As a result of a business partner's wrongdoings, Mel Anderson Manufacturing was closed and all tooling and remaining engines were sold off. Mel then went to work for Gil Henry at VECO where he designed the Series 100 VECO 19, 29 and 35 engines.

More about Mel Anderson and his engines... From a web discussion group archive...

"...the original Mel Anderson 1/2A engine, the .045 Baby Spitfire had a curious origin. In the early 1930's Mel worked with Bill Atwood (America's most prolific model engine designer, responsible for the original Wasp .049 and the Cox Tee Dees) on the first model engines to be manufactured on the West Coast. These were the Baby Cyclones: .36 displacement but about the same external size and weight as the Brown Junior .60's. The Baby Cykes were also the first front rotary valve model engines.

In 1948, three separate approaches to tiny model glow engines were made by Lud Kading and Johnny Bordbeeck at K&B (resulting in the .020 Infant), by Charlie Brebeck aka Herkimer (the OK Cub .049) and by Mel Anderson. To simplify setting the design parameters for his new tiny engine (the term "1/2A" was months in the future), Mel took the easy way out and made the Baby Spitfire's bore and stroke precisely half those of the Baby Cyclone. [JW}]"

More about Mel Anderson can be found at the web site of the Academy of Model Aeronautics (AMA) at: http://www.modelaircraft.org/museum/bio/anderson-mel.pdf.

If anyone has any more information on Mel Anderson or photos of him or his factory, please contact Craig Libuse at the Joe Martin Foundation (craig@craftsmanshipmuseum or craig@sherline.com) and we will update this page.

Mel Anderson Engine Photos.

Photo 1--Mel's first engine was large by model engine standards with a 1.125" inch bore, 1" stroke and 28-ounce weight. This engine belongs to Ted Enticknap.

Photo 2--The first known engine with a front rotary valve and true needle valve was designed by Mel. It had a .875" bore and stroke and displaced .525 cubic inches. The AC spark plug was made as a watch chain ornament for a spark plug advertising campaign.

Photo 3--Another photo of the .525" engine. This historical engine belongs to Bill Simpson and the above photos are by John Morrill.

Engine provided by Tony Pacini, USA

Anderson Baby Spitfire .045 (0.74 cm^3), Manufactured in 1949
This engine was the first small engine design by Mel Anderson. The bypass ports are cut into the cylinder just below the exhaust ports and the transfer channels are formed by a hollow between the steel cylinder and the aluminium spacer ring. The fuel tank is attached to the back with a single screw.
Production started in 1949 and special versions were produced for other companies like American Junior, Wen-Mac and Royal. The complete cylinder assembly, from piston to head was also used in Roy Cox first powered race car, the Cox Special. (Contributed by Martin Hepperle. See his site at: http://www.mh-aerotools.de/airfoils/cox_smallengines.htm for more on small engines.)

A list of engines by Mel Anderson Manufacturing (and all other known manufactures) has been compiled by RJL enterprises. For a complete listing of all known pre-1960 model engines, see their site at:
http://www.mecoa.com/museum/archive1.html

An archive of more recent engines can be linked to from: http://www.mecoa.com/museum/museum.htm.

MEL ADENRSON MANUFACTURING COMPANY

'48 "Anderson Spitfire" .604 ign. - die cast head
'49 "Anderson Spitfire" .645 ign. - as above but longer stroke
'49 "Baby Spitfire" .045 glow - brass head, name on fuel tank
'49 "Baby Spitfire" .045 glow - aluminium head & bypass anodized orange
'49 "Baby Spitfire" .045 glow - no colored parts, no name on tank
'50 "Spitzy' .045 glow - short fuel tank, aluminium head
'51 "Spitzy Sr." glow - long fuel tank, brass head
'51 "Spitzy" .045 glow - long tank, plain aluminium head
'51 "Royal Spitfire" .064 glow
'52 "Royal Baby Spitfire" .050 glow - side exhaust, plain head
'53 "Royal Baby Spitfire" .050 glow - side exhaust, blue head

Anderson Blue Head .65 ign
(High Compression Head)

~~ THE BACK PAGE ~~

RAMROD is the C/L Model for 2010 Vetrans' Gathering at Muswellbrook

From Barry, aka B2.

Basil killed a China Man, 'tis plain for all to see;
Decked his Chief, holed his donk, given Brian pain.
Trust that o'er the winter months
His luck will change again.