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Newsletter
Number 200
May – June
2016

200th Edition of Duration Times!

The first issue of DT in 1985 was prepared on typewriter by Dennis Parker. Issues in those days were mailed - as are some still today. However there have been many changes since the advent of computers and digital cameras. The magazine has been in continuous circulation for 36 years and is as old as SAM 1788.

Over the years the editors have included founding editor Dennis Parker, Bruce Able, Basil and Pat Healey and John Quigley, Ian Avery (issues 53 until 110), Don Southwell, Ian Avery (issues 122 to 192, a total of 129) and current editor Peter van de Waterbeemd. Apologies if anyone has been missed.

Ollie by John Humphreys

The committee has agreed that the Ollie fuselage will require sheeting between the rear of the pylon and the leading edge of the tailplane. This sheeting is not shown on the original plan but is specified in the original article accompanying the plan. This decision is based on rule 5.4.1.2 (f) which states "the contestant must prove the validity of the model and the fidelity to the original design".

See pages 10 and 11 for copies of the original article from Air Trails Sept 1951.

Advance Notice:

1/2A Texaco Postal competition for August 6-21

Oily Hand weekend at Cowra August 26-28 includes Cabin Scramble

Coota Cup September 10-11

WEST WYALONG

16 and 17 July 2016 at the Adrian Bryant Field

1390 Clear Ridge Road, West Wyalong

Saturday, 16th July

8:00am Free Flight Vintage Power contact Peter Scott

10:00am '38 Antique, lunch then Duration at 1:00pm

Sunday 17 July

9:15am Start: Cabin Scramble finishes at 9:45am sharp

10:00am ½A Texaco, lunch followed by Texaco at 1:00pm

All events run to MAAA rules, MAAA membership card to be shown

The early morning starts may be dependent on fog—deal with it on the day.

Note that NSWFF Society will also be flying their events during the weekend

**** Self catering for lunch. Tea, coffee and soft drinks will be available ****

For further information Grant Manwaring - 02 6241 1320

grantandmary7@gmail.com

Duration Times is the official Bulletin of SAM 1788
SOCIETY OF ANTIQUE MODELLERS OF AUSTRALIA INCORPORATED

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Committee Members:		Basil Healey, 02 6651-6563, Peter Scott, 02 9624 - 1262	

Email for Duration Times - waterbee@bigpond.com

SAM1788 Old Timer Events for 2016

July 16 – 17	West Wyalong	AB Field	Grant Manwaring 02 6241 1320
	38 Antique, Duration, Cabin Scramble, 1/2A Texaco, Texaco		
August 6–21	1/2A Texaco Postal Event	Various	Grant Manwaring 02 62411 320
August 26–28	Oily Hand Weekend	Cowra	Andy Luckett 02 6342 3054
	<u>Cabin Scramble</u>		
Sept 10–11	Coota Cup	Cootamundra	Grant Manwaring 02 6241 1320
	<u>Old Timer Glider</u> , Burford, Duration, 1/2A Texaco Texaco,		
October 1–2	Eastern States Gas Champs	Wangaratta	Grant Manwaring 02 6241 1320
	<u>38 Antique</u> , Burford, Duration, Scramble, 1/2A Texaco, Texaco		
Nov 12–13	Golden West Old Timer	Parkes	Peter Smith 0423 452879
	Burford, Duration, <u>2cc Duration</u> , Scramble, 1/2A Texaco, Texaco		



From the President:

Winter is upon us. That was well proven at Tamworth where the weather was very good for flying but cool during the days and cold at night. Have a look at some of the photos from Tamworth.

We were a little down on numbers but this was due to some health related issues for Basil Healey and Grant Manwaring. Basil

unfortunately broke his leg some weeks ago and after an operation he went to a rehabilitation centre at the Bellingen River District Hospital.

For those members who have not heard, there will be no amalgamation of the three NSW associations and the three associations will continue to be represented at the MAAA as members.

It is membership renewal time. For members who join the MAAA as affiliate members through SAM 1788 please note that your insurance cover ceases at the end of June and you must forward your renewal to Paul Farthing ASAP. Associate SAM1788 members must re-join the MAAA through their home club. A Membership renewal form is included with this edition either as a .pdf or as hard copy with the mailed version.

See you at West Wyalong. In the meantime Keep Safe!



Basil Healey as photographed recently by Karen Paton in the rehabilitation centre at Bellingen River District Hospital. He hopes to be able to go back home by 4 July.



Secretary's Report

At this year's AGM, Graham Mitchell raised the issue of first aid kits and immediate response to on field incidents at our events. This was triggered by incidents that required hospital attendance by two competitors at our championships. The committee agreed to address the issue and report back to members on measures to be adopted for future events.

In Duration Times No 199, our editor has introduced a new column "Safety Focus" This will be a regular feature aimed at highlighting the safe operation of our models and safety measures that can be adopted to do this. I have also added Safety as an agenda item for our future committee meetings.

Committee has also asked Anthony Vicary to compile two suitable First Aid kits These will have all the medical items necessary to deal with the sort of incidents we have at our events. The idea for two kits is that they will be held separately by two committee members to ensure at least one kit is available at all our events. These will be replenished as needed at end of year. Anthony has medical background and well suited to this task. Thanks Anthony for compiling these kits.

I have not been able to attend the last couple of flying events as we are currently dealing with a significant medical issue for my partner Mary. This has curtailed travel away from home at present. I am looking forward to attending events later this year.

There is a committee meeting scheduled for the West Wyalong Old Timer Weekend. If any member has an item they would like considered please let me know prior to 11 July 2016.

Grant Manwaring, Secretary

Safety Focus

Fingers and Propellers.

A propeller may be described as a pair (usually) of whirling knives. The blades usually have a sharp leading edge and sharp tips and are very hard compared to the skin on our fingers.

The cuts we receive vary from a single slice where the blades have repeatedly cut the same area through to multiple cuts usually parallel to each other indicating that the hand was moving through the arc of the propeller tip to grazing which will occur if the back of the blade is touched.

The size of the engine does not matter. A Cox .049 will cut you just as well as a larger engine. All propellers are dangerous when the engine is running.

Most injuries occur when the engine is being started and tuned. We reach for the needle valve by moving our hand through the propeller in order to tune the engine. We know that the engine is running and that the propeller is turning but perhaps because we can no longer "see" the propeller and are concentrating on a better tune, we lose our focus and go through the propeller. This usually causes the multiple parallel cuts.

Another instance is when we have our fingers on the needle valve or compression screw and slip of into the propeller. We hear a "propeller strike" on fingers at just about every competition.

What can we do to overcome this? Here are a number of suggestions.

1. First is to approach the whole starting process calmly and in the same tried and proven safe

process. Do as you always do when not under pressure. This process may of course fail during the pressure of competition.

2. The use of an electric starter motor as this removes our fingers from the prop and thus starting is a little safer. However we still put our fingers close to the propeller in tuning. The starter motor also introduces some hazards into the starting process. The lead from the starter motor to the battery can get tangled with the propeller hence cordless starters are safer. Also the pressure required for the starter cone to engage with the engine means that usually one hand holds the starter motor whilst the second hand holds the model with one's arm crossing the disc of the propeller. Probably the best incarnation of a remote starter is Peter Scott's starting cart.
3. Use of a "stick" to engage the needle valve and compression screw to move the hand away from the propeller. The risk here is in the stick touching the propeller and being knocked out of the hand towards a person. The Editor has seen this happen!
4. Use of a remote needle valve installed towards the rear of the engine, away from the propeller.
5. Paint the tips of the propeller white or yellow which will produce an annulus where the propeller is spinning. Very useful on dark propellers as it will outline the disc.
6. Test your engine, glow plug, battery, fuel setup before the event so that pressure situations are avoided.

Wyong Old Timer - May 14 and 15, 2016



Gordon Burford Event

Name	Model	Engine	Score	Fly Off
Jim RAE	Amazoom	Taipan BB	900	612
Peter SCOTT	Zoot Suit	Taipan plain	900	602
Robert RUTLEDGE	1953 Spacer	Taipan plain	900	560
Basil HEALY	Creep	Taipan Tryo	900	497
Peter J. SMITH	Spoofem	Taipan plain	900	478
Bob MARSHALL	Zoot Suit	Taipan plain	900	L/O

Duration

Name	Model	Engine	Score	Fly Off
Robert RUTLEDGE	Playboy	Saito 62 4/	1260	0
Basil HEALY	Megow Chief	YS 53 4/	1200	0
Bob MARSHALL	Playboy	Saito 62 4/	L/O	0

Standard Duration

Name	Model	Engine	Score	Fly Off
Peter SCOTT	Stardust Spl	OS 40H	900	455
Dave BROWN	80% Airborne	OS 40 H	900	431
Peter J. SMITH	Playboy	Magnum 36	900	421
Jim RAE	Lion Cub 125%	OS 40 LA	900	364

Cabin Scramble

Name	Motor	Score
Peter SCOTT	Mills .75	1473
Peter J. SMITH	Indian Mills	1328
Robert RUTLEDGE		1080
Jim RAE	Mills .75	1072

1/2a Texaco

Name	Model	Score	Fly Off
Robert RUTLEDGE	1942 Kerswap	1134	0
Peter J. SMITH	1941 Lil Diamond	1074	0
Garry WHITTEN	1941 Little Diamond	1050	0
Peter SCOTT	1941 Lil Diamond	1047	0
Jim RAE	Big Old Plane	990	0
Ian CONNELL	1941 Lil Diamond	L/O	0
Basil HEALY	Stardust Special	L/O	0

Texaco

Name	Model	Engine	Score	Fly Off
Geoff POTTER	1938 Lanzo Bomber	O.S. 61 4/	1800	779
Garry WHITTEN	1938 Bomber	OS 61 4/	1800	760
Peter J. SMITH	1938 Bomber	Drone D	1708	0
Bob MARSHALL	Record Breaker	OS 61 4/	1131	0
Dave BROWN	1938 Bomber	TTiger 54 4/	L/O	0

Top: Peter and Gail Scott preparing Peter's Texaco Model

Centre: View of the Texaco Pits, Peter Scott again in the foreground

Bottom: Geoff Potter and Basil Healey with Geoff's Texaco Bomber.

New England Gas Champs Tamworth - June 11 and 12, 2016

This event was again hosted by the Tamworth club at their field at Somerton about 30 kms west of Tamworth. The club has put a lot of work into the facilities at the field and now have a large shed, a covered model preparation area (with wood heater!) and toilets. Three vans camped there for the competition and were pleased to be able to do so. Thank you T.A.R.M.A.C. The field was beautifully prepared with smooth grass for the takeoff and landing areas

The weather was very good all weekend, bright sunny, moderate wind but quite cool with the wind chill factor.

The first event on **Saturday** morning was **Gordon Burford** and this was flown in excellent conditions. A field of nine flew with seven models reaching the fly off. Both Bob Marshall and Grahame Mitchell had fly aways with Grahame's model landing in the adjacent paddock and Bob's model recovered on Sunday some 8km away.

Lunch was prepared by Tamworth Area Radio Model Aircraft Club members including Gary Whitten's mother's chicken casserole.

Duration attracted eleven entries. The event was flown in very good conditions with eight models in the fly off. As in many fly offs the models were all up and then quite quickly they all came down.

Sunday commenced with **Cabin Scramble**. Five entries with all contestants enjoying the thrill of skirmish and battle. Reportedly no models or seagulls were harmed in the exchanges, even though one model was launched with the engine running backwards! A lot of fun.

1/2A Texaco followed. The wind was up a little now. Seven entries with only one maxing all three rounds. Well done Garry!

Lunch was again prepared by T.A.R.M.A.C. members again including Gary Whitten's mother's chicken casserole.

The wind came up after lunch but was below the 7 m/s cutoff point. **Texaco** entries were sought and five entered but only four flew. Remarkably all four models reached the fly off with Texaco specialist Garry Whitten again taking first place. In view of the windy conditions the landing area was extended with models allowed to land in long grass in order to avoid being blown over.

SAM 1788 thanked T.A.R.M.A.C. For their hospitality, culinary skills and the use of their field. We were invited back next year. Trophies were presented to place getters after the event. The perpetual Brian Potter Memorial 1/2A Texaco Trophy was presented by T.A.R.M.A.C. president Larry Hoskins to local member Garry Whitten

Top Gun was calculated using the Dave Brown method with Peter Scott third, Peter Smith second and Peter van de Waterbeemd first. Don't bother if you weren't a Peter. The trophy was not presented as it had been misplaced. Trust Karen Paton to remember that it was probably still in Brisbane and it has now been duly forwarded to Eden.

Gordon Burford Event

Name	Model	Engine	Score	Fly Off
Peter J. SMITH	Spoofem	Taipan plain	900	457
Peter van de Waterbeemd	Ollie	Taipan BB	900	450
Jim RAE	Amazoom	Taipan BB	900	427
Peter SCOTT	Zoot Suit	Taipan plain	900	408
Robert RUTLEDGE	1953 Spacer	Taipan plain	900	215
Dave Paton	Stardust Spl	Taipan plain	900	174
Geoff Potter	Spacer	Taipan plain	900	
Bob MARSHALL	Zoot Suit	Taipan plain	0	
Grahame Mitchell	Dreamweaver	Taipan plain	0	

Duration

Name	Model	Engine	Score	Fly Off
Peter van de Waterbeemd	Bomber	McCoy 60	1260	756
Paul Nightingale	Megow Ranger	OS 37	1260	715
Peter J. SMITH	106% Playboy	Profi 40	1260	714
Jim RAE	Playboy	Saito 62	1260	644
Dave PATON	105% Playboy	YS 63	1260	595
Robert RUTLEDGE	Playboy Cabin	Saito 62 4/	1260	547
Peter SCOTT	112% Playboy	McCoy 60	1260	485
Grahame MITCHELL	Playboy	ST 34	1260	
Bob MARSHALL	105% Playboy	TT 46	1203	
Geoff POTTER	Playboy Cabin	Enya 53	1168	

Cabin Scramble

Name	Motor	Score
Peter J. SMITH	Indian Mills	1434
Peter van de Waterbeemd	MP Jet	1417
Jim RAE	Mills .75	1374
Peter SCOTT	Mills .75	1261
Robert RUTLEDGE		1054

1/2a Texaco

Name	Model	Score	Fly Off
Garry WHITTEN	Stardust Spl	1260	0
Peter J. SMITH	1941 Lil Diamond	1166	0
Jim RAE	Big Old Plane	1027	0
Robert RUTLEDGE	1942 Kerswap	988	0
Peter SCOTT	Baby Burd	376	0
Garry WHITTEN	1941 Little Diamond	1050	0
Peter van de Waterbeemd	Stardust Special	12	0

Texaco

Name	Model	Engine	Score	Fly Off
Garry WHITTEN	1938 Bomber	OS 61 4/	1800	830
Peter Scott	1938 Bomber	Cunningham	1800	815
Dave Paton	1938 Bomber	OS 61 4/	1800	782
Peter van de Waterbeemd	1938 Bomber	Saito 65	1800	724

New England Gas Champs Tamworth - June 11 and 12, 2016



Above: Gordon Burford Event: Jim Rae 3rd, Peter Smith 1st and Peter van de Waterbeemd 2nd

Below: Texaco Peter Scott 2nd, Garry Whitten 1st and Dave Paton 3rd. Strong wind made it difficult to hold the models.



Above: Duration Peter Smith 3rd, Peter van de Waterbeemd 2nd and Paul Nightingale 2nd

Below: 1/2A Texaco: Peter Smith 2nd, Garry Whitten 1st and Jim Rae 3rd



Below left: Jim Rae launching his Cabin Scramble model. Grahame Mitchell timing. Gail and Peter Scott at the left of picture..

Below right: Peter van de Waterbeemd refuelling Cabin Scramble. Dave Paton writing down the score.



New England Gas Champs Tamworth - June 11 and 12, 2016



Above top: Heather and Paul Nightingale preparing for duration. Note the heavy clothing for the Queenslanders.

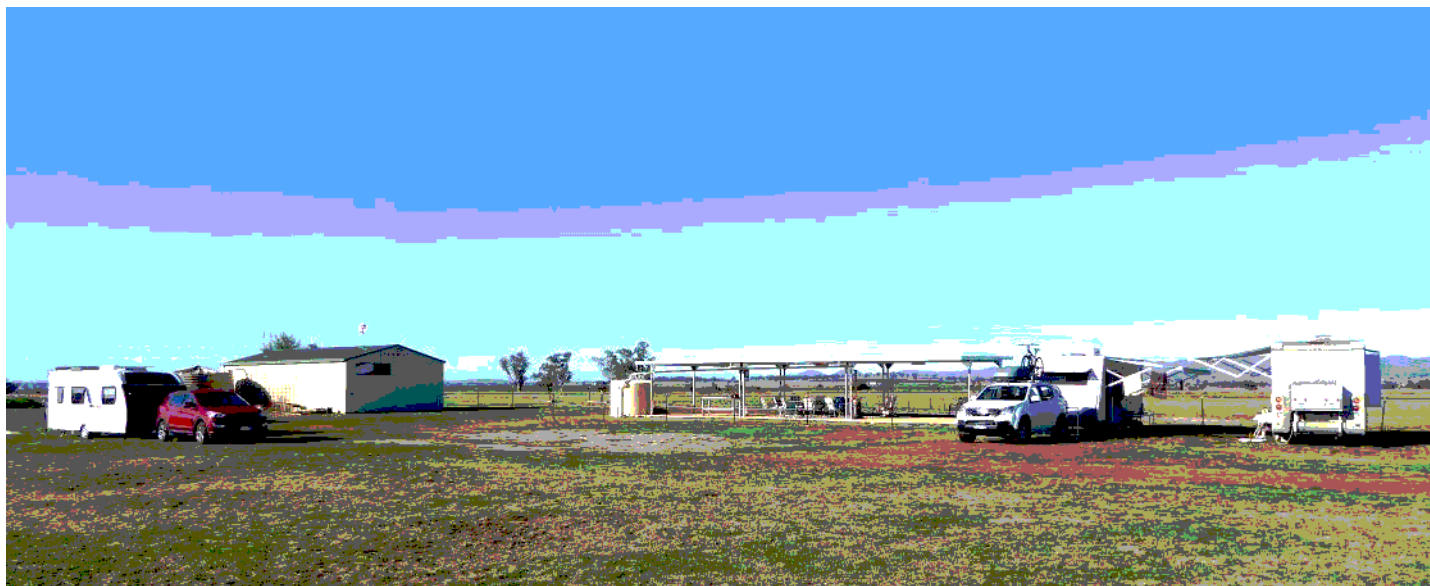
Above Centre: Peter Smith receiving yet another trophy from the president.

Above bottom: Karen Paton and T.A.R.M.A.C. President Larry Hoskins in discussion. Note the fire burning brightly!

Above top: Vice President Jim Rea receiving a trophy from the president.

Above centre and bottom: Gathering of the clans in the afternoon and evening. Power supplied by generator.

New England Gas Champs Tamworth - June 11 and 12, 2016



Views at Tamworth. The very large shed, shelters (much used) and caravans. An excellent facility!
Below: Views to the west at sunset. Photos courtesy Karen Paton.



David Owen's tribute to Gordon Burford, March 2010 - a tribute from one master to another

Gordon Burford (1919 - 2010)

Material with thanks from [Model Engine News](#)



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 modellers. Gordon was known around the world for his engines and modelling expertise, having made several overseas trips to England, France, Italy, and the United States.

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. Prior to the outbreak of WW2, he then trained as an aircraft instrument fitter. 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. Convincing Josie that he could support the family in this manner, he 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 Model Aircraft Association of Australia (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 progressed 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. As a result of these introductions, Australian modellers started to move out into the world. 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 the writer.

Josie passed away in 1998, ending for Gordon a marvellous 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 Air Trails September 1951. Got to love the advert for the Forster engines

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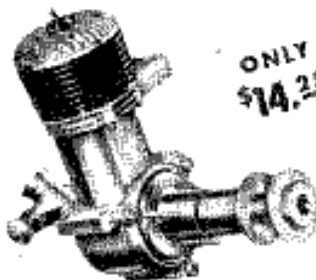


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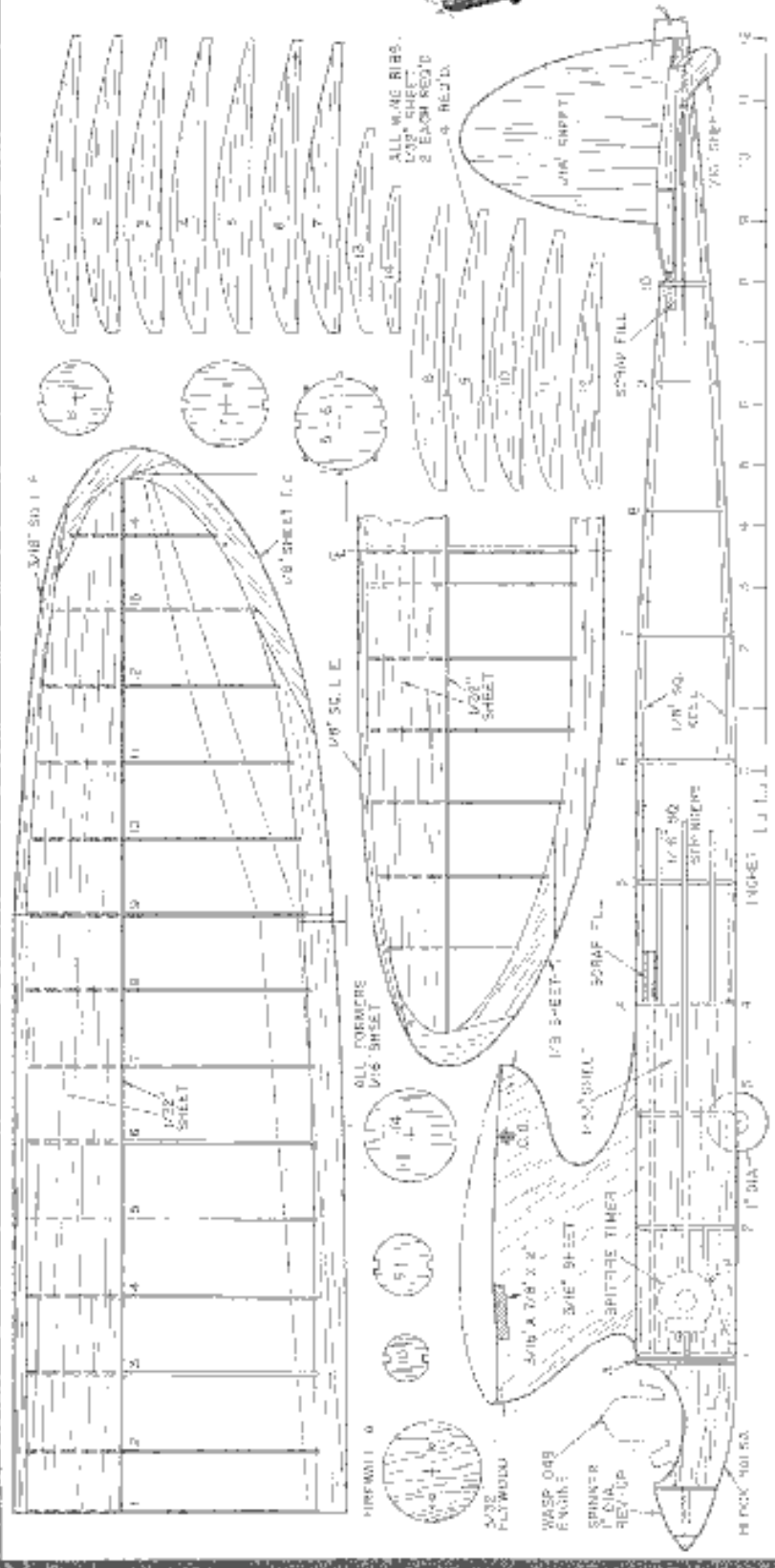
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Ollie

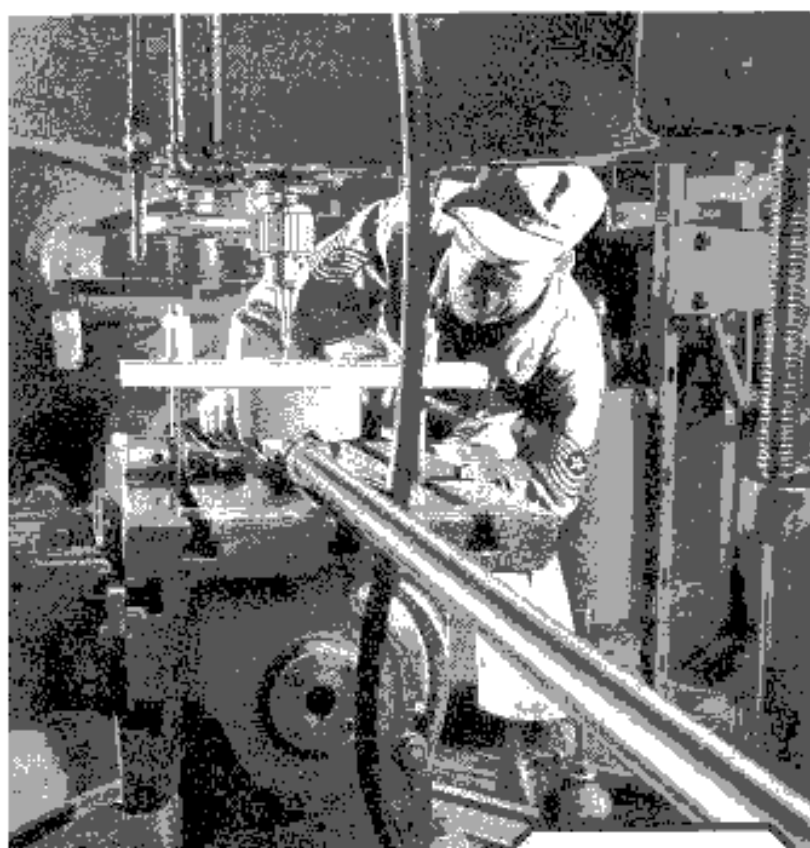
By JOHN HUMPHREYS

■ The aim with Ollie was to get a model that was different from the square wing and tail designs, and square bodies of nowadays, and to have it fly with superior qualities. Two models were made, Bill Mickelson's and the author's. These racked up 2 firsts, 1 second, 1 third, and a national record for the author in only four contests!

Fuselage is built upon a $\frac{1}{8}$ " sq. keel; formers of one side are added while on the board. Unit is removed, formers on other side are added. A $\frac{1}{16}$ " sq. stringer is added to each side from front to rear, then the other stringers are added from #4 to rear along with the pylon. From #1 to #4 is planked with medium hard sheet; bend to approximate shape before adding. The rest is planked with medium $\frac{1}{32}$ " sheet between stringers forming an octagon. Cover entire fuselage with Jap tissue.

Thanks to Bill Mickelson's unique construction idea, we have a light warp free and warp resistant wing. Cut trailing edge, pin to plan. Lay down leading edge, add ribs. Put required dihedral in. Let it dry thoroughly. Cut the soft sheet leading edge (top and bottom) planking and put it on. Don't mix the next step: Put $\frac{1}{32}$ " hard sheet (grain vertical) in between the ribs from top planking to bottom planking and glue well. While glue is wet, pin section to flat board to assure no warps. The stabilizer is made in the same way.

When a smooth glide is obtained, adjust the model for 100 ft. right circle, then for a fast workarow right climb—about $\frac{3}{32}$ of an inch left thrust is added for this.



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"The Glutton" Air Trails November 1951

The Glutton

By FRANK L. PARMENTER

■ Here is a simple Half-A that has nice lines and is a real performer. We decided that the extra couple of hours it would take to build a good-looking model was worth it hence did not use the customary square tips and square stabilizer as common today. The tip and stabilizer outline is simple and actually very little extra work. An eye-dropper in the pylon serves for a gas tank. There is enough gas to start a reliable engine and then hold the model till the gas is down to the proper level to give you the engine run desired.

We have flown this model in all sorts of weather; it has taken all kinds of abuse and is always ready for more. It is a glutton for punishment and gives real performance. Has a terrific climb and an amazing glide. It is a "hot" flyer,

so be careful till you get it right.

It might seem that making a fuselage out of a solid block would be heavy. After it is built, you will see there is so little cross section that actually there's not much fuse to have weight. Use medium-hard balsa $\frac{3}{8}$ " square or two pieces $\frac{3}{8}$ " x $\frac{3}{8}$ " glued together. If the latter, cut out the notch to receive the pylon before gluing together. If $\frac{3}{8}$ " square is used, the notch will have to be gunged on. Curve the blank to a circular cross section after tapering to the proper outline. In the rear, cut out the notch for the stabilizer saddle and glue the $1/16$ " x $\frac{3}{8}$ " x 2" plywood saddle in place. Do not spare the glue at this joint.

Next comes the pylon. Glue two pieces $3/16$ " x 2" sheet balsa together to get the width for the

pylon. On top is glued a piece of $\frac{1}{4}$ " x $\frac{3}{8}$ " x 6" hard balsa. Then glue firmly a piece of $1/16$ " plywood 2" x 3" for the wing saddle. Add small balsa blocks on top of the plywood to form the "V" for the wing dihedral. Make the cut-out to receive the eye-dropper. If you make it a nice snug fit there is no need to glue it. The eye-dropper can then be pushed out of the pylon, tilted up and pushed back in place. A hole is drilled through the fuse in line with the eye-dropper and groove cut down the bottom of the fuse from this hole to the firewall to take care of the fuel line.

We did not use a landing gear, but if one is desired bolt it to the middle of the firewall. The bolt will then come into the hollow of the crankcase. Drill two $5/32$ " holes



Glutton

(Continued from page 11)

curve the spar as the plug, do not worry about it. Just let it take a natural curve. The spars are tapered from root to tip from the tip to 1/32" at the end. Over time space you bend 1/16" square pieces out to fit snugly between the leading edge and trailing edge. You want to keep the bottom surface flat so be careful that it does not spring up. An alternate, if you have trouble in getting the top section of 1/32" sheet, using many very fine...

Cover stabilizer with 1/16" sheet and use the same procedure as oil with top sheet. The rudder is glued between the two outer ribs of the stabilizer. We used the peculiar salt-water covering method of mechanical...

The way of test flying is a fairly straightforward matter. There is here (adjusted the original Glutton...

First try a few hand glides. Gentle means the model dips the wing. Mine had a definite stall in when the model tends to drop away and then come down abruptly. I put a piece of 1/4" balsa under the leading edge of the stabilizer. This started to stall it was enough for a test hop. In your model tends to come down too sharply in hand glides add a little incidence at the wing; however, it is doubtful that you will experience this trouble.

I started the engine and adjusted it to an rich a mixture as possible. When the gas level dropped about on the bottom of the eye dropper. I let it go. It cruised very nicely on the right under power. Around on the verge of coming in. In the glide it still had a tendency to stall. I turned the rudder tab to the left about an eighth of an inch to widen out the turn. As to correcting the stall, I tilted the right side of the stabilizer tip down, looking from the prop.

On the next flight I again ran the engine rich. It climbed very nicely and went into a very fine glide when the engine quit. There was enough adjustment for me. The next flight, the model was really stalling.

If your model has a natural tendency to fly to the left, don't try to force it to fly right. Just reverse the procedure I used on the model and let it go to the left. One direction is as good as another so long as it goes up.

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In accordance with our policy of kitting only the very best of model designs, we are proud to offer this international winner that carried off top honours in the International Power Contest in Switzerland in 1952, besides placing in many National competitions. Winning Frog Senior Cup 1952.

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Motors from Japan

Returning to the U.K. after serving on H.M.S. Glory in Korean waters, Lieutenant D. A. McNaughton, R.N. has given us some good aeromodelling activities in Japan and also gave us a first opportunity of studying Japanese Glow plug motors. Whilst general accessories, props, wheels etc., were sold on a par with the price we pay in Britain, motors are remarkably cheap. For example, the two motors he was kind enough to loan us for examination, cost the equivalent of 22/- and 28/- each.

The smaller of the two motors (MAMIYA) has a nominal bore and stroke of 0.5 in. giving an actual displacement of 0.103 cu. in. or roughly 1.7 c.c. It proved particularly docile to handle, starting readily in spite of apparent lack of compression and running quite smoothly under various loads with the needle valve control proving reasonably insensitive. No full scale tests were attempted but a few torque and speed readings were made. These appeared to be about ten to fifteen per cent down on those figures which would be expected from a good British 1.5 c.c. diesel.

The method of assembly of the MAMIYA was also quite interesting. The cylinder is of steel fitted into a light alloy cylinder jacket, integral with the crankcase casting, Ohlson style. Like

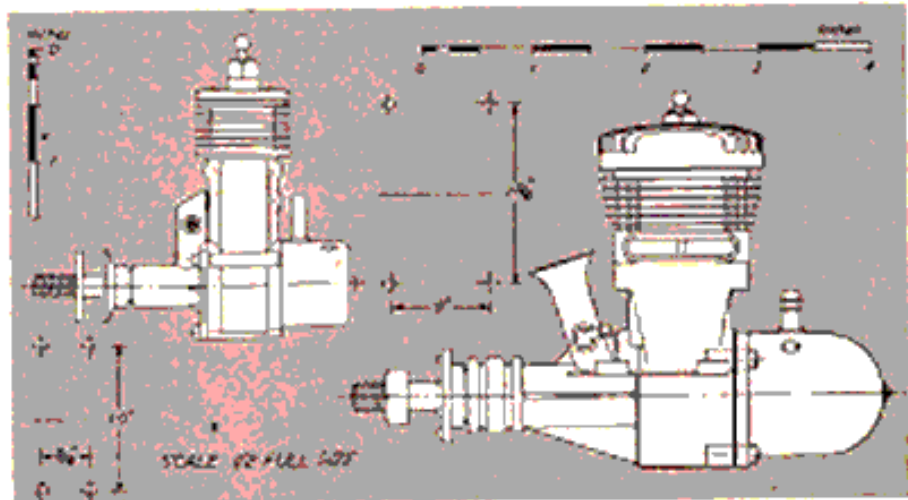
January, 1953

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the Ohlsson, too, the cylinder appears to be held in place by two spot welds. Piston-cylinder fit was tight and the rubbing surfaces well finished, but a slight tightening up at the top of the stroke was noticed, despite the fact that the cylinder diameter is relieved slightly in the space forming the combustion chamber. A separate light alloy head is attached with four screws. The front crankcase assembly is detachable and also held in place with screws. The crankshaft bearing is bushed, the main shaft diameter being quite generous for a motor of this size.

The second motor (OS 29) we assumed to be a 5 c.c. job, although it looked bigger (measured displacement 272 cu. ins.). Despite the fact that it has crankshaft induction it looked a racing motor of the *Dooling* breed. As it turned out it was a fast, extremely powerful motor with a surprisingly high performance. It would probably give any of our current production "29's" a good run for their money. One most pleasing feature is the ease with which it could be started from cold. After a generous prime, with the needle valve in the running position, it started first flick every time. Sometimes it faded after the first burst, however, which could be cured by starting with the needle valve open an extra turn or two and then closing down after five or ten seconds running. It certainly impressed by the ease with which it swung quite large diameter propellers and was remarkably free from vibration.

The whole assembly of this engine is based around a most intricate pressure die casting forming the crankcase, crankshaft bearing housing, intake tube, mounting lugs and cylinder jacket with stub exhausts at the top. Quite a remarkable

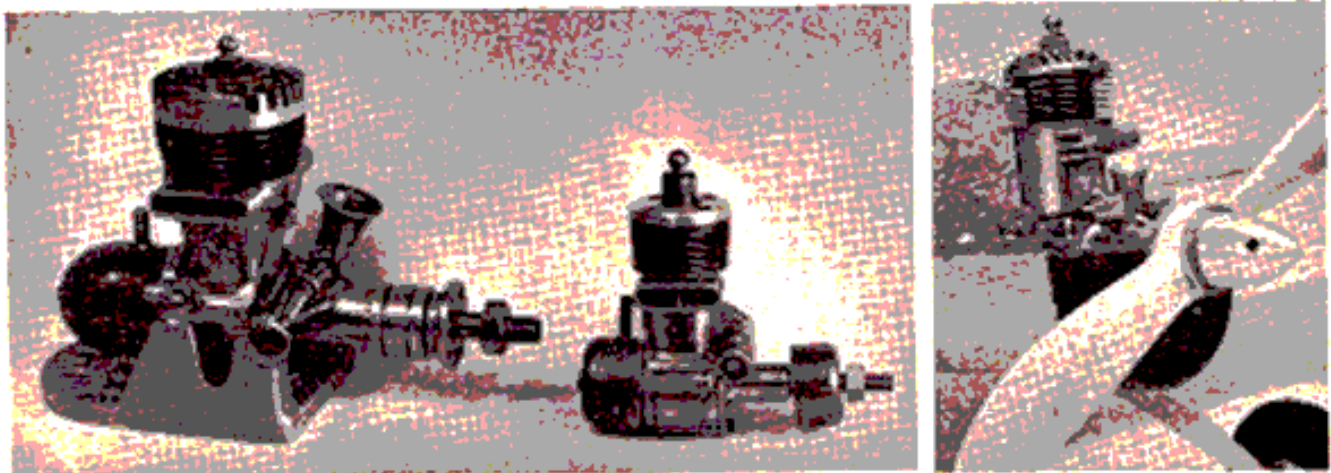


piece of casting, in fact, with the only machining operations involved being reaming or drilling for the bronze crankshaft bearing and cutting two parallel grooves on the front of the crankshaft housing which may, or may not, be provision for the fitting of a contact breaker unit for spark ignition. The method of incorporating the lugs is most intricate and, even with the supporting webs, somewhat doubtful as regards their ultimate strength under impact loads.

The steel cylinder has a large dural head, two screws (and two screws only) passing through the head and cylinder to hold the assembly to the crankcase unit. A further two screws complete the fastening down of the head to the cylinder. The cylinder fits in a rather loose fashion in the crankcase-cylinder jacket casting and relies on the fixing screws for alignment. In view of the obvious power of the engine, this again appeared a rather doubtful point. The head itself was solid enough and some of this weight could usefully have been employed elsewhere.

Summarising we can best "rate" these two Japanese motors by saying that customers would not regard them with disfavour were they available on the European market.

Asp motors below are the O.S. 29, a 5 c.c. radial ported job which comes complete with test stand for 2S; - (in Japan only), the Minicraft 1.2 c.c. (27-2) and at right, the Hope 19, fitted into a R.S. Pacer. Latter weighs 5½ oz. and maintains 11,000 r.p.m. with 7½ x 6 in. prop.



THE BACK PAGE

The three most common military aviation expressions (or famous last words) are: 'Did you feel that?' 'What's that noise?' and 'Oh Shit!'

"A good battle plan that you act on today can be better than a perfect one tomorrow." - Gen George S. Patton

'The three best things in life are: A good landing, a good orgasm, and a good bowel movement. The night carrier landing is one of the few opportunities in life where you get to experience all three at the same time'.
Ready room sign, USS Enterprise, 1969, Gulf of Tonkin

Tower received a call from a crew asking, "What time is it please?"

Tower responded, "Who is calling?"

The crew replied, "What difference does it make?"

Tower replied "It makes a lot of difference. If it is an American Airlines flight, it is 3 o'clock. If it is an Air Force plane, it is 1500 hours. If it is a Navy aircraft, it is 6 bells. If it is an Army aircraft, the big hand is on the 12 and the little hand is on the 3. If it is a Marine Corps aircraft, it's Thursday afternoon and 120 minutes to "Happy Hour".

'When the pin is pulled, Mr. Grenade is not our friend.' - USMC

'If you find yourself in a fair fight, you didn't plan your mission properly.' - David Hackworth

When you're short of everything but the enemy, you're in combat.

'Without ammunition, the Air Force is just an expensive flying club.'

Everyone wants peace - and they will fight the most terrible war to get it. - Miles Kington

You've never been lost until you've been lost at Mach 3.' - Paul F. Crickmore (SR-71 test pilot)

'There is no reason to fly through a thunderstorm in peacetime.'

- Sign over Squadron Ops Desk at Davis-Monthan AFB, AZ.

Look at this carefully...it is a brilliant example of British Humour!

The British government has scrapped the Harrier fleet and on their farewell formation fly...past over the Houses of Parliament they gave the government a message.

Lean back a bit from your computer monitor and squint. Seriously...push your chair back a couple of feet..

My hat is off to the man that was leading this Squadron.



If he is elected, will President Trump **DOWNGRADE to ride on Air Force One?**

<https://www.youtube.com/embed/UZq3iCn2y74?rel=0>

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