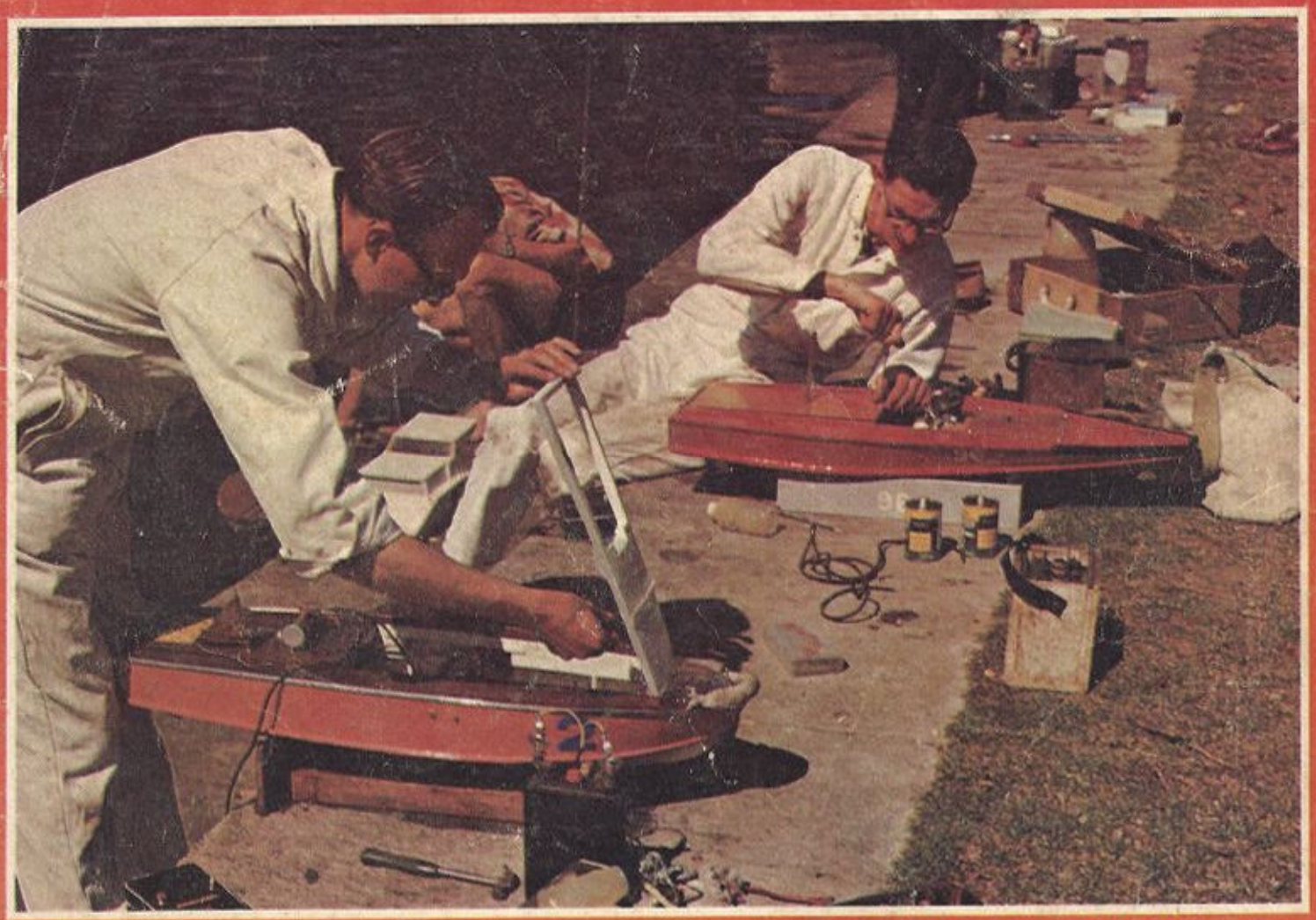
THE AUSTRALIAN

modeller

NUMBER FOUR
35c



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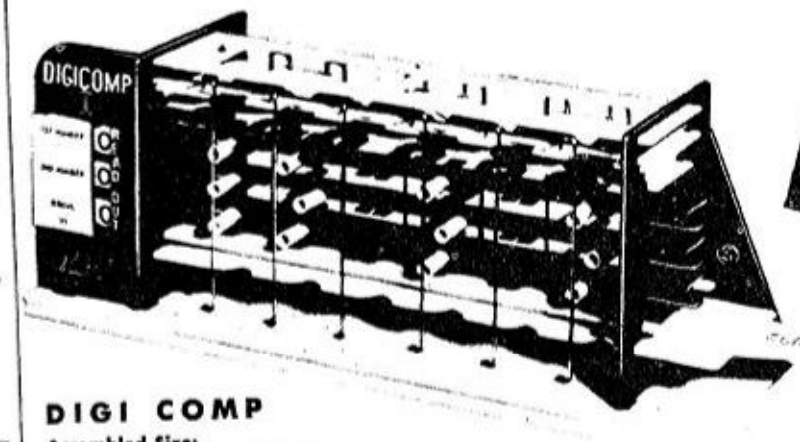

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THE AUSTRALIAN modeller contents

THE AUSTRALIAN modeller editorial

Readers will have noticed that the front cover of this issue has changed slightly from the usual multi-photo format, and we are now featuring one large picture. We feel that the old-type cover, which was chosen to indicate the coverage of ALL types of modelling, has now served its purpose, and that readers are now fully aware that regardless of the cover theme, the contents of AM will continue to cater for all modelling interests.

Also, it will be noticed that the monthly datelines have been dropped in favor of a numbering system. The reason for this is that we will be bringing out issues at six-weekly intervals in the near future, now that printing delays which have plagued us in the past have been overcome.

Model car enthusiasts will notice that this issue is without the popular Trackside Topics column written for us by Barry Beckman. Barry has had a well-deserved promotion within his company, and is now shouldering the burdens of an executive, complete with overseas commitments. This puts him out of the running for any further journalism, and we will miss his contributions. Thanks for all the work you have done for both the magazine, and for car modelling generally, Barry, and good luck

While on the subject of missing articles, in the last issue a request was made for clubs to submit their reports for inclusion in a new Club News feature. Not enough reports were received to warrant such a feature at this stage.

Thanks to the THREE club secretaries that took the trouble to respond, but let's face it . . . there must be a hell of a lot more model clubs than that in Australia!!! Maybe a few club members should ask their secretaries why they didn't bother? Anyway the offer still stands and as soon as the response warrants the inclusion of 'Club News we will print it.

Once again we must repeat that it is impossible to answer individual letters, but we are always interested in hearing from readers with their comments and requirements.

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letters to the editor

Sir,—I would like to start a model aircraft club in this district but the problem is that the population is very scattered as most of the people live on farms. Could you please give me some help in starting a postal club?—Robert Sheppard, Redbank, Arrino, WA 6520.

Bob,—The only way we can help you is by publishing your letter in these columns together with your full address. We hope that any other readers in your district will contact you and help get things under way. Good luck.

Sir,—I have built many plastic models, and go to much trouble to get the correct matte finish where is is required. It is most annoying to find that the decals that are supplied in many kits are glossy and ruin the appearance of the model completely. When are these manufacturers going to wake up to themselves? —Peter Roberts, Williamtown, NSW.

Peter,—Most of the kit manufacturers have got the message, and you will find that the decals in the latest kits are much improved with a nice flat finish. However, this still leaves the problem of the older kits. This is how to go about matting them without overpainting with goo. Before removing the decal from backing paper, rub over with a typewriter eraser until all the gloss is removed. Be careful as some decals are thinner than others. This is a handy tip that really works.

Sir,—I wish to build a collection of wartime RAAF aircraft, particularly those types which served in the Pacific theatre. The problem is the lack of data on insignia and finish. If you are lucky enough to obtain accurate information it is sometimes most disappointing to find that the variant of aircraft to which the data relates is not represented in kit form. In this case conversion is made difficult without basic guide lines. I would be grateful if you could run an article on this subject, incorporating camouflage patterns, insignia positions, etc. Work would be left to a minimum if the subjects were restricted to kits in their standard form. The fact that such data has to be painstakingly searched for suggests that we are unsure of our wartime air force's worth and history.—Larry Cutler, Kingsgrove, NSW.

Larry,—You are not alone in your problem. Enthusiasts all over the world have got together to form the IPMS, or International Plastic Modellers Society for the very purpose of researching such problems and exchanging information between members. The Australian section of this organisation is very active, and puts out most informative news sheets with plans and detailed information on camouflage, etc., much of this being of aircraft that you would need for your collection. Why do it the hard way? To join, just contact W. G. Rowland, 21 Purinvan Road, Reservoir, Vic. 3073. It is $5.00 well spent.

Sir,—I have been having great difficulty in tuning my OS Pixie SC radio. It will operate when the TX aerial is right on top of the RX aerial but at no further distance. It is used in a boat, the Aerokits Crash Tender. Can you tell us what is wrong? —Peter Martin, Woy Woy, NSW.

Peter,—It is impossible to diagnose your problem by post. The trouble could be either the TX or the RX. Your best course is to send all the equipment to Model Dockyard, 216 Swanston Street, Melbourne. They are agents for OS and will be able to tune and adjust the gear for you.

Sir,—Compliments on the new magazine but may I make a suggestion? Many modellers are train and boat enthusiasts, and the July/Aug issue had only two train and one boat article. Your plans are very good but why not boat plans? Could you send me a dealer's address so that I can obtain models of boats or plans of yachts?—Phillip Hart, 38 Sutherland Road, Cheltenham, NSW 2119.

Phillip,—You will find in this issue plans for the latest RAN patrol boat so this should help make you happy. Other plans will be coming along from time to time. Unfortunately we have to cover a wide field of modelling activities but we are doing our best to give all branches a fair go. Try Walther & Stevenson, 395 George Street, Sydney, for your plans, etc. Ken Anderson is a real boat enthusiast and he will give you all the help he can.

Sir,—I have just finished building the slot car chassis as per article in the July/Aug issue and it goes like crazy! I would like to fit a Chev Camaro clear body to it. Could you tell me where I could get one?—Peter Jetson, East Reservoir, Vic.

Peter,—Sorry, but there is no Comaro body available in 24th scale. In any case the wheelbase for this car would be too long for the chassis. Steve Hutchison recommends that you use the Ford Mirage GT, as it is of the correct wheelbase and is wide enough. Villawood Raceways have them in stock at $2.95 plus postage.

Sir,—You continually mention the word "sprue" in the magazine. Could you tell me just what this is and how you use it?—John Appleby, Toowoomba, Qld.

John,—Sprue is the plastic tree that all the bits and pieces are fixed to in a kit. It can be stretched over a candle flame or something similar until it is very thin indeed. Some practice is required, but it is very useful stuff and is quite flexible after cooling off.

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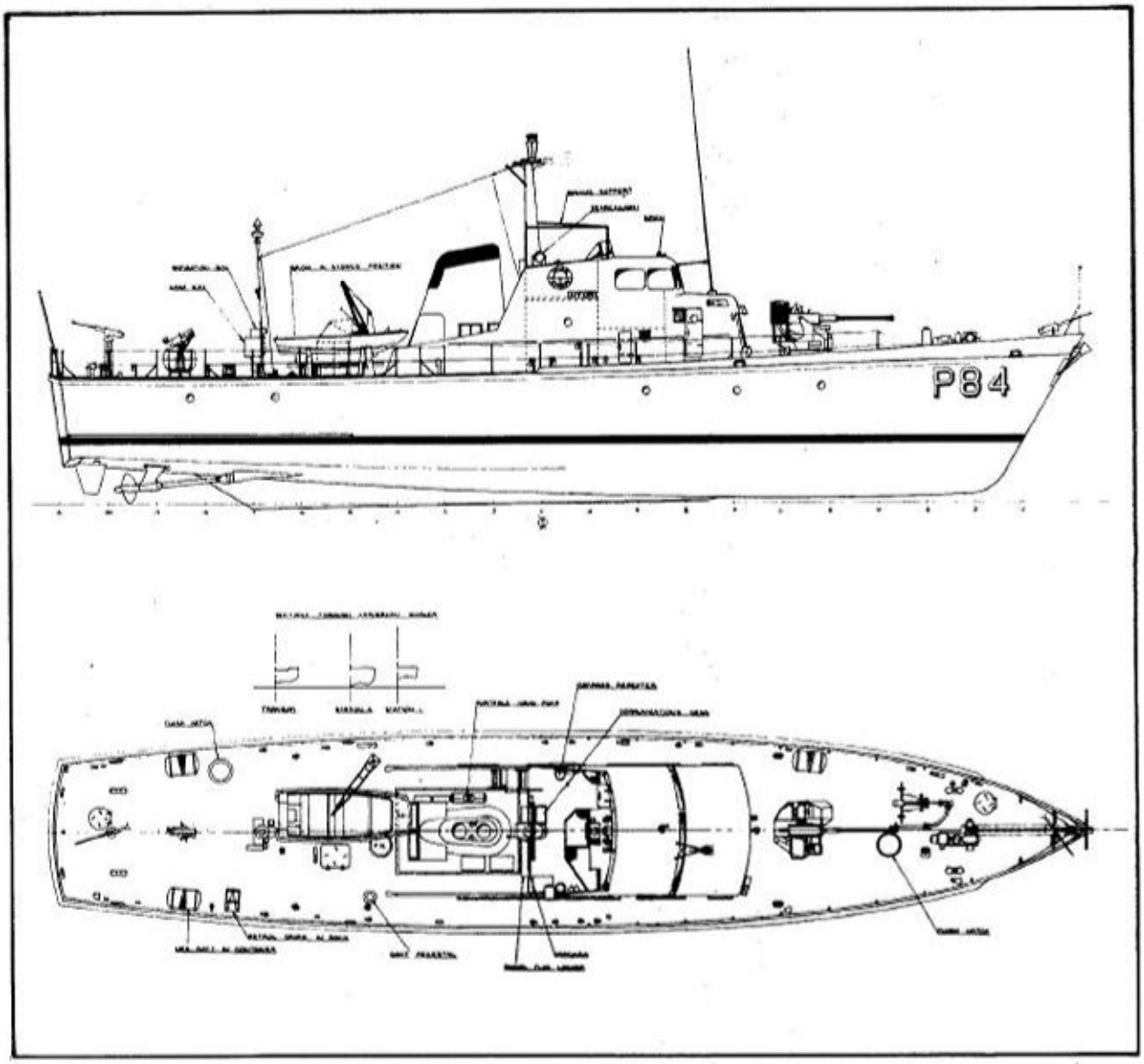

P84

NAVY ATTACK PATROL BOAT

As part of the modernisation program of the RAN, a new type of vessel has been added to the fleet. This is the fast coastal patrol vessel known as the Attack Class. Combining high speed, manoeuvreability, and shallow draught, these vessels will serve around the Australian coast and in northern waters, and will give the navy an added sting.

Twenty of these ships will be in service and will be identical except for the names and pennant numbers.

Thanks are due for help and co-operation in preparing the drawings to Ships Drawing Office, Dept of Navy, Garden Island, and to Naval Architects Office, Canberra.

PENNANT NUMBERS

Attack 90, Archer 86, Aitape 84, Arrow 88, Adroit 82, Assail 89, Acute 81, Aware 91, Ardent 87, Advance 83, Bandolier 95, Bayonet 101, Samurai 85, Barbette 97, Barricade 98, Ladava 92, Bucaneer 100, Bombard 99, Medang 94, Lae 93.

DETAILS OF ATTACK CLASS PATROL VESSELS

BUILDERS — Evans Deakin & Co Pty Ltd, Brisbane, and Walkers Ltd, Maryborough (Qld).

LENGTH OVERALL — 107 ft 6 in.

BEAM — 20ft.

DISPLACEMENT — 140 tons.

SHIPS COMPANY — 2 officers, 16 sailors.

DOMESTIC — Air conditioned throughout all living spaces, all electric galley, deep freeze unit, four refrigerators.

NAVIGATION — Navigation Radar, Trident log, echo sounder, Gyro compass.

BOATS — One fibreglass 14ft Caribbean whaler, three 8-man inflatable life rafts.

ENGINES — Two Paxman Ventura V16 high-speed diesel engines.

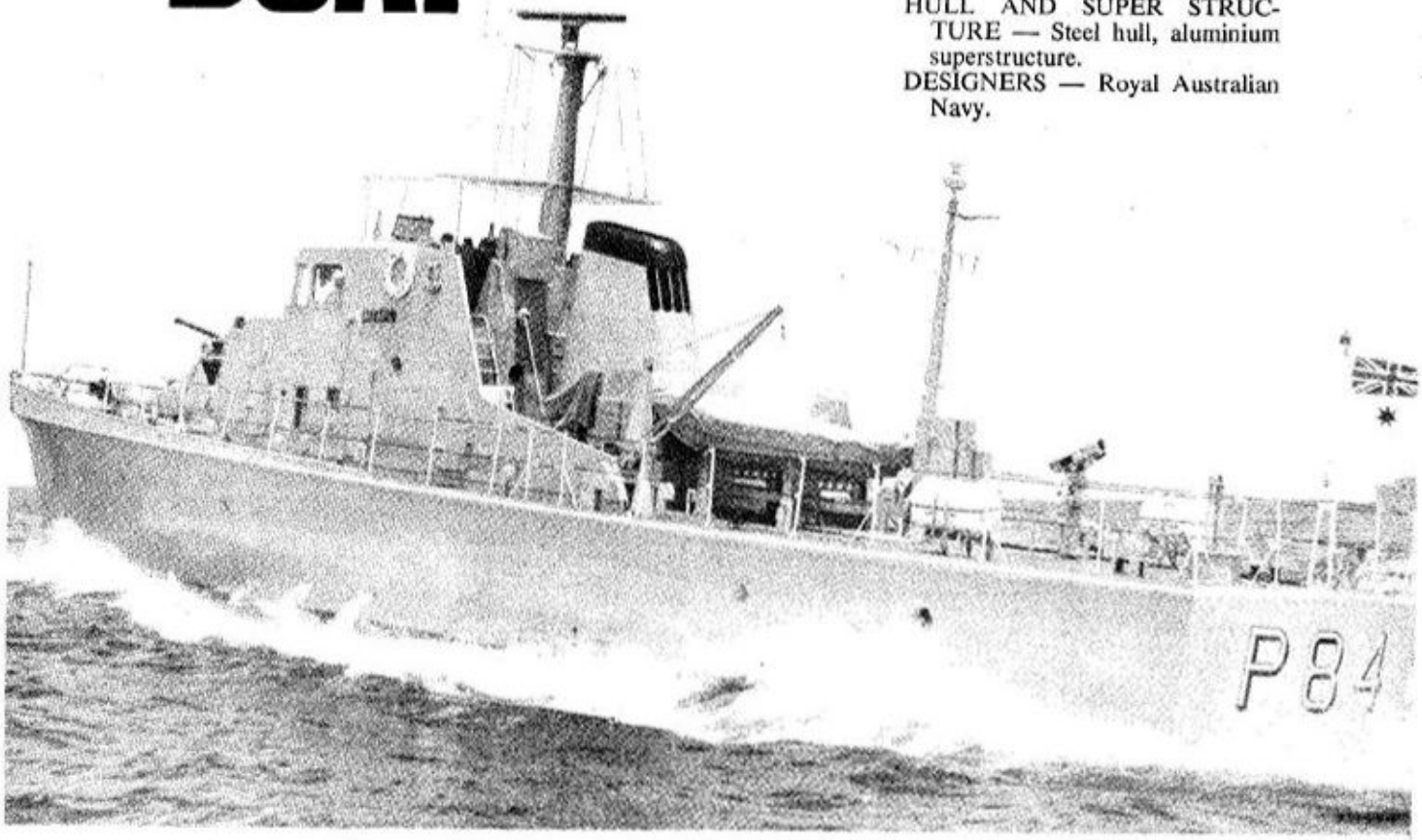
PROPELLERS — Twin screws.

ELECTRIC POWER — Two General Motors/Delco diesel generators providing 230 volts AC at 50 cycles.

ARMAMENT — One 40/60mm Bofors gun, one rocket flare launcher, two 0.5 Browning machine guns, various small arms.

HULL AND SUPER STRUCTURE — Steel hull, aluminium superstructure.

DESIGNERS — Royal Australian Navy.



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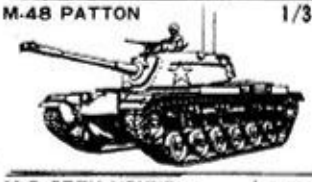
M-48 PATTON 1/35



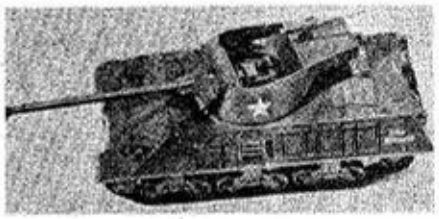
M-8 GREY HOUND 1/35

M-4 SHERMAN 1/35

BIG SHOT 1/21

M-2 GUN 1/21

M-4 SHERMAN 1/21



The Chieftan tank appeared for the first time in 1961 and also caused a great sensation, especially in West Germany and France (Britain's neighbors) for they too were developing at that time their respective main strength medium tank — the "Leopold" and the AMX-30.

The new Chieftain is a superior medium tank equipped with balanced fire and defensive powers. It has a low silhouette, weighs from 46 to 50 tons and is armed with a 120mm main gun, which is reputed to be the most powerful weapon yet mounted into a tank. The subsidy armament of the Chieftain consists of a 12.7mm machine gun, which is aligned on the same axis as the main gun and its purpose is to act as a range finder. Also there is a 7.26mm machine gun which is mounted on the smaller gun turret for the commander's use.

The M36 Tank equipped with a large 90mm calibre main gun appeared in 1943 as an expulsion tank. There were two types — B-I and B-II. The type B-I, M36 tank was actually placed with a 90mm main gun onto a hull of the Type A3, M4 Sherman tank. Thus, a TypeB-I, M36 tank model will be constructed when a gun turret of any Type B-II. M36 model now on the market is put onto the body of a 1/35 Type A3, M4 Sherman tank model. All above models, of course, are Tamiya models.

THIS US ARMY M4 TANK WAS ALSO NICKNAMED "GENERAL SHERMAN" and appeared during the World War II, replacing the former M3 tank.

Its upper hull and gun turret was cast en bloc and its round corners and sides formed an effective defence construction against the enemy fire.

Its gun turret can make a 360 deg. revolution with the aid of ball-bearing and it was equipped with a 76mm gun which can take the 25 deg. angle of elevation and 12 deg. dip.

Also, the tank had a 50-inch (20mm) heavy machine gun at top of gun turret and a 30-inch (12.7mm) light machine gun in front hull. The Sherman carried a strong front hull armor as thick as 80mm.

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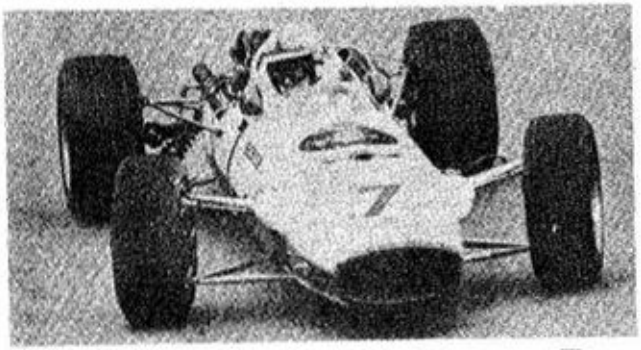

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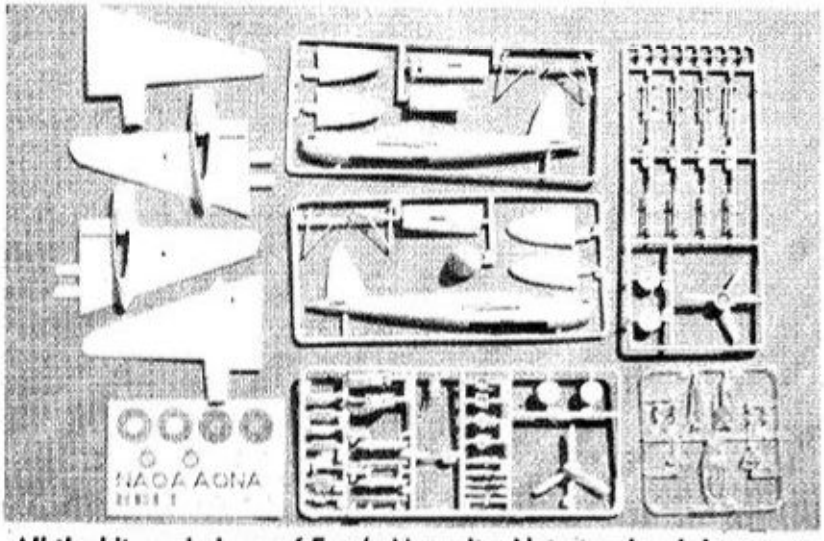
NEW KITS

Whether you like them large, small, or medium, new kits are arriving all the time. Here are three of the latest . . . covering all sizes.

Impact's kits are for the super scaler. How's this Bulldog for detail? And what's more it is all in the standard kit!



All the bits and pieces of Frog's Mosquito. Note two bomb-bays, two canopies, two nose cones, etc.

THREE NEW plastic aircraft kits are in the shops these days and are interesting to look at together as they represent three different scales.

For the fellow who likes to build them big, Revell have extended their range of fine 1/32 kits with the introduction of the Zero. All the features of the previous models are there with highly detailed motor, cockpit and pilot. These large models are a super detailer's dream. (It is quite easy to paint even the hands on the instruments!)

The particular model featured is the one preserved at the Air Museum, Ontario, and much research went into getting the correct colors and markings.

The decals are limited to the one aircraft but are of excellent quality and the correct colors. This model is also featured elsewhere in this issue in the article on reproducing battle damage.

Further down the line as far as scale is concerned is the range of 1/48 models put out by the English firm, Impact. This is indeed a treat for the collectors of vintage fighters.

The range consists of the Gladiator, Bulldog, Fury and the Flycatcher. The 1/48 scale is an ideal "in-between" scale that is small enough to make a collection possible with no display problems, yet allows the detailer to let himself run riot with the extra "bits".

We did not have time to build up a model for ourselves but the fantastic Hobby Shop, which is importing the kits, kindly lent a display model for us to photograph.

The detailing is very good indeed, and the decals are matte and of good quality, although they are rather on the thick side.

Even rigging thread is supplied with the kit, and full instructions on rirring the model are included. At only $1.39 these kits are fine value.

Now to the smallest of the scales, the ever popular 1/72. Frog have really jumped back into the market (sorry about that) with their latest kits.

While always having been around, somehow they just did not seem to keep up with other manufacturers who were improving their kits and ranges continually.

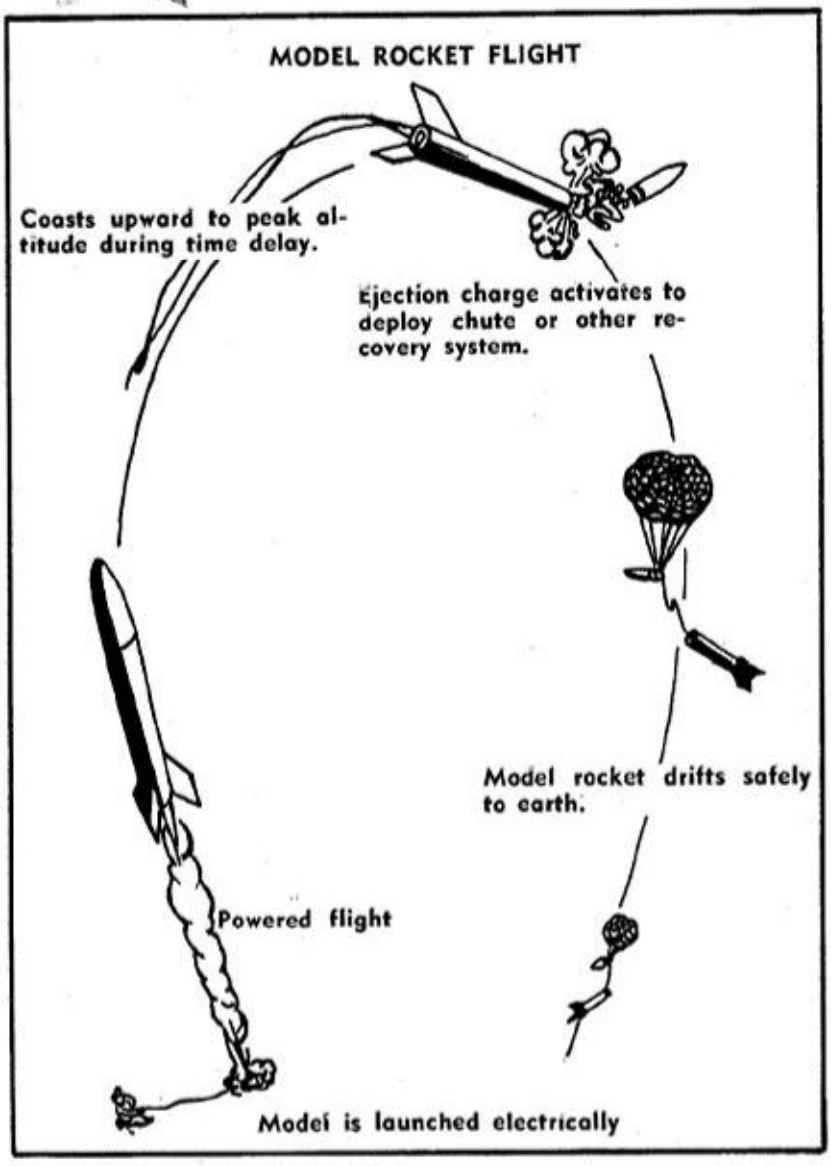
Happy to say that this state of affairs no longer exists. We were lucky enough to get an advance kit of their latest Mosquito, and although once again time did not allow for building, this kit is on the editors' "must" list for later.

A mass of extra parts is included to enable either the Mk 4 bomber of the Mk 6 fighter to be built, and decals are included for both types. The Mk 6 decals are for the aircraft of No 1 Fighter Squadron RAAF.

No praise can be too high for the quality of either the decals or the components, and the color schemes which are shown in full color on the box back shows that someone at the Frog factory is really intent on looking after us modellers from now on.

ABC OF ROCKETRY

GET LAUNCHED on the latest branch of modelling . . . Rockets! This is the first of a series of articles that will give you the low-down on the high-ups!



MODEL rockets are built from lightweight, non-metallic materials such as cardboard, balsa and flexible plastic. Standard modelling tools are used to construct models. By using these materials the rocketeer gains the highest performance from a prepackaged commercial engine.

Designing, building and launching a rocket puts to use principles of physics, maths, aerodynamics, optics, biology, astronautics, electronics and photography. Model rocketry makes normal school studies more interesting and easier to understand.

Most model rockets, though varying in appearance and purpose, use certain basic components. These include the nose cone or payload section, body tube, engine retainer, fins, launch lug, and recovery system. The arrangement of these parts in a working model is shown in the plan. The functions of the various parts are explained in Figure 1. A schematic model rocket flight is illustrated in Figure 2.

Commercial model rocket engines are classified into groups, based on the engine's total impulse. Commercial engines are built free of all metal parts, are extremely reliable and are less expensive than anything the rocketeer could build himself. Engines are tested during manufacture, to keep tolerances as small as possible so that they can be used for contests and exhibitions.

Ignition of rocket engines is accomplished by electrical means. Nichrome wire igniters are usually supplied with engines and are installed as shown in Figure 3. A 6-volt or 12-volt high current source is required to heat the igniter to 1100 degrees. A car battery or four nickel-alkaline batteries usually sufficient.

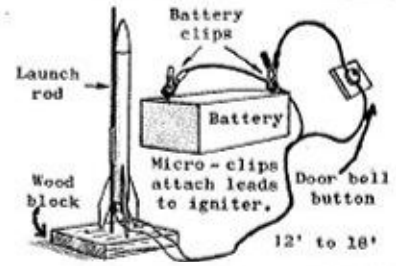
Figure 4 shows a simple homemade launching system. This system uses 18ft of twin 240-volt wire, a push button, micro-clips and a wooden base with a 36in long $\frac{1}{8}$in diameter launching rod secured in it. The launching rod is needed to guide the rocket until it has reached sufficient speed to become stable.

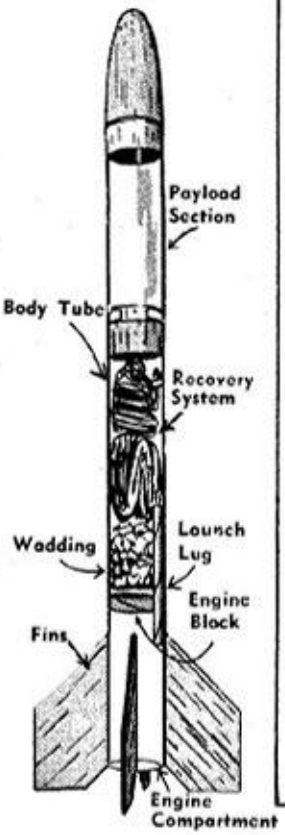
More than one engine can be ignited simultaneously by electrical means. This is accomplished by connecting the igniters in parallel and passing a current of at least 15 amperes through them.

Cluster ignition systems will be discussed in more detail in future editions of AM.

Multi-staging is possible with booster engines now available. A booster engine is simply the basic rocket engine without delay or ejection charge. It automatically ignites the upper stage engine upon burnout. No more than three stages are recommended, because of stability problems which arise. Multi-staging will be discussed in further editions of AM.

Model rockets can be tracked and their altitude determined using trigonometric techniques. As you can see model rocketry is a vast source of learning, and it has been introduced into many schools in the USA as part of the science course.





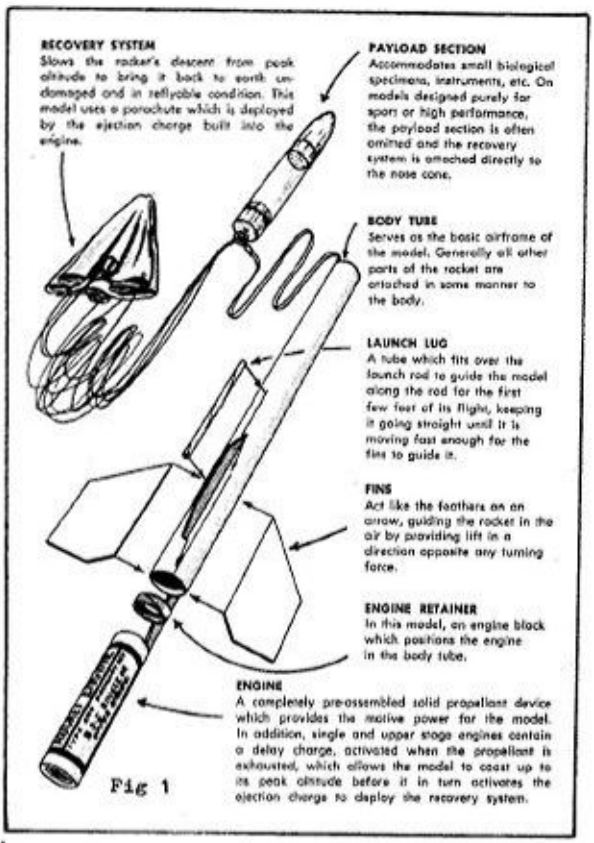


Fig 1

YOU DON'T NEED AN AXE TO CREATE LIFE-LIKE BATTLE DAMAGE EFFECTS

the gentle art of WRECKING!

IN the constant pursuit of added realism modellers are continually seeking new ways of presenting the manufacturers' products. Such refinements as exhaust stains, scratched wing walks, etc, are now quite normal on models built by the ardent enthusiast.

It is true that very few machines, whether they be aircraft, tanks, cars or anything else, keep their neat pristine condition long after leaving the factory, and the addition of the "worn" look does, indeed, help to give added realism.

In this modification I decided to go the whole hog and try to produce not just a slightly worn model, but one that had really taken a pounding by way of battle damage. Having just completed the latest Revell Zero I decided that here was my victim as the large scale would enable decent photos to be reproduced to show the effect obtained.

Far from attacking the model with a knife and hammer I sat down and studied as many photos as I could find of full size aircraft that had been shot down, beaten up on the ground, pranged in accidents, or suffered damage of any kind.

Now here was lesson one. After a while it became clear that a definite pattern was emerging, with certain types of damage being characteristic of the action involved. For instance, a taxiing accident invariably left the aircraft standing on its nose with all the prop blades bent back. A flat tyre was often present. Wheels, of course, would be down, but flaps up, as aircraft are never taxied with flaps lowered.

Where an aircraft is parked and is attacked from the air, almost any type of damage can be applied from a light peppering of bullet holes to almost total destruction.

Once again the flaps would be up and the undercart down, but in this case the undercart can well have collapsed, particularly one leg. The prop blades would not all be bent back under these conditions, as the motor would not be running at the time.

It became obvious that the answer was to envisage the circumstance under which the aircraft was to meet its fate, and stick to the circumstances and add the damage accordingly.

I decided that my Zero was to be clobbered by another fighter and as a result of damage was to crash land, and this dictated the whole exercise. Firstly the undercart was retracted and the long-range fuel tank was removed. Then the air scoop under the cowling was cut away. This resulted in the aircraft looking realistically "belly flopped".

A hot soldering iron was then applied to the underside of the radial cowling to give it a battered appearance and the battered portion touched lightly here and there with a mixture of grey and silver paint.

(This is much better than silver on its own.)

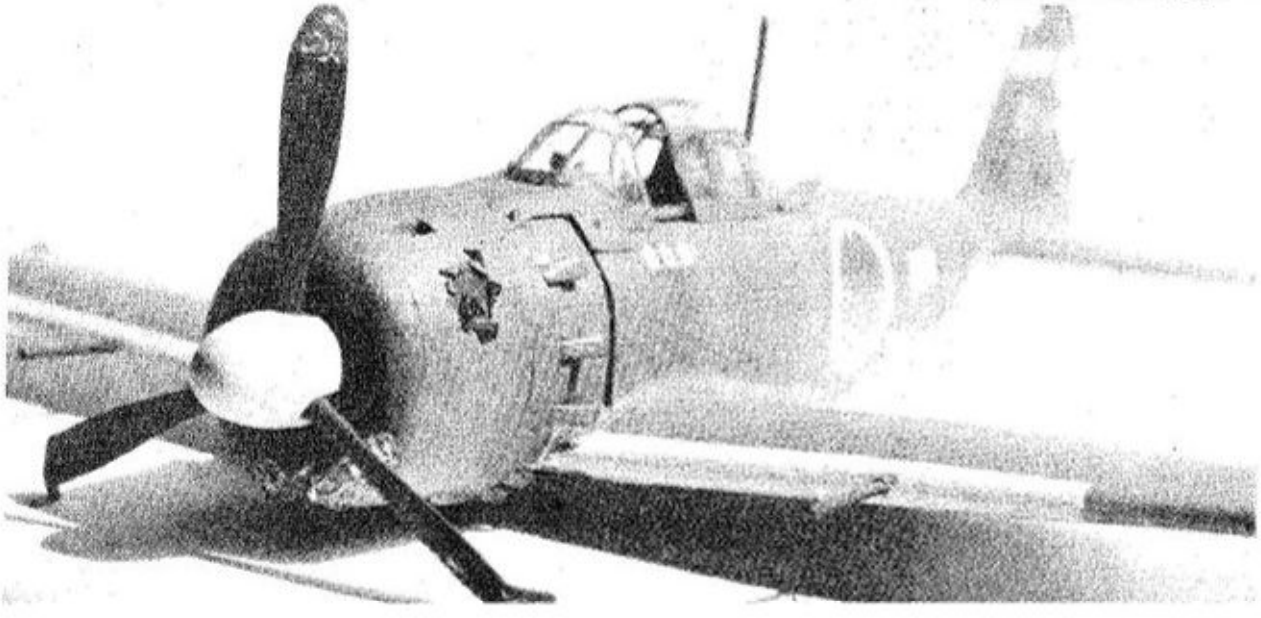
As the motor would at least be "windmilling" on touchdown, all the prop blades would be damaged so these were bent back with the aid of the soldering iron. (Take it easy as you know what will happen if the iron is too hot!) Now the prop tips got the light touch of grey and silver to indicate where the black paint would have been scraped away.

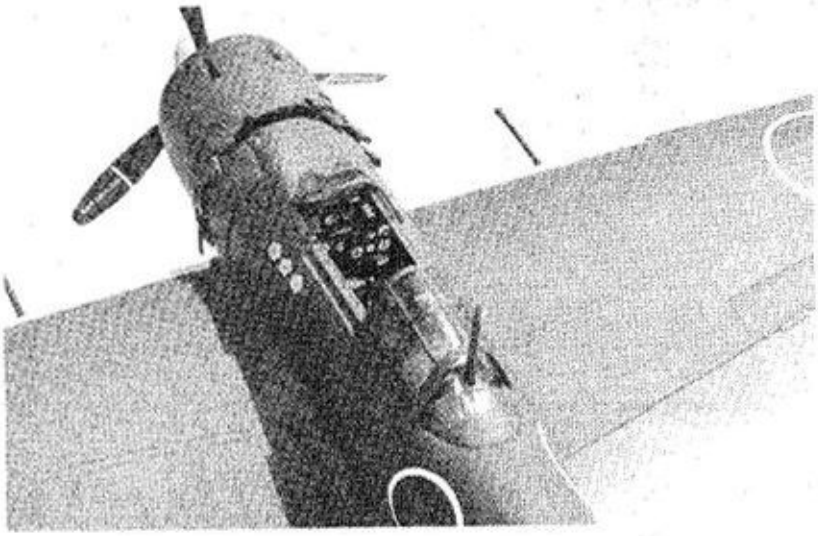
As the plane was landed, the flaps would have been down, so a pair of flaps were built up from thin card and attached in a half down position and slightly bent around to indicate landing damage.

Now to the bullet holes. Various methods were tried such as fine drills, heated pins, etc, but I found that the most realistic method of representing these was to put small spots of the grey-silver paint on the model, and when dry add a matt black centre to the spot. This gives the impression of the bullet hole with the small ring of bare metal around as actually results from a bullet strike. (On fabric covered surfaces such as the controls only a black dot would be used.)

The reproduction of damage done by explosive cannon shells was the next problem, and this was

Continued next page—





WRECKING

—from previous page

solved by pasting on to the plane panels of cooking foil, which, when smoothed down firmly, allow the rivet detail, etc, to show through. When painted the same color it is impossible to pick that an extra skin has been added.

When the paint is dry, use a razor blade to cut a cross in the foil and lift the edges of the foil up and away from the plastic. The result is a nice jagged "hole" which can be even further improved by the addition of a little matte black on the exposed plastic inside.

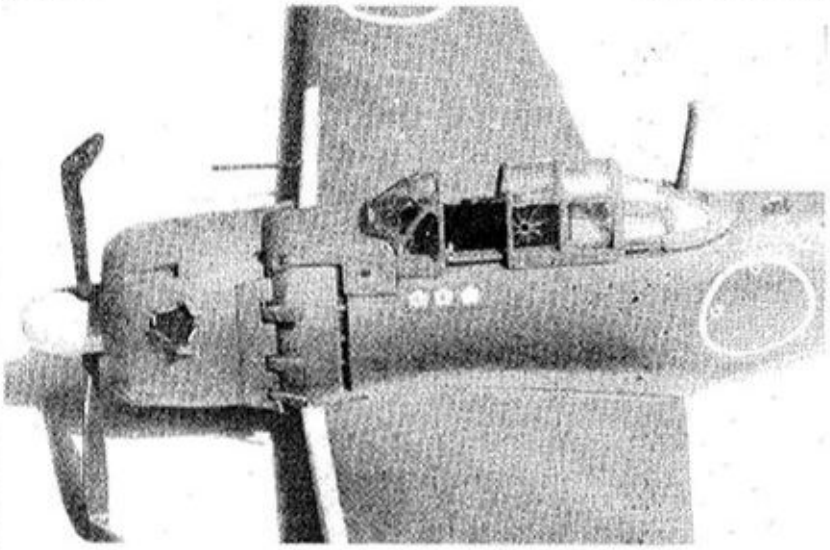
Now a bullet hole was added to the canopy and for this a fine drill was used. A starred effect was obtained by scratching a series of lines with a pin, radiating out from the hole.

Warming up to the subject I attacked the rudder with a razor saw, cutting the whole of the control area away, and using the removed portion as a pattern, built up a skeleton framework to take its place. I used plasticard for this but ordinary thin card would do. It is painted silver-grey and when dry covered with tissue paper.

The tissue is then painted and some of it torn away to expose the framework underneath. The result looks quite reasonably like a torn fabric surface. A notch was also filed into the leading edge of the rudder and covered over with foil. This was then dented in to give a battered metal effect.

The final result, I think, is well worth the effort, as the model does indeed look as though it has been well shot up. I certainly would not like to have been the pilot!

—RAY SMITH.



VILLAWOOD RACEWAYS

51 VILLAWOOD PLACE, VILLAWOOD. N.S.W.

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COMMUTATORS (no blo) suit 16 or 26D motors	
Champion	1.3[illegible]
Mura	1.3[illegible]

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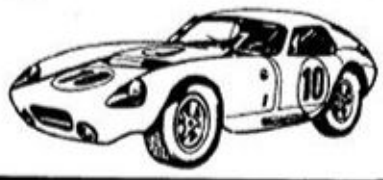


SWANSONG OF THE 35 CLASS

SUNDAY, September 29, saw the end of steam in NSW come one step closer when locomotive 3501 made its final run after more than half a century of service.

Conducted under the auspices of the NSW Rail Transport Museum, the final tour took several hundred passengers, heavily armed with cameras and tape recorders, from Sydney to Unanderra and back. (Photograph above shows 3501 building up speed at Erskineville.)

The 35 class, coincidentally 35 in number, were introduced as passenger locomotives in the latter part of 1914, a product of the Everleigh Workshops.

The engines were a superheated 4-6-0 type featuring 5ft 9in drivers and having a tractive effort of 29,000lb.

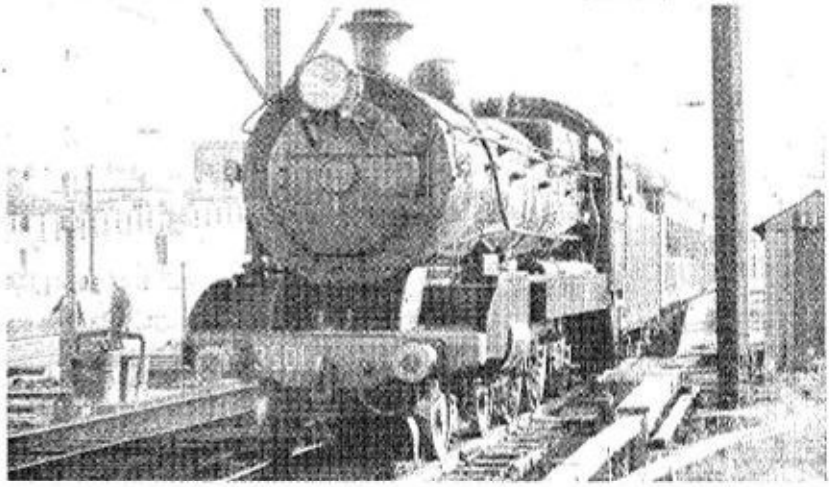
Early photographs show a distinctly Churchwarden appearance and despite considerable alteration over the years, notably to the cab and running boards, a slight suggestion of the Great Western Railway remained to the end.

Towards the end of their service they were mainly confined to the more northern parts of the State.

Fortunately, one representative of the 35 Class, 3526, resplendent in the blue livery of earlier days, has been restored for preservation by the NSW Rail Transport Museum.

—CLIVE HEATH.

Last of the 35 Class passing through Erskineville Station.



MODEL BOATS FOR BEGINNERS

MANY letters have been received from readers asking for advice on various aspects of the boating field, and many of these I have been able to answer personally, giving help on individual problems. However, many of the queries concerned the trimming of power craft to give improved performance, and as this is quite involved, I will devote this article to some practical aspects of the subject.

It is most likely that your boat has been constructed from a kit that was not designed for the very high power motors that are becoming available, and therefore some modifying of the hull may be required to use the extra power to full effect.

A simple and efficient way of lifting the hull in the water when under power (and thus gaining speed), is to fit strips along either side of the hull running from bow to stern. These strips are often referred to as "strakes" and they serve a dual purpose. Not only do they improve the running angle of the boat but they also deflect spray away from the hull and thus assist in keeping motors and radio equipment dry. This is quite important for reliable operation.

The strips should be fitted along the water line or chine of the model (depending on the type of craft you have) and experience has shown that a width of $\frac{3}{8}$" is the minimum effective size, with a thickness of 3/16" giving adequate strength. On large models the width can be increased to about $\frac{1}{2}$", and the thickness also to $\frac{1}{4}$", and the thickness also to $\frac{1}{2}$" to take the increased buffeting.

To allow the strips to follow the line of the hull accurately, it is best to build up from two strips of timber. Glue and screw a 3/16" square strip to the hull and when thoroughly dry add a second strip of the same size on top fixing in the same manner. This will give you your proper sized strake, and is much easier than trying to bend a piece of 3/8" timber.

You should now find that the boat will lift high in the water under power and speed will be much improved, but this is only the first step. We have got the model riding high in the water, but is it running efficiently? In most cases the bow will either be riding too high in the water, causing the craft to "skip" or "porpoise", or it will be riding too low and digging in, thus slowing the craft by "pushing water".

Either of these conditions can be cured by the addition of elevator plates to the bottom of the hull. These plates are of 3/16" waterproof ply and extend the full width of the hull. Two pieces must be used to conform to the "V" shape of the hull, and each piece is tapered to a knife edge at the front. Care must be taken to sand and finish the plates to minimise drag or resistance.

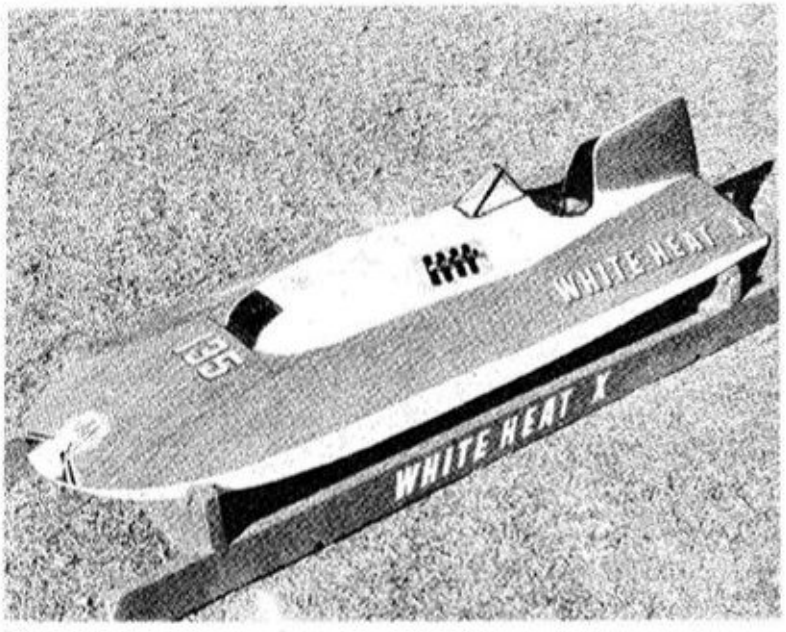
If the bow is riding too high, the correct place for the plates is at the rear of the hull, extending from the stern to a point 25 per cent of the total length. If on the other hand the bow is digging in, then the reverse applies and the plates should be fitted at the front extending from the bow to a point 50 per cent of the length.

If the thickness of 3/16" ply is not sufficient to gain the correct trim then it is possible to add another thickness, but be careful to sand and finish to blend smoothly with the hull.

Another problem which bugs many enthusiasts is instability in the turns. This is usually caused by the hull side slipping and is most prevalent in the case of hulls that are not deep "V" types. A cure for this is the fitting of "slide strips" to the bottom of the hull. These are attached to the rear of the hull as shown in the drawing and should extend forward for about 1/3 of the length. Half or quarter-inch timber should be used, and the front end tapered off to reduce drag. Attachment is by the usual screw and glue method.

If you are still having steering troubles, have a look at the rudder position in relation to the propeller. The closer the rudder blade is to the prop the sharper your turns will be. By moving the rudder further away more gradual control will obtained and the wider the turns. Whilst on the subject of rudders and as a final tip, always make sure that your rudder blade is deep enough to have the bottom of it level with your prop stream. This will ensure a steady control.

—KEN ANDERSON.



Typical high-speed hydroplane fitted with O&R 1hp motor.

HOW TO BUILD A

THE first pilot model of the Sexton was built in Canada in 1942. It was developed from the Canadian Ram Tank, and mounted the British 25 pdr. Gun Howitzer. Although this is a fairly light armament for a vehicle this size, it did allow a roomy fighting compartment, plenty of storage space, and a reasonable performance.

As the Canadian Ram had an identical chassis to the M4 Sherman, a model of the Sexton can be made by modifying the Airfix M4 and using the gun from the 25 pdr. kit.

The first step is to cut the top half of the nose, including the horizontal bolt detail, from hull top, part 43. Then remove the engine compartment section from the hull top by cutting immediatey behind the turret coaming. The hull can now be built up according to the instructions and the nose and engine compartment cemented in place. The two rows of bolts down the front of the nose should be removed as they are incorrect for shape of the nose on this model.

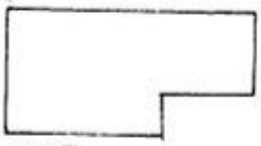
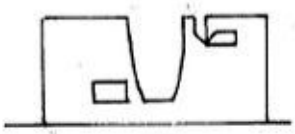


FIG 3.



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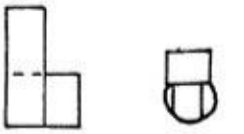
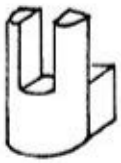
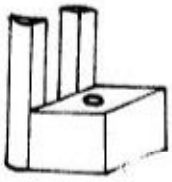


SIDE VIEW

TOP VIEW





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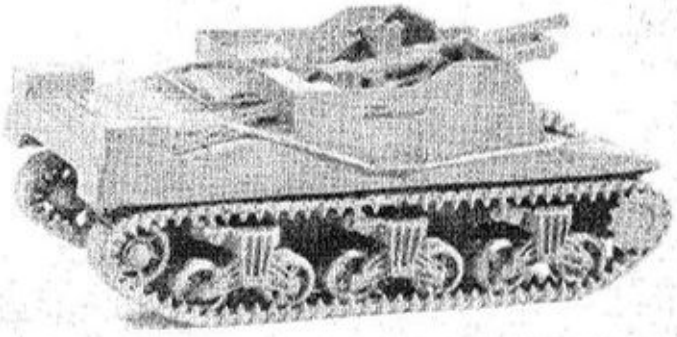
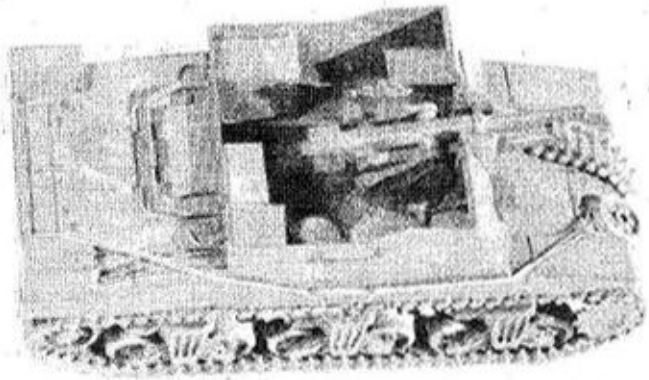




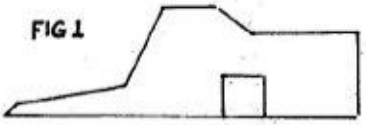


FIG 1

Next, cut out the sides to the shape in Fig. (1) and cement them to the hull. I used 10 thou. plasticard for mine and found that although a truer scale thickness was achieved, there was a step between the new sides and the sides of the engine compartment. This step will have to be removed by sanding down the engine compartment sides. This can be avoided by using thicker plasticard. Make the fighting compartment rear from Fig. (2) and cement it in position.

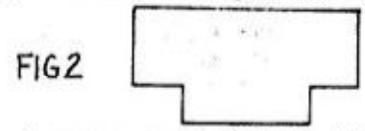


FIG 2

Now cut two strips of fairly thick plasticard 7mm wide and about 20mm long and cement them to the sides of the lower hull (parts 4 and 24). These will support the floor, which can now be cut out and cemented in place. The cutout in the corner is for the driver's seat. A seat from the Airfix M3 Half Track can be used here or one can be made from scrap.

The next step is to cut out and fit the hull front. Care must be taken with this piece, especially with the opening for the blast protector. I used 20 thou. plasticard here, partly for strength, and partly because AFVs carry thicker armor on the front. The glasis plate can now be fitted, butting against the nose housing and resting on the hull front plate. A piece of card 19mm x 10mm will do the job.

The curved blast protector is best made by cutting a length of ordinary pencil as shown in Fig. (5). Behind the protector in this figure a box can be seen. This can be made from plasticard and glued to the protector with a liberal application of plastic cement.

The gun, which is taken from

SEXTON TANK

the 25 pdr Field Gun kit, is used minus the trail and shield and sits on the box mentioned above. A hole will have to be drilled in the top of the box to take the pin under the trunnion base, part 48.

The next step is to build the front mudguards. Cut the inside vertical panels to the angle of the hull sides, and to fit the curve of the nose. The angled part at the front of these panels should be twice as deep as the same section of the hull sides. This allows for the peculiar shape of the front plate of the mudguards. Complete the mudguards by making and fitting the top and front plates, and add a hatch cover, 10mm x 5mm, cut out from paper or thin card, to each top plate.

On each rear corner there is a box, 8mm long and as wide as the sloping part of the hull top. These are 5mm high at the hull corners, and have a flat top. Between these boxes and the fighting compartment there are three guard rails with two vertical supports. On my model I used sprue, which had been heated over a candle and stretched to the right thickness. Thin fuse wire could also be used here, and there is another rail across the rear of the hull. Do not become worried if your rails become broken, or even come off entirely, as this is quite often the case when Sextons carry extra supplies on the rear hull.

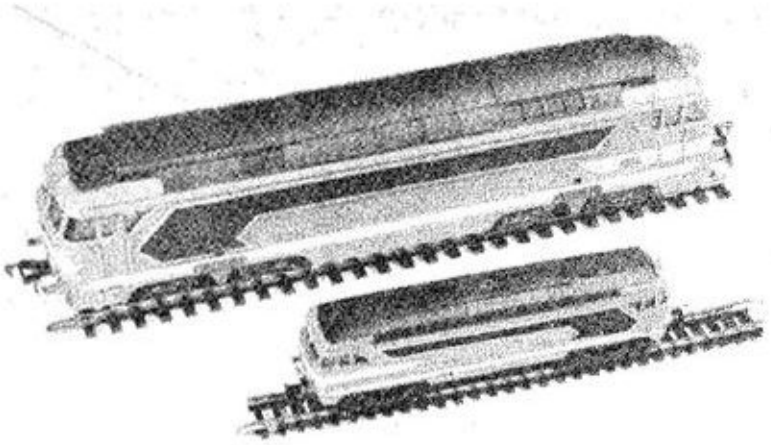
Inside the fighting compartment a map table, 5mm x 10mm, can be cemented against the side next to the gun. In the rear right hand corner there is a locker 6mm square, and next to this another 5mm x 8mm, against the back wall. In the other rear corner there is another locker, 10mm x 6mm, against the hull side. These lockers are about ½mm below the hull top. On the front a vision hatch for the driver can now be added in the open or closed position, and to the left of the gun there is an aperture for the gun sight, which also may be fitted either open or closed. On each hull side there are two grab rails represented by fitting small staples.

All that remains now is to give the model a little character. I did this by adding a spare road wheel and a length of track to the hull front, a tow rope along the side, and a camouflage net (cut from a piece of nylon stocking) to the interior.

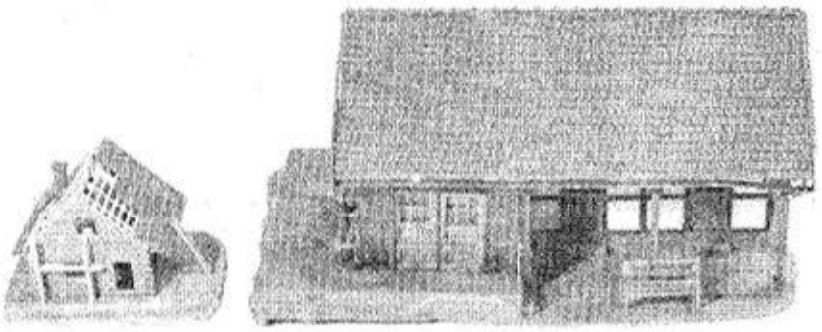
The model could be painted sand for desert operations, or green for use in Europe. Making the model look a little dirty by applying brown paint around the wheels and tracks, and sparingly over the hull improves its appearance, but one can also make a clean model, as it would come from the factory or repair depot.

—C. J. HENRY.

GAUGE THE RIGHT GAUGE



French Diesel in both scales indicates the relative space required for layouts in whichever scale you choose.
HO building on right dwarfs the N guage building and demonstrates the difference in size.



FIRST problem that confronts (or should confront) the beginner about to purchase his first model railway set, is that of choosing the most suitable gauge for his particular needs.

At the turn of the century in the days of steam driven model locomotives and rooms of Victorian grandeur, 0 gauge (i.e. a width of 32mm between the rails) was considered to be as small as any enthusiast could possibly desire. However, in present times of small homes and smaller home units, three lesser gauges are usually contemplated.

By far the most common of these three is OO, known in America and Europe as HO (strictly speaking there is a slight difference between OO and HO but this need not confuse the beginner). OO gauge, popularised some 30 years ago, is 16.5mm and curves of 14in radius are possible, although for best effects from the appearance angle try to stick to larger 17in curves. OO gauge, while being fairly space-consuming (6ft to 4ft is about the minimum area required), offers stock large enough to feature a great deal of fine detail.

Another advantage is that due to its great popularity, past and present, a vast supply of scenic and trackside accessories is available. OO gauge is also of particular interest to the modeller who likes making his own kits, as many plastic and white metal rolling stock and building kits are available at reasonable cost.

The next gauge to consider is TT which is 12mm between the rails. TT gauge had a brief period of popularity some years ago as an attempt at space saving. Unfortunately the percentage of space saved is not really enough to warrant the resulting lack of detail. Although TT gauge loco sets and rails may still be found at some retailers, a good selection of accessories is very hard to obtain and new items do not appear to be forthcoming.

Possibly the real reason for the failure of TT gauge was the advent of N gauge—9mm between the rails. This gauge, which has swept the modelling world in the last two or three years is small enough to enable a quite reasonable layout to be fitted to the top of an oblong coffee table. The leading brands of N gauge at present available in Australia are Lima, whose models prefer quaint backwoods type layouts.

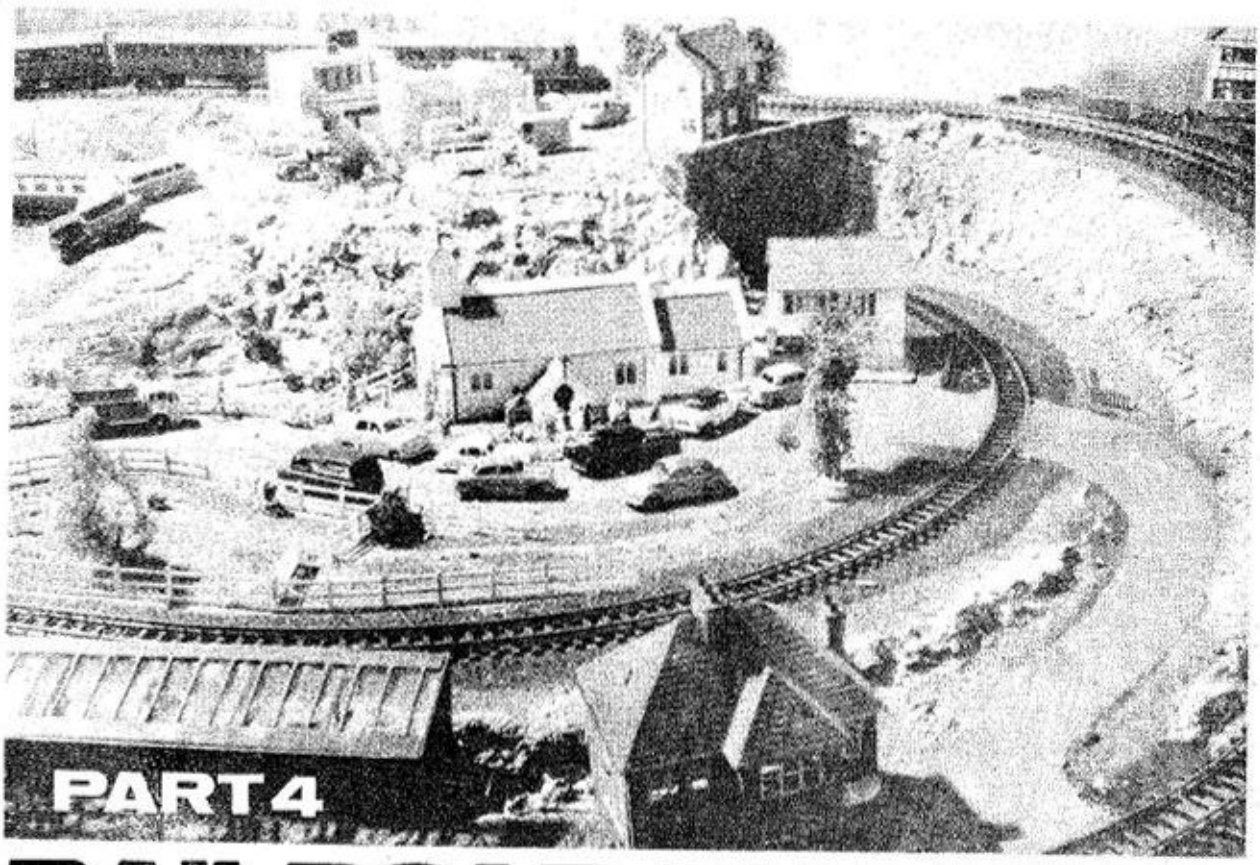
Incidentally, contrary to what you may expect, N gauge items of rolling stock are often somewhat more expensive than the equivalent in OO.

Briefly the situation can be summed up thus: OO gauge, space consuming but capable of showing a great deal of detail; N gauge, space saving but less realistic.

The accompanying photograph shows a Triang OO gauge locomotive compared with Lima N gauge type.

Regardless of choice, either gauge is guaranteed to give you many hours of interest and pleasure.

—CLIVE HEATH.



RAILROAD BUILDING

THE main difference between a model railway and a toy train is scenery. This aspect of your model railway makes the biggest initial impact on any viewer.

The term scenery includes mountains and hills, buildings and accessories. It should be planned in broad terms, along with the track layout, but the detail can be left until the track is laid.

Obviously where the line has to travel above or below the baseboard surface such as a river, or viaduct, this has to be included in the baseboard construction — but a lot can be done to make even a flat table top realistic.

Above all, remember this is easy. Anyone can improve on a bare baseboard; try it and you will be amazed at the result.

Crumpled newspapers and odd small cartons are useful to distribute about the layout to give you an idea of the effect that a hill, embankment or building will give in certain location.

Move them about until you are satisfied with the general effect and then draw the approximate locations on to the baseboard.

Remember to plan for and allow plenty of clearance for your trains. A maximum margin allowed should be one inch. Scenery has a tendency to fill available spaces and an encroachment on the "right of way" means sawing a hunk off and starting again.

Here is a quick method of making hills and other natural features. You will need:

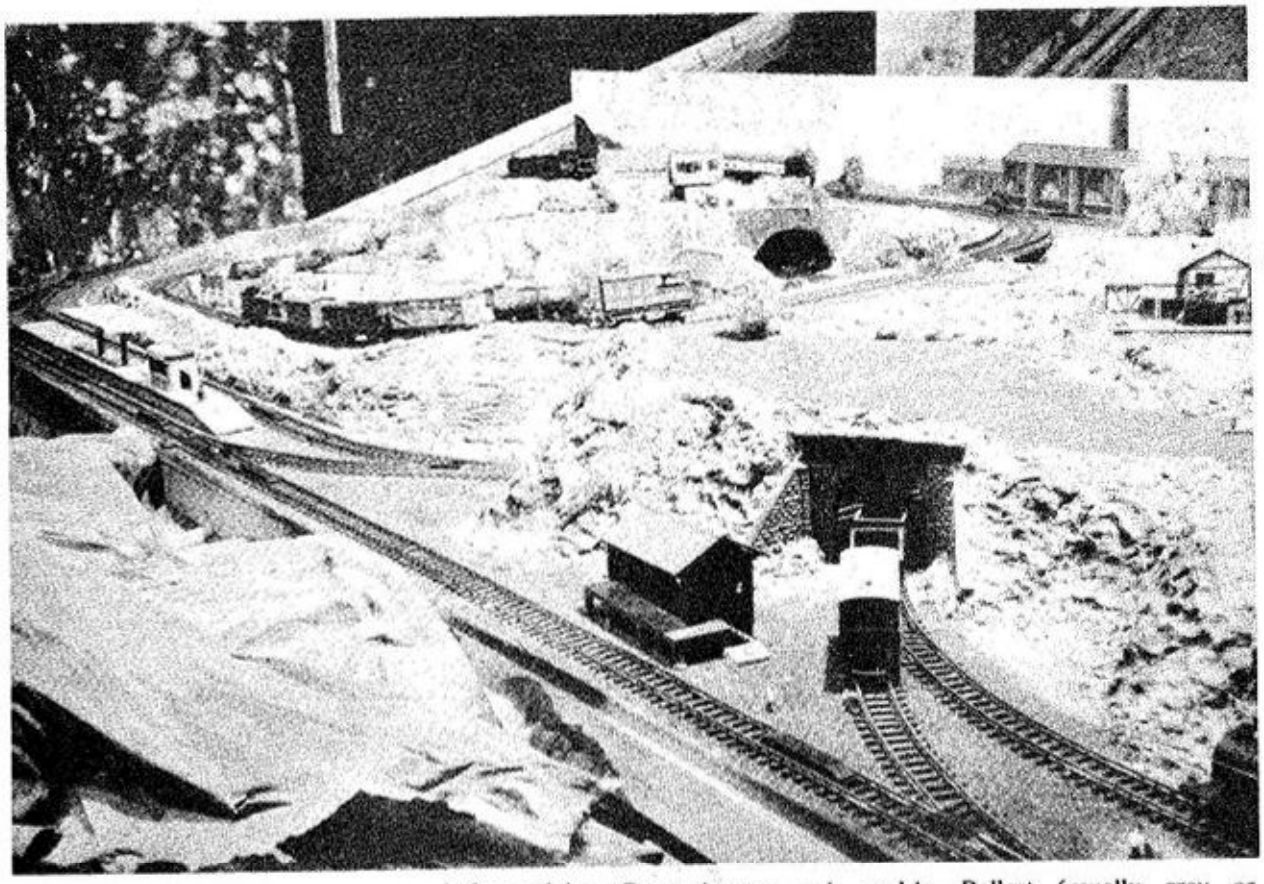
1. **A bucket or bowl**
2. **Water**
3. **A cheap brush approx. 1"**
4. **A spatula**
5. **A small piece of board (for use as a mortar board)**
6. **A quantity of clean rag (or unbleached calico will do) cut or torn into squares approx. 3"x3"**
7. **A packet of Fantascene (basically a powdered plaster, but with additives to retard the setting time and resist cracking, shrinking and chipping.**
8. **Rubber gloves (if you wish to avoid plaster under fingernails and cuticles).**

(a) Place about half the quantity of Fantascene you need into the bowl.

(b) Add water and stir until the mixture resembles a stiff dough, with no dry powder remaining. If you make it too wet add more powder; this is why you start with half quantity. The amount of water will vary according to the amount of humidity on the day.

(c) Crumple slightly dampened newspapers in balls and stack into approx. height and shape of your feature. Sticky or packing tapes can be used to secure it if necessary. When the structure is dry this can be removed from the back or from underneath if you use an open frame work baseboard. The resulting shell will withstand quite hard knocks once it is dry, and it is completely self supporting. No elaborate carpentry is required.

(d) Place some cut squares of dampened cloth in the bowl and squeeze the mixture through the material until completely covered. Wipe off the excess through your fingers.



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(e) Layer the material, starting at the bottom of your hill and working around and towards the top, over your crumpled newspaper form. You should overlap the layers and smooth down the joins as you go. Add surplus plaster where required to build up the texture of your hill; a dampened brush will provide water runules and your spatula can be used for shaping and forming.

Alfoil can be moulded around actual rough rocks to form moulds for Fantascene. When dry these realistic moulded sections can be plastered on to the hills to form cliffs. Make sure this is done in a natural manner: See the way real rocks run in layers, weather worn though they may be.

Don't worry about exact scale when modelling natural features. A hill 500ft high would have to be about 7ft in HO/OO scale. We are trying to present a realistic picture, not a model Everest.

COLORING:

Drycolor (available from art stores) can be added to the plaster before mixing. Greys, browns and greens are best but they will require mixing as they are available in primary colors, and we must try to avoid brilliant shades, particularly as base colors. If you wish to brush paint after the scenery has dried, use either poster paints or flat enamels. These should be thinned to about two parts of thinner to one of paint. I use a lot of pressure sprays on my layouts, because they bring out the texture very well. Their cost is compensated by the speed of application.

Use color to heighten perspective on your layout. Darker shades to the back and lighter colors to the front will add depth. Bright colors at the back tend to rush forward to the eye and destroy our illusion of distance. Bright colors can be used to highlight certain areas, and draw the observers' attention.

Over use will result in a Disney-like effect, and maybe your visitors won't even notice your trains. Scatter material is available in several brands — most of it very brightly colored. Exposure to dust and sunlight soon fades it and it is very useful to represent grass and weeds. Use the finer varieties for lawns and the rough for paddocks and weeds. Ballast (usually grey or brown grey) is a must to make your track realistic. Selleys Aquadhere is a good adhesive for this purpose as it is readily thinned with water when applying the material, but appears resistant to it when it has dried.

Trees can be bought commercially, or made up from lichen, wire, sticks, sponge, foam plastic, tea leaves, cotton wool, steel wool, and many other materials. A full discussion of this subject could be an article by itself.

BUILDINGS AND ACCESSORIES:

I intend to say more about these in a future article. However, suffice it to mention here that many plastic kits are available, and a careful selection of what you need should be possible in HO/OO, TT and N scales. Scratch building from balsa, card plastic, and embossed card is another very rewarding aspect of model railways.

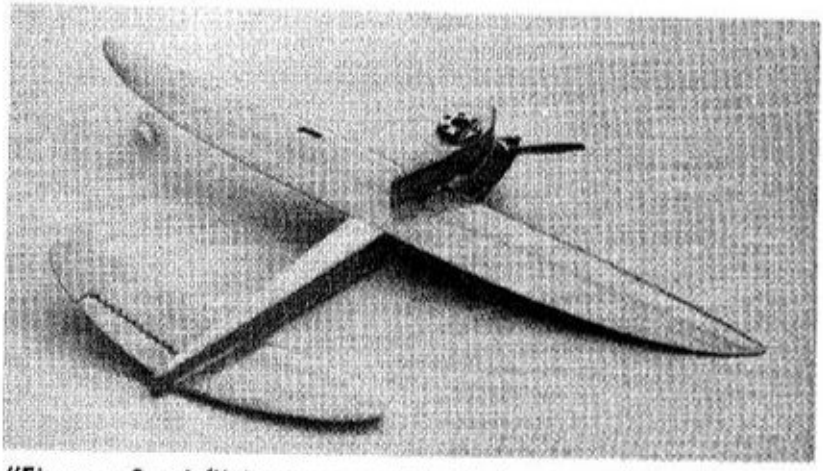
Scenery turns a train set into a model railway, and doubles the pleasure that you will obtain from it. You will be proud to demonstrate your layout.

SPEED FLYING

BUILD YOURSELF A SPEEDSTER!

Jack Finneran has long been known for his activities in the world of modelling. His greatest fame comes from his ability to coax extra horses from stock motors, and this is the reason that he is still such a well known speed man.

In the days when A Proto was popular this was Jack's answer. Power was Torpedo 15R.



"Finneran Special" that impressed the Yanks so much that it became a resident of the USA.

LET'S START by saying that the engine is the single most important factor in the quest for record breaking speeds as from model aeroplanes; so let's decide which class we wish to fly and then secure a suitable engine.

The brand names you should keep in mind are K&B Torpedo, Super Tigre, Rossi—these are the top speed engines which are available to some extent in Australia.

Having secured an engine suitable to the class you wish to fly, be it FAI, B or C, you will be well advised to lavish large amounts of the TLC factor on it if you want to secure top performance.

TLC—do these three letters puzzle you? They shouldn't, as you should apply them to just about everything you do every day, that is if you have any pride in the things you do. If you wish to secure top speeds from your engines then you had better give them your Tender Loving Care.

I am of the opinion that for best results and a longer useful life all speed engines should be given a protracted break in period on the bench. You should use heavy low pitch propellers and allow the engines to turn fast but with a rich needle setting for at least the first half hour of running. Use 80% methanol and 20% castor oil for fuel and run approximately three to four minutes, stop and let them cool off before starting again. This stop-start running is necessary to secure good break-in and will speed the process considerably.

Continued next page—

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It is also suggested that after the first couple of tankfuls, the engine be dunked in a can of kerosene and washed out thoroughly to remove any metal particles loosened during the early running stages, as these particles can only cause harm.

If you are going to fly FAI speed, the engine should be given about another hour of stop-start running on the 80-20 fuel, and should be leaned in to peak revs by the time this additional hour has been run. It should now be ready for flying.

Nitro engines, that is the 5cc and 10cc classes, should be given about an hour to one and a half hours running on low percentage nitro fuels, increasing to higher percentages towards the end of the run-in period. These engines can be considered to be run enough for flying only when they will take a fully peaked high speed run on the flying prop without sign of seizing or over-heating.

Remember at all times before high percentage nitro fuels are used the engines have to be loose enough in the piston cylinder pit not to generate heat and so seize up and damage the engine.

The biggest single destroyer of engines in flight will be due to a too lean needle setting, so when you fly, err on the rich side for a start and gradually, very gradually, lean the engine to top speed running. Once in the air you can't save that engine from destruction if your needle setting was too lean.

Having decided your engines are loose enough for the job in hand, put them in a speed pan, couple a suitable tank to them, attach the appropriate prop and practise starting and needle setting. Practise this routine religiously until you are completely familiar with the combination, because your ability to know your engine will help considerably in your quest for top speeds from it. Keep it clean at all times. The kerosene overhaul is very important; dust and grit are your arch enemies as they can destroy an engine or cause a fuel stoppage, cutting off a top speed flight. Don't let these things happen to you because of laziness or carelessness — remember the TLC factor.

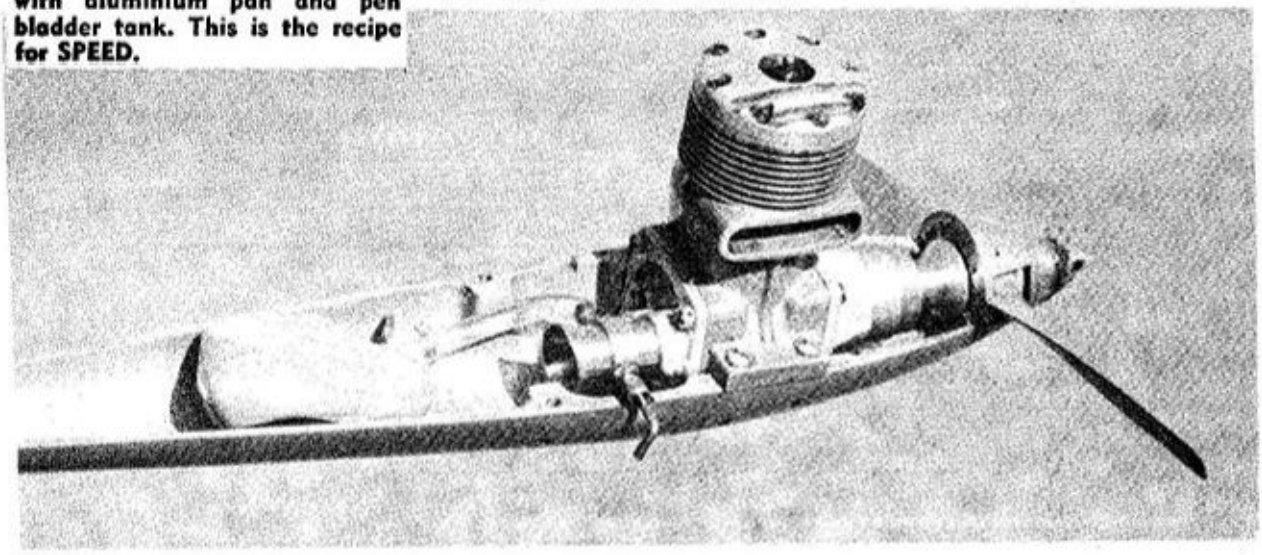
As I said earlier, the engine is the most important unit in the quest for speed but an engine, no matter how fast it runs on the bench, is useless unless a tank is chosen which will feed it a steady flow of fuel while flying. This difficult problem which plagued all speed fliers some years back has been just about eliminated by the use of the Pen Bladder tank, so I commend its use to you. There is little to say about speed planes; there have been many plans published and their capability will depend largely on your ability to duplicate the originals.

There are no real secrets to the speed caper, only a lot of painstaking effort, which effort has its own reward in the thrill of a fast, groovey flight.

—JACK FINNERAN.

The only way to start a high speed motor with a toothpick prop is with a geared starter like this.

Typical modern speed model with aluminium pan and pen bladder tank. This is the recipe for SPEED.



NEWS FROM AIRFIX

★ WARSHIPS & LINERS
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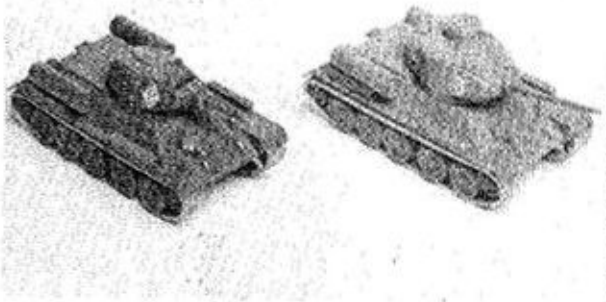
★ HISTORICAL FIGURES

THE WORLD'S GREATEST VALUE IN CONSTRUCTION KITS

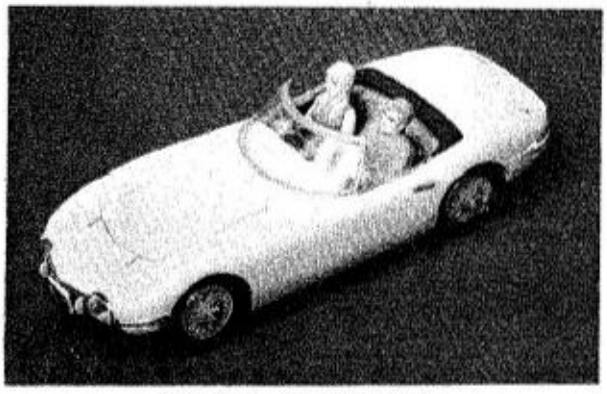


Armored Vehicles Series 1. 00 Scale.
T-34 RUSSIAN MEDIUM TANK

This was the tank that won the war for Russia, and its design had a great influence on many tanks that followed. This kit is of the original type, carrying a 76.2mm gun, and is similar to the T-34s used at Stalingrad. It may also be built with the larger 85mm gun if desired. AFV enthusiasts have been waiting a long while for this fine addition to the range.

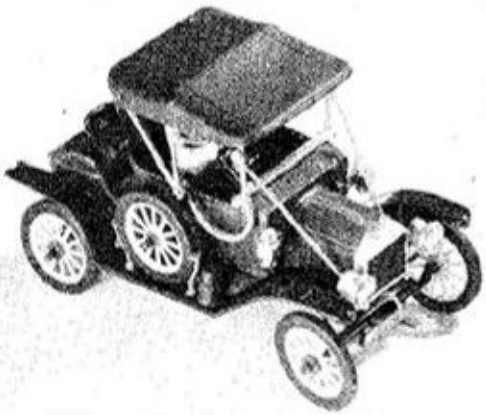
Aircraft Series 4. 1/72 Scale.
FORD TRI-MOTOR

Designed by the Ford Motor Company the "Tin Goose" was much influenced by European designs such as the Fokker. However, the Ford showed the way in all metal construction, and did much to establish the present USA airline system. After 40 years a few are still flying, but the kit model is based on the aircraft preserved in the USA National Air Museum. The kit comprises 94 parts, including crew, all interior detail, opening hatches, rotating propellers and wheels.



Elite Series 7. 1/24 Scale.
JAMES BOND TOYOTA

The Toyota 2000 GT that featured in the film "You Only Live Twice". The kit features all the weapons and paraphenalia associated with the invincible James Bond, including the rocket gun assembly. If desired, the model can be made up into the normal sports car version. One hundred and forty nine separate parts will give you a highly detailed, accurate model that makes an excellent partner for the Aston Martin DB-5.



Veteran Car Series 1. 1/32 Scale.
FORD, MODEL T

The most famous Ford ever, and probably the most reliable car of its era, the Model T remained in production for 19 years with its basic design remaining virtually unchanged. The kit comprises no less than 55 separate accurately moulded parts to produce the two-seater runabout version, incorporating alternative hood assembly, revolving wheels, and detailed driver.

THE FLYING ROAD -

REDIT for this design belongs to Paul Turner, of the Ryde MAC, who built the original model way back in 1960. Far from being a "dated" design, the Road Runner is still one of the top combat models, owing to continuous modifications and development by John Williams and myself.

More than 100 of these models have been constructed by Ryde club members and the design has a most impressive list of wins including a first in the 1964 Nationals, second in the 1965 Nationals and third in the 1964 NSW Champs.

Various engines have been used including the following: OS Max II .35 (85mph), Johnson Combat Special (90mph), OS Max H .35 (95mph), and Super Tigre .40 (107 mph). All engines run on pressure using Burford spraybars, 9" x 7" Tornado props and 5 per cent Nitro Methane.

If using the Super Tigre .40, use plenty of Araldite or similar epoxy to reinforce everything, as these motors are real brutes and will tear a weakly-built model to pieces.

ORDER OF CONSTRUCTION

1. Cut out fuselage sides and slot them for mainspars, LE, and TE.
2. Glue on 1/32" ply doublers.
3. Glue on engine bearers.
4. Sew and Araldite U/C to front bulkhead.
5. Join fuselage sides using front bulkhead and fuel tank.
6. Lay fuselage upside down on building board and slide in the mainspars and TE. Fit wing ribs.
7. Line everything up carefully and glue in place. It is important that all warps or misalignments are removed at this stage.
8. Sheet the LE.
9. Fit tail surfaces, flaps and bell crank.
10. Connect up controls and add fuselage top.
11. Go over all joints with Araldite, paying particular attention to the butt joint of the wing and fuselage. Heat Araldite here so that it soaks into the wood and gives an even stronger joint.
12. Cover with silk or Modelspan.

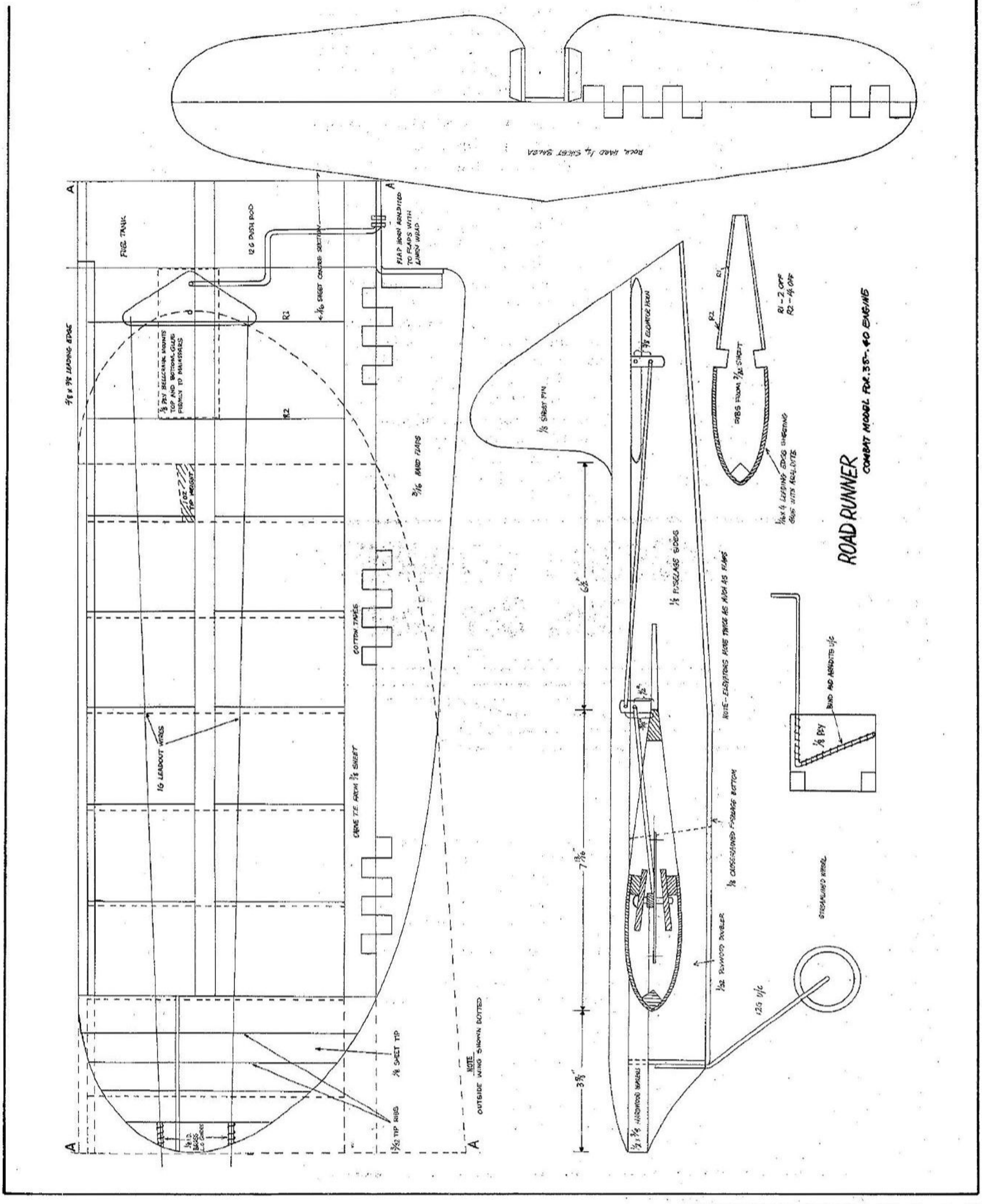
FLYING

Flying is very fast and sensitive. Do not give full elevator control or the model will turn itself inside out! Use 7 strand wire always as this one will snap 3 strand wire every time. When you are used to handling the aircraft reduce line tension gradually with slight thrust inset. This will increase speed.

But take it bit by bit, and above all, fly safely!

PLANS »

RUNNER


ROAD RUNNER
COMBAT MODEL FOR .35-.40 ENGINE
COTTON TAPES
1G LEADOUT WIRES
12G PUSH ROD
FUEL TANK
3/16 BAND FLAPS
NOTE
OUTSIDE WING SHOWN DOTTED
1/8 SHEET FIN
STREAMLINED WHEEL
12G U/C
1/8 PLY
R1 - 2 OFF
R2 - 14 OFF

DAWN SECURITIES PTY. LTD.

From MURA & LENZ — The famous Lenz Boss and Magnum 1000 all-American made motors (Mura's challenge to the Champion 517).
Also available — Mura unmeltable end-bells; Mura and Lenz Can-in-a-Can magnetic shim, Lenz and Mura 30 thousands all-American case; silver-coated rewind wire — all gauges available; New Lenz magnesium silver alloy wire. A variety of Mura armour proof magnetic copper wire; Mura and Lenz famous Magnum 88 and Magnum 88X magnets; small OD no-blow commutators; short stak, long stak and 26D stak armature — rotors (blanks).
NOTE: To be competitive you must have a small-can motor with either Mura-Lenz and/or Champion components.
Tyre dressings: Now available — Lenz and Mura "Tiger Milk" and the famous Associated Green Traction Compound — the best tyre dressing in Australia — has proven acceptable to all States, on all types of surfaces.
From Associated — A variety of scratch building items, including anglewinder drop arms, small can and 26D motor mounting brackets, sidewinder wheels, etc.
Also available — Hardened ground high tensile strength stainless steel sidewinder and incline axles in sizes 2½", 2¾" and 3". Retail prices only 25c and 33c.
Also available — Conversion bushings to convert your old 1/8" hole front wheels to 1/16" pin-hole.
From AJs — A wide range of the famous 1" Do-Nuts (super soft microcels), in colors of grey, blue, green olive and white and a supporting range of Tuffs (microcel tyre and wheel) and the famous AJ's Front Masters pin hols front wheel and "O" ring.
From Lancer and Dynamic — An entirely new range of 1/24 scale super-competition and handling bodies, including Dodge Charger, Ford Torino, The Spoiler, Graham Hills' 1968 Lotus 49 BF-1, Colin Chapman's Lotus 56 (Indy Turbine Wedge), and a host of new 1968 bodies in all classes — sedans, sports/GT, Formula I and Indianapoliis.
From International Engineering — A variety of 1/24 scale of Trans-Am and vintage bodies including 1932 Ford Victoria, 1931 Ford Coupe, 1932 Ford Coupe, 1937 Cord Convertible, 1948 Lincoln Continental, 1965 Mustang Fast back, 1966 Chrysler Barracuda, 1966 Rambler Marlin.
From Riggen, Weldun, Calex and Dynamic — A variety of crown gears and pinions in all sizes, including 6-tooth Weldun steel pinions.
From Riggen — A variety of their famous microcel tyres and wheels at special prices and their new famous Brimhall Handling bodies at a special price the young fry can afford. A variety of scratch building accessories including imported polished piano wire, Australian piano wire, imported brass rod and AYK brass tubing.
Mura, Lenz and Associated — Motor counting brackets. A variety of drop-arm tongues and collars, etc.
From Dynamic — An entirely new range including Sloppy Sam and outrigger body mounts; Dynamic Moo; Dynamic quick change guide and brush set; as well as the standard Dynamic items including Dynaflex and rigid diecast magnesium chassis and motor mounts, etc, for 26D and new 16DBB motors.
From Tamiya — 1/24 King Cobra and Lotus 40 kits with 36D motors and 1/24 Porsche Carrera and Plymouth Fury kits with 26D motors. NOTE: These kits are available at a special price and supplies will not last indefinitely — ask your local dealer. Tamiya 36D/26D conversion bushings.
Dealers' Note: Also available — A supply of discounted kits from Cox, Revell, Pactra, Strombecker and all ranges of Tamiya Inlines.
From GT Models — England — Gordon Tapsell's famous range of 1/32 scale bodies — Including his all-new 1968 range, viz:— Lotus 49 BF1, Lotus 56 Turbine, Ford 3-litre GT P/2, McLaren Ford Mark VIIA F1, etc. Retail price only $1.80.
Note: These bodies are all in scale and will satisfy the most ardent scale enthusiast. A limited supply of strictly scale 24th scale bodies is also available.

Our range is the ultimate — We can supply both the beginner and the professional. Our range includes the latest gear from the United States, England and Japan.

DEALERS, WRITE FOR TRADE LISTS
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(TESTOR, AUSTRALIA)

DAWN SECURITIES PTY. LTD.

WHOLESALE ONLY

CONTROL LINES

HELLO AGAIN and welcome to Control Lines.

Since the last issue there have been two important rules changes which will effect all modellers interested in competition flying. One allows for a team race—minimum wing area 90 square inches, tank size 6cc—and the other is in the method of selecting the champion of champions at the Australian Nationals to be held at Warrnambool over the Christmas period.

The new system allocates one point to a competitor for each person he beats in an event. Therefore a person coming 25th in an event with 30 entries would also score five points.

I consider this method of scoring as unfair, as each event should carry the same number of points. For example, the winner of power scrambles with approximately 40 entries would have an almost unbeatable lead, and could win the title with only one first place.

As this event would carry so many points, the system of timing is totally unsatisfactory. Each competitor is required to supply a timekeeper who in most instances is selected from the spectators. The actual flight is timed only from the seconds hand of an ordinary watch. As soon as the national results are received I will carry out an anlysis which should prove very interesting.

The most important monthly event was the Speed Day Get-together, which was held at Centennial Park.

There was a very good roll-up and among those present were Jack Finneran, Phil McGee, Chris McGee, Andy Kerr, Bill Logan, Ron Lee, and from the Newcastle area David Curry and John Tidey. The weather was beautiful with no wind and slightly cool. I have never seen so much speed flying in one day. Everyone was really keen and thoroughly enjoyed themselves. Many thanks to Hedley McGee and Nick Nielsen for acting as timekeepers.

Here are a few recorded times—

Phil McGee — 10cc McCoy — 60 pc. nitro methane — 161mph.

Chris McGee (junior) — 10cc McCoy — Rosse — 60 pc. nitro methane — 142.8mph.

Andy Kerr — 5cc Super Tigre — model contained Nicad batteries permanently installed in the model — 70 pc. nitro methane — 153.78mph.

David Curry — motor blew up, but spent rest of the day flying with John Tidey.

John Tidey — Super Tigre 2.5 (FAI) — 105mph.

Bill Logan — Super Tigre 2.5 (FAI) — 130mph.

Ron Lee — Super Tigre 2.5 (FAI) — 103mph.

Photos of Jack Finneran's B speed and Phil McGhee's B and C speed models are shown in this issue.

Entries in the 1000 lap team races held by Eastern Districts MFC have been very disappointing as only four models competed in each of the two races already held. Results—

First race — Lee and Logan — 58" 53.5; Shing and Tilley — 62" 54.6; Noakes and Short — 68"; Holland and Gardiner — 175 laps.

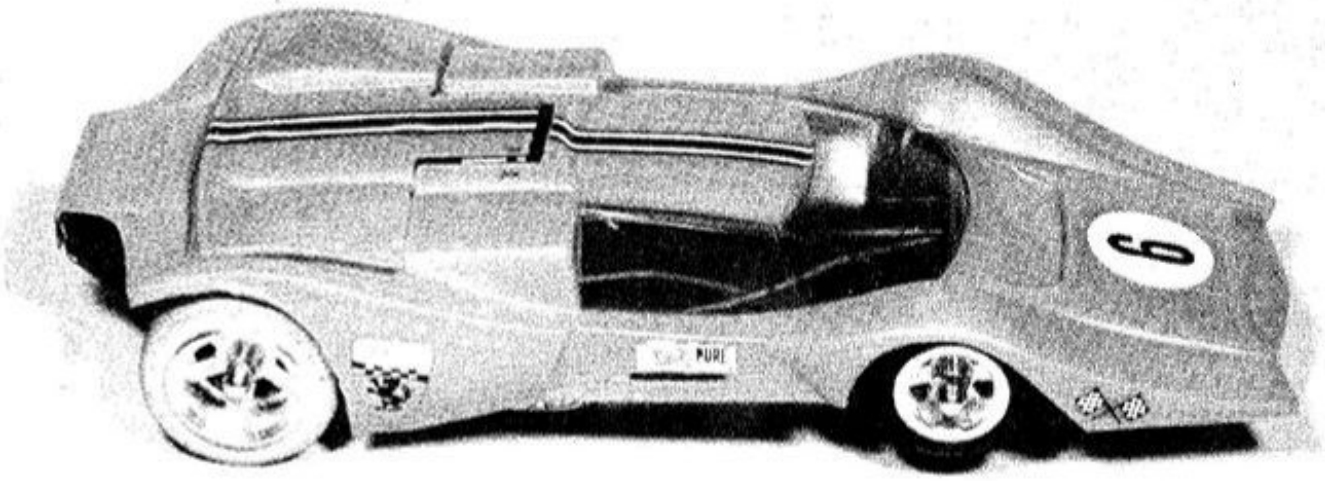
Second race — Lee and Kerr — 60" 96; Shing and Tilley — 63" 34; Noaker and Short — 74" 21; Holland and Gardiner — 567 laps.

In this issue you will find plans and write-up for a top rate combat model (6cc size) which was supplied by Stuart Sherlock. I have redrawn the plans to make them suitable for reproduction. I am at present working on a project to run a plans service, and if successful, will be able to supply copies of plans appearing in this magazine. It will be run on a non-profit basis so that costs should be quite low. More about this in the next issue.

During this month I have tried a new Apoxy adhesive by Scotch brand and have found it very satisfactory where extra strength is needed in a model.

In our next issue I will have a complete report of the first annual Sydney control line championships

BILL EAST



FOR TOP TRACK PERFORMANCE

Setting up a car to get the optimum in speed and handling with only limited home equipment can be a headache. The following steps, if followed carefully, will, however, give you an inexpensive way of ensuring that your car is performing its best when you put it on the track.

TEST block is the first essential when setting up a car and if you do not have access to one then a simple jury rig can be made from ¼" masonite or similar material.

Cut two pieces 2½"x9" and one piece 5 1/8"x9", making sure that all measurements are accurate. .

Cement the 2½" wide pieces flat on the 5 1/8" piece, keeping the edges flush. This will give you the ⅛"x¼" slot for a guide.

The arguments for and against scratch built and commercial chassis do not concern us in this article — it is simply intended to enable the enthusiast to obtain maximum performance from his car regardless of manufacture.

Assemble the front axle and check for free rotation and if the axle bends in the bearing, check for bearing alignment, or burrs on the axle, and remedy this before proceeding.

If using fixed front wheels, allow 3/32" end play between bearing and spacers to allow wheels to moe across when entering and leaving bends — this is essential for good track handling.

With independent front wheels, again check free spinning and any indication of tightness or bad alignment.

Next job is to set up the rear axle and motor. It is here that the performance of the car can be particularly assisted by making sure that the motor transmits as much of its available power to the wheels as possible.

There is a choice of ball bearing, roller bearing or Oilite bushes and my choice would be for ball bearings, as they offer the lowest friction problem. If these are not available, then use Oilite bushes.

Check motor direction and mark case with an arrow showing direction of rotation for fastest rpm and then secure the motor, complete with pinion, to the chassis.

The axle can now be placed through the bearings, not forgetting the crown gear for inline chassis — this should be placed on the arrowhead side of the pinion. Now check that axle spins freely in bearings, if not, check alignment and test again.

POWER WILL BE LOST through any bad alignment or friction caused by tight turning.

Now fit spacers if necessary and two nuts on each axle end. With the crown gear loose, adjust the end play to a minimum and tighten up the lock-nut. If axle does not spin freely, check that tolerance was not lost when tightening up the lock-nut.

Obtaining the correct pinion/crown gear mesh is the next step

and a good method is to take two thicknesses of tissue and place between the pinion and gear at the meshing point and then with finger and thumb squeeze them together while locking gear to axle.

Rotate the rear wheels and the tissue can be removed.

Now slowly rotate the axle assembly backwards (opposite to direction it will turn when on the track) and feel for any tight spots that could be caused by a warped crown gear or burrs on the teeth of the gear. Depending on extent of burring or warp the gear may have to be replaced.

When correctly adjusted, you should be able to rotate the rear axle and feel the pull of the permanent magnets in the motor — nothing else.

The reason for rotating the axle backwards is to bring together the teeth of the gear and pinion.

Now check the motor leads for broken wires where soldered to the motor and resolder if necessary. Then connect these to the guide shoe, making sure that good electrical contact is made.

Braids must be in prime condition and, if not, fit new ones and make sure they lie flat against the guide shoe to ensure good contact with the track strip.

The test block is now used.

Place the chassis on the block and check that all wheels touch the block surface. If front wheels do not touch then check that the braid is lying flat against the shoe — adjustment can be made by bending the guide shoe holder or adjusting the drop cam.

The other alternative is to fit larger front tyres, but avoid this where possible, as it lifts the centre of gravity and this is one thing that must be kept as low as possible.

Now check the car on the track — the moment of truth!!!

If you want to reach the ultimate in performance, now is the time to start experimenting. If the car is slow on acceleration, fit a larger crown gear or smaller pinion. If acceleration is good, but top speed is low, then a smaller crown gear or larger pinion is required.

The lower the chassis is to the track, the better your car will handle, so make no adjustments that will raise the chassis away from the track.

If the car develops bounce or wheel hop, check for a bent axle or wheels that are not true in shape. A bent axle has to be replaced, but out-of-true wheels can be brought into shape by running them on a sandpaper block.

Rear tyres play an important part in performance so it always pays to ask the track owner to advise on the type of tyre best suited to his track surface — this can eliminate a great deal of tyre testing.

★ ★ ★

Sweeping all before them in the USA is a new type of sidewinder.

Previously, the disadvantage of the sidewinder was the large spur gear necessary to allow the motor to clear the rear axle with a resultant raising of the chassis from the track and loss of handling control.

To overcome this, the motor is now set on an angle to the rear axle and with a small can Mabuchi you can use down to a 30-tooth gear allowing the use of ¾" tyres.

There is some argument as to the gear wear on this setup but I think that properly meshed gears will be just as reliable as the conventional manner.

Dawn Securities Pty Limited now announces its limited production series of Team Testor chassis. These chassis are prepared by Steve Hutchesson and Barry Brotherton scratch builders for the famous Testor Team and have proved to be in world class.

Apart from successes in every State of the Commonwealth, the Hutchesson-type semi-perimeter outrigger sidewinder has proved effective in the United States; when Dave Rittie, of the famous DBR-Earlwood Team, made a recent (July, 1968) visit to the United States, he broke record after record and won race after race in the stamping ground of the famous American Checkpoint, Champion and Mura teams, racing the DBR small can version of the Hutchesson sidewinder.

These chassis are now available on a limited production basis, to Australian slotters, with special preference to States other than New South Wales. In addition to the famous Hutchesson semi-perimeter outrigger floating drop arm sidewinder, the following range is available as set out below. At a later stage we will be announcing a series of Hutchesson and Rittie specially-prepared Champion 517, 617 and Mura Magnum 1000 and Lenz Boss motors specially wound for Australian conditions and at a price most slotters will be able to afford.

	Retail Price
B1 multi-rod, full-perimeter inline sports chassis for small can motor	$ 3.30
B2 multi-rod, full-perimeter inline sports chassis for 26D motor	3.30
H1 semi-perimeter outrigger sports inline chassis for small can motor with floating drop arm	3.30
H2 semi-perimeter outrigger sports inline chassis for 26D motor with floating drop arm	3.30
H3 semi-perimeter outrigger sidewinder chassis for small can motor with floating drop arm	10.70
H4 semi-perimeter outrigger sidewinder chassis for 26D motor with floating drop arm	10.70
H5 semi-perimeter outrigger anglewinder chassis (American side saddle regular sidewinder) for small can motor, with floating drop arm	13.20
H6 semi-perimeter outrigger anglewinder chassis (American side saddle regular sidewinder) for 26D motor with floating drop arm	13.20

We apologise to readers that the popular Radio Control article, by Bob Young, is missing from this issue. Bob is currently battling production problems on the Silvertone production line, caused, we are informed, by the supply of wrong components from the USA. Rather than utilise unsuitable parts Bob sent the whole lot back and is, at present awaiting delivery of the correct components. Readers who have been kept waiting for Silvertone deliveries are hereby assured that everything possible is being done to speed things up, and in the meantime, please accept apologies for the delay.

COUNTDOWN

OUR NEW COLUMN ON MODEL ROCKETS

THE National Association of Rocketry blasts off with this edition of AM. Over 200 membership applications have been mailed out to date.

The NAR has much to offer the rocketeer in Australia. Hard-to-get scale plans and performance data are readily available. Technical reports on rocketry techniques and systems are also available to members ONLY!

Australian Modeller has been accepted as the official organ of the NAR and will contain the official NAR newsletter "Countdown" in every edition. Every member is automatically subscribed to AM upon acceptance into the NAR.

A model rocket sporting licence is issued to every member, this enabling him to participate in NAR-sanctioned competitions and record attempts. Points awarded during the contest year are amassed, and the rocketeer with the highest point score is declared the national champ.

The main aim behind the NAR is to promote model rocketry as a safe space age educational tool. Model rocketry covers a wide range of sciences and by following the NAR safety code, it is as safe as model aviation. Over 5,000,000 model rockets have been flown in the USA since 1957 and not one serious accident has been reported.

To organise the sport on a national basis an NAR sporting code has been compiled in conjunction with the FAI (Federation of Aeronautique Internationale, the world-wide governing body for model rocketry and all aeronautical and astronautical sports). This code stipulates all rocket construction standards, engine specifications, and competition rulings. Every member is supplied with a copy.

Model rocketry has proven itself to be the safest way to work with rockets and we hope that you are, or will be, a model rocketeer if you wish to experiment with rockets. Membership in the NAR can be rewarding. It's up to you to make the best of it. We hope that we can welcome you to membership in the NAR in the near future.

★ ★ ★

CAMROCS, Campbelltown Model Rocket Society, has started flying models at Orana Park, Leumeah, every second Sunday, between 1 and 4pm. Every rocketeer launch his models. Full facilities are available.

Results of recent competitions are:

Class 1 alt.: C. Grezl (1227ft); Miss K. Sneddon (1003ft); P. HHerivel (975ft).

Class 2 alt.: C. Grezl (2160ft); C. Pettett (1222ft); K. Sneddon (1124ft).

Open alt.: C. Grezl (1727ft); B. Compton (1329ft); V. Grezl (433ft).

Payload: B. Sneddon (668ft); C. Pettett (663ft); V. Grezl (433ft).

Dual Para-duration: B. Compton (1.2 sec); K. Sneddon (1.5 sec); S. Newton (2.0 sec).

Para-d: B. Sneddon (3min 1.25sec); C. Grezl (1min 38sec); G. Thomas (1min 35sec).

Class II glide: C. Grezl (21.6sec); C. Pettett (18.8sec); B. Compton (17.3 sec.

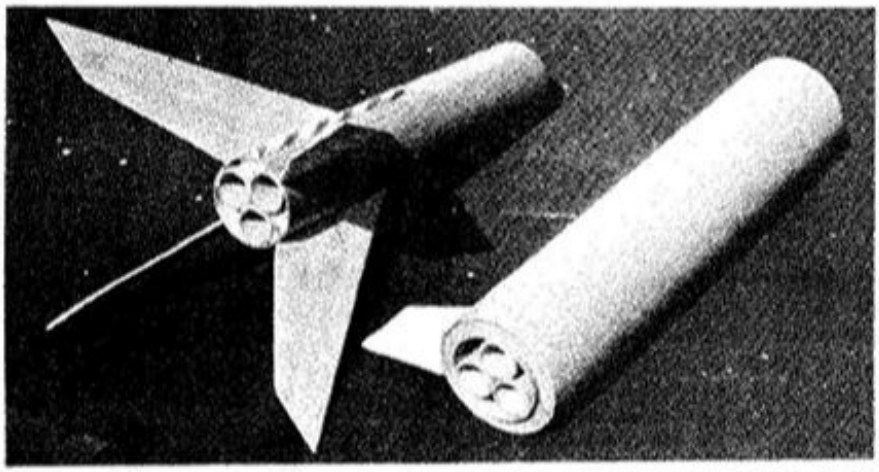
Open glide: B. Sneddon (3min 13 sec, 2-stage pod).

Nine scale: B. Sneddon (75pts, "Nike-Smoke"); B. Compton (71pts, "X-17").

Bill Sneddon with his Open Glide-winner at Newcastle. Time was 3min 13sec.

A 1/29th Aero Bee won the gold for Chris Vine at Newcastle. It reached 2,300ft.

Three-stage rockets in the course of construction. Note wound cardboard tubes, balsa fins, straw launching guides.



modeller club of the month

Model Boat Sailors come in all age groups, but the VMPBS is one of the oldest model clubs in Australia, and has a wide membership.

JUST 23 years ago, a group of model ship enthusiasts in Melbourne got together and decided to form a club. The result . . . the Victorian Model Power Boat Society. Over the years this club has been the backbone of nautical modelling activities in Victoria, and today emerges as a virile active body with a large membership of boating enthusiasts.

Today, with many years of experience behind the society, it is not unusual to find their meetings at Ringwood Lake and Edwards Lake, Reservoir (the centres of model boating activity), with all types of power boats being represented. (Editor's note: It would appear from the photos that the club is only interested in tugboats, but this is not true as the problem is that they have more modellers than photographers!)

Apart from the "sailing sessions" the boys have an informal "get-together" every month at the Victorian Railways Institute, in Flinders St, where everyone compares notes and exchanges information. These meetingsg also feature lectures, films, technical discussions, displays of members' models, and various other activities. New members are always welcome to the society and these meetings are always open to anyone interested in power model boating.

Of late, radio control has become even more prominent, with some very sophisticated models showing their paces. Controls include rudder, throttle, radar, salvage equipment, and various other auxiliaries. Power of these models is varied. Some of the members are stalwart supporters of the electric motor, whilst others use petrol motors or steam. Still, other members are builders of static display models and revel in the field of fine detail and authentic finishes.

All in all we feel that any person interested in model ships would be well advised to contact the Victorian Model Power Boat Society to really enjoy the hobby to the full. Join a club and enjoy your modelling!

There are meetings every second Sunday in the month at Ringwood Lake, and every last Sunday in the month at Edwards Lake.

"Get together" meetings are held every Thursday in the month at Victoria Railways Institute, 3rd Floor, Room 4, Flinders St, Melbourne, 8pm.

H. Balderchino's "Cervia" scale tug ploughing up the water at Lillydale (Vic.). Mr Balderchino is President of the VMPBS.

MANY readers must have wondered who was responsible for the fine drawing of the Australian Army version of the Cessna 180D in our last issue. Considering that we were so darned proud of bringing to our readers a drawing of such high standard we should be ashamed of ourselves for leaving the name of Don Halls off the drawing. Don has given us another of his fine drawings this issue in the shape of the Iroquois helicopter, once again as used by the Australian Army. Color schemes are really authentic for all theatres in which this aircraft operates, and if you want to know how Don gets all this up-to-date information . . . well, just get a look at the photo of Don doing a little research! Seems like he kind of gets amongst it, doesn't it?

Glad to say that Don will be a regular contributor for AM from now on, so look forward to more really up-to-date, first-class drawings from a well-established contributor to overseas magazines who we are proud to say has now joined Australian Modeller.

BUILDING PLASTIC MODEL AIRCRAFT:

CONVERSIONS

HE first conversion we shall deal with is a World War I aircraft, the Siemens Schuckert DI.

When the French Nieuport II and 17 appeared on the Western Front, the German authorities commissioned the aircraft manufacturers to copy this excellent French design. Siemens Schuckert built an almost straight copy of the Nieuport, the main difference being the type of engine — the Siemens-Halske SH-1 geared rotary, in which the engine rotated in the opposite direction to the propeller.

This conversion can be done in either 1/72 (Revell Nieuport 17) or in 1/48 (Hawk Nieuport 17). First off, check the drawing (A) to see how it differs from the Nieuport kit.

Now assemble the fuselage, leaving off the engine and cowling. File off the oval inspection panels at the nose, and replace them with an oblong, thin piece of card or plasticard with louvres scribed on. Replace the existing tail skid with another to match the drawing, consisting of a thick piece and two

very thin supports. The tailplane can now be fitted, either with one strut as in the kit, or with two as in the drawing which represents a late model.

Fit the single machine gun, as per kit, on top of the fuselage nose, and assemble the wings, replacing the rear cabane struts (between the fuselage and the top wing), which are in the form of an inverted V in the kit, with two vertical struts to match the front pair.

The rigging (see AM July-August) is almost the same as the Nieuport, except cross-bracing should go between the cabane struts, when seen from the side, and the front flying wire, from the upper front wing tip to the lower fuselage, joins the fuselageg at the same point as the rear flying wire, not at the cowling as in the Nieuport.

Now we come to the major difference — the engine cowling. This is easier to do in the 1/48 scale kit as the engine and cowling

Continued next page—

CLASSIFIED

FOR SALE

ALFA ROMEO, 1/24 scale. Rewound motor. Raft type brass chassis. Very fast car, ideal for club work. Only $6.50. Also hundreds spare parts, chassis, bodies, etc. Write G. Wadsworth, 58 Smithfield Rd, Wanganui, NZ.

REMCON TX $40. Remcon RX $20. Three mint condition OS servos $16 each. One MK $16. Whit 67 RX, new less reed bank $10. All gear A1 condition. Reason for sale — going over to propo. Rod Bent, 665 Young St, Albury, NSW 2640.

KING Cobra RC kit, two Tauri kits (part built), two Taipan motors, $30 the lot. A real bargain. Phone 92-6256 (Sydney).

MASS of model car equipment. Would suit club. Over 40 motors, including all types Mabuchi, Hit, Ram, GE, Classic, Hemi, Atlas, Russkit, Airfix. Odd motor spares include magnets, armatures, etc (there are a couple of new Ram armatures included in these, one being the famous 7-pole Hi Torque). Box of assorted tyres, nearly all new, both 24th and 32nd scale. About 80 pairs. Box of assorted wheels. About 30 pairs all types. Assorted axles, bushes, ballraces, etc. Two dozen bodies including all models featured in model cars. About three dozen chassis, including new Riggen Gator, and latest K & B Kangaroo. Simco speed kit, New Tiger and Ram controllers, etc, etc. Enough gear here to start a club! The lot can go for $30, but will not haggle or sell separately. Phone 36-2051 evenings only.

CLASSIC Super Asp with 3v 26D motor. Fastest R to R car ever produced. Absolutely new. Still in maker's box. Bargain at only $5. H. W., 223 Sutherland St, Paddington.

SPECIAL Power Lubricant, as used by leading American speed flyers, $1 per 26oz. Jetex 100 Red Spot fuel, also suitable for rocket experiments, 30c pkt. Four pkts for $1. Nitro Methane, $2 per lb. Doonside Aeromodellers. Box 11, Doonside, NSW, 2767.

WANTED TO BUY

SUPER Tigre G21 .29 lapped piston. Also Super Tigre G21 .40 lapped piston. Back issues Model Aeroplane News 1948 to 1953. Reply stating price and condition to Merv Bell, 17 Erskine St, Dubbo, NSW, 2830.

WANTED

OLD model aeroplane and boat motors and parts. Petrol, steam, diesel, Glo. Any state of repair or disrepair. Motors swapped or bought. Ivor F. Stowe, Box 11, Doonside, NSW, 2767.

COMMONWEALTH Aircraft CA-15 Fighter. Cockpit details and photos, will buy or exchange for other pictures. Material on loan will be looked after and promptly returned. JANES' ALL THE WORLD'S AIRCRAFT will buy second hand copies. Please state year and price. Maj. L. G. Halls, HQ PNG Comm, Murray Barracks, Port Moresby, TPNG.

are separate. Firstly, cut away the lower edge of the cowling, to the line of the bottom of the fuselage, as in the drawing. Then cut, from card or plasticard, the front engine support (B) and cement to the front edge of the cowling, smoothing out the joints.

In the 1/72 kit from Revell it is a little more laborious, as the engine is moulded into the cowling, however, by using a razor saw or fret saw, and a sharp modelling knife, the bottom of the cowling can be cut away, and the plastic cleaned from between the exposed cylinders. The front support can be made up as before and attached to the front of the cowling.

Fit the engine (1/48) and propeller, then fit the assembly to the fuselage. Some aircraft had no spinner, but I think it improves the looks tremendously if fitted, so hunt through your spares box, or make one up from sprue. A representative color scheme would be pale blue undersides (Humbrol 47), slate grey struts (Humbrol 31), and green (30) and mauve (Testors 36) in wave pattern upper surfaces.

Some aircraft had a polished aluminium cowling. The propeller, of course, is varnished wood (laminated), and the spinner I did in red because it looks good, although they probably matched the upper surfaces.

Markings are Cross Patee (Maltese) on top and bottom wing, fuselage sides, under the headrest, and on the rudder.

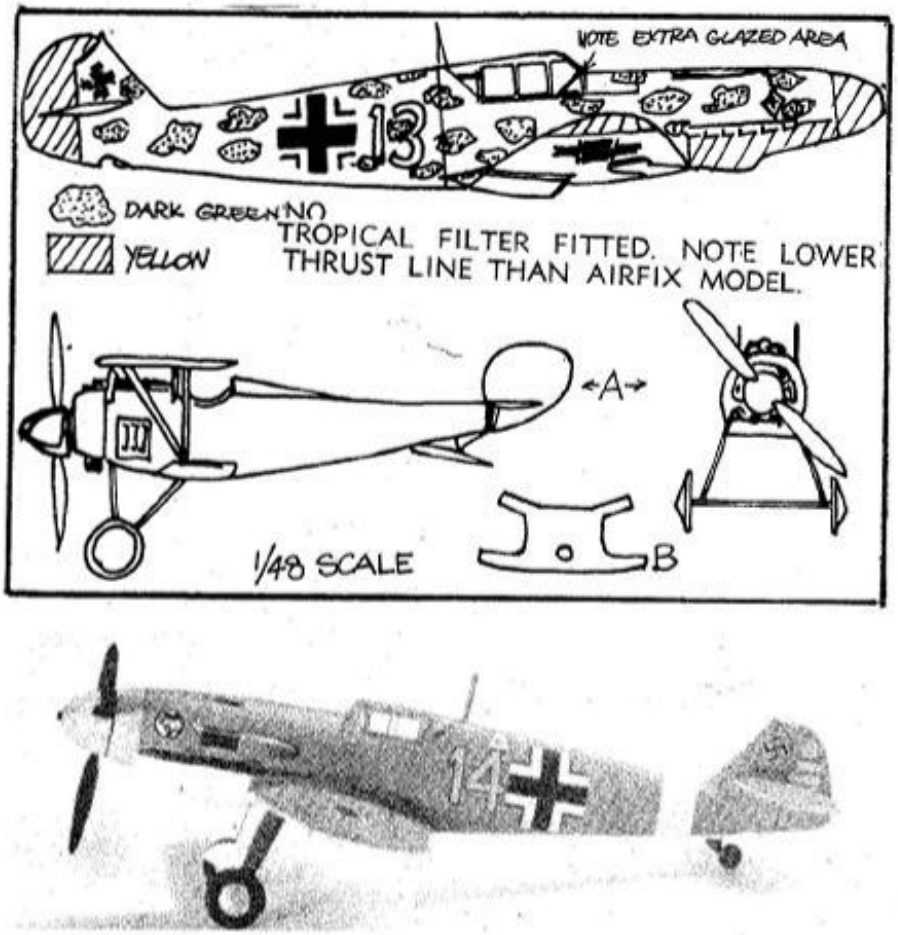
Then finish the aircraft overall with a coat of semi-matt varnish. (Dulux Satin clear enamel I find very good.) Put it on your shelf and see if any of your mates can tell you what it is.

The World War II conversion is also German, but this time applicable only to one kit, the Airfix Bf109G, which we shall turn into a Bf109F, and at the same time dispose of the kit's innacuracy.

This is a process that can be applied to a G model also, namely the shape of the nose, which Airfix have not got quite right.

If you look up Profile publications monographs on the 109G and F, you will see that with just these two aircraft, there is a lifetime of work just putting on new color schemes.

The first thing to be done before assembly is to carefully carve and sand the gn breech covers from the top of the engine cowling.



Then cut the front of the cockpit opening so that it is square when viewed from the side, as there are two extra panels of "glass" to go in here, below the windscreen.

Now glue together the two fuselage halves, and after fitting the canopy, cut two tiny triangles of transparent sheet and cement them carefully into the gaps left by trimming the cockpit. That is all that has to be done to make an F from a G, however, if a more accurate nose shape is required a little more work has to be done.

If you look at a completed Airfix Bf109, you may notice that the nose appears to curve upwards. This is because the spinner is mounted too high, so to correct this, the prop. shaft has to be lowered and the nose reshaped accordingly.

Glue together the fuselage halves but leave off the propeller assembly, and at the same time fill the whole nose with body putty. Then build up the bottom of the nose, forward of the oil cooler, with body putty, and at the same time, cut down the top of the nose, from the first panel line.

To assist with the initial carving, the spinner can be LIGHTLY cemented in the correct position on the nose, while you carve, and then remove the spinner again.

At this stage a new prop. shaft hole can be drilled in the nose in the correct position (that is what the body putty in the nose is for) and a new, longer shaft fitted to the propeller, which is then simply plugged into the nose.

If you dont mind if the prop. doesn't turn, you can simply cement it in position.

All you need now is a color scheme to finish the most handsome of the Messerschmitt Bf109 series. The easiest to reproduce, using only the decals in the kit, would be an aircraft of 3/JG 53 (Pik-As) as seen in the summer of 1942 in the Balkans. Undersides are pale blue (very pale), upper surfaces are 'sand' with dark green mottle the spinner, and nose below the exhaust is yellow as are the lower wing tips and fin. There is a yellow '13' in front of the fuselage cross and the 'Ace of Spades' emblem is applied above the exhaust, as in the kit, for a whole range of color schemes, including that of the legendary ace, Hans Joachim Marseille, see the Profile on the 109F.

NSWMRRA RACING

CHALLENGE CUP REPORT

REDLINE-Trident came from behind to win the first round of the Frank Matich Sydney-Melbourne Challenge Cup by 85 laps, from DBR-Earlwood and Testor, to give New South Wales a 1-2-3 walkover.

The event, held at the popular Earlwood centre, in Sydney, has been instituted to provide competition between the top teams from New South Wales and Victoria.

The race is for the Group 7 type sports cars and is co-sponsored by the Frank Hatich organisation, which has donated a trophy for the winning team. The Cup marks a new era in slot car racing in Australia. For the first time, an event of this nature has been held under a uniform set of rules (CASCRA) and it is hoped that more events can be held under these rules.

The Challenge Cup goes to the team obtaining the most points in the two-round series. Results of the second round were not to hand when this edition went to press.

The NSWMRRA point-score system has been adopted, and the results at Earlwood have given the New South Wales teams a commanding 78 points compared to Victoria's 34.

The teams and drivers were:

New South Wales: Testoor, I. Bannister, S. Hutchesson; Redline-Trident, M. Pearson, B. Titheridge; DBR-Earlwood, D. Rittle, S. Slowe; SSME, D. Birkholtz, T. Thomas.

Victoria: Tom Thumb, W. Goodman, G. Bartling; MMCRC, J. Strongman, N. Parker; GP Mini, W. Decker, D. Burn; Moonee Ponds, A. Josline, G. Lyons.

The Earlwood track again proved a good test of man and machine. Only Redline-Trident had not come off the track for repairs by the halfway mark, and their body was the only one to finish with all pieces together, in what virtually amounted to a free-for-all demolition derby.

The nature and layout of the track is such that there is no allowance for driving errors. The track has one of the best power supplies in Sydney, and drivers must have a car which, in addition to speed, has good brakes and good handling, otherwise there is every chance of not finishing the race.

With only one exception, all the New South Wales teams came through the race without any repair work carried out to their chassis.

The Victorians had good cars — certainly they were as fast as most Sydney cars — but they were not prepared for the punishment the track handed out and, consequently, were never in the hunt.

The New South Wales teams — consisting of three of the top four teams in the State — with their tenacious attitude to endurance races, completely outclassed their Victorian rivals to the extent that the leading Victorian team finished 854 laps behind Redline-Trident, the winning New South Wales team.

However, if nothing else, the Cup has given the Victorians an idea of the New South Wales chassis design. All New South Wales teams ran either a full or semi-perimeter brass rod or piano wire type scratchbuilt sidewinder chassis, powered by rewound Champion 617s.

It is expected that the Victorians will put to good use the knowledge gained in the Sydney round to provide tough opposition in the return match.

With the race only minutes old, it became obvious to everyone at the track that the New South Wales teams would fight out the top placing. After an hour's racing, Testor, DBR-Earlwood and Redline-Trident held the first three placings with 629 laps, 628 laps and 578 laps, respectively.

The Victorian teams, Tom Thumb (557 laps) and GP Mini (545 laps), appeared at this stage to be the only teams capable of stopping a 1-2-3 walkover by New South Wales teams. The MMCRC team began sluggishly, but had picked up well-prepared brass-rod and plate-hinged centre sidewinder chassis with a double idler gear complex powered by a rewound 16 motor. Although outdistanced down the straight, they were on equal terms with the Sydney teams in the handling department. However, the bumps and grind of the race soon took its toll and the car was beset with gear problems for much of the latter part of the race.

The race looked as good as over in the fifth and sixth sessions as Testor built up a commanding lead over DBR-Earlwood, with Redline-Trident reducing the leeway between itself and second place to 16 laps. Testor was on 4210 laps at the three-quarter mark (7 hours racing), with DBR-Earlwood 4115 laps and Redline-Trident 4099 laps. Driven consistently by Warren Decker and David Burn, the GP Mini teams' Lola 3B Cam-Am car still held onto fourth place, but now 565 laps behind third place.

Although not as fast as the flying New South Wales cars, their inline Dynamic frame supported by a brass strip and rod outrigger, proved to be the fastest and most reliable of the Victorian cars. Tom Thumb still held fifth place, but were only 62 laps in front of SSME, who, thanks to great driving by Dieter Birkholtz, had made a remarkable recovery in the two periods.

Three hundred and eighty-six laps behind Tom Thumb in the fourth bracket, they had made a good gain on the Victorians and now were in a position to gain at least fifth placing and so give the New South Wales teams a strangled on the series. Unlucky MMCRC was still having trouble with its gears, and had

Continued next page—

dropped back to seventh place with 3163 laps. Moonee Ponds was still holding the wooden spoon with 3014 laps.

The final two brackets saw Testor collapse. Leading by 95 laps at the start of the seventh period, Bannister and Hutchesson had enough laps on the other teams to take matters easy and consolidate their position. However, the brass plate drop arm of the Testor Matich bent after the car had deslotted and landed on the floor.

After repeating this several times, the Testor car was taken from the track to repair the front end, which had failed to survive the battering.

Redline-Trident driver Brian Titheridge, who had, up to this point, failed to live up to his reputation as one of the best endurance drivers in the State, sensed he had every chance to take the lead while Testor was repairing the damage.

He easily passed DBR-Earlwood to move into second place and, finally, wound up with 796 laps for the period to equal the highest period lap total, which had been set in the second period by DBR-Earlwood. By the end of the seventh period, he was 101 laps in front of DBR-Earlwood and 243 laps in front of Testor.

The last bracket was merely a formality, the only interest being the number of times Testor would land on the floor (although repairs had been affected, the car still deslotted at regular intervals), and if SSME, with Dieter Birkholtz driving, could make up the leeway of 176 laps between them and the fourth placed team, GP Mini. They failed to do this, but still managed to peg back 122 laps to finish only 54 laps behind the Victorians.

The race ended with Redline-Trident in first place, followed by DBR-Earlwood and Testor. Final details of the race were:—

Redline-Trident (NSW) 5599 laps, 30 points 1
DBR-Earlwood (NSW) 5513 laps, 21 2
Testor (NSW) 5272 laps, 16 3
GP Mini (Victoria) 4745 laps, 13 4
SSME (NSW) 4691 laps, 11 5
Tom Thumb (Victoria) 4356 laps, 9 6
Moonee Valley (Victoria) 4267 laps, 7 7
MMCRC (Victoria) 4045 laps, 5 8

By taking the first three placings, the New South Wales teams have virtually ensured victory for one of their teams in the 1968 series. However, there is not much doubt that the Victorian teams will put up much stronger opposition on their home track. Of the Victorian teams most capable of upsetting the New South Wales teams, GP Mini and MMCRC, despite last placing at Earlwood, appear to have the best chance.

GP Mini was able to keep within striking distance of the New South Wales teams until the gremlins struck. Although finishing last with the MMCRC team, John Strongman finished a narrow second to New South Wales in the Total 24-hour race in Melbourne at Easter, and can be relied upon to put to good use the knowledge gained about New South Wales chassis design and construction as well as his own, to come up with a competitive chassis for the return round.

In addition to thanks extended to the Frank Matich organisation for their interest in this race, Dawn Securities are to be congratulated for the way they have financially supported this match race series, in particular paying the expenses of the Victorian teams and providing trophies for the winning team in the round and a special trophy for concours, which was won by Dieter Birkholtz and his well prepared Matich.

The main difference between the two States is the method of chassis construction. While New South Wales teams favor the full or semi-perimeter 1/16" piano wire or brass rod floating drop arm sidewinder chassis, the Victorians still favor the inline chassis. Lancer scored in the body department, their Lola 3B Can-Am body being used by six teams; the other two teams running Lancer Matich bodies. With the exception of MMCRC and GP Mini, all the teams ran rewound Champion 617s, the winds ranging from 50 of 28½ down to 45 of 26. But the New South Wales teams proved fastest and will be hard to beat at Moonee Ponds in October.

DETAILS

(Track: Earlwood.)

1.—M. Pearson, B. Titherage, Redline-Trident (NSW), Lola 3B Can-Am, scratch built 1/16" piano wire E brass rod perimeter s/winder with floating drop arm chassis, Lancer body, 26D motor, KBB commutator, Pittman magnets, Mabuchi end cap, 50 of 28½ Lencosol wire turns, Cox front wheels and tyres, universal axles, Riggen rear wheels, AJ's (grey) microcells rear tyres. Pinion: Weldun 9T. Spur: Wilson 46T. Ratio: 5.1:1, Classic orange juice tyre dressing, MRC controller, Dynamic pick-up.

2.—D. Rittie, S. Slowe, DBR-Earlwood (NSW), Lola 3B Can-Am, scratch built 1/16" multired E piano wire perimeter s/winder, floating drop arm, Lancer, Champion 617, Champion commutator and magnets, Testor end cap, 50 of 28 silver (Mura) wire turns, AMT front, Cox rear, International Engineering axles, Classic rear wheels, Mila Miglia grey rear tyres. Pinion: 9T Weldun. Spur: 44T Cox. Ratio: 4.9:1, Classic orange juice tyre dressing, Cox controller, Dynamic pick-up.

3.—I. Bannister, S. Hutchesson, Testor (NSW), Matich, scratch built 1/16" piano wire and brass rod perimeter s/winder, floating drop arm, Lancer, Champion 617, Champion commutator, magnets and end cap, 45 of 27 silver (Mura) wire turns, Testor front tyres, wheels and axles, Riggen rear wheels, Mila Miglia grey rear tyres. Pinion: 9T Weldun. Spur: 43T Wilson. Ratio: 4.8:1, Classic orange juice tyre dressing, MRC controller, Cox pick-up.

Printed by Rotary Offset Press Pty Ltd, 175 Campbell Street, Taylor Square, for the publishers, Group Publications, 263 Oxford St, Darlinghurst, NSW.

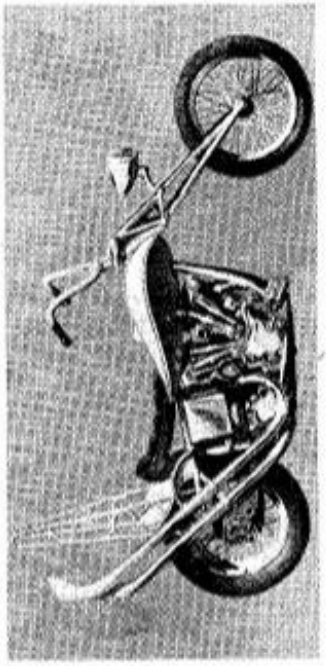
Revell release exciting, new models each month

WALLING WHALER

The Charles W. Morgan was the greatest whale hunter of them all, taking no less than 61 whales on her maiden voyage. A beautiful 16" model, exceptionally detailed with brick try works, deck fixtures, preformed sails and ratlines, rigging thread and rigging instructions, seven whale boats, and colorful flag sheet. Kit contains cement.

Wagon Power

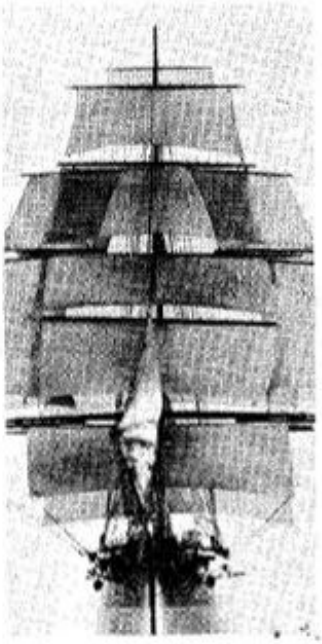
The '57 Chevy Nomad is the classic two-door wagon. To 1/25 scale this kit is one of many parts. Builder has the choice of three front heights and three different rear heights. Independent suspension with turntable front wheels. Lowered or stock, including tubular axle with semi-elliptic springs. One-piece body. Doors, hood, tailgate, rear window, all open and close. Tinted windows. Stick shift transmission. A kit that is loaded with chrome.



HOG

The classic Harley Davidson "hog" stripped to brute force and radically redesigned! And the features are super boss! Detailed all-chrome engine, engine wiring, fuel lines and control cables, exposed primary drive. Rear suspension with modified Chevy II springs. Custom forks on 45 per cent rake. Ape hangers high over steerable front wheel. Custom tuck and roll seat. Wrought iron 'sissy bar', with intra-tube scroll work. Floating tail light. Cibie headlight. A symetrically-designed gas tank.

Cutty Sark



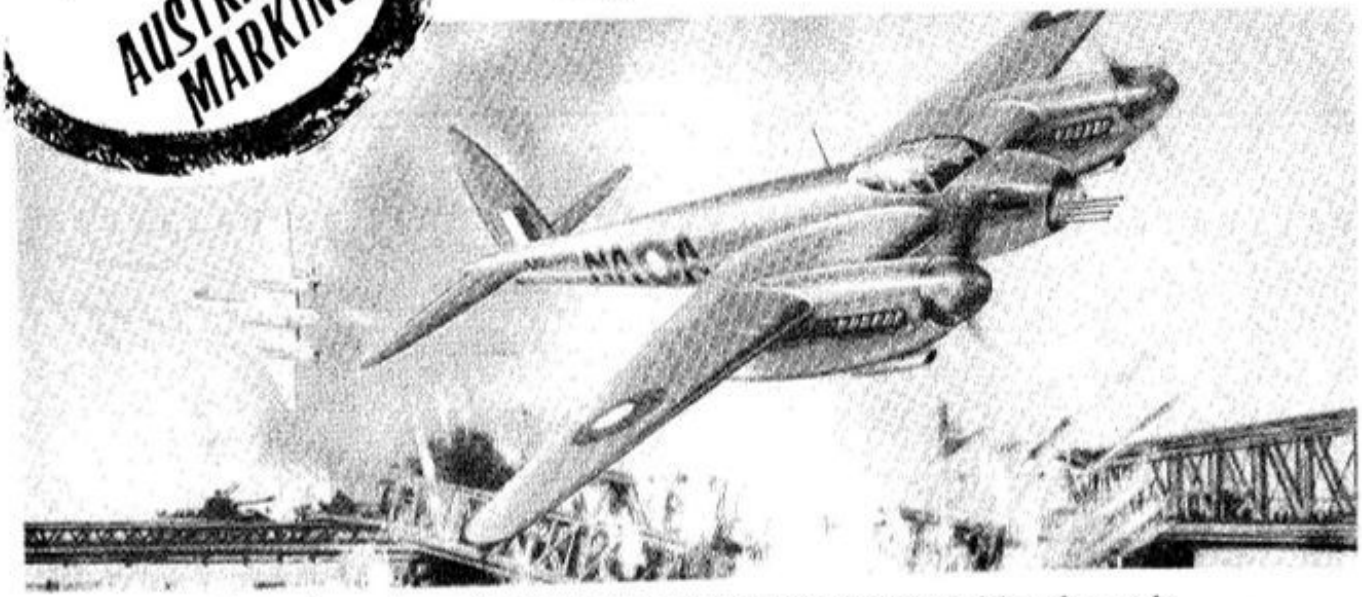
The Cutty Sark was the finest and fastest example of the great age of the merchant sailing ships. This is a SIMPLIFIED kit that will enable every amateur to build a professional-looking model. New time - saving features have been engineered into an entirely new conception in kit design. Easier parts location throughout with simplified yard and mast assemblies, cabins moulded to deck, two-piece hull, easy-to-rig sails, preformed ratlines, rigging thread, colorful markings and special display base. A 24" beauty that anyone can build. Cement is included in kit.

Look for the colorful Revell display at your local dealer NOW!

Revell IS GREAT IN '68

NEW! FROM FROG WITH AUSTRALIAN MARKINGS

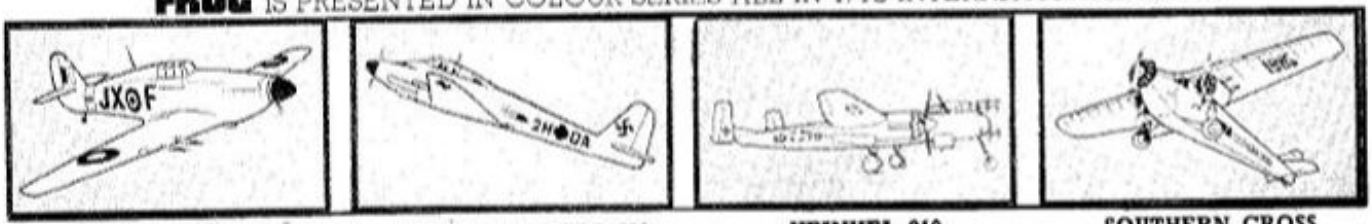
First kit of an R.A.A.F aircraft- De Havilland Mosquito MK.6 Fighter of No.1 Squadron



The unique all-wood construction of the Mosquito allowed it to be made almost entirely by the furniture industry and this light powerful aircraft was so fast that as an unarmed bomber and photo-reconnaissance, it roamed the skies of Europe at will and in perfect safety.

- Kit can be constructed two ways—as Mk.4 bomber of 105 Squadron, R.A.F., or as Mk.6 fighter with No. 1 Fighter Squadron, R.A.A.F.
- Two complete sets of decals with 22 different markings.
- 76 detailed parts, including cannons and machine guns.
- Moulded in authentic steel grey.
- Canopy windows, landing lights and many other parts in perspex.
- Full colour profile of two alternative markings shown on box.

FROG IS PRESENTED IN COLOUR SERIES ALL IN 1/72 INTERNATIONAL SCALE



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