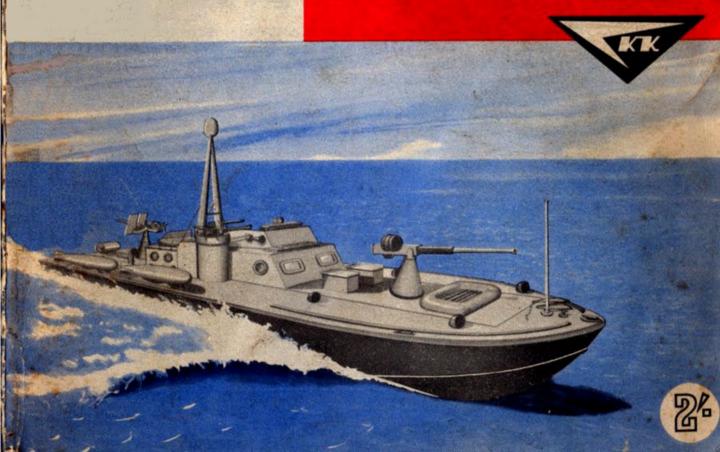


Model boats, fittings, motors, radio-control equipment etc.

Useful information on construction by Vic Smeed.

MARINE MODELS





THERE ARE OVER 3,000
KK STOCKISTS IN
GREAT BRITAIN

FOREWORD

MARINE CATALOGUE and GUIDE.

Our range of marine kits and accessories has expanded so rapidly that it has become necessary to compile a catalogue which will show model boat enthusiasts the wide variety of products which are now available.

This is the first edition of our marine Catalogue and we have tried to include as much helpful information as possible. Whether you want a small inexpensive electric motor powered model or a large elaborate radio-controlled boat you will find what you need in the pages of this book - and remember all the products mentioned are backed by the KeilKraft reputation for quality and value.

If you are a beginner to model boat construction this book will enable you to make a good start in this very fine hobby. The experts will recognise that here you have the finest selection of kits, motors, fittings, etc., obtainable at the present time.

Browse through the pages of this catalogue and guide and it will enable you to produce models that will give you lasting satisfaction. Model boats last for a long time, so build with care and select products that will not let you down - choose KEILKRAFT recommended products.

As a modeller I like to know that our Customers will not be disappointed, that is why I insist that all the items we manufacture or distribute come up to the high standards which myself as a modeller demand - this means that you can buy these products with complete confidence.



E. KEIL & COMPANY LTD. WICKFORD, ESSEX

Useful hints to the newcomer to model boat building

By VIC SMEED Editor: of MODEL MAKER"

When you build a model boat you are building something that with normal handling will last for several years—something which will give you a lot of fun and pleasure, both from operating it and from the interest and appreciation of people who see you with it. For these reasons an extra few minutes spent here and there in the construction will more than repay you.

Boat kits fall generally into two classes, the all-balsa models, usually small craft for electric motors, and ply or ply and balsa designs which may be used with either electric or diesel power. Ply provided in kits is always of the resin-bonded, waterproof type, which for most applications is the ideal material, possessing a high strength/weight ratio as well as freedom from faults such as splitting and twisting, to which ordinary timbers are prone.

For small models—or even correctly designed large ones—balsa is a highly satisfactory medium, and the following hints apply just as much to this material as to ply models.

Firstly, the question of tools. No matter how prefabricated a kit is, there must always be one or two steps which the manufacturer cannot carry out because the work cannot be done until certain other stages of assembly have been completed. These steps are, of course, kept to a minimum by the designer, and in the case of balsa models a razor blade or modelling knife, a few pins, and a sheet of glasspaper will normally take care of them. With ply. or where blocks of balsa have to be carved, useful additions are a file a chisel, and in some cases a small plane. If pins are used, a light hammer is desirable, and a hand-drill with one or two drills also proves useful. It should be pointed out that ways of doing jobs without these simple tools are many. but their availability does ease the work.

When you first get your kit, lay out the parts on a table and study the plans and instructions to familiarise yourself with the structure and the sequence of building. Make sure you know where each part goes and what it does. Cut out any necessary parts and clean up these and any pre-cut parts, which should require only a light sanding. Check the fits of all items and file any notches etc., so that smooth mating is possible—no parts should require forcing, but there should be no sloppiness.

Follow the assembly instructions accurately; they are not put in to fill up space, but are based on experience with assembling prototypes, and show you the easiest and most logical procedure. There are several excellent cements on the market, either of the cellulose type such as Britfix or Durofix, or the resin varieties such as Cascamite One-Shot or Aerolite

Where parts have to be pared or chamfered during or after assembly, take only light cuts — three or four small shavings are better than one deep cut which may go astray. Check that each piece added is truly in place and square before the cement dries.

Often chines or inwales (sometimes called stringers) require bending to a curve which is difficult to achieve "dry." Warming or steaming the wood will render it more pliable, or, in extreme cases, it can be soaked in hot water. Pin or strap in place with rubber bands or small clamps (clothes pegs or bulldog clips are useful) until the wood is dry, then cement in place.

Ply skins can often be fitted easier with the help of a stiff paper template. Hardened steel dressmakers pins can be pushed through ply quite easily by gripping the shank just above the point in a pair of pliers; they should be withdrawn when the cement has set

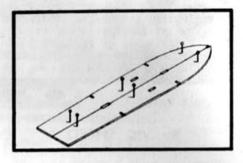
MERSEY MARINE MODELS

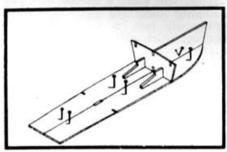
Before applying all of the skinning, check that the internal structure can be reached with a paint brush, as every part must be painted or varnished at least two coats. Omitting this step because the areas will never be visible again is very short-sighted, because water can certainly get into places the eye cannot see, and even though the materials are waterproof, eventually deterioration will commence at that spot and spread even beneath the painted areas. Although waiting for the paint to dry before proceeding is a nuisance, a little patience at this point is more than worthwhile.

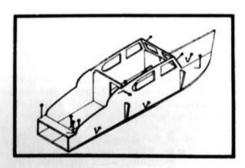
In many models it is necessary to fit the shaft tube and motor mountings before or during skinning. The tube may be held in place by a bolted skeg or it may slip into a slot or tunnel in the keel. Whatever the fixing, it must be rigid and watertight, and if the fit through the hull is good, a thick paint film or liberal cement will usually A round file of appropriate diameter is a useful aid in ensuring a good fit which, however, must not "strain" the tube; even a slight imperceptible bend can introduce unwanted friction. If by some mischance the tube is a sloppy fit, scraps of paint-soaked rag wrapped round it or stuffed in with it are preferable to plastic wood as packing, since the latter is quite likely to crack away. Where a bushed tube is used, it should be filled with grease before inserting the shaft, either with a grease gun or by sucking melted Vaseline into it.

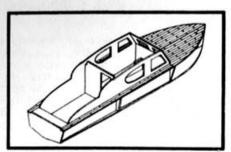
Fitting and lining up the motor is a vital step and one which calls for special care. Misalignment wastes an unbelievable amount of power, even with flexible couplings, and only a small amount of friction so produced will often prevent a motor from running, especially in the under 1½ c.c. size diesels. Bolt the motor in place as the mountings are glued, so that slight movement and packing can be introduced if necessary. Friction can be easily detected by turning the prop-shaft from the propeller end. When the glue is thoroughly set, the motor can be removed while further work is carried out.

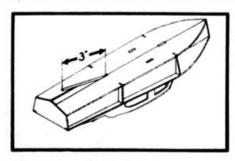
On the right—A sample of the step-bystep illustrations contained in the building instructions of the new Keilkraft EeZeBilt Boat Kits











Apart from neatness in fittings and details, the most striking thing about a model is the quality of its paint finish. This is achieved only by careful work and good quality tools and materials, and the basis is a really thorough sanding over the entire boat. If the deck is to be stained and/or varnished, this must be the first step, since it is impossible to remove entirely any traces of paint which may creep over from the sides if the deck has not been finished. Water or spirit stain should be applied thinly, using successive coats to reach the desired colour rather than one strong coat. Deck plank lines should be ruled at this stage if a soft lead black pencil is used. Apply a coat of varnish and rub down when really dry with No. 380 wet-or-dry carborundum paper used wet. Apply a second coat and leave to dry in a dustfree room. If Indian ink lines are intended, rub this coat down, pencil the planks lightly, then ink over; a further coat of varnish must then be flowed on.

The hull sides and bottom and the superstructure (where painted) need sufficient coats of undercoat to fill the grain—usually at least three, rubbed well down between each, again with wet-or-dry. Masking for the finishing coat, where different colours are used, can be cellophane tape or, for synthetic enamels, gummed paper tape, which must be soaked off when the paint is dry but will no, peel the paint film as can happen when cellophane tape is pulled off. Use two thin coats of finish rather than one thick one.

Details and fittings will usually be suggested on the plan, and any not supplied can normally be purchased as accessories.

A glance

through this Handbook will soon show you what is typical for your particular boat

Vic Smeed

Selection of Propellers

The selection and fitting of this most important of model ship's equipment is very often carried out in a most haphazard manner. This results in an enormous loss of power, much of the motor's capacity being wasted. There are five features of a propeller that need to be taken into consideration. These are the Diameter, Pitch, Number and Area of blades, and the Hand.

The hand of the prop. is controlled by the direction of rotation of the shaft. A great deal of confusion exists as to which is a right or left hand. The simplest method of defining this is as follows: If when the craft is going ahead the top of the propeller turns to port (to the left) it is a left hand, and if to starboard (to the right) it is a right hand.

The number of blades is largely controlled by circumstances, a two-blade is very efficient, but of necessity requires to be of large diameter and has the added disadvantage of giving a distinct beat each time the blade passes the stern post, masking the prop., and interfering with the clear run of water to the propeller which is so vitally important.

Three blades do not suffer from this defect so greatly as only one blade is

masked at a time.

Four blades are only used if space is very restricted and three blades will not give a sufficient blade area.

It is always best to arrange for the propeller to be as deeply immersed as

possible.

The matter of number of blades and the correct hand having been established, it remains then to settle Diameter, Pitch and Area.

Here considerations of hull form, engine speeds, etc., come in, and is a job for the expert designer, and even then the results are not always perfect. The correct size, etc., for the very best of results and performance must always be a matter of trial and error.

A basis on which to make an approximation of a suitable prop. can be calculated from the following formula. Take the required speed in inches per minute and divide by the known engine revs. per minute. To this result add 30 per cent; this will give Pitch. Size can be three-quarters of Pitch. If this proves to be restricting the engine's power, reduce the blade area until the engine is developing its full revs.

MERSEY MARINE MODELS

Propulsion

EVERY modeller has his own ideas as to the method of propulsion he will use in his model; he may favour diesel, steam or electric. I do not intend to persuade the modeller that one method is better than another. The main consideration should be the selection of one that will reproduce the characteristics of the prototype and so create a realistic and scale appearance. There is on the market a variety of power units suitable for the propulsion of every type and size of model. Obviously the size and type of model will govern the type of power plant used, this together with the amount one is prepared to spend and the area of water available, its location and condition, must be taken into consideration before a choice is made

Apart from pure racing craft, speeds must be kept within reasonable limits in order to provide for ease in the handling of the model and to avoid damage should it be operating on restricted waters. From five to six miles an hour is about the limit suitable for the average model such as a cabin cruiser or launch. This speed is very deceptive and to the onlooker would seem to be much higher.

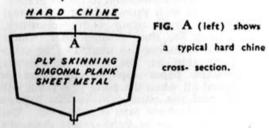
Many modellers are in favour of the small diesel or petrol motor. This type of propulsion gives fast and exciting sailing, at the same time it requires a larger area of water really to get the best out of the model, as against electric power. The small diesel engine seems to be the most popular, this I think, is owing to its power/weight ratio. Obviously, these are only suited to certain types of models, e.g., the Vospers Crash Tender or a high-speed Cabin Cruiser. in which they can create a most realistic and exciting performance. The petrol motor is no doubt the best from the point of speed control, but has the added complication of ignition equipment.

Steam has many points in its favour, and for some types of model is the most realistic. It is most reliable, and can be controlled from a tick-over to full speed; it is economical to run and many types of plant are available. Electric propulsion is suitable for almost any type of model—it has many features which make it desirable. It is clean and most reliable, and if radio control is to be used many modellers feel it is essential. Battery expense is the only real disadvantage, but with the small and efficient rechargeable accumulators now available this is a minor point.

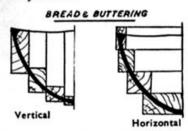
MODEL BOAT BUILDING METHODS

HARD CHINE HULLS

This type of hull is most often built on permanent frames or bulkheads which remain part of the finished hull.



For larger boats the "bread-and-butter" system of construction saves a lot of heavy work. The principle of this method is clearly shown.



The deck may be either fitted flush on to the top of the hull and held down by small screws or it may be let into the hull as at B.

BUILD A CITICITY

EeZeBILT MOTOR BOAT

Four delightfully easy-to-build boats that perform really well.

Check the

contents

Check the price!

DAY CRUISER. Length 16" CRESTA
OUTBOARD MOTOR BOAT.
Length 16"

MERMAID
OCEAN GOING CRUISER.
Length 14*

TRITON

CABIN CRUISER.

Length 17"

KITS CONTAIN

- ALL PARTS DIE-CUT
- BUILDING INSTRUCTIONS WITH STEP-BY-STEP ILLUSTRATIONS
- AMPLE BUILDING MATERIALS
- PROP, SHAFT & STERN TUBE
- RUDDER ASSEMBLY (Except Cresta)

For the CRESTA you will need the new Keilkraft Elmic "SPRITE" outboard motor.

Scale speed performance on any small electric motor.

* Each kit a quality job throughout

ONLY 12/-EACH

He's proud of his KK boat! — and you'll be pleased, too, with the easy way these kits go together.

GREATER VALUE THAN WITH ANY OTHER

KIT OF COMPARABLE SIZE.

To give the final finish to your model use only the approved "MERSEY MARINE" fittings.

For your guidiance these are fully listed & illustrated with the correct specification for each model on the following pages.

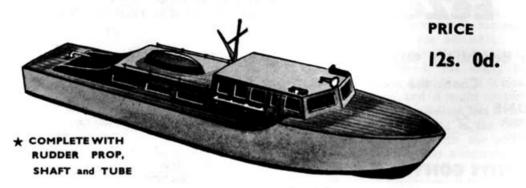
SEE THE COMPLETE RANGE AT YOUR LOCAL MODEL SHOP.



EeZeBILT Boat Kit

The **TRITON**

17in. Cabin Cruiser



NOTE Will perform really well on any small electric motor running on 3 to 6 volt dry batteries.

KIT CONTAINS

- AMPLE BUILDING MATERIALS
- ALL PARTS DIE-CUT
- BUILDING INSTRUCTIONS WITH STEP-BY-STEP ILLUSTRATIONS RUDDER ASSEMBLY
- PROP, SHAFT & STERN TUBE

Balsa parts are precision die-cut from first quality wood— ITS, KEIL KRAFT just press right out of the sheet ready to assemble!

Here are illustrated the correct MERSEY MARINE fittings for your'TRITON'



ASK TO SEE THEM AT YOUR MODEL SHOP and don't forget to ask for them by NAME



MOTOR BOAT KIT

MERMAID Length 14"

Semi-scale boats that the beginner

* BUILDING INSTRUCTIONS, with STEP-by-STEP ILLUSTRATIONS Construction is of balsa wood and all parts are die-cut to shape

MERMAID 14in. Ocean Going Cruiser 12 /2

The Mermaid, is complete

The Mermaid, is complete with rudder, propeller, prop. shaft and tube.

Length 14"

PRICE

THE SMALLER SIZES OF ELECTRIC MOTORS SUCH AS THE Mighty Midget. Ever Ready TG18. Kako Nos O, 1, or 2. Mabuchi 25 - 35. or similar are ideal for the Keil Kraft MERMAID, TRITON, & NEPTUNE.

MERSEY MARINE FITTINGS For the MERMAID

Beautifully made to give your model that professional touch.



TO GET THE BEST FROM YOUR KIT YOU MUST USE FITTINGS OF QUALITY INSIST ON MERSEY MARINE THE OFFICIALLY APPROVED RANGE.

-

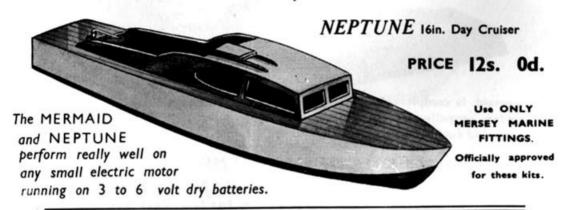
KEIL KRAFT Semi-Scale boats that the beginner can build with ease

NOTE THE CONTENTS:

All others are OPTIONAL.

- BUILDING INSTRUCTIONS, with STEP-by-STEP ILLUSTRATIONS
- THEY ARE COMPLETE WITH RUDDER PROP, SHAFT and TUBE

A large and very well prepared drawing shows each stage this, coupled with the step-by-step instructions, enables the model to be built in relatively few hours.



MERSEY MARINE FITTINGS For the NEPTUNE

In METALLISED PLASTIC, DEFINITELYthe FINEST QUALITY at the LOWEST PRICES



Boat Kits at your local model shop



THE POWER PLANT for your 'GRESTA' The Keilkraft-Elmic 'Sprite'



With one 44v. battery quite a lot of punch is obtained on 6v, the little motor fairly roars. The excellent performance is in part due to the fact that the designed as an outboard from the start.

Specification: Weight 2 oz., length, 21 width 11 height, 31 in.

Nylon and brass gearing

STEERING WHEEL

Screwed connections for wiring.

Steerable clamp. **Built-in** switch.

PRICE

19s. 3d.

Don't forget

MERSEY MARINE FITTINGS for the



PENNANT (NYLON

FLAGSTAFFS Chrome

finish.

I/- each.



CLEATS *

Chrome finish.

1/- pair.

Dia. 14"

1/3



Single horn

Twin type It long 1/9 each Fittings are ESSENTIAL.

All others are OPTIONAL.

TO GET THE BEST FROM YOUR KIT YOU MUST USE FITTINGS OF QUALITY

INSIST ON MERSEY MARINE THE OFFICIALLY APPROVED RANGE. SEE THEM AT YOUR MODEL SHOP

DO YOU KNOW? THERE ARE OVER 3,000 KK STOCKISTS IN GREAT BRITAIN

1/- pair.



SEE THE COMPLETE RANGE AT YOUR LOCAL MODEL SHOP



BOAT KITS FULLY **PREFABRICATED**

FOR THE SMALLER SIZES OF ELECTRIC MOTORS

Although designed mainly for electric power, the Police Launch, Cormorant and Tern can be fitted with a small diesel engine by the more experienced modeller who requires really high speed.

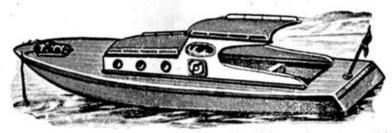
POLICE LAUNCH

Replica of the famous Thames River Police Launch.

LOA 18 in., Beam 5 % in.



A semi-scale replica of the famous Thames River Police launches, suitably modified as shown on the drawing, the Police launch can be powered with a small Diesel up to .5 c.c., for those who like really high speed. All parts are die-cut.



CORMORANT

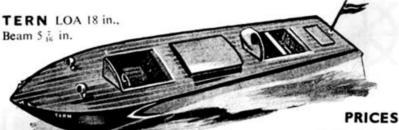
High speed sports or Fishing Cruiser.

LOA 18in., beam 5 in.

Modelled on the lines of a high speed sports or fishing cruiser, "Cormorant" performs realistically, with any small electric power unit. All parts are die-cut removing tedious cutting out.

For the TERN you'll need the famous

KeilKraft - Elmic SPRITE



Cormorant

16/11

Tern

14/6

EACH

Police Launch 16/6

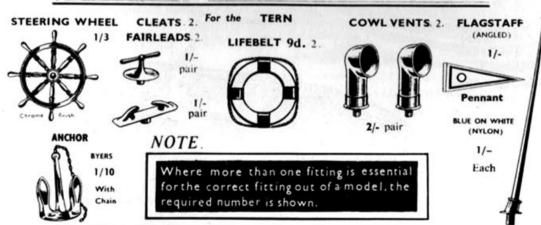
A model of a high speed, twin cockpit, open runabout, designed to be powered either as an inboard electric, or with outboard electric, or can by suitable modification be fitted with small diesel up to .5 c.c. for really high performance. All parts die-cut.

MERSEY MARINE SHIP FITTINGS in Metallised Plastic at Popular Prices

Suitable for Marinecraft Model Power Boats







"Marinecraft"

ALL BALSA
PRE-FABRICATED
BOAT KITS

A range of boat kits that even the beginner can construct with ease. Balsa construction with all parts accurately die-cut to shape. Simple to follow instructions and diagrams on each stage of building.



LOA 18 in., Beam 5 % in.

High speed ocean-going Cabin Cruiser.

- AMPLE BUILDING MATERIALS
- ALL PARTS DIE-CUT

A scale model of a high speed ocean-going cabin cruiser, "Kestrel' is a very impressive model. Suitably embellished with various ship fittings it is a model to be proud of. All parts are die-cut.

BUILDING INSTRUCTIONS
fittings it is a model to be proud of. All pa
WITH STEP-BY-STEP
ILLUSTRATIONS

O 4-7 6

A near scale model of the famous Rescue Craft of the R.A.F. A most impressive model in or out of the water. All parts die-cut.

M.T.B.

LOA 18 in., Beam 5 ii in.

R.A.F.

CRASH TENDER Famous rescue craft of the R.A.F.

Famous wartime "Fairmile" Torpedo

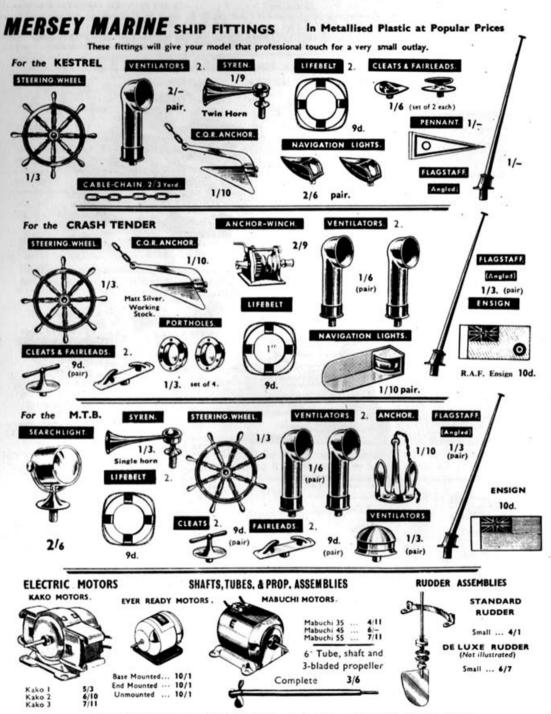
Power your boat with one of these efficient motors

KAKO I MABUCHI EVER READY or a MIGHTY MIDGET

Price each Kit

LOA 18 in.,
Beam 5 % in.

Based on the famous wartime "Fairmile", this semi-scale M.T.B. is a delight to build and a most impressive model when powered with the larger of the power units. All parts die-cut.





Electric. Taycol. Marine. Kako Nº 5.

Navigator etc.

A COMPLETE RANGE of scale prefabricated model boat kits covering engines of all sizes from .5 c.c. to 3.5 c.c. Equally suitable for radio control or free running these kits are all pre-formed and ready to assemble, requiring no special workshop facilities to construct. Basic tools required are hammer, file or rasp, sharp knife and sandpaper. A special feature is that parts are all COUNTER ROUTED to shape which provides 100% accuracy plus a degree of finish unequalled by any other process.



STERN TUBE 11"x 5/16." RUDDER NO

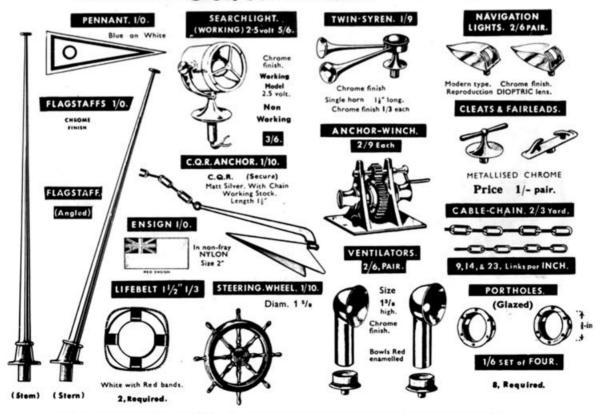
with two forward cabins, centre raised helmsman's cockpit, and rear cabin. Central and rear cabin roofs lift and floor of helmsman's cockpit also lifts for watertight location of radio receiver.

Reverse sheer to deckline completes the elegant appearance of this boat which performs as well as she looks.

Price, complete with fullsize working detailed drawings,

including P.T. 70/-

AUTHENTIC Sea Commander FITTINGS.



AEROKITS

True line-up is assured with their unique inter- locking building system.

Keels are slotted to assist accurate align-ment of prop tubes.

SEA ROVER

under cover.

Now extensive range of model boat kits have earned an enviable reputation for consistent practical design and trouble-free assembly. Material in all cases is selected resin-bonded ply in appropriate thicknesses of 11, 4 and 6 mm. to suit precise needs, plus hardwood strip for rubbing strakes, chine and gunwhale stringers. Really detailed building instructions, accurate plans, and progress sketches makes assembly simple even for the novice.



Taycol

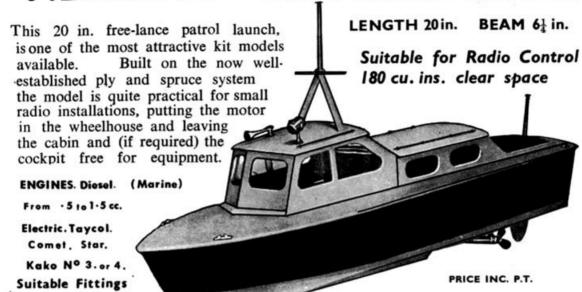
Target, Torpedo. Kako Nº 4. etc.

Sea Rover MERSEY MARINE **FITTINGS**



These are the fittings that you can depend upon to give you complete satisfaction.

AEROKITS FAST PATROL LAUNCH



Entirely prefabricated, everything goes together easily and it is difficult to get out of line on the basic structure due to the interlocking of parts. Tools required are an absolute minimum, a small plane, a chisel, and a glasspaper block being adequate.

Use ONLY MERSEY MARINE FITTINGS Officially approved for these kits



Stern Tube 10"x 1/4"

Rudder NO 1.

Single Horn 1/3. each Twin Horn 1/9.

LIFEBELT



Size I" 9d. White with Red bands





each

Chrome finish 5/6

Working

Model 2.5 volt



STEERING WHEEL



Brass Chrome finish 11"







Size I" IOd. each In non-fray NYLON

ENSIGN Red

31'6



Chrome finish.

PRICE I/- each.

ANGLED

FLAGSTAFF

NAVIGATION LIGHTS



1/10 pair.



Sea Nymph

Introduced at an amazingly low price this DAY CRUISER with open rear cockpit and enclosed forward cabin is a real winner

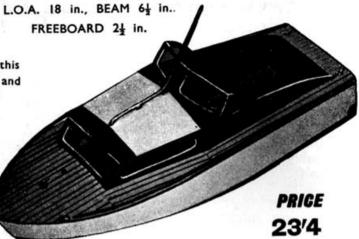
Ample room for radio-control gear.

For diesels of .5 to 1 c.c. or outboard engines, is also particularly suitable for electric propulsion (e.g. Taycol Star, or Marine motors.)

Suitable Fittings.

Stern Tube 8" x 1/4".

Rudder Nº1.



AEROKITS

L.O.A. 25∤ in. BEAM 8 in. SEA HORNET

Speed Boat, very fast and easy to make. Engine .5 or 1.5 c.c. or Electric

PRICE incl. P.T.

31′6

STEERING WHEEL

MERSEY MARINE FITTINGS

in Metallised Plastic

Suitable for SEA NYMPH for SEA HORNET



ENSIGN

Size I' 10d. LIFEBELTS



White with Red bands.

SEARCHLIGHT



CLEATS and FAIRLEADS

I/6 set of 4 Chrome finish



SIRENS



Single Horn 1/3.
Twin Horn 1/9.

MUSHROOM VENTS



Chrome finish. 1/6

pair

BYERS ANCHOR With Chain Working Stock.

1/10



Chrome

4" dia

finish.

ASK TO SEE THEM AT YOUR MODEL SHOP and don't forget to ask for them by NAME

AEROKITS

SEA URCHIN

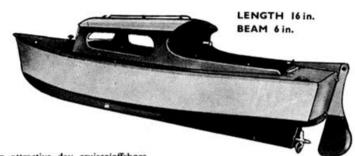
DAY BOAT FOR CRUISING AND OFF-SHORE FISHING



ENGINES. Diesel. (Marine) .5 cc.

Electric. Taycol. Comet. Star.

Kako Nº 3.



Suitable Fittings Stern Tube 7 "x 1/4"

SEA URCHIN, an attractive day cruiser/offshore fisherman of the type which can be seen in any harbour on the coast. Big for its length (beam is 6 in.) the model is of ply construction, fully prefabricated, and is excellent for electric power or up to .8 c.c. diesels. Easy to make up.

Aerokits

Sea Scout

L.O.A. 24 in., BEAM 81 in., FREEBOARD 21 in.

A simple and attractive Cabin Cruiser, with removable rooftop, with large open cockpit at rear.

> Suitable for engines from .5 to 1.5 c.c. or electric propulsion.

> > Suggested power units: Engines. Allbon Dart. Marine E.D. Bee, or Electric Motor.

Taycol, Target. Terpedo.

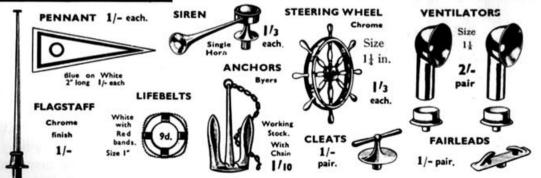
Kako Nº 4. etc



Suitable Fittings. Stern Tube 9"x 1/4" Rudder, Nº1.

MERSEY MARINE

AUTHENTIC FITTINGS 10. SEA - URCHIN. & SEA SCOUT.



SEE THE COMPLETE RANGE AT YOUR MODEL SHOP



This fine HIGH SPEED VOSPER R.A.F. CRASH TENDER makes up into a magnificent model 34 in. l.o.a., with a beam of 10 in., thus providing a scale model of truly seaworthy proportions, ideal for Radio Control installation. Forward and central cabin tops lift off for access, as does rear cockpit floor. It is thus possible to have r/c installation and steering motor quite separate and apart from the central cabin "engine room". Completely cut out pre-fabricated parts make assembly simple without elaborate tools or jigs and the model can be made by any enthusiast with a minimum of experience. Quality of materials and elegance of design make it a model that will be worthy of attention to detail fittings in the way of foam monitors, ventilators, lifebelts, anchor, searchlight etc., so that it can be launched with pride as the finest on the water.

FITTINGS

R.A.F. CRASH TENDER SET.

In common with the SEA SERIES

new Vosper Crash Tender has been the subject of exhaustive trials under the most severe

conditions both on inland waters and on the open sea.

A number of pilot kits are also circulated for independent examination, test and comment by acknowledged experts, so that AEROKITS come on the market in the positive certainty that they are as perfect as good kits can be.

Speed is terrific, as the model begins to plane under quite small power, and skippers are advised to go easy on full throttle until the power potentialities have been appreciated!

Genuine all-metal ship fittings of authentic pattern precision die-cast in non-rusting alloy.

1 Searchlight, 2 Small Fairleads, 2 Medium Fairleads, 4 Ball type Cleats, 2 Small Ventilators, 1 Anchor, 4 B type Cleats, 2 Navigation Lights, 1 Mast Head Light, 2 Foam Monitors, I Breeches Connection, 6 Large Ventilators, 12 Handrail Knobs, 2 Mushroom Vents.

PRICE including P.T 42/-

EXTRA FITTINGS

LIFEBELTS

STERN TUBE 10"x 5/16" RUDDER NO 2.



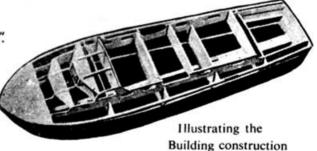
Price 3/pair

ENGINES, Diesel. 2. to 3.5cc. Electric.

Taycol. Marine.

White with Red bands

Kako Nº 5.

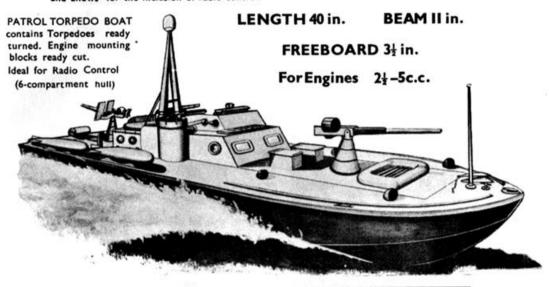


THE FINEST EVER OFFERED AS A KIT!

AEROKITS PATROL TORPEDO BOAT

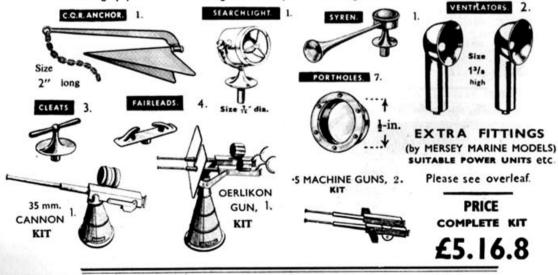
This boat kit is the result of many years of planning and

design and we feel will answer the need of the modeller who has been waiting for a kit, containing fittings supplied ready-made, straightforward to build, which, when completed, is really luxurious and allows for the inclusion of radio control.

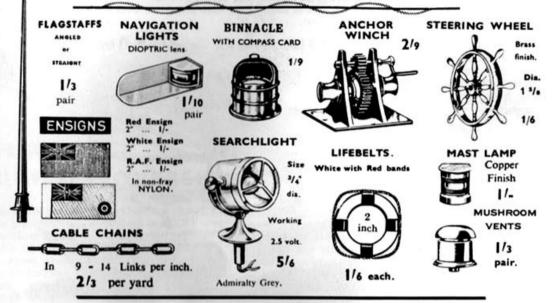


AEROKITS all contain selected resin-bonded ply in thickness of 11, 4 and 6 mm., plus hardwood strip for rubbing strakes and stringers. Detailed instructions, accurate plans, adequate progress sketches and unique interlocking building system make construction simple. Slotted keels ensure perfect prop-tube alignment.

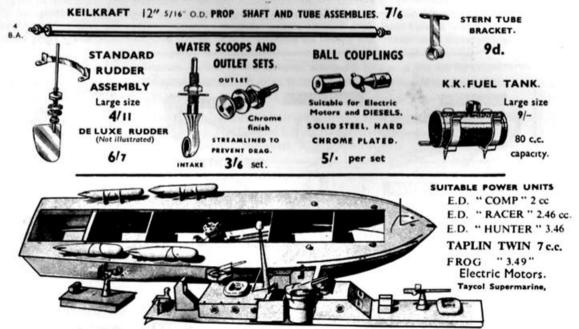
NOW for the first time a kit is available complete with all fittings, moulded in appropriate colour grey plastic and consisting of over 45 parts for fittings, illustrated!



Additional MERSEY MARINE fittings suitable for a SUPER DETAILED model



STERN GEAR and UNDERWATER FITTINGS.



Marinecraft Cabin Cruisets Silver Dawn

The finest cabin-cruiser ever presented in kit form.

The design is based on ocean-going cruiser lines and beginner or expert can take pride in the finished result. Simplicity of construction is a feature which will appeal to all. Performance and appearance is excellent and will cause comment wherever sailed. Designed for 6 or 9 volt electric motor which will produce better than scale speed or, for the speed enthusiast, up to a 1 c.c. diesel.

Kit contains: Cut parts of Best Selected Woods. Complete Stern Tube Assembly, Tiller Steering Gear, Lights, Bollards, Fairleads, Winch, Flagstaff, Steering Wheel, etc. Plan. Photo Chart, with Step-by-Step Building Instructions.

Cabin space allows for installation

of Radio Control Equipment, batteries, etc.,

below decks with locking covers to protect

valuable equipment from the water. Dimen-

sions: 31 in. overall length, 9 in. beam.

Equipment for Marinecraft Boats

SILVER DAWN

Motor

Type of Drive

6-12 v. Electric 1-2 c.c. Diesel

Stern Tube

Rudder

14" dia. 3 blade

WHITE CLOUD

Motor

Type of Drive

Electric 3-6 vo

Stern Tube

Propellor Rudder

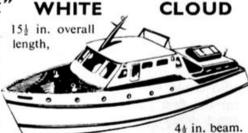
1" dia. 3 blade

"Marinecraft"

A Junior model of the "Silver Dawn" cruiser, of basically similar design and the same simple type of construction.

Although of relatively small dimensions, "White Cloud" is an impressive model when complete.

Cabin space allows ample room for drive gear and batteries.



Kit comains: Cut parts of Best Selected Woods, Rudder, Stern Tube Lights, Bollards, Fairleads, etc. Plan, Photo Chart, Step-by-Step Building Instructions. Transfers.

De-luxe Cabin Cruisers

The SILVER DAWN has been designed for Radio-control. For a beginner the choice is comparatively simple, the simplest of sets, namely a single channel by any of the manufacturers, will when used with a sequence control actuator usually suffice. This will give steering control over the model in sequence, that is, Left-Neutral-Right-Neutral. The more advanced modeller will perhaps choose the more complicated sets, that is, the sets with more than one channel.

PRICES

CABIN CRUISER KITS

Silver Dawn 31"

£ s. d.

4 - 1 - 8

White Cloud 154"

£ s. d.

1 . 8 . 0



THE MOST COMPREHENSIVE 4ft. MODEL KIT IN THE WORLD

H · M · S · METEOR

Prefabricated SCALE MODEL KIT

6 inch BEAM SUPER DETAIL

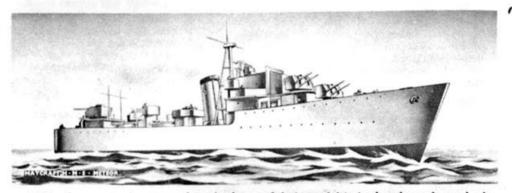
for

of Modified "M" CLASS DESTROYER

ELECTRICS OF DIESEL POWER

H.M.S. "Meteor" was one of many "M" class ships completed between 1941 & 1942, which saw much valiant service during World War Two.

"Meteor" was considered to be one of the handsomest ships of its class afloat.



This is a most comprehensively prefabricated kit in hardwoods and ply, every part cut or machined to shape and even the ply sides ready steamed to curvature.

This model has been specially designed for electrical propulsion, together with radio control if desired, or one can install a diesel engine from 2½ cc. to 5 cc., for the first time in the history of commercial model making we have the most complete model kit in the world, which will stand up against the severest criticism.

CONTENTS OF STANDARD KIT.

ALL PREFABRICATED WOOD PARTS NECESSARY TO BUILD COMPLETE SHIP'S HULL AND SUPERSTRUCTURE.

1. Ship's Funnel complete with Steam Pipes and Sirens

5. Duralumin Mast pieces

1. Duralumin Top Mast Socket

1. Duralumin Yard Arm Bracket

1. Length Brass Wire

6. 4.7" Duralumin Lathe Turned Main Guns

6. White Metal Main Gun Embrasures

3. Metal Spindles for Main Gun Turrets

10. White Metal Torpedo Tube Breeches

2. Metal Spindles for Torpedo Tubes

2. Metal Discs for Torpedo Tubes

2. Metal Collars and Grubscrews for Torpedo Tubes

PRICES.

STANDARD KIT

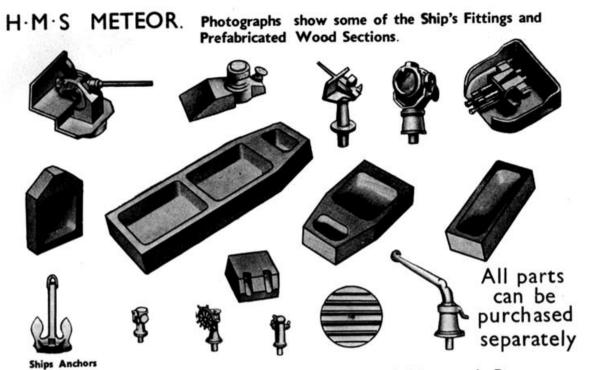
£12.14. 7.

"GOLD LABEL"

DE-LUXE KIT

£18. 18. 9.

INCLUSIVE OF TAX.



Ships Fittings are made from Solid Turned Brass Duralumin or Special Cast White Metal Every part of this kit is preformed and preshaped and is guaranteed interchangeable.

CONTENTS OF "GOLD LABEL" SUPER DE-LUXE KIT

ALL PREFABRICATED WOOD PARTS NECESSARY TO BUILD COMPLETE SHIP'S HULL AND SUPERSTRUCTURE.

- 1. Ship's Funnel complete with Steam Pipes and Sirens
- 5. Duralumin Mast pieces
 1. Duralumin Top Mast Socket
- **Duralumin Yard Arm Bracket**
- 1. Length Brass Wire
- 6. 4.7" Duralumin Lathe Turned Main Guns 6. White Metal Main Gun Embrasures
- 3. Metal Spindles for Main Gun Turrets 10. White Metal Torpedo Tube Breeches
- Metal Spindles for Torpedo Tubes Metal Discs for Torpedo Tubes
- Metal Collars and Grubscrews for Torpedo Tubes White Metal Torpedo Tube Pressure Bottles White Metal Ships Anchors Set of 4. White Metal Hawse Pipes

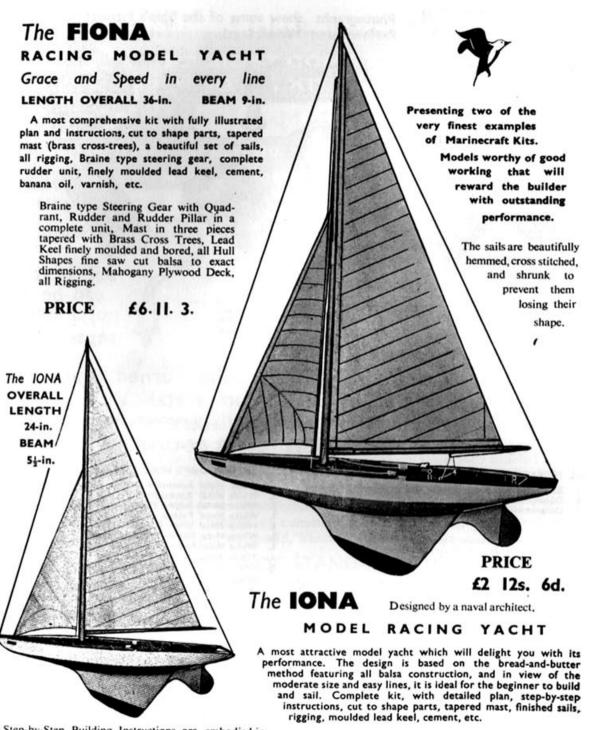
- Lengths Anchor Chain
- White Metal Chain Locker Leads (4 parts)
 White Metal Ship's Capstans
 White Metal Ship's Capstan Ramps

- White Metal Life Belt Lockers
 White Metal Watertight Doors
 White Metal Ammunition Davits
 White Metal 36" Searchlight (3 parts)
 White Metal 24" Searchlights (3 parts)
 Searchlight Glasses
 White Metal Searchlights (3 parts)

- White Metal Round Watertight Manholes White Metal Square Watertight Manholes

- White Metal Armoured Doors
- White Metal Ammunition Lockers White Metal Engine Room Ventilators
- White Metal Pelorus
- White Metal Ship's Binnacles
 White Metal Engine Room Telegraphs
 White Metal Ship's Helm (2 parts)
 White Metal 20 mm. Single Guns

- 2. White Metal 40 mm. Pom-Pom Guns (4 parts)
- 2. White Metal Squids
- 1. White Metal 40 mm. Four Barrelled Bofors Gun
- White Metal Rangefinder (3 parts), with base.
 White Metal Conning Tower (3 parts), with base
 Turned Brass Glazed Ship's Portholes
- 9. Sets Turned Brass Ship's Bollards (27 parts)
 1. Brass Ship's Rudder and Post
- Brass Ship's Rudder Tube
 Brass Tiller Rack
- 4. Turned Brass Glazed Ship's Portholes for Navigation Bridge
- Brass Tiller Arm with collar and grubscrew
 Brass Ship's Propeller, 2\frac{1}{2}\text{" Diameter, 3" Pitch
 Ship's Propellor Shaft, Stern Tube with watertight gland and "A" Bracket
- 1. Length of watertight packing
- 2. Sheets of Detailed Construction Plans
- 1. Instruction Book



Step-by-Step Building Instructions are embodied in a Clear-Cut, Easily Understood Drawing, and particulars of how to treat the balsa are also given in the Instructions.

"Iona" has Automatic Steering and a Tapered Mast with all Rigging.



"Marinecraft"

GALLEONS

The Craft of making Old Time Ships

This series of large galleon kits, is complete to the finest degree possible, containing a full size plan, instruction booklet and step by step photochart, spindle shaped hull, shaped plywood keel, shaped deck blocks all in best grade woods, all coloured panels silkscreened direct on to balsa sheet, brass turned cannon, brass dead-eyes, printed sails and flags, moulded anchors and figure-heads, rigging cord and thread, turned crows-nests or moulded cross-trees where applicable, rubbing strip, pins.

Golden Hind

CAPTAIN

SIR FRANCIS DRAKE,

ALL the romance of the Seven Seas is captured in this delightful hobby: the making of model ships being a traditional craft that has existed in this country ever since the men of Britain first sailed the seas.

A fascinating pursuit—now made easy for you by these splendidly practical Kits.

999999999

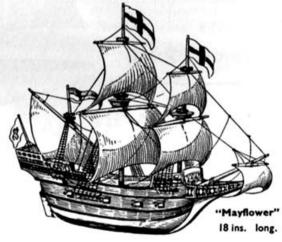


A masterly reproduction in kit form of this wonderful ship. Rigged and painted as at its most famous period after its voyage of circumnavigating the globe. The best known of all Galleons, easy to build, but a model requiring a little experience.

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Marflower

CHRISTOPHER JONES, CAPTAIN



Marinecraft Galleons

Particular attention has been paid in designing these models, to ease of construction, but, it will be obvious that a beginner to this type of modelling would be wiser to begin with the simpler models. It is our opinion that the order of simplicity is as follows:—BOUNTY, MAYFLOWER, SANTA MARIA, ARK ROYAL, GOLDEN HIND, CUTTY SARK and VICTORY.

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PRICES

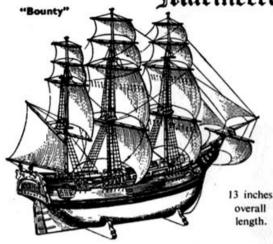
"Golden Hind" 24 ins. long. 564

"MAYFLOWER" 18 ins. long. 284

This remarkable 8-gun merchant ship, had a long life packed with adventure. As far as records go her activities ended with her famous voyage from Southampton to America in 1620 with 110 pilgrims. These pilgrims became known in history as the Pilgrim Fathers and were the first British settlers in America.

A simple model, ideal for the beginner's first attempt.

Marinecraft Galleons



H.M.S. Bounty

The H.M.S. Bounty well deserves to be included in the range of famous ships. The story of Lt. W. Bligh is a graphic account of his will to win.

His epic voyage in a ship's boat across 3,600 miles of open sea still ranks supreme in the annals of navigation.

DODDDDDDDDDDDDDDD

aaaaaaaaaa

.M.S. Victory

ADMIRAL LORD NELSON

In presenting a super detailed miniature of this famous ship we have overcome the modellers' greatest difficulty of cutting over 100 square gun ports. This is achieved by the simple method of building up the hull in deck layers enabling the builder to make a fine, clean job with ease.

These models have been produced for the advanced modeller and we feel sure they will give hours of pleasure in the making and years of delight as ornaments.





CHRISTOPHER COLUMBUS, CAPTAIN

A beautiful replica of this wonderful ship designed from a model presented by the Spanish Government. The perfect lines and grace of the Santa Maria makes it outstanding in its class of Ancient Galleons. Easy to construct, a razor blade or balsa knife being the only tool required.



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NO INTRICATE

PLANS

to confuse the beginner.

PRICES.

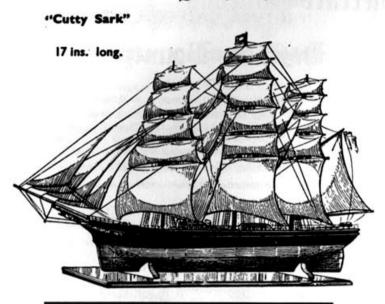
"Bounty" 12 ins. long.

284 60/8

"Victory" 20 ins. long. "Santa Maria" 19 ins. long. 39/8

POSTAGE AND PACKING EXTRA.

Marinecraft Galleons



Cutty Sark

Cutty Sark, named after the character in Burns' poem "Tam-o-Shanter", became the most famous clipper afloat. A very beautiful ship with a charmed life, her fame spread to all parts of the world.

As with all our Galleons, these models have a photographic chart making it possible for builders who do not understand plans to construct this beautiful Clipper ship with ease.

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Ark Royal

FLAGSHIP OF SIR WALTER RALEIGH

Chosen to lead the Fleet into action under the command of Lord Howard of Effingham in the defeat of the Spanish Armada, because of its speed and great manoeuvrability. Its grace and fine lines make it the ideal ship for the modellers' art. The sails and flags are those hoisted on State or Gala occasions.

Hints on Building Galleons

The building of model galleons is a rather specialised type of model ship building, since the object is to produce a decorative model of fine detail rather than an operating one.

It is essential therefore to pay a little more attention to the fine detail, those finicky little jobs that make or mar the finished product.

The following points may therefore be of some help to the modeller:— Avoid unsightly knots in rigging, by fastening ends of cords either by glue or varnish. A little care taken over this makes a big difference to your model. Where possible, whip the end of the cord in under the binding, this applies to the bindings on masts and spars particularly, or if this is not feasible fasten end behind with a coat of varnish or spot of glue. Similarly double knots to dead eyes can be obviated by using a single knot and a spot of glue.

When fitting sails do not be afraid to give them a good bulge, and pierce holes for stitching to spars first.

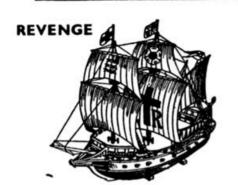
After sails are all fitted give them a coat of good varnish to darken the colour.



PRICES
GALLEON KITS
"CUTTY SARK"
25'8
"ARK ROYAL"
57'2



Authentic MINIATURE GALLEON KITS





"GOLDEN HIND"



THESE ARE THE EASIEST OF ALL GALLEONS TO BUILD

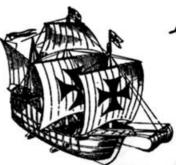
SANTA MARIA

MAYFLOWER

ARK ROYAL REVENGE

BOUNTY

"ARK ROYAL"



SANTA MARIA

"BOUNTY"



SENIOR series
(approx 12' long)
Price 15/0 each.

Junior series

Price 5'- each.

KITS FEATURE — Ready shaped hulls. Plastic anchors and crows nests. Hull sides, decks, sails, flags printed in colour on suitable material. Ample supplies for rigging, etc. Plan and full detailed instructions.

MODEST PRICES

AMPLE STOCKS

Service

Trade Mark.

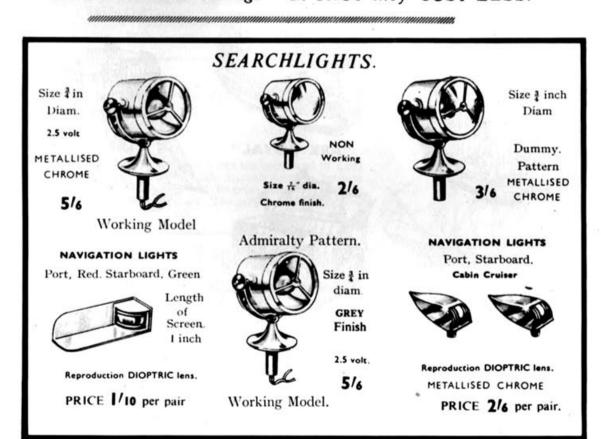
MERSEY MARINE

SHIPS FITTINGS IN METALLISED PLASTIC

NOTE THE SPECIAL FEATURES:

- ★ MOULDED in the FINEST QUALITY PLASTIC, and METALLISED by a NEW PROCESS,
- ★ UNTARNISHABLE. ★ LIGHTER THAN ALUMINIUM.
 - * ACCURATE AND AUTHENTIC DESIGN.

THEY LOOK GOOD! THEY ARE GOOD! They cost no more than other fittings - In FACT they COST LESS.

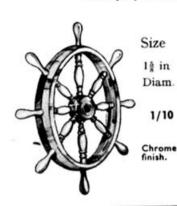


All these fittings are correctly designed to suit the kits in this catalogue.

MERSEY MARINE FITTINGS IN METALLISED PLASTIC

STEERING WHEELS.

Beautifully made to give your model that professional touch



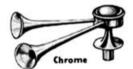


Size
11 inch
Diam.
Chrome
or
Brass finish.

Size
15/8 in
Diam.
1/10
Brass
finish.

7 1/3 each.
METALLISED CHROME or BRASS.

SYREN. Twin Horn



Can be used for Motor Ships or Steam Launches etc.

BINNACLE Cabin Cruiser



Size § in diam.

To in.high.

WITH

COMPASS

CARD

1/9

SYREN. Single Horn



Size
1½ in.
long.
Chrome
finish.

As used on Cabin Cruisers,

Best Quality Nickel Plated

Size

11 in

long.

1/9

PLAIN CABLE CHAIN

Each link separately soldered

In 9
14 23
Links per inch.

2/3 per yard

Byers Anchor Working Stock.



Price 1/10 each

ANCHORS.

C.O.R. Anchor. Movable Stock.



MATT SILVER With Chain
1½ inch long.
Price 1/10 each.

TO ENSURE YOU OF OBTAINING ONLY "MERSEY MARINE" QUALITY & VALUE, ALLOUR FITTINGS ARE SOLD CARDED IN SEALED PACKETS. DO NOT ACCEPT LOOSE FITTINGS.

Danforth Anchor



Movable Stock.

Price 1/10 each.

SEE THE COMPLETE RANGE AT YOUR LOCAL MODEL SHOP

FIRST QUALITY FITTINGS IN METALLISED PLASTIC HAND FINISHED



Height

Size of Mouth



VENTILATORS.

Bowls Red enamelled.



Sizes.

11 inch

3 inch.



PRICE per pair 2/6

Bowls Red enamelled.

2/-METALLISED CHROME

All vents have seperate DECK SOCKETS for convenience in

ADJUSTING HEIGHT.



Sizes.



Height 13 in. 11, in. Size of Mouth. 1 in. 3. in.

PRICE per pair 1/9 1/3

> Finish: Admiralty Grey Bowls Red enamelled

MUSHROOM VENTS

13

VENTILATORS.

Admiralty Grey

Finished

Admiralty Pattern.



Size 1. × | high. Size F X i ..

Size 7, X 16, Chrome finish Price 1/6 pair. Price 1/3 pair.

Size ½ × ¼ inch high.

METALLISED CHROME

Price 1/3 pair.













METALLISED CHROME

Outside	Dia
---------	-----

Price per Set of 4 5/a inch 1/2 inch 3/a inch

All sizes :- Grey finish, 1/3 SET OF 4







Drawing showing dimensions.

FAIRLEADS

and

CLEATS

Size

3 inch long.

Chrome finish 1/- pair.

Self Colour.

9d. pair.



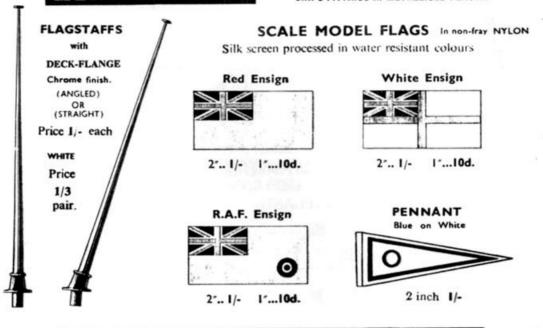
Size

inch high.

See thematyour Local Dealer

MERSEY MARINE

SHIPS FITTINGS IN METALLISED PLASTIC





Size 2 inch 1/6

White with Red bands



Size 11 in 1/3



Size 1 in. 9d.

Size 14-in, × 14-in

neat and accurately proportioned.

GRATINGS. 1/- each.

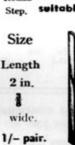
They may be cut to any required shape. 144, holes to the inch.

These plastic square hole gratings are

16" thick.



Round Self Colour, natural plastic Step. suitable for painting.



Flat Step.
Size
Length

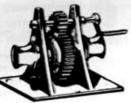
in.
inch.
wide

HAND DECK WINCH.

with

Drum, Cogwheels and Handles.

Size
in
in
in
in
high.



2/9 each.

NOTE—We are continually improving the design of our fittings, and therefore are unable to guarantee prices or patterns exact to illustrations.

MERSEY MARINE Accessories covering all your requirements.

Moulded in high impact Polystyrene.

MASTHEAD LIGHTS

DIOPTRIC lens



Brass finish

Chrome finish.

Price

Size high



high.

6d. each. 9d. each. BOWSIES For model yacht rigging.

Size 1, 1, inch long, 10d, doz

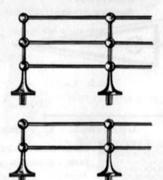
RIGGING SCREWS.

SOLID BRASS WITH STAINLESS STEEL SCREWS AND SWIVEL.

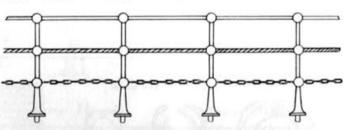
Size 1 in. opened 2 in. Price 4/6 each.

MODEL STANCHIONS

Stanchions for models of Motor Launches, protective rails, etc. MOULDED IN FLEXIBLE PLASTIC TO PREVENT BREAKAGES



Can be easily altered to single or two rail, with choice of three alternative types of protective rails, as illustrated, WIRE, ROPE or CHAIN.



Size 1 in. high.

Price per dozen White.

1/6

(flexible)

Price per dozen METALLISED CHROME

2/6 rigid type

MARINE WATER SCOOPS AND OUTLET SETS.

STREAMLINED to PREVENT DRAG, SUITABLE for all DIESEL POWERED MODEL BOATS.

FITTING INSTRUCTIONS. Connect the intake scoop to the water jacket with 1" bore NEOPRENE TUBING. Fit the outlet to either the side or stern of craft, connect up to water jacket outlet, which is the top pipe on the jacket, with 1" neoprene tubing.

OUTLET Chrome Finish.

Price

3/6

Complete Set:

TO ENSURE YOU OF OBTAINING ONLY "MERSEY MARINE" QUALITY & VALUE, ALL OUR FITTINGS ARE SOLD CARDED

IN SEALED PACKETS. DO NOT ACCEPT LOOSE FITTINGS.

See themat your Local Dealer

MERSEY MARINE PROPELLERS

STERN GEAR and UNDERWATER FITTINGS

ENSURE PROPULSIVE EFFICIENCY by fitting
THE FINEST MARINE PROPELLERS PRODUCED



WE ARE SPECIALISTS IN THE DESIGN AND MANUFACTURE OF THIS MOST IMPORTANT OF MODEL SHIPS FITTINGS. THERE ARE NO FINER PROPELLERS MADE AND THEY CAN BE RELIED ON TO GIVE BEST POSSIBLE RESULTS AND SERVICE.



SOLID BRASS .

PERFECT BLADE SECTION

SCIENTIFICALLY DESIGNED TO GIVE MAXIMUM PERFORMANCE

AND GREATER EFFICIENCY

LIGHTWEIGHT, PERFECT BALANCE, MIRROR FINISH

UNBREAKABLE

Jrusted for strength

Admired . .
. for excellence
of finish

Naval-Architect Designed

All Right or Left-handed.

SIZE	1"	11/4"	11/2"	13/4"	2*	21/2"	3"	31/2"],
PRICE	5/6	5/9	6/6	8/6	12/6	18/6	30/-	35/-	1
Tapped	4	4	4	4	4	2	2	2	1

3 Bladed each.

B.A.

Largest Range of Quality Propellers Made.

Their reputation is steadily increasing as their superiority is recognised. Thousands are now in use and we have not had one call for a replacement.

Made of solid malleable brass to allow of a slight variation in pitch of blades.

They have proved that they give higher performance.



SUPER OUALIT FITTINGS

PROPELLER ASSEMBLIES SHAFTS AND TUBES

Polishedduraltube, 1" diameter



10" Tube and shaft with 12" propeller	 4/6	6 B.A.
9" Tube and shaft with 1\frac{1}{4" propeller	 4/-	6 B.A.
8" Tube, shaft and 3-bladed propeller	 3/9)
7" Tube shaft and 3-bladed propeller	3/8	Plain

6" Tube, shaft and 3-bladed propeller





Diameter

ins. 11/4

11/2

13/4

2

PROPELLERS Brass (2-blade)

STERN TUBE CLEATS

9d. each

STERN TUBE

Prices

4/8

... 4/8

... 4/10

... 5/3

BRACKET

Price 9d.

each

Engine.

5/32.

B.A.

1/4 B.S. F.

1/8.

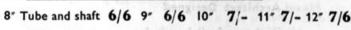
Male End. Female End.

4" diameter

JUNIOR 6" Tube, shaft and 3" propeller ... 1/2

Suitable for Motorising plastic BOAT kits.

Heavy Duty Stern Tubes and Propeller Shafts (For diesel power, 1," o/d tube, 4BA thread)



Lightweight Stern Tubes and Propeller Shafts

8" Tube and shaft 4/8 9" 4/8 10" 4/8 11" 4/8

UNIVERSAL SHAFT COUPLING.

SPECIFICATION SOLID STEEL. HARD CHROME PLATED.

Suitable for Electric Motors and DIESELS.

A number types of coupling are available, but by far the most satisfactory type is the ball and socket joint.



Ball-type "universal" coupling. Price 5/- per pair Singles 2/6 each

2 B.A. 2 B.A. 4 B.A. 4 B.A. 5/32. 1/8. 3/32. 3/32.

Shaft.

Stock

METHOD OF ASSEMBLY.

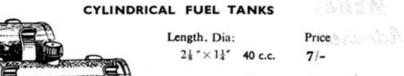
SCREW PROPON SHAFT, FILL TUBE WITH LIGHT GREASE, INSERT SHAFT IN TUBE, FIT MALE END (X) OF COUPLING ON SHAFT & LOCK WITH GRUB - SCREW LEAVING SHAFT FREE, BUT WITHOUT END PLAY.



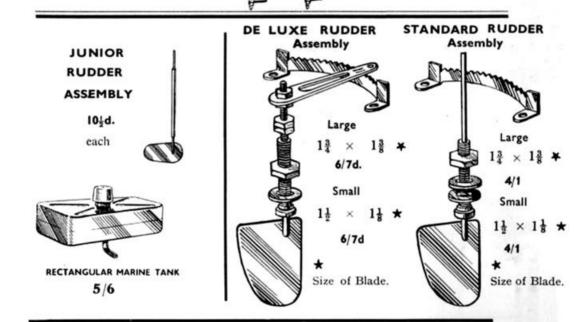




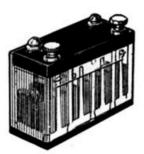
SUPER QUALITY MARINE FITTINGS.



 $3\frac{1}{4}$ " × $1\frac{1}{4}$ " 60 c.c. 8/- $4\frac{1}{4}$ " × $1\frac{1}{4}$ " 80 c.c. 9/- (Complete with mounting clips)



MINIATURE LEAD ACID ACCUMULATORS. FOR ELECTRIC BOATS



This range of accumulators is eminently suitable for boat work, being both compact and efficient. They may be coupled in series or parallel to increase the total voltage or amperage capacity.

They are particularly suitable wherever a small light-weight battery is required.

oquireu.	Amn he	Di	mensions			
Voltage	Amp. hr. capacity	W 14	L. 21	H. 2"	Weight 8 ozs.	Price 22/6
6	2	2	21/2	2"	11 ozs.	30/-

Accumulators may seem a little expensive as a first investment, but for serious work they are essential,

The improvement in performance, saving in space, weight, and, ultimately, cash, make them well worth the initial outlay.

MERSEY MARINE ALL METAL FITTINGS **EXHIBITION QUALITY**

Admired . for excellence of finish







All hand made. 8 spokes. Turned handgrips.

Bronze, brass, or chrome.

SIZE	BRASS.	BRONZE.	CHROME
1"	15/-	17/6.	each
11/4"	17/6	20/-	each.
13/4"	20/-	25/-	each.

Mounted on pillar to match 25% extra.





VENTILATORS.



Brass Polished. Lacquered.

Size Mouth	Height	Size	Brass	rice Chrome
1 in.	3 in.	½ in	3/-	3/9
3 in.	1½ in.	1 in.	4/3	5/6
½ in	2 in.	5 m	5/-	6/6
$\frac{5}{8}$ in.	2 in.	$\frac{3}{8}$ in.	6/-	7/6
1 in.	3 in.	1 in.	9/6	10/6

Can be shortened.







STANDARD



TYPE

As used for commercial showcase models.

SUPER QUALITY MARINE FITTINGS

BRONZED PILLAR. FLUTED



No. 1

Brass

Scale Size Size 5, in § in. high. high. Price 1 inch 12/6 diam.

BINNACLE

WITH COMPASS CARD



Size 1 in dia 1 high. Brass Lacquered.

Price

15/6

Lacquered.

Scale Model. With

Size § in. high. Hood Price

10/6



FLAGSTAFFS

Flag Poles and Jack Staffs with Deck Socket

Sizes Height.

21. 3 in.

4/6 each.

31, 4 in. 5/6 each.

41 inch 6/- each.

ANGLED

1/6 extra.

Finish: CHROME WIRELESS DIRECTION FINDER.

FINISH MATT WHITE



Size 11, inch high.

Price Single 5/6 each. Price Double 6/- each. LADDERS.

Steel Bronzed



Size

Length 2 in. Width inch.

5/6 each. Length

21 in.

Width # in. 6/6 each.

HANDRAILS FOR CABIN TOPS, Etc.,

COMPLETE WITH NUTS, AND WASHERS. CHROME PLATED



Length Overall Length Overall Length Overall

Length Overall

11/4"

2"

4 1/2"



Price Each.

Height

s. d.

4/3

5/6

8/6

11/6

in §





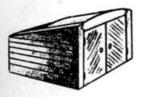
HANDRAIL OR HANDLES IN CHROME,



6 per dozen 14 · 6 per doz.

SHIP AND YACHT FITTINGS IN POLISHED WOOD.

ALL HIGHLY FINISHED AND WATERPROOF.



With sliding cover.

FRENCH

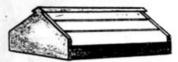
POLISHED WOOD



COMPANION WAYS.

	Length			Price
Size	13 in ×	$1\frac{1}{2}$ in \times	11 in.	8/6
Size	₹, in.×	¾ in.×	3 in.	9/6

SKYLIGHTS.



Glazed acetate with guard rails.

		1.0		
	Length			Price
Size	2 in.×	$1\frac{1}{2}$ in \times	$\frac{3}{4}$ in	12/-
Size	11 ×	11 in ×	3 in	10/6



CURVED BACKS.

HATCH COVERS.



Lengt	h	Size			Price.
1 in.	×	in a	×	in	3/6
11	×	1 in.	×	in	4/0
2 in	×	13	×	in	4/9



Prices per dozen.

TURNED RIMS and FLANGES.

PORTHOLES

These are correctly madeports not just brass bushes.

Glazed Acetate that will not drop out



Price per dozen Chrome Extra 4/- dozen.

STANCHIONS

Special Large Stanchions for Motor Launches, etc. 2-Ball

> Chrome with nut and washer.

Height,

FAIRLEADS *



Size ½ 5, ¾ in. length.

Price 2/- each

Single Fairlead with One Roller.



Sizes length, $\frac{1}{2}$ $\frac{5}{8}$, $\frac{3}{4}$ in Price 2/6 each

* ALSO Available in DURAL

BOLLARDS.



Size ½, ½ ¾ in long.

Brass 2/6 each.

Chrome 1/- extra

ADMIRALTY CLEATS.



Brass. Lacquered.
Size 1, 5 1 in length.

each.

CLEATS.





Size Dia: 1 in. 2/- each
Size Dia: 1 in. 2/6
Chrome 9d. extra
ALL FITTINGS, ARE
COMPLETE WITH

NUTS, AND WASHERS.

17/6 per doz.



ENGINES

Precision built engines that will make the most

of your models, give them all the power they require, make them really "alive" and improve their all-round performance.

For high speeds, endurance flights. control line or stunt flying, there is an E.D. Diesel especially designed for the job.

Fit one to your model, try it, compare it, and see the difference that it can make. And remember. every E.D. Diesel is individually tested for accuracy and reliability up to the highest standard before it leaves the works. They are easy to fit, simple to operate and suitable for use in model boats planes, or cars.



E.D. 46 c.c.

The smallest E.D. Diesel with a mighty performance. Just the engine to encourage newcomers to this highly educative and instructive study of modelling. PRICE

Bore .312in. Stroke .375in. Height Ilin. Length 2lin. Width Ilin. Weight Il ozs. Max. B.H.P. .04 at 10,000 R.P.M. (" Aeromodeller " test) 46 CC. E.D. BABY 57/5 MARINE E.D. BABY 73/2 Marine Accessories Flywheel. 7/1

> Water Jacket. 20/8

Suitable for

AIRCRAFT Slicker Mite. Mite, Pirate. Southerner Phantom Mite, Joker, Skylon. KK Super Scale Models

FOR BOATS

KEIL AEROKITS: SEA HORNET. SEA SCOUT. SEA NYMPH. PATROL LAUNCH.

"BEE" E.D. 1 c.c.

Displacement: .99 c.c. (.0605 cu. in.). Bore: .438 in.

Stroke: .40 in.

Power: Maximum B.H.P. .07 at 11,000 r.p.m. engine version, "Aeromodeller" test). Weight (including flywheel) 61 ounces:

Flywheel diameter: l in. Mounting holes (beam mount): l in. x 슈 in.

Suitable for

AIRCRAFT Slicker Ladybird. Skystreak 26, Bantam, Pirate. Ranger, Skylon, Phantom. Champ. Gazelle, Halo.

The engine with a sting! Britain's most popular Diesel. Over 300,000 sold. Gives an astonishingly high efficiency and power for weight ratio.

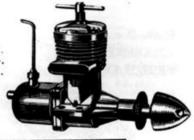
Prices.

I c.c. E.D. BEE 54/3 MARINE E.D. BEE

Flywheel. 12/2 Water Jacket. 17/4. Exhaust Stack 3/2

POWER BOATS

Sea Urchin, Sea Nymph. Sea Rover. Sea Hornet. Sea Scout. Silver Dawn. Fast Patrol Launch.



HE marine "Bee" is the ideal for a beginner's engine in his first power boat One of the difficulties with beginners is engine starting when the unit is installed and coupled up to the propeller. We emphasise the value of bench running the engine to gain familiarity with starting technique. The marine "Bee" can be given short test runs without bother- of hooking up

A suitable size of hull would be about 20-26 inches. water cooling, Suggested propeller sizes are 11-11 in. diameter x 11-12 pitch (three-bladed) A very popular Diesel suitable for all types of models,

Easy to fit, simple to operate and suitable for use in model planes, boats and cars.

Bore .531in. Stroke .4in. Height 25in. Length 31in.

Width 1½in. Weight 3¼ ozs.

Max. B.H.P. .14 at 11.000 R.P.M. ("Aeromodeller" test)

for Slicker 42. Phantom. Halo.

Slicker 42. Phantom. Halo. Ranger. Marquis. Champ. Gazelle. Bandit. AEROKITS: BOAT KITS
SEA HORNET. SEA ROYER.
PATROL LAUNCH. SEA SCOUT.
PATROL TORPEDO BOAT.

E.D.

'FURY"

1.49 c.c.

PRICES.

1.46 C. HORNET 57/5 MARINE HORNET 74/1

ACCESSORIES MARINE I.46 FLYWHEEL 12/2
Water-cooled Cylinder Head. 20/8

E.D. 1-49 c.c. "FURY" The latest addition to the range. Cleverly designed, beautifully made and up to the E.D. standard of quality in every detail. Height $2\frac{1}{4}$ in. Width $1\frac{1}{2}$ in. Length overall $3\frac{1}{8}$ in. Weight $3\frac{1}{2}$ ozs.

D. 1.46 c.c.

HORNET

Twin ball race. Reed valve induction. Bore 0.5 in. Stroke 0.464 in. B.H.P. 0.15 at 15,000 R.P.M.

for Bandit. Halo. Gazelle.
Ranger. Marquis

Ranger. Marquis, Junior 60.

DDICEC

1.49 CC. SUPER FURY 79/6 MARINE SUPER FURY 96/10 POWER BOATS
SEA SCOUT. SEA ROYER.
SEA COMMANDER. SEA HORNET.
PATROL LAUNCH. CRASH TENDER.

Height 3in. Length 4in.

AIRCRAFT

SLICKER . SLICKER 50.

BANDIT . PHANTOM .

OUTLAW. JUNIOR 60.

MARINE ACCESSORIES FLYWHEEL.

Water-cooled Cylinder Head.

12/2

23/7d.

The veteran of the E.D. Range and one held in respect wherever competitions are held.

Bore .5in. Stroke .625in. Max. B.H.P. .11 at 7.300 R.P.M





Suitable for

FOR BOATS :

Weight 64 oz.

SEA COMMANDER, SEA ROVER, SEA HORNET, CRASH TENDER, PATROL TORPEDO BOAT,

PRICES.

2 c.c. COMP. SPECIAL 44/1 MARINE COMP. SPECIAL 85/2 **E.D. Marine Accessories**

Width 17

C/S FLYWHEEL.

12/2

FLYWHEEL TAPERED INSERT. 3/7

Water-cooled Cylinder Head.

28/4.



The holder of many world records and numerous competition successes.

Particularly suitable for model aircraft, boats and cars when exceptional speeds are vital to success.

Bore .590in. Stroke .550in. Height 3in. Length 4in. Width 13in. Weight 53 ozs. Max. B.H.P. .26 at 14,000 R.P.M. (" Aeromodeller " test)

Exhaust

Manifolds

Plastic

Tubing

AIRCRAFT

2.46 c.c. E.D. RACER 82/7

SLICKER SO. PACER. STUNT QUEEN. SOUTHERNER 60. SPECTRE. TALON. DEMON. JUNIOR 60. OUTLAW.

ROATS

Sea Commander, 40" M.T. Boat. R.A.F. Crash Tender. Sea Rover. Silver Dawn.

A marine version of the standard E.D. 2.46 c.c.

Specially produced for the model boat builder. A superb engine supplied with Exhaust Manifolds, Flywheel, Marine Unit and Ball Joint Coupling and Plastic Manifold Tubing.

A length of plastic tubing should be attached to each of the two round exhaust tubes and the ends brought into, a suitable container fitted in the model boat.

Waste oil is thus collected, ready for disposal, instead of fouling the interior of the boat, or the water.

Power output is approximately .15 B.H.P. and pro rata for lower speeds,

Size of hulls from about 32 in. l.o.a., up. For 32-36 in. hulls of good planing form, quite high speed cruising can be achieved.

An 1½ in. to 1¾ in. marine propeller would appear the best, with not too steep a pitch so that the engine can run fast without stalling the blades.

Suitable for
POWER BOATS
R.A.F. CRASH TENDER
SEA COMMANDER.
SEA ROYER.
PATROL
TORPEDO BOAT.

PRICES.

2.46 c.c. " RACER 96/10 Water-cooled 11/5 Flywheel. Marine Unit and Ball 20/6 Joint Coupling. Exhaust Manifolds. 15/11 Plastic Manifold Tubing. 1/- Foot

Weight: bare engine, 71 ounces flywheel, 41 ounces manifolds, 11 ounces total (marine version with manifolds): 14! ounces Mounting dimensions: beam mount, × 9/16" 1-3/8" Clearance: bottom of crankcase. 1" between bearers, 1-1/16 flywheel (below bearers), 13/16" Flywheel diameter: 1; Total overhang (from bolt c/1): 1-13/16" Overall height (above beams): 21" Overall width: plain engine, 12 with manifolds, 3-9/16" Coupling: ball and socket type.

Shaft coupling threaded 4BA.

SPECIFICATION.

E.D. 2.46 c.c. "RACER" Exhaust Manifolds.



The manifolds are designed to clamp over the exhaust outlet stubs on both sides of the engine, and are held in place by tie bolts. They serve as primary expansion chambers and have round exit pipes. These are parallel to the engine shaft axis so that they can conveniently be connected to flexible pipes to lead the exhaust out aft.

E.D. 3-46 c.c. "HUNTER"

A powerful Diesel, well known for its speed and endurance.

Bore .656in. Stroke .625in. Height 3in. Length 47in.

Width IZin. Weight 72 ozs. Induction: Rotary disc 180 deg.

Ball bearing main shaft. Max. B.H.P. .265 at 10,000 R.P.M. (" Aeromodeller " test)

Suitable for

Aircraft. Junior 60, Slicker 50. Southerner 60. Stunt Queen. Spectre.

ROATS

R.A.F. Crash Tender 40" M.T. Boat. Sea Commander.

E.D. 3-46 c.c.

" HUNTER "

PRICES.

MARINE

FLYWHEEL

12/2

3.46 cc. E.D. HUNTER 82/3 MARINE HUNTER

ACCESSORIES

WATERCOOLED CYLINDER UNIT. 49/-

EXHAUST.

4/9

E.D. "PEP"

·8 c.c.

Diesel

ED. 8 c.c. DIESEL "PEP"

Top quality and the lowest priced small diesel engine in the world. No plugs or accumulators required and when you possess a "PEP" you will own a first-class engine backed by the usual E.D. Guarantee.

Specification:

BORE: -410" STROKE: .375" HEIGHT: 12" LENGTH: 24". WIDTH: It. WEIGHT: If oz. PISTON: Mehanite. CRANKSHAFT: Hardened Steel

Suitable for **Model Aircraft**

Pirate. Halo. Skylon. Skystreak 26. Ladybird. Slicker Mite. Champ. Phantom. Gazelle. Joker . Firefly .

Model Boats Sea Rover. Sea Nymph. Sea Urchin. Sea Hornet. Sea Scout. Fast Patrol Launch. Silver Dawn.

IT'S ALL BRITISH, easy to fit, and simple to operate E.D. Products can be relied upon for quality, performance and value.

TANK: Aluminium PRICES.

> A CC. E.D. PEP 43/3 MARINE E.D. PEP 59/-

MARINE ACCESSORIES

FLYWHEEL

11/5

Water-cooled Cylinder Head. 16/6

E.D. 2-SPEED CARBURETTER

Suitable for attachment to the 3.46 c.c."Hunter"

17/8.

Suitable for the E.D. Racer

FINGER SHIFLD



Made of solid rubber. Eliminates all risk of bruised fingers when" flipping the prop. of your aircraft.

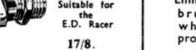
2/4 each.

FUELS E.D.

(Cannot be sent by post)

Economic is a general purpose fuel. 3/-Super Zip is nitrated for high speeds and maximum performance. 3/6 per 10 ounce tin.

Both have castor oil lubricant.



DAVIES CHARLTON DIESELS

Engineered to last a modelling lifetime

DAVIES CHARLTON ENGINES have an unrivalled reputation for quality and performance throughout the Produced in a modern factory with the latest in machine tool length and breadth of the modelling world. equipment by skilled engineers they really do give of their best throughout a modelling lifetime.

Ouickstart enables even the beginner to start his Davies-Charlton engine with only a turn Quickstart is a tempered steel spring which fits over the propeller shaft A turn of the propeller and, on release, the engine will turn and engages with the blade. over at least three times against compression. When the engine starts the spring recoils free from the blade. No more hours of finger-weary flicking! It's a simple uniquely effective device!

DART ·5 C.C. QUICKSTART

SPECIFICATION

Displacement: .55 c.c. (.036 cu. in.) Displacement: .35 c.c. (.036 cu. in.)
Bore: .35 in.
Stroke: .35 in
Bare weight (less flywheel): 2 1/16 ounces.
Bare weight (with flywheel): 3 3/16 ounces.

> Overall Length 23 in. Width Il in.

> > Price £3.4.7.

MODEL AIRCRAFT

Suitable Slicker Mite. Southerner Mite. Phantom Mite.

Joker, Cessna 170. Piper Super Cruiser. lor Luscombe Silvaire. Firefly.

MODEL BOATS:

SEA NYMPH: Length: 18", SEA SCOUT. Length: 241" SEA URCHIN. Length: 16". SEA HORNET. Length: 24" PATROL LAUNCH. Length: 20".

MARINE

Flywheel. Watercooled Head ACCESSORIES Exhaust Manifold. 11-8

11 - 8

Silencer.

STANDARD MERLIN

OUICKSTART

Performance is as good as it looks, and it really is easy to start and operate.

Suitable for MODEL AIRCRAFT

Skylon Slicker Mite Pirate Halo Ladybird Skystreak 26 Champ Joker Firefly Phantom Mite Cessna 170 Luscombe Silvaire

MODEL BOATS: SEA NYMPH : PATROL LAUNCH. SEA SCOUT. SEA URCHIN. SEA HORNET. SEA ROVER.

SUPER MERLIN

Complete with propeller, spinner, tommy bar, fuel tank.

PRICE

£2 13. 0.

Specification

Bore—.375" Stroke—.420" Capacity -- .76 c.c. -- .046 cu. in: Weight—II ozs. Propeller—C/L 6* —F/F 7*

Price

£2. 4. 7.

Complete

MARINE ACCESSORIES

9/4 FLYWHEEL.

WATERCOOLED HEAD

14/-





OUICKSTART

SPITFIRE 1.0cc., .06 cu. in. For the Beginner

A new and improved version of this famous engine with all the virtues of easy starting, flexibility and long life maintained:

Bore .425" Stroke .420" B.H.P. .0725 b.h.p.

Weight 3 ounces.

Propellers. Sport 9 in. x 4 in. Contest: 8 x 4 in.

Recommended

Mounting Beam C/Line : 7 x 6 in.

53/-Tank Integral.

PRICE Complete.

Suitable for MODEL AIRCRAFT

Pirate. Slicker 42. Skylon. Ladybird. Halo. Champ Phantom. Bandit.

MODEL BOATS:

SEA SCOUT. SEA HORNET. PATROL LAUNCH. SEA URCHIN. SEA ROYER.

MARINE **ACCESSORIES**

FLYWHEEL WATERCOOLED HEAD

18/8



B.H.P. .104 b.h.p. Recommended Propellers

Sport : 8 in. x 6 in.

Contest: 8 in. x 4 in.

C/Line: 8 in. x 6 in.

DAVIES CHARLTON DIESELS

Bore .525" Stroke .420"

R.P.M. Range 10 - 13,500

Weight 3.25 ounces. Mounting Beam Tank Integral.

PRICE

534

Complete

Exceptionally easy to start.

SABRE 1.5 C.C. Performance matches the appearance and the latest features such as, positive action angled needle valve, beam and radial mounting, together with first-class engineering combine in this outstanding model diesel.

Suitable for

MODEL AIRCRAFT

Bantam Ranger Marquis Phantom Gazelle Champ

Halo Outlaw Slicker 42

PATROL LAUNCH. Length: 20". MODEL BOATS: SEA HORNET. Length: 24", SEA SCOUT. Length: 241".

SEA ROVER. Length: 291".

MARINE

Water-cooled Cylinder Head.

OUICKSTART

18/8

ACCESSORIES

FLYWHEEL. 11/8

RAPIER 2.5 c.c. Marine modellers seeking a high performance power unit need look no farther than the RAPIER. Suitable for high speed boats of 27 to 34 inches in length, it will also drive craft of up to 42 inches. Performance is not its only attribute for general A flick of the starting cord and the handling qualities are excellent. RAPIER is away to a steady purr. A touch of the controls, note how comfortable they are to handle, and water churns to foam as this powerful motor applies thrust to the screw.

Specification

Displacement: 2.469 c.c. (.150 cu. in.). Bore: .5785 in.

Stroke: .5705 in.

Bare weight (less flywheel): 6} ounces.

Total weight (dry): 11} ounces.

Max. B.H.P.: .2125 B.H.P. at 14,000 r.p.m. Provision for two speed throttle fitting. Twin ball races for friction-free running. Rear rotary induction for maximum performance.

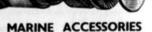
Suitable for

Pacer Talon Stunt Queen Demon Spectre Slicker 50 Outlaw Southerner 60 Junior 60

PATROL TORPEDO BOAT. SEA ROYER. SEA COMMANDER. R.A.F. CRASH TENDER. Price

77s. 9d.

Complete



FLYWHEEL. Water-cooled Head.

11/8d 23/3.

MODEL DIESEL ENGINE HANDBOOK



ANGLED ASSEMBLIES





RADIAL









The handling, care and maintenance of model diesels clearly explained by experts. An invaluable aid

PRICE

1/_



QUALITY ACCESSORIES O.K. BECAUSE THEY'RE K.K.

ELMIC "LIMITANK" Fuel Tanks!

Can be adjusted to give any desired length of engine run!

With a Limitank need you timer or cut-out!



Price

7/93

ELMIC TIMERS

For limiting engine run

Elmic Mini - Diesel combined timer and fuel cut-out Elmic "Universal" timer ... 14/7.



KEILKRAFT

FUEL FILTER

Ensures clean fuel supply to your engine. Prevents stoppages and reduces wear. Price: 2/6



E.D. 2-SPEED CARBURETTER

Suitable for attachment to the 3.46 c.c. "Hunter" or 5 c.c. Miles Special.

Price each 17/8



The perfect light weight cut-off for positive fuel control.

Price: 4/10



SPARK PLUGS

GLO-PLUGS



SPARK PLUGS K.L.G. 1/4 and 3/8 in

5/6 each

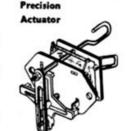


" (long or short reach) 5/11.
" (long or short reach) 7/6. For use with a 1.5 volts battery (1.2 volts at plug terminal) at 3.5 amps.

The ELMIC Conquest R/C Escapement provides unsurpassed dependability.

Self-contained with built-in yoke and couplings it is the only COMPLETE escapement on the market.

Fit this precision-made product with the robust nylon movement to your model and enjoy the confidence which goes with all ELMIC products. Price 21/-



The Scorpion

MINIATURE BULBS

ELECTRIC MINIATURE BULBS in screw fitting.

3 Volt BULB and SCREW CAP.



PRICE 1/3 per pair

Universal type engine test stand with quickaction adjustable clamps to take engines up to 3.5 c.c.

RED and GREEN coloured 1/6.

Also radial mounts.

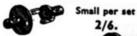
12/3.

LONG NOZZLE SQUEEZE BOTTLE

With positive air tight cap.

1/6

COUPLINGS FOR ELECTRIC MOTORS



2/11.

Couplings for diesel engines. Per set ... 3/6.

ELECTRICAL ACCESSORIES

For ignition circuits, flash equipment, etc.

21/6.

2/6.

CONDENSERS

Metal type (.05 mfd.) ...

THERE ARE OVER 3,000 K K, STOCKISTS IN GREAT BRITAIN

KEILKRAFT

If you care ... FOR YOUR ENGINE USE KK FUELS KEILKRAFT RECORD MODEL ENGINE FUELS, BLENDED WITH SELECTED BP LUBRICANTS ARE THE ANSWER TO THE REQUIREMENTS OF TODAY'S MODEL I.C. ENGINES



KEILKRAFT RECORD POWERPLUS DIESEL FUEL

The world's finest model diesel fuel. The only fuel specifically blended to meet the requirements of ultra high-speed FAI class contest diesels. The only fuel with a full 4 per cent, nitrate-essential to smooth, miss-free combustion at the 14,000-16,000 r.p.m. speeds of which engines such as the Oliver Tiger and Rivers Silver-Arrow are capable. POWERPLUS Diesel runs at lower compression settings, imposing lower stresses on the vital parts of the engine and is blended with finest quality racing castoroil. As now used in the Oliver test shop for all testing.

In | pint (10 oz.) cans with filler spout

... 3/6

KEILKRAFT NITRATED DIESEL FUEL

The universal easy-starting fuel for all model diesels. Blended with a base lubricant of firstquality castor-oil plus a small percentage of special inhibited petroleum oil to resist cold gumming tendencies. Unlike many low-priced fuels, it will not coagulate with storage, or form jet-blocking residues. Suitable for all beginners' diesels and for all other types, except at ultra-high speeds with some 2.5 and 3.5 c.c diesels, where the extra nitrate content of POWERPLUS will be found preferable.

> In | pint (10 oz.) cans with filler spout In I pint (20 oz.) cans with filler spout



KEILKRAFT RECORD METHANEX GLOW FUEL

A low-cost, all-purpose fuel of the highest quality, particularly suitable to larger type engines and containing 3 per cent, nitromethane and 30 per cent, racing castor-oil, Gives excellent results in .29/.35 cu. in. stunt type motors, where fuel cost is an important consideration. Due to its cool-running properties and ample lubricant content, METHANEX is an excellent fuel for running-in new engines.

K K Methanex Glow

₹ pt.... 3/-I pt.... 5/6



Whatever the future holds in model motor design, KEILKRAFT will provide fuels to match.

KEILKRAFT RECORD NITREX - 15 GLOW FUEL

Containing 15 per cent. nitromethane, NITREX-15 has been blended to meet the K K Nitrex requirements of the majority of today's model glowplug engines. Capable of adding up to 20 per cent. more power, or 800-1,000 r.p.m. at peak revolutions, when compared with standard methanol-castor-oil fuels.

15 Glow,

₹ pt.. 4/-

NITREX-15 promotes easy starting and is ideal for the new baby glow motors. Moderately cool running and excellent for increased performance and greater flexibility with engines in the .19-.35 cu. in. group, after adequate running-in.

KEILKRAFT RECORD SUPER NITREX GLOW FUEL

The most powerful fuel ever offered to British modellers. Contains a full 30 per cent. nitromethane. Specially blended for racing engines and for top performance in the smaller type motors. Capable of liberating up to 30 per cent. more horsepower. Do not (10-oz.) cans use SUPER-NITREX in new engines. Run in for at least 1-2 hours on METHANEX first with filler -longer in the case of engines over 2.5 c.c.

In + pint

SUPER-NITREX can also be mixed with METHANEX or NITREX-15, enabling the contest enthusiast to "tailor" his fuel to the exact requirements of his engine in varying climatic conditions.

6/6

Your diesel or glow plug motor will last longer, and perform better if you always run on Keil- Kraft Fuels. They are blended with B.P. Energol oil

THE FAMOUS 'TAYCOL' MOTORS

6 to 12 Volt Electric Motors for Model Boats, Railways Cars, etc.

IDEAL FOR ALL TYPES OF MODEL BOATS

Taycol Motors cover the whole Power range, from } amp to 5 amps. Their efficiency is so high that they will run satisfactorily from Dry Batteries, especially the Lantern-type.

All TAYCOL motors are tested at overload, and guaranteed against faulty workmanship or defective material.

THE 'SUPERMARINE' MOTOR

The most powerful and efficient Electric Motor obtainable for Motor Boats. Recommended for Boats of 36" length and upwards. Specification

Current Consumption (approx.) At 6 volts:- I amp at 4,800 r.p.m. 2 amps at 2,200 r.p.m. (max. efficiency). (running free)

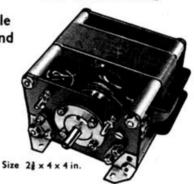
21 amp. at 1.500 r.p.m. max Power 71 M.H.P.

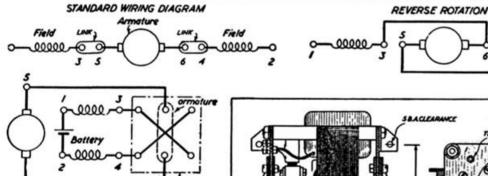
At 12 volts:- 41 amps. at 2,500 r.p.m. max. Power 26 M.H.P.

Exceptionally High Efficiency and Power. Does not overheat at normal loads.

Weight 2 lbs. 3 ozs.

THE "SUPERMARINE"





PRICES

"Supermarine"

76/7

"Supermarine

80/11

Special" 9 to 12 volts

Double-pole change-over relay

The "Supermarine Special" has the same electrical and other characteristics and dimensions as the "Supermarine" The essential difference is in the modified terminal arrangement by which radio or remote control may be operated through a single pole change-over switch or relay, instead of the double-pole.

'TAYCOL' MOTORS for HIGH POWER HIGH EFFICIENCY

4 to 12 Volt Series

'TARGET' and 'Asteroid'

LEVER SWITCH SERIES

For Boats of 24" length and upwards, or twin screw Boats of 40" and upwards.

Current consumption (approx.) of "Target" and "Asteroid"

at 6 volts

0.4 amps, running free.

amp. at 4,400 r.p.m. max. Power 31 M.H.P.

at 12 volts

0.6 amps. running free. 11 amps. at 6,600 r.p.m. max. Power 81 M.H.P.

Both the Meteor and Asteroid can be run for long periods on 12 volts, under reasonable loads, without overheating or fear of burning out the coils.



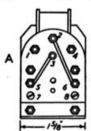
The "Asteroid" motors have the same electrical and other characteristics as the "Target "The essential difference is in the modified terminal arrangement by which radio or remote control may be operated through a single pole change-over switch or relay, instead of the double-pole required with the "Target."

The "Taycol", "Asteroid" with reduced speed Reversing Switch.

Taycol Motors are primarily for driving Model Boats, they may be used with cars, railway engines, cranes, etc.

KEY TO TERMINALS

1)- FIELD 3]- FIELD 5) - BRUSHES 7] - BRUSH FIXING



" Target " For independent stop-start switch. **Forward** only.

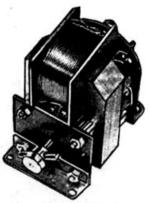
" Target " Remote Control. Links A and B must be removed use Double pole change-over switch or relay.

" Asteroid " Remote Control. Lever switch must be removed Single pole change-over switch or relay.

PROPELLER.

The most suitable size of propeller for your boat can only be found by experimenting, but the following sizes are approximately right:

The Target and Asteroid 11" dia. × 11" pitch. Torpedo and Meteor 13" dia. × 13" pitch. The "Supermarine" $2\frac{1}{2}$ " dia \times 2" pitch.



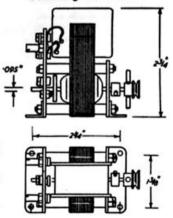
Weight 8 ozs

SPECIFICATION

Mounting hole size: ‡" dia. Overall height: 2‡" Overall width: 1‡" Overall length: 21' Weight: 9 ounces
Drive spindle: 3," dia.
(viewed from drive end) half-

Design voltage: 4-12 volts : 6 volts—I amp. 12 volts—I.7 amps. Suitability to remote control: by removing manual switch Armature: 3-pole Commutator: disc Brushes: phosphor bronze Motor type: series wound

Mounting dimensions



PRICES

- Target "
 - 28/6 Asteroid "
 - 32/9

'TAYCOL' MOTORS

THE "TORPEDO"

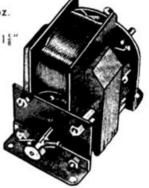
These Motors have become famous for performance, unparalleled by any others. For Boats of 24" length and upwards, or twin screw Boats of 40" and upwards.

Accumulators or Lantern type dry batteries are suitable for all Taycol Motors. These batteries are of 6 volts each. Two may be connected in "series" to supply 12 volts (nominal).

POWER

1 M.H.P. (milli-horsepower) = 33 ft. lbs. per minute or 1/1000 brake-horsepower

Weight 12oz. Base 21" x 11" x 21" high.



Meteor' LEVER SWITCH SERIES THE TAYCOL

These motors have the same electrical and other characteristics and dimensions as the well-known "Torpedo" essential difference is in the modified terminal arrangement by which radio or remote control may be operated through a single pole change-over switch or relay, instead of the double-pole change-over switch or relay required with the "Torpedo"

Current consumption (approx.) of "Torpedo" and "Meteor"

at 6 volts

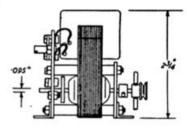
0.6 2mps. at 6.450 r.p.m. running free. amp. at 4,200 r.p.m. max. efficiency.

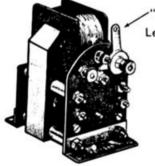
1.9 amps. at 2,400 r.p.m. max. Power 6 M.H.P.

12 volts

0.75 amps. at 9,700 running free. 1.6 amps. at 5,600 max. efficiency.

21 amps. at 4,000 max. Power 15 M.H.P.



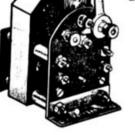


Meteor " Lever Switch.

Full speed forward and Half speed reverse.

Note For "Meteor", Remote Control. Lever switch must be removed and Single pole change-over switch used.

"Torpedo" Remote Control. Links A and B must be removed Double pole change-over switch or relay used.



Prices.

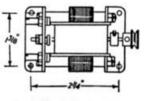
Torpedo " 38/8

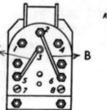
" Meteor " 34/10

ALL PRICES INCLUSIVE OF PURCHASE TAX.

YOUR TEST.

If your motor and stern-gear installation is in order, it will run steadily, though slowly, from a 11 volt gas lighter cell.





KEY TO TERMINALS }- FIELD

}- FIELD] - BRUSHES

The illustration shows links 2/6 and 3/5 reversed, to reverse direction of Rotation.

1 and 4 are Battery terminals. Either may be connected to +

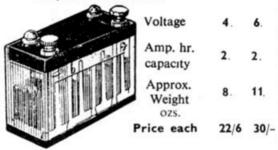
It is not recommended to run the Motors continuously in reverse.

THE FAMOUS 'TAYCOL' MOTORS

MINIATURE ACCUMULATORS.

Suitable for Taycol Motors

This range of accumulators is eminently suitable for boat work, being both compact and efficient.



They may be coupled in series or parallel to increase the total voltage or amperage capacity.

THE 'COMET' Motor

 $4\frac{1}{2}$ to 6 volts D.C.

A low priced Motor for small Boats up to 20" length, stationary models, etc.

THE "COMET"

Approximately · 4 amps. cons. running free.

Price

18/2

A FEW WORDS OF ADVICE TO THOSE WITH NO PREVIOUS EXPERIENCE OF ELECTRIC MOTORS

The Taycol "Supermarine," "Torpedo," "Target," "Meteor" and "Asteroid," have been designed to cover the whole range of Model Makers' requirements for cruising, racing, radio control, etc.. with battery consumption ranging from \(\frac{1}{4}\) amp. to 5 amps., according to the propeller size and battery capacity, at higher efficiency than hitherto attainable and at low cost.

Lantern type dry batteries are suitable for these Motors. Their power of recovery after 48-hours rest is not generally recognised. These batteries are of 6 volts each. Two may be connected in "series" to supply 12 volts (nominal). Under normal load this will drop to about 10 volts across the terminals; dropping progressively during a long run, but giving all the speed that is desired for cruising and radio control. After a rest they will recover almost their original energy, though slightly less each time, until the battery is exhausted. Four batteries in "series-parallel," giving 12 volts (nominal) is required for the "Supermarine."

If CONTINUOUS MAXIMUM PERFORMANCE is not required the dry-batteries offer advantage over accumulators, at lower cost.

LUBRICATION. Taycol Motors often have to run at full load for an hour between oilings," but a drop of oil in each bearing at 15 minute intervals will prolong their life considerably. The small quantity of oil that creeps from the bearings to the brushes gives the Taycol Motors a better performance than with dry brushes.

Use light Motor oil for bearings and commutator, for long life and best performance. Light oil is best also for prop-shaft, which should be of non-corroding metal.

FINALLY.

Keep your motor dry. Any motor can be ruined by damp.

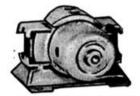
Batteries should NEVER be left in boats when exhausted

Both for increased propeller efficiency and a proportionate saving in current consumption the 12 volts higher voltage operation is to be preferred.

ELECTRIC MOTORS

High-quality, imported high-performance electric motors, ideally suited for powering boats and models of all kinds. Sturdy all-metal construction throughout.

KAKO 01



Designed for 1.5 to 3 volt opera-

tion, this little motor is only # in.

diameter by 1 in. long, and measures

1½ in. across the magnet assembly. Weight is ½ ounce. Shaft diameter, .080 in. Base mount holes 15/16 in.

BRASS SLEEVE BEARINGS

NOTE.

Kako 01 and

Kako 0

KAKO

R.P.M. 4,000 | 6,000

Employing a slightly larger arma-ture diameter and appreciably larger magnets, the model "O" is designed for 1.5 to 3 volt operation again, with somewhat increased perform-ance. The free running speed is less, however. Size 11/16 in. diameter by 1 in. long; 13 in. across magnets. Shaft diameter .091 in.

Weight 11 ounces. Base mount 1 1/16 in. by 11/16 in.

Particularly recommended for Motorising plastic BOAT, CAR and AIRCRAFT kits.

Consumption .30 - .45

by 11/16 in.

No. I. KAKO

R.P.M. 3,600 | 5,600

Slightly larger size of armature to the model "O", and with increased the model "O", and with increased magnet size. Operating voltage 1.5 to 3 volts. Again a slight reduction in free running speed, but increased torque output at all load-speeds. Diameter \$\frac{1}{2}\$ in. by \$1\$ in., length by \$1\frac{1}{2}\$ in. across magnets. Weight \$1\frac{1}{2}\$ ounces. Base mount \$1\$ in. by \$\frac{3}{2}\$ in. Shaft diameter .091 in.

KAKO No. 2.



R.p.m.

3,300

4,800

9,200 on

6 volts

For boats of launch type hull 18in. to 24in.

KAKO No. 3. R.P.M. 4800-7000



Consumption .35-.45 (amp)

Nominally designed for 11-41 volt operation, this model will also run without overheating badly on 6 volts, although somewhat overloaded and with a relatively high current consumption. Armature and magnet size stepped up again. Motor overall dimensions 15/16 in. diameter by 11 in. and 2 in. across magnets. Weight 22 ounces. Base mount 12 in. by 1 in. Shaft diameter .091 in.

Particularly recommended for hulls up to 20 in. I.o.a.

Although the "Kakos" are cheap motors they are well made and well finished, and quite consistent Light lubrication of the in performance. bearings improves running; also lubrication of the commutator with a contact oil.

Further all-round step-up proportions, but again specified for 1.5 to 3 volt operation although it can be used on 4.5 volts without overheating. Free running speed reduced to 5,500 r.p.m. on 3 volts. Maximum performance on 4.5 volts is good for a motor of this size. Diameter ‡ in. by 1 3/16 in. long by 1½ in. across magnets. Weight 2½ ounces. Base mount 1½ in. by 1 in. Shaft diameter .091 in.

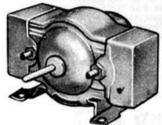
PRICES KAKO MOTORS 01 ... 3/11 Inc. ... 4/6 PURCHASE 5/3

7/11 TAX ... 15/8

KAKO PERFORMANCE ... DEPENDABILITY ... at LOWEST PRICES

In the two larger motors (models 4 and 5), the construction is more rugged, with pressed covers completely enclosing the magnet assembly and the whole bolted together On model No. 5 spring loaded carbon brushes are also fitted. This brush gear is neat and efficient and readily permits of brush changes.

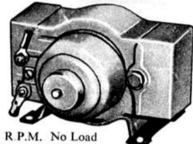
KAKO No. 4 R.P.M. 2,000 3,800



Of more substantial construction throughout, this model still retains the cantilever brass brushes mounted on a fibre plate. Nominally designed for an operating voltage range of 1.5 to 6 volts, it would not normally be advisable to run on less than 3 volts and with 4.5 to 6 volts, preferred. Employs a similar armature to model No. 3, but modified winding. Size 15/16 in. diameter by 1½ in. by 2½ in. across magnets. Weight 5 ounces. Base mount 11 in. by 1 in. Shaft diameter .111 in.

Ample power for a 24-30 in. displacement type hull.

Consumption KAKO No. 5. 45-.50-.52



1700-2400-3000

No. 5

31/6.

Again substantially constructed with an improved, 11 in diameter armature and carbon brushes KAKO 5 on spring- loaded arms. Nominal operating voltage range 4.5 to 10 volts. This is a relatively low speed motor and draw high current under load on more than 6 volts, but has a good torque output. Size 1 3/16 in. diameter by 21 in. by 21 in. across magnets. Weight 11 ounces. Shaft diameter .111 in. Base mount 17 in. by 1 3 in. PRICES.

KEILKRAFT LONGSHAFT MOTOR

No. 4 15/8



The smallest of all electric motors! With wide application in every field of modelling.

It is especially suitable for Motorising plastic BOAT, AIRCRAFT and CAR kits.

Models readily adaptable to powering

Size 1" x 11 dia.

Weight & oz.



AURORA. Mustang P51. Spitfire. Curtiss P40. Piasecki Helicopter.

Boeing P26 Cruiser St. Paul AIRFIX. Whirlwind .

REVELL. Piasecki Helicopter. Sikorsky S55. Chris Craft Cruiser. Tugboat Patrol Torpedo Boat.

MONOGRAM. Albatross . Landing Ship. T28A Air Force Trainer.

LINDBERG. Spirit of St. Louis. KLEEWARE. "Thunderbolt". FROG. Fairey "Gannet"

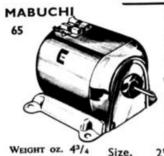
Price only 3/3 each

MABUCHI ELECTRIC MOTORS

Guaranteed Quality

C IX different sizes of this range of electric motors are available. Design layout is common throughout, with the exception that the largest model (605) incorporates a number of refinements such as ball race bearings and copper All the motors are extremely low priced for what is a high carbon brushes. standard of design and production.

Dimensional and performance data of the complete range. Recommendations for matching propeller sizes, etc., are included in the accompanying tables.



Specification:

Normal Voltage Voltage Range... 6-10 750-800 R.p.m. .. (Free Running) 5.000-7.000 Current Consum.

280-450 (Free Running) Shaft Dia. ·110 in.

11 in. x 12 in Propeller Suitable Hull ... 18 in.-32 in. 21/2 × 21/8 × 2 inches

4.5

In the 605 the brush gear unit is readily detachable.

The copper carbon brushes are of The brushes generous section. themselves are beryllium copper.

A new type of permanent magnet, known as the "ferrite", is incorporated, and the makers claim they give results far bevond any other motor in the world.

MABUCHI 55 Specification:

Normal Voltage



Voltage Range. 3-6 150-165 R.p.m. 4,500-6,500 (Free Running) Current Consum. 150-250 (Free Running) Shaft Dia. -091 in. Propeller 11 in. x 1 in Suitable Hull 18 in.-27 in.

MABUCHI 45



WEIGHT OZ. 13/4 Size. $1^{1}/_{2} \times 1^{3}/_{8} \times 1^{1}/_{8}$

Specification:

Normal Voltage 4.5 Voltage Range.. 3-4-5 130-150 R.p.m... (Free Running) 7,000-9,000 Current Consum. (Free Running) 200-400 ·091 in. Shaft Dia. Propeller 11in.xlin. Suitable Hull ... 18 in.-24 in.

MABUCHI 35 Specification



Normal Voltage Voltage Range.. 3-4-5 R.p.m.... 55-65 (Free Running) 6,000-8,000 urrent Consum. 180-350 Shaft Dia. 1 in. dia.+ Propeller Suitable Hull ... 14 in.-22 in.

MABUCHI 25



Normal Voltage 3 2-4-5 Voltage Range... 45-50 R.p.m 7,500-9,500 (Free Running) Current Consum. 150-300 (Free Running) Max. Shaft Dia. -079 in. ... 1 in. dia.+ Propeller Suitable Hull ...12 in.-18 in. Size, 11/4 × 11/6 × 7/6

Specification:

Specification MABUCHI 15



Normal Voltage 2-4-5 Voltage Range... 37-50 R.p.m.... 200-400 -079 in. Shaft Dia. # in. dia.+ Propeller 10 in.-16 in. Size 1 3/16" × 7/8" Suitable Hull ...

PRICE LIST

INCLUDING TAX

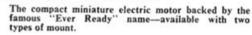
MABUCHI MOTORS 15 3/11 4/6 25 35 4/11 45 6/-... 55 7/11 29/11

ELECTRIC MOTORS

RING MAGNET MOTORS

LOW DRAIN-VERY RELIABLE- IDEAL for SERVOS

EVER READY

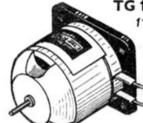




TG 18-B

Permanent magnet type motor with three-pole low resistance armature and metal leaf brushes. Moulded plastic case and base mount 11" × 1".

1" overall diam., 1 16" long



TG 18-E

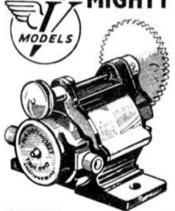
1" overall diam., 11 long

The identical motor with end mounting plate for flush fitting against a bulkhead. etc. Mount holes spaced $15/16'' \times \frac{3}{4}''$, 8BA clearance size.

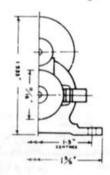
Recommended application model power boats of hull size up to 24" l.o.a. (ideal for 14-18" cruisers), model rail cars, demonstration models, etc., etc.

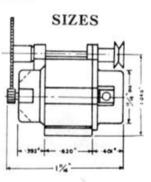
MIGHTY MIDGET

Normal current consumption LESS than a small flash-light bulb.



Weight 11 ozs. 4-6,000 r.p.m. 3-6 volts Replaceable brushes Self starting Instantly reversible Develops tremendous power for its size Precision built to engineering standards





GEARED MOTOR

(illustrated) With 7:1 reduction gearing and drive pulley. Countershaft 650-1.000 r.p.m.

TYPE V (with pulley) 4-6,000 r.p.m.

THE "TAPLIN" Voltage 44-6 Consumption 250 M.A. under load 300 M.A. Approx.



Motor is unique in that it contains a reduction gear box at one end of 11.75 to 1 with the armature shaft projecting at the other end, thus giving a low speed and high speed range from the same motor. At an armature shaft speed of 6,000 r.p.m. gear shaft speed is 500 r.p.m. giving approximately 2 ozs.-in. of torque which is more than enough power for the largest of control surfaces.

Specification: Horse-Power - Approx. 1/750 Gear-Ratio - 11.75 to 1. Armature Shaft Speed - 8,000 R.P.M Gear Box Shaft Speed 660 R.P.M.

PRICES

EVER READY plain, end mount or

base mount.

MIGHTY Reduction MIDGET Rear drive 13/10

(pulley drive) 10/5

TAPLIN 29/6.

INCLUSIVE OF PURCHASE TAX.

REP TONE

RADIO & ELECTRONIC PRODUCTS

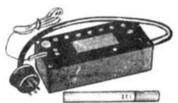
THE COMPLETE RANGE OF R.C. EQUIPMENT

Combining RANGE, RELIABILITY DURABILITY, achieved by up-to-date "TONE SYSTEMS"

★ The R.E.P. "UNITONE"

UNITONE IS IN keeping with the standard of all the R/C goods produced by R.E.P. Ltd. Both transmitter and receiver are well made and neat in appearance and it is obvious that a great deal of thought has been put into design and production. The result is reliable single-channel equipment at a reasonable price.

UNITONE Receiver



RECEIVER is housed in a shockproof red plastic case and the wiring both neat and compact. Size is 3½ in. x 1½ in. x 1 in. and weight 2½ oz.

The unit is supplied with switch and plug ready wired and all that is necessary to operate is to connect the H.T. and L.T. batteries together with the actuator and battery. The size and weight make it suitable for any size model, the cross-section adapting itself to small fuselages.

Although small in size, however, nothing has been

sacrificed and performance is excellent.

The R.E.P. "TRITONE" Three-channel transmitter and

Three-channel transmitter and receiver with outstanding qualities.

Pretuned to frequency and channels. No tuning or adjustment required. Range exceeds two miles. Transmitter: $8\frac{3}{4} \times 6\times3$ self-contained. Telescopic aerial, $9\frac{1}{2}$ ins. to 5ft. Receiver: $3 \times 1\frac{1}{2} \times 1\frac{5}{8}$ in light dural case. Weight: 5 ounces. XFY34 valve and two transistors. Batteries: One B122, one U12.

Unique circuit gives freedom from channel drift.

EQUIPMENT £20.13. 0.

Full 12 months' guarantee



The Transmitter, is housed in an attractive aluminium case with a mottled grey finish.

Size

9½ in. x 6 in. x 3 in. and at a weight of 4½ lb complete with aerial and batteries it is ideal as a hand-held unit.

* STAR POINTS *

- "Tone stability" achieved by use of tuned high Q chokes in all transmitters.
- "Receivers" totally enclosed, protected from dust and exhaust fumes.
- "Temperature" stability ensured by choice of high stability components.
- ★ "Pretuned", no adjustments or tuning required.
- ★ "Sextone and Octone" fitted with original "neon flasher" battery voltage indicator.

PRICES

"UNITONE" single channel tone. Hand held transmitter and $2\frac{1}{2}$ -oz. matched receiver.

"UNITONE" transmitter. £9/3/0. "UNITONE" Receiver. £7/7/6.

'TRITONE' 3-channel reeds. Hand held transmitter and 5-oz, Receiver.

"TRITONE" transmitter. £9/6/6.
"TRITONE" 5 oz Receiver. £11/6/6.

Full 12 months' guarantee



'REPTONE' COMPLETE RANGE OF R.C. EQUIPMENT

Transmitter, combined receiver, motorised actuator and battery box.

THE Reptone, is a completely self-contained radio unit which must be as near to fool-proof as we are ever likely to get.

SPECIFICATION

You buy the receiver unit and transmitter. slip in the batteries as drawn for you, connect up your tiller, switch on. and it works. It really is as simple as that. There is one tuning control which need not be touched unless you require absolute maximum range, and provided the batteries are put in the right way round there is nothing you can do wrong no wiring up, no meters or pots to fiddle with, no relays to adjust, just one on/off switch.

The power available from the crank will move the rudder of the largest model quite happily.

The equipment is extremely portable and very rugged and a first class piece of equipment at a very reasonable price

The transmitter weighs 3 lb. complete with 1 B131 90v and 1 AD35 $1\frac{1}{2}v$ battery, measures $9\frac{1}{4} \times 4 \times 2\frac{1}{2}$ ins., and includes built-in telescopic aerial.

A simple description of the set is that it is a one valve-transistor tone receiver coupled to an Omniac electric actuator, all built into a case $4\frac{1}{4} \times 2\frac{1}{2} \times 1\frac{1}{4}$ ins. and weighing $8\frac{1}{4}$ ozs. including batteries, which are 1 122 $22\frac{1}{2}$ v and 3 U12 $1\frac{1}{2}$ v.

Aerial emerges from one side, switch from the other, tuning slug is underneath.

One press on the transmitter button gives, say, left rudder; release, return to original neutral. Two slowish presses, right rudder, release, neutral. Two slowish presses followed by a quick one close a circuit through the side socket, which can be used for engine or any other control via an escapement etc. which will not operate until the appropriate signal is sent.

All of these actions can be selected at will and repeated as required.

OF PURCHASE TAX.



THE COMPLETE RANGE OF R.C. EQUIPMENT

SEXTONE

The super hand-held multi-channel outfit - best value in R/C today !!





TRANSMITTER

SEXTONE, SIX-CHANNEL TUNED REED EQUIPMENT

TRANSMITTER Hand held with self-contained batteries and a 5-ft. telescopic aerial.

SIZE 6" × 9" × 3"

batteries

WEIGHT 4 ! lb. with

A joystick four-position switch and two push buttons are conveniently placed for operation. The channel notes are produced by a high-stability tuned choke circuit.

The R.F. section consists of a crystalcontrolled oscillator followed by an R.F. amplifier

A flashing neon battery voltage indicator is fitted.

Batteries: One AD4-11 volt. Two B101-67 volt each.

RECEIVER

SIZE 31" × 21" × 21"

WEIGHT 9 oz.

Totally enclosed in a strong light alloy case. Conventional valve - two transistor circuit feeding a reed unit with nontarnishing rhodium-plated reeds. The six R.E.P. relays have the output cables ready

Batteries: L.T. U.11-11 volt. H.T. B105-30 volt.

"SEXTONE" 6-channel reeds. Crystal controlled transmitter with "Joystick". 8-oz. receiver

PRICE £31, 17s, 3d,

OCTONE 8-channel reeds. Simultaneous operation. Crystal controlled Transmitter and matched 10 oz. receiver.



OCTONE, EIGHT-CHANNEL SIMULTANEOUS-TUNED REED SET

6" × 91" × 3"

WEIGHT 5 lb. with batteries The 'Octone' is what may be considered as the optimum of present-day radio control equipment.

Any one of four channels can be operated simultaneously with any one of another set of four. This permits two-handed control which is the nearest thing to actually being in the model

L.T. AD4-11 volt

In order to obtain complete stability, the trans-H.T. Two B101-67 volt mitter is crystal-controlled.

Tuned chokes are used for both modulators.

L., T. Consumption 200 MA.

H.T. Consumption 20 MA.

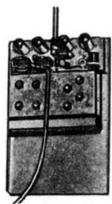
Quick-action switches are used for the controls. The transmitter with telescopic aerial is hand held. The battery leads are long to allow larger

batteries to be used, if required, either groundbased or in a carrier.

A flashing neon battery voltage indicator is fitted.

The receiver is totally enclosed in a strong light alloy case. Conventional valve-transistor amplifier feeding special eight-bank reed unit with rhodium-plated reeds. Eight R.E.P. 1-oz. relays in two banks of four. Both the transmitter and receiver use low battery consumption circuits.

* "Pretuned", no adjustments or tuning required.



Octone Receiver

PRICE

"OCTONE" 8-channel Simultaneous reeds. operation. Crystal controlled Transmitter and matched 10-oz. receiver

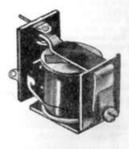
£50. 0. 0d.

Transmitter

★ "Sextone and Octone" with original "neon flasher" battery voltage indicator.

Radio & Electronic Accessories

R.E.P. 4-oz. RELAY



R.E.P. J-oz. Relay

This relay has been reduced in size and weight to the smallest possible without loss of efficiency or strength. The contact materials are hard-drawn fine silver. Frame and armature are bright chrome plated. Return spring is a phosphor bronze strip incorporating an easy adjustment of operating point.

One hole fixing and choice of dimensions enable several relays for multichannel receivers to be assembled within the minimum space.

The angled balanced armature is proof against normal vibration and is unaffected by up to 14 G.

All connections are on one side of the panel. Normal coil resistance is 5,000 ohms, other values to order. Contact limitation 0.5 A non-inductive 12 V.

Size 1" ×1" ×1". Weight .50 oz.

THE MINI UNIAC

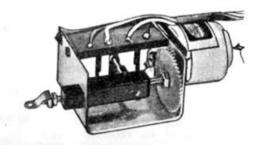
Compact, lightweight but robust leadscrew motorised actuator suitable for aircraft elevator, aileron and engine controls. Will be found powerful enough for rudder control of model boats up to six feet long. It can be wired for use as either progressive or self-centring action.

Size 3" × 11" × 11". Weight 21 oz. Battery 3 to 41 volts.

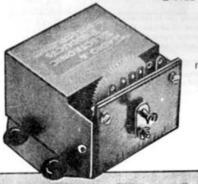
UNIAC. As the 'Mini Uniac' but more suitable for model boats or larger aircraft.

Size 21" × 11" × 11". Weight 21 oz. Battery 3 to 41 volts.

" MINI UNIAC " motorised



OMNIAC MOTORISED ACTUATOR.



Motorised for single or multi , double geared M M motor.

plied, can be used as:

A. Single-channel sequence rudder

A universal 'Mighty Midget' powered

actuator which, by choice of the five printed circuit contact discs sup-

- A. Single-channel sequence rudder.
- B. Single-channel compound actuator with third position contact for a further control.
- C. Multi-channel self-centring or progressive.
- D. and E. Two- or three-position engine speed control.

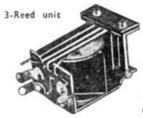
Size $11^{\infty} \times 2^{\infty} \times 11^{\infty}$. Weight 21 oz.

PRICES R. F.P. deoz. Relay 24/-

PRICES R.E.P. ½-oz. Relay ... 24/INCLUSIVE "MINI UNIAC" motorised 52/OF TAX. "UNIAC" motorised 44/-

"OMNIAC" motorised for single or multi ... 60/-

RADIO & ELECTRONIC EQUIPMENT and ACCESSORIES



These units are offered separately, to enable the more technically minded to construct their own equipment.

THREE-REED UNIT

This miniature three-reed unit has been produced in order that really small three-channel receivers can be made.

Its small size has not detracted from its efficiency. Special core material. Alcomax 4-magnet silver and rhodium-plated reeds. Harddrawn silver wire contacts produce trouble-free action and lasting contact surfaces.

Size 11" x 1" x 1". Weight 6 oz. Coil resistance 5,000 ohms.

SIX- AND EIGHT-REED UNITS

8-Reed unit



PRICES. 3-Reed unit

35/-6-Reed unit 60/-

8-Reed unit

70/-

Size 1" × 11" × 1

Weight 1.6 oz.

Multi-channel radio control equipment would not have arrived at its present-day perfection without the 'Reed Unit'.

The R.E.P. Units incorporate the following improvements based on years of experience.

Rhodium-plated reeds. Rhodium is a hard non-corrosive precious metal of excellent electrical properties.

Angled hard-drawn silver contacts. The angle of the contact wires permit a slight wiping action clearing dust, etc., from the reed contact surface. The 'spring' of the contact wire permits a longer contact duration than a solid contact which produces 'bounce'.

R.E.P. RADIO CONTROL COMPONENTS

27 M/cs TRANSISTORS

Complete with Circuits and Component Values for "Tone" Single- and Multi-

Receivers

Price

44/-

* 27 M/cs CRYSTALS

Complete with Circuits and Component Values for "Carrier" and "Tone" Transmitters 40/-

"SOLENOID" for lightweight multi models, rudder control Price 30/- TELESCOPIC AERIAL 3 ft. 21/- 5 ft., 25/-AERIAL BASE.. 3/6.

KIT "PRINTED CIRCUIT" Carrier transmitter. Pre-tuned less VALVE ... 20/6. All kits are pre-assembled and contain all finished components.

Basically 'Radio Control' is nothing more than a switch (Single) or switches (Multi) controlled by radio waves. It is no more and no less! The switch when pressed (keyed) sends a message to a receiver by the radio waves. This switch (usually called a relay) then sets in motion the gadgets (small motors, actuators or escapements) which then convey the mechanical motion required.

There is nothing weird or wonderful about radio control.

It has been fully proved. It works. It is a fact. The future of all modelling lies in 'Radio Control.'

For Boat Modellers

MODEL BOAT RADIO CONTROL

E.D., pioneers in the science of Radio Controls, now produce models that will adequately meet the demands of all Radio Control enthusiasts.



COMPLETELY WIRED READY FOR USE.

Simplicity itself to install and most economical in use.

Size $3\frac{1}{2}'' \times 2\frac{1}{4}'' \times 1\frac{3}{4}''$. Weight $3\frac{1}{2}$ ozs.

RADIO CONTROL MODELS & ELECTRONICS.

This is the Magazine for Radio Control Enthusiasts

52 pages $8\frac{1}{2} \times 5\frac{1}{2}$ in. containing a wealth of information for radio control enthusiasts of all degrees of expertness. 24 Monthly

wherever you buy your Aeromodeller or Model Maker.

E.D. 'BOOMERANG'

THE RADIO CONTROL SET WITH 5 LIVES

A Radio Control Unit completely wired and ready for use in your Model Plane or Boat, supplied with either soft or hard valves.

This revolutionary-set provides five different aerial tappings which enable the aerial load to be matched to the valve. A new valve is worked on the A.I. tapping for maximum sensitivity. When required I.5. M.A. current becomes unobtainable the A.2. tapping will give a further period of sensitivity. This procedure is used progressively through all five stages, thus lengthening the life of the valve by five times.

PRICE LIST.

"BOOMERANG" PCI TRANSMITTER
RECEIVER H/V Mk. III
ESCAPEMENT Completely wired

£12.5.6

PC1 Single Channel Boomerang and Airtrol Transmitter Aerial

£5.18. 0d.

BOOMERANG RECEIVING SET H/V Receiver & Mk. III Escapement (Wired ready for use)

£6 5s. 6d.

E D RADIO CONTROL EQUIPMENT

E.D. P.C.I TRANSMITTER

Will operate "Boomerang," "Transitrol," "Airtrol" and all single channel Receivers. A high-powered, super compact, lightweight, portable Radio Control Transmitter suitable for the operation of all carrier receivers. Designed on entirely new lines and using a DCC 90 in push/pull for maximum power and formed into a printed circuit for absolute frequency stability unaffected by temperature changes. Engineered in every respect for maximum reliability. Finished in attractive hammered grey stove enamelled cabinet. Size: 6½" x 5" x 5½". Weight with batteries 8 lbs. Supplied complete with a four-section collapsible aerial and keying lead.

Price(less batteries) £5.18.0d.





Price £7. 4. 0

E.D. "AIRTROL" HARD VALVE RECEIVER

The smallest receiver in the world. Size $2\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ ". Weighs only $2\frac{1}{2}$ ozs. The "AIRTROL," latest addition to the E.D. range of Remote Control Receivers, has been specially developed to meet the great demand for a transistor hard valve receiver with a specification producing the ultimate in Radio Control.

H.T. Supply — 22½ volt battery. Idling current — .6 ma. Current Change — .6 ma. to 4.8. L.T. Consumption — 25 ma. Hard Valve — No quench coils. Simple tuning.

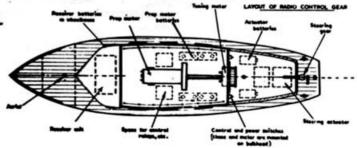
Two transistors for output and economy. Valve Life — 3,000 hours.

BOAT RADIO CONTROL

TYPICAL LAYOUT

OF

RADIO EQUIPMENT.





performance

RADIO new type multi-channel

Electronic Developments lightweight tone gear incorporates specially-produced relays and reed units. Neatly produced in black Anodised boxes and appropriately christened the *Black Prince* series, tone transmitters are available for single-, four-six-, or eight- channel with *Black Arrow* receivers to match.

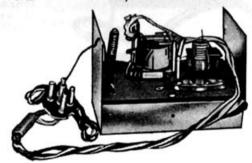


BLACK PRINCE/I TRANSMITTER

This transmitter has been designed to meet the requirements of the single channel enthusiasts and when used in conjunction with the E. Q. BLACK ARROW/1 receiver will produce easy and faultless operation. This is the perfect combination for newcomers to radio control. It is, as with all E.D. transmitters, TONE STABILISED with a high R.F. output Tone frequency. 400 Cps. Supplied in a neat black anodised hand held cabinet, with a 5ft. telescopic aerial.

Size: 9^a in. x 6¹ in. x 3¹ in. Weight Complete 5 lbs. Less Batteries 2¹ lbs.

BLACK ARROW/I RECEIVER



absolute reliability. Tuning is elementary, and once adjusted will remain so. Single tuning slug is only adjustment required. The receiver operates from 22½ volts H.T., and ½ volts L.T. It has a completely redesigned relay incorporated which requires no adjustment whatsoever and is also temperature stabilises to operate perfectly between 30 to 130 degrees. It is extremely light, weighing only 3 ozs. and yet is very robust. The recommended transmitter to use in conjunction with this receiver is the BLACK PRINCE/I tone transmitter described above.

This receiver has been produced to provide

BLACK PRINCE /I Single Channel (Tone) Transmitter.

£11 Is. 4d.

BLACK ARROW / I Single Channel (Tone) Receiver.

£7 11s. 8d. inc. P. Tax.

E.D. RADIO CONTROL EQUIPMENT

All of the new Electronic Developments radio gear has been exhaustively tested and one of the main attributes has been the complete reliability of the outfits, very few adjustments being required to maintain full control over a lengthy period. Tuning is elementary.

BLACK PRINCE /6

BLACK KNIGHT /I BLACK PRINCE /I BLACK PRINCE 16 Six Channel (Tone) Single Channel (Carrier) Four Channel

This entirely new transmitter has been produced after months of exhaustive flying tests. The Standard Transmitter, the first of a new series, may be supplied up to eight channels or as a single channel tone or carrier transmitter. Housed in identical cabinets, they are tone or carrier transmitter. Housed in identical cabinets, they are hand-held, using a 5 ft, detachable aerial. The self-biased switches fitted, are easily accessible by both hands. Many unique features have been incorporated, including a neon voltage indicator.

Complete tone stabilization due to feroxcube pot cores. Each potentiometer will only cover 100 cycles and, having set up the transmitter, will operate without further adjustment.

Battery consumption has been cut to a minimum and many months of use are assured. Balanced weight distribution makes perfect handling. A detachable compartment enables batteries to be inserted without

disturbing the transmitter.

Size: 91" x 61" x 31". Weight complete 5 lbs. Less Batteries 21 lbs.

BLACK ARROW RECEIVERS



RECEIVERS :

Size: $3\frac{3}{4}$ " $\times 2\frac{1}{4}$ " $\times 1\frac{3}{4}$ ".

Weight: 8 ozs.

The 4 and 6 Channel Receiver is completely revolutionized with a new and absolutely reliable relay and a super-sensitive reed unit capable of operating with an input of only 2 volts R.M.S. Using the new high gain Mullard transistors, transformer coupled and temperature stabilized, developing 20 volts R.M.S. into the reed unit. Both reed unit and relays are fitted with fixed contacts, no adjustment being required. A low voltage supply of 22½ volts for H.T. and 1½ volts L.T. at extremely low consumption resulting in quite small batteries being used. The complete receiver is mounted in virtually a crash-proof container.

TRANSMITTERS

Black Prince/I Single Channel (Tone) £11 Is. 4d. Black Prince/4 Four Channel (Tone) £14 3s. 4d.

Black Prince/6 Six Channel (Tone) £15 9s. 10d.

E.D. Single Channel Tone Outfits £18 13s. 0d.

E.D. Six Channel Tone Outfits... £32 9s. 0d

RECEIVERS.

BLACK ARROW /4 Four Channel (Tone) £14 12s. 2d. BLACK ARROW /6 Six Channel (Tone) £16 19s. 5d.

E.D. Four Channel Tone Outfits.

And the new competition masterpiece simultaneous eight channel Crystal Outfit. £47 19s. 4d.

E.D. BLEEP RELAY (Fixed Contacts)

This robust relay is fitted to all E. D. EQUIPMENT. It is factory adjusted and will not require readjusting throughout its service. Many hundreds of thousands of faultless operations are guaranteed.

SPECIFICATION: Coil resistance 3750 Ohms. Current 10 Ma. Pull in 2.5 Ma. Fall out 1.5 Ma.



E.D. MULTI SERVO UNIT

Multi-Channel Servo Unit



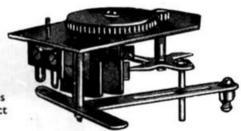
The E. D. P.C./3 MULTI-CHANNEL SERVO is a robust powerful motor driven unit, designed for use with reed equipment. Built around a switching circuit, suitably plated against wear. This servo may be used for RUDDER operation, ELEVATORS, AILERONS, SAILS, etc. PROVISION is made for adjustable trim, and it may be wired for self-centering or progressive operation. Spaced off holes are inserted so that the throw may be adjusted. This servo as with all E. D. equipment has been fully tested to ensure perfect control over many thousands of operations.

SPECIFICATION: Supply voltage - 3 to 4 volts. Pull 2 lbs. Consumption 250 Ma. Weight 21 ozs. Mounting any position. Self centering.

Mk. I CLOCKWORK ESCAPEMENT

The Escapement can be fitted, where most convenient to the model, preferably as near as possible to the point of control. The control arm permits several methods of drive, either by fine piano wire, cords direct, or cords over pulleys.

Any convenient position, either vertical or horizontal, is permissible. In boats the control arm can be fitted direct to the rudder operating bar.



The Escapement can be wound up either by the extension which projects through the slot in the control arm, or by the spring housing underneath both, in a clockwise direction. If wound up fully, release by hand one full turn on star wheel to ease spring tension. Escapement provides for about 200 movements, 50 complete revolutions of star wheel. Battery voltage 4½ to 6 volts.



Mk. II COMPACT ESCAPEMENT This has under half the total area of previous escapements. Special features are : one hole

escapements. Special features are : one hole fixing, redesigned magnet system, giving low current consumption and obviating the necessity for current saving devices.

Weight $\frac{3}{4}$ oz. Self-centring rapid movement. Overall size $I'' \times I_{\frac{1}{6}}'' \times I_{\frac{1}{6}}''$ excluding spindle Operating voltage: max. 6 v., min. 3 v.

PRICES

BLEEP RELAY 24/CLOCKWORK
ESCAPEMENT 56/8
COMPACT 23/7

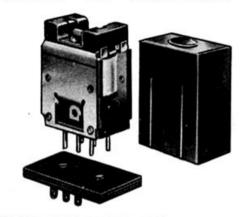
ESCAPEMENT.

E.D. RELAYS FOR ALL KINDS OF CONTROL

E.D. P.100 RELAY

The P.100 operates on 20 M/watts or less—and can be adjusted to make as low a current as .8 Ma, and to break on as high a current as 3 Ma, and to change over on a current difference as small as ·2 m/a. The compact mechanical design and assembly ensures a completely rigid unit; totally unaffected by shocks and vibration and is enclosed in a bakelite case.

Overall size, i‡" x ‡" x ‡". Weight, I oz. Coil Resistance, 3,500.
Contacts, Standard Silver.
Minimum Operating Current, .8 Ma.
Maximum Safe D.C. Current, 3 Ma.
Maximum Safe D.C. Contact Current, I a at 6 v.





Overall size, I" x 7".

Weight, I oz. Coil resistance, 4,000 ohms. Contacts. Solid Silver.

Magnets, two rods embedded in a dural base.

E.D. POLARISED RELAY

This is a lightweight permanent magnet polarised relay with a stretched phosphor bronze wire bearing for a high permeability balanced leaf armature which permits operations of over 30 per second.

The compact mechanical design and assembly ensures a completely rigid unit totally unaffected by shocks of vibration. The adjustable contacts are cheese head 6 B.A. screws with a rounded solid silver tip.

Due to the permanent magnets, polarity of coil connections must be observed. Sense of armature movement can be changed by reversing coil polarity and readjusting the contact

Due to the low armature inertia and coil current, this relay is very suitable for condenser delayed circuits, for example self-operated to give pre-determined varying ratio pulses of up to 30 per second.

E.D. OCTAVE TUNED RELAY

This entirely new reed unit has been designed to meet the exacting standards demanded by Radio Control enthusiasts, a compact sturdy, but light unit, suitable rodium plated, and solid silver self-wiping contacts. A built up laminated core using an extremely high flux magnet, produces remarkable sensitivity.

The contacts are factory set and require no further adjustment. A logarithmic curve of the reed fingers, has resulted in perfect frequency separation. Many hundreds of thousands of faultless operations have been recorded.

SPECIFICATION:— Size—1" x 1½" x 1". Weight—1½ ozs. Recommended input—16 volts AC. Sensitivity—2, volts R.M.S. Coil resistance—4000 ohms.

Frequency-260, 300, 340, 370, 400, 430. 460, 490.

OCTAVE-



PRICES.

P.100 RELAY 31/-

E.D. POLARISED RELAY 30/-

OCTAVE TUNED
RELAY ... 60/

RADIO CONTROL

ACCESSORIES

MILLIAPMETER



0. to 50. 25/-

PLUGS & SOCKETS









POTENTIOMETERS

5K, 10K, 100K 5/6

VALVEHOLDERS



Suitable for X FG1. DL 68 DL 66. and transistors. 2 PIN PLUG & SOCKET ... 1/9
4 PIN PLUG & SOCKET ... 1/9
6 PIN SOCKET ... 1/8
6 PIN PLUG 1/6
7 PIN PLUG 3/–
7 PIN SOCKET ... 1/6

VALVES

DL 68 VALVE	15/-
DL 92 VALVE	14/9
DL 94 VALVE	14/9
XFG1 VALVE	17/6
XFY34 VALVE	15/-
XFY35 "	15/-
3 S4 ,,	15/1
3A5/DCC90 "	23/3
DK 96 VALVE	15/3

TRANSISTORS TMI TRANSISTOR 21/OC75 MULLARD TRANSISTOR 18/-

27 M/cs TRANSISTORS Complete with Circuits and Component Values for Tone Single- and Multi-Receivers

27 M/cs CRYSTALS

Complete with Circuits and Component Values for "Carrier" and "Tone" Transmitters ... 40/-

Mk. III RELAY BOBBIN & COIL ... 7/4

E.D. PLASTIC BOBBIN 1/8
CLOCKWORK ESCAPEMENT
SPRING ... 3/4
STAR WHEEL (Clockwork

Escapement - 4 PAWL) 3/6 2 PAWL) 3/2 COMPACT ESCAPEMENT

2/-

PLASTIC ROUND AERIAL BASE 5/-

COUPLINGS



Plastic covered wire in 12 different colours for wiring Boat Circuits, Solenoids. etc.
25 foot. coils Price 2/6.

100 foot, coils Price 7/-

SWITCHES



(Can be used as single pole).

TOGGLE SWITCH	3/-
ON & OFF SWITCH (Single)	2/6
ON & OFF SWITCH (Double)	3/-
MICRO SWITCH	9/6
ROTARY SWITCH (Lever)	8/8
BELL PUSH SWITCH (Double Pole)	3/4
KEYING LEAD WITH SWITCH	6/-

SNAP-SWITCHES

PRESS-ACTION SINGLE-POLE, (Push for 'ON')(Push for 'OFF') 1/3

TRANSMITTER AER	IAL
(4 Section)	12/-
NEON VOLTAGE	25/-
INDICATOR	4/-

5-ft. Chromium Plated Telescopic Aerials 24/-27 M/C Crystals 30/- ASK FOR



each 8id.

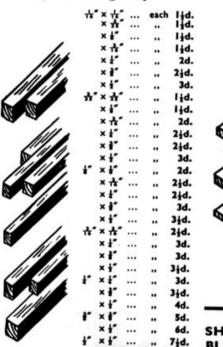
THE ONLY SANDED BALSA

Costs no more than ordinary balsa!

CHECK THIS LIST

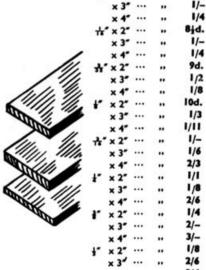
STRIPWOOD

(3ft. lengths)



Even blindfolded you can tell it's KEILKRAFT SANDED BALSA! SHEET

(3ft. lengths)

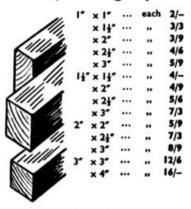


SHEET BALSA PACKS each I/-BLOCK BALSA PACKS each 2/-(Packs of useful assorted sizes)



BLOCK

(3ft. lengths)



MOULDING (Leading Edge) 3 ft. lengths

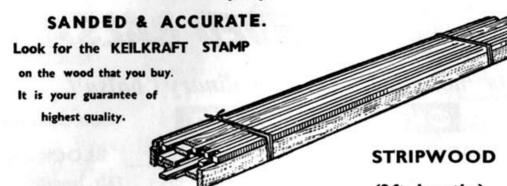


MOULDING (Trailing Edge) 3 ft. lengths

1	1" × 1"	 each	4d.
	× 1"	 	41d.
	14. × 1.	 	5d.
	× 3"	 	6d.
	1" × 1"	 	71d.
_	x 1"	 	94

Use KK SANDED BALSA for all your models. You'll You'll be surprised at the improvement in their appearance!

EIL RAFT OBECHE & SPRUCE specially selected & prepared for Model Boat building.

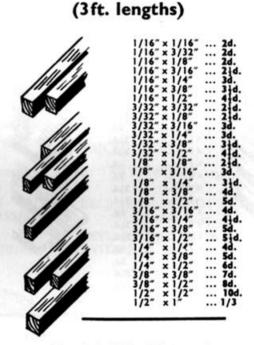


SHEET (3ft. lengths)



HARDWOOD

STRIP	(Engin					
A. B. C. D. E.	1/4	x 5	/16" x /16" x /16" x /8" x /4" x	18"		3d.
Č.	3/8	× × 9	/16" X	18"	:::	4d.
D.	7/1	6" × 5	/8" ×	18"		4 d.
E.	1/2	× 3	/4 ×	18		sa.
DOWE	LS (3f	t. long	g) Ø	1 6	3 +	
***************************************					_	~
1/16"	dia.		ld. 1	/4" dia /8" dia /2" dia		5d. 7d.



Special Thin Plywood

RESIN BONDED.

Thicknesses 1/32". 1/16". 1/8", in. 5/8d. 5/8d. approx. 6/-

SUPPLIED IN PANELS Approx. 3ft. sq.

Ideal for model makers. Thin, bendable in a handy-size sheet,





KEILKRAFT CEMENT

An all-purpose cement that will not weaken. Colourless and fast drying.

Midget ... Large Medium ... 6d. Monster ... 1/6

FUEL PROOFER

KEILKRAFT Marjonos ... 2/-BRITFIX 2/6 AEROGLASS 2/6 HMG

AEROGIAS'

ASK FOR THE BEST

Insignia Red

Chrome Yellow

Medium Green

Royal Blue

Black Gray

White Clear.

HMG CEMENT Heat and Water Proof 1/3

BUTYRATE DOPE-Hot Fuel Proof.

Butyrate dope has long been favoured in America where its built-in fuel proofing qualities are particularly useful due to the almost universal use of the glowplug engine. Available in Following Colors:

2/-

No additional fuel proofing is required over the dope which covers well and dries quickly (20 min), with a glossy finish. An important factor is the ability to carry out ordinary cemented repairs over the doped surface without having first to remove a stubborn layer of fuel proofer.

It should be borne in mind that the clear Butyrate has practically no shrinking properties and is a clear lacquer. All tissue surfaces must be treated with normal cellulose clear shrinking dope before using Butyrate. PRICES SMALL 1/- .

MODELLERS MATERIALS CEMENTS. DOPES AND FINISHES



Quick drying. KEILKRAFT DOPE

CLEAR 1/2 ounce jars CLEAR 1 ounce jars CLEAR 2 ounce jars CLEAR 1/2 pint cans COLOURED 1/2 ounce jars COLOURED 1 ounce jars COLOURED 2 ounce jars COLOURED 1/2 pint tins

This glossy dope is available in White. Black, Cream, Grey, Light Blue, Royal Blue, Light Green, Dark Green, Red, Orange. Dark Green, Red, Orange, Yellow, Maroon, Gold and Silver.

1/2 pint tins, Gold and Silver 4/6

AS WITH KITS, KEIL KRAFT IS THE NAME TO REMEMBER WHEN BUYING CEMENT, TISSUE PASTE, DOPE.

BANANA OIL

Same prices

Clear Dope.

as for

THINNERS (for done)

1 ounce 9d. 2 ounce 1/- 3 ounce jar 1/3 1/2 pint can 2/6

Give your models a superior finish with these high quality KeilKraft products.

K K FUEL PROOFER		2/-
K K SANDING SEALER		1/3
K K GRAIN FILLER K K DOPE POLISH	•••	1/6
K K PLASTIC WOOD	***	9d.

KK MODEL BOAT VARNISH

Price 2/6 per tin.



Is exceptionally resistant to water without blooming and is ideal for model boats. Being durable and weather proof it can be used for many general purposes.

NEW E.D. ENGINE

FUELS

HIGH PERFORMANCE

Super Zip A Nitrated Fuel for high speed work with Compression Ignition Engines. 10 ounce tins. 3/6

The Economic Fuel for general use.3/- per tin

OILERS

VALVESPOUT

Handy to carry. handy to to use. The Alton **Valvespout** makes the ideal fuel can for power modellers. Features special on-off nozzle operated by a twist of the fingers. Sturdy allmetal construction, red painted finish.

Price 3/3 each. Capacity 4 oz. approx. size: 3"×74"

6" 0/0



FUEL TUBING

clear plastic

3/32" internal diameter

41d., ft.

1/8" internal diameter

41d. ft.

3/16" internal diameter

6d. ft.



CLEAR PLASTIC SHEET.



Cuts easily and may be bent to almost any shape.

For cabin windows. **Thicknesses**

.015" × 24" × 10" .020" × 24" × 10" Price per sheet

.015" x 24" x .020" x 24" x Price per sheet

SHIP MODELLERS MATERIALS AND ACCESSORIES

TRANSFERS for BOATS etc.

Clear printing-bold colours.

Keilkraft 0000 0000 Alphabet 1" 6d, per sheet (Red, White or Black)

Alphabet 5/16" 3d. per sheet (Red, White or Black) Alphabet 1/8" 3d.per sheet (Red, White or Black)

R.A.F. Roundels 1" dia., per sheet of 12 44d. R.A.F. Roundels 11" dia., per sheet of 12 94. R.A.F. Roundels 13"" dia., per sheet of 6 9d. R.A.F. Roundels 2" dia., per sheet of 6 1/-24. 2" High letters and numerals, each Black/White/ Red

BRUSHES Especially selected for model finishing.



Assorted artists brushes (sizes 1-6) ... 41d.

Series 2. Quality.

00 0 1 2 Bach 8d. 7d 7d. 8d. 3 4 5 6 No.

Each 8d. 9d.10d 11d. BRUSHES for applying clear dope, etc.) 6d. 101d Squirrel hair



Builds up 'wood' in layers for model making, etc.

Use like putty.

Tubes.

1/-

French Polish



French Polish 1/6 White Polish

1/9 Bottle.



MODELLING

In the attractive Keilkraft Bubble Pack Per pack ... I/-

KEILKRAFT

Modelling thread, 10 yd. hank 34. Terylene thread, 100 ft. 71d. Rubber Bands-Mermaid assorted packet

TUBING



Brass and Aluminium -12 in. lengths 20, 18, 16 gauge length 9d. 14, 12, 10 gauge .. 101d

Glass Cabinet Paper Coarse Fine Medium

5d. 41d. 34d

Price per sheet

PIANO WIRE (straight lengths, 3ft.)

1 1/4	110	***	2 (array	Pere son	D
10g	1/8	.			1/-
12g		4" .			9d
14g	5/64	4" .			6d.
	1/16				3½d.
	3/64				2½d.
20g	-1-				1½d.
22g					1½d.
24g					11d.

NUTS, BOLTS and WASHERS (Steel)

It is essential that model aero-engines be bolted in position on suitable bearers or mounts. Woodscrews are quite unsatisfactory for this purpose.

6 B.A. 8 B.A. DRILLS Prica No. 50 No. 43 6 B.A. per packet TAPPING No. 44 No. 51 8 B.A. " No. 32 No. 42

CLEAR 7/64 3/32 6d.

SHIP MODELLERS MATERIALS AND ACCESSORIES



ENAMEL

TO GIVE YOU AN EVEN BETTER

Specially formulated for the exacting needs of professional modelmakers, new formula 'Humbrol' is lead free, flows on

faster, dries quicker, passes magnified inspection—yet at a price that makes it easy for large scale jobs as well.

NEW FORMULA HUMBROL PLASTIC ENAMEL

Is available in 34 colours -matt and gloss

Gloss Colours:

- 1. Eau-de-Nil, 2. Emerald Green, 3. Mid Bruns. Green,
- 4. Light Admiralty Grey, 5. Dark Admiralty Grey,
- 6. Pale Cream, 7. Light Buff, 8. Yellow, 9. Tan,
- 10. Service Brown, 11. Silver, 12. Copper, 13. Sky Blue,
- 14. French Blue, 15. Midnight Blue, 16. Gold.
- 17. Flesh (Semi-Matt Finish), 18. Orange, 19. Post Office Red. 20. Crimson, 21. Black, 22. White.

Matt Colours: 23. Duck Egg Blue, 24. Trainer Yellow, 25. Blue, 26. Khaki, 27. Sea Grey, 28. Sky, 29. Dark Earth, 30. Dark Green, 31. Slate Grey, 32. Red, 33. Black, 34. White. Ask for Colour Card.

Available in ½ oz. tin 8d. Copper and Gold 1/-

20z. tin 1/6d.Copper and Gold 2/-

Results equal to spray gun finish by brush application.

"HUMBROL" Art Oil Plastic Enamel is manufactured to provide a lasting high gloss finish, drying in approxi-mately 1 hour. Recommended for many household uses and colour scheme decorative work, ideal for plastics and plastic models, toys, pottery, woodwork, hobbies, motor cycles and cycles.

"HUMBROL" is available in a full range of beautiful art colours, being manufactured under strict laboratory specification and control, thus ensuring consistency of

formula and quality. All colours are intermixable, enabling any matching finish to be obtained. "HUMBROL" is extremely easy to apply on Plastics, Wood, Metal, Glass, Pottery, Canvas, Hardboard, and Plaster. One coat covers most surfaces, brushes out smoothly, and leaves no brush marks. No undercoat is necessary except in the case of plaster models, on which "HUMBROL" PLASTER SEALER should be

applied first.
"HUMBROL" being extremely light in weight, quick drying, and proof against Diesel Fuel, provides an excellent finish on flying model aircraft tissue, and

renders colour dope unnecessary and obsolete.
"HUMBROL" colours include a number of authentic matt finishes, specifically manufactured for the artist and modeller. Matt colours are not, however, proof against Diesel Fuel.
"HUMBROL" Enamel is formulated to the latest in

paint technology and research. Being lead free, it can be used safely by children. If it is considered necessary to thin the enamel, only "HUMBROL" Enamel Thinners should be used.

"Humbrol" Flat Finish

An unusual new product that will be of particular interest to modellers is 'Humbrol' Flat Finish, a completely transparent varnish that transforms any gloss surface into a smooth, dead matt finish. Flows on easily without leaving brushmarks, does not change the colour or hide detail.

Turn gloss into matt with a thin coat of Flat Finish.



2 oz. tin 1/6d. + oz. 8d.

"Humbrol" Clear Varnish

Gloss varnish for use over matt surfaces or as extra protection for paint work, stained or natural wood, and polished metal. Being exceptionally resistant to water without blooming 'Humbrol' Clear is ideal for model boats, and is extremely durable

Definitely leaves no brush marks.



An attractive painting outfit containing the three primary colours, black and white, metallic gold and aluminium and a jar of thinners; mixing palettes, brush and matting agent for providing a matt finish.

Complete kit 8/11

MODELLERS MATERIALS AND ACCESSORIES

HUMBROL CAPSULE PACK

This pack contains six intermixable colours in capsule form. A most economical paint pack for the Handicraft worker. For small jobs, or for Post 3d. retouching it is

just the thing.



Thinners Specially prepared for the thinning of all Humbrol Enamel and Paints. l oz. bottle 8d.

Transfer Varnish A unique pack with a handy brush for the preservation applying, and coating of transfers.

I oz. jar with brush 1/6d.

"BRITFIX" BALSA CEMENT

The old favourite among modellers, Britfix is specifically formulated for balsa wood joining and will effect an extremely strong and lasting joint. Quick drying, waterproof, transparent, handy for general use on woods, cork, pottery, tiles, etc.

> I/- and I/8d. Tubes 6d.

BRITFIX" 55 WHITE ADHESIVE

A PVA adhesive that sticks almost anything, and suitable for paper, card, fabrics etc. In the handiest container yet a plastic 'squeeze' bottle with special applicator. 55 is clean to use, and colourless when dry.



Price

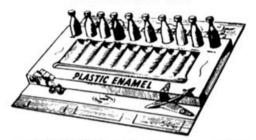
1/9



Ready for instant use. Price

> 1/2 Tube

"Humbrol" Art Oil Plastic Enamel ECONOMY KIT



Supplied packed flat, but easily erects into a 3-D stand as shown. Contains eight plastic containers of Humbrol Enamel colours: Yellow, Blue, Green, White, Black, Red, Gold and Aluminium, one of Thinners, one of flatting Agent for making matt finishes, brush, ten mixing palettes, colour guide and mixing instructions.

Price 3/6

Complete

BRITFIX 77



POLYSTYRENE CEMENT-the non- inflammable high quality adhesive made specifically for plastic models does not string Tubes 6d. each.



G.P. IMPACT ADHESIVE - a special blend of resin and rubber makes it ideal for rubber, metals, glass, wood etc. Resists water and dilute acids.

Only 1/9d, per sarge tube.

Balsa

The 'preferred' O-MY cement for many modellers Cement Gives quick-drying strong joints with balsa. Excellent for card models, Tubes

10d. 1/6

O-MY Polystyrene Cement

Tubes 6d.

GARGE GLUES YOU CAN TRUST

Give yourself the best possible chance of making a really sound gluing job by using "One Shot"—CASCAMITE "One Shot"—the resin glue specifically designed for use with wood. Supplied in powder form, "One Shot" is easily mixed in cold water, is used cold and requires no hardener to make it set; and it's strong, waterproof, gapfilling (to B.S. Specification), non-staining, heat and mould resistant.



Cascamite GLUE

Packed in $3\frac{1}{2}$,-oz. tins 2/6.

We use CASCO GLUES in our own WORKSHOPS.

'ARALDITE' EPOXY ADHESIVE RESIN

Araldite bonds metals, glass, porcelain, china, ceramics and other materials in common use.

With metals, 'Araldite' can make joints that are stronger than those obtainable with rivets or other fastenings.

It is the only adhesive that will bond permanently surfaces like glass and metal, and will provide joints free from breakdown by heat, water, oils, acids, petrol and other solvents.

Price 6/-



Aerolite 306

THE MARINE



In the red pack for wood-to-wood gluing in the blue pack for wood-to-plastic gluing Aerolite 306 is the carpenter's and the home handyman's adhesive. Unrivalled for strength, it is used exclusively by the R.A.F. It is easy to use,

needs only contact pressure and is highly resistant to water, heat and weathering.

In the new 'big value' pack, only

3′6

Britfix 55 Due to its deep penetration into all types of wood it has the tremendous joint strength of 3,000 lbs. per sq. in., and is equally effective on balsa or hardwood. It is clean to use and dries without trace, saving several ounces of weight on a large model. It is slower drying than cellulose cements, which enables the more difficult building operations, such as sheet covering, to be carried out more easily. Its water-resistant properties also make it ideal for model boat building, and the plastic squeeze bottle makes it convenient and economical to use.

PRICE 1/9

MOTORISING PLASTIC MODEL BOATS

THE MOTORISING OF PLASTIC MODEL SHIPS is a quite straightforward and practicable proposition, which is neither expensive nor difficult to carry out. The lower priced electric motors such as the 'KAKO' Nos. 01 and 0, the 'MABUCHI' Nos. 15 to 35, the 'MIGHTY MIDGET' or the 'EVEREADY' are suitable for powering, and the 'KEILKRAFT' junior series of etern tubes, propellers, rudders, etc., are correct for most models.

As with all craft, it is important to have the propeller immersed as deeply as possible, and also to keep the motor and batteries as low down in the boat as can be managed; the only way to reconcile these two conflicting conditions is to place the motor well forward and locate the batteries aft, to balance the weight; this will give the best possible installation, which is essential in modifying a model not primarily designed for working conditions.

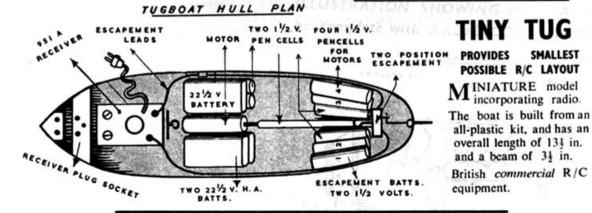
The motor can be mounted very efficiently on a small block of balsa wood carved to fit the hull in required position and cemented in place. As only miniature-type motors are being used, it is important to see that the motor and propeller shaft are accurately lined up, so as to avoid any loss of power. These two can be connected up with a small piece of plastic tube or valve rubber, or, for the larger models, a short piece of curtain spring is ideal.

The holes for the stern tube and rudder post should be made as close a fit as possible, and a good fillet of cement should be built up around each on the inside of the hull. A suitable filler can be made from the discarded spues taken from the kit. These should be ground up to a powder and mixed with some plastic cement.

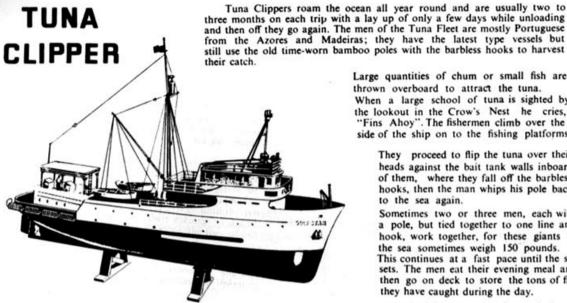
It is important to note that only models which are light enough to float with the added weight of motor and batteries are suitable for motorising and this rules out the very small models; these in any case would only be suitable for use indoors on dead-calm waters.

CRAFT suitable for motorising in the following pages are marked with an *.

ILLUSTRATION SHOWING AN ACTUAL MODEL not only MOTORISED but complete with RADIO CONTROL. Reproduction by courtesy of the MODEL MAKER



GULF STAR



In most Portuguese manned vessels there is a little chapel with altars and images of the saints who have been good to the fishermen. These sea-faring men are a very religious group. The sea is a hard master and only the toughest men manage to make a good living.

Many Tuna Clippers have gone to sea and disappeared without a trace; it is truly a rough and rugged life.

Use Polystyrene Cement only. A very fine Artist's

Brush will help you for fine cementing.

Large quantities of chum or small fish are thrown overboard to attract the tuna. When a large school of tuna is sighted by the lookout in the Crow's Nest he cries. "Fins Ahoy". The fishermen climb over the side of the ship on to the fishing platforms

> They proceed to flip the tuna over their heads against the bait tank walls inboard of them, where they fall off the barbless hooks, then the man whips his pole back to the sea again.

Sometimes two or three men, each with a pole, but tied together to one line and hook, work together, for these giants of the sea sometimes weigh 150 pounds. This continues at a fast pace until the sun sets. The men eat their evening meal and then go on deck to store the tons of fish they have caught during the day.

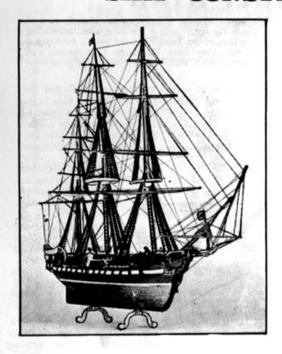
Gulf Star was recently wrecked on a reef off Peru, South America. She was salvaged and last reports have her operating out of Panama.

> Fully detailed model 141" long

> > EACH.

1502 DIESEL TUG





U.S.S. CONSTITUTION

101 piece kit. making a fully detailed model, 14" long, of a historic 48-gun ship of the line: "Old Ironsides."

"OLD IRONSIDES"! Symbol of America's early sea superiority, the Constitution was launched in 1795, is still afloat today!

Deluxe model is authentic from stem to stern. Each painstaking detail of the hull, decks, equipment, armaments, spars, long boats with oars, and companionways leading below, sets off this fabulous model. Easy-to-mount pre-assembled rope ladders, cement and instructions included in kit.

¥ 1516 MARILYN M.

The clean modern lines of this North Atlantic fishing trawler make the 18" model an exciting addition to any collection. Each detailed kit, complete with full instructions, is packed in an individual display box.

BEFORE YOU START TO ASSEMBLE YOUR KIT

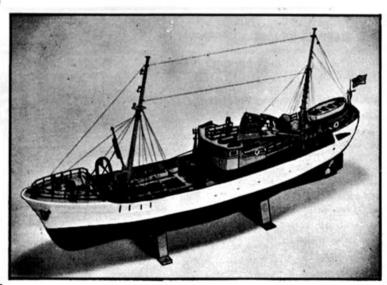
Lay out and check all parts to become familiar with them.

Be careful not to paint where you want to cement.

Some parts should be painted before assembly.

Use enamel paints only.

Use Polystyrene Cement.



PRICES

3156 U.S.S. CONSTITUTION 1516 MARILYN M. 13/6

29/6



3180 "ATLANTIC" YACHT

Over 200 pieces in this kit produce a superb 28½" detailed model historic of a sailing vessel. Complete with vacuum formed sails and full instructions.

Authentic from stem to stern, complete to the most minute detail includes sculptured figures of sailors,

These sails are masterpieces of realism that actually seem to strain with the wind. Every natural fold and billow is clearly defined. Even tiny reinforcement stitching can be seen on these marvelous sail reproductions.

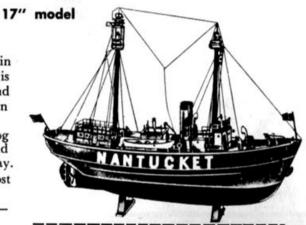
Scaled 1/8" to 1', Size: 28" long x 21" high x 4-1/2" wide.

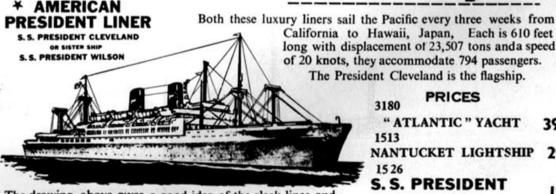
Spectacular models anyone can assemble and display with shipbuilders' pride. Intricate detail of these deluxe ships makes them handsome display models.

* NANTUCKET LIGHTSHIP

This most famous of all the lightships in the United States Coast Guard Service is stationed 40 miles off Nantucket Island She is equipped with the most modern and powerful equipment available.

Powerful Lights are shown at night - Fog Horns are sounded in thick weather and Beacon Signals are sounded 24 hours a day. The Nantucket is the first U. S. Outpost to greet transatlantic Ocean Liners.





The drawing above gives a good idea of the sleek lines and ultra-modern appearance of these magnificent Vessels.

California to Hawaii, Japan, Each is 610 feet long with displacement of 23,507 tons and a speed of 20 knots, they accommodate 794 passengers. The President Cleveland is the flagship.

PRICES 3180

"ATLANTIC" YACHT

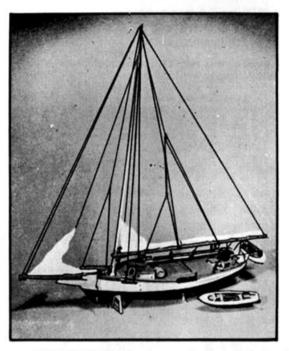
39/6 29/6

NANTUCKET LIGHTSHIP

S. S. PRESIDENT CLEVELAND

12/6

SKIPJACK Length 12".



The "Skipjack" Oyster Boat incorporates all the external detail of this interesting sailing boat.

This is a most unusual sailing vessel, for it has a very shallow draught (and, therefore, has a centre plate), yet carries a very large area of sail.

The model captures the many features of the "Skipjack" to perfection.

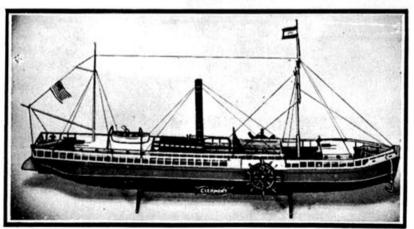
The fine lines of the hull, the tall staggered mast, the many deck fittings—from water keg to winch—and even her two attendant motor boats are reproduced in exceedingly fine detail. This model is presented with furled sails and these are, in fact, moulded in plastics. The fit of all parts is excellent.

COMPLETE KIT 8/9

1539 SKIPJACK

Length 12".

CLERMONT Amongst the many interesting features of the "Clermont" is the completely exposed engine room. The boiler, with its tall smoke stack, the single cylinder engine and the twin paddle wheels are all beautifully reproduced and add considerably to the appeal of this model. Deck rails, cabins, lifeboat, masts and various small detail parts are supplied, as are several crew members. Particulars of the full size ship and comprehensive building and finishing instructions are contained in a profusely illustrated 4-page leaflet.

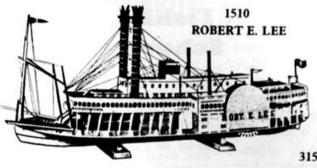


The steamship
"Clermont"
made a historic vovage
in 1807 up the Hudson
River and completed,
against wind and current,
the 150-mile voyage in
32 hours compared with
three to nine days by sail.

PRICE 14/6

MISSISSIPPI STEAMBOAT

Robt. E. Lee 22" model



Building this big 22" model of the most famous Mississippi River steamboat in history will prove to be the most enjoyable project of your model building

Here is the finest ship model kit of its kind ever offered. Kit contains more than 365 precision plastic parts which quickly and easily assemble into a minutely detailed, completely authentic model you will proudly display and highly prize.

3155 169 piece kit, to make a finely detailed 11" model

1529 BURMESE PADDY BOAT



An example of native craft.

Model when made lends itself to multi-colouring. Kit includes sail. Length 81"

1528 FIIIAN OUTRIGGER



An enjoyable and educational model of typical Fijian native craft.

Kit includes sail.

Length 91".

PLASTIC KITS

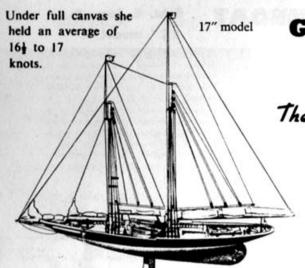
The modern plastic model kit is made of high-impact polystyrene, and special polystyrene cements (also called plastic cements) have been developed for assembling plastic models. These cements and these only-should always be used For the best results use a standard polystyrene cement thinned down with carbon tetrachloride (e.g. applied to the edges to be jointed with a brush.

1527 BERMUDA YAWL

Model is complete with vacuum formed sails and has attractive racing appearance. Length 8½".



	PRICES	
1510	ROBERT E. LEE 22" model	45/
3155	ROBERT E. LEE 11" model	14/
1529	BURMESE PADDY BOAT	7/
1527	BERMUDA YAWL	7/6
1528	FILIAN OUTRIGGER	7/



Grand Banks **Fishing** Schooner

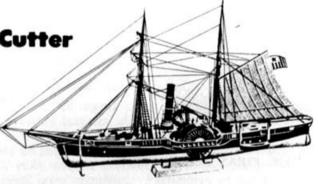
The Gertrude L. Thebaud

This all-plastic model kit is a perfect replica of the famous Grand Banks Fishing Schooner. Comes complete with thread for rigging, anchor chain, display stand, and full instructions.

In 1937, McMillan, the explorer, took the "Thebaud" into the Arctic Circle

* The Steampaddle Cutter HARRIETT LANE

The Lane was a perfect example of the transition from sail to steam during the 1850's. This realistic model is fun to build and you will be proud to display your 19" model on the mantle or anywhere in your home.



The Revenue Cutter **ROGER B. TANEY**

You will enjoy building this 19" replica of one of the more famous cutters that was built during the early 1800's to en- force and collect revenue duties along the Atlantic Coast.



PRICES

1501 SCHOONER 24/6

1515 HARRIETT LANE 27/6

1514 ROGER B. TANEY 22/-

EACH

HANDYMAN KNIVES & TOOLS

MORE SKILL AT YOUR FINGERTIPS

Are you really satisfied with that last model? If you're like most of the model-makers we know, you're already keen to go one better! And you'll find that fine, precise X-acto tools are just what you need for more difficult work. Three different weights of balanced handle give you accurate control. One of the 25 interchangeable blades, routers and gouges will be exactly right for any particular job - they're all in scalpel-sharp surgical steel, and a twist of the wrist locks them solid into the handle. And X-acto also make a plane and a sander.





KNIFE SET

These are ready-assorted sets of handles and quick-change blades-especially useful if you are mainly engaged on cutting jobs.

No 51 The no. 1 knife with 6 assorted

blades.



Takes blades nos.



Medium-weight all-metal handle for meticulous WOrk No. 2 work with the heavier blades.



KNIFE SET

No. 52 The no. 2 knife with 6 assorted blades.



BLADES IS TO 17 FIT BOTH THE Ne. 2 AND Ne. 5 HANDLE



Takes blades nos.

2 chisel blade for



No. 19



No. 22 Long cuts, close corner cutting whittling.

30

No. 28



No. 23



No. 1001 GENERAL PURPOSE KNIFE



The ideal odd-job knife. The blade is reversible, and there's a spare in the handle-giving 4 razor- keen cutting edges.

PRICES

INICES	
No. I handle	4/6
No. 2 handle	4/9
No.51 Knife Set	8/-
No. 52 Knife Set	8/3
No. 1001 KNIFE	2/4

There's an CCCO blade for every cutting job

No.5



Price 8/10

Heavy plastic handle with metal blade lock to take the heavier blades gouges, plus routers, punches and razor saws.



No. 5 KNIFE. For really heavy work. Takes blades Illustrated

10	V	**	~~ ·	V :	3.
No. 18 2 chief blade for day creat total	No. 19 Broad blade for light chiselling and rough shaping.	No. 22 Long cuts, close corner cutting, whittling.	No. 23 All-purpose, double-edged for corners.	No. 24 Mount cutting, templaces, cross grain trimming.	No. 25 General cutting, whittling, heavy cutting.
To lo	No.	W	× P	, P	z P
	No. 12 2 punch.	Sir chart.	Committee of the Commit	Si v page	
8	No. 32 2 punch.	No. 34	- The second	No. 35	A hostr

RI ADE SETS

	ing of the each Nov. 19, 52 53	BLADE SE	TS.	
	Five straight edge, short blades,	Price	Five assorted short blades,	Price
	packets of five of one No. Nos. 11, 16, 17, 18, 19, 24 (straight).	3/-	No. 1—Two blades each Nos. 10, 11, one blade No. 16.	3/6
-	Five curved edge short blades,		No. 2-One blade each Nos. 19, 22, 23, 24, 25	3/6
	Nos. 10, 22, 23, 25, 28 (curved).	4/-	No. 6-Two Punches (Nos. 31 and 32).	6/4
	Five different gouges No. 4	6/•	Razor Saw 2" deep	2/6
	Four assorted routers, No. 51.	4/10	Razor Saw I" deep,	2/9
•	Two long blades, Nos. 26 or 27.	2/-	Knife No. 1001. blades, packet of 3.	1/4



TOOL SETS Neat kits for every job -

they're a good idea for a gift!

Choose one of the complete modellers' toolkits Or collect your X-acto tools gradually: no item is expensive and you can add parts as needed. You'll find that the more skilful you become, the more you'll appreciate

your X-acto tools. Burlington Hobby Chest

No. 86 **BURLINGTON CHEST**

A complete workshop in miniature

The wonderful assortment of tools in this handsome chest enable you to tackle just about every modelling job with X-acto precision!

The Burlington Chest contains almost the whole X-acto range. All the knife handles, Nos. 1, 2, and 5 . . . all the blades, including gouges, routers and punches. And the tools are well represented with balsa stripper, plane, sander, and spokeshave, plus a steel ruler. All these matchless tools are here in a moulded plastic chest which will keep them in matchless condition!



CHEST

No. 77 WOODCARVING

A compact set for a wide variety of work, containing the heavy duty No. 5 Knife, gouges, and a selection of blades. Mounted on a polished wooden block for easy access.

No. 78



A superb kit in a polished wooden cabinet. All three knives, Nos. 1, 2 and 5 are included, together with a selected range of blades for cutting, carving, chiselling and all types of intricate work.

PRICESCARVING

No. 86 Burlington Hobby Chest

No. 82 KNIFE CHEST 37/-

No. 77 CARVING SET 27/6 WOOD

No. 78 CARVING SET



A fine set complete with the No. 1 and No. 5 Knives, and a full range of blades, gouges, punches and routers, all on a fitted wooden base for quick blade selection.

SET

RAZOR SAWS

These supremely fine tools are made the No. 5 handle. Made from Swedish backed for rigidity, their extra-this blue with a minimum of waste. Teeth are pitched to cut wood, soft metal, plastics. ivory, etc. All are angled for perfect

No. 53. Razor Saw Set-containing one each Nos. 34 and 35

Saws, with No. 5 Handle.

PRICE

13/6

Xacto TOOLS

VERSATILE HANDY EFFICIENT

No. 50 BLOCK PLANE

Although small in size the X-acto plane is none the less a precision tool and well suited to the needs of the model maker and hobby worker.

of the

A candle rubbed on the sole will act as a lubricant and make planing easy.

The body of the plane is die cast in aluminium and the cutter will take and keep a keen edge.

When using a small block plane many workers make the mistake of having the cutter too far advanced. Unless set fine, the cutter may be deflected and thus cause jumping and tearing out.

for CARVING CUTTING ETCHING HOLLOWING PIERCING ROUTING SCORING SCRAPING SCRAPING SCRIBING SLICING SLICING TRIMMING

NO. 58 BALSA STRIPPER



With this inexpensive little device, a No. 2 or No. 5 X-acto knife can be used to cut square or rectangular strips from thin balsa sheets. The movable guide can be adjusted to produce strips from 1 to 2 wide



16.56

No. 55 SPOKESHAVE
Choose this for finishing curved
work. The X-acto spokeshave is
properly balanced and fitted
with a fine-ground blade which is
adjustable for depth of cut.





No. 41 SANDER

With curved ends (different radii) for accurate sanding. The wedge locks 1" strips of garnet paper into the tool. Sander is 5" long, in natural finish hardwood and supplied with two strips.



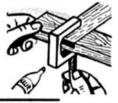
CLAMPS

 $1_1^{n} \times 1_2^{1}$ deep $1_2^{n} \times 1$ deep $1^{n} \times 1_2^{n}$ deep $1^{n} \times 1$ deep.

deep 1 × 1 deep.

X-acto clamps are forged from a special aluminium alloy. Only a third the weight of steel, it has a tensile strength of 18 tons per square inch. Supplied with cadmium-plated steel screws and swivelling lock plate.





JUST A FEW OF THE USES OF X-ACTO KNIVES:

Template cutting • Model and mould making Gasket cutting • semi-conductor work • Trimming plastic flash • Cutting leads • Trimming molten glass • Cutting solid fuel • Testing strain gauges Deburring precision parts • Cable trimming Removing excess material in printed circuits.

PRICES

No. 50 BLOCK PLANE	7/9	
No. 55 SPOKESHAVE	6/8	
No. 41 SANDER	6/-	
No. 58 BALSA STRIPPER	5/9	
No. 46 CLAMPS	15/6	Set

MULTICRAFT Tools for the

CRAFTSMAN and HOBBYIST



Blade ...

MULTICRAFT TOOLS KITS

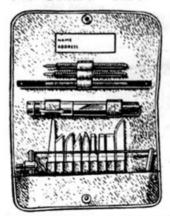


MAJOR KIT

The famous de luxe gift presentation outfit in handsome fitted polished wood case. Escutcheon on lid for engraving name. Hinged blade holder inside lid.

Contains: Multicraft Precision Cutter with two sets of four blades; Set 3 Chisels, Set 3 Round Abrafiles; Keyhole Sawblade, Long Whittling Blade; U and V Gouges; Saw frame with 2 each 6 in. Hacksaw and Abrafile Tension Blades and Sharpen-Stone. 45/-.

POCKET KIT



A really practical pocket-sized tool kit. Contains all basic Multicraft tools which fit the one handle. In handsome leathergrained plastic wallet with strong welded seams and ivorine nameplate.

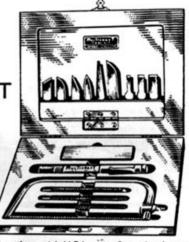
PRICES

MULTICRAFT MAJOR 45/-

MULTICRAFT CADET 30/-

CADET KIT

A junior edition of the Major Kit, in fitted, solid wood case. Hinged blade holder in lid. Contains full range of tools for the hobbyist and modeller.



Complete with V.P.I. rust protection insert.

AEROMODELLERS KIT



A practical vest pocket outfit, containing Multicraft Junior Knife and blade, one round Abrafile, and a U and V gouge. Ideal for carving and shaping jobs.

MULTICRAFT POCKET KIT AEROMODELLERS' KIT 22/6 6/9

MULTICRAFT

Hobby

TABLE BENCH for the

Handyman!



ideal working surface for cutting, shaping and assembling small parts. The spaced holes and pegs permit work to be held for planing. Notice the two sturdy vices. Complete with two metal cramps. Size 20 ins. long. Made of seasoned hardwood for years of service.

MULTICRAFT MINIPLANE



In beechwood.

A perfect
reproduction in
miniature of the
cabinet maker's
precision type.

MULTICRAFT SANDING BLOCK



An exceedingly useful accessory essential to all who model. Saves waste and effort.

For sanding all surfaces and radii.

A turn of a coin tensions the sand-paper band.

Spare sandpaper bands, packet of 6.

6d.

A GOOD MODEL DEMANDS A PERFECT FINISH

YOU WILL APPRECIATE THE PERFECTION OF SPRAY PAINTING



illustrated No. 3 GUN (hand bulb operated) Two-ounce container—ideal for all small model spraying, including plastics 9/6 retail No. 2 GUN (foot

pump operated) Four-ounce container. The choice for spraying large models, etc., etc. 8/6 retail

GUARANTEE



All units fully guaranteed by the makers against faults for a period of five years.

S&B "DERMIC" OILER



Will feed the minutest drop of oil for watch and clock lubrication. For models and general purposes it takes oil up to XL consistency. May also be used as a grease or flux gun. This is a precision-made tool you will be proud to own. Size 4½ ins. long overall.

Interchangeable needles.



PRICES

MULTICRAFT WORKBENCH 37/6
MULTICRAFT MINIPLANE 4/6

MULTICRAFT SANDING BLOCK 5/-

CELSPRAY No. 3

9/6

DERMIC OILER

5/6

FOLLOWING is a list of representative commercial glues and adhesives available, for the modeler.

The mutiplicity of different adhesive types now readily available means that there is a choice of adhesive for almost every type of gluing job — and scope for applying adhesives to repair jobs, etc., which hitherto have not been suitable for gluing.

Knowledge of these various products brings confidence in being able to use — the right adhesive for a particular job.

designation for cellulose cements for modelling work, since it implies that its main application is for the jointing of balsa wood. It is a quick-drying cement, the actual setting time being controllable from very rapid (a matter of minutes) to slow (a matter of several hours), depending on the formulation.

They are excellent for gluing paper and card (where their quick drying characteristic can be advantage, as in assembling card models).

PLASTIC CEMENT is not a correct designation for polystyrene cement, although it has come to be accepted as such. The reason for this is simply that the main call for a plastic cement is for jointing polystyrene. Strictly speaking, plastic cements are solvent type cements specifically intended for individual plastics. Thus cement for polystyrene is correctly called polystyrene cement, cement for Perspex 'Perspex' cement, cement for PVC 'PVC cement, and so on. There is little call for plastic cements other than polystyrene cement in the average model

The main point to remember is that a plastic cement is intended for use only with the particular plastic specified. It is not a 'general purpose' cement like cellulose cement.

GLUES

This is a general term, applicable as a description to almost all adhesives. It is now generally taken to refer to nonsynthetic adhesives or adhesives derived from animal or vegetable origin.

Liquid animal glues — the traditional type of woodworking glue—are still used, also fish glues, gum Arabic and

gelatine base, etc. Glues of this type are water-soluble. tacky and will adhere to a wide range of materials. Because of their inherent tackiness they will also stick to non-porous surfaces although in such cases their bond strength is low. Glued joints, too, are not water resistant. These types are little in demand for modelling.

CASEIN GLUES

These are a 'natural' glue in the sense that they are derived from casein found in mild, but more strictly they are classified as a synthetic glue, casein being an established plastic. They offer an advance on 'traditional' glues in that they are much easier to use, being supplied in powder form for mixing with water, and give strong joints in woodwork. Such joints are moisture resistant but not waterproof.

Main application in modelling is for laminating (both balsa and hardwoods)

SYNTHETIC RESIN GLUES

These are first-choice materials for woodworking these days. In modelling applications, synthetic resin glues should always be advised for marine model construction where plywood (or hardwood) components are involved for high joint strength and high water-resistance. Balsa cements used on ply hull construction are very liable to failure and opening up of joint lines.

All of the synthetic resin glues are essentially two-part mixtures. The resin can either be in liquid form, or supplied as a powder to be made up by mixing with water.

With the resin in powder form (ii), shelf life is a matter of 2

years at least,

P.V.A. ADHESIVES

This is a comparatively new type of adhesive, based on polyvinyl acetate plastic.

It is another of those glues which have no 'tackiness,' which is misleading in its strength properties.

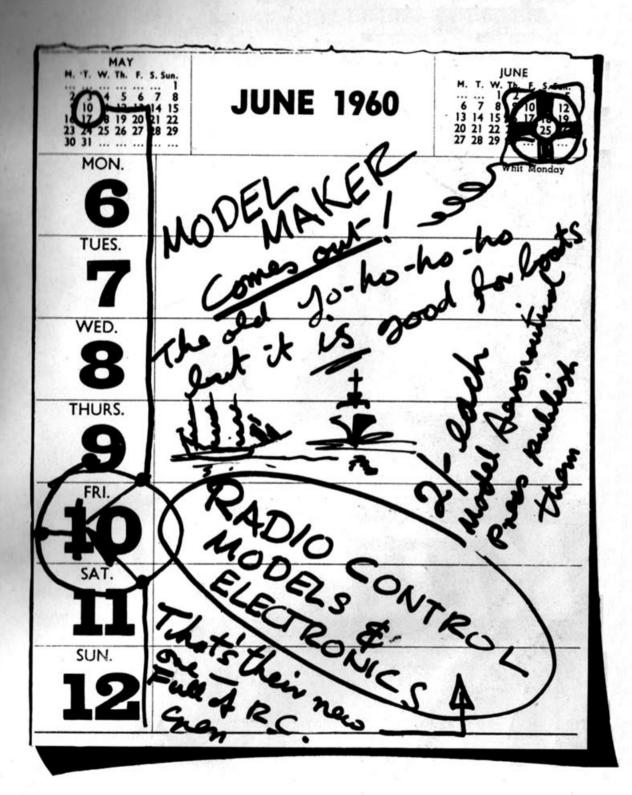
Many modellers are now using PVA glues for jointing balsa and hardwoods on airframes, instead of bals a cement, particularly on large models. Drying time is longer than balsa cement, but joints are stronger. It also finds application as a general purpose adhesive especially because it is clean, not subject to deterioration when kept, and basically non-staining.

CONTACT OR IMPACT ADHESIVES

These are normally based on synthetic rubber reinforced with synthetic resins with strong adhesion to almost any surface. The principle of use is to apply a surface of contact adhesive to both surfaces to be joined, allowing to dry off partially, and then bringing the two surfaces together under pressure. The resulting bond strength is permanent and high, but remains flexible. It is highly satisfactory for securing rigid panels, etc.—such as sheets of 'Formica'—and for numerous other high - strength bonding

EPOXY RESIN GLUES

These are a high-duty adhesive with exceptional bond strength and the ability to adhere to almost any surface. More expensive than ordinary synthetic resin glues they are nevertheless the only choice for certain jobs, such as to provide strong, waterproof joints on metals, glass, hermoset plastics, pottery and china and similar normally 'im-asible' jobs.



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