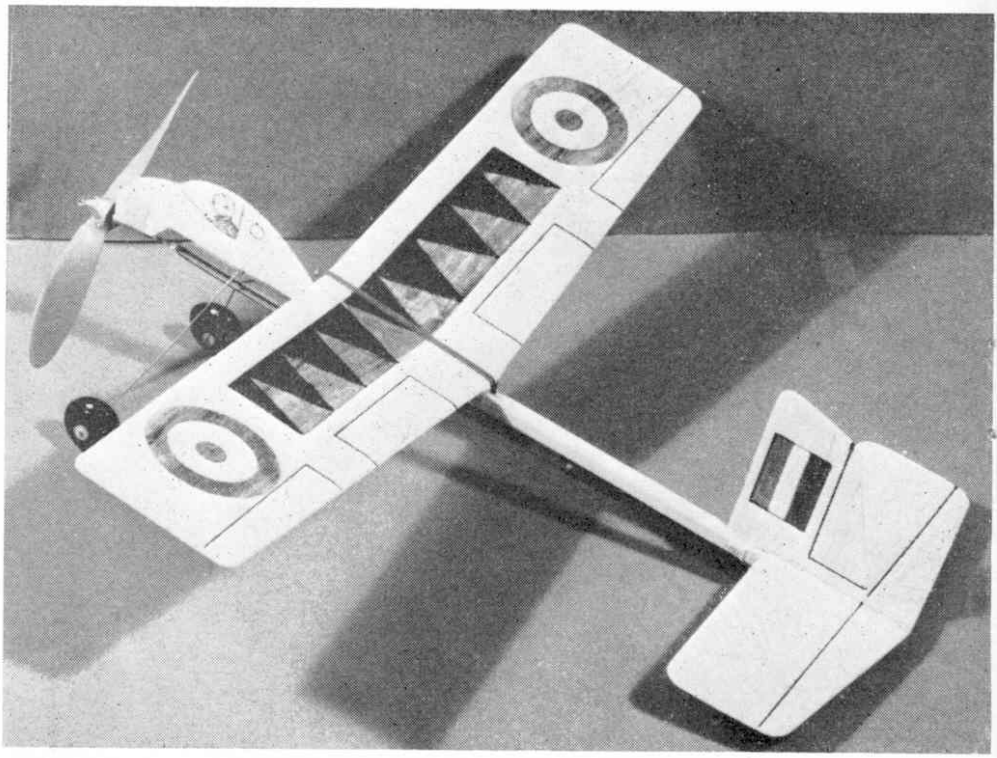
By Ray Malmström

Skyfly



WAY back in the early days of model aeroplane flying the "stick" type model aircraft was very popular. The fuselage is just a stick to which is attached the wings, tail plane and fin, propeller and undercarriage. This set-up makes for a simple but very robust model and one that affords plenty of opportunity for learning how to trim a model aeroplane to get the best possible flight performance out of it. SKYFLY can be built in an evening and will give you lots of flying experience.

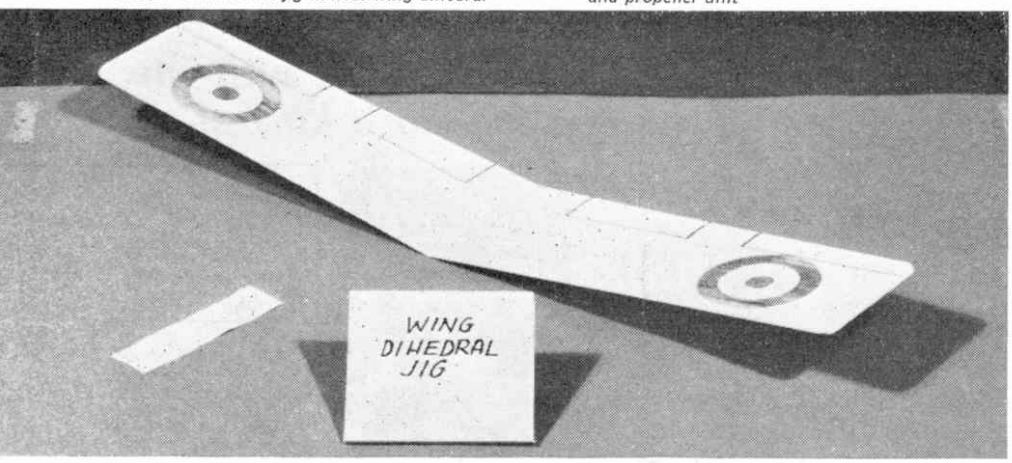
The plans are full size and the photo and "easibuild" sketches give you all the information you need to construct this first-rate little flyer. The cost, too, is an attraction—around two to three shillings!

One or two points we would like to stress. Make sure the brass bush that carries the propeller shaft and is bound and cemented to the propeller bearing block, slopes downwards at the correct angle. Build the wing mount accurately, so that when the wing is in position on it, the wing has an equal amount of dihedral (upward slope) on both sides. Make sure the thread bindings holding the propeller bearing block and brass bush and the rear hook are well coated with cement.

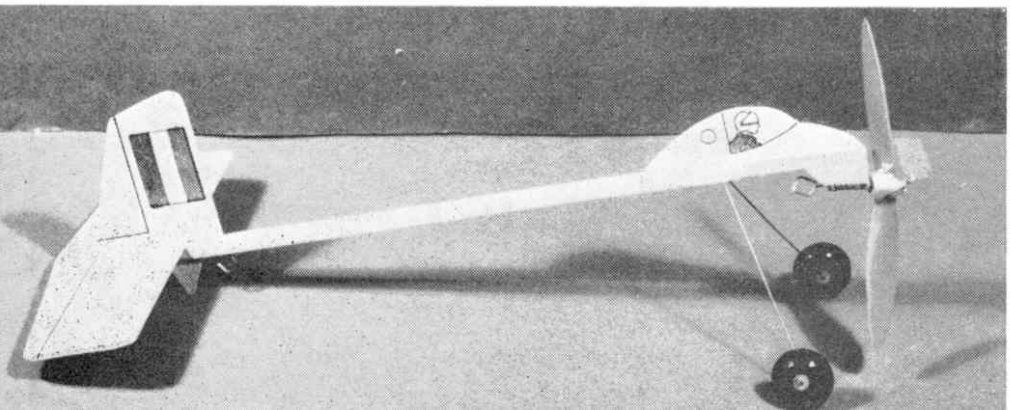
Hold the wing in position with an elastic band that is neither too tight nor too loose. A loose band will allow the wing to shift in flight and this can rapidly spell 'trouble'! Be certain to use *hard* grade balsa for the motor stick. Use a 10 in. loop of $\frac{3}{16}$ in. rubber strip for short test flights, but when your model is well trimmed install a 15 in. loop of $\frac{3}{16}$ in. strip and use an 'S' type hook with a geared winder for longer, higher flights. Always rub rubber-lubricant on to your motor before winding up.

The second sequence of sketches shows the points you should check before test gliding your model. Choose some soft or long grass for your first flights and a calm day. Wind always makes trimming, even for the expert, a more difficult and dangerous business. You will see that it may be necessary to bend or warp the wing and tail plain surfaces. Do this very gently. Slightly moistening the wood helps to prevent the wood splitting. When you have obtained a good flat glide (model launched from approximately shoulder height should glide straight down to land about 10-12 yds. ahead of the launching point) you can begin to put trims on the rubber motor for some power-on flights. Check any errors after each flight, making all adjustments by *small* degrees. SKYFLY is lots of fun—so why not build *yours* tonight?

Above: A dihedral jig assists wing dihedral

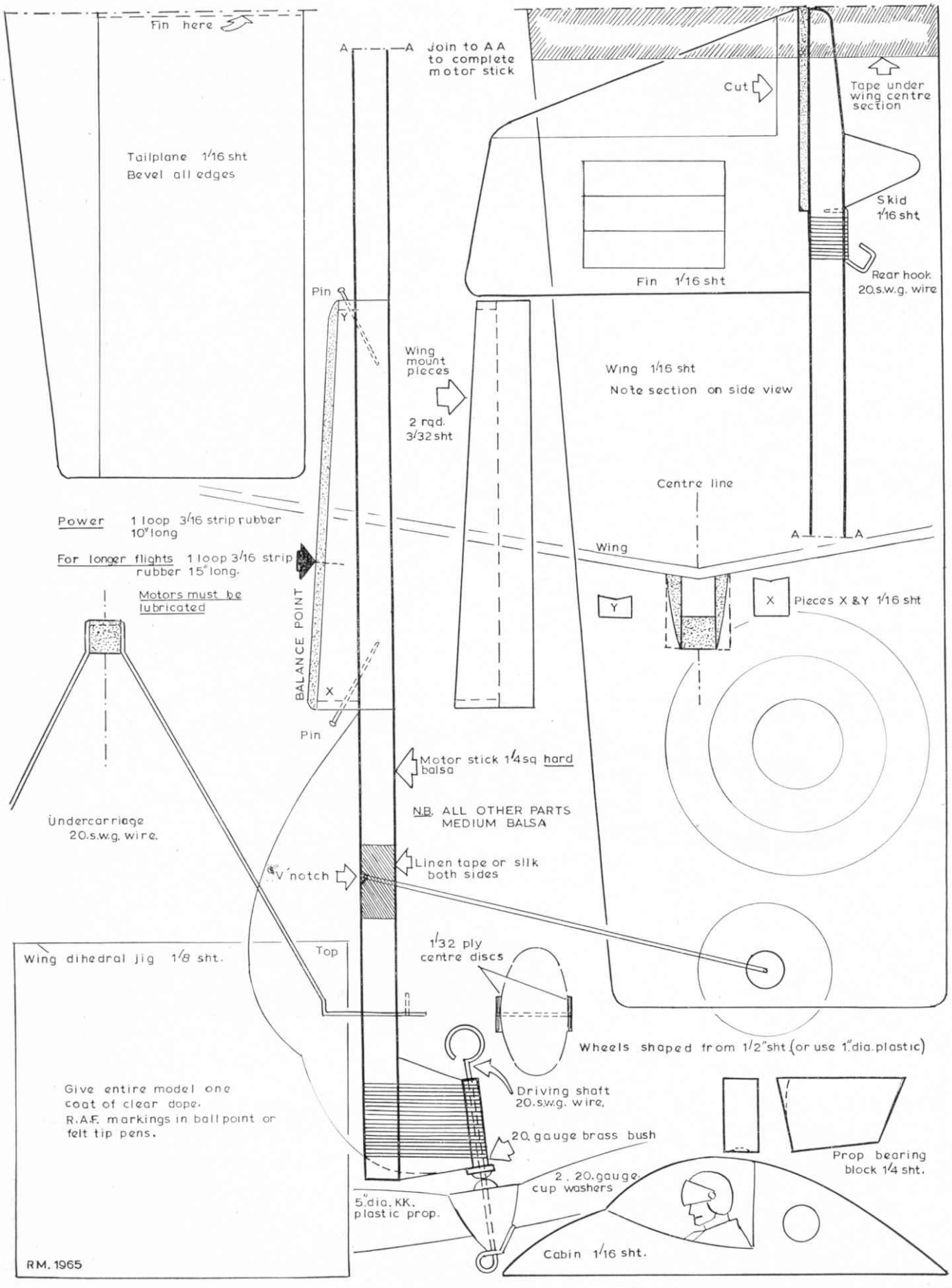


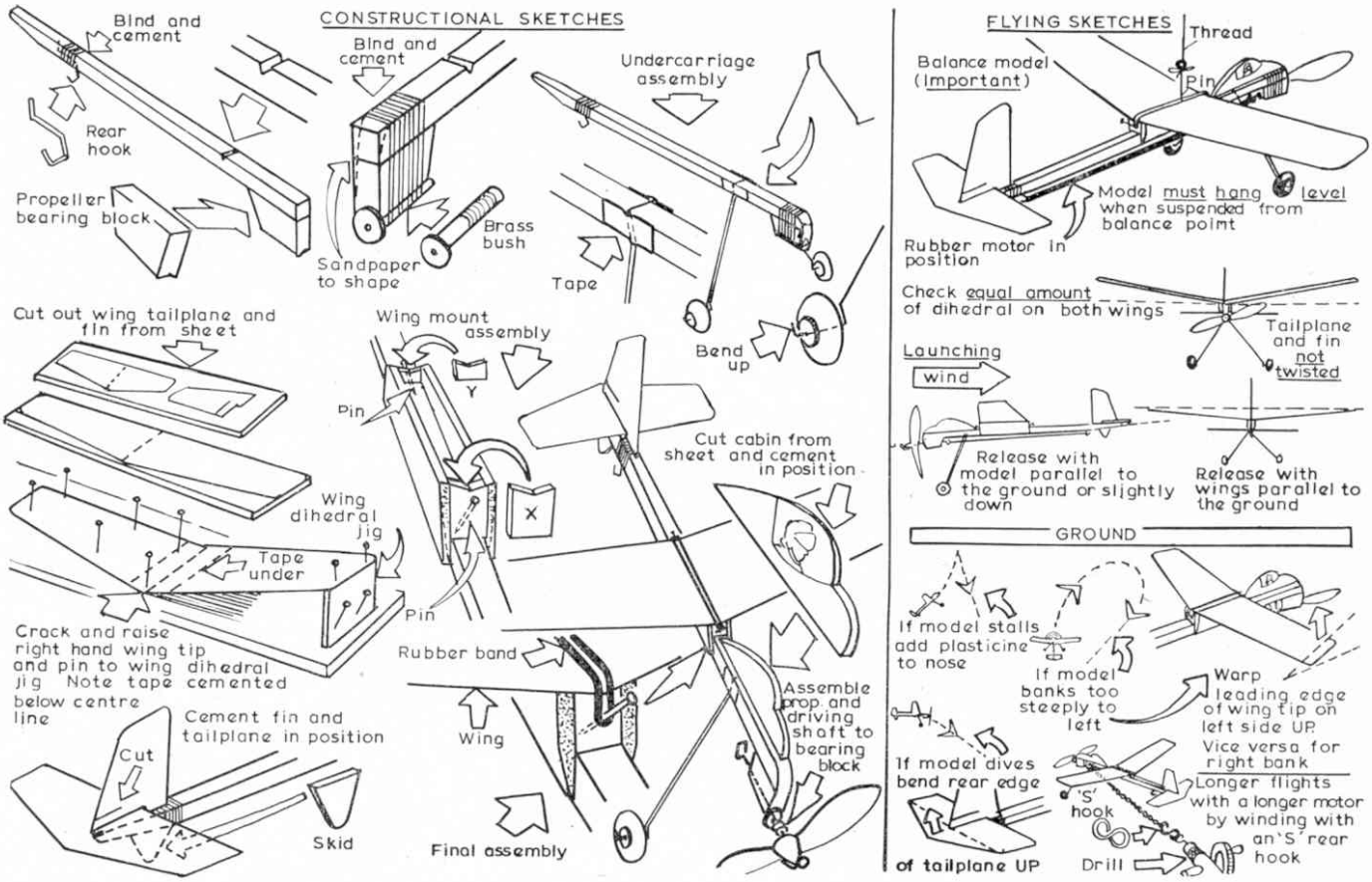
Below: The fuselage, undercarriage, tail assembly and propeller unit



Materials List

1 length $\frac{1}{4}$ in. by $\frac{1}{4}$ in. by 13 in. hard grade strip balsa.
1 sheet $\frac{1}{16}$ in. by 3 in. by 24 in. medium grade sheet balsa
1 small piece $\frac{1}{4}$ in. sheet balsa.
1 sheet $\frac{3}{32}$ in. by 3 in. by 4 in. sheet balsa.
1 20 s.w.g. brass bush.
2 20 s.w.g. cup washers.
12 in. length 20 s.w.g. piano wire.
Small length $\frac{1}{2}$ in. wide linen tape.
1 K.K. 5 in. diam. plastic propeller.
1 pair K.K. streamlined wheels (alternatives to balsa).
Length of thread.
1 tube balsa cement.
1 3 in. long approx. rubber band.
2 pins.
1 small bottle clear dope.
1 tube rubber lubricant.


Fin here
Tailplane 1/16 sht
Bevel all edges
A A Join to A A to complete motor stick
Cut
Tape under wing centre section
Skid 1/16 sht
Rear hook 20.s.w.g. wire
Fin 1/16 sht
Pin
Y
Wing mount pieces
2 rqd. 3/32 sht
Wing 1/16 sht
Note section on side view
Centre line
Power 1 loop 3/16 strip rubber 10" long
For longer flights 1 loop 3/16 strip rubber 15" long.
Motors must be lubricated
BALANCE POINT
X
Pin
Wing
A A
Y
X
Pieces X & Y 1/16 sht
Motor stick 1/4 sq hard balsa
N.B. ALL OTHER PARTS MEDIUM BALSA
Undercarriage 20.s.w.g. wire.
"V" notch
Linen tape or silk both sides
Wing dihedral jig 1/8 sht.
Top
1/32 ply centre discs
Wheels shaped from 1/2" sht (or use 1" dia. plastic)
Give entire model one coat of clear dope.
R.A.F. markings in ball point or felt tip pens.
Driving shaft 20.s.w.g. wire.
20. gauge brass bush
Prop bearing block 1/4 sht.
2 . 20. gauge cup washers
5" dia. KK. plastic prop.
Cabin 1/16 sht.
RM. 1965

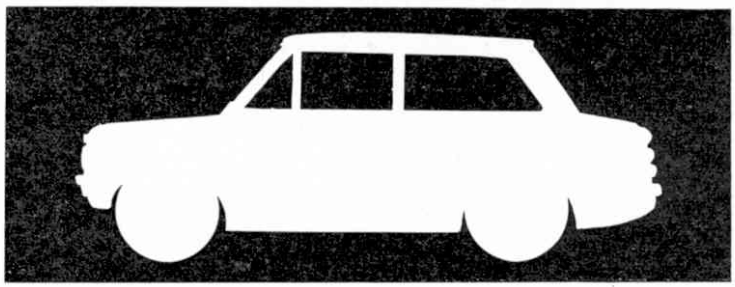


car outline COMPETITION

50 Dinky Toy Models to be won!

Fill out the form and send it to us. The names of the senders of the first 50 correct answers will be published in the next issue of Meccano Magazine. The winners will then be expected to write to us to claim their prize. The competition will be judged by the editor of Meccano Magazine. His decision will be final and no correspondence can be entered into.

To:—Meccano Magazine: Competition D, St. Alphage House, Fore Street, London, E.C.2.



The vehicle illustrated is:—

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NAME .....

ADDRESS .....

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