The Tramp

SUITABLE FOR ENGINES FROM 2.5-5 c.c.

★ BIPLANE
★ HIGH WING
★ LOW WING ★ SEA PLANE
★ SKI PLANE ★ TRAINER
★ ADVANCED STUNTER

An all-in-one control line composite from Poland

by Wiestaw Schier

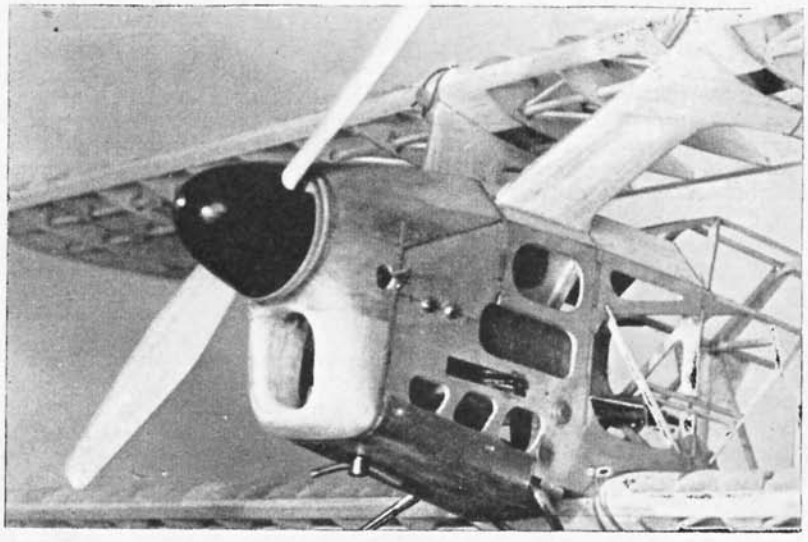
THE Tramp is unique among C/L designs, as it can be readily converted to fly in many different versions. If you are fed up with a biplane, remove one of the wings and fly it as a monoplane, or in winter when snow makes normal flying impossible fit the skis and get a new thrill out of control-lining. Or again, perhaps summer rain has turned your flying field into a pond, then there's still no need to be grounded, fit the floats and keep flying.

To those who are accustomed to looking at the all-sheet, pre-fabricated, tip-from-box, squeeze-tube-of-cement, shake-well, allow-to-dry and it's ready-to-fly type of C/L model that is so popular nowadays, the construction may appear a little tricky. This is not so, however, and although some of the constructional ideas used may appear strange to your eyes, they have been thoroughly flight proven.

The total possible variants for this design are many but the following list will give some idea of the different models that can be obtained by merely rearranging various components.

1. The biplane with non-symmetrical wing section 1, is the basic version, and fitted with any average 2½ c.c. engine it will make an ideal trainer, capable of the simpler aerobatic manoeuvres, which include wing overs, loops—single and consecutive and inverted flight.

2. The special biplane stunt version differs from the above in having a symmetrical wing section, and its wing area increased by adding two ribs to each tip; accordingly the wing struts should be repositioned two ribs further out. Fitted with a suitably powerful 3.5-5 c.c. engine it is capable of the full stunt schedule. Because of the greatly increased



This close-up of the nose gives a good idea of the construction.

speed it is necessary to use the unbalanced "B" tailplane to avoid elevator flutter and vibration.

3. The low wing version is obtained by removing the upper wing from either 1 or 2. The only other change necessary is to use the smaller tail "C."

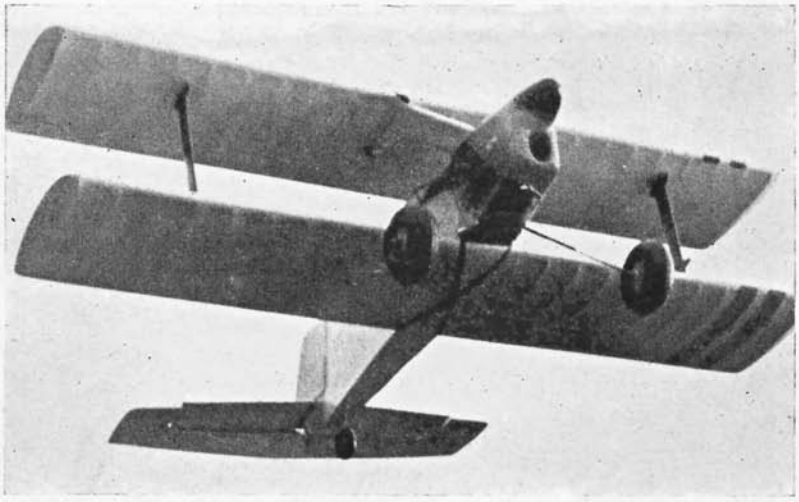
4. A parasol version of 3, is obtained by removing the lower wing. However, the flying characteristics are completely different, the high wing giving the model a very lively performance.

5. The Class B team race version can consist of either 3 or 4, it only being necessary to use a 30 c.c. tank, positioned in the fuselage at an angle to ensure that all the fuel is used.

6. By merely fitting floats or skis any of the variants can be converted into a completely different machine, not only from the point of view of appearance either, one must try flying a control liner from water to really appreciate that it is a new branch of flying.

To obtain all these variations it is assumed that all the different components have been constructed, but if desired one can, of course, simply construct one particular type.

The only constructional doubt that might remain after studying the detailed two sheet plan, is the composite hardwood/balsa construction, but provided a suitable cement such as Durafix is used for the hardwood or hardwood-balsa joints no difficulties should be experienced.



A good action shot of the biplane airborne.

It would, however, be a good idea to pre-cement all joints.

Strip hardwood such as spruce, birch, pine or obeche is obtainable from most model shops, but should there be any difficulty very hard balsa maybe substituted.

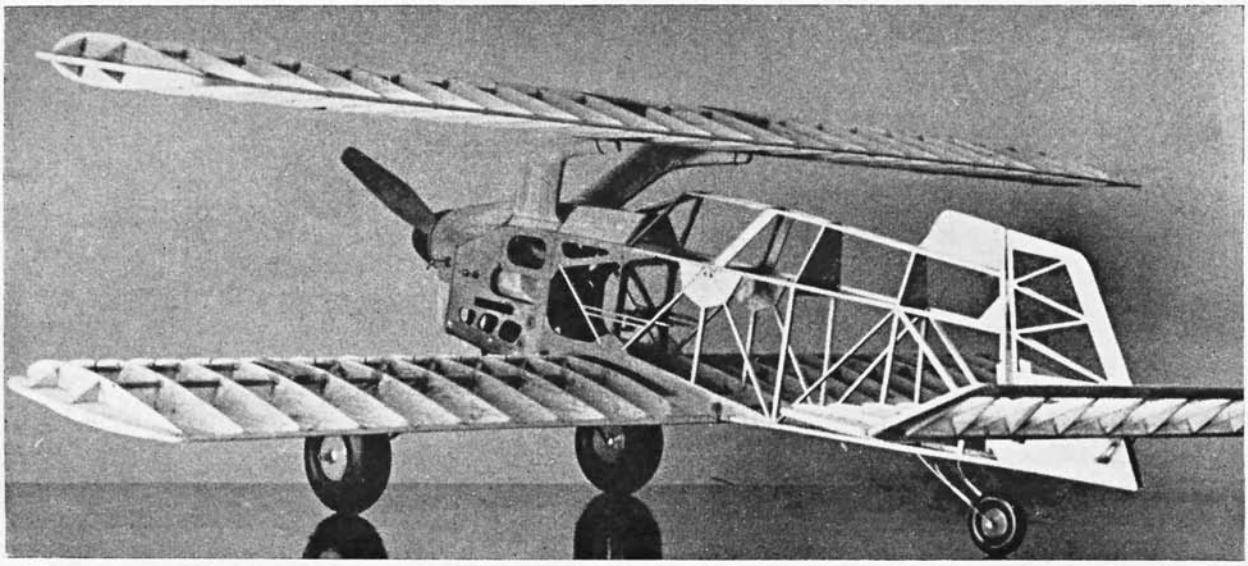
Incidentally, if you intend to use an engine of low power, the weight of the model must be kept as low as possible to ensure a good performance, so it would be quite in order to use balsa wood throughout in such a case.

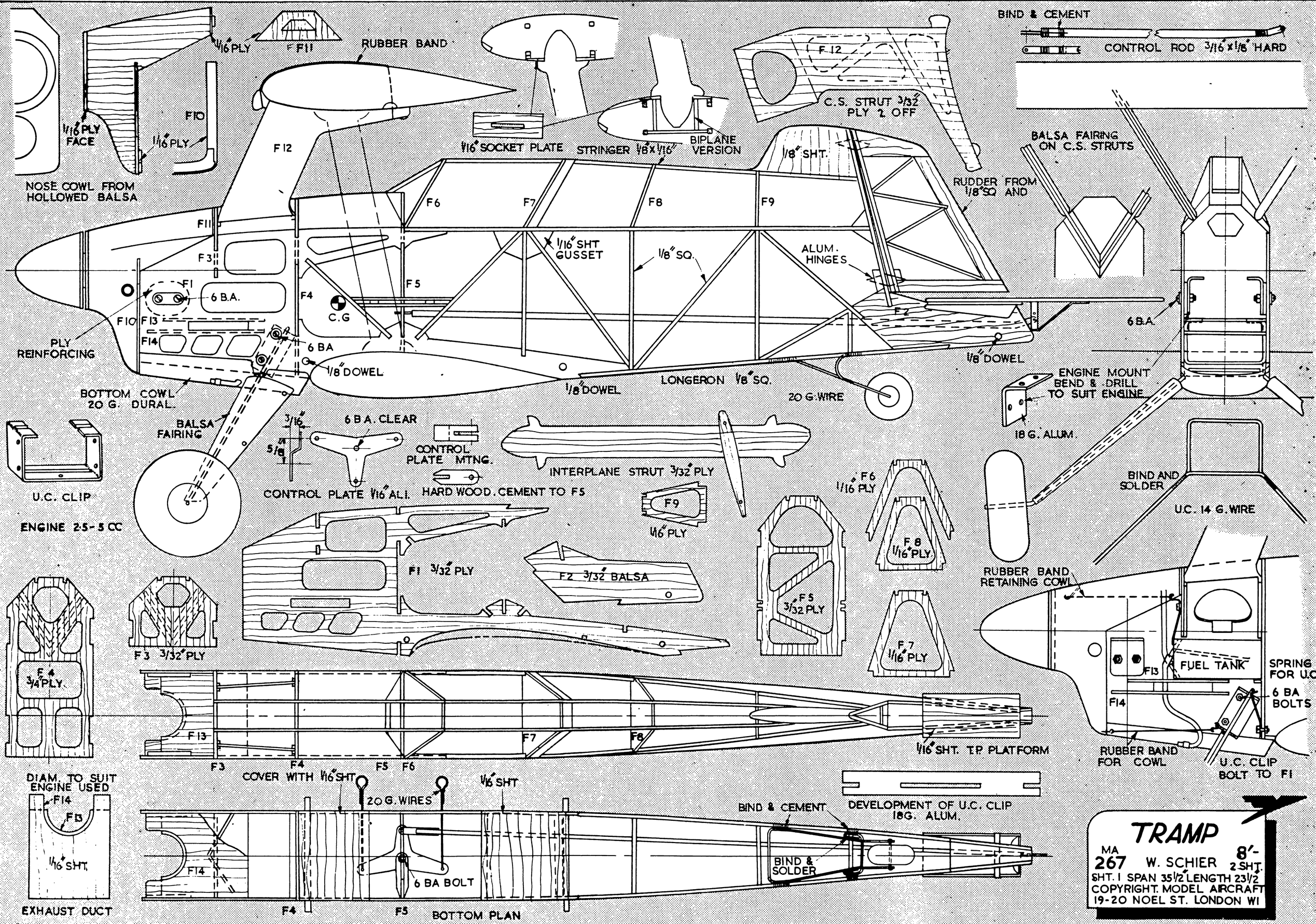
To obtain the best performance, particularly with the smaller engines, the propeller is most important, and various pitch/diameter combinations should be tried until the best results are obtained. Generally, for training and stunt flying, a fairly large diameter fine pitch prop is best, i.e., 9 × 6, 10 × 5, etc., but for team racing or fast flying a coarser pitch is necessary, and an 8 × 8 or 8 × 9 should be tried.

The length of line will, of course, depend on the motor used but a good average would be between 40-50 ft. for 2.5 c.c. versions; up to 60 ft. for the 5 c.c. stunt version.

I hope that this brief description of Tramp has shown how versatile the design is, and that those who build it will get as many hours of fun experimenting with the different layouts as I have had.

Another uncovered view this time of the complete model.





TRAMP

MA 267 W. SCHIER 8'- 2 SHT.

SHT. 1 SPAN 35 1/2 LENGTH 23 1/2

19-20 NOEL ST. LONDON W1

L.E. 5/16" x 1/8"

COVER ON TOP WING

COVER ON LOWER WING

SPARS 1/8" SQ

1/8" SQ

HOLE FOR ELASTIC

1/8" SHT.

'B' TYPE WING

T.E. 3/8" x 1/8"

PORT WING

C L

C L

STBD. WING

1/8" BALSA SHT.

1/8" SQ.

1/8" SQ.

3/16" x 1/8"

3/16" x 1/8"

1/8" SQ

1/8" SHT.

T.E. 1/8" SQ.

B

12 G. WIRE

FLOAT VERSION

9 27/32"

RUBBER BAND

DETAIL AT B

NOSE RIB 1/16" SHT. 40 OFF

RIB 50 1/16" SHT. OFF

ALTERNATIVE RIB SECTION

LINE GUIDE LOW WING VERSION

LINE GUIDE HIGH WING VERSION

SECTION EE

SEC. GG

D

1/16" PLY

BLOCK BALSA

1/8" SQ

BLOCK BALSA

2"

12 G.

16 G

C

C

DETAIL AT CC

1 9/16"

SECTION DD

BLOCK BALSA

1/16" PLY

1/8" SQ

BLOCK BALSA

SKI VERSION

9 27/32"

BALSA BLOCK

1/8" PLY

E

E

1/8" SQ

1/8" x 3/16" HARD

COVER FLOAT WITH 1/32" PLY OR BALSA

BALSA BLOCK

TRAMP

M A 267 W SCHIER 8'-

SHT 2 2 SHTS

19-20 NOEL ST. LONDON W1