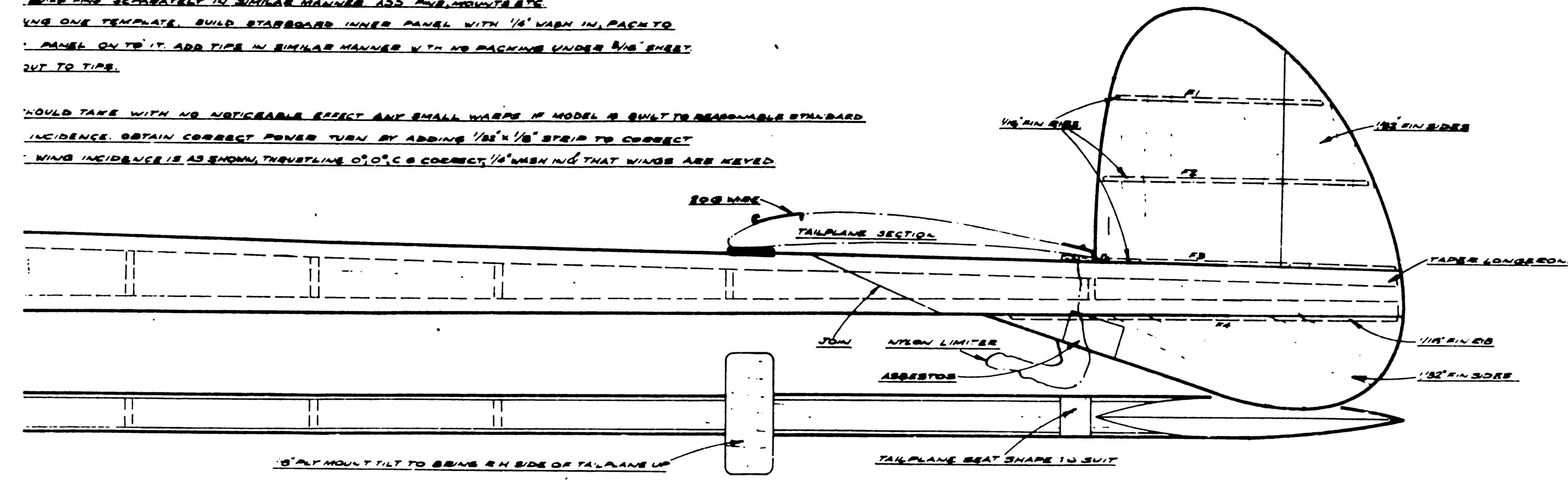
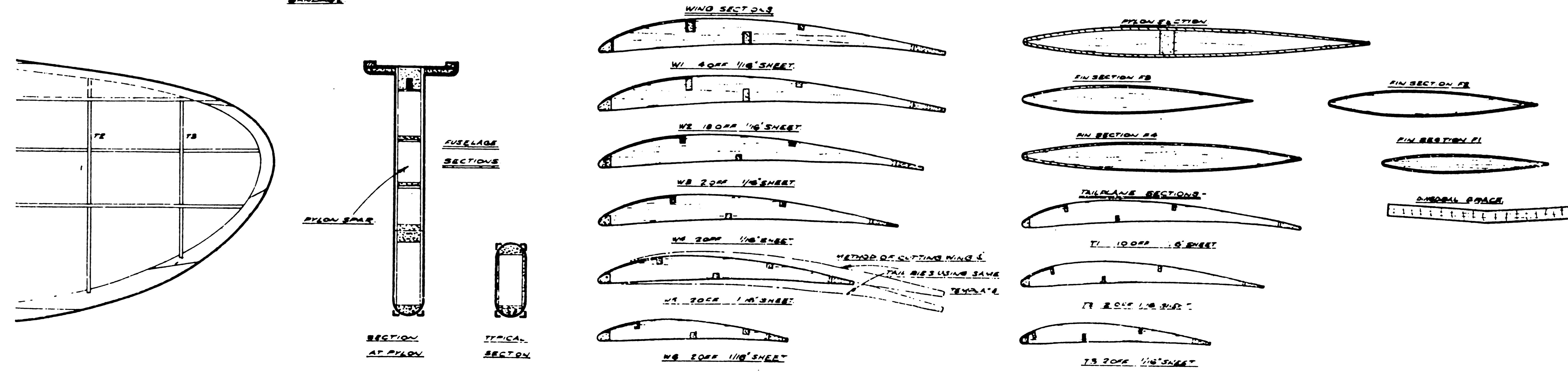
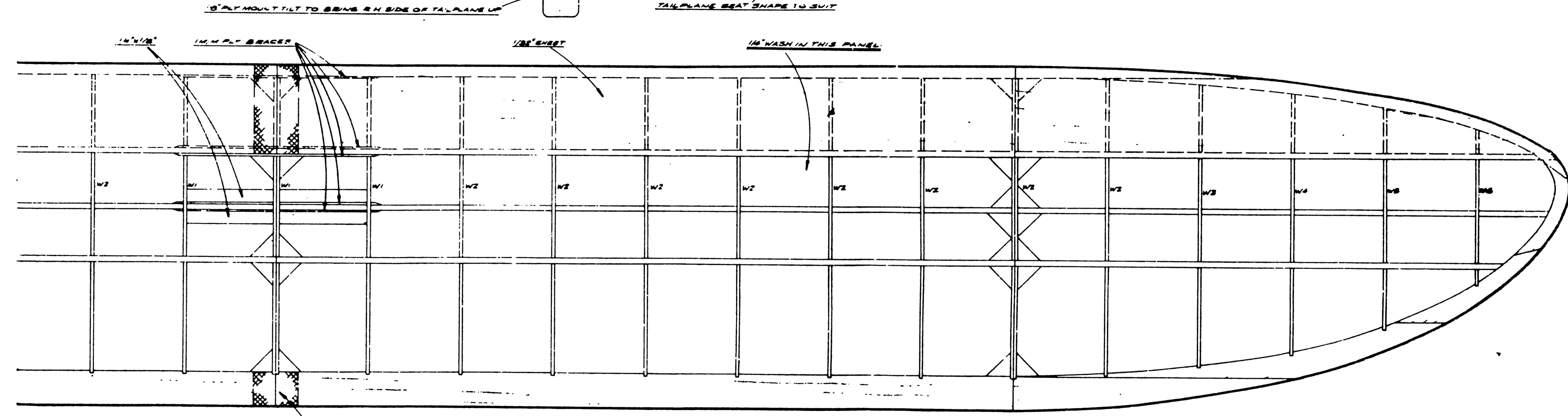


OUT & REAR END TAPERED TO F.L. SECTION ADD BOTTOM MULON RIP
PRIOR TO TAKE 1/8" x 1/8" MULON RIP. ADD REMAINING RIPS & SIDES IN QUICK SUCCESSION
BUILD FRMS SEPARATELY IN SIMILAR MANNER ADD MULON RIP.
USING ONE TEMPLATE. BUILD STAGED AND INNER PANEL WITH 1/8" WASH IN, PACE TO
PANEL ON TO IT. ADD TIRES IN SIMPLE MANNER WITH NO MACHINING UNDER 3/16" SHEET
PUT TO TIRES.

SHOULD TAKE WITH NO NOTICABLE EFFECT ANY SMALL WINDS IN MODEL TO QUOTED REASONABLE OTHER
INCIDENCE. OBTAIN CORRECT POWER TURN BY ADDING $\frac{1}{38} \times \frac{1}{8}$ " SPAN TO CORRECT
WIND INCIDENCE IS AS SHOWN, THROATLINE $0^{\circ}, 0^{\circ}$, C & CORRECT, $\frac{1}{4}$ " WASH AND THAT WINDS ARE KEVED.



MATERIAL	QUANTITY OR SIZE
1/32" SHEET.	3
1/16" SHEET.	4
3/16" SHEET	1/2
1/8" SHEET	1/2 x 1/2
1/16" x 1/8"	3
1/8" SQ	3
1/8" x 1/4"	2
1/8" x 1/2"	1
1/8" x 1/2" TE	1
1/8 x 3/4" TE	2
3/16" SQ	1
1/4" SQ	2
1/8" x 1/8"	3
1/8" x 1/8" HWD	0
3/16" x 1/2" SCARF	3
1 MM M PLY.	2" x 4 1/2"
1/8" PLY.	8 1/2" x 2"
3/16" PLY.	8 1/2" x 2"
70G. WIRE	1
HEAVYWEIGHT MODEL SPAN	8
MISCELLANEOUS ITEMS	





Jim Baguley's series of articles on power model design, which appeared in "Model Aircraft" between December, 1959 and March, 1960, aroused considerable interest both here and overseas. In view of this fact, we have great pleasure in presenting here the plans of Jim's latest power model.

THIS is the sixth development in a particular series, the main improvements over earlier versions being structural, and an increase of tailplane chord.

The most potent 3.5 c.c. engine will not prove too powerful for it and the ideal is probably a "19" glowplug motor, by using which the flying weight can be taken down to 14 oz. The original *Beatnik* weighed 16½ oz. with a modified Oliver, and using over-hard balsa all round. The only hard balsa needed is that used for the fuselage longerons.

The construction is very simple enabling building time to be a nominal 20 hours, and while the plan contains ample information for an average person to complete *Beatnik*, the following general constructional notes will prove of interest.

Fuselage

This component is as slim and simple as practicable, the completely enclosed

10 c.c. tank being sufficient for any motor up to 3.5 c.c.

To gain the full advantage from this form of construction the longerons should be made from hard balsa and the sides from soft. The section is sanded and carved to a semi-circular shape at top and bottom as shown.

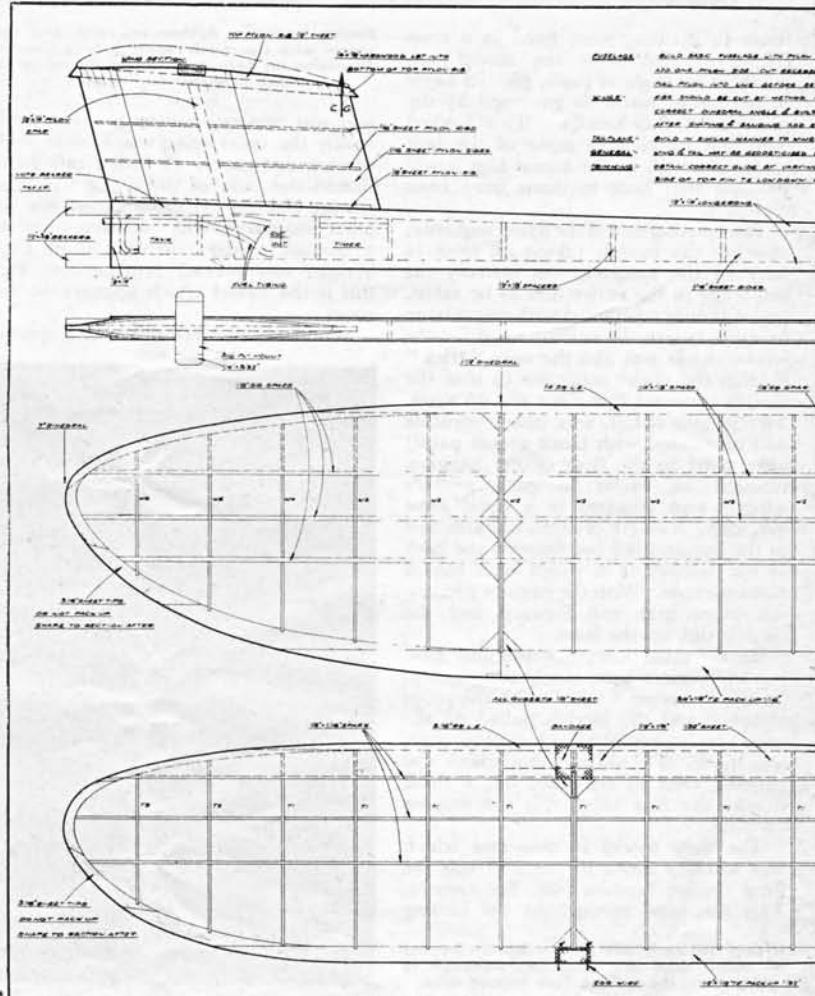
Wings

The tip shape is a concession to appearance but the construction is essentially practical.

Care should always be taken with this type of wing tip to leave no gaps between the parts during assembly, or cement shrinkage may produce excessive warps. A natural and desirable tendency is towards wash-out, and this should be

BEATNIK

Open class power model by JIM BAGULEY



encouraged if it does not appear of its own accord. The $\frac{1}{8}$ in. wash-in on one inner panel is important but the other inner panel must remain flat.

Tailplane

This is of similar construction to the wing and although the wood sizes shown may look flimsy, they should not be increased. My original tailplane shows no defects due to the small wood cross sections and it is extremely light.

Finishing

The whole model should be covered in heavyweight Modelspar or its equivalent, given a suitable number of coats of dope, and then fuel proofed.

Trimming

The trim is the "Tail Tilt and Wash In" type and should result in a near vertical spiral of a type increasingly common nowadays.

Before even venturing onto the flying

field, however, check and ensure that wing incidence is correct (4 deg.), thrustline is zero/zero, c.g. where shown, and all warps as indicated. The wing should be keyed in place, preferably with pieces of split dowel. Correct the glide by adjusting the tailplane incidence and tilt, and by using low power with a fairly long engine run and a very short D.T. The tilt should bring the tailplane nearly parallel to the starboard inner wing panel while the tailplane incidence should be increased to cure any trace there may be of a stall.

Power can now be increased gradually. If looping or more likely excess left rolling tendencies predominate then a strip of $1/32 \times \frac{1}{8}$ in. balsa should be added to the starboard side of the fin T.E., just above its junction with the fuselage.

If the climb pattern is too tight and possibly banked inwards, strip should be added to the port side of the fin in a similar position. In this way a safe trim



should be arrived at within 10 flights, although further detail trimming will probably be necessary to get the best out of the model.