A 73"span glider to F.A.I. A/2 specification

ACCIPITER

DESIGNED BY

A.J.Crisp.

7/6

COPYRIGHT OF

THE AEROMODELLER PLANS SERVICE

13–35 BRIDGE STREET, HEMEL HEMPSTEAD, HERTS

ALL WOODS BALSA UNLESS OTHERWISE STATED

MATERIAL LIST

1 sheet	1/32" x	3" x 36" med balsa	4 strips	1/8" x	1/8" x 36" spruce
1	1/16" x	3" x 36"	3	3/16" x	3/16" x 36" med balsa
2	3/32" x	3" x 36"	4	3/16" x	3/16" x 36" spruce
1	1/8" x	4" x 36"	2	3/16" x	3/4" x 36" T.E stock
1	1/4" x	3" x 18"	2	3/16" x	3/8" x 36" med balsa
1	1/2" x	3" x 18"	1 piece	12 s.w.g.	x 18" piano wire
3 strips	1/16" x	1/16" x 36" med/hrd balsa	1	12 s.w.g.	x 12" brass tube
1	3/32" x	1/4" x 36" - soft	Scrap pieces of 3/8" sheet, 1/32" ply & 14 s.w.g. wire		

Weights of original model

Fuselage & ballast	8 18 ozs
Wing	6 2 ozs
Tailplane	0 22ozs
TOTAL	4 6 ozs

COVERING

Wing — Silk

Tail — Jap tissue

Fuselage L/E Modelspan

1/32" ply horn

1/8" negative packing

1/32" ply

Hardwood stop, use match

1/16" dowel

1/4" sheet

1/16" sheet

Tube for d/t line

Pin stops

ply horn

Sewn hinge

1/8" sheet fin & rudder

3/8"

On original model the rudder was straight for towing & 3/8" left for glide

1/16" sheet sides to tailplane pylon

1/32" sheet top & bottom this area, top sheeting omitted for clarity

3/16" sq L.E

All spars 1/16" sq med

1/16" sheet gussets, flush with top surface

3/32" x 1/4" T.E

1/8" dia dowel for d/t

Weight box

Pod core from 1/2" sheet

1/8" sheet hps

Sketch showing how rear end of pod cut away to accept 1/8" sq boom pieces

3/16" dia dowel

1/8" x 1/2" hardwood, front & back

1/4" x 3/4" T.E stock, (see Section B-B)

BALANCE

Tube for Auto-rudder pin, see sketches under fuselage sections

Tube to prevent wing bands from crushing D.T & Auto-rudder lines Bind with cotton & cement well

Bandage

16 s.w.g. wire skid

Bent pin hook

Leather patch

14 s.w.g. towhook

1/8" sheet sides, taper to 1/16" at rear of fuselage

1/8" sq spruce longerons, shape to triangular section, and taper towards tail. See fuselage sections B,C,D.

Cut two off each to lengths A,B,C, for tip ribs

Cut ribs as per wing. 17 required from 1/32" sheet quarter grain.

1/32" ply on 1/32" sheet

Dihedral 7" + or – 1/4"

L.E 3/8" sq med hard

1/4" sheet

Spars 3/16" sq spruce

3/32" sheet ribs

3/16" sq med

3/16" x 3/4" T.E

3/8" sheet tip

12 s.w.g. Id. Brass tube

Epoxy to spar

Pack scrap balsa around tube before sheeting

Ballast

Section A-A

16 s.w.g. stud

Before shaping

3/16" x 3/4" T.E stock

1/8" sheet wing mount

Section B-B

Note how longerons are shaped

Before shaping

Section C-C

Section D-D

The two views below show method of D.T. & Auto rudder being set up, B ready for flight at right, B after tow release at left

rubber band

pin hook

to d/t

auto rudder

To auto-rudder

rubber band stretched over pull out pin

to d/t

line extension to pin

End view of wing without 1/32" ply facing rib

1/32" sheet covering

3/32" scrap balsa support

Cut ribs to fits line

D C B A

1/32" ply facing rib

Cut rib slightly oversize. Glue in place after sheeting, trim off surplus & dope on bandage over first 2" of wing

Cut ribs by sandwich method, make 58 ribs from 3/32" sheet. Cut 8 ribs to take sheeting, & cut 2 off each to A,B,C, & D

Tubes & sheeting omitted for clarity, see part wing for tube position

Trim down to T.E

Approx 5/16" washout

Template for angle of root ribs.

Make T.E flat on board

Wing joiners, 2 off 12 s.w.g.

1/32" sheet set between L.E & spars top & bottom (see section at left)

Published AEROMODELLER, March 1969.