

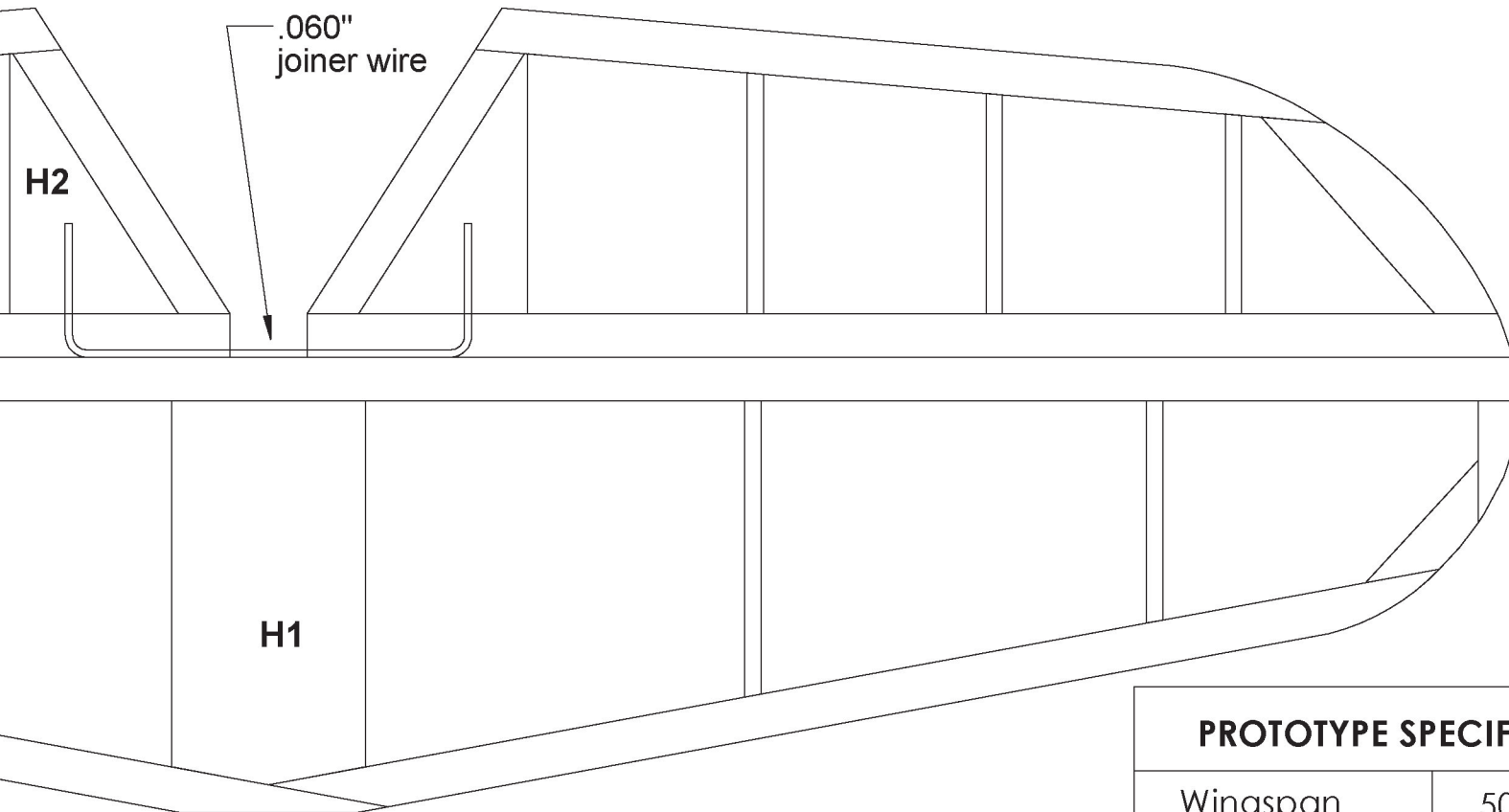
Tail Group Instructions

1. Build rudder and elevators from 3/16" balsa stock
 1. These parts will be covered as open frames
2. Build vertical fin and horizontal stabilizer from 3/32" balsa
 1. Sheet these parts on each side with 1/16" balsa
 2. Once sheeted and sanded, the fin and stabilizer will be the 3/16" thickness of the rudder and elevators
3. All bracing is 3/32" strip stock
4. Radius the leading edge and taper the trailing edge of the tail group parts

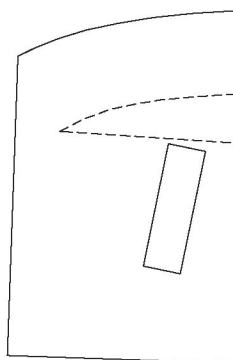
7

6

5



Motor Pod Te



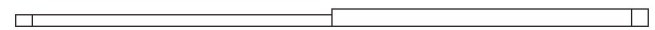
PROTOTYPE SPECIFICATIONS

Wingspan	50.0"
Length	32.0"
Weight	29.5oz
Wing Area	178.8 sq in
Power	L2210A 1650kV
Propeller	7.5" 4-Blade

sa stock

Fin / Stabilizer

Rudder / Elevator



Step 1 & 2 Build the framework



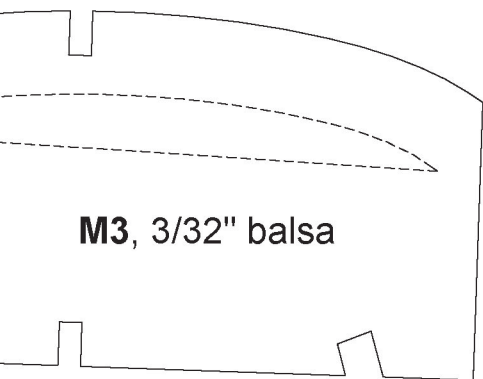
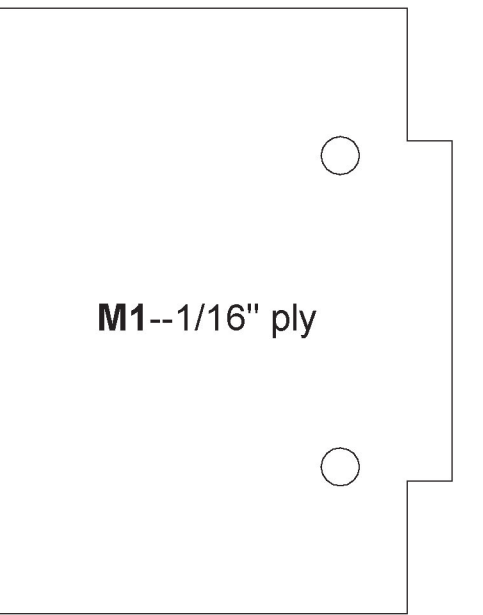
Step 2.1 Sheet the Fin / Stabilizer



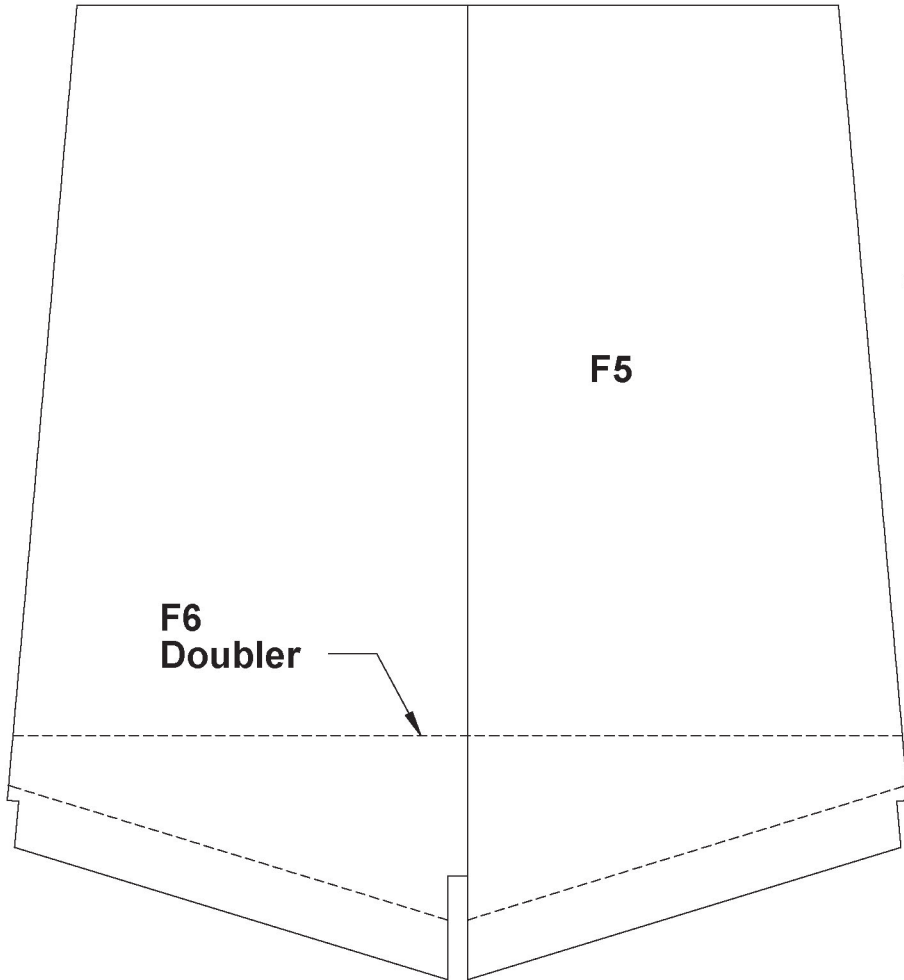
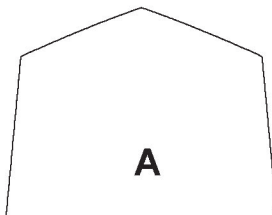
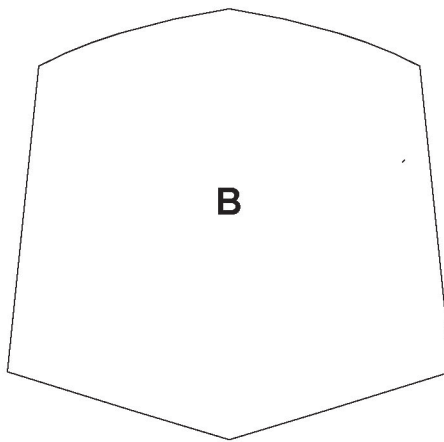
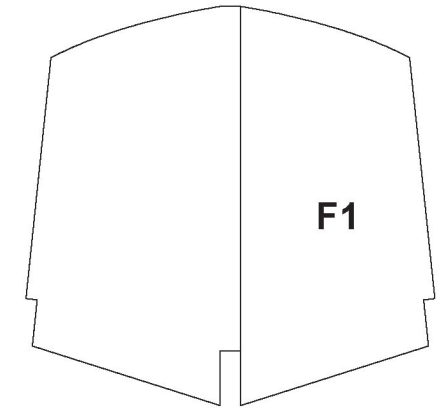
ill match

the tail

Templates and Assembly



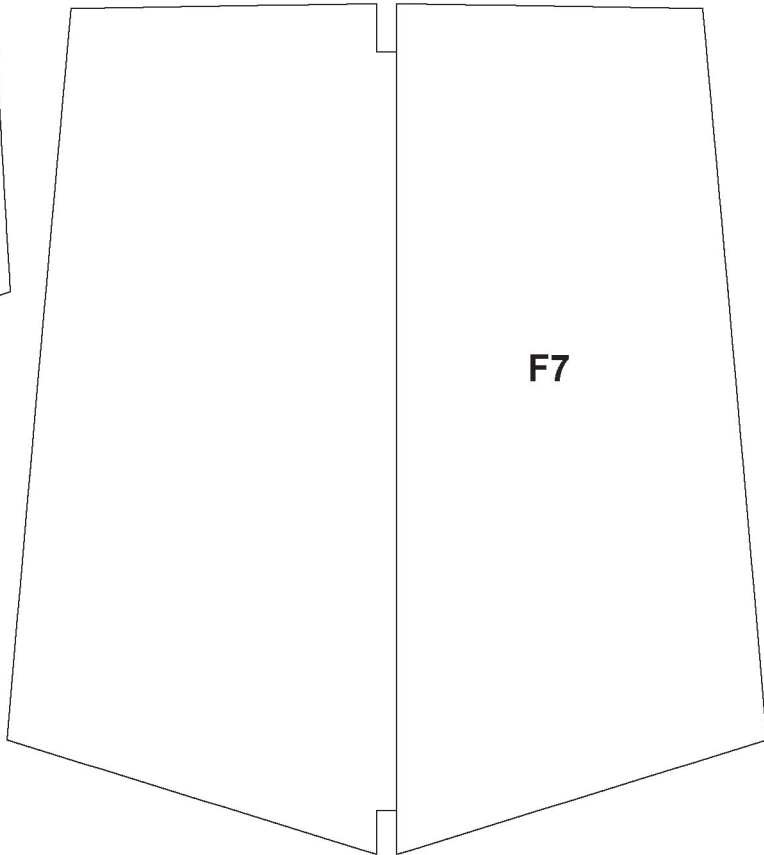
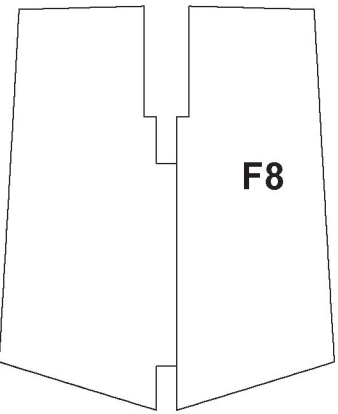
Former Templates--3/32



2

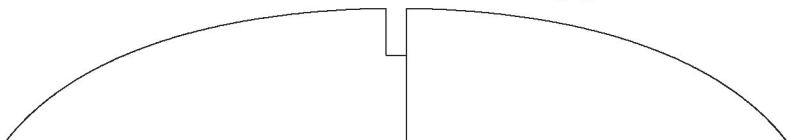
1

3/32" balsa unless noted



F

E



Motor Pod Instructions

1. Attach Doublers to outside walls of formers M3 and M4
2. Trap Firewall M2 between formers M3 and M4
 1. These formers set the motor's thrust angles
3. Attach the M2-M4 assembly to Base M1
4. Attach a former M5 to each side of M1
5. Sheet the top of the formers with 1/16" balsa
6. Run the pod struts up through the wing and into the pod
 1. Epoxy the struts into position

D

The Volmer VJ-22 Sportsman

Volmer Jensen designed the original VJ-22 in 1957, and made it a Legend has it that his goal was to combine his love of flying with still flying his Sportsman thirty years later.

Jensen marketed his design as a homebuilt aircraft. To simplify it from popular GA aircraft. Both the horizontal stabilizer and the fuselage was typically fitted with tricycle landing gear using main wheels in the up position.

Around 1000 plans have been purchased by builders hoping to be modelers, only 10-15% of these projects were completed.

In another parallel with modelers, builders of the full-scale VJ-22 can be found in both tractor and pusher configurations, with and without designs including a T-tail.

C

The Model

Float flying is my favorite RC activity. The goal for this design was that could be cut easily by hand. Unlike my typical stick-and-balsa beginning with laser cutting in mind, this one has no stringers and is sheeted without complex curves. The wing is held down with

A few liberties were taken with Mr. Jensen's design. The rudder is a simple rudder. I went with the tractor option on my prototype to help with the reversed. I left off the wheels and struts to keep the build simple and details in.

Step 4 Sand to shape

Parts with **Bold** numbers are included in lasercut shortkit

Propellor

7 x 6 APC

Battery

3S 2200mAh

CONTROL THROWS

	LOW	HIGH
Aileron	1/2"	5/8"
Elevator	3/8"	1/2"
Rudder	1/4"	5/8"

Large Rudder on High for water handling. Prop Brake ON to reduce pitch up with power off.

aidened his full-scale prototype the following year. with his interest in scuba diving. Mr. Jensen was

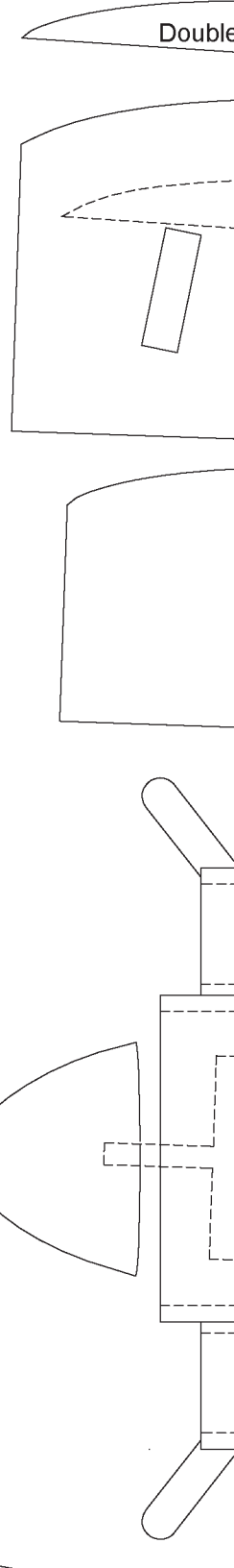
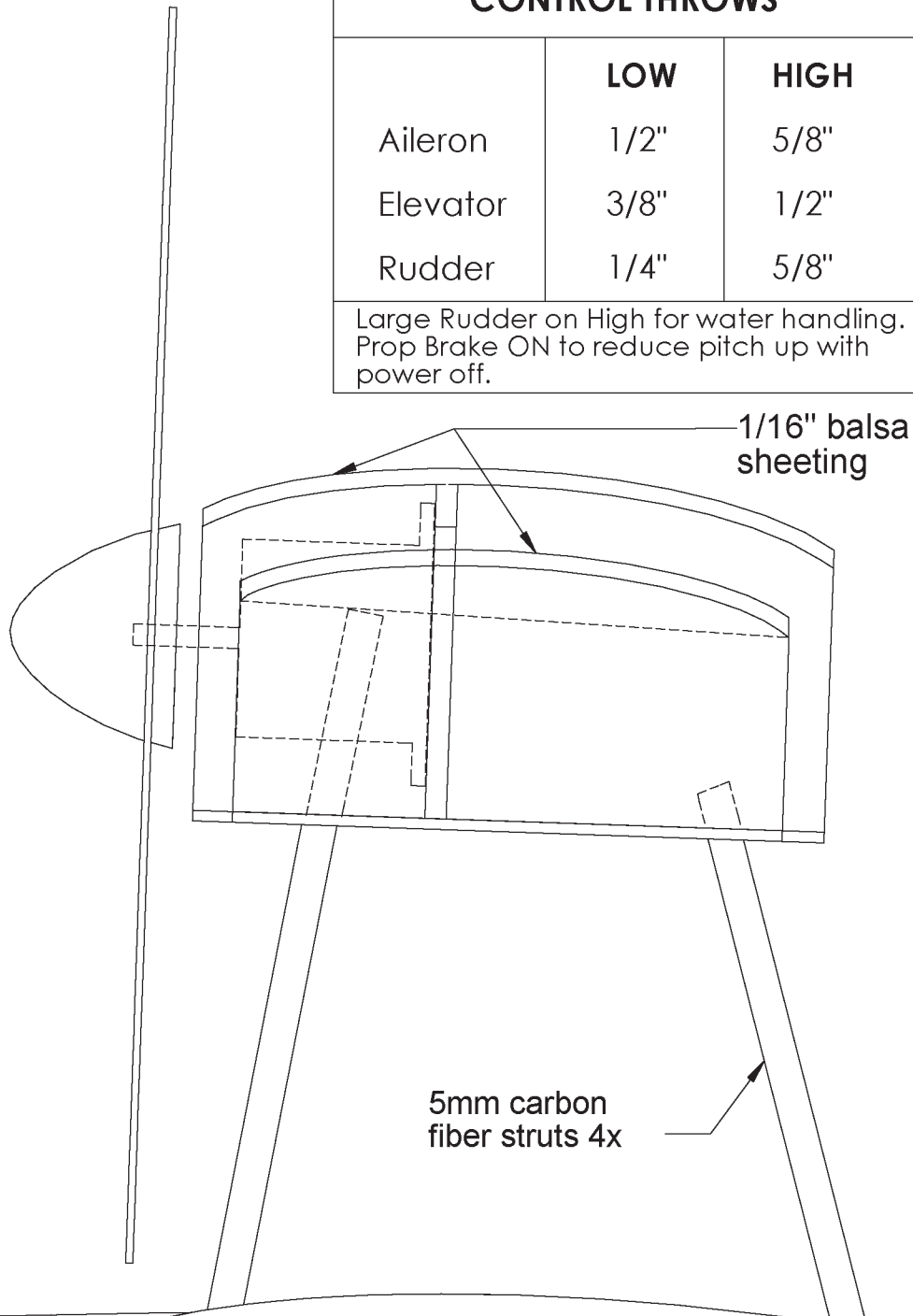
implify construction, many parts like the wings came the wings were supported with struts. The aircraft eels that pivoted forward to clear the water when in

g to own their own amphibian. Not unlike RC

J-22 frequently modified the design. Aircraft can without landing gear, and with different tail

gn was to create a simple and durable waterplane d-tissue type designs that are planned from the rs or complex shapes. The whole fuselage is h rubber bands in the old-school fashion.

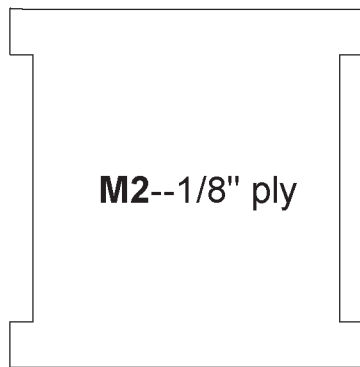
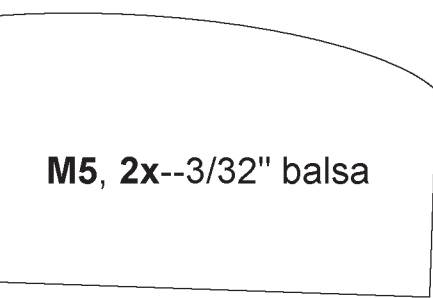
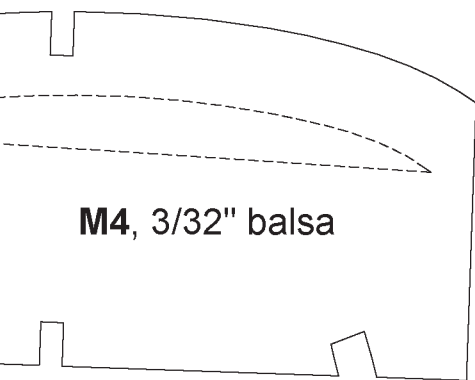
dder was reshaped to function better as a water p keep the Cg forward, but the mount can be mple, but scale nuts are welcome to add these



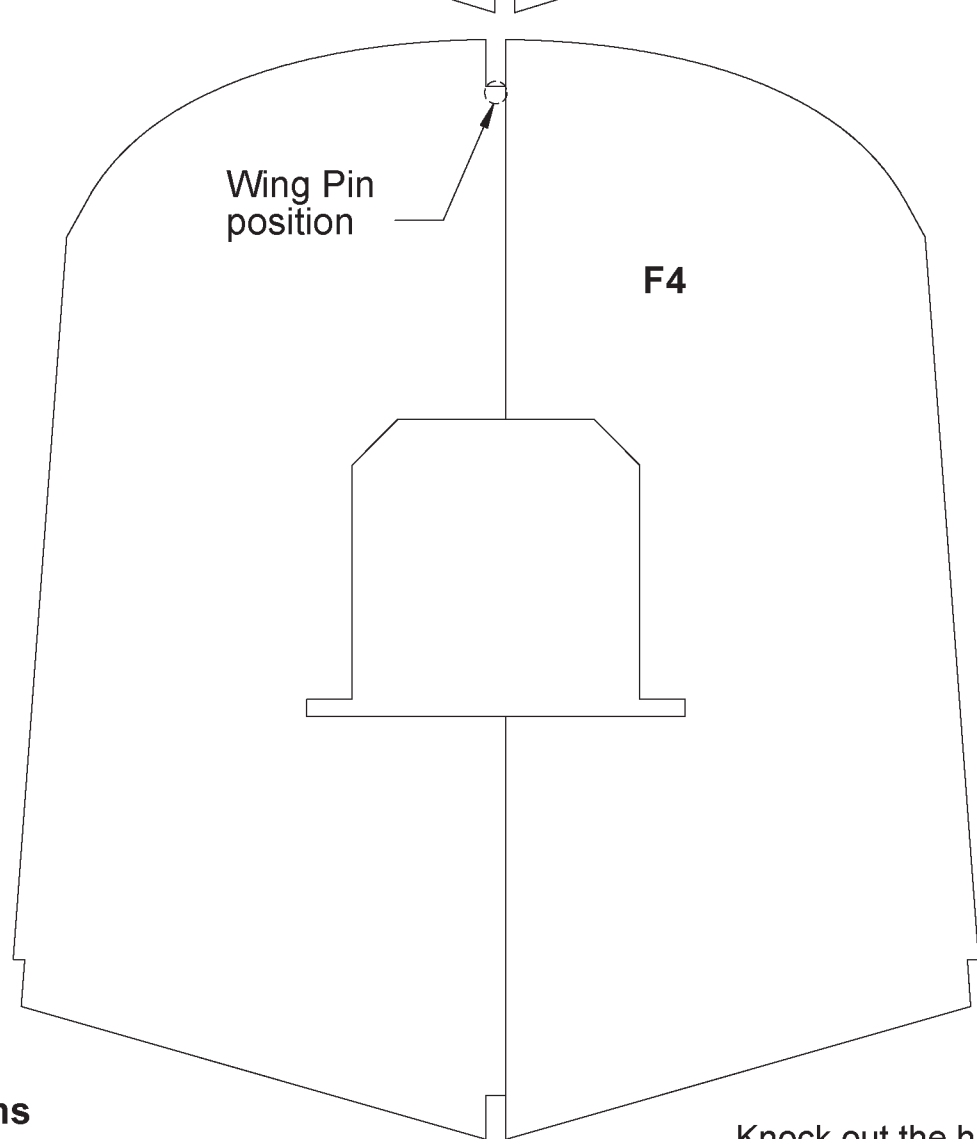
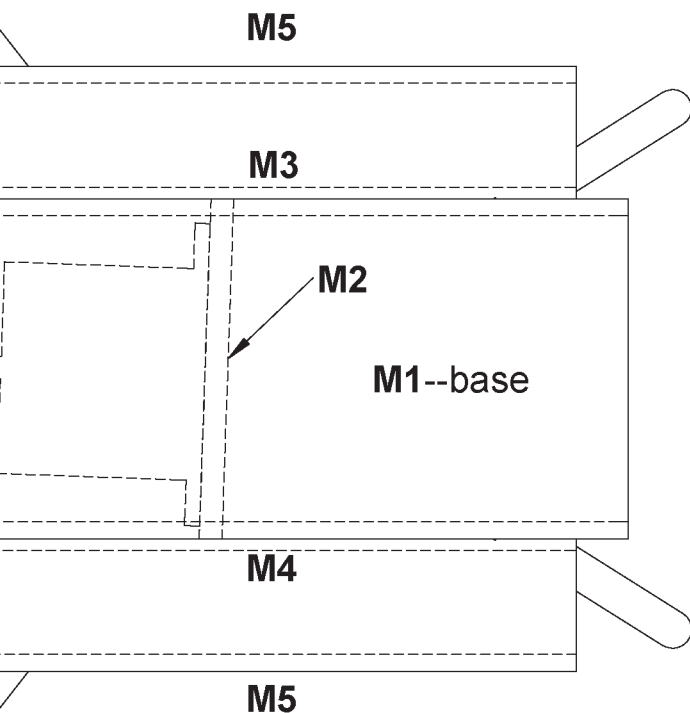
K2

Cg 23% MAC

oler for M3 and M4



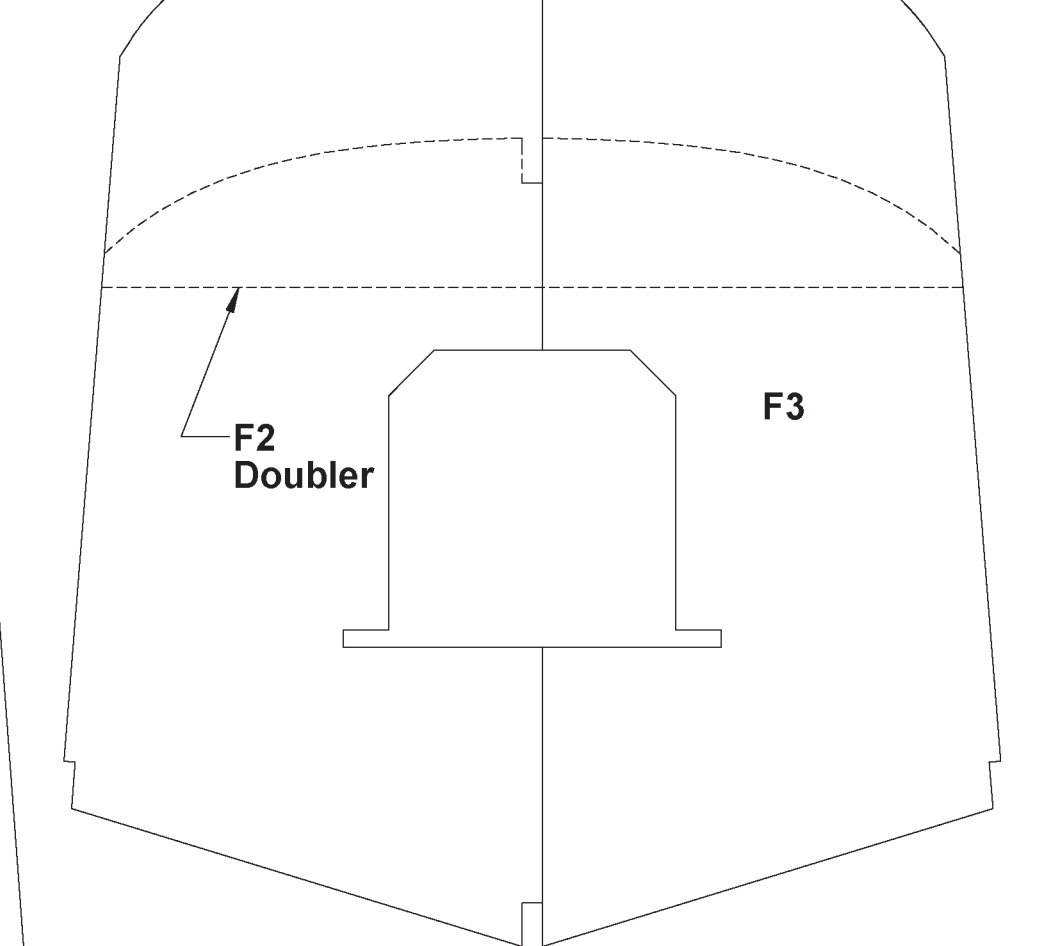
A and B formers--1/2" soft balsa



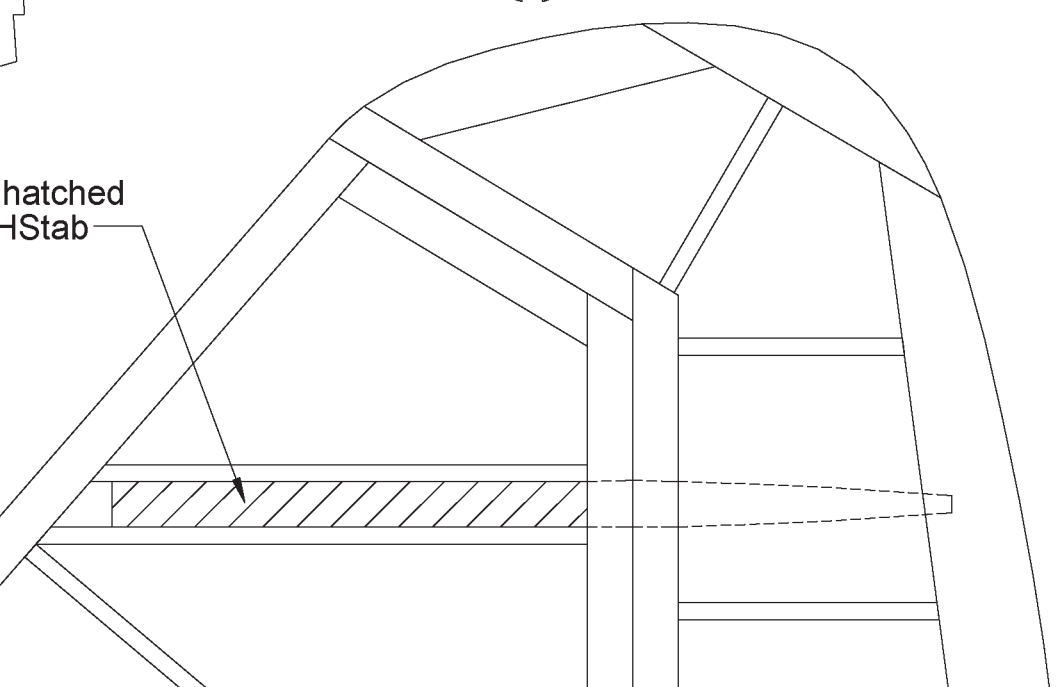
Knock out the h area to insert H

Fuselage Instructions

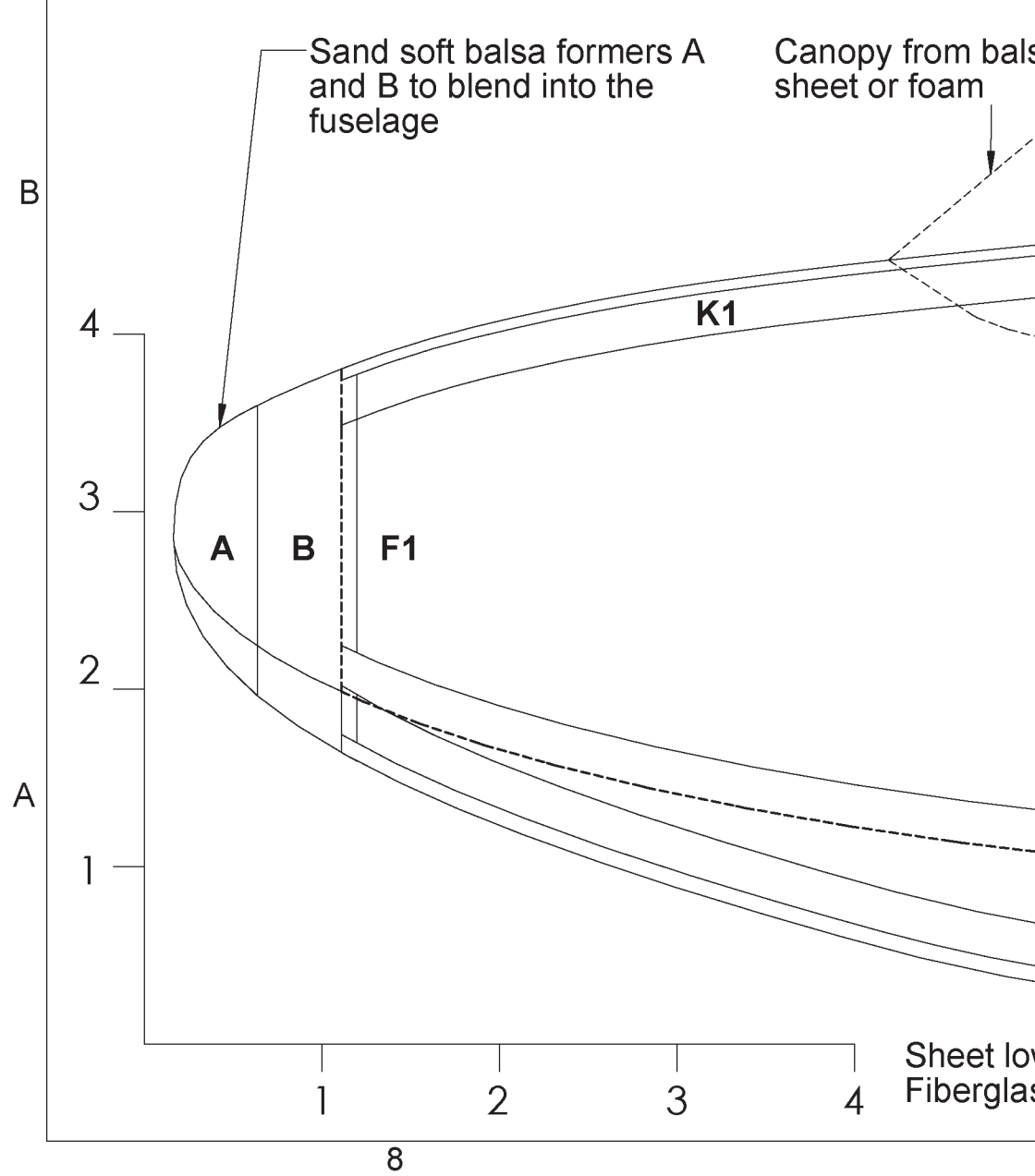
1. Pin Keels K1 thru K5 to board
 1. Cut K2 and K5 from 3/32" x 1/4" strip stock
2. Mount left half of Formers F1 thru F9 perpendicular to board
3. Join the formers F1, F3, F4, and F5 with chine keel K6
4. Sheet the fuselage side with 1/16" balsa
 1. Use the side view as a guide: the top of the fuselage behind the wing is flat, the lower edge of the side panel is marked on the plan
5. Add the bottom sheeting to stiffen the assembly
6. Unpin the assembly and build the right side free from the board
 1. Insert Batt and Servo trays into left side assembly
 2. Attach right half Formers to the left side assembly
7. Sheet the remainder of the fuselage as shown

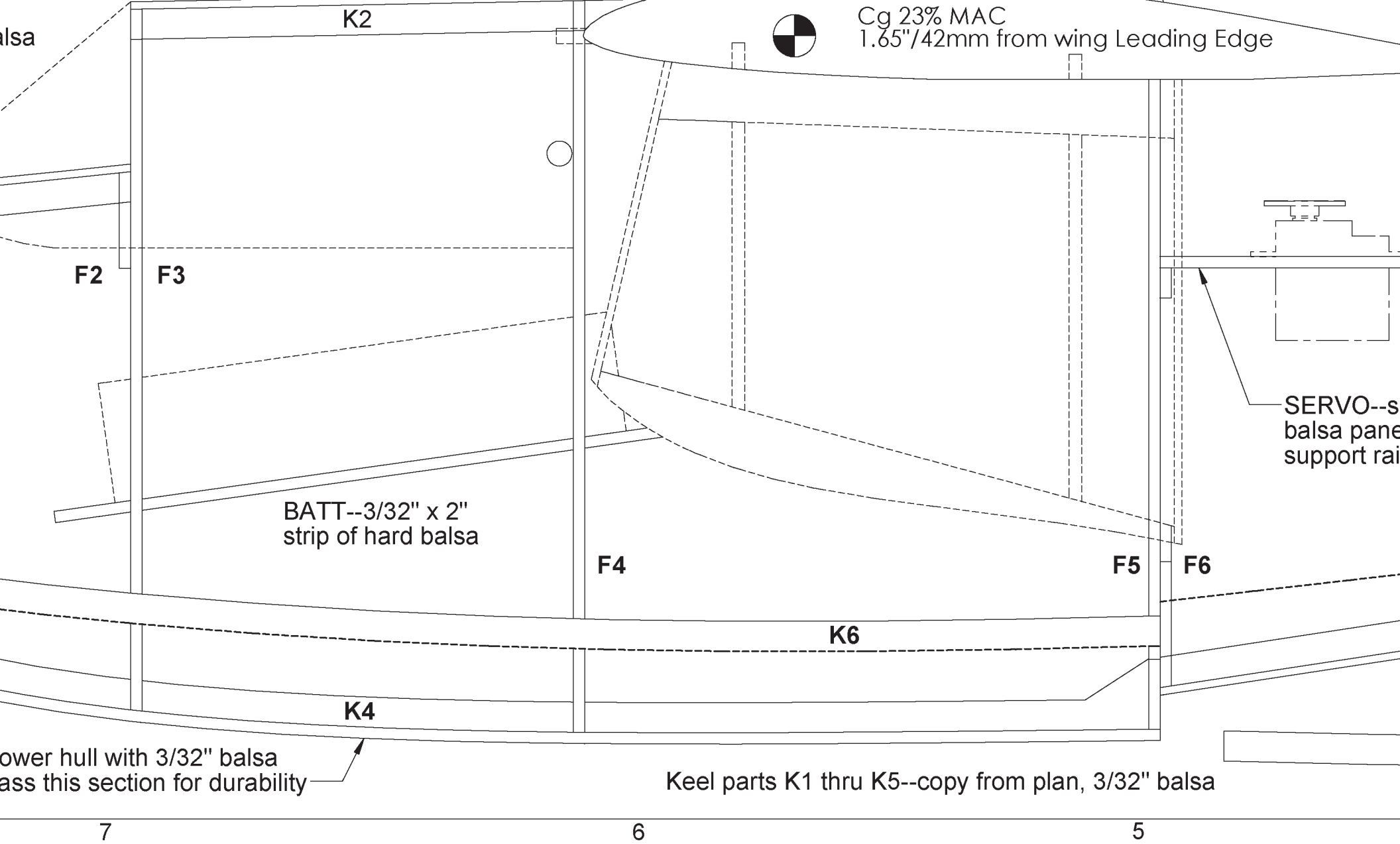


D



C





balsa

K2



Cg 23% MAC
1.65"/42mm from wing Leading Edge

F2

F3

BATT--3/32" x 2"
strip of hard balsa

F4

F5

F6

SERVO--s
balsa pane
support rail

K6

K4

lower hull with 3/32" balsa
pass this section for durability

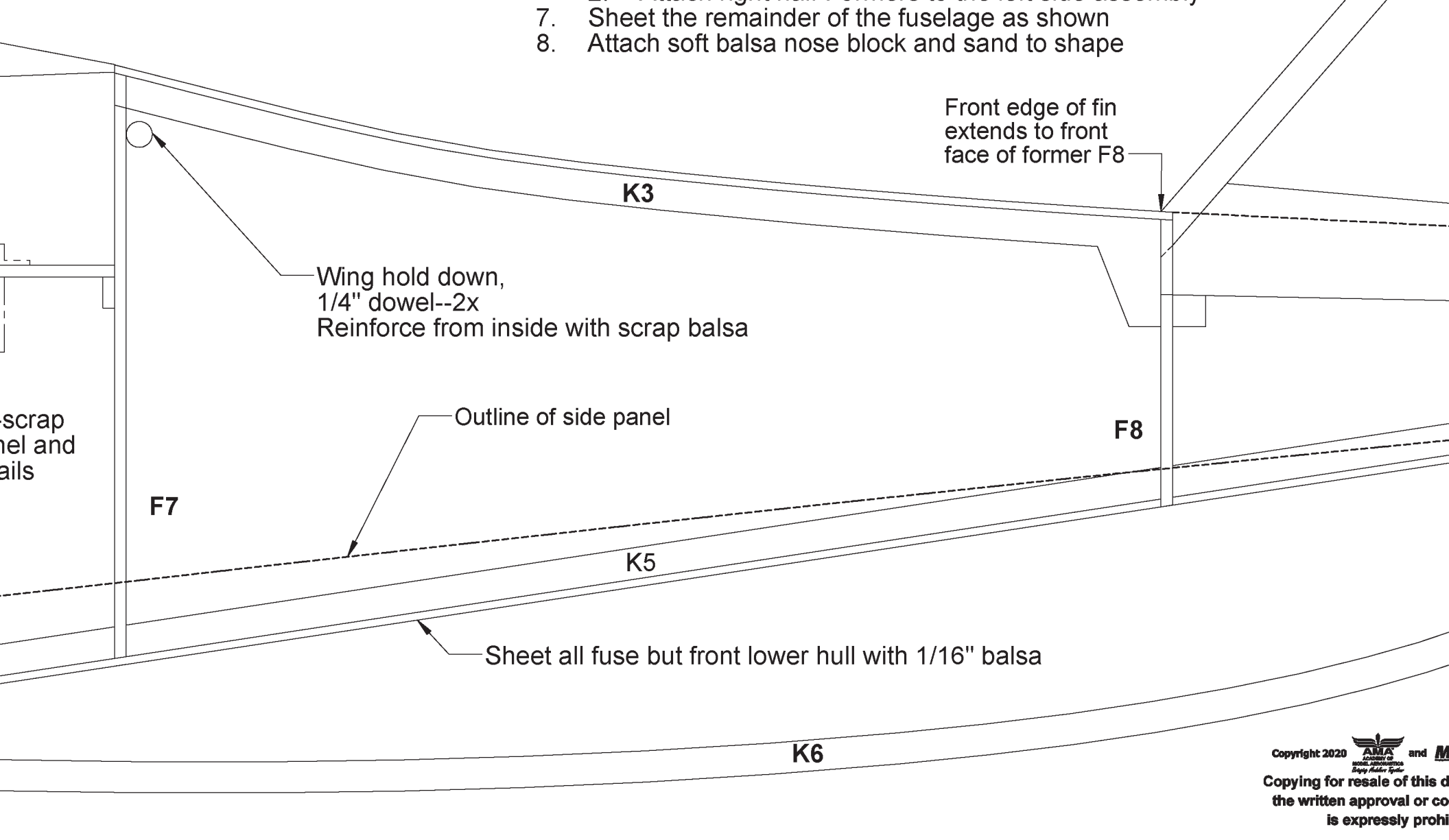
Keel parts K1 thru K5--copy from plan, 3/32" balsa

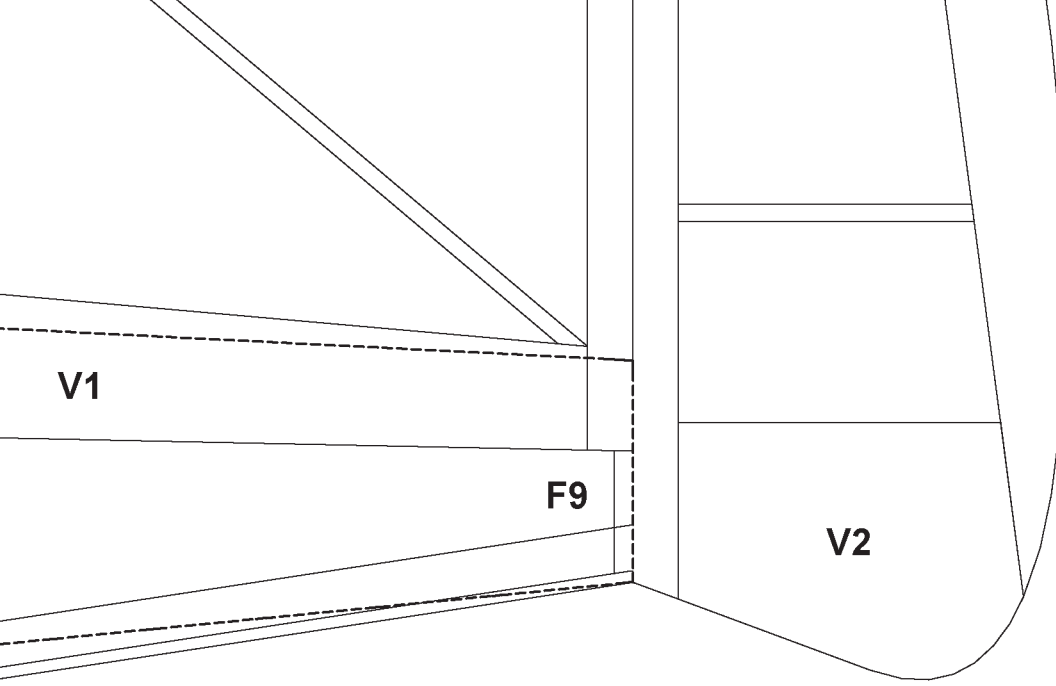
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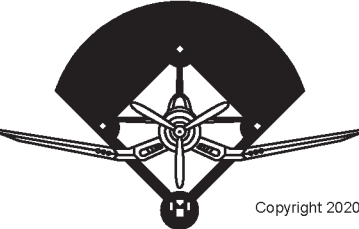
7. Sheet the remainder of the fuselage as shown
8. Attach soft balsa nose block and sand to shape





B

A

INFIELD ENGINEERING[™] by Paul Kohlmann			
 <small>Copyright 2020</small>	Title 50" Volmer VJ-22 Sportsman		
	Size D	Dwg. No. Volmer VJ22	Rev A
	Scale: 1:1	Weight: 28-32oz	Sheet 1 of 2 Plan No. 1121
Details and lasercut parts info can be found at: www.infieldengineering.com			

Model Aviation
 This drawing without
 consent of AMA
 is prohibited.