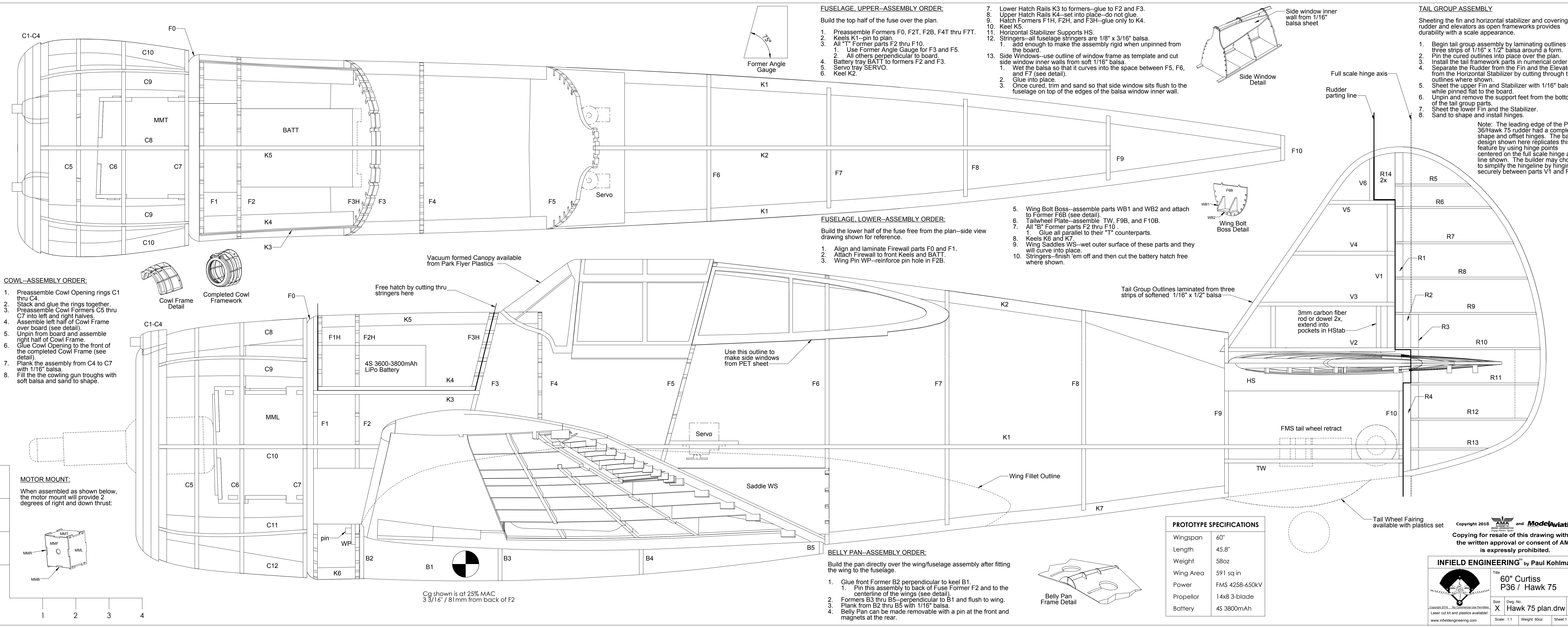
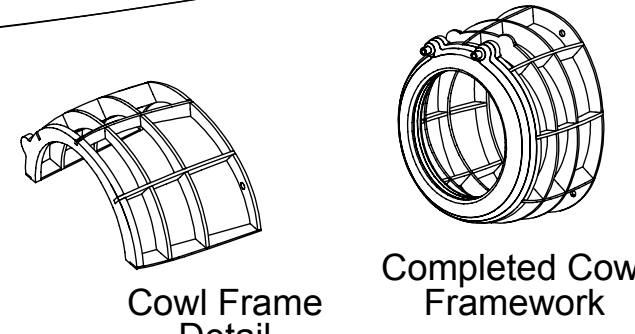




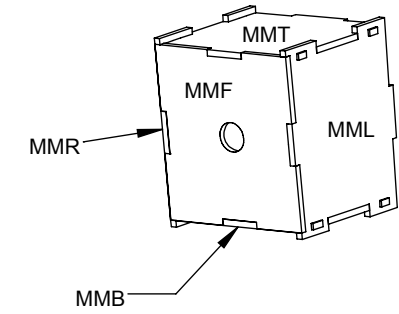
COWL--ASSEMBLY ORDER:

1. Preassemble Cowl Opening rings C1 thru C4.
2. Stack and glue the rings together.
3. Preassemble Cowl Formers C5 thru C7 into left and right halves.
4. Assemble left half of Cowl Frame over board (see detail).
5. Unpin from board and assemble right half of Cowl Frame.
6. Glue Cowl Opening to the front of the completed Cowl Frame (see detail).
7. Plank the assembly from C4 to C7 with 1/16" balsa.
8. Fill the the cowl gun troughs with soft balsa and sand to shape.



MOTOR MOUNT:

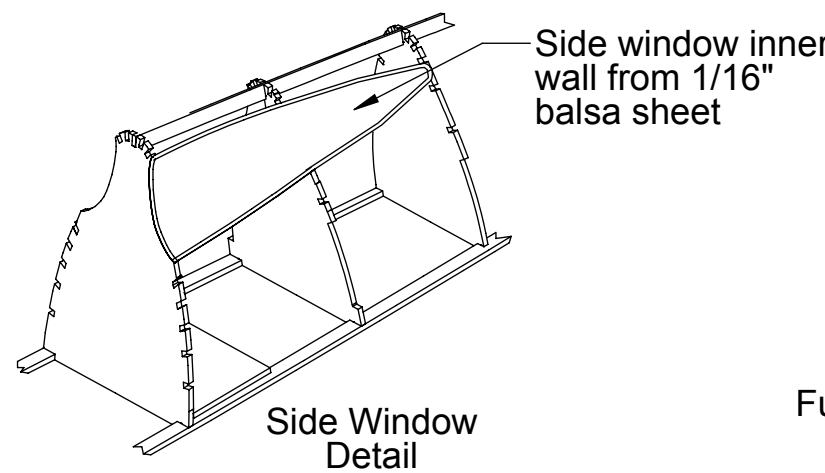
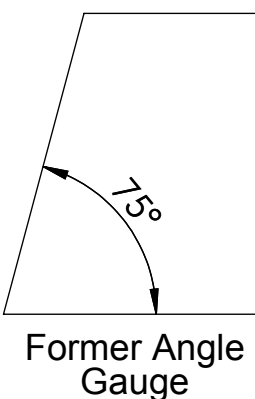
When assembled as shown below, the motor mount will provide 2 degrees of right and down thrust:



FUSELAGE, UPPER--ASSEMBLY ORDER:

Build the top half of the fuse over the plan.

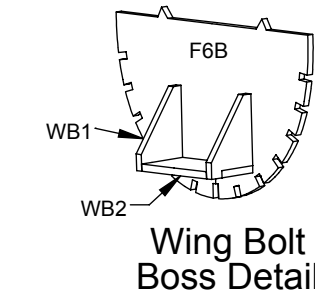
1. Preassemble Formers F0, F2T, F2B, F4T thru F7T.
2. Keels K1--pin to plan.
3. All "T" Former parts F2 thru F10.
 1. Use Former Angle Gauge for F3 and F5.
 2. All others perpendicular to board.
4. Battery tray BATT to formers F2 and F3.
5. Servo tray SERVO.
6. Keel K2.
7. Lower Hatch Rails K3 to formers--glue to F2 and F3.
8. Upper Hatch Rails K4--set into place--do not glue.
9. Hatch Formers F1H, F2H, and F3H--glue only to K4.
10. Keel K5.
11. Horizontal Stabilizer Supports HS.
12. Stringers--all fuselage stringers are 1/8" x 3/16" balsa.
 1. add enough to make the assembly rigid when unpinned from the board.
13. Side Windows--use outline of window frame as template and cut side window inner walls from soft 1/16" balsa.
 1. Wet the balsa so that it curves into the space between F5, F6, and F7 (see detail).
 2. Glue into place.
 3. Once cured, trim and sand so that side window sits flush to the fuselage on top of the edges of the balsa window inner wall.



FUSELAGE, LOWER--ASSEMBLY ORDER:

Build the lower half of the fuse free from the plan--side view drawing shown for reference.

1. Align and laminate Firewall parts F0 and F1.
2. Attach Firewall to front Keels and BATT.
3. Wing Pin WP--reinforce pin hole in F2B.
5. Wing Bolt Boss--assemble parts WB1 and WB2 and attach to Former F6B (see detail).
6. Tailwheel Plate--assemble TW, F9B, and F10B.
7. All "B" Former parts F2 thru F10.
 1. Glue all parallel to their "T" counterparts.
8. Keels K6 and K7.
9. Wing Saddles WS--wet outer surface of these parts and they will curve into place.
10. Stringers--finish 'em off and then cut the battery hatch free where shown.



Tail Group Outlines laminated from three strips of softened 1/16" x 1/2" balsa

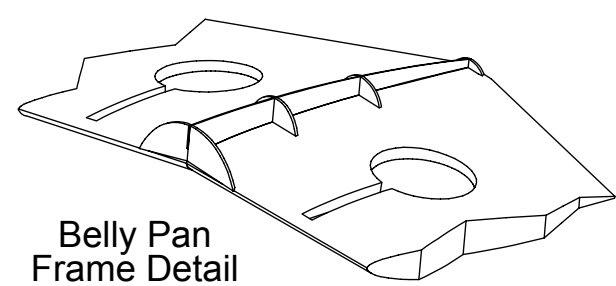
3mm carbon fiber rod or dowel 2x, extend into pockets in HStab

Tail Wheel Fairing available with plastics set

BELLY PAN--ASSEMBLY ORDER:

Build the pan directly over the wing/fuselage assembly after fitting the wing to the fuselage.

1. Glue front Former B2 perpendicular to keel B1.
 1. Pin this assembly to back of Fuse Former F2 and to the centerline of the wings (see detail).
2. Formers B3 thru B5--perpendicular to B1 and flush to wing.
3. Plank from B2 thru B5 with 1/16" balsa.
4. Belly Pan can be made removable with a pin at the front and magnets at the rear.



PROTOTYPE SPECIFICATIONS	
Wingspan	60"
Length	45.8"
Weight	58oz
Wing Area	591 sq in
Power	FMS 4258-650kV
Propellor	14x8 3-blade
Battery	4S 3800mAh

TAIL GROUP ASSEMBLY

Sheeting the fin and horizontal stabilizer and covering the rudder and elevators as open frameworks provides durability with a scale appearance.

1. Begin tail group assembly by laminating outlines from three strips of 1/16" x 1/2" balsa around a form.
2. Pin the cured outlines into place over the plan.
3. Install the tail framework parts in numerical order.
4. Separate the Rudder from the Fin and the Elevators from the Horizontal Stabilizer by cutting through the outlines where shown.
5. Sheet the upper Fin and Stabilizer with 1/16" balsa while pinned flat to the board.
6. Unpin and remove the support feet from the bottom of the tail group parts.
7. Sheet the lower Fin and the Stabilizer.
8. Sand to shape and install hinges.

Note: The leading edge of the P-36/Hawk 75 rudder had a complex shape and offset hinges. The base design shown here replicates this feature by using hinge points centered on the full scale hinge axis line shown. The builder may choose to simplify the hingeline by hinging securely between parts V1 and R1.

Full scale hinge axis

Rudder parting line

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Title
60" Curtiss P36 / Hawk 75

Size **X** Dwg. No. **Hawk 75 plan.drw** Rev **A**

Scale: 1:1 Weight: 60oz Sheet 1 of 4

WING FILLET

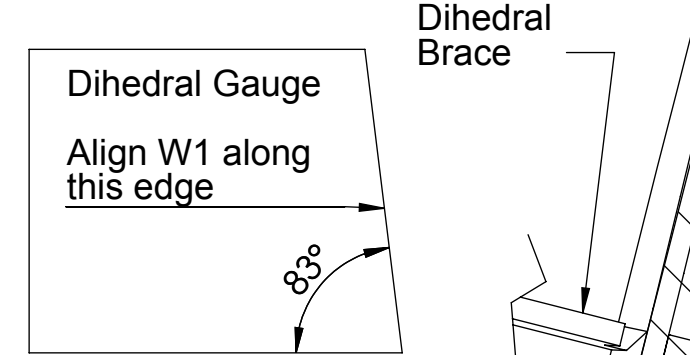
Use the templates to the right to make the fillet parts:

- Wing Platform--cut from 1/16" balsa or 1/32" ply.
 - Fit Platform to upper wing surface
 - Glue the Platform to the bottom edge of the Wing Saddle WS.
- Bottom--cut from 1/8" balsa
 - Epoxy to back edge of Wing Platform and fuselage.
- Side Panels--cut from 1/16" balsa or thick cardstock
 - Wet each Panel and gently shape to fit.
 - Work from the Rear to the Front.
 - Glue to Wing Platform and fuselage.
 - Add bracing from scrap balsa as needed.

DIHEDRAL

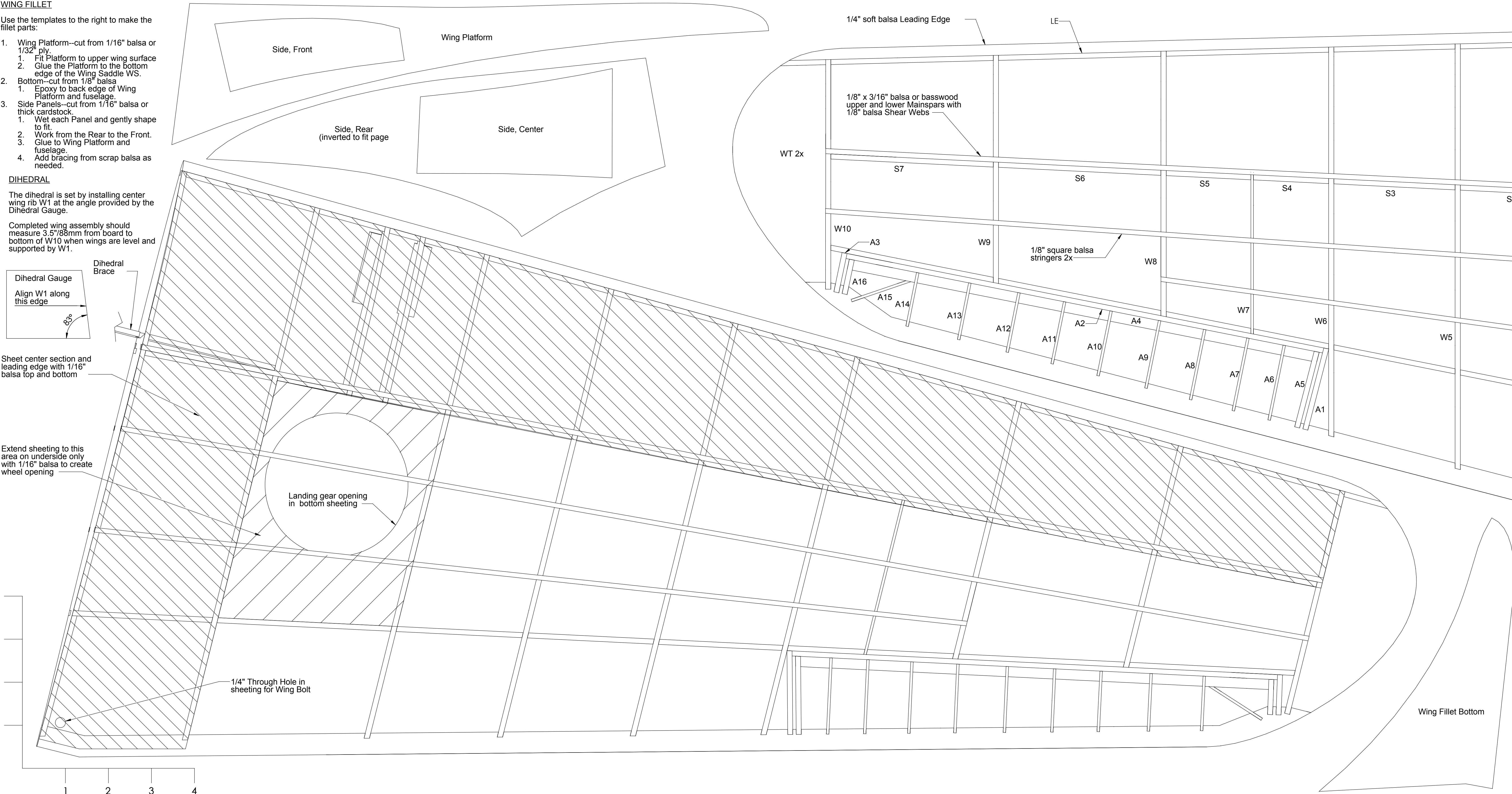
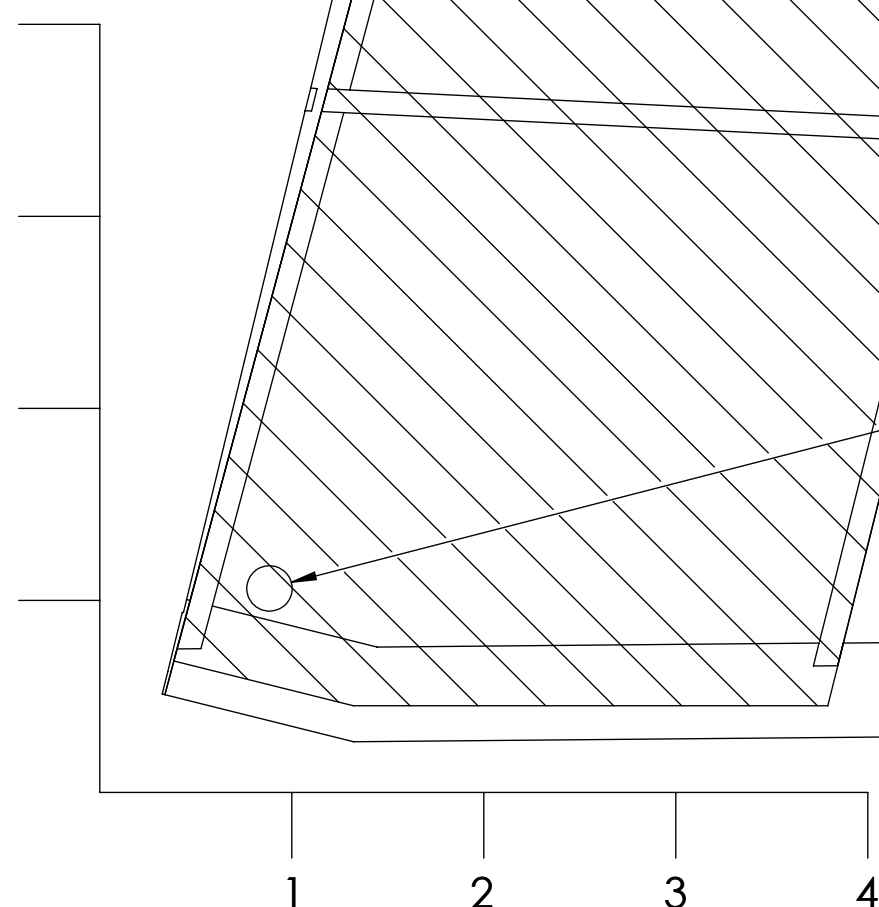
The dihedral is set by installing center wing rib W1 at the angle provided by the Dihedral Gauge.

Completed wing assembly should measure 3.5"/88mm from board to bottom of W10 when wings are level and supported by W1.



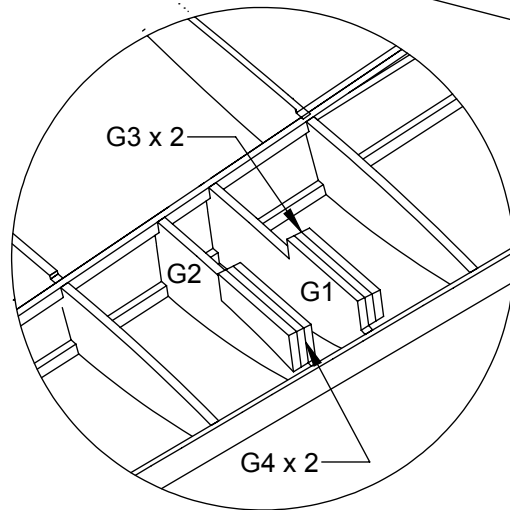
Sheet center section and leading edge with 1/16" balsa top and bottom

Extend sheeting to this area on underside only with 1/16" balsa to create wheel opening



WING-ASSEMBLY ORDER:
The wing is built flat against the board. Feet on the ribs and rear spar will set the washout angle.

- Pin the Lower Main Spar and Rear Spar RS to the board.
 - Raise the Lower Main Spar by shimming it with 1/16" balsa scrap--this will allow the sheeting to cover the Lower Main Spar later.
- Ribs W2 thru W10 perpendicular to board.
- Rib W1--set angle with Dihedral Gauge.
- Trailing Edge TE.
- Upper Main Spar, and Shear Webs S2 thru S7.
- Upper Stringers.
- Aileron parts in numerical order.
 - Glue A1 to RS only!
 - A1 is a doubler to RS.
- Wing Tip W1--stack two together and then attach to wing.
- Unpin assembly from board and epoxy S2 into place.
- Retract Ribs G1 and G2--epoxy to S2 and Main Spars.
- Leading Edge LE.
- Upper Sheeting--return assembly to board and sheet from Main Spar to LE to lock in the washout.
- Lower Sheeting--unpin assembly and remove feet first.
- Retract Bosses--stack two G3's and two G4's together.
 - Epoxy each assembly firmly to Retract Rib and wing sheeting.
- 1/4" Soft balsa leading edge.
- Join wings with ply Dihedral Brace.
- Install a wing pin from 3/16" dowel where marked on ribs W1.



Main Gear Detail

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INFIELD ENGINEERING™ by Paul Kohlmann		
Title 60" Curtiss P36 / Hawk 75		
Size X	Dwg. No. Hawk 75 plan.drw	Rev A
Scale: 1:1 Weight: 60oz Sheet 2 of 4		

C3
C2
C1
R14 2x
E12 4x
E2 4x
C4
F0

WT 4x
A4 2x
R3
R2
R4
E1 2x
H1
V1
R1

1/4" Balsa--MAKE 1 OF EACH UNLESS OTHERWISE NOTED

R13
R12
R11
R10
R9
R8
R7
R6
R5
E10
E9
E8
E7
E6
E5
E4
E3
W7
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6

1/16" Balsa--MAKE 2 OF EACH

F1
MMR
MML
MMB
MMT
MMF
F6B
WB2
WB1 2X
WP
G3 4X
G4 4X
TW
G1 2X
G2 2X
BRACE
S1 2X

1/8" LIGHT PLY--MAKE 1 OF EACH UNLESS OTHERWISE NOTED

elevator parting line
.090" music wire joiner
reinforce pockets with scrap balsa to accept pins from vertical fin 2x

HORIZONTAL TAIL PLANE:
Follow Tail Group Assembly notes from page 1.

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Title
60" Curtiss P36 / Hawk 75

Size X	Dwg. No. Hawk 75 plan.drw	Rev A
Scale: 1:1	Weight: 60oz	Sheet 3 of 4

