



bottom of fuse. at wing





4 cu.in. twin



side view of twin engine



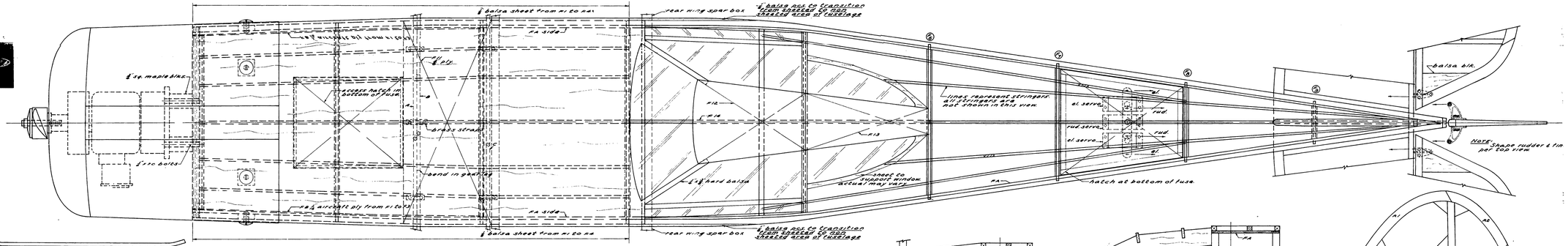








hatch at bottom of fuse.



Custom Miniature Aircraft Designs

Piper PA-25 Pawnee

Span: 119.35", Scale: 27.5%, Weight: 24 to 26 lbs., Length: 81.7", Wing Area: 1934.5 sq. in., Power: 3 to 6 cu. In.

Drawn by: Wendell Hostetler 545 Jerome Dr. Orrville, OH 44667

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Bill of Material for Piper PA-25 Pawnee (wood only)

Fuselage

2 pieces 1/8" x 11" x 66" lite ply. for FA sides

2 pieces 1/16" x 10" x 23" aircraft ply. for FB sides

3/8" x 8" x 10" aircraft ply. for F1 firewall

3/8" x 4 1/8" x 10 ½" aircraft ply. for F 11

3/16" x 2" x 3" aircraft ply. for F 15

7/8" x 4 ½" x 6" balsa for F 12

3/8" x 3" x 7 1/2" balsa for F 13

1/8" x 8" x 36" (approx.) lite ply. for F5 through F9

1/8" x 3" x 36" balsa for F1A through F4A

1/8" x 3" x 36" balsa for cabin floor

2 pieces 3/8" x 1" x 18" balsa for wing supports (inside FA sides)

1 piece 3/32" x 3 ½" x 6 ½" aircraft ply. battery shelf

1/8" x 4 ½" x 16" aircraft ply. for F 14

304 lineal inches of ¼" x ¼" balsa for FA sides

171 lineal inches of ¼" x 3/8" for crosspieces and cabin material

2 pieces 3/8" x 1" x 18" balsa for wing supports (inside FA sides)

482 lineal inches of 1/8" x ¼" balsa for stringers

2 pieces ½" x ¾" x 14" balsa for F 10

29 lineal inches ¾" x ¾" balsa for rear hatch

8 pieces 1/8" x 3" x 36" balsa fuselage sheeting

Fin and Rudder

46 lineal inches of 1/8" x 3/8" balsa

2 pieces of 1/32" x 3/8" x 14" ply for tail post

17 lineal inches of 3/8" x 3/8" balsa for leading edge of rudder

32 lineal inches of ¼" x 3/8" balsa

3/8" x 3" x 10" balsa for R1 through R5

3/8" x 3/8" x 8" balsa for leading edge of fin

3/8" x 1 ¼" x 2" basswood, or equal, for flying wire support blocks

3/8" x 1 ½" x 2 ¼" balsa for rudder horn support blocks

1/8" scrap balsa for gussets

Stabilizer and Elevator

¾" x 3/8" x 24 1/2" basswood for trailing edge of stabilizer

3/8" x 3/8" x 30" balsa for leading edge of elevator

3/8" x 3" x 30" balsa for S1 through S7

¾" x 3/8" x 80" balsa

3/8" x 3" x 7" balsa for stabilizer fill

72 lineal inches of 1/8" x 3/8" balsa

3/8" x 1 ¾" x 3" balsa horn support

1/8" scrap balsa for gussets

¾" x 3/8" x 3" basswood for flying wire support blocks

Wings

3 pieces 3/8" x 3" x 30" balsa tip material

8 pieces ¾" x 3/8" x 57" basswood wing spars

12 pieces 1/8" x 3" x 30" balsa for ribs

15 pieces 1/8" x 3" x 36" balsa sheeting

2 pieces ¼" x 1" x 28" balsa wing material in front of ailerons

2 pieces 3/8" x ¾" x 27 ½" balsa aileron leading edges

¾" x 1" x 82 lineal inches balsa for trailing edges

4 pieces ¼" x 1 ¼" x 14" balsa flap material

2 pieces 3/32" x 3 ¼" x 20 ½" aircraft ply. for front spar boxes

2 pieces 3/32" x 3" x 20 ½" aircraft ply. for rear spar boxes

4 pieces 3/32" x 2 ¼" x 9 ¼" aircraft ply. for outer wing panel front spar boxes

4 pieces 3/32" x 1 ½" x 20 ½" aircraft ply. for outer wing panel rear spar boxes

2 pieces 3/8" x 1 ¼" x 17" aircraft ply. for front spar wing "plugs"

2 pieces 3/8" x 1" x 17 ¼" aircraft ply. for rear spar wing "plugs"

220 lineal inches ¼" x 7/8" balsa leading edge material

396 lineal inches 1/8" x 3/8" balsa cap strips

2 pieces ½" x 1" x 32" balsa for front part of wing struts

2 pieces ½" x 1" 34" balsa for rear part of wing struts

Miscellaneous basswood for strut support blocks (sizes per plan).

left & right rear windows

windows patterns used as a general guide, exact size will vary.

left & right sides

ais to asn acetate

windshield

blocks to support flying wires

hinges

¼ balsa

horn

¼ x ¼ balsa

balsa

balsa

¼ x ¼ balsa

¼ x ¼ basswood

sand to shape

formica horn

¼ ply wing plug

¼ ply spar box

fuselage side

¼ ply spar box

¼ ply wing plug

¼ balsa sheet

¼ dia. holes for rubber bands (approx.) in bottom of wing plug to secure wing panel to fuselage

LA tires hinge pins www.cstatone.com

Support hinges to ribs with scrap balsa

formica horn on hinge

¼ ply

¼ basswood wing spars

¼ hinge

¼ dia. alum.

center line of wing screw

¼ paper tube

¼ ply

cap strips

¼ x ¼ balsa cap strips over ribs

¼ x ¼" wood block 4-40 threaded brass insert

balsa leading edge

fuselage

balsa

balsa trailing edge

balsa blk.

formica horn

screw spars to allow taper to tip

wing walk

Note: all ribs ¼ balsa

¼ balsa sheet and/or cap strips

strut support blocks

W3 & W4

W1A

W1 & W2

W3

Note: spar webs between wing joints not required due to wing screw design.

2-¼ pieces .orm - .rii

¼ x¼ pcs formica horn buttes to ca hinge

balsa

outboard wing panel ¼ ply front spar box

fuse. side

¼ ply front spar box

wing plug

threaded brass inserts

¼ aircraft ply wing plug glue in outer wing panel

¼ ply outer wing panel rear spar box

¼ ply rear spar box

¼ ply

W10

W11

48 balsa

Servo Detail

¼ x ¼ brass

¼ x ¼ balsa

¼ to bend

¾ to bend

¼ aluminum true length

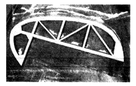
true length

¼ aluminum true length

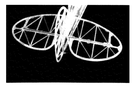
wrap with 15 oz. cloth

5° to bend

wire pins









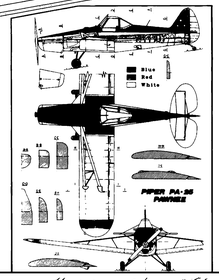














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