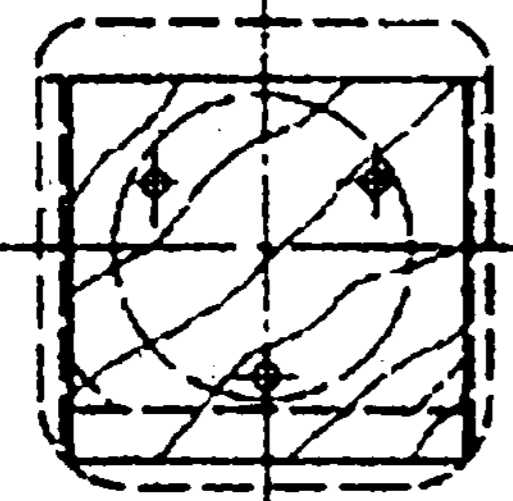
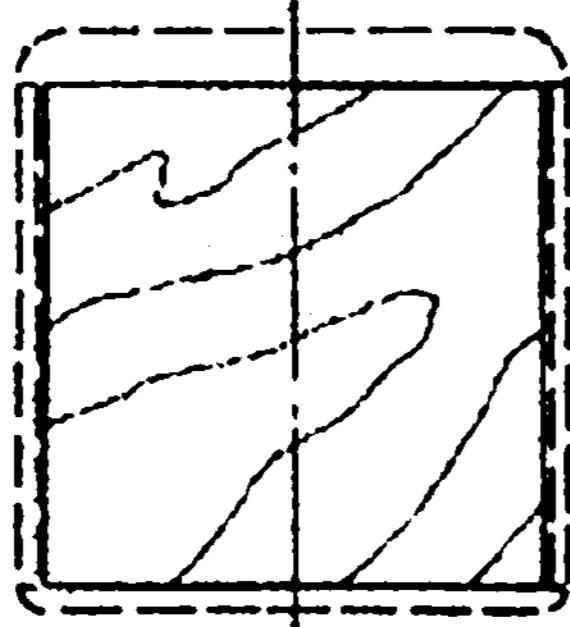


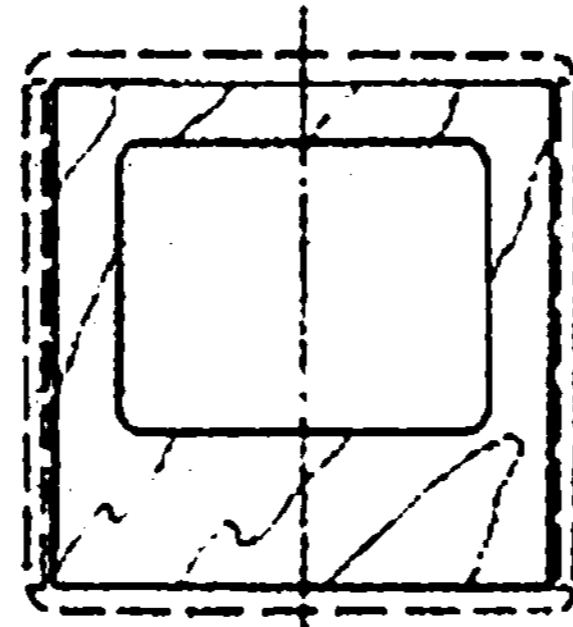
TOP VIEW (TYPICAL "HUMP" & "BUMP") SHOWN WITHOUT TOP SHEETING



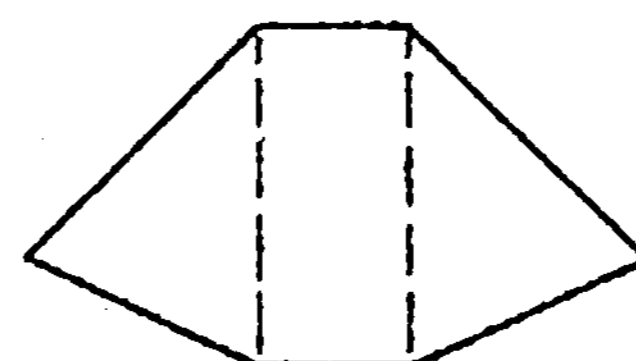
F-1H
1/8" PLY



F-2H
1/8" PLY



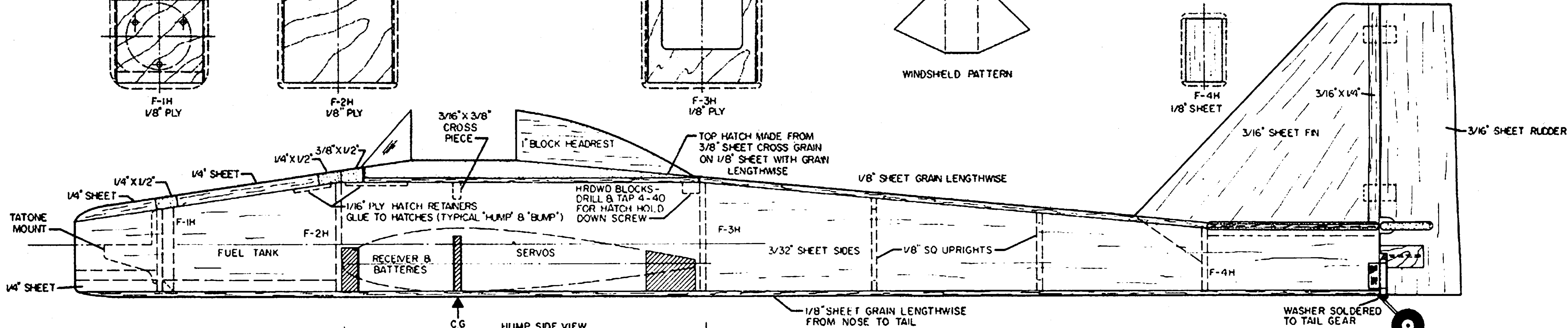
F-3H
1/8" PLY



WINDSHIELD PATTERN



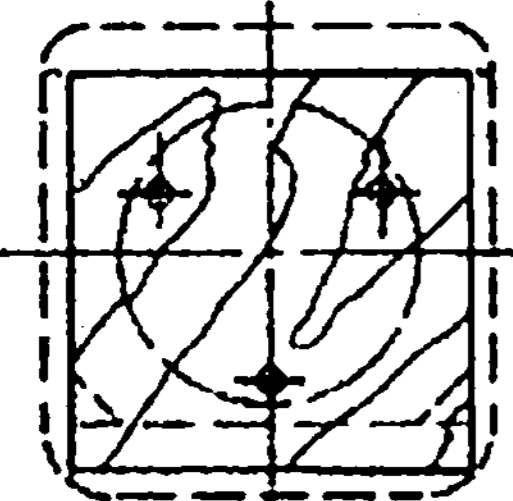
F-4H
1/8" SHEET



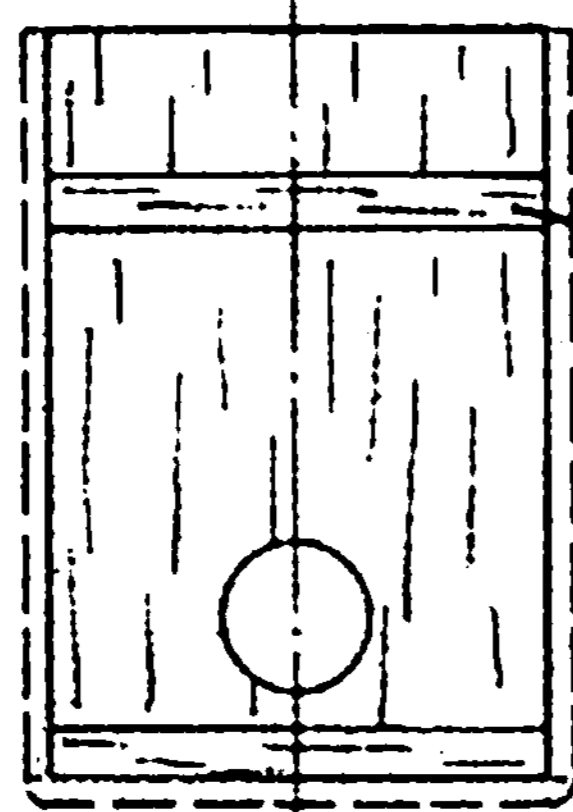
CG

HUMP SIDE VIEW
CUT OUT CROSS HATCHED
AREAS FOR WING

1/8" SHEET GRAIN LENGTHWISE
FROM NOSE TO TAIL

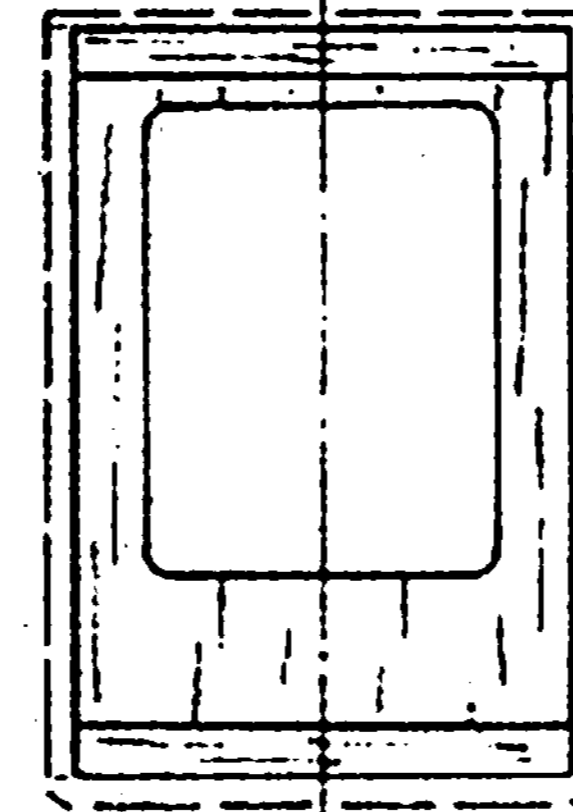


F-1B
1/8" PLY

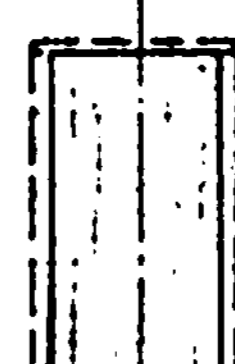


F-2B
1/8" SHEET

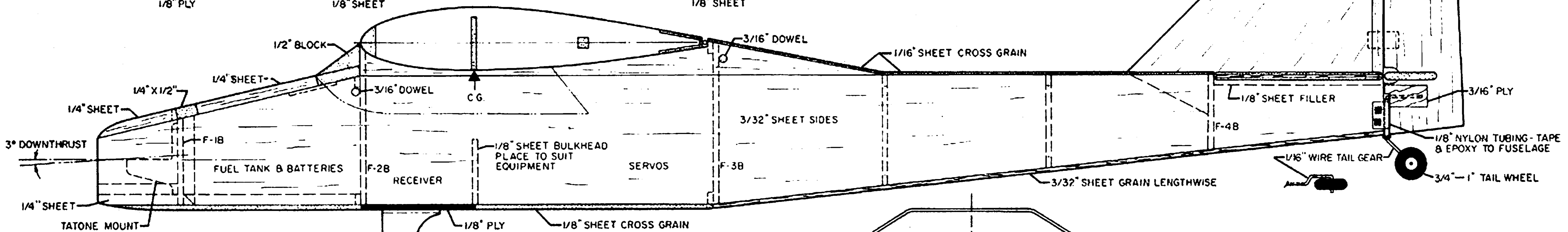
1/8" X 1/4" CROSS BRACES
(TYPICAL ALL FORMERS)



F-3B
1/8" SHEET



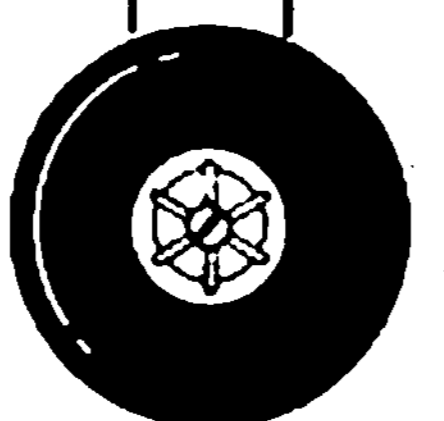
F-4B
1/8" SHEET



CG

BUMP SIDE VIEW

LANDING GEAR - FRONT VIEW



2" WHEELS



4-40 BOLT AXLES

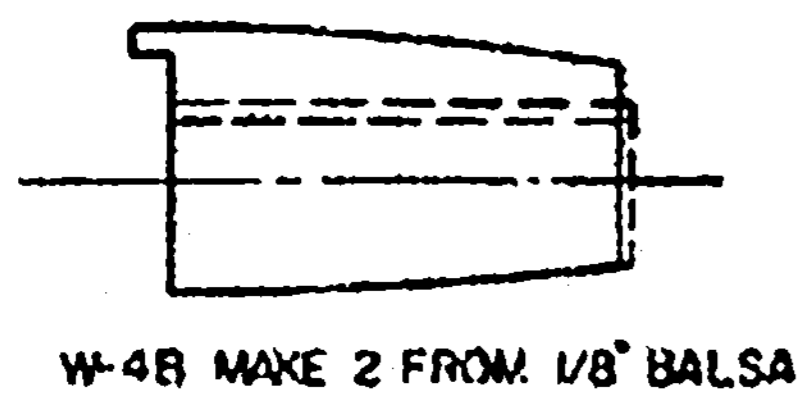


PLATE 1 OF 2

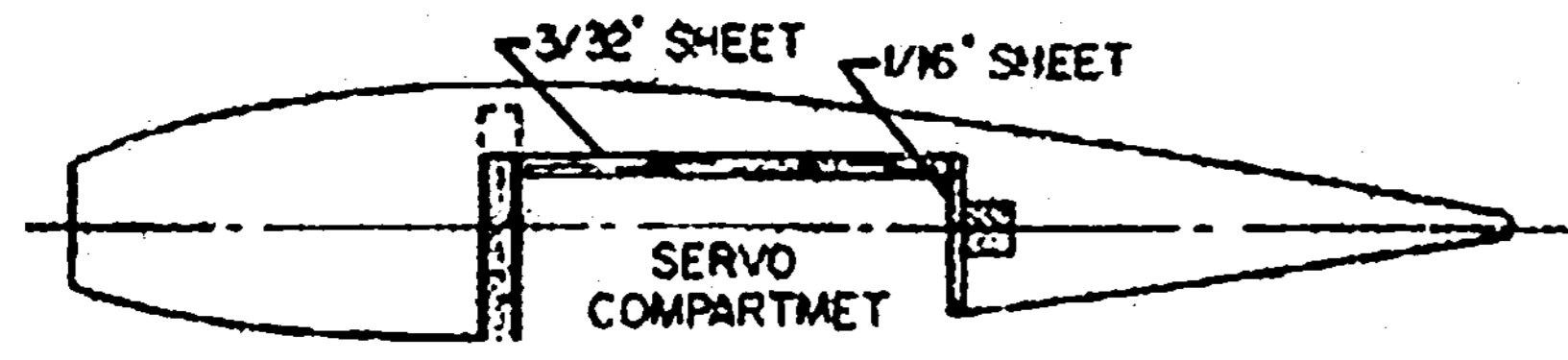
HUMP & BUMP

DESIGNED BY P. B. STRENGELL INKED BY DICK KIDD
DRAWN BY RANDY KIDD

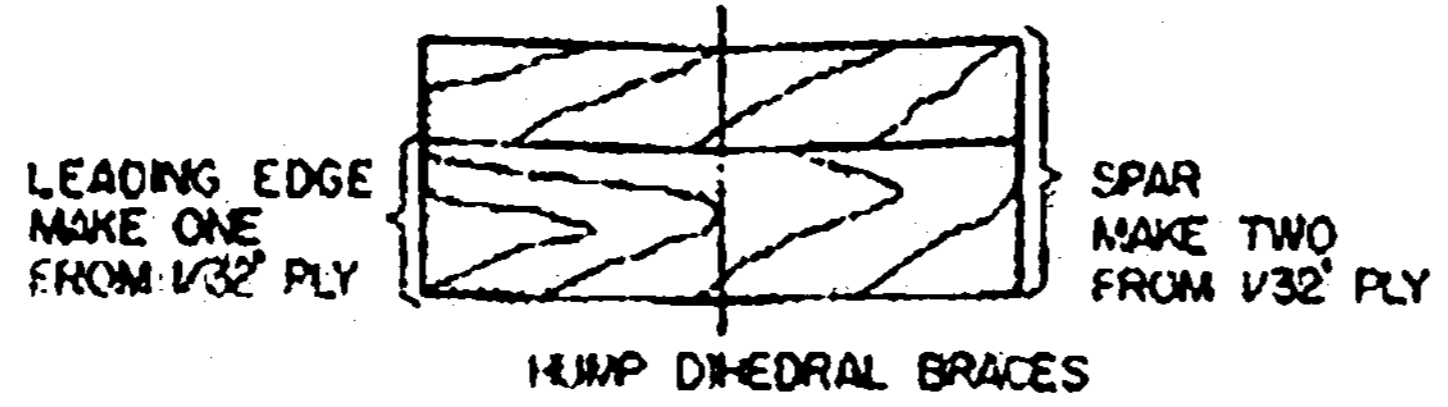




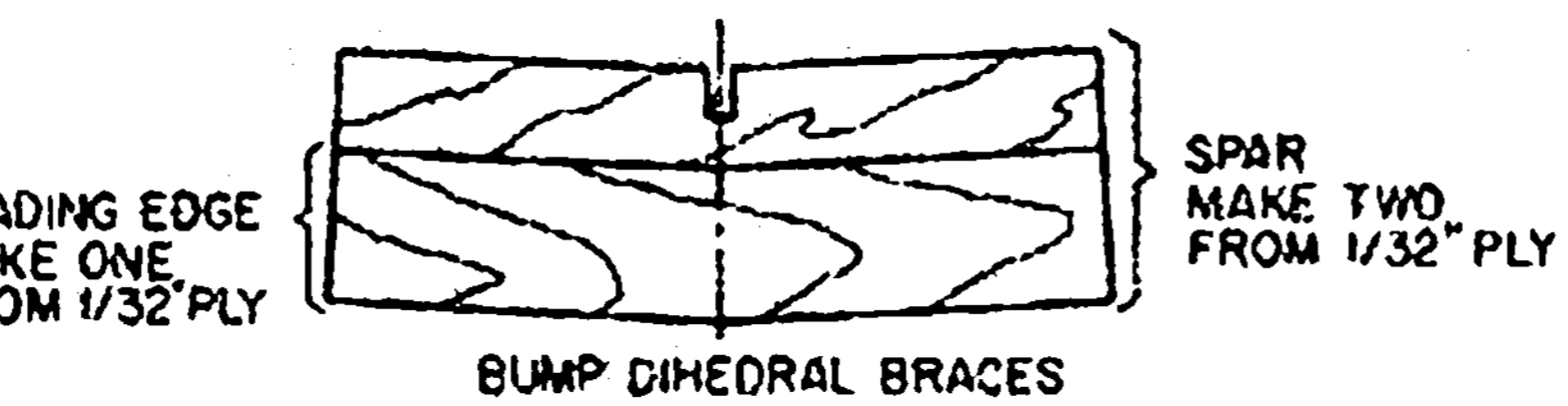
W-4B MAKE 2 FROM 1/8" Balsa



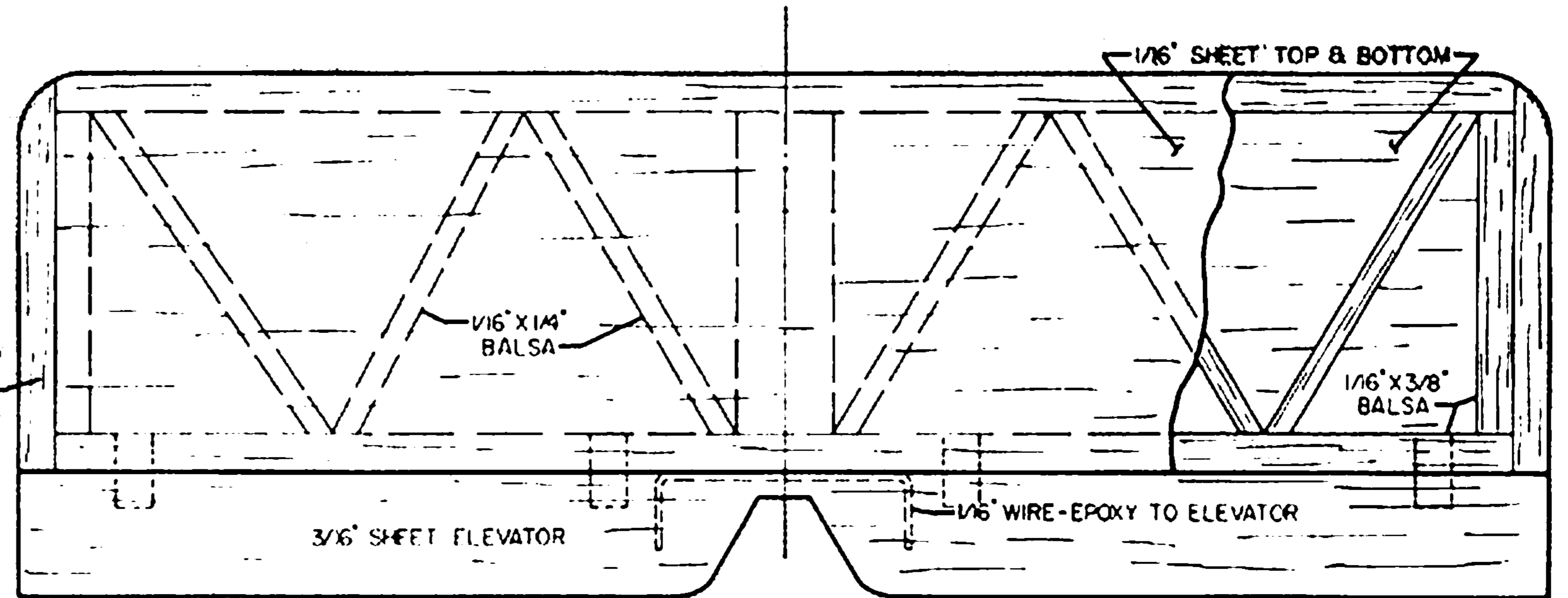
W-3B, MAKE ONE FROM HARD 1/8" Balsa OR 1/8" PLY



LEADING EDGE MAKE ONE FROM 1/32" PLY
HUMP DIHEDRAL BRACES
SPAR MAKE TWO FROM 1/32" PLY



LEADING EDGE MAKE ONE FROM 1/32" PLY
BUMP DIHEDRAL BRACES
SPAR MAKE TWO FROM 1/32" PLY



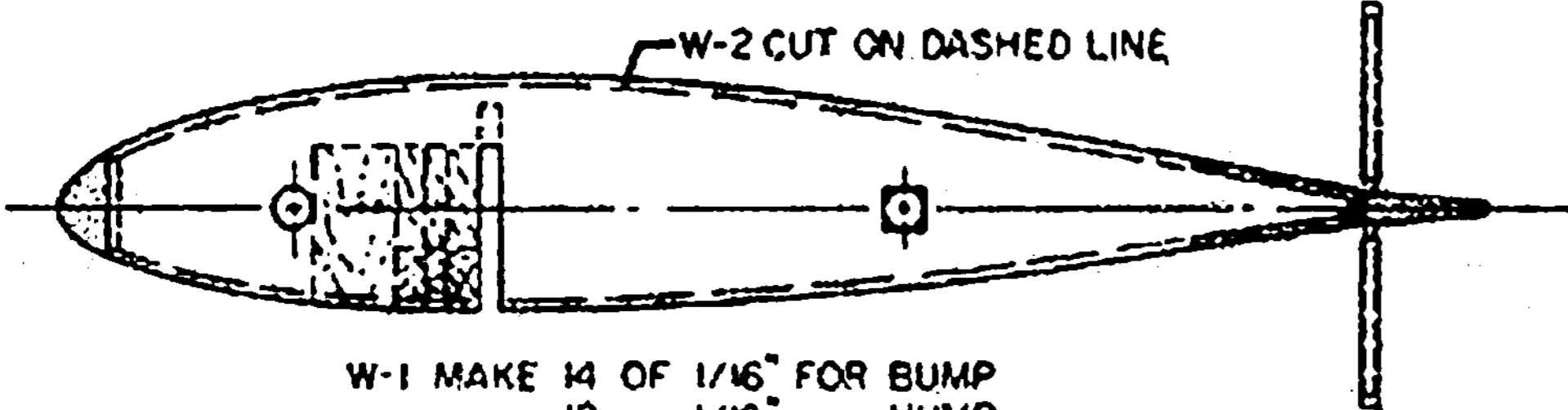
3/16" x 3/8" Balsa

1/16" x 1/4" Balsa

1/16" x 3/8" Balsa

3/16" SHEET ELEVATOR

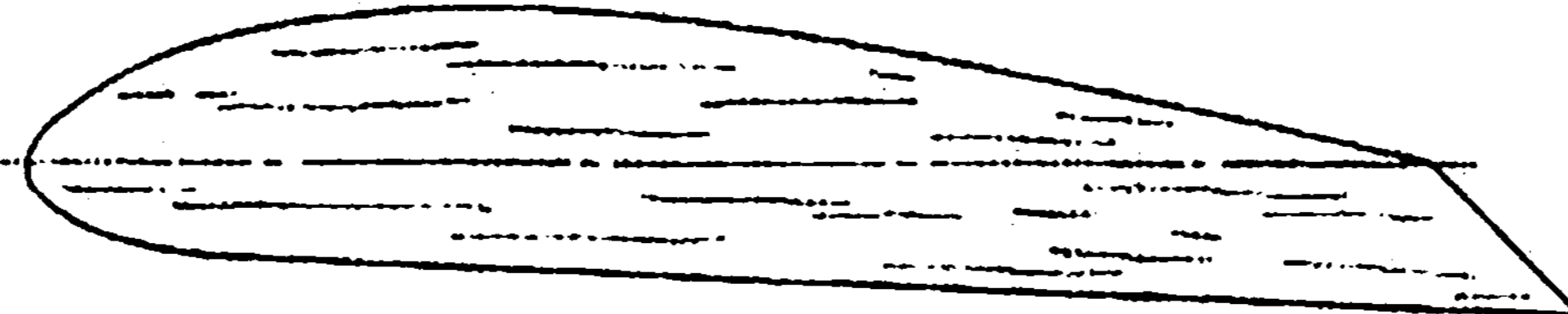
1/16" WIRE-EPOXY TO ELEVATOR



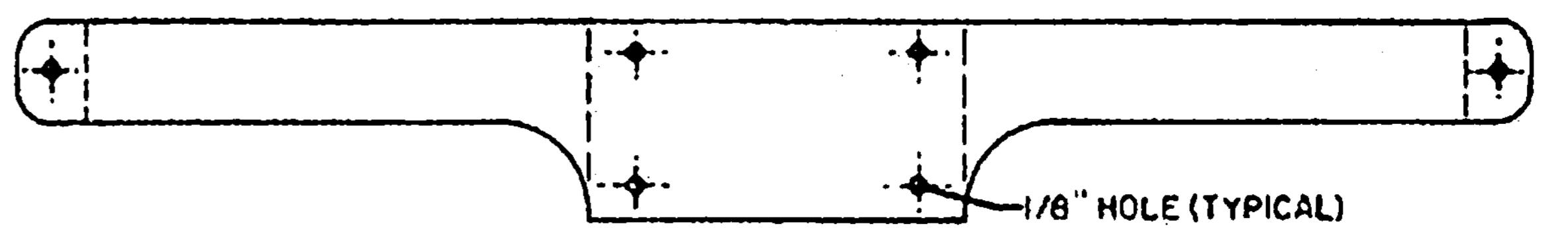
W-2 CUT ON DASHED LINE

- W-1 MAKE 14 OF 1/16" FOR BUMP
- " " 12 " 1/16" " HUMP
- " " 2 " 1/8" " BOTH
- W-2 " 2 " 1/16" " BUMP
- " " 4 " 1/16" " HUMP

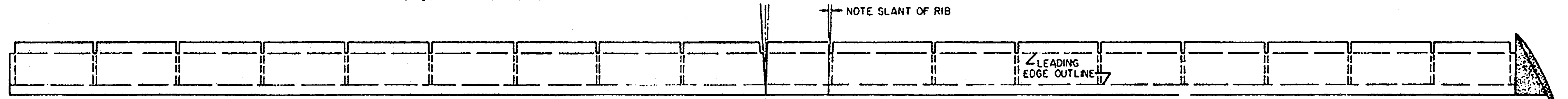
AILERON TORQUE SHAFTS MADE FROM 1/16" WIRE WITH 3/32" BRASS TUBING SLIPPED OVER ENDS FOR BETTER FIT ON DUBRO AILERON HORNS



TIP PLATE - MAKE 2 FROM 1/8" SHEET



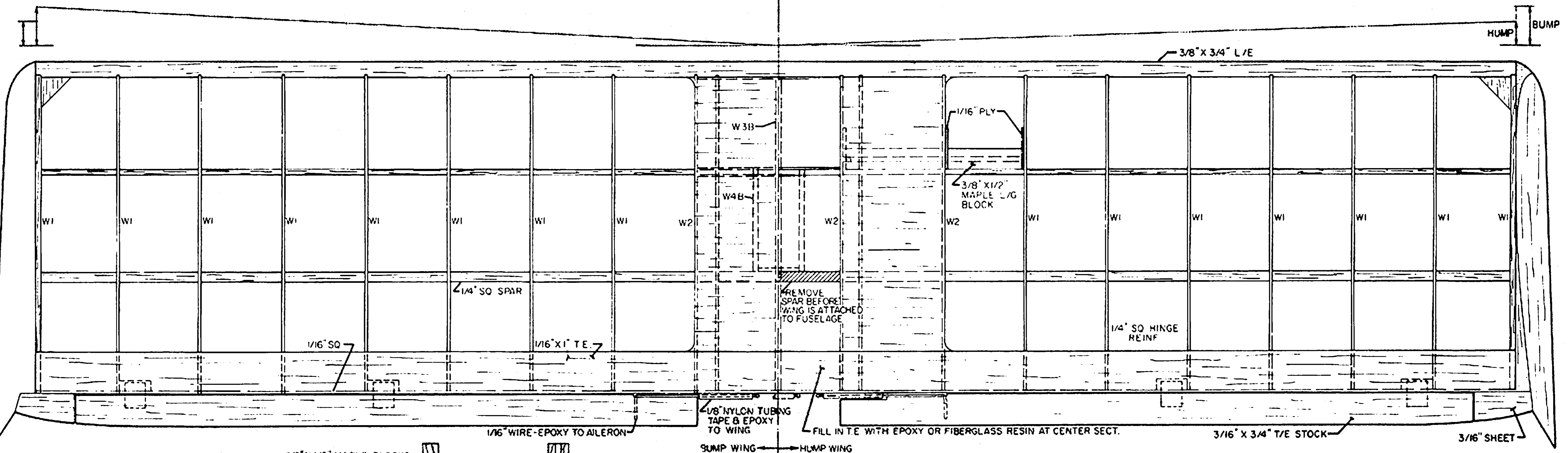
BUMP LANDING GEAR 1/16" 6061 ALUMINUM



NOTE SLANT OF RIB

LEADING EDGE OUTLINE

WING SPAR HARD 1/8" SHEET



HUMP BUMP

3/8" x 3/4" L/E

W 313

W 4B

1/16" PLY
3/8" x 1/2" MAPLE L/G BLOCK

1/4" SO SPAR

REMOVE SPAR BEFORE WING IS ATTACHED TO FUSELAGE

1/4" SO HINGE REINF

1/16" SO

1/16" x 1" T/E

1/8" NYLON TUBING TAPE & EPOXY TO WING

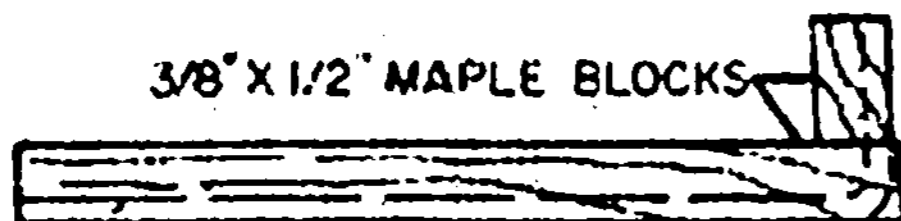
FILL IN T/E WITH EPOXY OR FIBERGLASS RESIN AT CENTER SECT.

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

3/16" SHEET

1/16" WIRE-EPOXY TO AILERON

SUMP WING HUMP WING



3/8" x 1/2" MAPLE BLOCKS

FRONT VIEW
HUMP LANDING GEAR MAKE ONE RIGHT & ONE LEFT
BUMP ALUM GEAR CAN ALSO BE USED ON THE HUMP



1/8" WIRE

SIDE VIEW

TRUE LENGTH

NOTE - WING SHOULD BE BUILT IN ONE PIECE AND THEN CUT IN HALF FOR DIHEDRAL (SEE CONSTRUCTION ARTICLE)



HUMP & BUMP

DESIGNED & DRAWN BY P. B. STRENGELL INKED BY DICK KIDD RANDY KIDD

