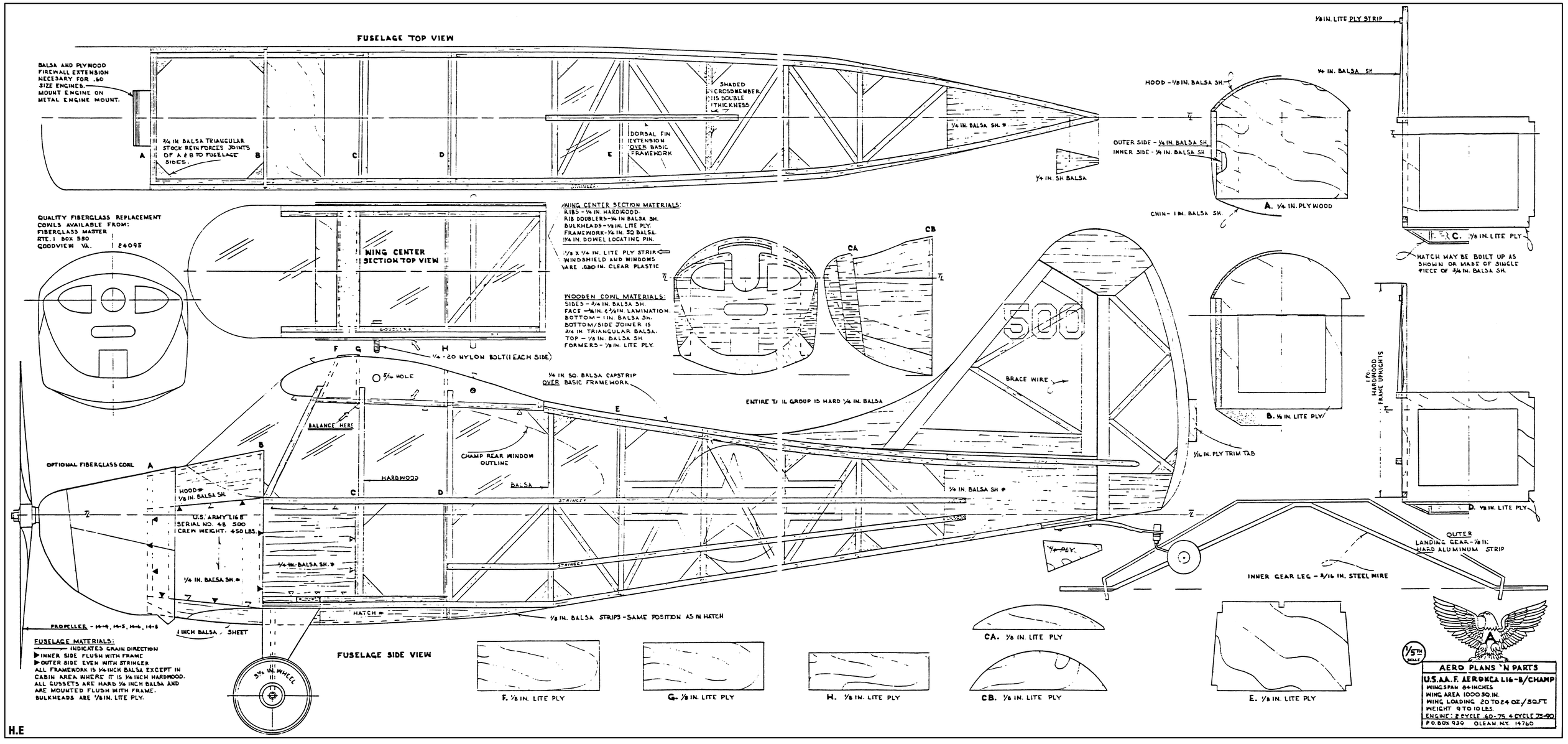
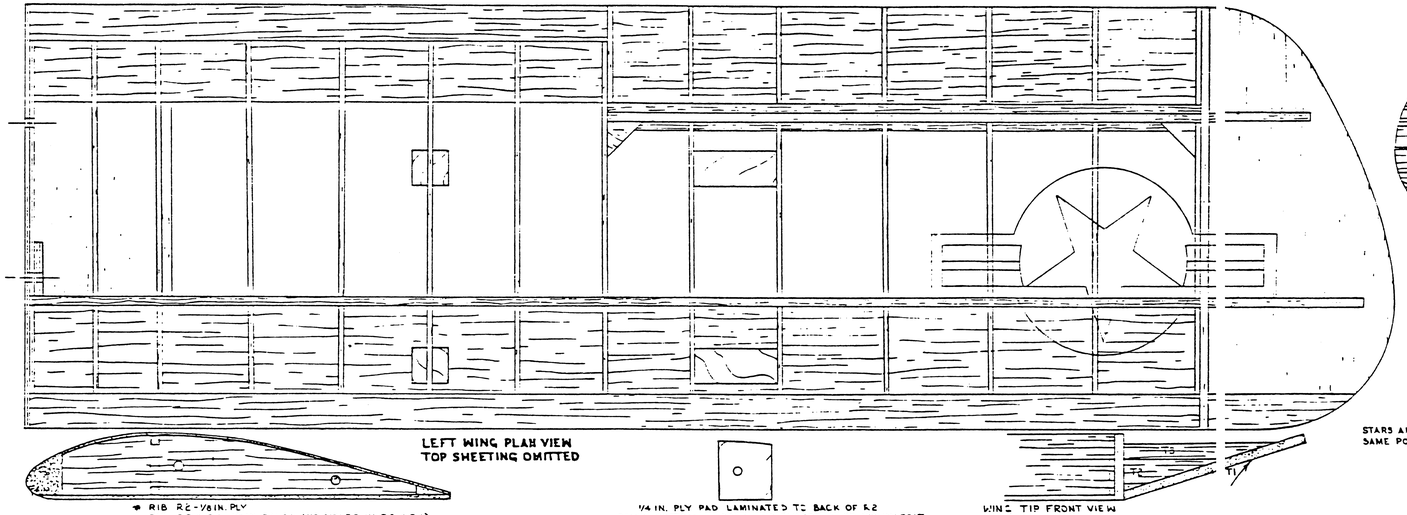
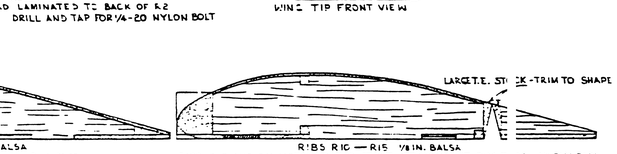

FUSELAGE TOP VIEW
BALSA AND PLYWOOD FIREWALL EXTENSION NECESARY FOR .60 SIZE ENGINES. MOUNT ENGINE ON METAL ENGINE MOUNT.
3/4 IN BALSA TRIANGULAR STOCK REINFORCES JOINTS OF A & B TO FUSELAGE SIDES.
SHADED CROSSMEMBER IS DOUBLE THICKNESS
DORSAL FIN EXTENSION OVER BASIC FRAMEWORK
1/4 IN. BALSA SH.
1/4 IN. SH BALSA
STRINGER
QUALITY FIBERGLASS REPLACEMENT COWLS AVAILABLE FROM: FIBERGLASS MASTER RTE. 1 BOX 530 GOODVIEW VA. 24095
WING CENTER SECTION TOP VIEW
WING CENTER SECTION MATERIALS:
RIBS - 1/4 IN. HARDWOOD.
RIB DOUBLERS - 1/4 IN BALSA SH.
BULKHEADS - 1/8 IN. LITE PLY.
FRAMEWORK - 1/4 IN. SQ BALSA.
1/4 IN. DOWEL LOCATING PIN.
1/8 X 1/4 IN. LITE PLY STRIP
WINDSHIELD AND WINDOWS ARE .030 IN. CLEAR PLASTIC
WOODEN COWL MATERIALS:
SIDES - 3/4 IN. BALSA SH.
FACE - 3/4 IN. & 3/8 IN. LAMINATION.
BOTTOM - 1 IN. BALSA SH.
BOTTOM/SIDE JOINER IS 3/4 IN TRIANGULAR BALSA.
TOP - 1/8 IN. BALSA SH.
FORMERS - 1/8 IN. LITE PLY.
1/4-20 NYLON BOLT (1 EACH SIDE)
5/16 HOLE
1/4 IN. SQ. BALSA CAPSTRIP OVER BASIC FRAMEWORK
ENTIRE T/ IL GROUP IS HARD 1/4 IN. BALSA
BRACE WIRE
BALANCE HERE
CHAMP REAR WINDOW OUTLINE
HARDWOOD
BALSA
OPTIONAL FIBERGLASS COWL
HOOD 1/8 IN. BALSA SH.
U.S. ARMY L16 B SERIAL NO. 48 500 CREW WEIGHT: 450 LBS.
1/4 IN. BALSA SH.
HATCH
1/8 IN. BALSA STRIPS - SAME POSITION AS IN HATCH
PROPELLER - 14-4, 14-5, 14-6, 14-8
1 INCH BALSA SHEET
3 1/2 IN. WHEEL
FUSELAGE SIDE VIEW
FUSELAGE MATERIALS:
INDICATES GRAIN DIRECTION
INNER SIDE FLUSH WITH FRAME
OUTER SIDE EVEN WITH STRINGER
ALL FRAMEWORK IS 1/4 INCH BALSA EXCEPT IN CABIN AREA WHERE IT IS 1/4 INCH HARDWOOD.
ALL GUSSETS ARE HARD 1/8 INCH BALSA AND ARE MOUNTED FLUSH WITH FRAME.
BULKHEADS ARE 1/8 IN. LITE PLY.
H.E
1/8 IN. LITE PLY STRIP
1/4 IN. BALSA SH.
HOOD - 1/8 IN. BALSA SH.
OUTER SIDE - 1/4 IN. BALSA SH.
INNER SIDE - 1/4 IN. BALSA SH.
CHIN - 1 IN. BALSA SH.
A. 1/4 IN. PLYWOOD
C. 1/8 IN. LITE PLY
HATCH MAY BE BUILT UP AS SHOWN OR MADE OF SINGLE PIECE OF 3/4 IN. BALSA SH.
CB
CA
B. 1/8 IN. LITE PLY
1/16 IN. PLY TRIM TAB
1 IN. HARDWOOD FRAME UPRIGHTS
D. 1/8 IN. LITE PLY
OUTER LANDING GEAR - 1/8 IN. HARD ALUMINUM STRIP
INNER GEAR LEG - 3/16 IN. STEEL WIRE
1/8 PLY
CA. 1/8 IN. LITE PLY
CB. 1/8 IN. LITE PLY
E. 1/8 IN. LITE PLY
F. 1/8 IN. LITE PLY
G. 1/8 IN. LITE PLY
H. 1/8 IN. LITE PLY
1/5TH SCALE
AERO PLANS 'N PARTS
U.S.A.A.F. AERONCA L16-B/CHAMP
WINGSPAN 84 INCHES
WING AREA 1000 SQ. IN.
WING LOADING 20 TO 24 OZ./SQ.FT.
WEIGHT 9 TO 10 LBS.
ENGINE: 2 CYCLE 60-75, 4 CYCLE 75-90
P.O. BOX 930 OLEAN N.Y. 14760



LEFT WING PLAN VIEW
TOP SHEETING OMITTED

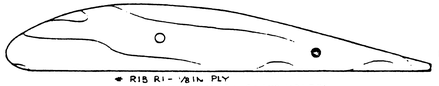
* RIB R2 - 1/8 IN. PLY
RIB R3 & R4 - 1/8 IN. BALSA (NO HOLES IN R3 & R4)



1/4 IN. PLY PAD LAMINATED TO BACK OF R2
BEVEL BOTTOM DRILL AND TAP FOR 1/4-20 NYLON BOLT

WING TIP FRONT VIEW

R1 - R2 & PLY PAD ALL TILTED IN 2 1/2 DEGREES FOR DIHEDRAL



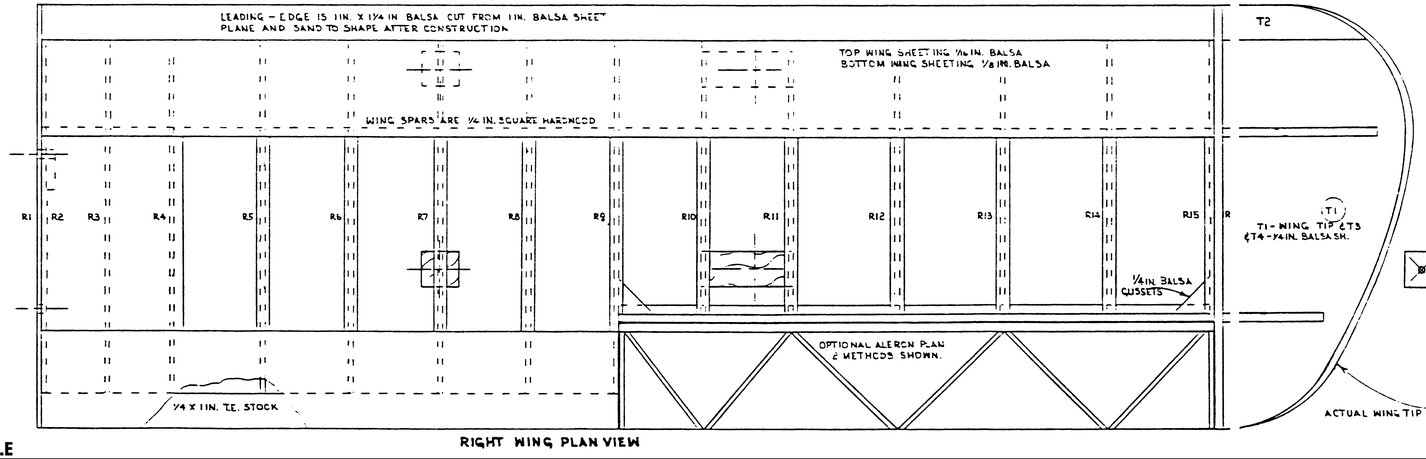
* RIB R1 - 1/8 IN. PLY
RIB R16 - 1/4 IN. BALSA (NO HOLES)

RIBS R5 — R9 1/8 IN. BALSA
RIB R7 NOTCHED FOR PLY JURY STRUT PADS - 1/8 PLY PADS.
WEB BETWEEN SPARS WITH 1/4 IN. BALSA SH FROM R2 TO R9

LARGE T.E. STICK - TRIM TO SHAPE

RIBS R16 — R15 1/8 IN. BALSA
RIBS R10 AND R11 NOTCHED FOR STRUT ATTACHMENT PLY PADS - 1/8 PLY PADS.
ALL STRUT ATTACHMENT PLY PADS SHOULD BE GUSSETED TO RIBS WITH 1/2 IN. TRIANGULAR BALSA.

* RIBS R1 AND R2 HAVE 2 HOLES DRILLED AFTER CONSTRUCTION.
FRONT HOLE IS 3/16 IN. IS TAPPED FOR A 1/4-20 NYLON BOLT - (R1 - R2 - 1/4 PLY PAD ALL TAPPED)



LEADING - EDGE IS 1 IN. X 1 1/4 IN BALSA CUT FROM 1 IN. BALSA SHEET
PLANE AND SAND TO SHAPE AFTER CONSTRUCTION

TOP WING SHEETING 1/16 IN. BALSA
BOTTOM WING SHEETING 1/8 IN. BALSA

WING SPARS ARE 1/4 IN. SQUARE HARDWOOD

T1 - WING TIP RIBS & T4 - 1/4 IN. BALSA SH.

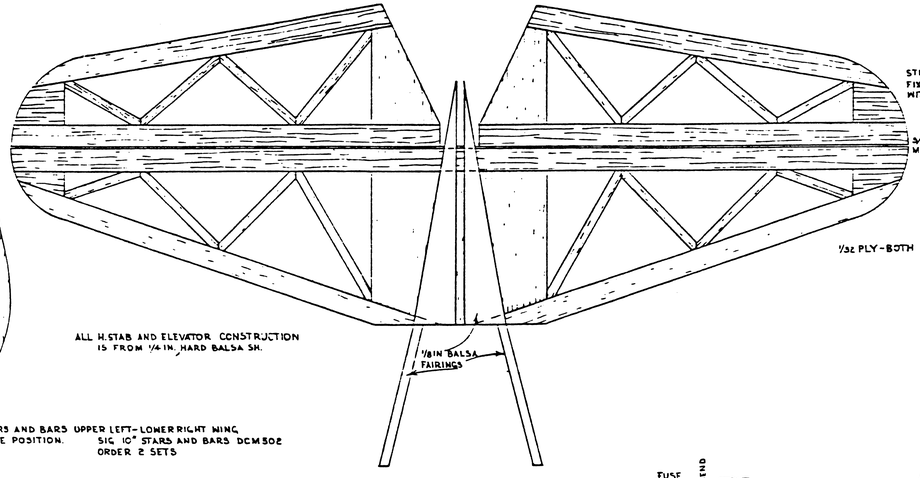
1/4 IN. BALSA GUSSETS

OPTIONAL AILERON PLAN
2 METHODS SHOWN.

1/4 X 1 IN. T.E. STOCK

ACTUAL WING TIP OUTLINE PATTERN

RIGHT WING PLAN VIEW



ALL H.STAB AND ELEVATOR CONSTRUCTION IS FROM 1/4 IN. HARD BALSA SH.

1/8 IN BALSA FAIRINGS

STRUT ATTACHES TO FUSELAGE FIXTURE WITH STEEL PIN HELD WITH WHEEL COLLAR. (1/16 IN.)

3/32 IN. ID METAL TUBES

1/32 PLY - BOTH SIDES

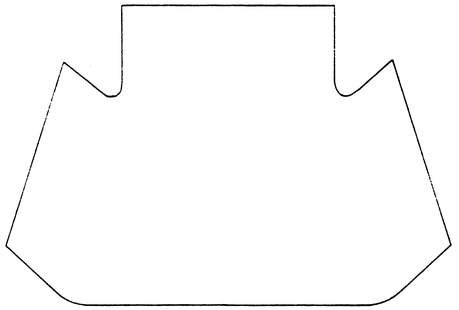
STARS AND BARS UPPER LEFT - LOWER RIGHT WING SAME POSITION. SIG 10" STARS AND BARS DCM502 ORDER 2 SETS

FUSE WING BEND STRUT

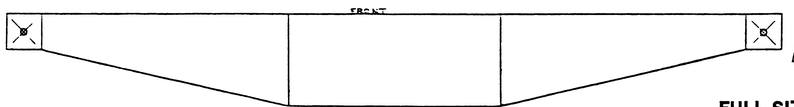
STRUT ATTACHMENT FIXTURES ARE DU-BRO # 202 STEEL STRAPS BEND TO ANGLE REQUIRED (90° FOR FUSELAGE) AND ATTACH TO FUSELAGE AND WING WITH NUTS & BOLTS (4-40)

WING STRUTS ARE MADE FROM 1/4 IN X 3/4 IN HARDWOOD WING STRUTS ARE DRAWN WITH EXTRA LENGTH. FIT STRUTS TO AIRCRAFT AND TRIM TO CORRECT LENGTH.

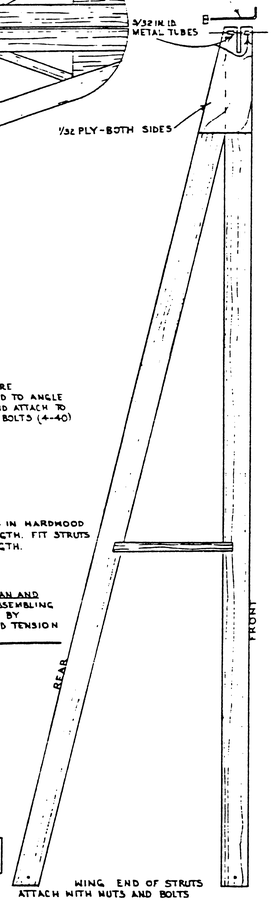
* **NOTE:** ABOUT 1/2" WASHOUT IN WING CAN AND SHOULD BE RIGGED INTO WING WHEN ASSEMBLING FUSELAGE, WING AND STRUTS TOGETHER BY HAVING COMPRESSION ON REAR STRUT AND TENSION ON FRONT STRUT. (REAR STRUT LONGER)



WINDSHIELD PATTERN
MAKE FROM .050 IN. CLEAR PLASTIC (SIG)



OUTER LANDING GEAR 1/8 TO 3/16 ALUMINUM SHEET DRAWN HERE FLAT



REAR
FRONT

WING END OF STRUTS ATTACH WITH NUTS AND BOLTS

FULL-SIZE PLANS ARE AVAILABLE FROM:
AERO PLANS 'N PARTS
P.O. BOX 939
OLEAN, NY 14760

H.E