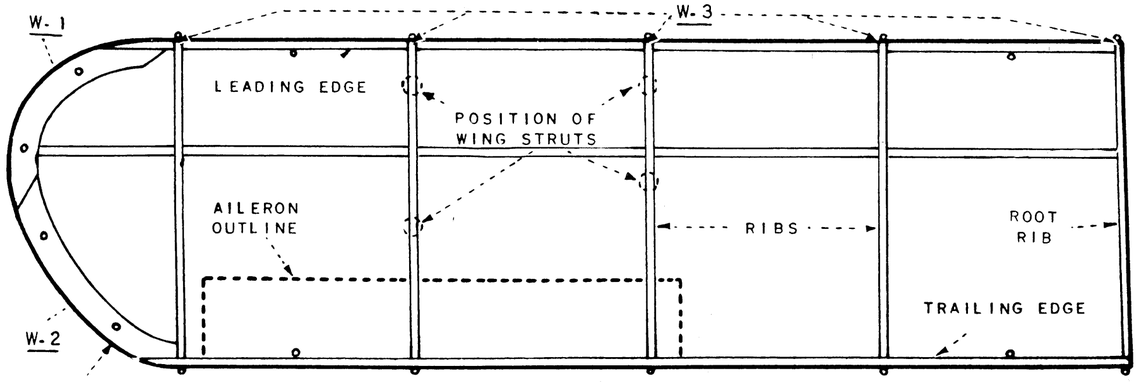
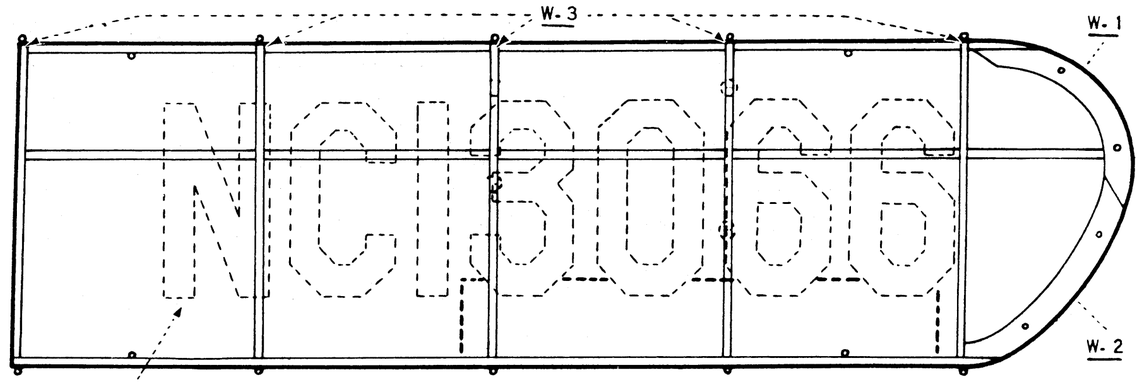


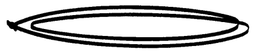
WING TIP- CUT FROM BALSA PRINT STOCK

LEFT WING LAYOUT



CUT LICENSE NUMERALS FROM BLACK TISSUE IF AVAILABLE

RIGHT WING LAYOUT



ABOUT 30" OF 1/32" X 1/8" RUBBER THREAD, TIED AND LOOPED AS IS SHOWN, IS REQUIRED TO FLY THIS MODEL. RUBBER THREAD IS AVAILABLE AT YOUR LOCAL HOBBY DEALER.

INSTRUMENT PANEL - CEMENT TO FORMER F-5

LEADING EDGE OF RIGHT WING

WING STRUTS

ADD WINDSHIELD STRUTS AFTER WINGS HAVE BEEN ATTACHED TO THE FUSELAGE

CROSS MEMBERS - SEE FUSELAGE PERSPECTIVE

F-7 F-4 F-5 F-1

F-7 STRINGERS

AIR SCOOP (STIFF PAPER)

LANDING GEAR CROSS BRACES NOT SHOWN

USE CELLOPHANE FOR WINDSHIELD AND WINDOWS

TOP VIEW

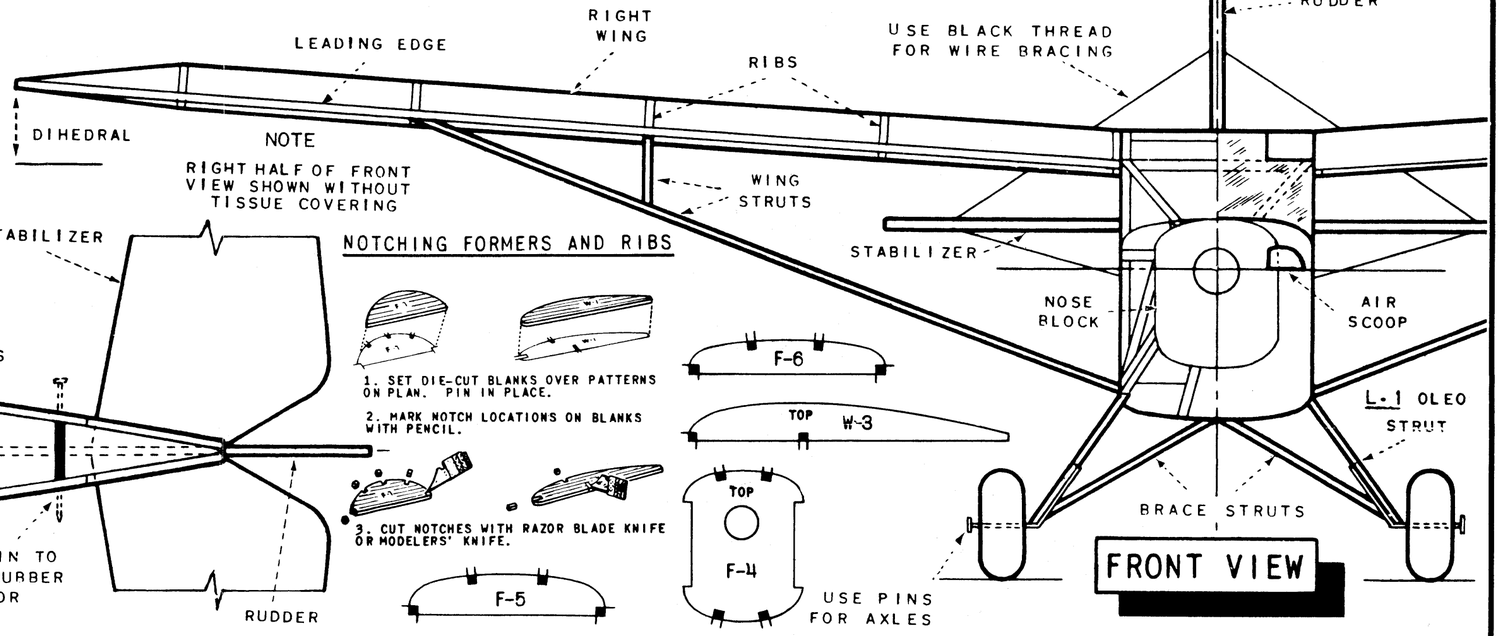
SEE BACK OF PLAN FOR COMPLETE BUILDING AND COVERING INSTRUCTIONS

STABILIZER

FUSELAGE SIDE FRAMES

USE PIN TO HOLD RUBBER MOTOR

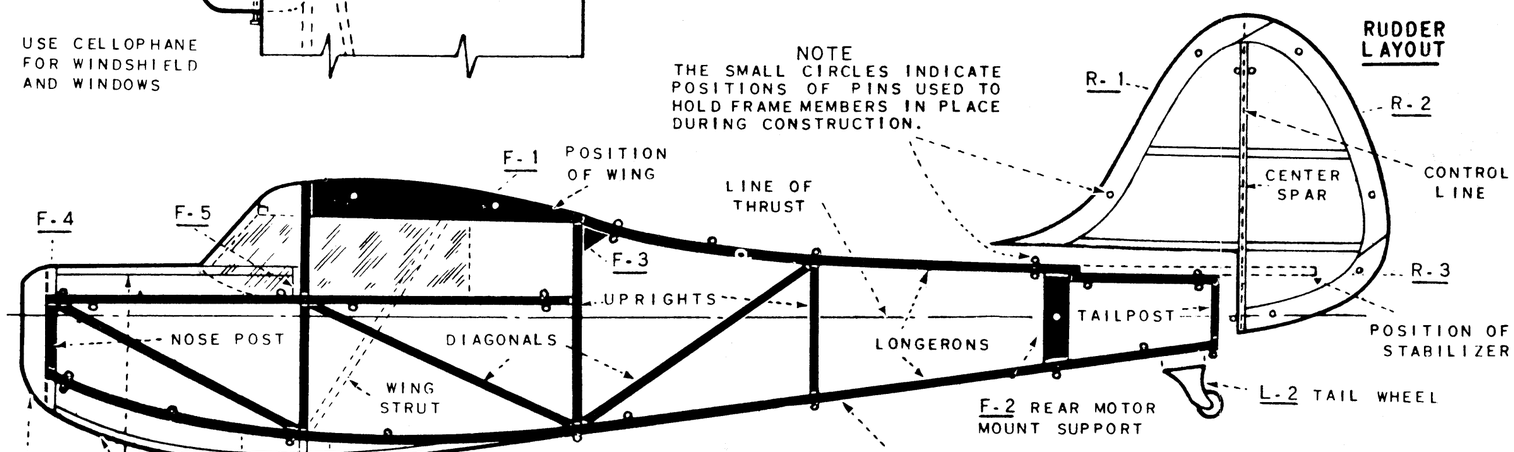
RUDDER



FRONT VIEW

NOTCHING FORMERS AND RIBS

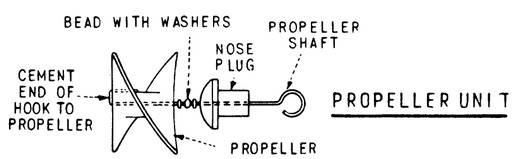
NOTE
THE SMALL CIRCLES INDICATE POSITIONS OF PINS USED TO HOLD FRAME MEMBERS IN PLACE DURING CONSTRUCTION.



FUSELAGE SIDE FRAME LAYOUT

EXPLODED SIDE VIEW

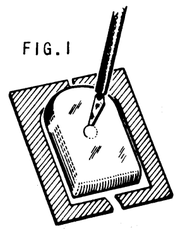
RUDDER LAYOUT



PROPELLER UNIT

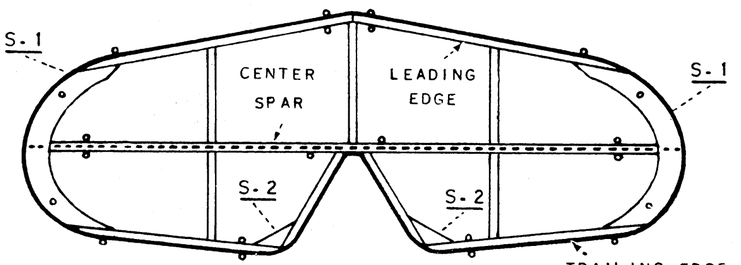
CEMENT TO FRONT OF F-7

FIG. 1

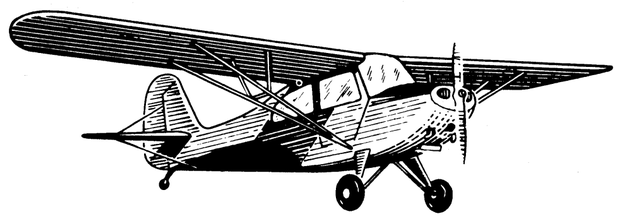


PLASTIC NOSE COWL

CUT PLASTIC NOSE BLOCK FREE FROM THE FORMED SHEET WITH THE POINT OF A KNIFE OR RAZOR BLADE (FIG. 1). CUT THE NOSE PLUG HOLE AS SHOWN.



STABILIZER LAYOUT



GUILLOW'S

AERONCA CHAMPION

Kit 50-8 Wing Span — 20" Length — 11¼"

Two-place tandem light plane

PAUL K. GUILLOW • WAKEFIELD, MASS.

Kit 50-8

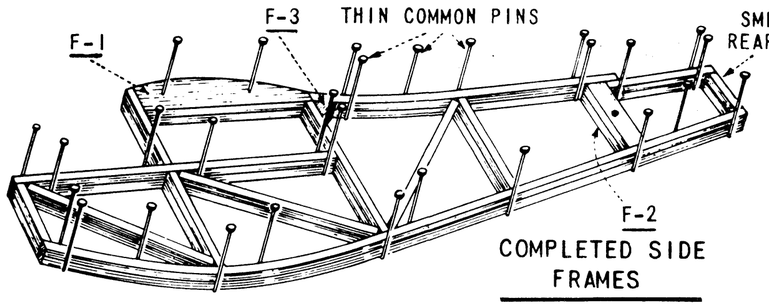
AERONCA CHAMPION

★ STEP BY STEP INSTRUCTIONS ★

STUDY PLAN AND INSTRUCTIONS BEFORE STARTING WORK. WHEN READY FOR WORK, PIN PLAN TO WORKBOARD (SOFT WOOD) AND COVER WITH TRANSPARENT WAX PAPER TO PREVENT BALSA FRAMES FROM STICKING TO PLAN. USE MODEL AIRPLANE CEMENT (NOT FURNISHED) TO FASTEN FRAMES TOGETHER. USE THIN COMMON PINS TO HOLD FRAME MEMBERS IN PLACE DURING CONSTRUCTION. WORK CAREFULLY AND ACCURATELY FOR BEST RESULTS.

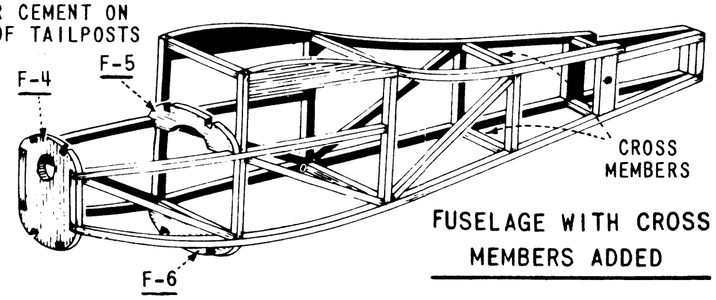
A. FUSELAGE CONSTRUCTION

MATERIAL REQUIREMENTS: 1/20" SQUARE BALSA STRIPS FOR LONGERONS, UPRIGHTS AND DIAGONALS - PIECES F-1 TO F-6 FROM SHEET BALSA - BALSA NOSE BLOCK.



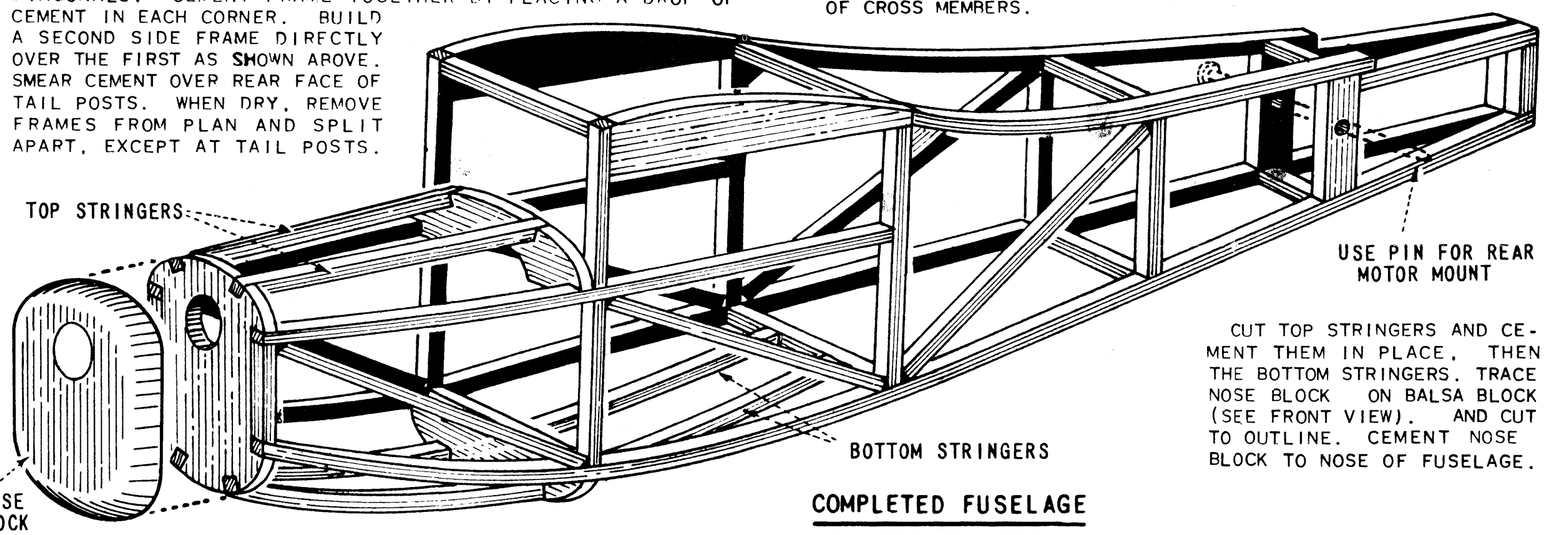
COMPLETED SIDE FRAMES

BUILD A SINGLE SIDE FRAME OVER THE SIDE FRAME LAYOUT. CUT OUT PIECES F-1 AND F-2 AND PIN TO PLAN. CUT LONGERONS AND PIN IN PLACE. CUT UPRIGHTS AND FIT THEM IN PLACE, THEN THE DIAGONALS. CEMENT FRAME TOGETHER BY PLACING A DROP OF CEMENT IN EACH CORNER. BUILD A SECOND SIDE FRAME DIRECTLY OVER THE FIRST AS SHOWN ABOVE. SMEAR CEMENT OVER REAR FACE OF TAIL POSTS. WHEN DRY, REMOVE FRAMES FROM PLAN AND SPLIT APART, EXCEPT AT TAIL POSTS.



FUSELAGE WITH CROSS MEMBERS ADDED

CUT OUT FORMERS F-4, F-5 AND F-6. CUT REQUIRED NUMBER OF CROSS MEMBERS. SEE HEAVY BLACK LINES ON TOP VIEW FOR NECESSARY MEASUREMENTS. CEMENT F-4 BETWEEN NOSE OF SIDE FRAMES. WHEN DRY, ADD FORMERS F-5 AND F-6, THEN EACH SET OF CROSS MEMBERS.



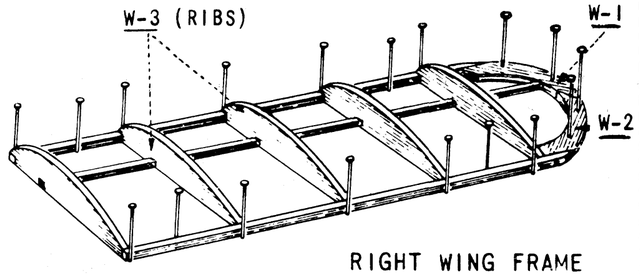
COMPLETED FUSELAGE

CUT TOP STRINGERS AND CEMENT THEM IN PLACE. THEN THE BOTTOM STRINGERS. TRACE NOSE BLOCK ON BALSA BLOCK (SEE FRONT VIEW). AND CUT TO OUTLINE. CEMENT NOSE BLOCK TO NOSE OF FUSELAGE.

B. WING CONSTRUCTION

BUILD WING FRAMES OVER RIGHT AND LEFT LAYOUTS.

MATERIAL REQUIRED: 1/20" SQ. BALSA STRIPS FOR SPARS (LEADING AND TRAILING EDGES) - PIECES W-1, W-2 AND W-3 CUT FROM BALSA PRINT.

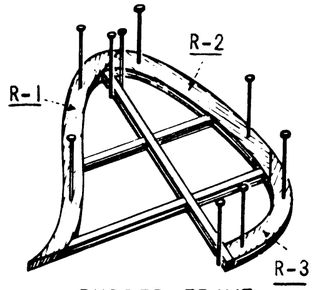


RIGHT WING FRAME

CUT OUT ALL WING PARTS FROM PRINTED BALSA. CEMENT TIP PIECES W-1 AND W-2 TOGETHER AND PIN TO RIGHT WING LAYOUT. CEMENT LEADING, THEN TRAILING EDGE TO WING TIP PIECES. PIN IN PLACE. CEMENT RIBS BETWEEN WING SPARS. BUILD LEFT WING FRAME IN SIMILAR MANNER.

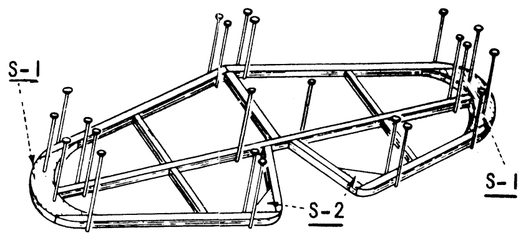
C. RUDDER AND STABILIZER CONSTRUCTION

MATERIAL REQUIRED: 1/20" SQ. BALSA STRIPS. PIECES R-1, R-2 AND R-3, PIECES S-1, S-2 AND S-3 FROM BALSA PRINT.



RUDDER FRAME

CUT PIECES R-1 TO R-3 FROM BALSA PRINT, CEMENT TOGETHER, AND PIN TO RUDDER LAYOUT. ADD CENTER SPAR AND ROOT RIB.

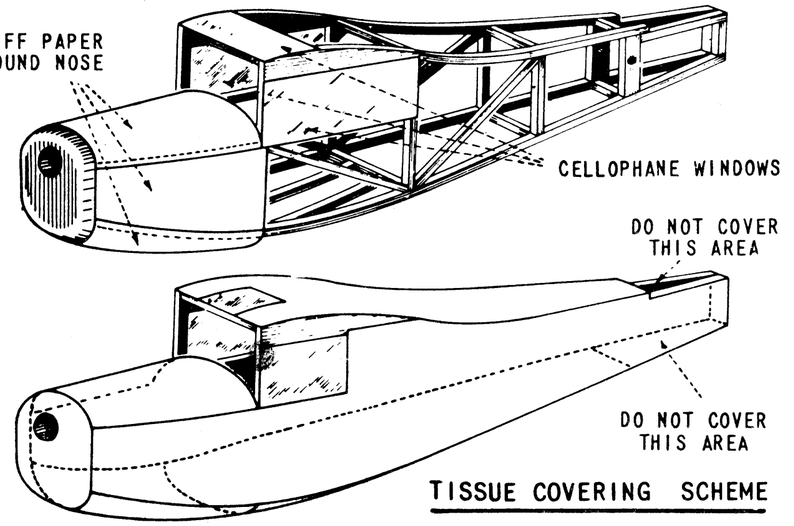


STABILIZER FRAME

CUT PIECES S-1 FROM BALSA PRINT AND PIN TO STABILIZER LAYOUT. ADD CENTER SPAR, THEN LEADING AND TRAILING EDGES AND FINALLY THE ROOT RIBS. CUT S-2 FROM BALSA PRINT AND CEMENT IN PLACE.

D. COVERING THE FRAMES

MATERIAL REQUIREMENTS: MODEL AIRPLANE TISSUE - STIFF PAPER (WHITE TYPEWRITER PAPER) - CELLOPHANE. THE LATTER ITEMS NOT FURNISHED.



TISSUE COVERING SCHEME

COVER NOSE OF FUSELAGE WITH STIFF PAPER. ADD CELLOPHANE WINDOWS. COVER SIDES OF FUSELAGE WITH TISSUE, THEN THE TOP AND BOTTOM. NOTE: CUT TISSUE PIECES 1/4" LARGER THAN NEEDED. APPLY CEMENT ALONG TOP OF BALSA FRAME MEMBERS THAT COME IN CONTACT WITH EDGES OF THE TISSUE. DO NOT PUT CEMENT ON THE TISSUE OR INNER BALSA FRAME MEMBERS. TRIM TISSUE TO SIZE AFTER CEMENTING IT TO THE FRAME.

COVER ONLY THE TOP SIDE OF THE WING AND STABILIZER FRAMES. THE RUDDER IS COVERED ON BOTH SIDES.

E. ASSEMBLING THE MODEL

WHEN ASSEMBLING THE MODEL, CHECK WITH PLAN TO SEE THAT THE PARTS ARE IN THE CORRECT POSITION. DO THIS BEFORE THE CEMENT HARDENS. CEMENT STABILIZER TO TAIL OF FUSELAGE. CEMENT RUDDER TO TOP OF STABILIZER AND TO TAIL POSTS. CEMENT WINGS TO RIB ROOTS F-1 OF FUSELAGE. RAISE WING TIPS TO DIHEDRAL GIVEN ON FRONT VIEW. ADD WING STRUTS.

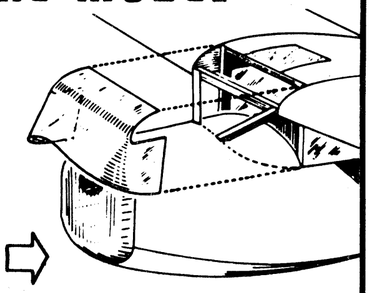
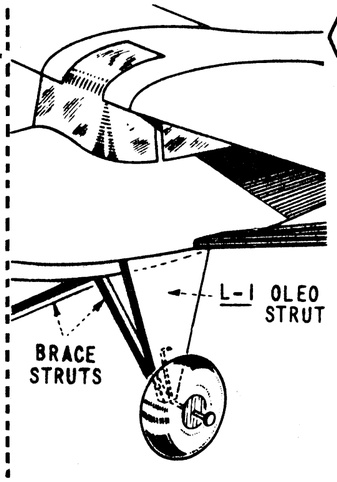


FIG.2 FIG.1

ADD SECTION OF LEADING EDGE BETWEEN THE WINGS, THEN THE WINDSHIELD STRUTS. CEMENT WINDSHIELD IN PLACE (FIG.1). ADD SMALL PIECES OF TISSUE ON EACH SIDE OF TOP WINDOW (FIG.1). ASSEMBLE LANDING GEAR AND ATTACH TO FUSELAGE. ADD BRACE STRUTS (FIG.2). ASSEMBLE PROPELLER UNIT - INSTALL RUBBER MOTOR AS SHOWN (FIG.3). USE LONG WIRE TO PULL RUBBER MOTOR THRU FUSELAGE. DO NOT CEMENT NOSE PLUG IN NOSE BLOCK.



CUT OUT PIECES F-7 AND CEMENT THEM TO EACH SIDE OF NOSE BLOCK. COVER WITH STIFF PAPER TO FORM AIR SCOOPS. CUT OUT TAIL WHEEL L-2 AND CEMENT TO BOTTOM OF TAIL. ADD THREAD BRACES & NUMERALS.

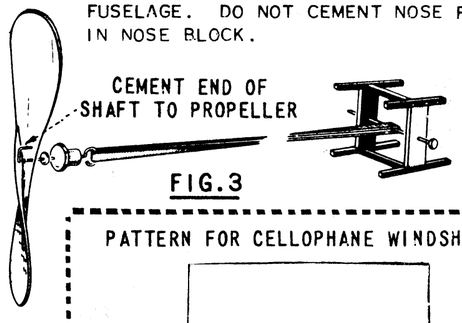


FIG.3

PATTERN FOR CELLOPHANE WINDSHIELD