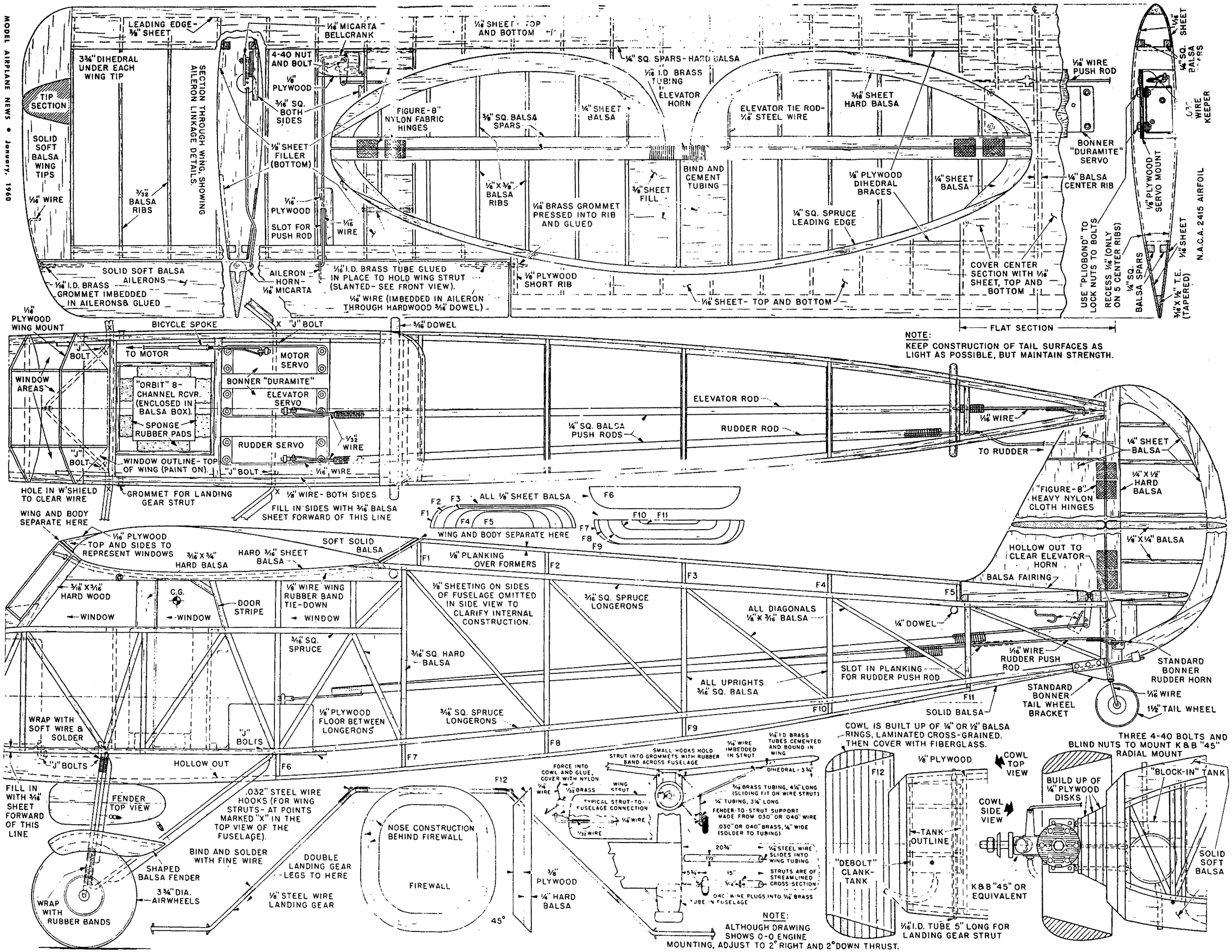
LEADING EDGE- 3/8" SHEET
3¾" DIHEDRAL UNDER EACH WING TIP
TIP SECTION
SOLID SOFT BALSA WING TIPS
1/16" WIRE
3/32" BALSA RIBS
SECTION THROUGH WING, SHOWING AILERON LINKAGE DETAILS.
1/16" MICARTA BELLCRANK
4-40 NUT AND BOLT
1/8" PLYWOOD
3/16" SQ. BOTH SIDES
1/8" SHEET FILLER (BOTTOM)
1/16" PLYWOOD
SLOT FOR PUSH ROD
1/16" WIRE
1/16" SHEET - TOP AND BOTTOM
1/4" SQ. SPARS - HARD BALSA
1/16" I.D. BRASS TUBING
ELEVATOR HORN
FIGURE-8" NYLON FABRIC HINGES
3/8" SQ. BALSA SPARS
1/4" SHEET BALSA
ELEVATOR TIE ROD- 1/16" STEEL WIRE
3/16" SHEET HARD BALSA
1/16" WIRE PUSH ROD
BONNER "DURAMITE" SERVO
1/8" X 3/8" BALSA RIBS
1/16" BRASS GROMMET PRESSED INTO RIB AND GLUED
3/8" SHEET FILL
BIND AND CEMENT TUBING
1/8" PLYWOOD DIHEDRAL BRACES
1/4" SHEET BALSA
1/4" BALSA CENTER RIB
1/4" SQ. SPRUCE LEADING EDGE
1/8" PLYWOOD SERVO MOUNT
SOLID SOFT BALSA AILERONS
1/16" I.D. BRASS GROMMET IMBEDDED IN AILERONS & GLUED
AILERON HORN- 1/16" MICARTA
1/16" I.D. BRASS TUBE GLUED IN PLACE TO HOLD WING STRUT (SLANTED- SEE FRONT VIEW).
1/16" WIRE (IMBEDDED IN AILERON THROUGH HARDWOOD 3/16" DOWEL)
1/8" PLYWOOD SHORT RIB
1/16" SHEET- TOP AND BOTTOM
COVER CENTER SECTION WITH 1/16" SHEET, TOP AND BOTTOM
USE "PLIOBOND" TO LOCK NUTS TO BOLTS
RECESS 1/16" (ONLY ON 5 CENTER RIBS)
1/4" SQ. BALSA SPARS
1/16" SHEET
3/16" X 1/2" T.E. (TAPERED)
N.A.C.A. 2415 AIRFOIL
FLAT SECTION
NOTE: KEEP CONSTRUCTION OF TAIL SURFACES AS LIGHT AS POSSIBLE, BUT MAINTAIN STRENGTH.
1/16" PLYWOOD WING MOUNT
BICYCLE SPOKE
"J" BOLT
5/16" DOWEL
TO MOTOR
MOTOR SERVO
BONNER "DURAMITE"
ELEVATOR SERVO
WINDOW AREAS
"ORBIT" 8-CHANNEL RCVR. (ENCLOSED IN BALSA BOX).
SPONGE RUBBER PADS
RUDDER SERVO
1/32" WIRE
WINDOW OUTLINE- TOP OF WING (PAINT ON).
1/16" WIRE
ELEVATOR ROD
RUDDER ROD
1/4" SQ. BALSA PUSH RODS
TO RUDDER
1/4" SHEET BALSA
1/4" X 1/2" HARD BALSA
"FIGURE-8" HEAVY NYLON CLOTH HINGES
HOLE IN W'SHIELD TO CLEAR WIRE
GROMMET FOR LANDING GEAR STRUT
1/8" WIRE- BOTH SIDES
FILL IN SIDES WITH 3/16" BALSA SHEET FORWARD OF THIS LINE
WING AND BODY SEPARATE HERE
ALL 1/8" SHEET BALSA
F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11
1/16" PLYWOOD TOP AND SIDES TO REPRESENT WINDOWS
3/16" X 3/4" HARD BALSA
HARD 3/16" SHEET BALSA
SOFT SOLID BALSA
1/8" PLANKING OVER FORMERS
1/8" X 1/4" BALSA
HOLLOW OUT TO CLEAR ELEVATOR HORN
BALSA FAIRING
3/16" X 3/16" HARD WOOD
C.G.
WINDOW
DOOR STRIPE
1/8" WIRE WING RUBBER BAND TIE-DOWN
1/8" SHEETING ON SIDES OF FUSELAGE OMITTED IN SIDE VIEW TO CLARIFY INTERNAL CONSTRUCTION.
3/16" SQ. SPRUCE LONGERONS
ALL DIAGONALS 1/8" X 3/16" BALSA
1/4" DOWEL
3/16" SQ. SPRUCE
3/16" SQ. HARD BALSA
ALL UPRIGHTS 3/16" SQ. BALSA
SLOT IN PLANKING FOR RUDDER PUSH ROD
1/16" WIRE RUDDER PUSH ROD
STANDARD BONNER RUDDER HORN
STANDARD BONNER TAIL WHEEL BRACKET
1/16" WIRE
1½" TAIL WHEEL
SOLID BALSA
WRAP WITH SOFT WIRE & SOLDER
1/8" PLYWOOD FLOOR BETWEEN LONGERONS
3/16" SQ. SPRUCE LONGERONS
"J" BOLTS
HOLLOW OUT
FILL IN WITH 3/16" SHEET FORWARD OF THIS LINE
FENDER TOP VIEW
.032" STEEL WIRE HOOKS (FOR WING STRUTS- AT POINTS MARKED "X" IN THE TOP VIEW OF THE FUSELAGE).
BIND AND SOLDER WITH FINE WIRE
SHAPED BALSA FENDER
3¾" DIA. AIRWHEELS
WRAP WITH RUBBER BANDS
DOUBLE LANDING GEAR LEGS TO HERE
1/8" STEEL WIRE LANDING GEAR
NOSE CONSTRUCTION BEHIND FIREWALL
FIREWALL
3/8" PLYWOOD
1/4" HARD BALSA
45°
F12
FORCE INTO COWL AND GLUE, COVER WITH NYLON
1/16" WIRE
1/32" BRASS
WING STRUT
TYPICAL STRUT-TO-FUSELAGE CONNECTION
1/16" WIRE
1/32" WIRE
SMALL HOOKS HOLD STRUT INTO GROMMETS WITH RUBBER BAND ACROSS FUSELAGE
1/16" WIRE IMBEDDED IN STRUT
1/16" I.D. BRASS TUBES CEMENTED AND BOUND IN WING
DIHEDRAL - 3¾"
3/16" BRASS TUBING, 4¼" LONG (SLIDING FIT ON WIRE STRUT)
1/4" TUBING, 3¼" LONG
FENDER-TO-STRUT SUPPORT MADE FROM .030" OR .040" WIRE
.030" OR .040" BRASS, 1/4" WIDE (SOLDER TO TUBING)
20¾"
1/16" STEEL WIRE SLIDES INTO WING TUBING
5¾"
15"
STRUTS ARE OF STREAMLINED CROSS-SECTION
.040" WIRE PLUGS INTO 1/16" BRASS TUBE IN FUSELAGE
NOTE: ALTHOUGH DRAWING SHOWS 0-0 ENGINE MOUNTING, ADJUST TO 2° RIGHT AND 2° DOWN THRUST.
COWL IS BUILT UP OF 1/4" OR 1/2" BALSA RINGS, LAMINATED CROSS-GRAINED. THEN COVER WITH FIBERGLASS.
1/8" PLYWOOD
COWL TOP VIEW
COWL SIDE VIEW
TANK OUTLINE
"DEBOLT" CLANK-TANK
K&B "45" OR EQUIVALENT
1/16" I.D. TUBE 5" LONG FOR LANDING GEAR STRUT
THREE 4-40 BOLTS AND BLIND NUTS TO MOUNT K&B "45" RADIAL MOUNT
BUILD UP OF 1/4" PLYWOOD DISKS
"BLOCK-IN" TANK
SOLID SOFT BALSA