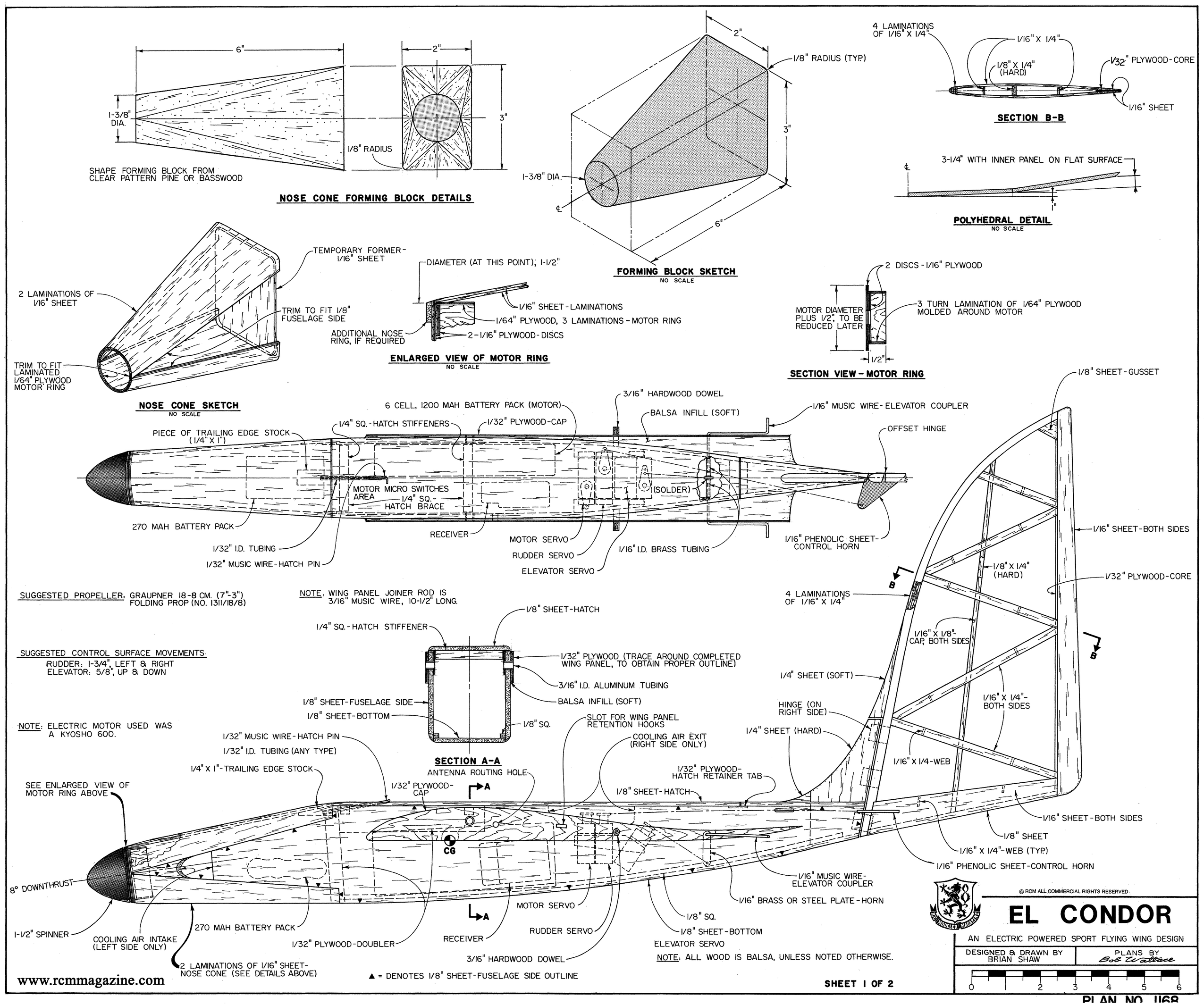
6"
2"
1-3/8" DIA.
3"
1/8" RADIUS
SHAPE FORMING BLOCK FROM CLEAR PATTERN PINE OR BASSWOOD
NOSE CONE FORMING BLOCK DETAILS
2"
1/8" RADIUS (TYP.)
3"
1-3/8" DIA.
6"
FORMING BLOCK SKETCH
NO SCALE
4 LAMINATIONS OF 1/16" X 1/4"
1/16" X 1/4"
1/8" X 1/4" (HARD)
1/32" PLYWOOD-CORE
1/16" SHEET
SECTION B-B
3-1/4" WITH INNER PANEL ON FLAT SURFACE
1"
POLYHEDRAL DETAIL
NO SCALE
TEMPORARY FORMER - 1/16" SHEET
2 LAMINATIONS OF 1/16" SHEET
TRIM TO FIT 1/8" FUSELAGE SIDE
TRIM TO FIT LAMINATED 1/64" PLYWOOD MOTOR RING
NOSE CONE SKETCH
NO SCALE
DIAMETER (AT THIS POINT), 1-1/2"
1/16" SHEET-LAMINATIONS
1/64" PLYWOOD, 3 LAMINATIONS - MOTOR RING
ADDITIONAL NOSE RING, IF REQUIRED
2-1/16" PLYWOOD-DISCS
ENLARGED VIEW OF MOTOR RING
NO SCALE
2 DISCS - 1/16" PLYWOOD
MOTOR DIAMETER PLUS 1/2", TO BE REDUCED LATER
3 TURN LAMINATION OF 1/64" PLYWOOD MOLDED AROUND MOTOR
1/2"
SECTION VIEW - MOTOR RING
1/8" SHEET-GUSSET
3/16" HARDWOOD DOWEL
6 CELL, 1200 MAH BATTERY PACK (MOTOR)
BALSA INFILL (SOFT)
1/16" MUSIC WIRE-ELEVATOR COUPLER
1/4" SQ.-HATCH STIFFENERS
1/32" PLYWOOD-CAP
PIECE OF TRAILING EDGE STOCK (1/4" X 1")
OFFSET HINGE
MOTOR MICRO SWITCHES AREA
1/4" SQ.-HATCH BRACE
(SOLDER)
270 MAH BATTERY PACK
RECEIVER
MOTOR SERVO
RUDDER SERVO
ELEVATOR SERVO
1/16" I.D. BRASS TUBING
1/32" I.D. TUBING
1/32" MUSIC WIRE-HATCH PIN
1/16" PHENOLIC SHEET-CONTROL HORN
1/16" SHEET-BOTH SIDES
1/8" X 1/4" (HARD)
1/32" PLYWOOD-CORE
4 LAMINATIONS OF 1/16" X 1/4"
1/16" X 1/8"-CAP, BOTH SIDES
1/4" SHEET (SOFT)
1/16" X 1/4"-BOTH SIDES
HINGE (ON RIGHT SIDE)
1/4" SHEET (HARD)
1/16" X 1/4-WEB
1/16" SHEET-BOTH SIDES
1/8" SHEET
1/16" X 1/4"-WEB (TYP.)
1/16" PHENOLIC SHEET-CONTROL HORN
1/16" MUSIC WIRE-ELEVATOR COUPLER
1/16" BRASS OR STEEL PLATE-HORN
1/8" SQ.
1/8" SHEET-BOTTOM
ELEVATOR SERVO
MOTOR SERVO
RUDDER SERVO
RECEIVER
3/16" HARDWOOD DOWEL
SUGGESTED PROPELLER: GRAUPNER 18-8 CM. (7"-3") FOLDING PROP (NO. 1311/18/8)
NOTE: WING PANEL JOINER ROD IS 3/16" MUSIC WIRE, 10-1/2" LONG.
SUGGESTED CONTROL SURFACE MOVEMENTS:
RUDDER: 1-3/4", LEFT & RIGHT
ELEVATOR: 5/8", UP & DOWN
NOTE: ELECTRIC MOTOR USED WAS A KYOSHO 600.
1/8" SHEET-HATCH
1/4" SQ.-HATCH STIFFENER
1/32" PLYWOOD (TRACE AROUND COMPLETED WING PANEL, TO OBTAIN PROPER OUTLINE)
3/16" I.D. ALUMINUM TUBING
BALSA INFILL (SOFT)
1/8" SHEET-FUSELAGE SIDE
1/8" SHEET-BOTTOM
1/8" SQ.
SECTION A-A
SLOT FOR WING PANEL RETENTION HOOKS
COOLING AIR EXIT (RIGHT SIDE ONLY)
1/32" MUSIC WIRE-HATCH PIN
1/32" I.D. TUBING (ANY TYPE)
1/4" X 1"-TRAILING EDGE STOCK
ANTENNA ROUTING HOLE
1/32" PLYWOOD-HATCH RETAINER TAB
1/32" PLYWOOD-CAP
1/8" SHEET-HATCH
SEE ENLARGED VIEW OF MOTOR RING ABOVE
CG
8° DOWNTHRUST
1-1/2" SPINNER
COOLING AIR INTAKE (LEFT SIDE ONLY)
270 MAH BATTERY PACK
1/32" PLYWOOD-DOUBLER
2 LAMINATIONS OF 1/16" SHEET-NOSE CONE (SEE DETAILS ABOVE)
▲ = DENOTES 1/8" SHEET-FUSELAGE SIDE OUTLINE
NOTE: ALL WOOD IS BALSA, UNLESS NOTED OTHERWISE.
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EL CONDOR
AN ELECTRIC POWERED SPORT FLYING WING DESIGN
DESIGNED & DRAWN BY BRIAN SHAW
PLANS BY Bob Wallace
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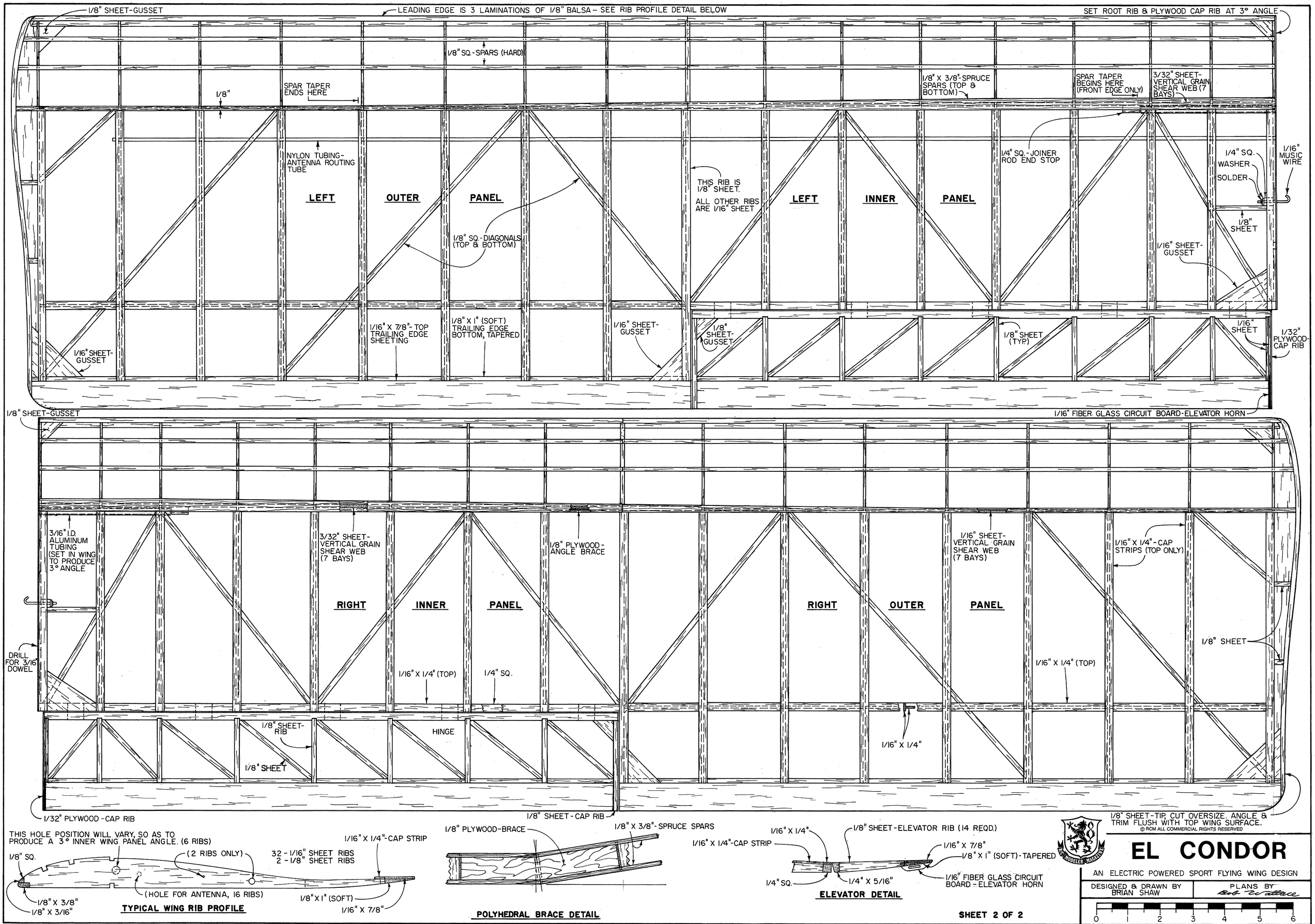
SHEET 1 OF 2
PLAN NO. 1168


1/8" SHEET-GUSSET
LEADING EDGE IS 3 LAMINATIONS OF 1/8" BALSA – SEE RIB PROFILE DETAIL BELOW
SET ROOT RIB & PLYWOOD CAP RIB AT 3° ANGLE
1/8" SQ.-SPARS (HARD)
1/8"
SPAR TAPER ENDS HERE
1/8" X 3/8"-SPRUCE SPARS (TOP & BOTTOM)
SPAR TAPER BEGINS HERE (FRONT EDGE ONLY)
3/32" SHEET-VERTICAL GRAIN SHEAR WEB (7 BAYS)
NYLON TUBING-ANTENNA ROUTING TUBE
LEFT OUTER PANEL
1/8" SQ.-DIAGONALS (TOP & BOTTOM)
THIS RIB IS 1/8" SHEET.
ALL OTHER RIBS ARE 1/16" SHEET
LEFT INNER PANEL
1/4" SQ.-JOINER ROD END STOP
1/4" SQ.
WASHER
SOLDER
1/16" MUSIC WIRE
1/8" SHEET
1/16" SHEET-GUSSET
1/16" SHEET-GUSSET
1/16" X 7/8"-TOP TRAILING EDGE SHEETING
1/8" X 1" (SOFT) TRAILING EDGE BOTTOM, TAPERED
1/16" SHEET-GUSSET
1/8" SHEET-GUSSET
1/8" SHEET (TYP.)
1/16" SHEET
1/32" PLYWOOD-CAP RIB
1/8" SHEET-GUSSET
1/16" FIBER GLASS CIRCUIT BOARD-ELEVATOR HORN
3/16" I.D. ALUMINUM TUBING (SET IN WING TO PRODUCE 3° ANGLE
3/32" SHEET-VERTICAL GRAIN SHEAR WEB (7 BAYS)
1/8" PLYWOOD-ANGLE BRACE
1/16" SHEET-VERTICAL GRAIN SHEAR WEB (7 BAYS)
1/16" X 1/4"-CAP STRIPS (TOP ONLY)
RIGHT INNER PANEL
RIGHT OUTER PANEL
DRILL FOR 3/16" DOWEL
1/16" X 1/4" (TOP)
1/4" SQ.
1/16" X 1/4" (TOP)
1/8" SHEET
1/8" SHEET-RIB
HINGE
1/8" SHEET
1/16" X 1/4"
1/32" PLYWOOD-CAP RIB
1/8" SHEET-CAP RIB
1/8" SHEET-TIP, CUT OVERSIZE. ANGLE & TRIM FLUSH WITH TOP WING SURFACE.
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THIS HOLE POSITION WILL VARY, SO AS TO PRODUCE A 3° INNER WING PANEL ANGLE. (6 RIBS)
1/8" SQ.
(2 RIBS ONLY)
32 - 1/16" SHEET RIBS
2 - 1/8" SHEET RIBS
1/16" X 1/4"-CAP STRIP
(HOLE FOR ANTENNA, 16 RIBS)
1/8" X 3/8"
1/8" X 3/16"
1/8" X 1" (SOFT)
1/16" X 7/8"
TYPICAL WING RIB PROFILE
1/8" PLYWOOD-BRACE
1/8" X 3/8"-SPRUCE SPARS
POLYHEDRAL BRACE DETAIL
1/16" X 1/4"
1/8" SHEET-ELEVATOR RIB (14 REQD.)
1/16" X 1/4"-CAP STRIP
1/16" X 7/8"
1/8" X 1" (SOFT)-TAPERED
1/4" SQ.
1/4" X 5/16"
1/16" FIBER GLASS CIRCUIT BOARD-ELEVATOR HORN
ELEVATOR DETAIL
SHEET 2 OF 2
EL CONDOR
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