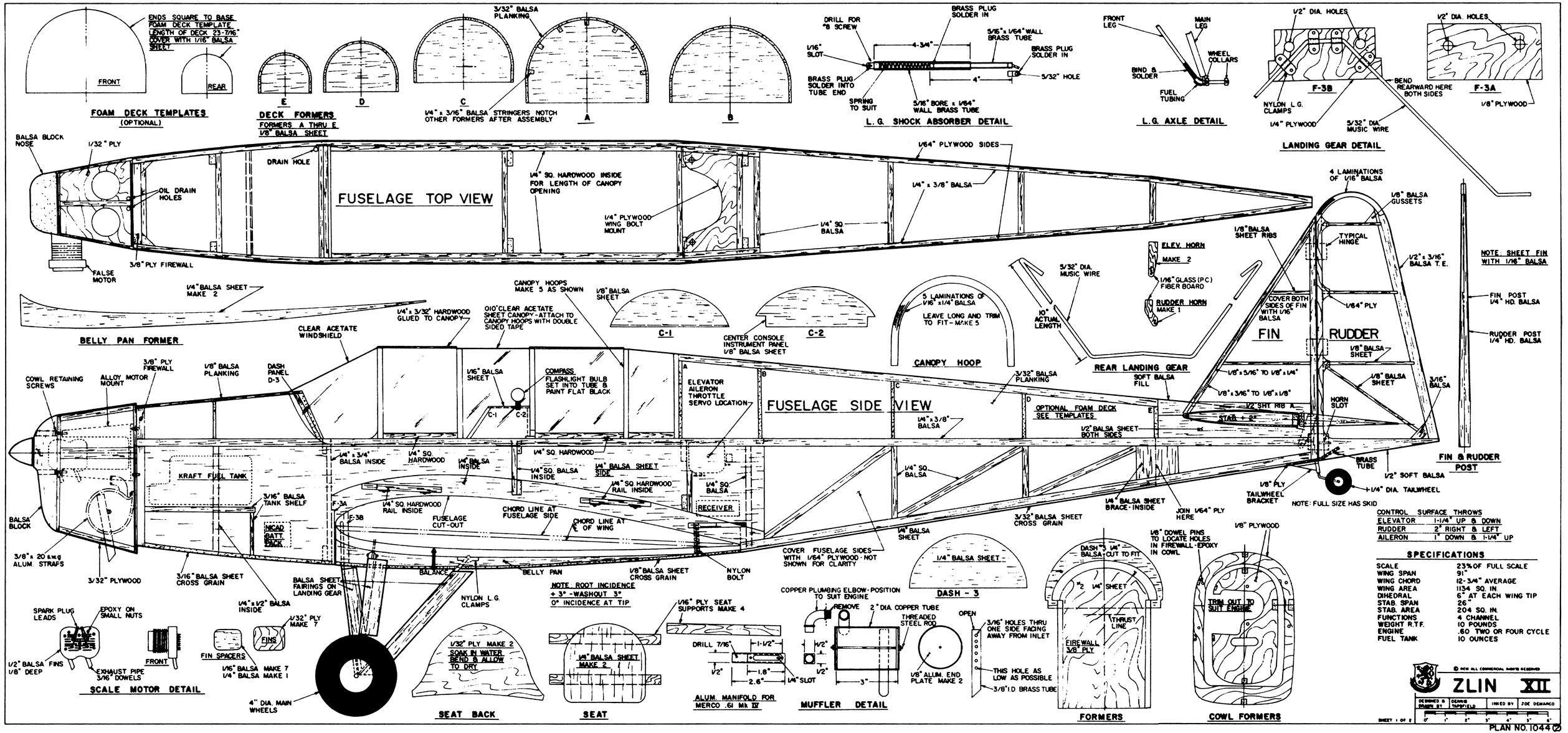
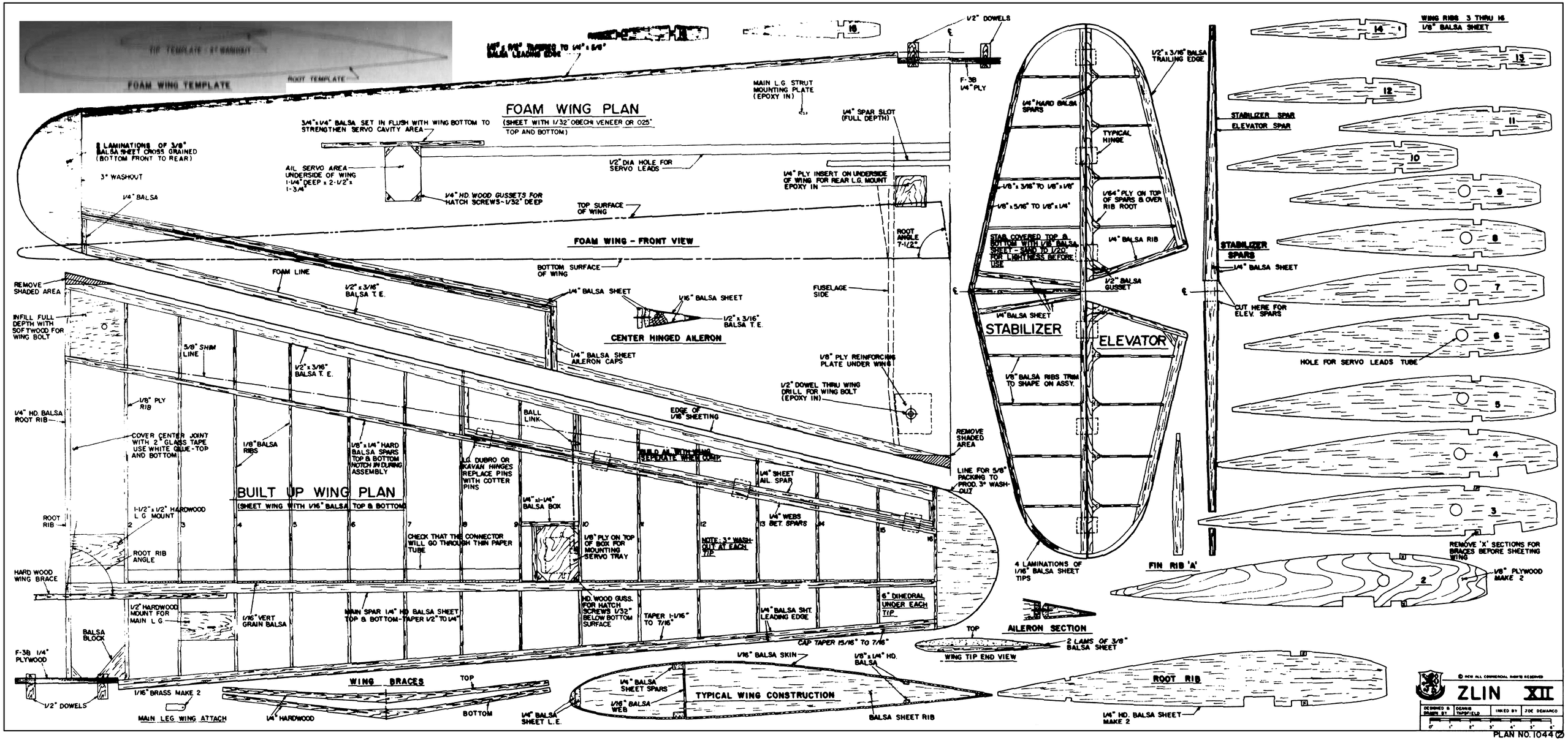

FOAM DECK TEMPLATES
(OPTIONAL)
ENDS SQUARE TO BASE
FOAM DECK TEMPLATE
LENGTH OF DECK 23-7/16"
COVER WITH 1/16" BALSA SHEET
FRONT
REAR
DECK FORMERS
FORMERS A THRU E
1/8" BALSA SHEET
E
D
C
A
B
3/32" BALSA PLANKING
1/4" x 3/16" BALSA STRINGERS NOTCH OTHER FORMERS AFTER ASSEMBLY
L.G. SHOCK ABSORBER DETAIL
DRILL FOR #8 SCREW
BRASS PLUG SOLDER IN
5/16" x 1/64" WALL BRASS TUBE
1/16" SLOT
4-3/4"
BRASS PLUG SOLDER INTO TUBE END
SPRING TO SUIT
5/16" BORE x 1/64" WALL BRASS TUBE
4"
5/32" HOLE
L.G. AXLE DETAIL
FRONT LEG
MAIN LEG
BEND & SOLDER
WHEEL COLLARS
FUEL TUBING
LANDING GEAR DETAIL
1/2" DIA. HOLES
F-3B
F-3A
BEND REARWARD HERE BOTH SIDES
NYLON L.G. CLAMPS
1/4" PLYWOOD
5/32" DIA. MUSIC WIRE
1/8" PLYWOOD
FUSELAGE TOP VIEW
BALSA BLOCK NOSE
1/32" PLY
DRAIN HOLE
OIL DRAIN HOLES
1/4" SQ. HARDWOOD INSIDE FOR LENGTH OF CANOPY OPENING
1/64" PLYWOOD SIDES
1/4" x 3/8" BALSA
1/4" PLYWOOD WING BOLT MOUNT
1/4" SQ. BALSA
3/8" PLY FIREWALL
FALSE MOTOR
BELLY PAN FORMER
1/4" BALSA SHEET MAKE 2
CLEAR ACETATE WINDSHIELD
1/4" x 3/32" HARDWOOD GLUED TO CANOPY
.010" CLEAR ACETATE SHEET CANOPY - ATTACH TO CANOPY HOOPS WITH DOUBLE SIDED TAPE
CANOPY HOOPS MAKE 5 AS SHOWN
1/8" BALSA SHEET
C-1
C-2
CENTER CONSOLE INSTRUMENT PANEL 1/8" BALSA SHEET
5 LAMINATIONS OF 1/16" x 1/4" BALSA
LEAVE LONG AND TRIM TO FIT - MAKE 5
CANOPY HOOP
5/32" DIA. MUSIC WIRE
10" ACTUAL LENGTH
ELEV. HORN
MAKE 2
1/16" GLASS (PC) FIBER BOARD
RUDDER HORN
MAKE 1
REAR LANDING GEAR
4 LAMINATIONS OF 1/16" BALSA
1/8" BALSA GUSSETS
1/8" BALSA SHEET RIBS
TYPICAL HINGE
1/2" x 3/16" BALSA T.E.
NOTE: SHEET FIN WITH 1/16" BALSA
COVER BOTH SIDES OF FIN WITH 1/16" BALSA
1/64" PLY
FIN
RUDDER
FIN POST 1/4" HD. BALSA
RUDDER POST 1/4" HD. BALSA
1/8" BALSA SHEET
3/16" BALSA
HORN SLOT
FIN & RUDDER POST
COWL RETAINING SCREWS
ALLOY MOTOR MOUNT
3/8" PLY FIREWALL
1/8" BALSA PLANKING
DASH PANEL D-3
1/16" BALSA SHEET
COMPASS FLASHLIGHT BULB SET INTO TUBE & PAINT FLAT BLACK
ELEVATOR AILERON THROTTLE SERVO LOCATION
FUSELAGE SIDE VIEW
3/32" BALSA PLANKING
SOFT BALSA FILL
1/8" x 3/16" TO 1/8" x 1/4"
1/8" x 3/16" TO 1/8" x 1/8"
1/2" SHT RIB A
STAB + 2°
OPTIONAL FOAM DECK SEE TEMPLATES
1/4" x 3/8" BALSA
1/2" BALSA SHEET BOTH SIDES
KRAFT FUEL TANK
1/4" x 3/4" BALSA INSIDE
1/4" SQ. HARDWOOD
1/4" BALSA INSIDE
1/4" SQ. HARDWOOD
1/4" SQ. BALSA INSIDE
1/4" BALSA SHEET SIDE
1/4" SQ. HARDWOOD RAIL INSIDE
1/4" SQ. BALSA
RECEIVER
1/4" SQ. BALSA
3/16" BALSA TANK SHELF
NICAD BATT. PACK
F-3A
F-3B
1/4" SQ. HARDWOOD RAIL INSIDE
FUSELAGE CUT-OUT
CHORD LINE AT FUSELAGE SIDE
CHORD LINE AT ℄ OF WING
BRASS TUBE
1/2" SOFT BALSA
1/8" PLY TAILWHEEL BRACKET
1-1/4" DIA. TAILWHEEL
NOTE: FULL SIZE HAS SKID
1/4" BALSA SHEET BRACE - INSIDE
JOIN 1/64" PLY HERE
3/32" BALSA SHEET CROSS GRAIN
1/8" BALSA SHEET
COVER FUSELAGE SIDES WITH 1/64" PLYWOOD - NOT SHOWN FOR CLARITY
BALSA BLOCK
3/8" x 20 s.w.g. ALUM. STRAPS
3/32" PLYWOOD
3/16" BALSA SHEET CROSS GRAIN
BALSA SHEET FAIRINGS ON LANDING GEAR
BALANCE
BELLY PAN
1/8" BALSA SHEET CROSS GRAIN
NYLON BOLT
NYLON L.G. CLAMPS
NOTE: ROOT INCIDENCE + 3° - WASHOUT 3° 0° INCIDENCE AT TIP
1/4" x 1/2" BALSA INSIDE
1/4" BALSA SHEET
DASH - 3
DASH #5 1/4" BALSA - CUT TO FIT
#2 1/4" SHEET
THRUST LINE
FIREWALL 3/8" PLY
1/8" DOWEL PINS TO LOCATE HOLES IN FIREWALL - EPOXY IN COWL
1/8" PLYWOOD
TRIM OUT TO SUIT ENGINE
FORMERS
COWL FORMERS
SPARK PLUG LEADS
EPOXY ON SMALL NUTS
1/2" BALSA FINS 1/8" DEEP
EXHAUST PIPE 3/16" DOWELS
FRONT
SCALE MOTOR DETAIL
1/32" PLY MAKE 7
FINS
FIN SPACERS
1/16" BALSA MAKE 7
1/4" BALSA MAKE 1
4" DIA. MAIN WHEELS
1/32" PLY MAKE 2
SOAK IN WATER BEND & ALLOW TO DRY
SEAT BACK
1/4" BALSA SHEET MAKE 2
SEAT
1/16" PLY SEAT SUPPORTS MAKE 4
DRILL 7/16"
1-1/2"
1/2"
1.8"
2.6"
1/4" SLOT
ALUM. MANIFOLD FOR MERCO .61 MK IV
COPPER PLUMBING ELBOW - POSITION TO SUIT ENGINE
REMOVE
2" DIA. COPPER TUBE
THREADED STEEL ROD
1/2"
3"
1/8" ALUM. END PLATE MAKE 2
OPEN
3/16" HOLES THRU ONE SIDE FACING AWAY FROM INLET
THIS HOLE AS LOW AS POSSIBLE
3/8" I.D. BRASS TUBE
MUFFLER DETAIL
CONTROL SURFACE THROWS
ELEVATOR 1-1/4" UP & DOWN
RUDDER 2" RIGHT & LEFT
AILERON 1" DOWN & 1-1/4" UP
SPECIFICATIONS
SCALE 23% OF FULL SCALE
WING SPAN 91"
WING CHORD 12-3/4" AVERAGE
WING AREA 1134 SQ. IN.
DIHEDRAL 6" AT EACH WING TIP
STAB. SPAN 26"
STAB. AREA 204 SQ. IN.
FUNCTIONS 4 CHANNEL
WEIGHT R.T.F. 10 POUNDS
ENGINE .60 TWO OR FOUR CYCLE
FUEL TANK 10 OUNCES
© NEW ALL COMMERCIAL RIGHTS RESERVED
ZLIN XII
DESIGNED & DRAWN BY DENNIS TAPSFIELD
INKED BY JOE DEMARCO
SHEET 1 OF 2
PLAN NO. 1044


FOAM WING TEMPLATE
TIP TEMPLATE - 3" WASHOUT
ROOT TEMPLATE
FOAM WING PLAN
(SHEET WITH 1/32" OBECHI VENEER OR .025" TOP AND BOTTOM)
3/4" x 1/4" BALSA SET IN FLUSH WITH WING BOTTOM TO STRENGTHEN SERVO CAVITY AREA
8 LAMINATIONS OF 3/8" BALSA SHEET CROSS GRAINED (BOTTOM FRONT TO REAR)
3" WASHOUT
1/4" BALSA
AIL. SERVO AREA UNDERSIDE OF WING 1-1/4" DEEP x 2-1/2" x 1-3/4"
1/4" HD. WOOD GUSSETS FOR HATCH SCREWS - 1/32" DEEP
1/2" DIA HOLE FOR SERVO LEADS
TOP SURFACE OF WING
MAIN L.G. STRUT MOUNTING PLATE (EPOXY IN)
1/4" SPAR SLOT (FULL DEPTH)
1/4" PLY INSERT ON UNDERSIDE OF WING FOR REAR L.G. MOUNT EPOXY IN
ROOT ANGLE 7-1/2°
1/2" DOWELS
F-3B 1/4" PLY
FOAM WING - FRONT VIEW
BOTTOM SURFACE OF WING
FOAM LINE
REMOVE SHADED AREA
INFILL FULL DEPTH WITH SOFTWOOD FOR WING BOLT
1/2" x 3/16" BALSA T.E.
1/4" BALSA SHEET
1/16" BALSA SHEET
1/2" x 3/16" BALSA T.E.
CENTER HINGED AILERON
1/4" BALSA SHEET AILERON CAPS
FUSELAGE SIDE
5/8" SHIM LINE
1/2" x 3/16" BALSA T.E.
1/8" PLY REINFORCING PLATE UNDER WING
1/2" DOWEL THRU WING DRILL FOR WING BOLT (EPOXY IN)
1/4" HD BALSA ROOT RIB
1/8" PLY RIB
BALL LINK
EDGE OF 1/16" SHEETING
COVER CENTER JOINT WITH 2" GLASS TAPE USE WHITE GLUE - TOP AND BOTTOM
1/8" BALSA RIBS
1/8" x 1/4" HARD BALSA SPARS TOP & BOTTOM NOTCH IN DURING ASSEMBLY
L.G. DUBRO OR KAVAN HINGES REPLACE PINS WITH COTTER PINS
BUILD AIL WITH WING SEPERATE WHEN COMP.
1/4" SHEET AIL. SPAR
REMOVE SHADED AREA
LINE FOR 5/8" PACKING TO PROD. 3" WASHOUT
BUILT UP WING PLAN
(SHEET WING WITH 1/16" BALSA TOP & BOTTOM)
1-1/2" x 1/2" HARDWOOD L.G. MOUNT
ROOT RIB
ROOT RIB ANGLE
1/4" x 1-1/4" BALSA BOX
CHECK THAT THE CONNECTOR WILL GO THROUGH THIN PAPER TUBE
1/8" PLY ON TOP OF BOX FOR MOUNTING SERVO TRAY
NOTE: 3" WASHOUT AT EACH TIP
1/4" WEBS BET. SPARS
HARD WOOD WING BRACE
1/2" HARDWOOD MOUNT FOR MAIN L.G.
1/16" VERT GRAIN BALSA
MAIN SPAR 1/4" HD BALSA SHEET TOP & BOTTOM - TAPER 1/2" TO 1/4"
HD. WOOD GUSS. FOR HATCH SCREWS 1/32" BELOW BOTTOM SURFACE
TAPER 1-1/16" TO 7/16"
1/4" BALSA SHT. LEADING EDGE
6° DIHEDRAL UNDER EACH TIP
BALSA BLOCK
F-3B 1/4" PLYWOOD
1/2" DOWELS
CAP TAPER 15/16" TO 7/16"
1/16" BALSA SKIN
1/8" x 1/4" HD. BALSA
WING BRACES
TOP
1/16" BRASS MAKE 2
MAIN LEG WING ATTACH
1/4" HARDWOOD
BOTTOM
TYPICAL WING CONSTRUCTION
1/4" BALSA SHEET SPARS
1/16" BALSA WEB
1/4" BALSA SHEET L.E.
BALSA SHEET RIB
1/4" HD. BALSA SHEET MAKE 2
ROOT RIB
1/4" HARD BALSA SPARS
TYPICAL HINGE
1/8" x 3/16" TO 1/8" x 1/8"
1/8" x 5/16" TO 1/8" x 1/4"
1/64" PLY ON TOP OF SPARS & OVER RIB ROOT
STAB COVERED TOP & BOTTOM WITH 1/8" BALSA SHEET - SAND TO 1/20 FOR LIGHTNESS BEFORE USE
1/4" BALSA RIB
1/2" BALSA GUSSET
1/4" BALSA SHEET
STABILIZER
ELEVATOR
1/8" BALSA RIBS TRIM TO SHAPE ON ASSY.
4 LAMINATIONS OF 1/16" BALSA SHEET TIPS
AILERON SECTION
2 LAMS OF 3/8" BALSA SHEET
WING TIP END VIEW
1/2" x 3/16" BALSA TRAILING EDGE
STABILIZER SPAR
ELEVATOR SPAR
STABILIZER SPARS
1/4" BALSA SHEET
CUT HERE FOR ELEV. SPARS
HOLE FOR SERVO LEADS TUBE
FIN RIB 'A'
WING RIBS 3 THRU 16
1/8" BALSA SHEET
REMOVE 'X' SECTIONS FOR BRACES BEFORE SHEETING WING
1/8" PLYWOOD MAKE 2
© NOW ALL COMMERCIAL RIGHTS RESERVED
ZLIN XII
DESIGNED & DRAWN BY DENNIS TAPSFIELD
INKED BY JOE DEMARCO
PLAN NO. 1044 (2)