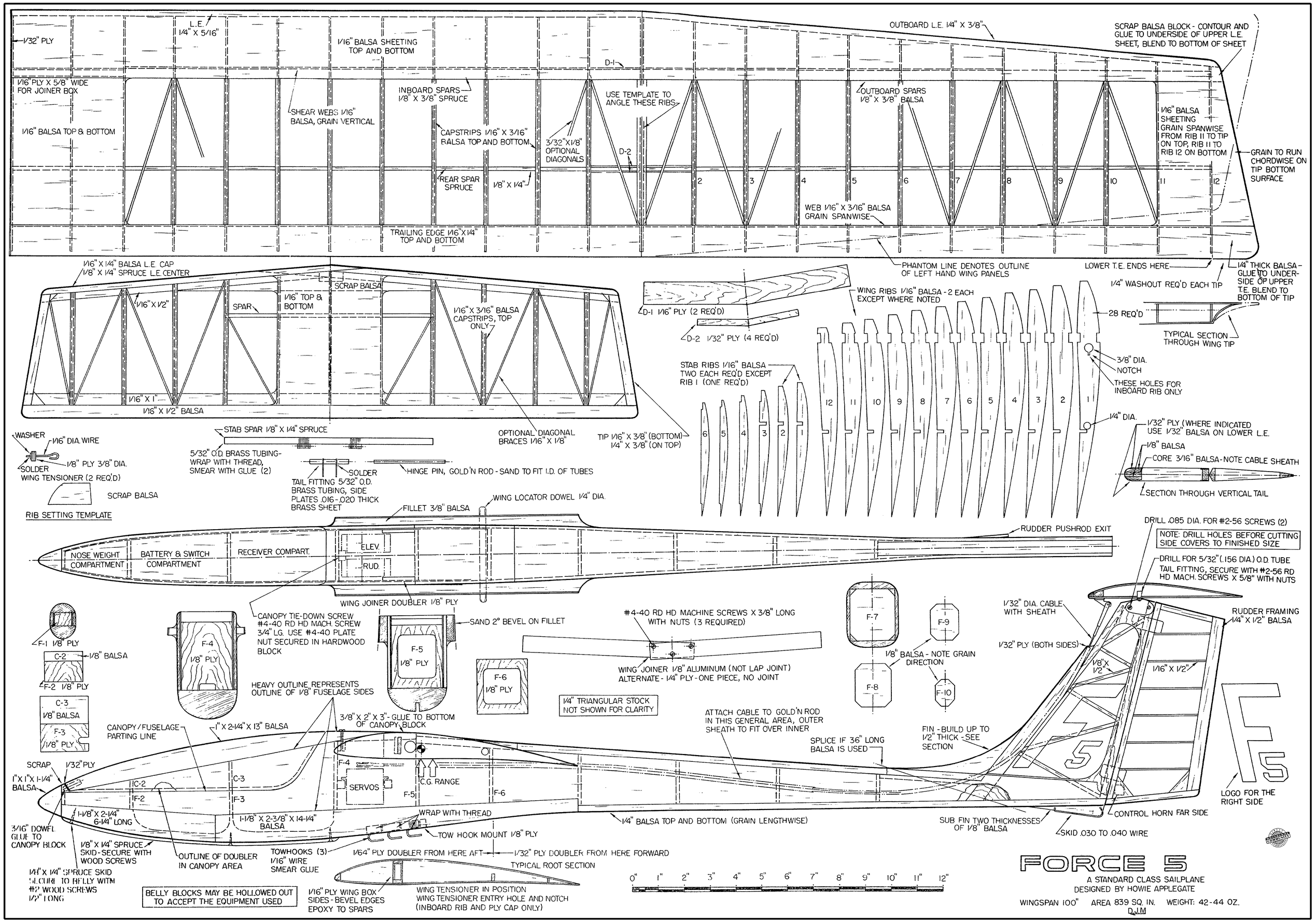
1/32" PLY
L.E. 1/4" X 5/16"
1/16" BALSA SHEETING TOP AND BOTTOM
OUTBOARD L.E. 1/4" X 3/8"
SCRAP BALSA BLOCK - CONTOUR AND GLUE TO UNDERSIDE OF UPPER L.E. SHEET, BLEND TO BOTTOM OF SHEET
D-1
1/16" PLY X 5/8" WIDE FOR JOINER BOX
1/16" BALSA TOP & BOTTOM
SHEAR WEBS 1/16" BALSA, GRAIN VERTICAL
INBOARD SPARS 1/8" X 3/8" SPRUCE
USE TEMPLATE TO ANGLE THESE RIBS
OUTBOARD SPARS 1/8" X 3/8" BALSA
1/16" BALSA SHEETING GRAIN SPANWISE FROM RIB 11 TO TIP ON TOP, RIB 11 TO RIB 12 ON BOTTOM
CAPSTRIPS 1/16" X 3/16" BALSA TOP AND BOTTOM
3/32"X1/8" OPTIONAL DIAGONALS
D-2
GRAIN TO RUN CHORDWISE ON TIP BOTTOM SURFACE
REAR SPAR SPRUCE
1/8" X 1/4"
2
3
4
5
6
7
8
9
10
11
12
WEB 1/16" X 3/16" BALSA GRAIN SPANWISE
TRAILING EDGE 1/16"X1/4" TOP AND BOTTOM
PHANTOM LINE DENOTES OUTLINE OF LEFT HAND WING PANELS
LOWER T.E. ENDS HERE
1/4" THICK BALSA - GLUE TO UNDERSIDE OF UPPER T.E. BLEND TO BOTTOM OF TIP
1/4" WASHOUT REQ'D EACH TIP
1/16" X 1/4" BALSA L.E. CAP
1/8" X 1/4" SPRUCE L.E. CENTER
1/16" X 1/2"
SPAR
SCRAP BALSA
1/16" TOP & BOTTOM
1/16" X 3/16" BALSA CAPSTRIPS, TOP ONLY
1/16" X 1"
1/16" X 1/2" BALSA
D-1 1/16" PLY (2 REQ'D)
D-2 1/32" PLY (4 REQ'D)
WING RIBS 1/16" BALSA - 2 EACH EXCEPT WHERE NOTED
28 REQ'D
TYPICAL SECTION THROUGH WING TIP
STAB RIBS 1/16" BALSA TWO EACH REQ'D EXCEPT RIB 1 (ONE REQ'D)
3/8" DIA.
NOTCH
THESE HOLES FOR INBOARD RIB ONLY
1/4" DIA.
1/32" PLY (WHERE INDICATED USE 1/32" BALSA ON LOWER L.E.
1/8" BALSA
CORE 3/16" BALSA-NOTE CABLE SHEATH
SECTION THROUGH VERTICAL TAIL
WASHER
1/16" DIA. WIRE
1/8" PLY 3/8" DIA.
SOLDER
WING TENSIONER (2 REQ'D)
SCRAP BALSA
RIB SETTING TEMPLATE
STAB SPAR 1/8" X 1/4" SPRUCE
5/32" O.D. BRASS TUBING-WRAP WITH THREAD, SMEAR WITH GLUE (2)
OPTIONAL DIAGONAL BRACES 1/16" X 1/8"
TIP 1/16" X 3/8" (BOTTOM) 1/4" X 3/8" (ON TOP)
SOLDER
TAIL FITTING 5/32" O.D. BRASS TUBING, SIDE PLATES .016-.020 THICK BRASS SHEET
HINGE PIN, GOLD'N ROD - SAND TO FIT I.D. OF TUBES
FILLET 3/8" BALSA
WING LOCATOR DOWEL 1/4" DIA.
RUDDER PUSHROD EXIT
DRILL .085 DIA. FOR #2-56 SCREWS (2)
NOTE: DRILL HOLES BEFORE CUTTING SIDE COVERS TO FINISHED SIZE
NOSE WEIGHT COMPARTMENT
BATTERY & SWITCH COMPARTMENT
RECEIVER COMPART.
ELEV.
RUD.
DRILL FOR 5/32" (.156 DIA.) O.D. TUBE TAIL FITTING, SECURE WITH #2-56 RD HD MACH. SCREWS X 5/8" WITH NUTS
WING JOINER DOUBLER 1/8" PLY
CANOPY TIE-DOWN SCREW #4-40 RD HD MACH. SCREW 3/4" LG. USE #4-40 PLATE NUT SECURED IN HARDWOOD BLOCK
SAND 2° BEVEL ON FILLET
#4-40 RD HD MACHINE SCREWS X 3/8" LONG WITH NUTS (3 REQUIRED)
F-7
F-9
1/32" DIA. CABLE WITH SHEATH
RUDDER FRAMING 1/4" X 1/2" BALSA
F-1 1/8" PLY
C-2
1/8" BALSA
F-2 1/8" PLY
F-4 1/8" PLY
F-5 1/8" PLY
F-6 1/8" PLY
WING JOINER 1/8" ALUMINUM (NOT LAP JOINT) ALTERNATE - 1/4" PLY - ONE PIECE, NO JOINT
1/8" BALSA - NOTE GRAIN DIRECTION
F-8
F-10
1/32" PLY (BOTH SIDES)
1/8" X 1/2"
1/16" X 1/2"
C-3
1/8" BALSA
F-3
1/8" PLY
HEAVY OUTLINE REPRESENTS OUTLINE OF 1/8" FUSELAGE SIDES
1/4" TRIANGULAR STOCK NOT SHOWN FOR CLARITY
CANOPY/FUSELAGE PARTING LINE
1" X 2-1/4" X 13" BALSA
3/8" X 2" X 3" - GLUE TO BOTTOM OF CANOPY BLOCK
ATTACH CABLE TO GOLD'N ROD IN THIS GENERAL AREA, OUTER SHEATH TO FIT OVER INNER
SPLICE IF 36" LONG BALSA IS USED
FIN - BUILD UP TO 1/2" THICK - SEE SECTION
SCRAP
1/32" PLY
1" X 1" X 1-1/4" BALSA
C-2
C-3
F-2
F-3
F-4
SERVOS
C.G. RANGE
F-5
F-6
LOGO FOR THE RIGHT SIDE
1-1/8" X 2-1/4" 6-1/4" LONG
1-1/8" X 2-3/8" X 14-1/4" BALSA
WRAP WITH THREAD
1/4" BALSA TOP AND BOTTOM (GRAIN LENGTHWISE)
SUB FIN TWO THICKNESSES OF 1/8" BALSA
CONTROL HORN FAR SIDE
3/16" DOWEL GLUE TO CANOPY BLOCK
1/8" X 1/4" SPRUCE SKID - SECURE WITH WOOD SCREWS
OUTLINE OF DOUBLER IN CANOPY AREA
TOWHOOKS (3) 1/16" WIRE SMEAR GLUE
TOW HOOK MOUNT 1/8" PLY
SKID .030 TO .040 WIRE
1/64" PLY DOUBLER FROM HERE AFT
1/32" PLY DOUBLER FROM HERE FORWARD
TYPICAL ROOT SECTION
1/8" X 1/4" SPRUCE SKID SECURE TO BELLY WITH #2 WOOD SCREWS 1/2" LONG
BELLY BLOCKS MAY BE HOLLOWED OUT TO ACCEPT THE EQUIPMENT USED
1/16" PLY WING BOX SIDES - BEVEL EDGES EPOXY TO SPARS
WING TENSIONER IN POSITION WING TENSIONER ENTRY HOLE AND NOTCH (INBOARD RIB AND PLY CAP ONLY)
0" 1" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12"
FORCE 5
A STANDARD CLASS SAILPLANE DESIGNED BY HOWIE APPLEGATE
WINGSPAN 100" AREA 839 SQ. IN. WEIGHT: 42-44 OZ.
D.J.M