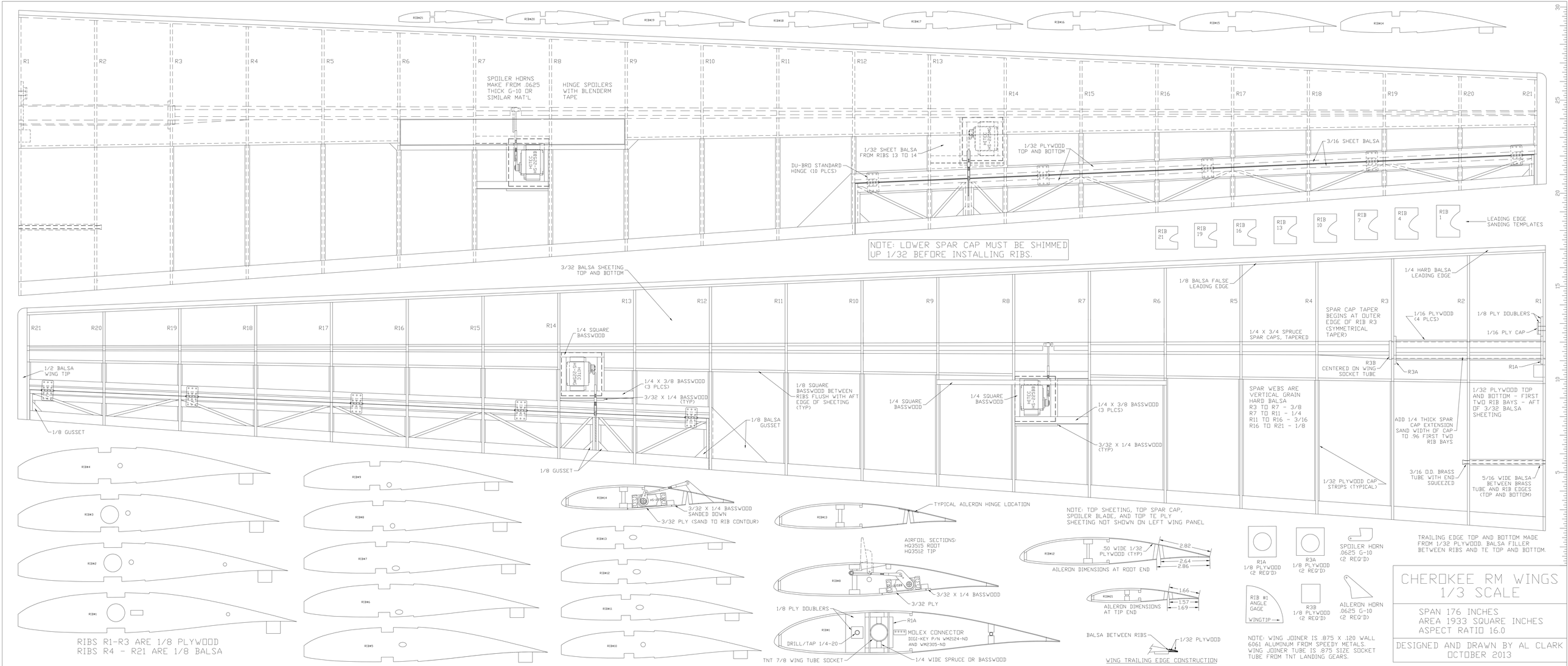
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
SPOILER HORNS MAKE FROM .0625 THICK G-10 OR SIMILAR MAT'L
HINGE SPOILERS WITH BLENDERM TAPE.
HITEC HS-225MG
DU-BRO STANDARD HINGE (10 PLCS)
1/32 SHEET BALSA FROM RIBS 13 TO 14
1/32 PLYWOOD TOP AND BOTTOM
3/16 SHEET BALSA
NOTE: LOWER SPAR CAP MUST BE SHIMMED UP 1/32 BEFORE INSTALLING RIBS.
LEADING EDGE SANDING TEMPLATES
3/32 BALSA SHEETING TOP AND BOTTOM
1/4 SQUARE BASSWOOD
1/2 BALSA WING TIP
1/4 X 3/8 BASSWOOD (3 PLCS)
3/32 X 1/4 BASSWOOD (TYP)
1/8 BALSA GUSSET
1/8 GUSSET
1/8 SQUARE BASSWOOD BETWEEN RIBS FLUSH WITH AFT EDGE OF SHEETING (TYP)
1/4 SQUARE BASSWOOD
1/8 BALSA FALSE LEADING EDGE
1/4 X 3/4 SPRUCE SPAR CAPS, TAPERED
SPAR CAP TAPER BEGINS AT OUTER EDGE OF RIB R3 (SYMMETRICAL TAPER)
1/4 HARD BALSA LEADING EDGE
1/16 PLYWOOD (4 PLCS)
1/8 PLY DOUBLERS
1/16 PLY CAP
R3B CENTERED ON WING SOCKET TUBE
R3A
R1A
SPAR WEBS ARE VERTICAL GRAIN HARD BALSA
R3 TO R7 - 3/8
R7 TO R11 - 1/4
R11 TO R16 - 3/16
R16 TO R21 - 1/8
ADD 1/4 THICK SPAR CAP EXTENSION SAND WIDTH OF CAP TO .96 FIRST TWO RIB BAYS
1/32 PLYWOOD TOP AND BOTTOM - FIRST TWO RIB BAYS - AFT OF 3/32 BALSA SHEETING
1/32 PLYWOOD CAP STRIPS (TYPICAL)
3/16 O.D. BRASS TUBE WITH END SQUEEZED
5/16 WIDE BALSA BETWEEN BRASS TUBE AND RIB EDGES (TOP AND BOTTOM)
TRAILING EDGE TOP AND BOTTOM MADE FROM 1/32 PLYWOOD. BALSA FILLER BETWEEN RIBS AND TE TOP AND BOTTOM.
RIB#1
RIB#2
RIB#3
RIB#4
RIB#5
RIB#6
RIB#7
RIB#8
RIB#9
RIB#10
RIB#11
RIB#12
RIB#13
RIB#14
RIB#15
RIB#16
RIB#17
RIB#18
RIB#19
RIB#20
RIB#21
RIBS R1-R3 ARE 1/8 PLYWOOD
RIBS R4 - R21 ARE 1/8 BALSA
3/32 X 1/4 BASSWOOD SANDED DOWN
3/32 PLY (SAND TO RIB CONTOUR)
TYPICAL AILERON HINGE LOCATION
AIRFOIL SECTIONS: HQ3515 ROOT HQ3512 TIP
3/32 X 1/4 BASSWOOD
3/32 PLY
1/8 PLY DOUBLERS
R1A
MOLEX CONNECTOR
DIGI-KEY P/N WM2124-ND AND WM2305-ND
DRILL/TAP 1/4-20
TNT 7/8 WING TUBE SOCKET
1/4 WIDE SPRUCE OR BASSWOOD
NOTE: TOP SHEETING, TOP SPAR CAP, SPOILER BLADE, AND TOP TE PLY SHEETING NOT SHOWN ON LEFT WING PANEL
.50 WIDE 1/32 PLYWOOD (TYP)
2.82
2.64
2.86
AILERON DIMENSIONS AT ROOT END
1.66
1.57
1.69
AILERON DIMENSIONS AT TIP END
BALSA BETWEEN RIBS
1/32 PLYWOOD
WING TRAILING EDGE CONSTRUCTION
R1A 1/8 PLYWOOD (2 REQ'D)
R3A 1/8 PLYWOOD (2 REQ'D)
SPOILER HORN .0625 G-10 (2 REQ'D)
RIB #1 ANGLE GAGE
WINGTIP
R3B 1/8 PLYWOOD (2 REQ'D)
AILERON HORN .0625 G-10 (2 REQ'D)
NOTE: WING JOINER IS .875 X .120 WALL 6061 ALUMINUM FROM SPEEDY METALS. WING JOINER TUBE IS .875 SIZE SOCKET TUBE FROM TNT LANDING GEARS.
CHEROKEE RM WINGS
1/3 SCALE
SPAN 176 INCHES
AREA 1933 SQUARE INCHES
ASPECT RATIO 16.0
DESIGNED AND DRAWN BY AL CLARK
OCTOBER 2013