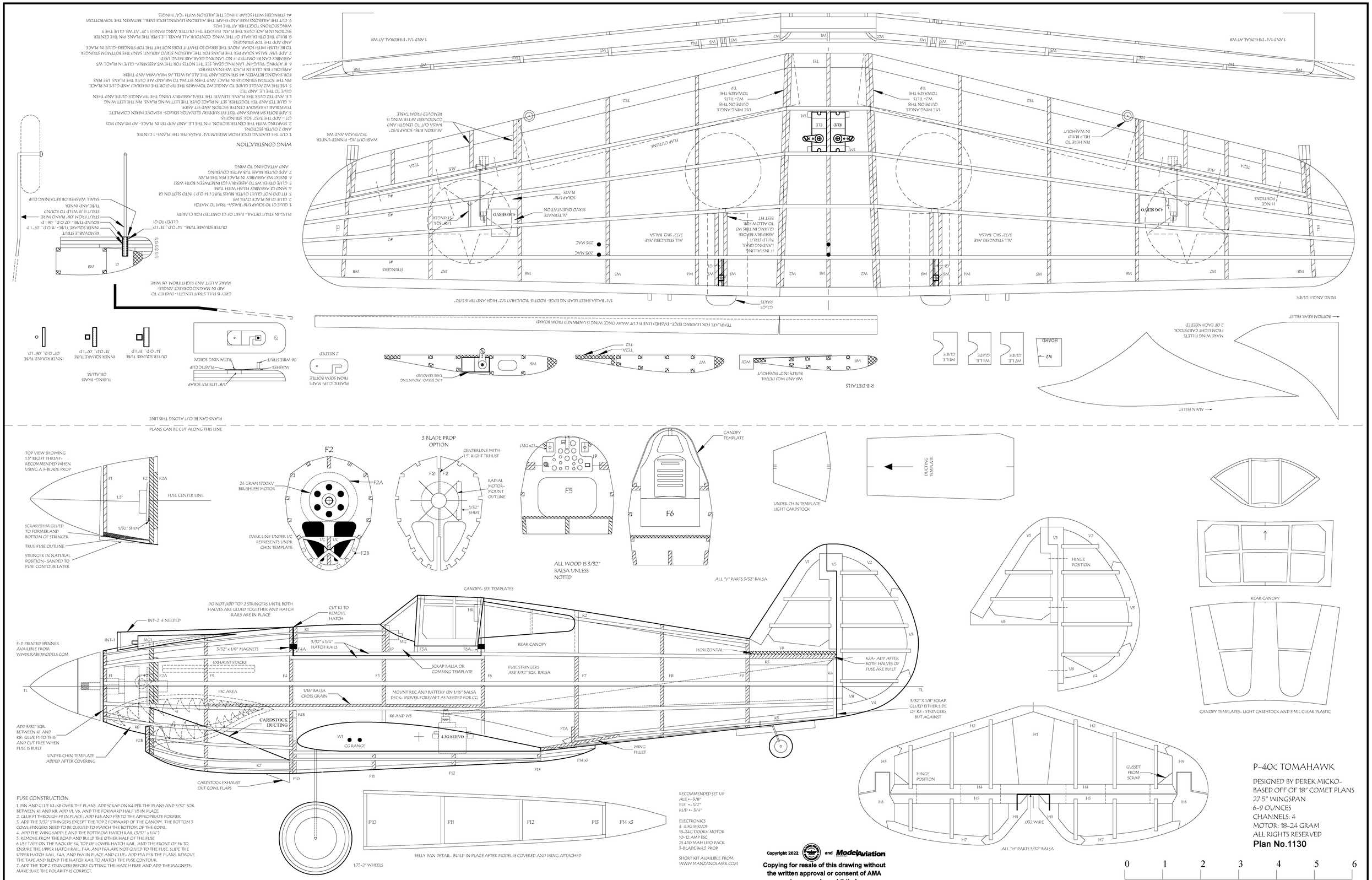
WING CONSTRUCTION
1. CUT THE LEADING EDGE FROM MEDIUM 1/4" BALSA PER THE PLANS-1 CENTER AND 2 OUTER SECTIONS
2. STARTING WITH THE CENTER SECTION, PIN THE L.E. AND APP TEN IN PLACE- AND WI AND W25
3. APP BOTH SM PARTS AND TEST FIT RUDDER, ELEVATOR SERVOS- REMOVE WHEN COMPLETE.
(2)- APP THE 5/32" SQR. STRINGERS
4. GLUE TE2 AND TE3 TOGETHER, SET IN PLACE OVER THE LEFT WING PLANS, PIN THE LEFT WING L.E. AND TE2 OVER THE PLANS. ELEVATE THE TE3/4 ASSEMBLY USING THE TIP ANGLE GUIDE AND THEN TEMPORARILY REMOVE CENTER SECTION AND SET ASIDE
5. USE THE W2 ANGLE GUIDE TO ANGLE W2 TOWARDS THE TIP (FOR THE PHEMAL) AND GLUE IN PLACE THE BOTTOM STRINGERS IN PLACE AND THEN SET W4 TO W8 AND ALE OVER THE PLANS. USE PINS FOR SPACING BETWEEN #4 STRINGERS AND THE ALE AS WELL AS W6A/W8A AND THERE
GLUE TO THE L.E. AND TE2
APPROPRIATE BIB. GLUE IN PLACE WHEN SATISFIED
6. IF APPING "RIVIG-IN" LANDING GEAR, SEE THE NOTES FOR THE MS ASSEMBLY- GLUE IN PLACE. M5 ASSEMBLY CAN BE OMITTED IF NO LANDING GEAR ARE BEING USED
7. APP F/W, BALSA SCRAP PER THE PLANS FOR THE AILERON SERVO MOUNT. SAND THE BOTTOM STRINGER TO BE FLUSH WITH SCRAP. NOTE THE SERVO SO THAT IT DOES NOT HIT THE TOP STRINGES-GLUE IN PLACE
AND APD THE TOP STRINGES
8. BUILD THE OTHER HALF OF THE WING. CONTOUR ALL PANEL L.E.S PER THE PLANS. PIN THE CENTER SECTION IN PLACE OVER THE PLAN. ELEVATE THE OUTER WING PANELS 1.25", AT W8. GLUE THE 5 WING SECTIONS TOGETHER AT THE W25
9. CUT THE AILERONS FREE AND SHAPE THE AILERONS LEADING EDGE UNTIL BETWEEN THE TOP/BOTTOM #4 STRINGERS WITH SCRAP. HINGE THE AILERON WITH 'CA' HINGES
1 AND 1/4" PHEMAL AT W8
PIN HERE TO HELP BUILD IN WASHOUT
USE WING ANGLE GUIDE ON THIS W2- TILTS TOWARDS THE TIP
USE WING ANGLE GUIDE ON THIS W2- TILTS TOWARDS THE TIP
ALIGNED BIB- SCRAP 5/32" CONTOURED AFTER WING IS REMOVED FROM TABLE
WASHOUT/ALE- PINNED UNDER TE2/TE2A AND W8
FLAP OUTLINE
SM
ELE
RUD
TE3
TE2
TE2A
ALE
HINGE POSITIONS
4.3G SERVO
ALL STRINGERS ARE 5/32" SQ. BALSA
YES
#1
#2
#3
#4
STRINGERS
W8
W7
W6
W5
W4
W3
W2
W1
GI
IF INSTALLING LANDING GEAR, BUILD STRUT ASSEMBLY BEFORE GLUING IN THIS M5 TO ALLOW FOR BEST FIT
ALTERNATE SERVO ORIENTATION
SCRAP 1/16" PLATE
1/16" SQR STRINGERS
205 MAC
255 MAC
1/4" BALSA SHEET LEADING EDGE- ROOT IS 90%(CHT) 1/2" HIGH AND TIP IS 5/32"
GZ-GS PARTS
TRIM ALL FOR LEADING EDGE- DASHED LINE IS CUT AWAY ONCE WING IS UNPINNED FROM BOARD
WING ANGLE GUIDE
MAIN FILLET
BOTTOM LEAK FILLET
MAKE WING FILLETS FROM LIGHT CARDSTOCK 2 OF EACH NEEDED
RIB DETAILS
W8 AND W10 DETAIL
B/W175 IN 2" WASHOUT
W10
W7
TE2A
TE2
4.5G SERVO- MOUNTING TABS REMOVED
W6
2 NEEDED
PLASTIC CLIP- MADE FROM SODA BOTTLE
W2
BOARD
W2 L.E. GUIDE
W4 L.E. GUIDE
W7 L.E. GUIDE
W11 L.E. GUIDE
GS
1/8" LITE PLY SCRAP
.06 WIRE STRUT
WASHER
PLASTIC CLIP
RETAINING SCREW
OVTER SQUARE TUBE 14" O.P., .1" I.P
INNER SQUARE TUBE .1" O.P., .07" I.P
INNER ROUND TUBE .07" O.P., .06" I.P.
TUBING- BRASS OR ALUM.
PLANS CAN BE CUT ALONG THIS LINE
PLANS CAN BE CUT ALONG THIS LINE
GREY IS FULL STRUT LENGTH- PAINTED TO AID IN MAKING CORRECT ANGLE. MAKE A LEFT AND RIGHT FROM .06 WIRE
BEARING/ABLE STRUT
OVTER SQUARE TUBE- .14" O.P., .11" I.P
INNER SQUARE TUBE- .07" O.P., .06 I.P
ROUND TUBE- .07" O.P., .06 I.P
GLUED TO GI
STRUT FROM .06" ROUND WIRE
STRUT IS 1/8 WELD TO ROUND TUBE AND INNER
SMALL WASHER OR RETAINING CLIP
PLUG-IN STRUT DETAIL- PART OF OMITTED FOR CLARITY
1. GLUE GI TO SCRAP 1/16" BALSA- TRIM TO MATCH
2. GLUE GI IN PLACE OVER W5
3. FIT TEO NOT GLUED, OVER BALSA TUBE (.14 O.P.) INTO SLOT ON GI
4. SAND GI ASSEMBLY FLUSH WITH TUBE
5. GLUE OTHER M5 TO ASSEMBLY (GI) INBETWEEN BOTH W5)
6. INSERT W5 ASSEMBLY IN PLACE PER THE PLAN
7. APP OUTER BIAS 1/8 AFTER COVERING AND ATTACHING TO WING
TOP VIEW SHOWING 1.5" RIGHT THRUST- RECOMMENDED WHEN USING A 3-BLADE PROP
F1
F2
F2A
1.5°
FUSE CENTER LINE
SCRAP/SHIM GLUED TO FORMER AND BOTTOM OF STRINGER
1/32" SHIM
TRUE FUSE OUTLINE
STRINGER IN NATURAL POSITION- SANDED TO FUSE CONTOUR LATER
F2
24 GRAM 1700KV BRUSHLESS MOTOR
F2A
DARK LINE UNDER UC REPRESENTS UNDR CHIN TEMPLATE
UC
F2B
3 BLADE PROP OPTION
CENTERLINE WITH 1.5° RIGHT THRUST
F2
F2
RADIAL MOTOR-MOUNT OUTLINE
1/32" SHIM
(MG x2)
IP
F5
F6
CANOPY TEMPLATE
ALL WOOD IS 3/32" BALSA UNLESS NOTED
UNDER CHIN TEMPLATE LIGHT CARDSTOCK
FLICTING TEMPLATE
ALL "V" PARTS 3/32" BALSA
V1
V5
V2
V3
V6
V8
V4
HINGE POSITION
REAR CANOPY
CANOPY TEMPLATES- LIGHT CARDSTOCK AND 3 MIL CLEAR PLASTIC
CANOPY- SEE TEMPLATES
DO NOT APP TOP 2 STRINGERS UNTIL BOTH HALVES ARE GLUED TOGETHER AND HATCH RAILS ARE IN PLACE
CUT K1 TO REMOVE HATCH
INT-2 4 NEEDED
INT-1
3-D PRINTED SPINNER AVAILIBLE FROM WWW.RABINMODELS.COM
MG1
K1
MG
H1
K2
3/32" x 1/8" MAGNETS
F4A
3/32" x 1/4" HATCH RAILS
IP
F5A
F6A
REAR CANOPY
HORIZONTAL
EXHAUST STACKS
SCRAP BALSA OR COMBING TEMPLATE
FUSE STRINGERS ARE 5/32" SQR. BALSA
K3A- ADD AFTER BOTH HALVES OF FUSE ARE BUILT
K3
K4
F1
F2A
F3
F4
F5
F6
F7
F8
F9
TL
ESC AREA
1/16" BALSA CROSS GRAIN
MOUNT REC AND BATTERY ON 1/16" BALSA DECK- MOVER FORE/AFT AS NEEDED FOR CG
V8
V4
3/32" X 1/8" SCRAP GLUED EITHER SIDE OF K3 - STRINGERS BUT AGAINST
APP 3/32" SQR. BETWEEN K1 AND K8- GLUE F1 TO THIS AND CUT FREE WHEN FUSE IS BUILT
K8
F4B
CARDSTOCK DUCTING
K6 AND W5
F7A
K5
W1
CG RANGE
4.3G SERVO
WING FILLET
UNDER CHIN TEMPLATE ADDED AFTER COVERING
F2B
K7
F10
F11
F12
F13
F14 x3
CARDSTOCK EXHAUST EXIT COWL FLAPS
H2
H1
H3
HINGE POSITION
H4
GUSSET FROM SCRAP
H5
H6
H8
.032 WIRE
H7
ALL "H" PARTS 3/32" BALSA
BELLY PAN DETAIL- BUILD IN PLACE AFTER MODEL IS COVERED AND WING ATTACHED
1.75-2" WHEELS
RECOMMENDED SET UP
AILE +- 3/8"
ELE +- 1/2"
RUD +- 3/4"
ELECTRONICS
4 4.3G SERVOS
18-24G 1700KV MOTOR
10-12 AMP ESC
2S 450 MAH LIPO PACK
3-BLADE 8x4.5 PROP
SHORT KIT AVAILIBLE FROM: WWW.MANZANOLASER.COM
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P-40c TOMAHAWK
DESIGNED BY DEREK MICKO-
BASED OFF OF 18" COMET PLANS
27.5" WINGSPAN
6-9 OUNCES
CHANNELS: 4
MOTOR: 18-24 GRAM
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Plan No.1130
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