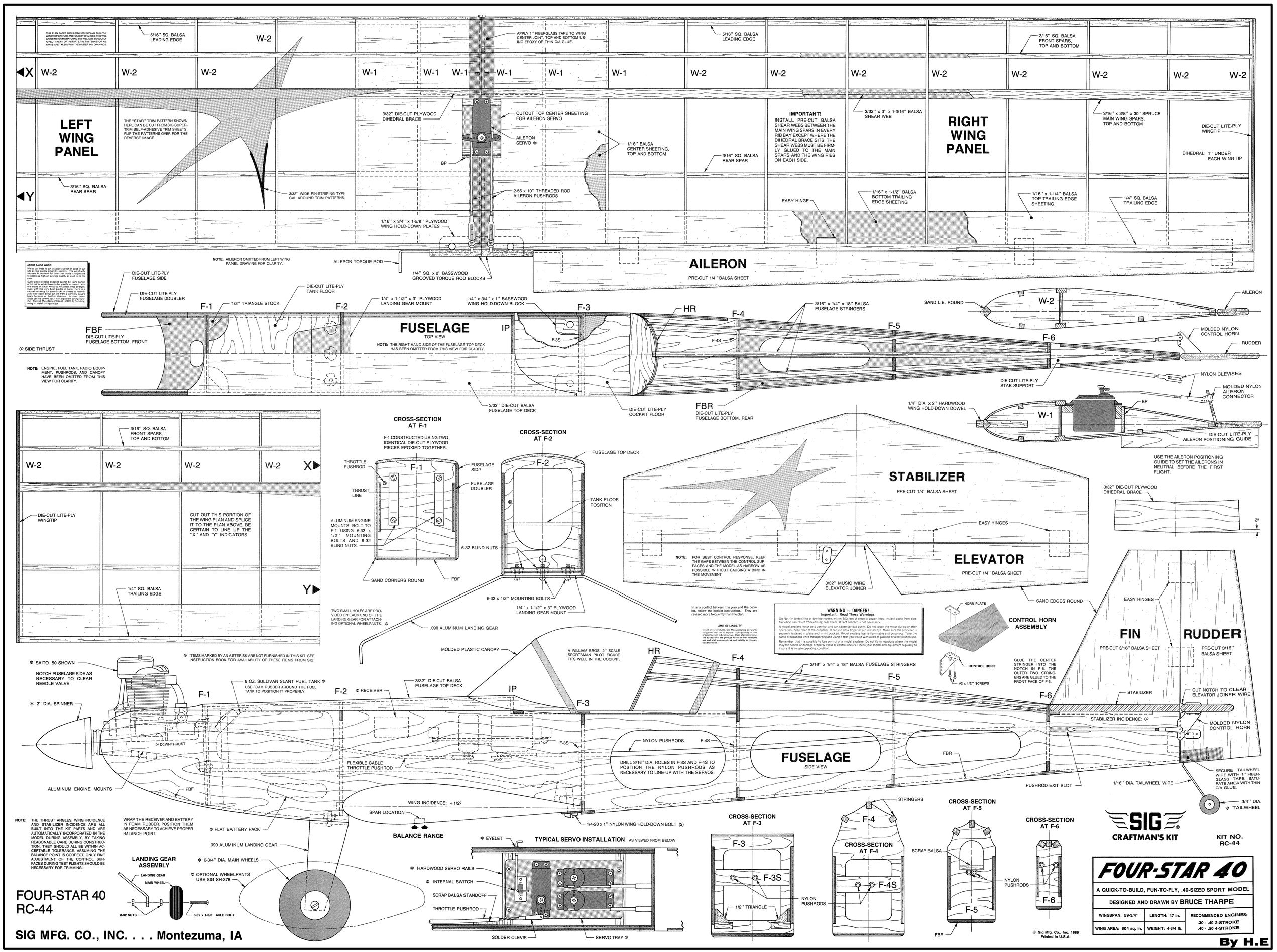
THIS PLAN PAPER CAN SHRINK OR EXPAND SLIGHTLY WITH TEMPERATURE AND HUMIDITY CHANGES. THESE CHANGES ARE NORMAL AND WILL NOT ADVERSELY AFFECT THE FIT OF THE PARTS. THE PATTERNS FOR ALL PARTS ARE TAKEN FROM THE MASTER INK DRAWINGS.
5/16" SQ. BALSA LEADING EDGE
W-2
APPLY 1" FIBERGLASS TAPE TO WING CENTER JOINT, TOP AND BOTTOM USING EPOXY OR THIN C/A GLUE.
5/16" SQ. BALSA LEADING EDGE
3/16" SQ. BALSA FRONT SPARS, TOP AND BOTTOM
X
W-2
W-1
LEFT WING PANEL
THE "STAR" TRIM PATTERN SHOWN HERE CAN BE CUT FROM SIG SUPER-TRIM SELF-ADHESIVE TRIM SHEETS. FLIP THE PATTERNS OVER FOR THE REVERSE IMAGE.
3/32" DIE-CUT PLYWOOD DIHEDRAL BRACE
CUTOUT TOP CENTER SHEETING FOR AILERON SERVO
AILERON SERVO ✻
BP
1/16" BALSA CENTER SHEETING, TOP AND BOTTOM
IMPORTANT!
INSTALL PRE-CUT BALSA SHEAR WEBS BETWEEN THE MAIN WING SPARS IN EVERY RIB BAY EXCEPT WHERE THE DIHEDRAL BRACE SITS. THE SHEAR WEBS MUST BE FIRMLY GLUED TO THE MAIN SPARS AND THE WING RIBS ON EACH SIDE.
3/32" x 3" x 1-3/16" BALSA SHEAR WEB
RIGHT WING PANEL
3/16" x 3/8" x 30" SPRUCE MAIN WING SPARS, TOP AND BOTTOM
DIE-CUT LITE-PLY WINGTIP
DIHEDRAL: 1" UNDER EACH WINGTIP
3/16" SQ. BALSA REAR SPAR
3/16" SQ. BALSA REAR SPAR
Y
3/32" WIDE P/N-STRIPING TYPICAL AROUND TRIM PATTERNS.
2-56 x 10" THREADED ROD AILERON PUSHRODS
EASY HINGE
1/16" x 1-1/2" BALSA BOTTOM TRAILING EDGE SHEETING
1/16" x 1-1/4" BALSA TOP TRAILING EDGE SHEETING
1/4" SQ. BALSA TRAILING EDGE
1/16" x 3/4" x 1-5/8" PLYWOOD WING HOLD-DOWN PLATES
ABOUT BALSA WOOD:
We do our best to put as good a grade of balsa in our kits as the supply situation permits. The wonderfully versatile balsa wood is a fine, lightweight material to obtain as high an average quality as used to be the case.
Every piece of balsa supplied cannot be 100% perfect or kit prices would have to be greatly increased. Minor stains or small knots do not affect wood strength. Knots, if not too large or too many, are a sign of natural tendency for some species of sheets to develop slots low upon being cut off from a perfectly square block because of built-in stresses. In most cases, knots will not affect the proper alignment during building. True up the edges of blank sheets by trimming using a metal straightedge
NOTE: AILERON OMITTED FROM LEFT WING PANEL DRAWING FOR CLARITY.
AILERON TORQUE ROD
1/4" SQ. x 2" BASSWOOD GROOVED TORQUE ROD BLOCKS
AILERON
PRE-CUT 1/4" BALSA SHEET
DIE-CUT LITE-PLY FUSELAGE SIDE
DIE-CUT LITE-PLY FUSELAGE DOUBLER
1/2" TRIANGLE STOCK
DIE-CUT LITE-PLY TANK FLOOR
1/4" x 1-1/2" x 3" PLYWOOD LANDING GEAR MOUNT
1/4" x 3/4" x 1" BASSWOOD WING HOLD-DOWN BLOCK
F-1
F-2
F-3
HR
F-4
F-5
F-6
FBF
DIE-CUT LITE-PLY FUSELAGE BOTTOM, FRONT
FUSELAGE
TOP VIEW
NOTE: THE RIGHT-HAND SIDE OF THE FUSELAGE TOP DECK HAS BEEN OMITTED FROM THIS VIEW FOR CLARITY.
IP
F-3S
F-4S
0º SIDE THRUST
NOTE: ENGINE, FUEL TANK, RADIO EQUIPMENT, PUSHRODS, AND CANOPY HAVE BEEN OMITTED FROM THIS VIEW FOR CLARITY.
3/16" x 1/4" x 18" BALSA FUSELAGE STRINGERS
SAND L.E. ROUND
W-2
AILERON
MOLDED NYLON CONTROL HORN
RUDDER
DIE-CUT LITE-PLY STAB SUPPORT
NYLON CLEVISES
MOLDED NYLON AILERON CONNECTOR
3/32" DIE-CUT BALSA FUSELAGE TOP DECK
DIE-CUT LITE-PLY COCKPIT FLOOR
FBR
DIE-CUT LITE-PLY FUSELAGE BOTTOM, REAR
1/4" DIA. x 2" HARDWOOD WING HOLD-DOWN DOWEL
W-1
BP
DIE-CUT LITE-PLY AILERON POSITIONING GUIDE
USE THE AILERON POSITIONING GUIDE TO SET THE AILERONS IN NEUTRAL BEFORE THE FIRST FLIGHT.
3/16" SQ. BALSA FRONT SPARS, TOP AND BOTTOM
W-2
X
DIE-CUT LITE-PLY WINGTIP
CUT OUT THIS PORTION OF THE WING PLAN AND SPLICE IT TO THE PLAN ABOVE. BE CERTAIN TO LINE UP THE "X" AND "Y" INDICATORS.
Y
1/4" SQ. BALSA TRAILING EDGE
CROSS-SECTION AT F-1
F-1 CONSTRUCTED USING TWO IDENTICAL DIE-CUT PLYWOOD PIECES EPOXIED TOGETHER.
THROTTLE PUSHROD
THRUST LINE
ALUMINUM ENGINE MOUNTS. BOLT TO F-1 USING 6-32 x 1/2" MOUNTING BOLTS AND 6-32 BLIND NUTS.
SAND CORNERS ROUND
FBF
FUSELAGE SIDE
FUSELAGE DOUBLER
CROSS-SECTION AT F-2
FUSELAGE TOP DECK
TANK FLOOR POSITION
6-32 BLIND NUTS
6-32 x 1/2" MOUNTING BOLTS
1/4" x 1-1/2" x 3" PLYWOOD LANDING GEAR MOUNT
TWO SMALL HOLES ARE PROVIDED ON EACH END OF THE LANDING GEAR FOR ATTACHING OPTIONAL WHEELPANTS. ✻
.090 ALUMINUM LANDING GEAR
STABILIZER
PRE-CUT 1/4" BALSA SHEET
EASY HINGES
NOTE: FOR BEST CONTROL RESPONSE, KEEP THE GAPS BETWEEN THE CONTROL SURFACES AND THE MODEL AS NARROW AS POSSIBLE WITHOUT CAUSING A BIND IN THE MOVEMENT.
ELEVATOR
PRE-CUT 1/4" BALSA SHEET
3/32" MUSIC WIRE ELEVATOR JOINER
SAND EDGES ROUND
3/32" DIE-CUT PLYWOOD DIHEDRAL BRACE
2º
In any conflict between the plan and the booklet, follow the booklet instructions. They are revised more frequently than the plan.
WARNING — DANGER!
Important: Read These Warnings:
Do Not fly control line or towline models within 300 feet of electric power lines. Instant death from electrocution can result from coming near them. Direct contact is not necessary.
A model airplane motor gets very hot and can cause serious burns. Do not touch the motor during or after operation. Keep clear of the propeller. It can cut off a finger or put out an eye. Make sure the propeller is securely fastened in place and is not cracked. Model airplane fuel is flammable and poisonous. Take the same precautions while transporting and using it that you would with a can of gasoline or a bottle of poison. Remember that it is possible to lose control of a model airplane. Do not fly in locations where the model may hit people or damage property if loss of control occurs. Check your model and equipment regularly to insure it is in safe operating condition.
LIMIT OF LIABILITY
In use of our products, SIG Manufacturing Co.'s only obligation shall be to replace such quantity of the product proved defective. Buyer and any other user of the suitability of the product for his or her intended use and shall assume all risk and liability in connection therewith.
HORN PLATE
CONTROL HORN ASSEMBLY
CONTROL HORN
#2 x 1/2" SCREWS
FIN
PRE-CUT 3/16" BALSA SHEET
RUDDER
PRE-CUT 3/16" BALSA SHEET
EASY HINGES
GLUE THE CENTER STRINGER INTO THE NOTCH IN F-6. THE OUTER TWO STRINGERS ARE GLUED TO THE FRONT FACE OF F-6.
STABILIZER
CUT NOTCH TO CLEAR ELEVATOR JOINER WIRE
STABILIZER INCIDENCE: 0º
MOLDED NYLON CONTROL HORN
✻ SAITO .50 SHOWN
NOTCH FUSELAGE SIDE AS NECESSARY TO CLEAR NEEDLE VALVE
✻ 2" DIA. SPINNER
✻ ITEMS MARKED BY AN ASTERISK ARE NOT FURNISHED IN THIS KIT. SEE INSTRUCTION BOOK FOR AVAILABILITY OF THESE ITEMS FROM SIG.
8 OZ. SULLIVAN SLANT FUEL TANK ✻
USE FOAM RUBBER AROUND THE FUEL TANK TO POSITION IT PROPERLY.
✻ RECEIVER
3/32" DIE-CUT BALSA FUSELAGE TOP DECK
A WILLIAM BROS. 2" SCALE SPORTSMAN PILOT FIGURE FITS WELL IN THE COCKPIT.
MOLDED PLASTIC CANOPY
3/16" x 1/4" x 18" BALSA FUSELAGE STRINGERS
2º DOWNTHRUST
FLEXIBLE CABLE THROTTLE PUSHROD
ALUMINUM ENGINE MOUNTS
FBF
NYLON PUSHRODS
DRILL 3/16" DIA. HOLES IN F-3S AND F-4S TO POSITION THE NYLON PUSHRODS AS NECESSARY TO LINE-UP WITH THE SERVOS.
FUSELAGE
SIDE VIEW
FBR
PUSHROD EXIT SLOT
1/16" DIA. TAILWHEEL WIRE
SECURE TAILWHEEL WIRE WITH 1" FIBERGLASS TAPE. SATURATE AREA WITH THIN C/A GLUE.
3/4" DIA. ✻ TAILWHEEL
WING INCIDENCE: + 1/2º
SPAR LOCATION
BALANCE RANGE
1/4-20 x 1" NYLON WING HOLD-DOWN BOLT (2)
NOTE: THE THRUST ANGLES, WING INCIDENCE AND STABILIZER INCIDENCE ARE ALL BUILT INTO THE KIT PARTS AND ARE AUTOMATICALLY INCORPORATED IN THE MODEL DURING ASSEMBLY. BY TAKING REASONABLE CARE DURING CONSTRUCTION, THEY SHOULD ALL BE WITHIN ACCEPTABLE TOLERANCE. ASSUMING THE BALANCE POINT IS CORRECT, ONLY FINE ADJUSTMENT OF THE CONTROL SURFACES DURING TEST FLIGHTS SHOULD BE NECESSARY FOR TRIMMING.
WRAP THE RECEIVER AND BATTERY IN FOAM RUBBER. POSITION THEM AS NECESSARY TO ACHIEVE PROPER BALANCE POINT.
✻ FLAT BATTERY PACK
.090 ALUMINUM LANDING GEAR
LANDING GEAR ASSEMBLY
LANDING GEAR
MAIN WHEEL
8-32 NUTS
8-32 x 1-3/8" AXLE BOLT
✻ 2-3/4" DIA. MAIN WHEELS
✻ OPTIONAL WHEELPANTS USE SIG SH-378
✻ EYELET
TYPICAL SERVO INSTALLATION AS VIEWED FROM BELOW
✻ HARDWOOD SERVO RAILS
✻ INTERNAL SWITCH
SCRAP BALSA STANDOFF
THROTTLE PUSHROD
SOLDER CLEVIS
SERVO TRAY ✻
CROSS-SECTION AT F-3
F-3
F-3S
1/2" TRIANGLE
NYLON PUSHRODS
STRINGERS
F-4
CROSS-SECTION AT F-4
F-4S
CROSS-SECTION AT F-5
SCRAP BALSA
NYLON PUSHRODS
F-5
FBR
CROSS-SECTION AT F-6
F-6
SIG CRAFTMAN'S KIT
KIT NO. RC-44
FOUR-STAR 40
A QUICK-TO-BUILD, FUN-TO-FLY, .40-SIZED SPORT MODEL
DESIGNED AND DRAWN BY BRUCE THARPE
WINGSPAN: 59-3/4"
LENGTH: 47 in.
RECOMMENDED ENGINES: .30 - .40 2-STROKE .40 - .50 4-STROKE
WING AREA: 604 sq. in.
WEIGHT: 4-3/4 lb.
© Sig Mfg. Co., Inc. 1989 Printed in U.S.A.
FOUR-STAR 40 RC-44
SIG MFG. CO., INC. . . . Montezuma, IA
By H.E