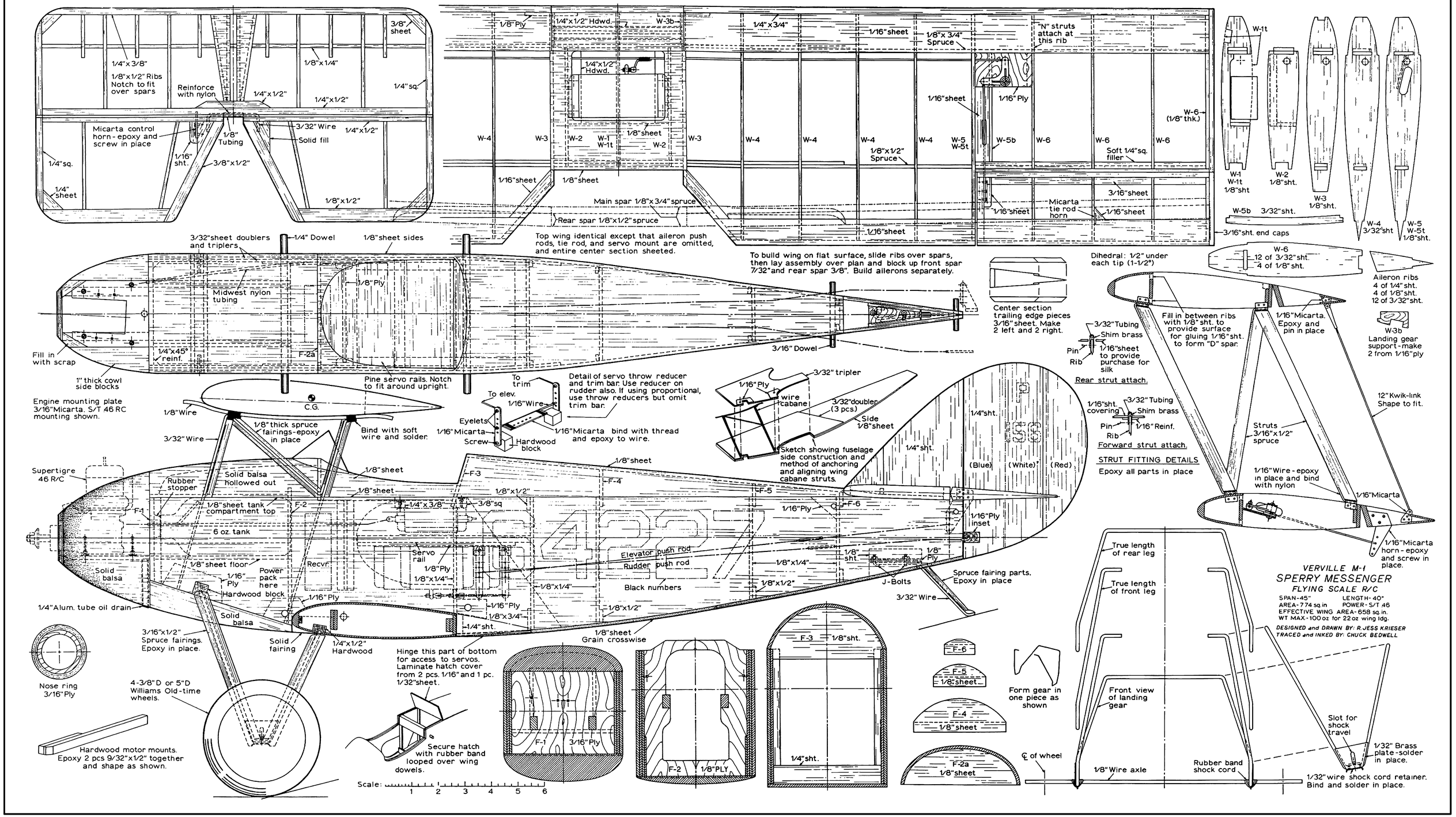
1/4"x3/8"
1/8"x1/2" Ribs Notch to fit over spars
Reinforce with nylon
1/4"x1/2"
1/8"x1/4"
3/8" sheet
1/4" sq.
Micarta control horn - epoxy and screw in place
1/8" Tubing
3/32" Wire
Solid fill
1/16" sht.
3/8"x1/2"
1/8"x1/2"
1/4" sheet
1/8" Ply
1/4"x1/2" Hdwd.
W-3b
1/4"x3/4"
1/16" sheet
1/8"x 3/4" Spruce
"N" struts attach at this rib
W-4
W-3
W-2
W-1
W-1t
1/8" sheet
1/8"x1/2" Spruce
W-5
W-5t
W-5b
W-6
W-6 (1/8" thk.)
Soft 1/4" sq. filler
1/16" Ply
3/16" sheet
Micarta tie rod horn
Main spar 1/8"x3/4" spruce
Rear spar 1/8"x1/2" spruce
Top wing identical except that aileron push rods, tie rod, and servo mount are omitted, and entire center section sheeted.
W-1 W-1t 1/8" sht
W-2 1/8" sht.
W-3 1/8" sht.
W-5b 3/32" sht.
W-4 3/32" sht
W-5 W-5t 1/8" sht.
3/16" sht. end caps
3/32" sheet doublers and triplers
1/4" Dowel
1/8" sheet sides
Midwest nylon tubing
To build wing on flat surface, slide ribs over spars, then lay assembly over plan and block up front spar 7/32" and rear spar 3/8". Build ailerons separately.
Center section trailing edge pieces 3/16" sheet. Make 2 left and 2 right.
Dihedral: 1/2" under each tip (1-1/2°)
W-6 12 of 3/32" sht. 4 of 1/8" sht.
Aileron ribs 4 of 1/4" sht. 4 of 1/8" sht. 12 of 3/32" sht.
W-3b Landing gear support - make 2 from 1/16" ply
Fill in with scrap
1/4"x45° reinf.
F-2a
3/16" Dowel
1" thick cowl side blocks
Pine servo rails. Notch to fit around upright.
Engine mounting plate 3/16" Micarta. S/T 46 RC mounting shown.
C.G.
1/8" Wire
3/32" Wire
1/8" thick spruce fairings - epoxy in place
Bind with soft wire and solder.
To trim
To elev.
1/16" Wire
Eyelets
1/16" Micarta
Screw
Hardwood block
Detail of servo throw reducer and trim bar. Use reducer on rudder also. If using proportional, use throw reducers but omit trim bar.
1/16" Micarta bind with thread and epoxy to wire.
1/16" Ply
3/32" tripler
wire cabane
3/32" doubler (3 pcs.)
Side 1/8" sheet
Sketch showing fuselage side construction and method of anchoring and aligning wing cabane struts.
1/4" sht.
(Blue)
(White)
(Red)
3/32" Tubing
Shim brass
Pin
Rib
1/16" sheet to provide purchase for silk
Rear strut attach.
1/16" sht. covering
1/16" Reinf.
Forward strut attach.
STRUT FITTING DETAILS
Epoxy all parts in place
Fill in between ribs with 1/8" sht. to provide surface for gluing 1/16" sht. to form "D" spar.
1/16" Micarta. Epoxy and pin in place
12" Kwik-link Shape to fit.
Struts 3/16"x1/2" spruce
1/16" Wire - epoxy in place and bind with nylon
1/16" Micarta
1/16" Micarta horn - epoxy and screw in place.
Supertigre 46 R/C
Rubber stopper
Solid balsa hollowed out
1/8" sheet
F-1
F-2
F-3
F-4
F-5
F-6
1/8" sheet tank compartment top
1/4"x3/8"
3/8" sq.
1/8"x1/2"
1/16" Ply
1/16" Ply inset
6 oz. tank
Servo rail
Elevator push rod
Rudder push rod
1/8" sheet floor
Power pack here
Recvr.
1/8" Ply
1/8"x1/4"
1/8" sht.
Solid balsa
1/16" Ply
Hardwood block
Black numbers
J-Bolts
Spruce fairing parts. Epoxy in place
3/32" Wire
1/4" Alum. tube oil drain
1/8"x3/4"
1/4" sht.
1/8" sheet Grain crosswise
3/16"x1/2" Spruce fairings. Epoxy in place.
Solid fairing
1/4"x1/2" Hardwood
Hinge this part of bottom for access to servos. Laminate hatch cover from 2 pcs. 1/16" and 1 pc. 1/32" sheet.
Nose ring 3/16" Ply
4-3/8" D or 5" D Williams Old-time wheels.
Hardwood motor mounts. Epoxy 2 pcs 9/32"x1/2" together and shape as shown.
Secure hatch with rubber band looped over wing dowels.
Scale: 1 2 3 4 5 6
3/16" Ply
F-2
1/8" PLY
F-3 1/8" sht.
1/4" sht.
F-6
F-5 1/8" sheet
F-4 1/8" sheet
F-2a 1/8" sheet
Form gear in one piece as shown
℄ of wheel
True length of rear leg
True length of front leg
Front view of landing gear
1/8" Wire axle
Rubber band shock cord
Slot for shock travel
1/32" Brass plate - solder in place.
1/32" wire shock cord retainer. Bind and solder in place.
VERVILLE M-1
SPERRY MESSENGER
FLYING SCALE R/C
SPAN - 45" LENGTH - 40"
AREA - 774 sq. in POWER - S/T 46
EFFECTIVE WING AREA - 658 sq. in.
WT MAX - 100 oz for 22 oz wing ldg.
DESIGNED and DRAWN BY: R. JESS KRIESER
TRACED and INKED BY: CHUCK BEDWELL