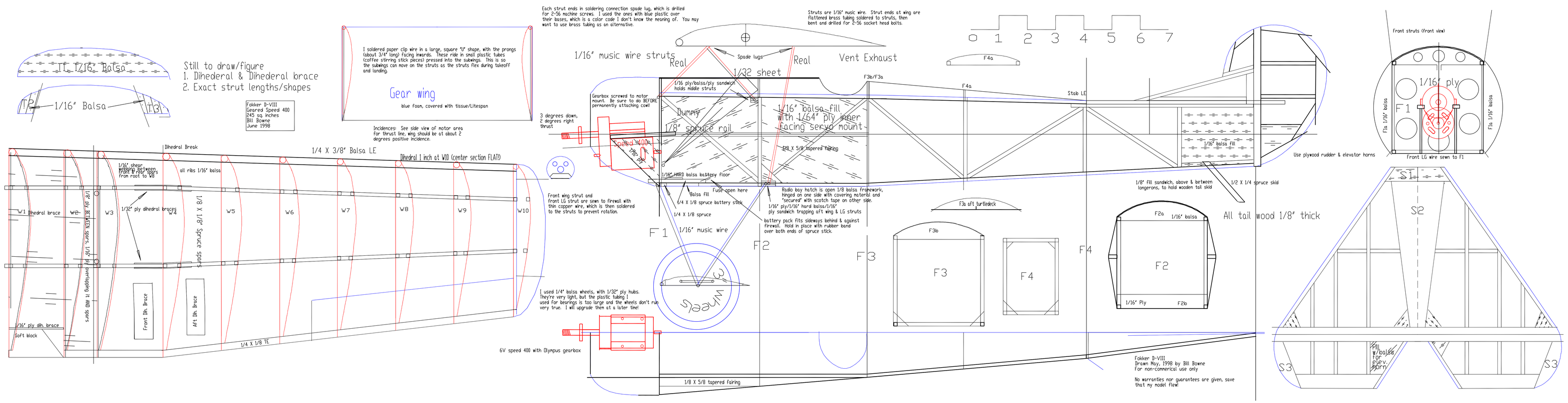
TE 1/16" Balsa
T2
1/16" Balsa
T3
Still to draw/figure
1. Dihederal & Dihederal brace
2. Exact strut lengths/shapes
Fokker D-VIII
Geared Speed 400
245 sq. inches
Bill Bowne
June 1998
I soldered paper clip wire in a large, square "U" shape, with the prongs (about 3/4" long) facing inwards. These ride in small plastic tubes (coffee stirring stick pieces) pressed into the subwings. This is so the subwings can move on the struts as the struts flex during takeoff and landing.
Gear wing
blue Foam, covered with tissue/Litespan
Incidences: See side view of motor area for thrust line, wing should be at about 2 degrees positive incidence.
Dihedral Break
1/4 X 3/8" Balsa LE
Dihedral 1 inch at W10 (center section FLAT)
1/16" shear webbing between spars from root to W8
all ribs 1/16" balsa
W1 Dihedral brace
W2
W3
1/32" ply dihedral braces
W4
W5
W6
W7
W8
W9
W10
1/8" X 1/8" Spruce spars
1/8" X 1/8" Spruce spars
1/16" ply diagonals in W10 spars
Front Dih. Brace
Aft Dih. Brace
1/16" ply dih. brace
Soft block
1/4 X 1/8 TE
Each strut ends in soldering connection spade lug, which is drilled for 2-56 machine screws. I used the ones with blue plastic over their bases, which is a color code I don't know the meaning of. You may want to use brass tubing as an alternative.
Struts are 1/16" music wire. Strut ends at wing are flattened brass tubing soldered to struts, then bent and drilled for 2-56 socket head bolts.
1/16" music wire struts
Real
Spade lugs
Real
Vent Exhaust
1/32 sheet
1/16 ply/balsa/ply sandwich holds middle struts
Gearbox screwed to motor mount. Be sure to do BEFORE permanently attaching cowl
3 degrees down, 2 degrees right thrust
Dummy
1/8" spruce rail
1/16" balsa fill with 1/64" ply inner facing servo mount
1/8 X 5/8 tapered fairing
1/16" HARD balsa battery floor
Fuse open here
Balsa fill
1/4 X 1/8 spruce battery stick
1/4 X 1/8 spruce
1/16" music wire
Front wing strut and front LG strut are sewn to firewall with thin copper wire, which is then soldered to the struts to prevent rotation.
Radio bay hatch is open 1/8 balsa framework, hinged on one side with covering material and "secured" with scotch tape on other side.
1/16" ply/1/16" hard balsa/1/16" ply sandwich trapping aft wing & LG struts
battery pack fits sideways behind & against firewall. Hold in place with rubber band over both ends of spruce stick.
F3b/F3a
F4a
Stab LE
0 1 2 3 4 5 6 7
F1
F2
F3
F4
F3a aft turtledeck
F3b
F2a
1/16" balsa
1/16" Ply
F2b
1/16" balsa fill
1/8" fill sandwich, above & between longerons, to hold wooden tail skid
1/2 X 1/4 spruce skid
All tail wood 1/8" thick
Use plywood rudder & elevator horns
Front struts (front view)
1/16" ply
F1
F1a 1/16" balsa
F1a 1/16" balsa
Front LG wire sewn to F1
S1
S2
S3
S3
Fill w/balsa for elev. horn
I used 1/4" balsa wheels, with 1/32" ply hubs. They're very light, but the plastic tubing I used for bearings is too large and the wheels don't run very true. I will upgrade them at a later time!
Wheels
6V speed 400 with Olympus gearbox
1/8 X 5/8 tapered fairing
Fokker D-VIII
Drawn May, 1998 by Bill Bowne
For non-commerical use only
No warranties nor guarantees are given, save that my model flew!