Wood, Adhesive, Parts & Tool Listing As Built

Woods

Qty	Size & type
1	1/4” x 36” square balsa
1	3/16” x 3” x 36” balsa sheet
2	3/32” x 4” x 36” balsa sheet
1	3/32” x 3” x 36” balsa sheet
1	1/16” x 4” x 36” balsa sheet
1	1/16” x 3” x 36” balsa sheet
1	3/16” x 5/8” X 26” balsa trailing edge stock - this is not easy to find, but 3/16” x 3/4” can be substituted as in only increases the wing chord by 1/16”
1	3/32” x 6” x 12” plywood
1	1/16” x 6” x 12” plywood
1	3/16” x 36” Dowel

Adhesives
Loctite Spray Adhesive or equivalent
Titebond Original Wood Glue
Instant Jet brand CA or equivalent
Devcon 30-Minute Epoxy
Locktite Threadlocker Blue 242 - inside nut on axle
Not an adhesive, but handy to have for an oops, Lightweight Spackling, found at hardware or big box hardawre stores.

Other
Great Planes Dural Landing Gear .19
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXJ921&P=7
This gear will have to be adjusted to the dimensions shown on the mm-fuse-top-view.pdf

2 6-32 socket head screws with 4 bolts to act as axles
Dubro Socket Bolt Locknut 632 (4)
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXD961&P=7
and
Dubro Steel Hex Nuts 6-32 (4)
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXE065&P=7

Dubro Bolt Locknut Set 256 (4) 1bolt and nut required for the rudder yoke
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXD962&P=7

4 Sheet metal screws (Dubro Sheet Metal Screws #2x3/8 (8)) to mount the motor
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXD973&P=ML

2 small servo/wood screws to mount the servo to the servo mount

Dave Brown Lectra Lite Flite Wheel 2" (2)
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXB919&P=7
Two wheels from a parkzone T-28 were actually used

Dubro E/Z Connectors (2) - fitting for rudder torque rod and servo arm
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXD925&P=7

K&S 0.055 or 0.062 music wire - rudder torque rod, tail skid, rudder yoke although yoke can be even smaller diameter for easier bending

K&S 3/32" O.D. x 12" round brass tube - used for bushing at the rear of the fuselage and through the plywood motor mount.

2 rare earth magnets
Rare Earth Super Magnets (2-Pack) these are 3/16" in diameter
http://www.radioshack.com/product/index.jsp?productId=2102642
I emancipate mine from magnet toys, the brand I'm using now is called the MagneXt System.

Radio System Used:
Tactic TR624 receiver
Hitec HS-50 servo (discontinued) Hitec HS-35 could be substituted

Power System Used:
Thunder Power 2S 450mAh LiPo - a 750mAh or 800mAh could be substituted as 1 oz. of nose weight was required on the prototype
Castle Creations Thunderbird 9 ESC
Scorpion S-2205-32 aka 2818-1979Kv 32g w/standard prop adapter NOT prop saver!
A good substitute would be a Cobra C-2204/32 aka 2714-1960Kv 23g with a prop adapter NOT prop saver
http://www.innov8tivedesigns.com/product_info.php?cPath=21_120_121&products_id=862
2 pair of Anderson Power Poles (battery to ESC connection)
Cox 6x4 Gray Prop - substitute an APC 6x4E

Tools:
Hobby size table saw. I use a Dremel which is discontinued, but Micro Mark still carries the belt and blades for it.
The Mini Harbor Freight one will not do!
A scroll saw can cut the plywood parts, but the edge will need to be 'straightened' using a sanding bar.
For the serious modeler, I'd recommend the very expensive table saw from Micro Mark.
http://www.micromark.com/microlux-digital-table-saw,11530.html

Scroll Saw. I have the discontinued Dremel.
This should work in most hobby applications.

http://www.harborfreight.com/16-inch-variable-speed-scroll-saw-93012.html
16 In. Variable Speed Scroll Saw $69.99
Here's Micro Mark's
http://www.micromark.com/16-inch-scroll-saw-with-flexible-shaft-attachment,9621.html

Electric hand drill with 1/16", 3/32", 5/32", 3/16", 1/4", 7/16" and 5/8" bits

Pin vice with 1/16" bit
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXARDZ&P=7

Weller 40-watt soldering iron - solder bullet connectors on the ESC & open holes in covering for dowels, motor mount, horizontal stabilizer, etc.

Covering iron

Heat Gun - shrinking iron on film, removing sand paper from sanding bars

Assorted sandpaper

Sanding Bar
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXK315&P=7
Attach sandpaper with spray adhesive on both the bar and paper.
Remove sandpaper with a heat gun

36" metal rule - use to swipe between balsa that was temporarily laminated for cutting parts, align to cut straight edges of parts

12" metal, wood or plastic ruler

Single edge razor blades - cutting straight edges on parts
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXJC81&P=7

X-Acto with #11 blade - notching & other odds and ends
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXKY72&P=ML

X-Acto Razor Saw Blade 52T/in 5-1/2"
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXKX92&P=ML

Dremel Moto Tool at least 2 speeds
http://www.lowes.com/ProductDisplay?
partNumber=406989-353-200-1%2f15&langId=-1&storeId=10151&productId=3824377&
catalogId=10051&cmRelshp=req&rel=nofollow&cId=PDIO1

Dremel Fiberglass Reinforced Cutoff Wheel #426

Dremel Rotary Mandrel #402

Dremel 15/16” Cutting wheels #409

Safety goggles
3M Clear Plastic Chemical Impact Goggle
http://www.lowes.com/pd_79788-98-90519-00001_0__?productId=3776059&Ntt=safety+goggles&pl=1&currentURL=%3FNtt%3Dsafety%2Bgoggles&facetInfo=
or goggles, dust mask & ear plugs
http://www.lowes.com/pd_162469-98-93005-80025_0__?productId=3086637&Ntt=safety+goggles&pl=1&currentURL=%3FNtt%3Dsafety%2Bgoggles&facetInfo=

3” or larger vice
http://www.lowes.com/pd_211822-52800-BV-CO30_0__?productId=3053509&Ntt=vice&pl=1&currentURL=%3FNtt%3Dvice&facetInfo=

Bondhus 9-Piece Fold Up Inch Standard - motor mount screws and landing gear axles
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXARJ2&P=7

Small screw driver set - working with small servo screws
http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXYYF0&P=7

Straight pins, the kind with the round heads are nice

No. 2 pencil and fine line marker

1” wide masking tape

Small adjustable crescent wrench

small container to store small parts in during the assembly, i.e. old margarine container

#64 rubber bands

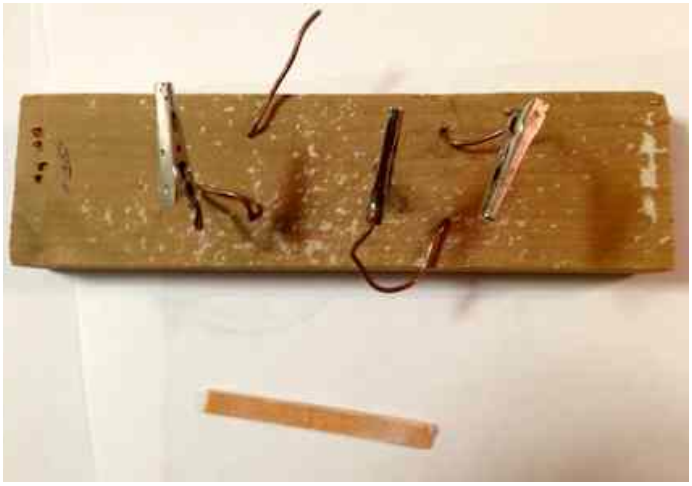
wax paper

Pliers; one of each, needle nose and regular

Homemade tools:

A couple of different width sanding sticks made from 1/16” plywood with ‘fine’ sandpaper attached to both sides and <u>one edge ONLY</u> using spray adhesive. Wrap the sandpaper around only one edge.

Third hand, used to hold connectors for soldering, one short piece of 1x2, 12 gauge house wiring (about 18”), four small ‘alligator’ clips. Drill four holes, two each parallel to



each other, though the wood. Run a nine inch length of wire through each hole until they are about equal. Solder on the clips. (put photo here)