A Consolidated XBY Story

Back in September 1988 I ran across a free flight peanut scale plan of the Consolidated XBY-1 in the now defunct Model Builder Magazine(MB). (The plan should still be available from Bill Northrop's Plan Service, 702-896-2162). I was very interested in it and drew up a set of plans for a scale CL model. I never built that model, but I did build a profile carrier version a few years later. The airplane performed well but I never refined the design.

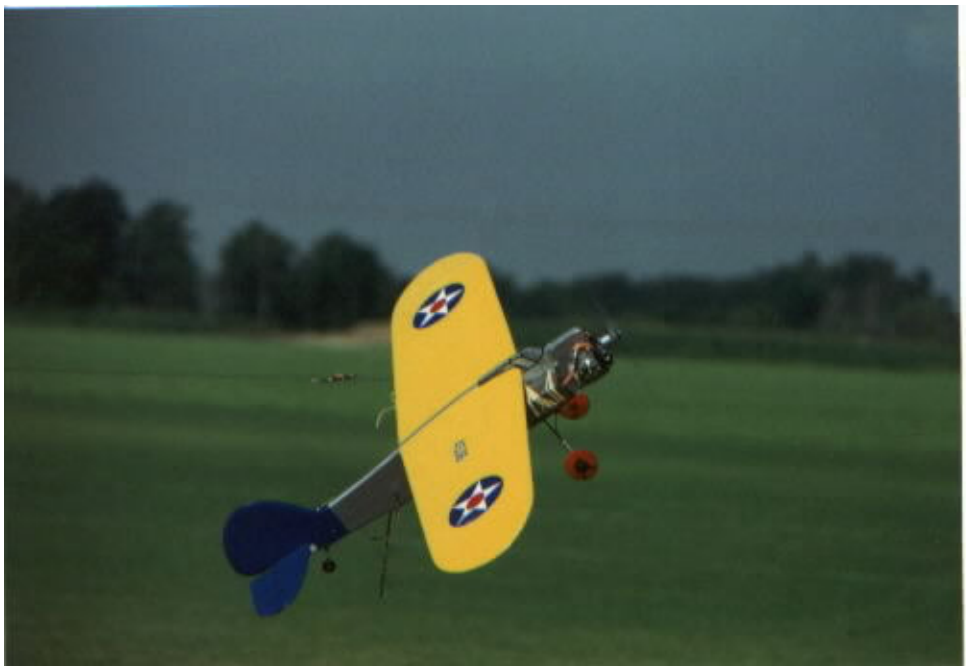
The XBY looks like a Lockheed Vega, but according to the MB article is was an all metal fuselage and had many more modern design features. It was based on the commercial version of the Fleetster, build for the New York, Rio, and Buenos Aires Airline (NYRBA). Flying the coastal route could use either floats or wheels.

In 1931 the Navy briefly evaluated the Consolidated XBY-1, (BuAer A8921) an R-1820-engined version. Though fast by the standards of the day (181 mph top speed), it was ultimately deemed too large for carrier storage and unsuitable for dive-bombing. It was not ordered but was the first stressed-skin aircraft, and the first aircraft with integral fuel tanks in the wings operated by the Navy.

Sometime back in the 1990's I built a profile version that was close to scale. It ultimately met its fate in the Muncie wind one day when the slider tripped on take-off. The plane nosed up and onto its back. No problem I thought, since I am an accomplished stunt pilot, I just started to pull a loop. Unfortunately with the wind and slider back it became a figure 9.

After the rule change to allow mufflers of every type, I re-designed the XBY for a tuned pipe. The original design had some faults I have tried to correct. The fuselage gets tall(wide) at scale size and is weak near the tail. I slimmed the fuselage, ran a ½" square spruce spar down the centerline. The tail surfaces have been increased by 10% over scale size. To speed construction I used a combat wing that was cut by Bub Reese, one of my club mates. I didn't get fancy, just used it as I would on a combat plane, however it does have a straight leading edge vice a sweptback wing as the original had.

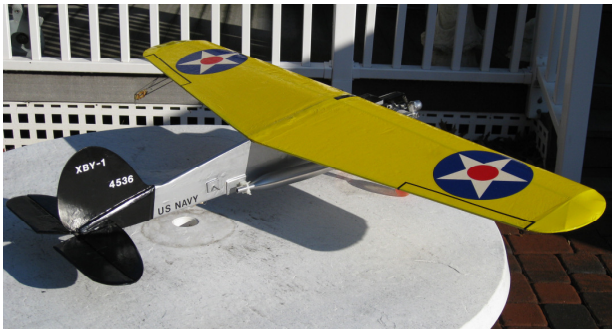
Construction is normal except since there is nothing on top to hold the wing on other than the glue on the bottom, I doweled it with ¼" pins. To power the thing I bought a Thunder Tiger .36 and a MACS pipe. I have absolutely no pipe experience, so I don't have a feel for how this will work. The pipe is advertised for this engine, and it is a relatively inexpensive setup. It will use 10% Red Max fuel of course. Covering is Monocote (silver), Coverite (black) and Ultracote (Yellow), just because it is what I had. A set of my working drawings are available, tiled in a PDF document or as a dxf file if anyone wants a copy. Just drop me a note at flyclcarrier@yahoo.com .



The Original doing what it was meant to do.

The real thing

My original model, lost in the wind at Muncie when the slider prematurely tripped on take off



The piped version, complete, except for some bits and pieces of linkage. It has a much meaner look in my view.