Andy Weinberg's PB-3

PB-3 Specifications:

Gross weight: 1,800 lbs Empty Weight: 1,100 lbs Useful Load: 700 lbs

Wingspan: 33'
Length: 23'
Fuel: 34 gallons
Top Speed: 140mph
Cruise Speed: 125mph
Stall Speed: 40mph
Range: 550 miles



This is Andy Weinberg's PB-3. The aircraft is "purpose built" and the third aircraft he's constructed. The first airplane Andy built was the Van's side by side RV-6 followed by tandem RV-8. All 3 airplanes have been taildraggers. The RV-6 exceeded Van's Aircraft performance specs bringing Andy's "first build" significant attention from the aircraft kit manufacturer.

The PB-3 resembles the popular Bellanca Citabria, but a closer look reveals a completely different airplane. Beginning at the front of the aircraft you'll note the high performance Cato propeller. The cowling is from an RV-8 offering lower drag, better performance and good engine cooling. Inside that cowling is an experimental Lycoming 0-320 with an estimated 185 HP driving that beautiful composite propeller.



The aircraft stands tall on long aluminum gear legs with large 28"X 10" tires. The gear allows for operations on grass or stone covered runways as well as off airport landings. Note: The brake fluid flows through a tunnel/hole in the aluminum gear legs. There are no long external brake lines that can easily be broken by rocks or stones. The Scott tailwheel is equipped with the new "T-3 tail spring" suspension system and 8" tire. This allows for a smooth touchdown and roll out regardless of the runway surface.

Andy installed vortex generators on the top of the wing and the bottom of the horizontal tail. A

vortex generator keeps the airflow attached to the wing and tail during slow flight allowing the PB-3 to fly even slower. The Citabria 7GCBC takeoff distance is published to be 412' and landing distance is 360'. The PB- 3 can easily surpass these distances due to the vortex devices and increased power.

Inside the cockpit Andy designed an instrument panel that folds down for easy access to the instruments and wiring. Performing avionics work on most aircraft requires the technician to be a contortionist working in a very uncomfortable prone position. In the PB-3, one sits comfortably in the seat and simply folds down the instrument panel to accomplish the work.

The pilot and passenger seat are covered with heavy duty fabric and are very comfortable. The "Hooker Harness" seat belt and shoulder restraints are red and gray matching the overall color scheme of the PB-3. Andy added handmade leather coverings to several of the controls making the interior very personable and attractive.

The PB-3 took 2.5 years of full time work to complete and about 3000 hours of labor. The plane is covered with an experimental lightweight fabric called "Oratex". The fabric is stretched and tightened with a heat gun. There is no need for the added weight of paint because the color is in the fabric.

The navigation system is the Grand Rapids EFIS (glass display) with GPS and a full moving map. This system incorporates modern ADSB traffic reporting and has a Full Engine Monitor on one of the many screens available.

EXPERIME

This airplane was built purely for fun and is used for flying out with friends for "\$100 hamburgers." Andy also enjoys taking the PB-3 to dirt and grass strips and always considers "risk vs reward" when choosing his unimproved airport experience. Andy remarked that the first flight included a lot of anticipation several days before, but went well, just as expected.



In Andy's words: "The PB-3 is a lot of fun to fly, I went from flying an RV-8 that goes high and fast to flying the PB-3 which I generally fly low and slow. I don't really have a mission other than to have fun, so yes it's a lot of fun to fly. Although the airplane is an experimental, most of the design and the construction as long the lines of proven designs and methods. I toyed with the name "Cub Scout" because the airplane has many features of both the Piper Cub and the American Champion Scout. I tried to keep the airplane simple safe and light. I also work very hard to build serviceability into the airplanes I have built for simpler maintenance.

I built an early RV-6 that originally flew in 1990. In 2003 I sold the "6" and built an RV-8. Soon after finishing the "8" I spent six weeks flying around the country and up the East Coast. The PB-3 is the third airplane I've built for myself and the first that was not a kit. I have helped complete numerous other airplanes mostly Vans type aircraft.

Right now I'm pretty content flying the PB-3 and I have no plans to build another airplane. I still enjoy aircraft construction though, so I don't think I would rule it out."