

Norris Warner, EAA # 9701 completes and flies Stan Shannon's final project, The BushCaddy LSA.

Friends

Glad to report that the first flight of Stan Shannon's BushCaddy was accomplished yesterday, May 18, 2010. The take was at 6:00 PM local, with a slight crosswind of 10 to 15 mph, and lasted about one hour. The magneto check was shown to be a "no drop" of RPM, thanks to electronic ignition on the Jabiru 3300 (120 hp). The carb heat check was likewise uneventful, as it uses two layers of electric heat coils (separately switched) and so I could not detect a blip on the volt meter—We'll have to make sure that that novel system is really working.

The takeoff roll at the ranch airport is down hill, and by the time I had things straightened out and was able to crosscheck the tachometer, I was airborne. That antique 4412 airfoil is still a good choice! The elevator trim system is also a novelty (or perhaps a mistake). It is a spring tied to the elevator push-pull tube, with a cable from the spring winding around a ½ inch shaft running across the cockpit, under the seats—with a hand wheel on each side to tighten or loosen the spring. Quite obviously, there is no way to determine the correct setting for the first flight, so it was what it was—fortunately, the BushCaddy was designed with adequate tail surfaces, so this was a non-problem for the first takeoff, and I was able to roll in proper trim for approach speeds with no difficulty.

Back to the takeoff—the airplane actually lifted off from the three-point attitude after a ground roll of only 200 feet or so, and we were climbing out at around 55 mph, but surprisingly, the tachometer was pegged at 2400 rpm, and not the 3100 rpm I was expecting. The airplane clearly had enough power to climb out of ground effect, so I proceeded to fly a normal pattern.

Earlier in the afternoon I had broken in the wheel brakes by taxiing downhill and riding the brakes to get them hot—and then letting the airplane sit to allow them to cool off. In doing this twice, I was a bit concerned that the cylinder head temps were getting up to the redline limit, and so during the first few minutes of flight, those gauges were constantly in my crosscheck—and they were running cooler than on the ground (?). O.K., I'll take it! All of the other engine indications were "in the green" and so we slowly climbed up to 3000 feet above ground level, all the while feeling out the coordination of the controls, one step at a time. The aircraft has no nasty habits that I could tell during this one-hour test flight. I guess one could say that those Canadian designers got it just right! Of course, I was in constant communication with my ground crew, Jack Ridgway, son Norris II, and Richard Gramling, and reported my every observation. Stan's widow, Nanette, had a hand-held radio also, so she was abreast of all of the proceedings.

I did approach the stall at a couple of different power settings, and determined that 35 mph (really—no flaps) was the stall speed. My ground crew computed my approach speed as 45 mph, and that felt quite correct. The landing rollout was a no brainer, and I taxied in towards the ramp and a very warm reception from Nanette, daughter Stacy, son-in-law Ray and the guys.

Now we have to figure out if I'm getting full throttle travel at the Bing carburetor, or if the propeller pitch is just taking too much of a bite. It is ground-adjustable, so if that's what it takes, it is an easy fix. We did cross-check the tach with an optical rpm reader after flight, and it concurred with the panel-mounted tachometer. We will install a temporary second tach in the cockpit just to be certain of what we're really getting out of that beautiful Australian-built flat six. I can report no oil usage or leaks.

When Stan became more and more ill about one year ago, I promised that his fourth "experimental" would be completed, and so now it is a fact. Several friends gave willingly of their time to finish this project—among them were Jack Ridgway, Richard Gramling, Joe Parchesky, Ken Gilmore, Mike Jewett, Will McCormick, and son Norris II. Stan passed away on January 3, 2010, RIP.

Norris Warner, EAA # 9701

To read more about Stan Shannon's remarkable legacy to general aviation read "The Legacy of Stan Shannon" published by the Texas Aviation Association

http://www.txaa.org/main_articles/stan_shannon/default.htm

