Chapter 9- Test Flying and Debugging

Before this chapter begins I must say that although most of the Ultralight representatives out there say that their machines "need no license to fly", most of these same machines need a lot of common sense and the basics that at least STUDENT PILOT TRAINING would cover. The Zipster flys like a 'Real airplane'- that's it. It is close to a cub or a champ in response, feel, reaction, etc. The Zipster is nothing like a motorized hang glider!!

Very few homebuilders are professional test pilots. The pro pilot has been trained,trained, trained, to be calculating, methodical, cool, and quick. The homebuilder, however, may have just spent his or her life savings, and 2 or 3 years of spare time to get that machine out to the airport, ready to fly. When you put that much sweat into something, you can get emotionally off center. These emotions need to stay back in the hangar. You should have a clear head, confidence, and respect for the machine. Do not push yourself or the machine. When you are ready, you will know it.

Have an E.A.A. Technical Counselor, or a knowledgeable friend go over the airplane. Extra eyeballs never hurt, as long as they are qualified ones. Make sure your are satisfied with your fuel flow, weight and balance, Control stops, etc. Sit in the machine with the engine running, learn all the noises, and get comfortable with it. Note your foreward vision attitude as you sit and familiarize yourself with the instruments and controls. How does it feel? Do you need a cushion? Should you be wearing tennis shoes instead of Cowboy boots?

Make sure you have a strong running engine. You don't need to worry about the engine quitting if you are fighting a rigging problem or some control issue.

Taxi around the airport. Get the feel of the tailwheel steering action.Check your turning radius. Make sure your seatbelts are tight. Now, go out on the runway and track down the centerline slowly. Increase your speed as you go. The elevator of the Zipster will lift the tail before the rudder is effective, so on a full power takeoff run, wait 3 seconds after full power is applied before you begin to raise the tail. Do a few runs like this until you are comfortable with the tail firmly up, and the mains just starting to get light. Reduce power slowly, to bleed off the torque gradually.

At this point, there are two schools of thought. Some people say get in it and go for it . Others say to lift it off, fly it down the runway, to get the feel of it, and put it back on the runway.

I have done it both ways, and the method I use largely depends on the type of airplane I am testing, as well as the length of runway I am using. A formula racing plane may not break ground till it is going 75 or 80, so obviously you eat up lots of runway- But, the Zipster will break ground at 30 to 35 mph once you are used to it, so 'crow' hops are entirely possible on a 2000 ft. runway.

If you don't feel up to it after all this, then look for an experienced pilot, experienced with testing low inertia,high drag homebuilts. Then you can enjoy watching the first flight.

I don't like crowds at the airport on test flight day, but sometimes you cant avoid it. People appear out of nowhere, so don't let them make you nervous. You should pick a 'point of no return' out on the side of the runway, so if you choose to abort the takeoff, you have room to stop.

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