

Hangar Talk

The “Lightning” Newsletter

Volume 4, Number 9
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Dennis Wilt's beautiful new Lightning at Green Landings on the day of its first flight

Editor's note: The October/November Hangar Talk features Dennis Wilt's builder report, notes and photos from Tex Mantel on his Reddish Stall Warner installation, and the second in a series of builder hints from Bernardo Melendez.

Please submit material or ideas for future issues to John Jenkins at jjenkins@chorus.net.

Another Lightning Takes Flight Dennis Wilt

[Dennis Wilt submitted this builder's report in late October. As we "go to press," at the end of November, he is expecting soon to take delivery of his fully tested Lightning at the Green Landings facility. Ed.]

Hello,

I am Dennis Wilt and have just completed my Arion Lightning S/N 132, N616DW at Green Landings Flight Center in Hedgesville, WV. Ryan Gross, owner of the dealership made the first flight on Friday, October 21, 2011. Very early on Saturday morning, I packed up and drove back to Sebastian, FL and I will not see the plane for nearly a month.

I chose the Arion Lightning because I am a friend of Buz Rich and he is the technical advisor at our EAA Chapter 156 in Williamsburg, VA. But, I just said I am in Sebastian, FL didn't I? Well, my wife Donna and I moved back to Florida in early August after 9 years in Williamsburg.

Back to the Lightning. When you talk to Buz about the Lightning he is very enthusiastic and that enthusiasm rubs off very quickly. I got a chance to fly Buz's Esqual LS and really liked the way it flew. Then, last May at the Virginia State Festival of Flight in Suffolk, I got a chance to fly a Lightning. I enjoyed that as well. This past March, Donna told me to get off my backside and build the airplane I have always wanted to build, so I ordered the kit. One of the main reasons I chose the Lightning was that I could build it as an Experimental Amateur Built aircraft and fly it off as a Light Sport. I will placard the RPM settings for the 120 Knot CAS Continuous Cruise at Sea Level. We chose Green Landings to build the plane for three reasons, it was much closer to Williamsburg than Shelbyville, Ryan had had quite a few Lightnings go through his shop on the builder education program, and Donna was not interested in the build process taking 5 to 7 years.

On May 23, 2011 Donna and I arrived at Green Landings to begin the building process. That's me, inspecting the kit.

Donna and I were able to work together for two build weeks on the plane. Donna worked very hard as did I and the build experience at Green Landings is quite good. Ryan does some things a little different than the factory and has jigs that he has developed for his build process. His procedures work for his system and the jigs make things so much easier than the build manual shows. I highly recommend Ryan Gross and Green Landings Flight Center for your build if you are anywhere near that location. I have included a few pictures from the build process.



Donna sanding the gel coat to install the opera windows (week 1)



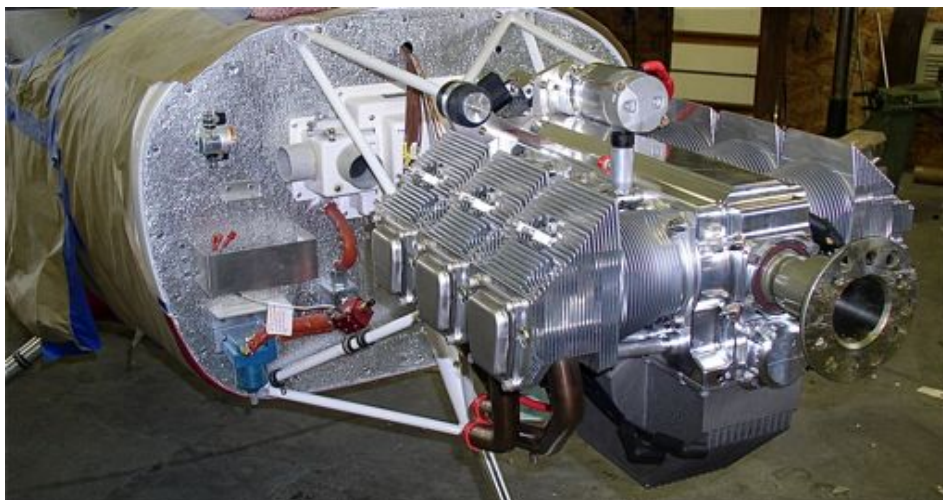
On the mains after installing and setting toe (week 1)



Beginning Week 2, back from paint



Donna installing the elevators (week 2)



First day week 3, installed the engine



The end of week 3

At the end of week 3, the plane was close, but not ready for inspection. It still had some wiring to complete, the interior was not done, the rudder wasn't installed, and a whole bunch of little things needed to be done, but it was getting close. One thing we did was change the brake lines from the clear plastic to another system that uses a different connection system (they can be re-used, too) and can handle up to 3000 psi of pressure. The lines from the inside of the airplane to the calipers are braided and I liked that much better than the lines that came with the kit. They are much harder to route since they are much stiffer than the other lines, but I don't think I'll be having any leakage issues.



Week 4 was getting the plane ready for inspection on Thursday, October 20, 2011. There were no issues during the inspection and after a couple of hours the DAR, Bobby Thomas, and I had a paperwork signing party.

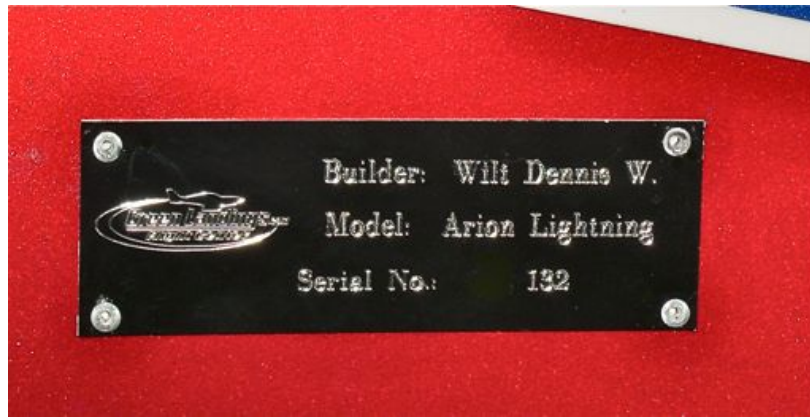
For the panel, I chose Dynon SkyView displays, a 10 inch display on the left and a 7 inch display on the right. The system has beautiful displays and the Mode S transponder option is a Trig Avionics TR22 made in Italy. I also decided to use the Dynon autopilot. I have a PS Engineering PMA5000EX Audio Panel topping an SL-30 Nav/Comm and SL-40 Comm.



The paint scheme was designed by my son Charlie and it is beautiful. The red (Ford Toreador Red) is the same color as my 1967 Mustang Convertible and the Blue Stripe (Vista Blue) is the same color as Donna's 2007 Mustang GT. The registration number, N616DW is as follows, 6/16 is our anniversary and we both have DW as our initials. After I get back to WV, I will be placing a little 1 inch "2" above and to the right of the W as in N616DW². So it will be Delta Whisky squared.



Notice the arm rest. I have back cushions on the way



Builder = Me



First flight



First landing

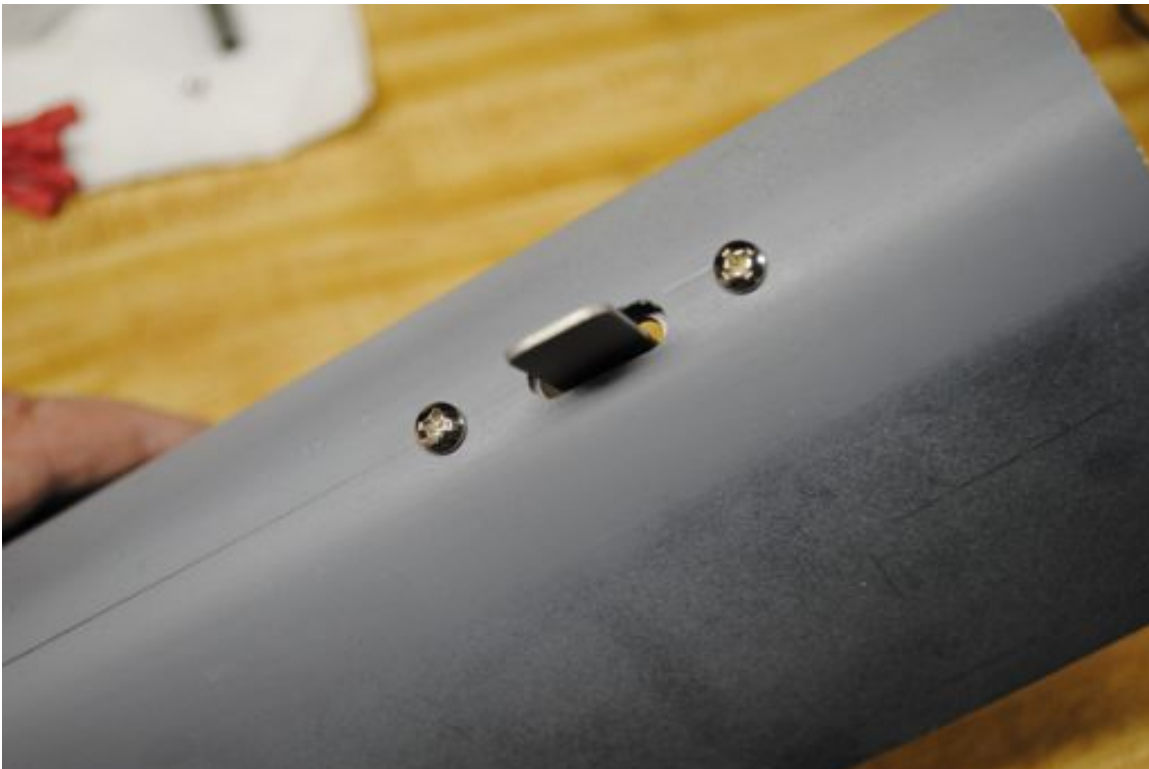
I have hundreds of pictures; I hope these few give you a flavor of the build. The Wheel Pants and Gear Fairings are in process. Ryan Gross will be flying off the 40 hours in the next few weeks. I expect to travel back to WV in early December to get some time in the plane with Ryan next to me so I don't break the plane and then I fly her home after he is satisfied. I can hardly wait.

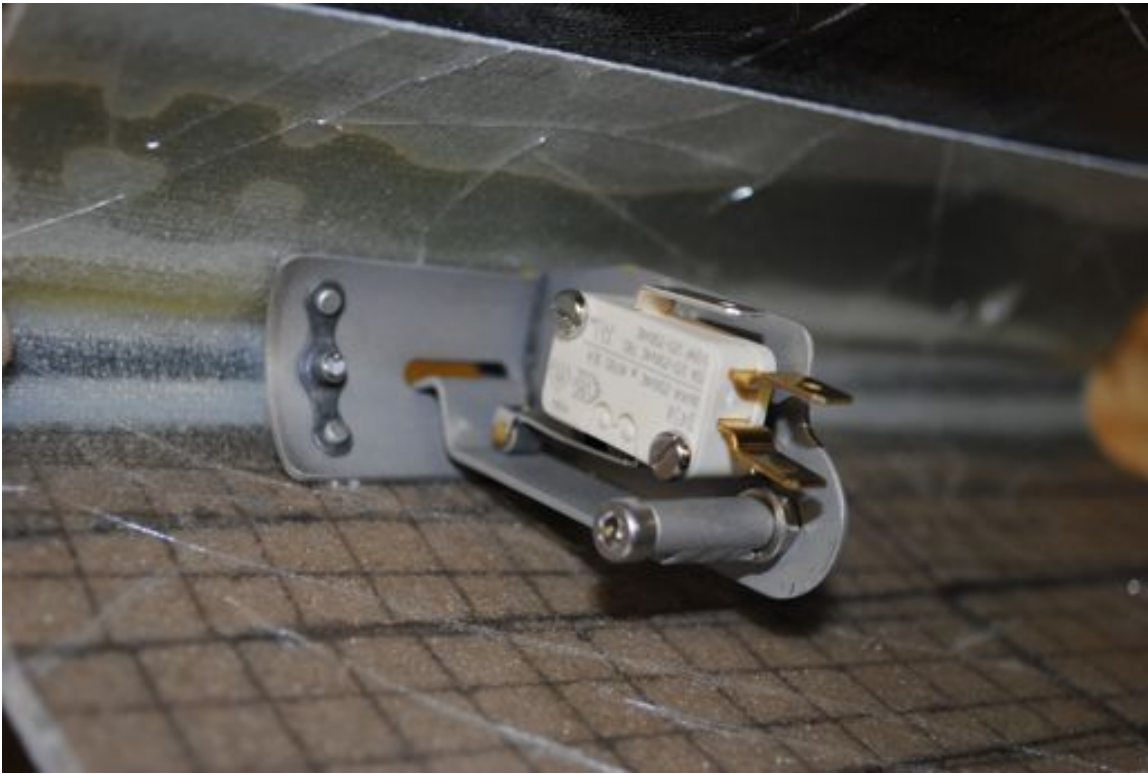
Reddish Stall Warner

Tex Mantell

[Tex Mantell submitted this report in response to a request from the editor.]

Enclosed are some pictures of the Reddish Stall Warner, available from Aircraft Spruce (#10-02686), which I have installed on my Lightning. I am still doing tests to adjust the switch and need a few more flights to prove the proper position of the tab. It seems to be almost perfect after only one adjustment. I used the wing cutout for my landing light to show it installed in the wing. The other pictures are of the actual install. Nick Otterback's suggestion of putting it right in front the access port for the bell crank is perfect. Tex





Small Lightning Mods

*(second in a series of email messages
addressed to the editor)*

Bernard Melendez, Jr.

Hello John,

Pictures? Did you say you wanted pictures? The more the better? Well, here's another group of pics of little details and mods I've been doing on my Lightning project. I guess that I just like to add my own little touches to my planes.

The first four pics are of me busily making holes on the fuselage bottom for the main gear.





Then another pic of the horizontal tail to fuselage fairings.



Next is the angle of incidence plates on the wings and another pic of my modified rudder shape, top to bottom.





Not one to complain, but I was not happy with the rudder support stop bushings on the rudder support tube. So again I made my own. An option for this would be for the kit to include two more bushings in the kit. Shown is how they turned out in my case.



I can see how there is a problem on the rudder cables and their pulling geometry due to the swept back hinge line, so I copied another Lightning builder's system. Works like a champ.



Finally, there a picture of how I centered the bolt holes on the 1/2" bar stock for the universal joints. Actually, I used a model airplane centering jig used for slotting the hinges on balsa wood to center the holes.





More details to come.

Kind regards,
Bernardo Melendez, Kit # 110

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