



Waix 82 Avionics & Panel Configuration

Written by Kip Laurie, Waix 82
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The avionics equipment in my 2010 Waix has proven to be very reliable after 400 hours of operation and I would recommend all of the equipment and wiring that I have chosen.

My goals were to have everything fit on the stock Sonex panel (no sub-panels), overall symmetry, and reliability.



The basic equipment is...

- Dynon FlightDek D180
- Becker AR-4201 Communication radio and 4401-175 Transponder
- Garmin GPSMap 495 for navigation
- AmeriKing AK-451 406 ELT
- ACS Keyed Ignition Switch
- AirGizmo GPS Panel Dock
- AveoFlash LED nav/strobe lights



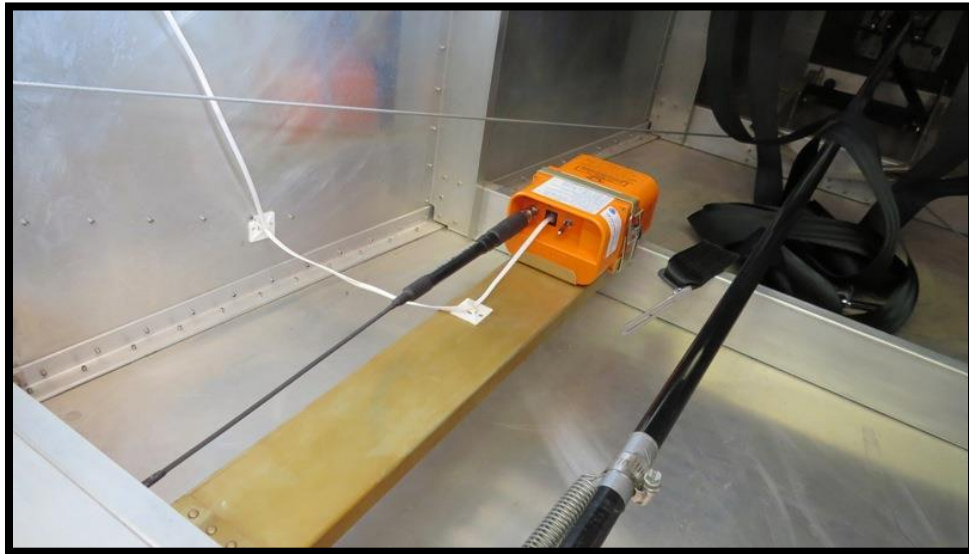
Some notes...

The Dynon is a tight fit with only 1/8 of an inch top and bottom of the Sonex panel. It fits nicely, but with little to spare. The D180 also has the capability to monitor every cylinder and I recommend this, especially to keep a tab on CHTs and EGTs if you operate a Jabiru engine.

The Becker radios have worked great and despite the higher price, I feel that I was buying reliability because of the TSO certificate and thus worth the extra cost.

I used circuit breaker switches for the battery master and avionics master switch to prevent the use of solenoids and additional pop-out circuit breakers. These switches are installed sideways (left to right is "on") as they would not fit right-side up.

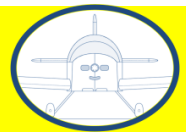
The ELT is mounted on a tray below the baggage area without a remote antenna.



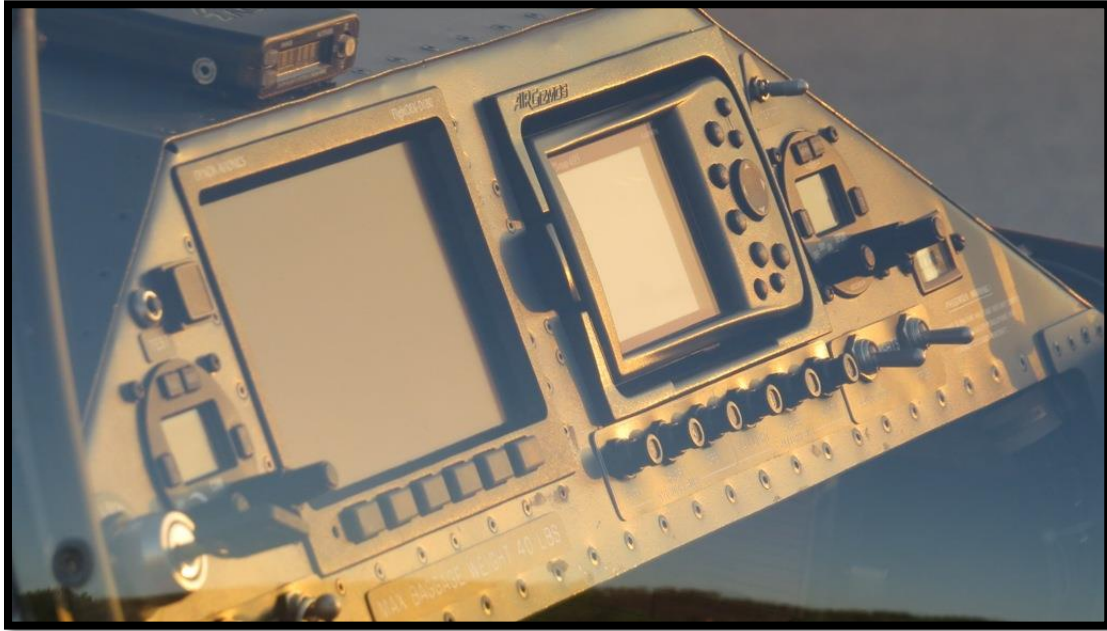
I had planned to have a Hobbs meter hooked up to the oil pressure to record engine time, but that was problematic with a sensor, so my Hobbs has its own switch that I turn on taking the runway and turn it off leaving the runway, which is a better measure of flight time. The Dynon records engine time well enough. I use the engine time for 25 hour oil changes and this usually equates to 23 hours or so of flight time.

www.aircraftengravers.com is a great place to have placards made they have great service and prices.

After two years of flying, I added a Xaon portable collision avoidance device. It is installed on top of the panel with Velcro. This has worked well.



The only change that I would make would be to add a panel mounted intercom. The Becker radio has an internal intercom and I planned to use that, but it turns out it is not voice activated and thus has background noise. This gets annoying quickly and I have settled on using a portable in the cockpit which is not ideal given the number of wires.



I've made all the schematics available for my electrical and avionics system.

Kip Laurie