

Communication Summary

May 02, 2016, May 4, 2016, July 19, 2016

Information From: Lincoln Probst, Pilot



Summary & Factual Information: Mr. Probst was asked for a description of the airplane's electrical system and what caused the electrical power loss and in part indicated that he had put "crowbar" anti-overvoltage which clamps the generator output to ground should it go over 15volts, this would pop the 5 amp breaker on the panel. My "master" switch is 3 position, off, battery only, battery and generator. In the Battery only position it both physically disconnects the output of the generator via a relay and disables the generator's "enable" wire. There are two main "buses" for the electrical system, an "emergency" bus and the "main" bus, the "emergency" bus feeds all critical systems and has its own 10amp relay at the battery. The "main" bus uses a heavy duty contactor and is mainly for the starter and landing lights and also feeds back to the emergency bus via 4 high amp diodes (I think 3amp each). Now, because I ended up opting for a generator(versus an alternator) and it is sufficiently low amperage, I realize the "crowbar" system is actually unnecessary. I had a 1/4" spade come off the terminal to the generator's voltage regulator.

He was asked about the engine installation and he indicated that he did the install and stated that he did get some parts from flycorvair.com (like engine mount, propeller mount and their oil filter holder). I did all the cowling and firewall forward myself. I followed the plans and advice from William Wynne's conversion manual.

The pilot said that this was a good sounding recommendation instead of the trickle charger recommendation: Consult the battery manufacturer's applicable maintenance manuals which specifies the correct charging method/device that matches the battery's specific chemical process if the onboard system is not sufficient to charge the battery during the flight and/or the airplane is inactive beyond a battery manufacturer's recommend time period.

I can attest that the above summary is correct to the best of my knowledge:

Edward F. Malinowski
National Transportation Safety Board
Air Safety Investigator