



Intelligent Idiot Lights In The Cockpit

Gary Hertzler (AZ) - I can't take credit for this one, in fact I first came across it on Harry Bawcom's Long-EZ, "Yellowstone Express".

If we have an electrical system, we are required, by regulation, to have an ammeter. If your airplane is like mine, the ammeter is stuck off in the corner somewhere and is not part of my regular instrument scan pattern. It would be possible for me to have a charging system failure and not realize it until the battery dropped off line. Also, I have an electronic ignition which, requiring battery power, would quit if allowed to get too low.

To provide an alert of pending problems, I have employed a \$6 Radio Shack LED battery checker, # 22-1635. The unit, which is designed to plug into a cigarette lighter socket, has three LED's, red, yellow, and green, to roughly indicate battery voltage. The red light comes on when voltage drops below 11 volts. The yellow light is on between 11 and 13.6 volts and the green light illuminates between 13.7 volts and 15 volts. Above 15 volts the red light comes on in conjunction with the green to indicate overcharge condition. (All voltages are approximate.)

To adapt it to my panel, I carefully pried apart the plastic case and removed the small circuit board with the 3 lights and drilled 3 holes in my instrument panel to match the position of the lights. With the lights inserting through the panel, a little 5-minute epoxy holds the assembly in place. Wiring is accomplished by simply connecting the plus lead to the switched side of the master and grounding the minus lead. I have a positioned light array high on the panel, just below the line of sight. Now I can keep a constant vigilance on the condition of my charging system and all for just a few dollars.

O-235 Oil Cooler Adapter

Walter Renko (MI) - I got an oil cooler adapter from Aviation Development Corp. 1305 N.W. 200th Court Seattle, WA 98177 for \$250. It is the same one Aircraft Spruce has for \$350. My Lycoming O-235-C1 doesn't have provision for an oil cooler.

Trade Defiant for Vari-Eze

Wish to trade a Defiant project on the gear, no engines, all flying surfaces built and ready to finish, for a flying Vari-Eze.

Contact:
Noah Peckler
(805) 525-0417

Long-EZ First Flight

Jim Gomory of Rochester, PA just wrote me with news that his Long-EZ

flew on July 11 at Zelenople airport. It has 25 hours on the tach now. Jim said, "It was a real thrill!"

Nav Light Installation

Sid Lloyd (TX) - While looking at nav light installations at OSH I found many that seemed like after thoughts. They had no flat mounting surface, were partially hidden from the rear, and were canted inward. I thought I could improve on that.

To form the mounting foam, I made a trough with tape around the front of the winglet past the wing leading edge and down the winglet side. I filled it with pour foam. It worked great and was ready to sand in a couple hours. I added about 2" of wing length with the foam, set a level line, then contoured it to match the wing and faired it to the winglet. I ran a string out parallel to the main spar, mounted the wing, and ran another string exactly perpendicular to the first string. I then sanded the foam flat

in line with the string. This made the foam and the light perpendicular to the line of flight. When sanded flat, a straight edge was flat against the front and about 3/4" out from the winglet trailing edge.

I traced the strobe base outline and made two aluminum mounting plates with flush riveted nut plates to attach my Whelen strobes. I put the mounting plates on the foam making sure they were parallel to my level line and traced around them. I used the Dremel router attachment to cut a recess in the foam deep enough for the mounting plates plus 1/32" for flux. Next I excavated out a cavity in the foam which led to the wire conduit in the wing. The hole was large enough for the bulb extension and all the wires. Finally I foxed the plates in place and covered the whole thing with two plies of BID.

