



## REMEMBERING THE VIGILANT

**WHEN I SAW THE COVER** of the April *Sport Aviation* (Stinson L-1 Vigilant), it brought back a lot of memories. We had one at David, Panama, our B-24 base, for the officers to fly, and we also used it to drop food and mail to the troops stationed up in the mountains at a radio range location. Dropping supplies was a cinch — just fly in a tight circle and drop them out in the middle. One could hit the target every time. When the war was over, I asked the commanding officer, “What are we doing with the L-1?” He replied, “Chop it up and send it to the dump.” It was a great plane, and it always has been a regret that we had to destroy it.

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**Leonard Milholland**, EAA 72307  
 Clifton, Texas

I almost did a double take when I saw a control panel for a complete SCR-274-N in the Stinson L-1 on page 57 of the April 2017 *Sport Aviation*. This equipment is dear to my heart, as I wrote a great deal about it back in the 1970s, and still, today, it has a coterie of dedicated followers who collect it and discuss it on a Yahoo group.

This equipment has more of a story than the usual government electronics contract. It traces its history back to the 1920s, and the designer, Aircraft Radio Corp. of Boonton, New Jersey, also built the model-D receiver that Jimmy Doolittle used to make the world's first blind landing in 1929.

The SCR-274-N also known as the command set, was designed specifically to replace the Air Corps' inadequate equipment following the 1934 disastrous flying of the airmail after Franklin Roosevelt canceled the commercial airmail contracts. Aircraft Radio Corp. designed what it called the type-K equipment initially for the Air Corps, but they at first declined to buy it, so it was sold to the U.S. Navy in 1939. When the “50,000-plane” force came along in 1940, the Army changed its mind and bought the Navy set, adopting the SCR-274 designation, with the “N” for Navy.

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**Gordon White**, EAA 353754  
 Hardyville, Virginia

### DIY With Caution

**MY NEPHEW IS BUILDING** the preheater for the engine in his small airplane based on your article (“Controlling a Preheater with a Text Message”) in the April 2017 edition of *Sport Aviation* pages 84-87.

My biggest concern is a possible fuel leak leading to a fire. You propose to deal with this by adding a combustible gas sensor in the future. There are several heaters advertised for use in boat bilges where there is a similar concern about igniting fuel vapors. They appear to be “ignition protected” ceramic heaters. Ceramic heaters operate at a lower temperature and have no exposed hot wires.

I think your design would be safer if you use a cheaper ceramic (PTC) heater (\$30-\$60), take out or bypass the controls, and use a sealed relay.

I guess my point is that there is a better way: Use a heater designed for boats or do some research and modify a ceramic (PTC) heater with sealed relays and possibly elevate the controls to make the whole project safer to start with instead of trying to add safety at the back end with a vapor detector (kind of trying to add quality/safety by inspection).

Also, in reading the boat literature, because fuel vapor sinks to the floor, I think it could be helpful to elevate the electrical controls, possibly on a ladder, which I think most plane owners would have readily available.

—  
**John Eaton**, EAA 129272  
 St. Paul, Minnesota

*You bring up a great point about the technology employed in the boating industry. I would expect that boaters run into many of the same issues aircraft owners have in terms of combustible gas. Our article was an illustration of the myriad ways to employ the Raspberry Pi technology with text messaging. In the end, it is up to the user/builder to figure out a safe method.*

*I come from an aviation safety background, so our heater has a gas sensor. The software does allow for the connection of an MQ-2 combustible gas sensor. There are several variants of that gas sensor for a variety of applications. The MQ-2 seems to do a good job sensing avgas fumes, and it has sensitivity adjustment. Our application also uses ducting to keep the heat source as far from the wings and engine compartment as possible.*

*It is interesting how many people have refrigerators or large compressors in their hangars, which presumably have electrical circuits that could be exposed to combustible gas.*

*As to the gas sinking to the floor, the research I have done on vapor propagation agrees with your statement.*

— Domingo DeGrazia