

327 transponder (only two years old), a Narco Mark 12 digital Nav/Com with GS, and a lot of wiring behind the dash. A King-slaved HSI was installed and became the primary direction instrument. A new Garmin 530 was installed along with the Garmin 330 mode S transponder to receive the uplink traffic information from ATC. GPS steering was added so that the aircraft now follows course lines, anticipate turns and makes those turns at a standard rate. New BAS shoulder harnesses were added for occupant safety.

My old Northstar M-3 IFR-approved GPS was retained for DME use and as a back up to the Garmin 530. The Northstar remains wired to the autopilot but not to the King DG. The old directional gyro was retained, as it is vacuum operated and will serve as a backup to the electric HSI.

The photos accompanying the article are not touched up. The old panel was not arranged in the proper "T" formation for scanning. Penn Avionics moved the instruments into the proper location for

coming from the cigarette lighter.

Penn Avionics basically made me a new panel and painted it satin black. Peter Stelzenmuller, a principal at Penn Avionics in Collegeville, PA worked with me on design and paint. Peter took off my chipped and worn dual yoke and painted that in a shiny black. He was able to fit the equipment that I wanted to retain into the new nav/com stack.

When I picked up the plane, everything worked as advertised and all the paperwork was done. I am most pleased with the information provided by the traffic uplink from ATC. The GPS has been a dream to fly with. The inertial reel shoulder harnesses give both my wife and me an added feeling of safety. Having traffic information is also a safety item. Flying behind the Garmin 530 with the big bright color map is state of the art. (for today) If you are thinking of having electronic work done to your plane, see Penn Avionics' web site at [www.pennavionics.com/](http://www.pennavionics.com/) for quotes, samples of work done and contact information. I would highly recommend his shop.

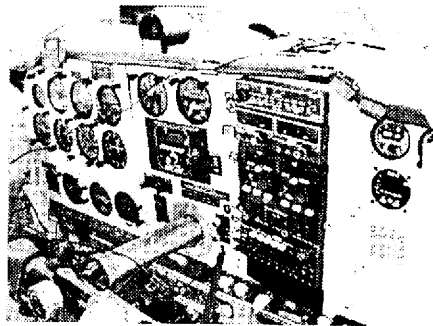
## THE NEW PANEL

BY ALAN WITKIN

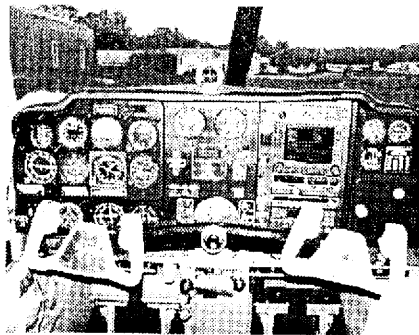
A few issues back, I wrote an article about how I wanted a traffic alerting system in my aircraft and had decided to buy the Monroy ATD 300. This is a portable device that receives the signals from the transponder of a plane and determines range through the signal strength. It shows altitude in hundreds of feet based upon the altitude of your plane and the output of the other aircraft. I thought that this would be a reasonable purchase.

If you recall, I indicated my wife had vetoed the idea because it didn't give direction of where to look. We went in search of other methods to obtain traffic detection. The plane has been returned from Penn Avionics where it underwent a transformation that is nothing short of a miracle. The panel never looked so good.

The following items were removed from the old panel. A Garmin



Alan's old panel.



The new panel.

easier scanning. The new equipment allowed me to remove messy wires from the portable GPS running to the windscreen and the power cable

## CIRCLING APPROACHES

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