



# PANEL COUNTDOWN

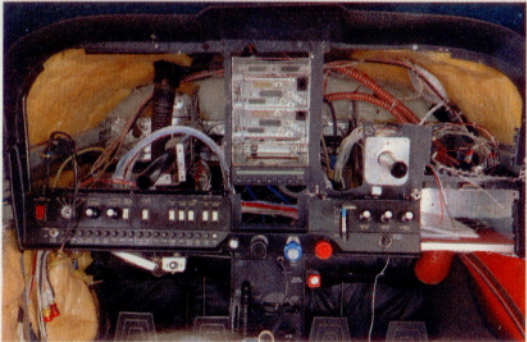
BY THOMAS A. HORNE

**T**here's something shocking about a total avionics makeover, especially when you plunge a 40-year-old instrument panel into a time warp that puts it squarely into the ranks of 2011's swankiest panel hardware. When I last saw the Crossover Classic AOPA 2011 Sweepstakes Cessna 182, way back in November 2010, its panel was vintage early 1970s. Not that that's bad, mind you. I learned to fly sitting behind a panel like the sweeps'

From the 1970s to 2011—  
in just eight weeks

original. In the early 1970s, Cessna's "Nav/Pac II" (a term that denoted dual nav/coms, a Cessna/ARC autopilot, a Mode C transponder, and a hodgepodge of round gauges) was the bee's knees.

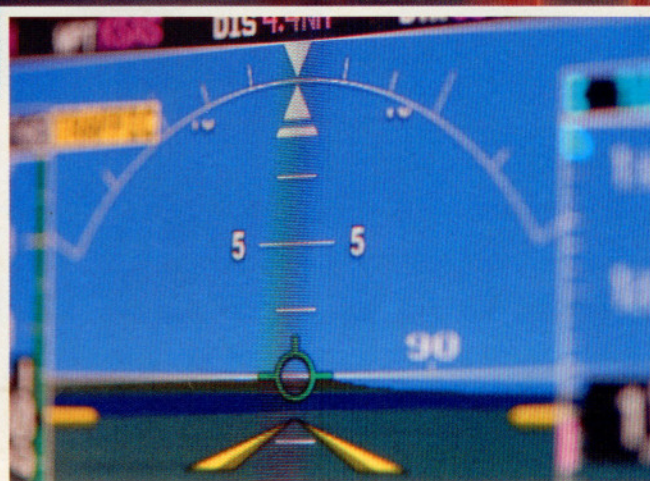
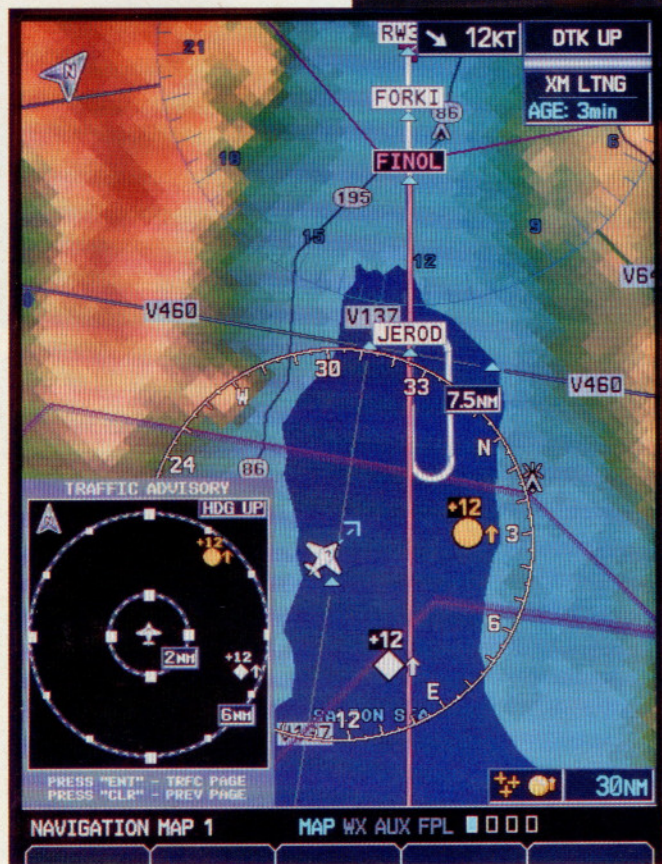
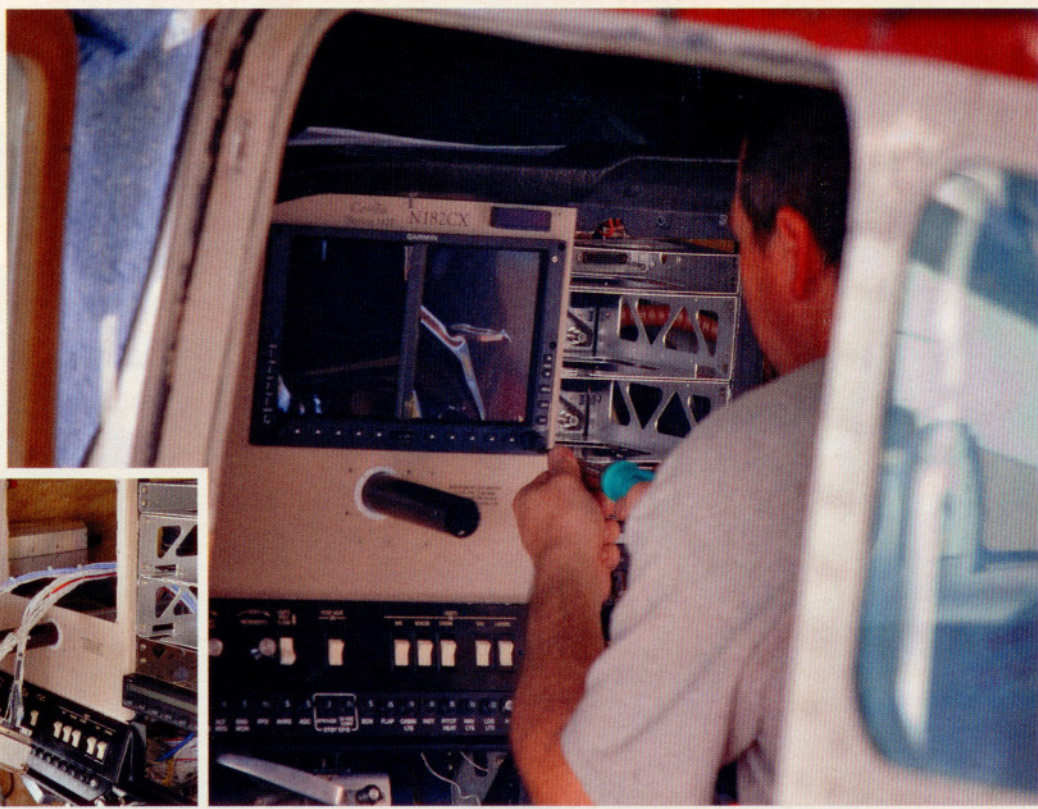
Alas, the Nav/Pac II concept just didn't fit our idea of a thoroughly updated piston single. Avionics have changed over and over since the 1970s. First



After delivering the Crossover Classic to Advantage Avionics, it didn't take long for the shop to rip out the old panel (left) and start on the new one (above).

PHOTOGRAPHY BY CHAD SLATTERY

Technicians at Advantage Avionics closing in on the final steps of the panel installation (right). The G500 being connected (below) and finally installed. The Crossover Classic in the Advantage Avionics hangar (far right).



The Garmin G500 has a highly capable multifunction display (above left) that can show traffic, terrain, flight-plan route, and XM WX datalink weather. The primary flight display (above right, top) includes a flight path marker (green circle) that indicates exactly where the airplane is going, regardless of heading. The primary flight display heading indicator (above right) can display two sources of navigation information and works with the Cobham/S-Tec System Fifty Five X autopilot to carry out automated roll-steering commands for course changes.



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came Ioran—a wonder in its day—then came GPS, followed by IFR-approved GPS. Then single-line alphanumeric GPS displays gave way to a war of ever-larger display options, followed by moving-map and menu-driven graphic display units with their own attitude and heading reference systems (AHRS). Now there are high-end, big-screen GPSs with vertical-tape scales for airspeed and altitude; flight guidance symbology accompanies large moving-map multifunction displays that double as systems monitors, flight planning tools, and much more. Gone are round gauges and vacuum-powered instruments.

I had a chance to see just how far our 182's panel had come. As we go to press, Advantage Avionics of Chino, California ([www.advantageavionics.com](http://www.advantageavionics.com)), was putting the final touches on our now thoroughly modern panel. What an amazing transformation! Your Skylane's features could never have been imagined in 1974, when the Crossover Classic rolled off the production line at Cessna's Pawnee factory in Wichita.

Advantage Avionics, headed up by Mark Krueger, did a superb job of rejuvenating the panel to the highest

standards. And all in just eight weeks (with a few days off for Thanksgiving and the holiday season). I'm told it was a 300-hour job, which reflects the patience and precision a job this big requires.

What got chucked out? It's easier to ask what *wasn't* discarded. The undiscarded list includes: the magnetic compass, the power controls, and some subpanel switches. That's about it!

Now, the panel features a seemingly endless list of the best in today's retrofit technology. For contact information, see the Crossover Classic website ([www.aopa.org/sweeps](http://www.aopa.org/sweeps)), but here's a list of the new panel's equipment:

- Garmin G500, two-screen primary flight and multifunction displays
- Garmin GTS 800 active traffic advisory system
- Dual Garmin GNS 430s
- Garmin GTX 330 Mode S transponder
- Cobham/S-Tec System Fifty-Five X autopilot/flight control system
- PS Engineering PMA8000 audio selector panel
- Davtron M803 digital clock/timer
- Artex ME 406 ELT
- JP Instruments EDM-930 engine data monitoring system and display

- CO Guardian AERO 553 carbon monoxide detector
- New, powder-coated panel and sub-panel fascia, with laser-engraved switch labels

Many, many thanks to Advantage Avionics for their top-notch work—and to our generous suppliers who make it all possible. As for me, I can't wait to fly this panel. There will be a learning curve, no doubt, but if I can fly a Nav/Pac II to minimums, then the safety and situational awareness offered by this new panel, with its synthetic vision, traffic alerts, and loads more, should make any procedure a comparative walk in the park. Stay tuned for an in-flight review, and be sure to check the sweepstakes website for blogs, photos, and videos.

Make sure you're in the running for the Crossover Classic—keep your AOPA membership active, join AOPA, renew your membership, or sign up for AOPA's automatic annual renewal—which gives you multiple shots at the prize! Getting others to join adds even more to your chances. See you next month. **AOPA**

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