

# Panel Planner 101: Dynon in a Cessna

*With an installation open to A&P/IA mechanics, Dynon's SkyView HDX Certified suite for a Cessna Skyhawk is made easier with prefab hardware.*

by Larry Anglisano

This month's panel for planning is for a mid-1980s Cessna 172 equipped with a Garmin GNS 530W and GNS 430W, S-TEC single-axis autopilot and original round-gauge flight instruments. Its owner is ready to make the plunge into an all-glass, all-electric avionics suite and is sold on the Dynon SkyView HDX Certified suite because her experimental kit aircraft (she didn't build it, but purchased it secondhand) has older Dynon gear.

After getting a thorough demo at Sun 'n Fun, the proposed package includes removing all of the existing flight instruments, engine instruments (including fuel gauges), the S-TEC autopilot, Garmin GMA 340 autopilot, both Garmin navigators and the Mode S transponder. Since the aircraft lived overseas, it also needs a U.S. mandate-compliant ADS-B Out system, plus ADS-B In for receiving traffic and weather.

What's unique about the Dynon SkyView HDX for certified aircraft is that Dynon allows the installation to

be performed by qualified mechanics with IA credentials. Contrast that with Garmin's process, which requires that the installation is done by a qualified Garmin dealer.

The rub in this case is that the owner's mechanic has little to no avionics installation experience, although he has done some wiring when restoring his own airplane. Dynon attempts to tame that dragon with its FastTrack system, which includes prefabricated wiring harnesses and a mounting system that houses the remote sensors and components that live behind the panel in a SkyView suite.

Dynon's FastTrack actually came from the feedback it got from IA mechanics (and experimental kit builders) who install the SkyView HDX in certified aircraft—uncharted territory for the mechanic and for Dynon, a company with deep roots in experimental applications. But one of the many things the company learned from these installers (who are listed by name on the STC) is that installing critical components like ADAHRS,

magnetometers, remote backup batteries and ADS-B modules is time-consuming and creates some bit of guesswork.

The other thing I like about the FastTrack is that it makes maintaining (and upgrading) the suite easier since the majority of the major hardware is nicely organized in one location. There's no metal work required to fabricate brackets and mounting trays. Moreover, the prefab mounting system has pre-dilled nut plates for the sensors and accessories, further curtailing the installation effort.

## MULTIPLE VERSIONS

The FastTrack Essentials packages are available in both VFR and IFR configurations and include a modular mounting tray for the HDX800 and HDX1100 EFIS displays. These trays are one-piece systems to house the remote accessories that support a given HDX suite. There's also a com/transponder module mounting kit for housing components behind the center avionics stack. The interface also includes the components networked together with a wiring hub and prefab network harnesses. The EMS to ADAHRS/ARINC Module Stacking Kit can be used to attach either an ADAHRS or an ARINC-429 module directly to the top of the EMS module. This kit provides the gold-alodined aluminum module stacking plate and all of the hardware needed to stack and install the modules. This means the installer won't have to design and fabricate mounting brackets for the SkyView electronic modules.

Last, the aircraft's owner decided on Avidyne's IFD-series navigators since they slide into the Garmin wiring with little modification. Visit [www.dynonavionics.com](http://www.dynonavionics.com) for more on the SkyView HDX/FastTrack package pricing.

*That's what the proposed final Dynon SkyView HDX certified integrated avionics and autopilot system will look like in the Cessna Skyhawk, lower left. The integration is made easier thanks to the Dynon FastTrack mounting system, lower right.*

