FEATURE

Training TIME

STORY AND PHOTOS
BY SCOTT M. SPANGLER

Installing New Knowledge with Equipment

Imagine this. The weather is dreary, bottom-of-the-bucket visual flight rules, but it's a good day because a customer just gave you a check for glass and wide area augmentation system that replaced his legacy boxes. You introduced the eager customer to the tech who installed the avionics, and he spent a half-hour showing the pilot how they worked. A half-hour later the customer was flying home with a bag of shrink-wrapped manuals in the baggage compartment. Rather than clearing, the weather settles as instrument flight rules murk. Anxious to file IFR, the customer can't remember how to find the right air traffic control frequency in the database and load it. Finally connected, he fumbles again. "Now, what did the tech instruct me to do to get the nav screen on the multifunction display?"

Operational orientation has always been part of good customer service. In the analog era, 30 minutes was enough for customers born and raised with a nearly universal push-button, flip-flop knob-ology. Today, a half-hour now barely covers the schizophrenic soft keys whose multiple personalities depend on the screen selected. Ultimately, teaching customers to use their new avionics is not just another interface conflict to resolve, it is perhaps the most challenging aspect of customer service that shops now face. Getting two boxes to communicate is easy compared to getting a human, an organism of inconsistent and/or unpredictable performance, to connect with a layered, multifaceted digital system.

Just as boxes communicate using different protocols, pilots learn in different ways. Some aviators have the self-discipline needed to work through a book, manual, online or DVD video course, and software that simulates the system's operation on a PC before they fly. Others must be cajoled and personally guided by an instructor who demonstrates and supervises pilot practice in the airplane or appropriately equipped simulator before releasing the fledgling. Many learn best with a combination of these methods, with supervised practice verifying that customers have missed nothing important during self study. The hardest customers to serve are the few who rebuff offers of training, recalcitrant students who, at their own peril, insist on learning new things the hard way.

PRE-PURCHASE TRAINING

What pilots should learn about their new avionics, along with the operations they should master before VFR and then IFR flight, is pretty straightforward, said Max Trescott, the 2008 National Flight Instructor of the Year. Author of the "GPS & WAAS Instrument Flying Handbook" and the "G1000 Glass Cockpit Handbook," he specializes in teaching pilots how to efficiently get the most out of digital avionics.

ABOVE: At EAA AirVenture, Garmin builds a multi-classroom campus for training. OPPOSITE PAGE: An appropriately equipped flight training device, such as this flight school's FTD with a G1000, is ideal for avionics checkouts because pilots don't need to divert half their attention to flying straight and level.

According to Trescott, before flying boxes like the Garmin 430/530, VFR pilots must "absolutely know how to switch between the different pages or displays" and know – without guessing – what information each one provides. From the unit's databases they must know how to "get airport information, download frequencies with consistent accuracy and how to input and use a flight plan – including how to make a diversion." If pilots only know how to fly direct, they are not using their airplanes efficiently or getting full value of their avionics.

When making the transition to glass, all of the

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Pilots can take advantage of cockpit time with Bendix/King glass in its classroom at AirVenture.

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above applies. Pilots should know how to properly operate the horizontal situation indicator, "how to switch to different navigation sources and understand how to manage the critical screens on the MFD." Once pilots master operations as second nature in VFR operations, they can step up to IFR. Still, it is important for pilots to keep manuals and quick reference guides within arm's reach of the left seat.

Rather than issue all the information pilots should know with fire hose intensity on the day customers pick up their airplanes, training can start before they deliver the airplane for the installation. Rarely is buying avionics an impulse purchase. Both in person and online, shops can help customers realize their pre-purchase research is really training, especially if they get hands-on with the equipment. Aviation shows, such as EAA AirVenture and the AOPA Aviation Summit, are excellent places to comparison shop and get hands-on with tech rep tutelage. In addition, several OEMs conduct product specific seminars and presentations away from the exhibit hall.

Outside the AirVenture exhibit hall, Garmin has a multi-tent campus dedicated to a full schedule of seminars and presentations in two classrooms. "We often focus on new products in our aviation seminars, because those are the products that customers are most interested in, yet least familiar and least experienced," said Mika Cohn, communications specialist for Garmin. "But, we also pay very careful attention to the questions we receive from our customers and tailor our seminars to address those common questions." Garmin representatives also hold seminars at dealer locations nationwide, with the schedule posted on the "seminars" tab of its aviation products website.

For example, near the AirVenture 2010 classrooms, schedule boards revealed one day's wide range of topics, including Traffic Systems & ADS-B, WAAS Approaches & GNS530/430W, Retrofit Glass: G600/500, IFR Flying with G1000, and a handful more dedicated to various portable products. More than an audio-visual presentation, each session was a Q-and-A conversation among the Garmin rep and attendees. Video programs played between the didactic seminars. Most are available on its online learning center or as DVDs, Cohn said, and a few are on Garmin's YouTube channel. All aviation manuals, guides and cockpit references are online under the "support" tab.

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And, here's an idea for shop owners. As part of your customer service, dedicate a page to training on your shop's website. Include links to all the available free online references, training and tutorial resources for the products you service and sell.

TRAINING AFTER THE SALE

When closing the deal on the installation of new avionics, give customers all of the manuals, pilot guides, training materials, CDs, DVDs and PC simulators that come "in the box." Then, urge each pilot to dive into them immediately. Distribute the training page from the shop's website and direct them to training materials, both free and sold by the OEMs and third parties. Stress the fact that software simulating the unit's operation on a personal computer is especially helpful in learning the desired capabilities available on each page.

Recommending – or providing – a structured training course increases the chances pilots will open the manuals, because it gives them a path to follow. Most courses, whether print, computer, online or a combination of the three, teach pilots the unit's capabilities – and how to use them – using two different teaching methods.

The first method covers each function in a linear lecture, starting with turning on the power. The second method is scenario-based, teaching the functions as pilots would use them in different phases of VFR and IFR flight. The teaching method that works best depends, whether or not the pilot wants to know every detail no matter how small, or the pilot is Joe "Just the Facts" Friday. Most are good at self-selecting when given a choice.

Sporty's Pilot Shop offers a great selection of avionics training materials. In its Air Facts DVDs, Richard Collins covers a wide range of equipment and operational situations. What you should know programs focus on specific equipment, such as Flying the Aspen Evolution, or operation, like WAAS approaches, which flies them with G1000 and the 430/530. Sporty's is in the process of formatting many programs for downloading to computers and portable devices like the iPad, said Brett Koebbe, "so you always have the training with you." Sporty's teaches real-world operations, often with video shot in real-world conditions, with the 80-20 rule determining how much time is devoted to specific functions.

Given the rate of change, keeping training materials current can be a challenge, which is another reason Sporty's is online. According to Koebbe, "We do upgrades with major software revisions and keep an eye on what people are doing," citing the increased use of synthetic vision.

"Customers always get the most up-to-date content as upgrade modules," said John Zimmerman, citing LPV approaches as an example, even if they bought the online course last year.

Training is such an important part of avionics customer service, Trescott wonders why shops don't bundle it with the price of the installation.

"Shops should be proactive, give (training materials) to pilots ahead of time and emphasize the importance of looking at it before picking up their airplanes," Trescott said.

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Ultimately, pilots must put all their training pieces together in the cockpit. An ideal situation would be a partnership with a knowledgeable flight instructor or flight school that conducts a structured operational checkout doubling as a flight review or instrument proficiency check. If this option is unavailable, Trescott suggests shops appoint a go-to checkout tech and give this individual time to study the equipment's operational use, "so it's not the blind leading the blind."

The length of time cockpit checkouts consume depends on how well pilots prepare before picking up the airplane. If the pilot arrives with hermetically sealed manuals, plug the airplane into external power, strap them in the left seat, and start from the beginning. If the pages are well thumbed, a trip around the pattern, perhaps with a simulated instrument approach, will demonstrate the pilot has done his homework. Then, you can send them on their way worry free that they'll get stuck in the sky because they can't remember how to tune the needed frequency or recall the nav display showing them the way home. ❑