by George Wilhelmsen

navAero's t-Pad 800 Tactical Pilot Awareness Display

LEFT: The t-Pad 800 did a good job of displaying Jeppesen's FlightMap software, which we used to change course using the leader line to reach our destination. RIGHT: The t-Pad 800 can show both VFR and IFR maps, and even approach plates with the right software package, providing full electronic flight bag capabilities in the cockpit.

Laptops have become a fixture in some aircraft cockpits. The reason for this change is simple: laptops can be interfaced with remote GPS sensors and flight planning software, and in doing so, become a powerful, flight planning and following system, as well as to do work when the owner isn't in the airplane. This approach provides many laptop-owning pilots with a way to get more bang into the cockpit for almost no additional cost.

With that said, laptops aren't really well suited for the cockpit. Because of their folding screens, they are almost always relegated to the right seat, which means if you are flying with friends, your laptop isn't going to be as handy or as versatile as it would be if you were flying alone. Enter navAero and their Tactical Pilot Awareness Device, known as the t-Pad 800 ($1,395), which is designed to allow you to get all the features of your laptop on an electronic kneeboard.

Here's how the whole thing is set up. Your laptop and flight planning software are on board and are connected to the navAero interface box. The interface box is connected to the kneeboard display (which is a beautiful color, 8.4" diagonal sunlight readable active-matrix LCD stylus screen), a GPS antenna and to the aircraft power supply. Once powered up, your laptop functions are all transferred to the electronic kneeboard, including all your software.

On our demo unit, we were running Jeppesen's FlightMap software, which provided excellent moving map capabilities. Once we synchronized with our GPS receiver, our position was displayed on the map in the software, as well as our course and track lines. From there, we simply engaged the FlightMap's flight planning functions, planned where we wanted to go, and then followed the flight path that was displayed.

The navAero box acts as an intermediary between the laptop and the display. Thus, all the functions of the software are available as they would be on the laptop itself, but instead of needing someplace to have your laptop set up, the electronic kneeboard does the job. Better yet, this represents a complete electronic flight bag when combined with flight planning software that offers approach plates.

The hardware and software requirements are simple: you need a laptop running at 333 mHz or more, running Windows XP or 2000. You must also have a licensed copy of one of the various flight planning software packages including FlightMap, JeppView with FliteDeck, MountainScope, FUGAWI Military, RMS/Flightsoft/Vista, or Destination Direct, and of course, a GPS sensor. Using an onscreen keyboard made our data entry easy, allowing for fast selection of waypoints with a minimum of muss and fuss.

Display visibility and usability was good in our Beech Bonanza cockpit and didn't interfere with the flight controls. We noticed there were a lot of cables in the installation, but figure that if a pilot were to "install" this in their airplane, that the cables could be trained and restrained fairly easily to allow the t-Pad 800 to stay in place, and the laptop to be removed as needed. On a loss of power, the t-Pad 800 will fail, unless powered from a backup source, as will the laptop.

Overall, the t-Pad 800 met our expectations for functionality and provided an excellent "go-between" box that allowed us to utilize our laptop flight planning software as a detailed flight following tool with the addition of the GPS information. While this may not be the right fit for everyone, if you are one of those pilots with the right laptop, flight planning software and no moving map in the panel, this is one way you could upgrade your cockpit to the latest in technology with a minimum amount of cost and bother.

For more information, visit www.navaero.com, or call 866/nav-aero.