IFR Approach

Now! IFR Approach Option - Adds GPS, VOR, ILS approaches to any HX/HXr EFIS



What is it?

A new software option for HX/HXr display units provides the ability to select an approach, and will provides lateral and vertical guidance with autopilot coupling including for GPS LPV approaches, as well as VOR/ILS approaches.

Is it legal?

Our GPS approach function is designed to conform with all requirements of TSO-C129a, and TSO-146C, "Stand-Alone Airborne Navigation Equipment Using the Global Positioning System Augmented By The Satellite Based Augmentation System" but is not FAA certified. These approaches are legal to use in VFR conditions for instrument instruction and currency. FAR 91.3 allows their use in an emergency. All VOR/ILS approaches are legal in IFR conditions when VOR/ILS data is used as the primary source of navigation.

Can I legally fly an IFR GPS approach in non-emergency conditions in my experimental aircraft?

This is a legal question that we are not qualified to address. We make no claim regarding the legality of our GPS approach when intentionally flying in IFR conditions. The EAA has addressed this issue on their website regarding equipping a homebuilt for IFR operations. Their position, states, in part, "GPS equipment must meet the performance requirements of the applicable TSO (in this case, C129) but there is no specific requirement for the equipment to be built under a TSO authorization. However, if the equipment is not built under a TSO authorization, it is up to the owner/operator to verify and document that the equipment performs within the required specifications."

How much does it cost?

As we complete each portion of the software, we will make it available as a free download on our website, with a user manual. The approach functions will operate until a specified expiration date. Prior to that expiration date we will release new software. This will allow our customer base to aid us with testing, as is our normal practice. The final approach software release will include at least a 3 month free trial period. Permanently enabling the IFR approach option is currently priced at \$750 per display unit. Customers may place an order for this option to lock in this price with no obligation. We do not require or accept payment until the expiration date of the final software release.

What about databases?

Our US navigation database now includes IFR approaches within it for most GPS, ILS, and VOR approaches. Soon Jeppesen databases will support IFR approach and may also be purchased.

What GPS will be required?

The approach function will work with any GPS that provides 3D position data to the EFIS, although the approach will be flagged for inadequate integrity unless the GPS is providing RAIM integrity, and accuracy data, with accuracy sufficient for the selected approach. The GRT Safe-Fly GPS provides this data. Certified GPS approach navigators, such as the Garmin GNS650, generate this data, and transmit it via ADS-B+ output, but this format is proprietary to Garmin and thus is not usable currently.