Integrated Primary Flight Display (IPFD)

See What You’ve Been Missing.

IPFD Downloads

Integrated Primary Flight Display (IPFD) is Honeywell’s Synthetic Vision System (SVS) • a new product that will be offered on multiple platforms for business jets. IPFD uses cues that pilots already understand to provide them with a VFR visual environment regardless of the time of day or weather conditions.

The integrated primary flight display uses Honeywell’s industry-leading Enhanced Ground Proximity Warning System (EGPWS) database and our advanced Head-Up Display (HUD) symbology. Combined, they give pilots an unprecedented, coherent, and continuous window of situational awareness of their flight path, terrain, and navigational environment.

The IPFD synthesizes key information for the pilot and delivers it in an easy way that is:

- Ambient – The pilot makes no special effort to gather data
- Natural – The pilot makes no special effort to interpret the data
- Continuous – The pilot makes no special effort to update the data

IPFD is a tactical decision-making tool that helps the pilot make necessary short-term decisions needed during flight. It complements Honeywell’s proprietary Interactive Navigation (iNAV™). iNAV is Honeywell’s navigation display which allows on-screen graphical flight-planning. It is a strategic tool allowing the pilot to plan far in advance of events in the flight plan.

IPFD employs performance-based HUD symbology information. It helps the pilot determine the outcome of many navigation tasks, such as avoiding terrain and obstacles. The HUD symbology also helps the pilot understand in a very intuitive way where the aircraft is going and makes the energy management of the airplane, especially during critical flight phases such as takeoffs and landings more natural. In addition, the blending of symbology, such as range rings and runway center lines with the terrain assures the pilot accurate distance information that’s easily interpreted.

The IPFD enhances the EGPWS system by backing up decision links in the accident chain even further, giving a new larger margin of safety. It is a strategic ground proximity tool allowing continual prevention of decisions leading to CFIT.

The IPFD terrain data comes from the Honeywell EGPWS database which has a record of 500+ million hours of proven operation on commercial, business jets and helicopters and is credited with 30 CFIT saves. The database is continuously updated with newer and higher resolution data, and endures a thorough and strict validation and configuration control exceeding the DO200A compliance standards.

The first application of Honeywell’s IPFD will be the Gulfstream SV-PFD which will be available in 2007 on all Gulfstream aircraft equipped with the Primus Epic®/PlaneView® avionics system. Honeywell is actively studying the introduction of IPFD on other aircraft platforms.

Features of IPFD

Innovative features that IPFD will bring to the cockpit:
Flight Path Marker based PFD-HUD symbology that helps with the aircraft energy management and eases navigation

- Conformal terrain • Displays exactly where you are going by looking at the Flight Path Marker
- Color coded terrain • Similar to how it is conventionally displayed on a map
- Water texturing and color saturation • Clearly distinguishes the water from the sky
- EGPWS warnings and cautions overlaid on the terrain
- Range rings • Show distance
- Obstacles
- Runways markings • Centerline, runway numbering and distance remaining markers
- Unusual attitude declutter with fade-in • When the aircraft is in an unusual attitude the terrain is gradually faded away to allow the pilot to concentrate on the task of returning to steady and level flight

Seamless integration of the terrain and the advanced HUD symbology make the Honeywell IPFD the most advanced synthetic vision product available today. Download our product brochures and video demo below for more information.

**IPFD Downloads**

- 1280x1024 Format IPFD Wallpaper Images
- 1024x768 Format IPFD Wallpaper Images
- 800x600 Format IPFD Wallpaper Images
- IPFD Video Demo
- IPFD Brochure