

Enhanced Situational Awareness  
Crisp, Clear, Real-Time Imagery

# Vision-1<sup>®</sup>

## Synthetic Vision System

Egocentric View (Pilot's View)  
Exocentric View (Wingman's View)



SVS Egocentric View shown on EFI-890R Primary Flight Display

## “Safety Never Looked Better”<sup>®</sup>

Universal Avionics' Vision-1 Synthetic Vision System features a high-resolution terrain database for crisp, clear “you-have-to-see-it” images.

Vision-1 “Egocentric” pilot’s view is designed for Primary Flight Display (PFD) and Electronic Attitude Director Indicator (EADI) applications. It provides the pilot with a perspective as if looking out the flight deck window. The system maintains the standard foreground symbology and replaces the blue/brown background with imagery depicting the terrain in real-time complete with pitch and roll orientation.

The unique “Exocentric” wingman’s view provides a 3-D view of your aircraft with respect to the flight path and surrounding terrain. The perspective is as if from a camera situated behind, above and to the right of the aircraft.

The dynamic VGA video output can be displayed on the EFI-890R, EFI-890H, MFD-890R, MFD-890H, MFD-640 or EFI-640 navigation displays. Overlay of the flight plan from the Universal Avionics Flight Management System (FMS), along with deviation indicators, trend vectors and compass symbol with course and heading information contribute to provide you with a unique, increased level of situational awareness.

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# Synthetic Vision System

The terrain imagery utilizes topographical coloring similar to that used on aviation sectional charts. Hills and mountains appear in shades of green and brown while oceans and other large bodies of water are colored blue. Special shading on the digitized terrain and the grid overlay that conform to the landscape on the synthetic world help you get a sense of movement in flight, particularly when flying near ground.

The low contrast grid lines are oriented East/West and North/South (True). The E/W grid lines are at an interval of 0.25 NM and the N/S grid lines start at 0.25 NM at the Equator and become narrow as you reach the Poles.

Flight plan and vertical profile depiction are derived from FMS flight plan waypoint altitudes. Platforms show direction of flight.

White poles extending to the ground provide a perspective of the flight plan relative to surrounding terrain. The poles are spaced at 1 NM intervals within 10 NM of the aircraft and 10 NM thereafter.

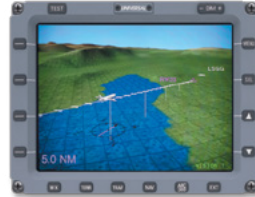
A compass symbol, referenced to magnetic north, is displayed 1,000 feet directly below the aircraft. A magenta line depicts the FMS selected course and a black triangle for the aircraft heading.



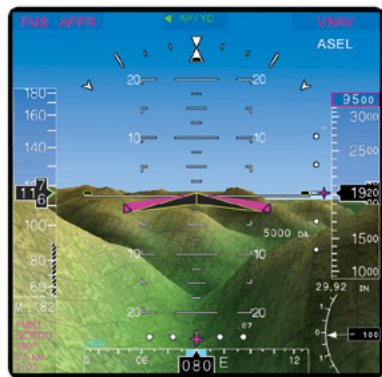
SVS Egocentric View displayed on an EFI-890R Primary Flight Display



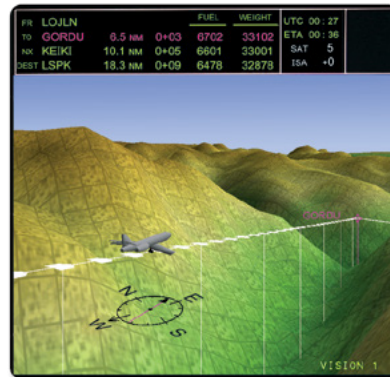
SVS Exocentric View displayed on an EFI-890R Navigation Display



SVS Exocentric View displayed on an MFD-640 Multi-Function Display



Egocentric View on Primary Flight Display overlaid with innovative foreground symbology TSO'd and certified for Part 23 and Part 25 aircraft



Exocentric View on Navigation Display



The terrain database is stored in solid-state memory within the Vision-1 computer, which is housed in a remote-mounted, 2-MCU sized Line Replaceable Unit (LRU).



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