3D Synthetic Vision EFIS

3D terrain, traffic and towers. A new dimension in safety. The lightest, most comprehensive system including TAWS, Highway-In-The-Sky (HITS) and GPS-WAAS Navigation.

The most important thing we build is trust.
3D Synthetic Vision EFIS
A new dimension in safety

3D Synthetic Vision EFIS
What has long been a dream—3D navigation, terrain, traffic, and towers on your Primary Flight Display—Cobham delivers today as the standard in avionics. The revolutionary Cobham EFIS integrates breakthroughs like 3D Synthetic Vision, graphical Flight Management System (FMS), Highway-In-The-Sky (HITS) predictive flight director, Head-up Display (HUD) symbology, Terrain Awareness and Warning System (TAWS), and much more. Light years ahead of any other avionics package, the Cobham EFIS is the number-one selling 3D Synthetic Vision EFIS.

3D Synthetic Vision with GPS-WAAS
The Primary Flight Display shows three-dimensional terrain, optional traffic, towers, and runway environment in real time. The photo at left shows the approach to Aspen, Colorado, surrounded by hazardous terrain.

The inset image depicts what you see on the Primary Flight Display during approach. Note how precisely the display conforms to the actual terrain and runway. Imagine the situation—not as sunny VFR—but as a nighttime approach under deteriorating weather conditions. How much more confident would you feel with the Cobham EFIS?
**Integrated FMS with HITS (Highway-In-The-Sky)**

Experience the future of integrated flight management. The Highway-In-The-Sky (HITS) predictive flight director projects your course as a 3D tunnel of green rectangles onto the Primary Flight Display. You simply fly the airplane symbol through the green rectangles to follow your lateral and vertical route, corrected for wind, automatically. Besides just showing you the HITS course on the Primary Flight Display, the Cobham EFIS can also feed the HITS course to your autopilot, allowing you to fly any procedure hands free.

**Integrated Terrain Awareness and Warning System (TAWS)**

Always know when danger threatens. The Terrain Awareness and Warning System (TAWS) integrated into the Cobham EFIS meets the requirements of the FAA mandate. To avoid “warning fatigue,” the Cobham EFIS TAWS technology displays alerting colors only when terrain threatens your flight path, not when it is behind you or hundreds of miles away. Furthermore, the Cobham EFIS is the only system to feature a Horizontal Projected Flight Path with “look-ahead” in turns. A white “noodle” off the nose of the aircraft symbol shows your flight path one minute into the future, warning you at the beginning of turns if you’re headed into trouble.

5 The “look-ahead” TAWS feature warns you of hazards in your projected horizontal flight path, immediately alerting you to danger. This gives you sufficient time to change to a safer course and avoid problems before they become critical.
Integrated Display Unit (IDU)
• Full-color, high-resolution, sunlight-readable (1,000 nit) LCD screen with fully adjustable brightness
• Black-anodized machined 6061-T6 aluminum bezel
• Integrated voice warning system
• Illuminated controls with tactile differentiation
• Digital flight performance recording for last 5 flights
• SmartMedia data card reader
• Line replaceable components
• Upgradeable and expandable
• Level-A software
• Ruggedized for hostile cockpit environments

6.30”h x 5.50”w x 4.50”d
Weight: 4.5 lb.

AHRS (Attitude/Heading Reference Systems)
• Solid-state, strap-down AHRS
• 14,000 hours MTBF
• Non-tumbling, non-precessing
• Multiple AHRS configurations available
• Level-A software

ADC (Air Data Computer)
• Includes OAT probe
• Multiple ADC configurations available

GPS/WAAS Receiver
• 12-channel, parallel tracking
• RAIM and FDE

AIU (Analog Interface Unit)
• Drives virtually any autopilot
• Fly hands-free: DPL, STAR’s approaches (including DME arcs, procedure turns, and teardrop and holding pattern course reversals) and missed approaches (including holding patterns with correct entries)
• Dual VOR/DME/ILS, MB, ADF, Radar Altimeter

Primary Flight Display (PFD)
• HUD symbology
• 3D Highway-In-The-Sky navigation for waypoints and approaches
• User-defined precision approaches
• Real-time 3D terrain modeling
• Real-time 3D traffic display
• Real-time 3D towers, antennas, and obstructions
• Full VNAV capability
• Zoom/wide-angle views
• Fully integrated FMS supports all ARINC-424 leg types
• Unusual Attitude Recovery mode
• Multiple declutter options
• ASI, ALT, VSI, AGL, CDI, trends, heading, timers, bugs, and more
• Radar Altitude display

Multi-Function Display (MFD)
• Vector-based moving map with Jeppesen NavData
• Topographic terrain display
• Datalink weather display
• Class A / B / C Terrain Awareness and Warning System (TAWS)
• TCAS-I, II, TIS, ADS-B display
• Winds aloft / crosswind component
• Density altitude display
• ISA/Temperature
• True airspeed, groundspeed, and OAT
• Conventional HSI/ILS/RMI/ADF display
• Towers, antennas, and obstacles
• Color- and altitude-coded airspace
• Horizontal Projected Path with “look-ahead” in turns
• Waypoint information
• Multiple display options
• Fuel range and duration
• Built-in, graphical Flight Management System (FMS) flight planner

Certification Basis
• STC’d on over 740 models including all King Air, Citation 501, all Cessna single and twin, all Piper single and twin, Piaggio Avanti and Pilatus PC-12 models—plus hundreds more aircraft.
• TSO-C2d, TSO-C4d, TSO-C6d, TSO-C8d, TSO-C10b, TSO-C15b, TSO-C34e, TSO-C35d, TSO-C36e, TSO-C40c, TSO-C41d, TSO-C52b, TSO-C87, RTCA/DD-160D, RTCA/DD-178B, Level A

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