



*Unparalleled Visibility.
Unprecedented Safety.*

AerAwareTM

Complete Enhanced Flight Vision System

No Natural Vision. No Problem.

Enhanced Flight Vision System (EFVS)

AerAware is a groundbreaking innovation in commercial aviation, designed to significantly improve safety and operational efficiency. Its primary purpose is to equip pilots with a crystal-clear view of their surroundings, even in the most challenging low-visibility conditions such as fog, rain, snow, smoke, sand or darkness. By utilizing advanced sensor technology, real-time imaging, and synthetic vision, AerAware EFVS enables pilots to see what their eyes cannot, providing essential visual cues during all phases of flight including critical phases like approach and landing.

This enhanced visibility not only bolsters safety by reducing the risk of missed approaches, hard landings, long landings and runway excursions/incursions but also streamlines operations by minimizing delays and diversions caused by poor weather. In an industry where precision and reliability are crucial, AerAware EFVS stands out as an essential tool for ensuring safer, more efficient flights.



FEATURES

- Dual Head Wearable Displays (HWD)
- Multi-spectral camera technology
- Combined Vision System (PFD Symbolology + Enhanced Vision + Synthetic Vision)
- Highly integrated solution
- Lightweight
- Easy installation & integration
- LED and incandescent runway light detection in low visibility
- High-resolution, high contrast
- One STC for entire system and installation

IMPROVED SAFETY IS POSSIBLE

Heads-up Guidance System Technology (HGST) - A Powerful Tool for Accident Prevention*



ACCIDENTS INVESTIGATED

ACCIDENTS THAT LIKELY COULD HAVE BEEN PREVENTED WITH HGST

123

LOSS OF CONTROL

341

TAKEOFF AND
LANDING

110

MISCELLANEOUS

574

TOTAL ACCIDENTS
INVESTIGATED

57%

LOSS OF CONTROL

69%

TAKEOFF AND
LANDING

33%

MISCELLANEOUS

342

TOTAL AVOIDABLE
ACCIDENTS

*Data: Special Report- Flight Safety Foundation Heads-Up Guidance System- A Clear Path to Increasing Flight Safety (2009)

KEY FEATURES

EVS-5000 CAMERA

AerAware utilizes the top-of-the-line EVS-5000 multispectral camera. The camera system combines visible light and longwave infrared sensors to display a comprehensive view outside the cockpit, providing a complete gate-to-gate experience, during all phases of flight.

- Four (4) internal cameras
- Six (6) internal sensors
- Detects incandescent and LED runway lights



**Reduces published visibility
minimums by 50%**



FEATURES

- High detection distance of ALS flashing lights and runway lights
- High resolution 1280 x 960 pixels
- No thermal halo effect
- Provides the pilots a high-resolution view which cuts through mist, fog, haze, dust, sandstorms and other obscurants, turning any visibility condition day or night into a clear day
- The camera is certified to have a “50%” advantage over natural vision

KEY FEATURES

SKYLENS HEAD WEARABLE DISPLAY (HWD)

A revolutionary Head-Wearable Display (HWD) that provides high-resolution symbology, along with synthetic and enhanced vision that is presented on a high-transparency visor. The easy-to-wear device provides superior see-through transmission in all weather conditions, day and night, with unlimited field of view.

- Dual system provides both pilots with the same information
 - Improving crew resource management, decision-making and overall situational awareness
- Provides a fully conformal display
- Panoramic display allows pilots to look 180 degrees to the left or right to view SVS imagery
- Superior performance over a fixed HUD in high crosswind landings
- Projects key Primary Flight Display Symbology (PFD)
- Light-weight and comfortable
- Allows for preferred pilot seating location
- Wearable over glasses and headphones
- Only HWD display certified for commercial operations

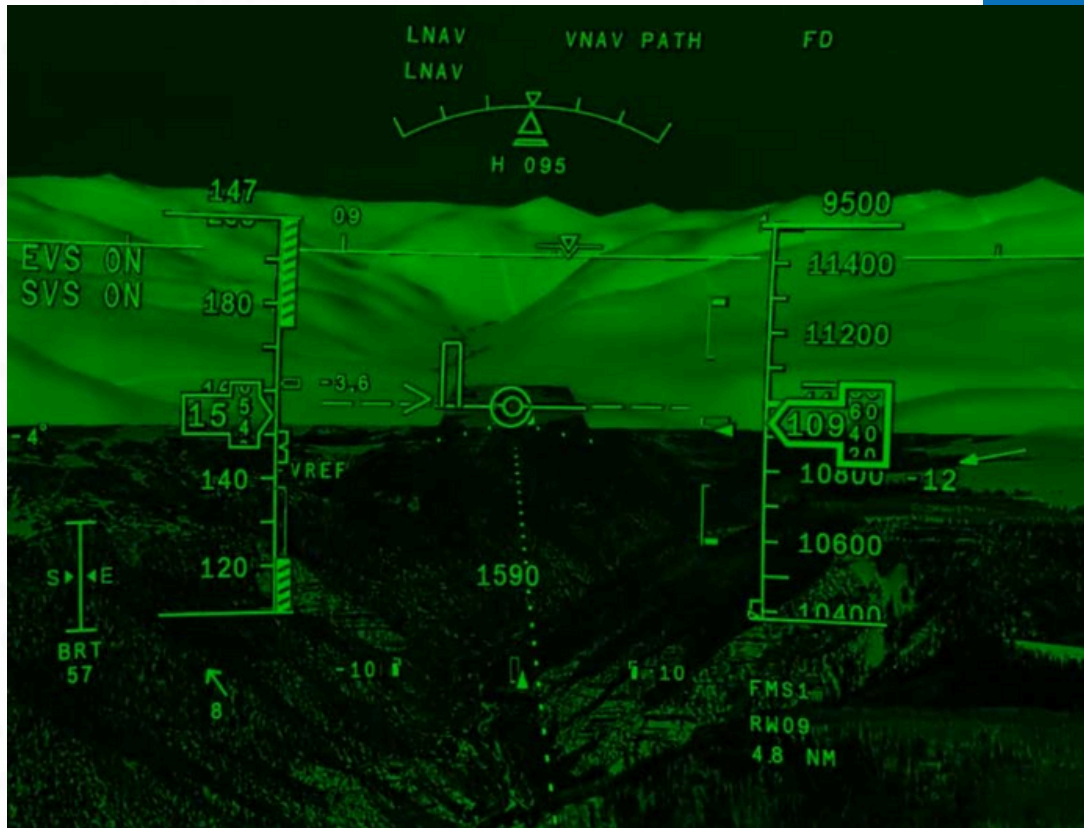


KEY FEATURES

COMBINED VISION SYSTEM (CVS)

$$\text{CVS} = \text{PFD} + \text{EVS} + \text{SVS}$$

AerAware's Combined Vision System is a unique and optimized solution for commercial aviation. The CVS combines EVS, SVS and PFD symbology, providing an enhanced view of the outside world even when actual visibility is close to zero. It enables the pilots to see runway lights much earlier in low visibility conditions. This improves the pilots' ability to execute precision and non-precision approaches, reducing the risks of Controlled Flight into Terrain (CFIT) accidents, tail strikes, hard landings, and runway excursions / incursions.



Primary Flight Display Symbology (PFD)

- Provides Heads-Down Primary Flight Display (PFD) information
- Enables pilots to control the aircraft's flight path and energy more precisely while remaining heads-up

Synthetic Vision (SVS)

- Provides computer generated 3D imagery of terrain and objects
- Utilizes a worldwide airport database & GPS technology
- Aids in identifying the correct landing airport and runway
- Provides extended runway centerline (breadcrumbs) symbology
- Displays alternate airports

Enhanced Vision (EVS)

- Presents the pilot with a real-world enhanced image
- In reduced visibility conditions, runway infrastructure can be seen at a distance farther than possible with the unaided eye
- Provides a clear depiction of taxiways, obstructions, vehicles and personnel

OPERATIONAL ADVANTAGES

REDUCED COSTS

- Minimizes delays, diversions and cancellations
 - Reduces the need for delay related expenses
 - Helps keep aircraft on schedule and in sequence
- Reduces hard landings, wear and tear on wheels, tires, brakes, flaps, and engines
- Enables optimized routes / reduced flight time
- Reduces the need for weather related holds

ENHANCED FLEXIBILITY

- Access to more airports
- Reduced minimums for landing
- Minimizes seasonal weather-related route variances
- Approach alternatives: mitigate traffic delays by availing alternate runways / approaches

REDUCED ENVIRONMENTAL IMPACT

- Fuel efficient operations = lower CO2 emissions
 - Fewer flight diversions means less fuel burned during extended flight paths or holding patterns
 - More fuel-efficient operations: enables optimized flight operations and the avoidance of inefficient routes caused by poor visibility

IMPROVED PASSENGER EXPERIENCE

- Customer satisfaction: fewer delays and cancellations improve the passenger experience
- Reputation and revenue: airlines with better on-time performance and reliability can attract more customers
- Fewer delays lead to better on-time performance



SAFETY ADVANTAGES

Safety Above All: How AerAware EFVS Protects Your Flights

Exceeds Human Vision

Pilots can see through weather and other low-visibility conditions with a real-time image of their surrounding environment, especially during approach, landing, and takeoff.

Approved for Lower Minimums

- 50% visual advantage over the naked eye; the highest of any commercial EFVS
- Zero visibility landings are possible

Improved Situational Awareness

Integrated with the HUD, AerAware lets pilots monitor flight data without looking away from their external view, greatly enhancing situational awareness.

Natural Vision

AerAware

Shared Mental Model

Dual pilot head wearable displays (HWD) ensure complete situational awareness fostering a shared mental model between pilots.

Efficient Energy Management

Real-time display of aircraft flight path vector and acceleration that is conformal with the outside world enables better altitude and airspeed control and eliminates short and long landings.

Reduced Runway Excursion / Incursion Risk

AerAware helps pilots maintain alignment, descent paths, and manage energy, lowering the risk of runway excursions.

Additionally, terrain, structures, vehicles and other aircraft are visible helping avoid a runway incursion.

AerAware keeps you on track, on time and on schedule.

CASE STUDY

Real world example of a flight that would have been “saved” by AerAware. AerAware is certified for up to a 50% reduction in published RVR.

Flight information:

- Departure – 11/22/22
- Origin Airport– KSFO (San Francisco)
- Destination Airport - FLL (Fort Lauderdale)
- Departure Time – 11:05 PM
- Scheduled Arrival – 07:03 AM (11/23/22)

What happened?

- Diverted to Tampa due to fog (low visibility conditions)
- Resulting in a 2H17M delay
- Actual Arrival at KFLA 09:27 AM

AerAware Equipped Aircraft

- The required RVR (runway visual range) for FLL is 2,400 ft.
- AerAware reduces required RVR for approach to 1,200 ft.
- With AerAware a safe landing, touch down, rollout, and taxi to gate would have been possible
- No delay or diversion

Past Flight Replay Speed 10x Loop Off





EQUIPMENT AND INSTALLATION



Installation at any MRO within
3 to 5 days



AerSale will provide Training
Manual, Training Program and Train
the Trainer



Installation can be accomplished
around aircraft maintenance
schedule



Rotable pool of serviceable radomes
and LRU's available



Structural and electrical kits are
manufactured by AerSale's in-house
PMA division



AerAware simulator integration is
available



24/7 Customer Support
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APPROVALS AND CERTIFICATIONS

- FAA Certification Received
 - Supplemental Type Certificate (STC) for Boeing 737NG
 - ST04576AT
- EASA Certification Pending





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EVERYTHING YOU NEED.
ONE INTEGRATED
COMPANY.



About

AerSale is dedicated to providing integrated aftermarket services and products designed to help aircraft stakeholder realize significant savings in the operation, maintenance and monetization of their aircraft, engines and components.

OUR

SERVICES

- Engineered Solutions
- Asset Management
- Engine and Aircraft Sales and Leasing
- Materials USM
- Aircraft MRO
- Component MRO

OUR SIGNATURE

PRODUCTS



AerAware[™]



AerSafe[®]



AerTrak[®]

AerAware®

Innovative Flight Clarity



FLY SMARTER

Explore AerAware's
Sky Vision Solution



AerSale.com

AerAwareTM

Complete Enhanced Flight Vision System



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