

# EGPWS Database



DATABASE OF TERRAIN,  
AIRPORTS, & OBSTACLES

Worldwide Coverage.  
Accurate. Proven.

**Honeywell**

Only Honeywell's industry-leading Enhanced Ground Proximity Warning System offers the precise alerting and guidance of this superior database.

## Enhanced Safety

Honeywell's has a proven record of protecting pilots, planes, and passengers from collisions with terrain. The secret of the Enhanced Ground Proximity Warning System's (EGPWS) is its accurate, virtually no-nuisance alerting using our proprietary look-ahead algorithms combined with a detailed, high-resolution mapping database. Along with 100 percent of the Earth's terrain, the database includes 12,000 airports with 30,000 runways 2,000 feet and longer, as well as 108,000 man-made obstacles, and the list is growing. This information provides Pilots guidance and enough warning time to execute corrective maneuvers. So far, that's help prevent 30 accidents, potentially saving thousands of lives.



100 percent global coverage—more than just airports—which means you're protected during climb, cruise, descent, landing, and also for strategic emergency flight planning in case of rapid descent.

### Unparalleled database

The development team continuously cross-maps our data with that of governments, geographical organizations, corporations, and private surveyors on every continent and inside each country to give pilots the most comprehensive, verified, and precise view. Data is validated by our Route Structure Analysis, in which Honeywell engineers fly "virtual" aircraft into airports to analyze the performance of EGPWS and ensure the accuracy of terrain, runways, and surrounding obstacles. Database & software updates are made available 3 times per year to provide customers with additional safety improvements. Prior to the release, 30,000 real life simulations are run on the data to ensure accuracy. Honeywell's database seamlessly integrates with the EGPWS for sophisticated monitoring, alerting, and warning algorithms. It is compatible with existing instrument procedures & RNP approaches.

### Uncompromising commitment

Over the past two decades, Honeywell's engineers, designers, and human factors specialists have continually developed, expanded, and refined the proprietary database built into every EGPWS with passion and uncompromising commitment to the safety of your planes, personnel, and passengers. Our driving mission? Make air travel even safer.

### Honeywell's Pledge

Why do we go to such lengths? For you and your safety. More complete data means better terrain avoidance. Pilots get improved situational awareness sooner to protect against Controlled Flight Into Terrain (CFIT). Honeywell's EGPWS offers virtually no nuisance alerts, giving pilots and crews confidence in the system. They know when an alert sounds, they must react.

With over 38,000 installations worldwide, Honeywell's EGPWS is one of the most commonly used and reliable flight-safety systems available to prevent CFIT accidents. Our proprietary database inside allows for precise alerting and guidance. Don't trust your flight safety to anything less.

Trust the flight-safety leader that's continually set the standard for traffic collision avoidance, enhanced ground proximity, and weather radar systems.

## Peace of Mind

Using the world's best data, EGPWS provides pilots with an unrivaled level of certainty. They know precisely where their aircraft is in relation to terrain and obstacles at all times providing enhanced situational awareness without nuisance.

- Compatible with existing instrument procedures & RNP Approaches
- Covers 100 percent of the Earth's terrain in high-resolution data with more than 12,000 airports, 30,000 runways, and 108,000 obstacles—and we are adding more all the time.
- Continuous refinement cycle and ongoing database updates.
- It covers all areas—not just airports—for continuous protection during takeoff, climb, cruise, descent, and landing, and in case of rapid descent where emergency flight planning is required.
- Offers the most comprehensive WGS84-referenced data available.
- Database resolution is tailored to either fixed-wing craft or helicopters for optimal performance and superior safety.

- 30,000 real life simulations run prior to database & software releases which are provided 3 times per year.
- Honeywell's in-house database seamlessly integrates with the EGPWS sophisticated monitoring, alerting, and warning algorithms
- Terrain data used for improving weather radar detection - AutoTilt™

### Reliability

More than 12 years, 250 million flight hours of tested terrain and \$35 million invested in development, means you can trust the system's accuracy and reliability.

- Saved 30-plus aircraft and potentially thousands of lives.
- Nuisance alert rate of less than 1 in 150,000 flight hours-pilots trust alerts are real and react.
- Refined through more than 6 million audited flight legs (or 12 million flight hours).
- Updates go through an extensive validation effort and the database is maintained under strict configuration controls that exceed RTCA DO-200A standards.

### Value

On most EGPWS units, database updates are available free of charge—forever. We continuously update our database with new releases, generally three to four times each year. Updates include new, additional, and revised data for terrain, airports, runways, and obstacles.

- Mark V, VI, VII, VIII, and XXII customers receive free database updates for life. (Mark XXI and KGP upgrades are available for a nominal fee.)
- Updates take 30 minutes or less with a PCMCIA card.
- For customers with special needs, new database releases can be generated quickly.



The latitude and longitude reference of the database is WGS84, the global standard. Terrain resolution ranges from 6 arc-sec to 30 arc-sec, for the most precise performance on any target aircraft type.

**Proven. Safer. Better.**

Fly with confidence, knowing you've partnered with the very best. As a worldwide flight-safety leader, Honeywell delivers the demonstrated value and performance, unmatched industry experience, and superior customer service you can depend on.

**Worldwide support.**

With the most extensive and capable sales offices, field service engineers, distribution centers, repair and overhaul centers, and more than 800 installation service centers positioned around the globe—from the Americas to Europe, across the Middle East and Africa, and throughout the Asia-Pacific region—Honeywell is the worldwide force that keeps your fleet in the air 24/7/365.

**The Honeywell advantage.**

As part of a \$30 billion multinational high-technology products and services company, Honeywell Aerospace draws upon a depth of knowledge, experience, and resources unmatched in the industry. We are a global leader in integrated avionics, engines, systems, and service solutions for aircraft manufacturers, airlines, business and general aviation, military, helicopters, space, and airport operations.

**For more information**

To learn more about the EGPWS family of products, visit us on-line at [www.honeywell.com/egpws](http://www.honeywell.com/egpws)

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