Assessment of pilot response to EGPWS guidance material

For the system to work as designed, aircraft operators should keep the software and terrain/obstacle/runway database up to date. The proper and timely responses to EGPWS warnings can result in significantly reducing the risk of a CFIT accident.

Response to an EGPWS alert activation

Flight crew should demonstrate taking the correct action and perform appropriate recovery manoeuvres needed in response to a caution and warning.

In the case of a warning, flight crew should follow the warnings without hesitation as soon as triggered.

- During night or in instrument meteorological conditions (IMC), apply the procedures immediately in response to caution and warning level alerts. Do not delay reaction for diagnosis.
- During daylight or in visual meteorological conditions (VMC), take positive corrective action until the alert stops or a safe trajectory is ensured.

Pilots must refer to the recovery manoeuvres defined in their AFM or AFM Supplement, and they must follow specific guidance as defined for their aircraft model.

Caution level alert

- Take immediate corrective action as necessary to recover safe terrain clearance.
- Advise ATC of situation as necessary.

Warning level alert

- Aggressively position throttles for maximum rated thrust.
- Apply maximum available power as determined by emergency need. The pilot not flying (PNF) should set power and ensure that takeoff / go-around power and modes are set.
- If engaged, disengage the autopilot and smoothly but aggressively increase pitch toward “stick shaker” or Pitch Limit Indicators to obtain maximum climb performance.
- Continue climbing until the warning is eliminated and safe flight is assured.
- Advise ATC of situation.

Operators:

- Assess and consider equipping their aircraft with EGPWS equipment;
- Ensure the use of GPS that feeds direct to EGPWS;
- Put in place a training program to ensure flight crew can respond effectively to EGPWS cautions and warnings; are aware of factors that can reduce effectiveness of EGPWS and are trained to mitigate the effects of EGPWS degradation;
- Have procedures in place to ensure that EGPWS software and terrain, runway and obstacle databases are current and continually updated;
- Have procedures in place to ensure that EGPWS equipment remains activated and serviceable at all times;
- Include CFIT avoidance maneuvers in recurrent training.

Guidance material

Performance assessment of pilot compliance to EGPWS

To access the guidance material, jointly written by IATA and Honeywell, please visit: www.iata.org/cfit