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भारत सरकार
नागर विमानन विभाग
महानिदेशक नागर विमानन का कार्यालय
सफदरजंग एयरपोर्ट के सामने
नई दिल्ली - ११० ००३

OPERATIONS CIRCULAR 8 of 2010

Subject : SAFETY OVERSIGHT - TAWS/ EGPWS EQUIPMENT - role of position inputs from GNSS equipment.

1. PURPOSE. This advisory Circular provides recommendations to operators on action that should be taken related to Operations Circular 3/ 2009 **Reduced Effectiveness of TAWS/ EGPWS Equipment.**

2. BACKGROUND. Operations Circular 3/ 2009 provides information to air operators on factors that must be addressed to ensure that the timely warning provided by TAWS/ EGPWS equipment is available all of the time. The EGPWS/ TAWS safety issues that have been identified concern the upkeep of soft-ware on which EGPWS/ TAWS depends; as well as the obstacle, runway and terrain database; the provision of global navigation satellite system (GNSS) positioning; the operation of the system's "peaks and obstacles" function; and the geometric altitude function of the equipment.

3. BENEFIT OF GNSS EQUIPMENT.

a. Operations Circular 3/ 2009 highlights that the proper functioning of EGPWS/ TAWS operation can be undermined by the lack of suitable navigational input, where DME/DME update for area navigation systems is not available. Some Operators have mandated the installation of GNSS equipment as a component of the EGPWS/ TAWS system to ensure navigation accuracy. Use of GNSS, accessible worldwide, eliminates the possibility of position shift, which is a source of false warnings (or worse, the failure to provide a genuine warning). Operators should consider mandating the installation of GNSS equipment.

4. SAFETY OVERSIGHT OF AIR OPERATORS.

a. It is expected that air operators would have established procedures to ensure that the effectiveness of installed equipment is maintained to the required specifications. However, a number of recent incidents indicate that this is not always the case. Operators Air Safety Department should as part of their audit programme ensure that aspects related to the effectiveness of EGPWS/TAWS equipment are reviewed.

- Software is updated to the latest available standard;
- Databases are updated to the latest available standard;
- EGPWS/ TAWS geometric altitude function is enabled (if available);
- EGPWS/ TAWS peaks and obstacles function is enabled (if available); and
- Implementation of any applicable service bulletins issued by manufacturers.

Sd/-
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