



Vaisala's runway visual range system cleared for air traffic control use in the USA

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Vaisala's new runway visual range system has been approved for air traffic control use by the FAA. Improved estimation of runway visual range has a positive impact on both flight safety and airport capacity.

The US Federal Aviation Administration (FAA) has approved Vaisala AviMet® PC-Based Runway Visual Range (RVR) system for air traffic control use in airports across the country. The primary users of the system are air traffic controllers who access RVR data through an improved display application, also developed by Vaisala.

Runway visual range (RVR) is a calculated estimation of the distance that a pilot can see down a runway. Prevailing weather conditions have the most impact on RVR, but ambient light levels and runway light settings also play an important part in the equation. Vaisala's PC-based RVR system uses state-of-the-art sensor technology to gather a host of readings from meteorological optical range to the intensity settings of runway lights.

The first prototype of the RVR system was installed at Wilkes-Barre/Scranton International Airport in Pennsylvania in August 2007. Since the installation, the system has undergone extensive operational testing in real-life conditions. Soon it will be the first airport in the world with the PC-based RVR system in official operational use.

Airports better equipped for poor weather

The Vaisala RVR system is an integrated, PC-based system that provides fully automated runway visual range assessment and reporting for airports. In addition to having an obvious impact on flight safety, improved runway visual range estimation also impacts airport capacity as runways can safely be

kept open longer under diminishing weather conditions.

The FAA currently operates two older generation RVR systems in the National Airspace System (NAS), both of which are becoming harder to maintain and more unreliable as they age. Vaisala's PC-Based RVR system is designed for maximum mean-time-between-failures (MTBF) and minimum mean-time-to-repair (MTTR), minimizing the amount of time during which runways cannot be kept in operation.

Vaisala has worked with the FAA for more than three decades already, supplying e.g. weather radar signal processors and software, ceilometers and different kinds of visibility instruments.