MC Solutions launches new Lamp Time Control

MC Solutions' Lamp Time Control (LTC) system measures the response time of an airfield ground lighting (AGL) lamp failure and – says the Milan-based supplier of ground lighting and surface guidance monitoring systems - can form part of a safe surface movement guidance control system (SMGCS)

The LTC consists of a master unit that is installed in an airfield control site, typically the wider AGL environment.

an air traffic control tower, and what is described as a subordinate (or 'slave') unit taken onto the airfield. The latter is connected to a 'power light' device that - through a standard Federal Aviation Administration (FAA) connector - is placed between the monitoring module and an airfield lamp on which the failure response time is going to be checked.

The master and slave units are wirelessly connected with a communication range of up to 12km.

The master unit incorporates a device that will detect the acoustic signal that is generated by a lamp failure. On an integrated printer it will then produce a report on the test: the failure response time in milliseconds as well as the LTC's individual serial number.

As well as timing the lamp failure feedback response time, the LTC can also be used to check the 'switch on' command time

needed to light individual lamps and so

The instrumentation has been tested and certified by the Piacenza, Italy-based

SIET testing laboratory, and has a patent pending.

MC Solutions delivers the components of the LTC in what is described as a purpose-

Why is it important to test lights' failure response rate?

So, why is it so important for an operator to be able to time AGL lamps' failure feedback response time?

First, an AGL system must be in compliance with European Union Aviation Safety Agency (EASA) regulations: the rules say there must be a maximum of two seconds for feedback from a stopbar and five seconds from all other circuits, MC Solutions explains.

Moreover, when lead-on lights [which provide visual guidance to those entering a runway] are switched on or off, those lights must provide immediate feedback to the tower: "If you consider that an aircraft moves at a around 30 knots [56km/h], timing performance is a key feature if ground traffic is to be safely managed, ensuring safety for both aircraft and any other vehicles that might not be visible be seen from a cockpit," the company notes.



The LTC master unit



The LTC slave unit



The LTC comes in its own 'aeronautical suitcase'

made 'aeronautical suitcase' complete with handle and snap-lock system. The use of the measuring instrument does not require screws or other fastening mechanisms that could be dropped or lost. The LTC system requires calibration just once a year.

MIA going strong at Venice Airport

In other news, MC Solutions has reported that the Modular Intelligence Airport (MIA) system that it installed at Italy's Venice Airport has now been going strong for more than a year.

Of the 15,000 MIA modules and 6,000 connectors installed, there has not been a single failure over the past year, the company reveals.

The MIA airfield lighting control and monitoring system (ALCMS) is a fibre

optic system that enables remote monitoring and testing of an AGL system. With high-speed connectivity and requiring little in the way of maintenance, MIA incorporates an aircraft detection system that can highlight any runway incursions as part of a wider surface technology need only ever be calibrated once - on installation.

The fibre optic data transmission of the FAA and European Aviation Safety Agency incursion detection. (EASA)-compliant MIA system that connects the airfield to tower at Marco Polo Airport in Venice is a development of large volumes of data, with monitoring the MC Solutions' copper wire-based AGL monitoring system that is in place at a number of other Italian air gateways.

The software is tailored to the customer - not just the layout, but functionalities

and interface as well. The software is controlled, uploaded and updated remotely.

MIA consists in the main of two devices: Monitor Control Lamp Opticals (MCLOs) that monitor airfield lamps and for which management ground control system. This there is a worldwide patent pending; and Crossing Detection Units (CDUs) that recognise an aircraft or vehicle, its speed and its direction, through a magnetic loop installed in the airfield asphalt for runway

> MIA is a high-speed system handling of both primary and secondary AGL services. It provides feedback from any malfunctioning lamp in a single second. That communication is free from interference because it does not use wireless technology.

