



LOCATION Southwest Africa

DATE July 2017

CLIENT Civil Aviation Authority

EQUIPMENT Portable Trailers Carrying Runway Edge, Threshold, Approach Lights & Solar Series LED Wind Cones, Solar Series LED PAPIs, ERGLs & iSeries Portable Airfield Signs, DRMs and Taxiway Markers

APPLICATION Portable LED Airfield Lighting Systems for Emergency Airfield Operations

SYNOPSIS

Aviation Renewables designed and supplied three Portable LED Airfield Lighting Systems for the Civil Aviation Authority. The systems will be kept on hand and deployed in the event of unexpected airport power failure or equipment malfunction. The trailer-based system will mitigate any potential safety and operational risks presented by aging airfield lighting infrastructure.



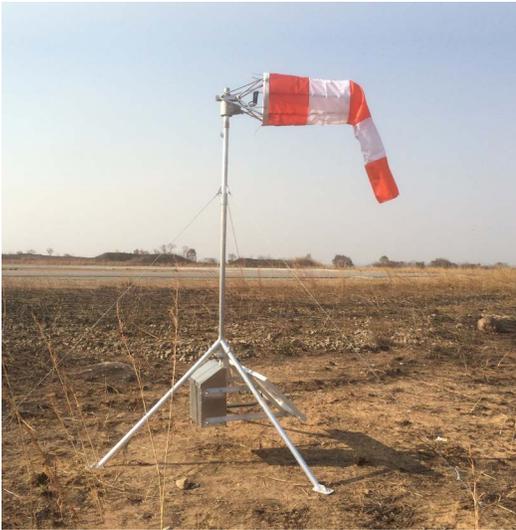
CHALLENGE

The Civil Aviation Authority recognized the risk that a major power supply failure would present to air operations in the country during a risk management exercise in 2017. With upcoming election campaigning, the need to ensure reliable 24/7 air operations within the country was a high priority. The challenge was to design custom portable airfield lighting systems that met the individual needs of each airport, but also contain the flexibility to be deployed at other airports in the national airspace. The selected systems needed to meet budget constraints and be on site within 4 weeks to support the election campaign travels.



SOLUTION

Aviation Renewables designed three complete Portable LED Airfield Lighting Systems. Each system is a fully integrated, ICAO compliant lighting system that is stored, charged and transported by a street-legal trailer. The systems include: runway edge lights; threshold lights; Precision Approach Path Indicators (PAPIs); runway guard lights; wind cones; and airfield signs.



- The Portable LED Threshold and Runway Lighting use the latest LED and radio control MESH network developments. They have operating times as long as 400 hours from a single charge. A full recharge of the entire portable LED airfield lighting system can be accomplished within 8 hours. This enables the operator to collect the lights in the morning and deploy again the same evening, which delivers continuous night-time use at FAA Medium intensity or ICAO VFR runway lighting levels.

- The Portable LED PAPI systems delivers an ICAO compliant visual glide slope 4-box PAPI for day and night visual approach. A trained user can easily install and calibrate the LED PAPI system within minutes.



- The Solar Series internally lit Portable LED Airfield Wind Cone (windsock) has a quick install tripod base with guy wires, designed for quick installation by one person. The all-aluminum structure is maintenance-free and will deliver many years of reliable performance.

- The Portable Solar Series LED Elevated Runway Guard Lights are compliant to ICAO low intensity lighting specifications. The unit weighs less than 30kg and is capable of being deployed in minutes, with a simple on/off selection. The integrated solar panel keeps the unit operating indefinitely, even in the world's toughest climates.

All the systems were delivered and operational within the client's deadline of 4 week from order. The client has been very impressed with the performance, build quality and ease-of-use; and is currently considering adding several more Portable LED Airfield Lighting Systems to their inventory.