



aviationrenewables

PROJECT REPORT



LOCATION Guyana

EQUIPMENT Solar LED Airfield Lighting System

DATE January 2013

APPLICATION Permanent Solar LED Airfield Lighting System for day and night VFR operations

CLIENT Ogle International Airport

SYNOPSIS

Aviation Renewables was tasked with the design of a solar airfield lighting system for the extension of the runway at Ogle International Airport, located in Guyana, South America. The solar airfield lighting system features advanced LED lighting and power solutions that operate from a 2.4 GHz command and control system.

CHALLENGE

The Ogle International Airport required an upgrade to the airfield lighting system in order to improve the category of the airfield, thereby allowing larger aircrafts to take off and land at the airfield in both day and night VFR conditions. Airport management decided to extend the runway to a Class II rating, allowing international flights from neighbouring Caribbean and South American nations to operate at a regional class airport in association with Liat Airlines.



SOLUTION

Aviation Renewables was tasked with the design and installation of a solar airfield lighting system featuring solar runway, threshold, approach, taxiway lighting and Solar Series wind cones. Using the advanced network, the runway, threshold, approach and taxiway lights are all controlled by a single command and control system via LCD. Because of the specialized network, the redundant wireless RF network communicate the command and control signals to the extremities of the airfield, operating with ease throughout the undulating surface and terrain.

solarseries™

Web: www.aviationrenewables.com
Email: arc@aviationrenewables.com
Phone: +1 (250) 590 1272



aviationrenewables

PROJECT REPORT



The Solar Series wind cones incorporate an FAA LED L810 with photocell control and a Solar Series RMS engine for self contained operation, easy installation and no maintenance over the next 5 years. Working with Aviation Renewables, the installation for the solar LED airfield lights and Solar Series wind cones was achieved within days.

With a fast approaching inauguration after the completion of the runway extension, Ogle Intl. Airport was able to conduct runway operations during the installation process due to the elimination of infrastructure, portability and a self-contained design.

Once the solar LED airfield lighting system was completely installed, both day and night operations were open to Liat Airlines. The completed project was estimated to be 20% of the cost of installing, operating and maintaining a conventional airfield lighting system.



solarseries™

Web: www.aviationrenewables.com
Email: arc@aviationrenewables.com
Phone: +1 (250) 590 1272



aviationrenewables

PROJECT REPORT

The solar LED airfield lighting system provides visual flight rules lighting capability for the new runway extension. The upgrade carried out by Ogle's airport management team allows the airport to operate a Class II runway thereby permitting larger aircrafts to support international flights. Nations such as Trinidad and Tobago, Venezuela and Brazil have partnered with Liat Airlines to further increase their passenger capacity and international destinations. Previous delays that resulted from transiting various airports will no longer exist resulting in a significant improvement for both the local and national economy through the benefits of increased tourism, agriculture and mining who are all dependent on efficient air transportation..



After the installation, airport management stated "The equipment is working with a very high satisfaction level. On the 26th the inauguration night flight was successfully completed in the presence of the President of Guyana. They sent us congratulations for the excellent work done and wanted to transfer this greeting to Aviation Renewables' team!"



solarseries™

Web: www.aviationrenewables.com
Email: arc@aviationrenewables.com
Phone: +1 (250) 590 1272