



aviationrenewables

PROJECT REPORT

LED HELIPAD LIGHTING SYSTEM SUPPLIED FOR HOSPITAL ON NORTHEAST OF CANADA



LOCATION Ontario, Canada

DATE 2023

CLIENT Bingham Memorial Hospital

EQUIPMENT LED Helipad Lighting System for Surface

APPLICATION LED Helipad Lighting for 24/7 Medevac Operations

SYNOPSIS

Aviation Renewables advised and supplied equipment for Bingham Memorial Hospital to upgrade their helipad lighting system from halogen to LED. In doing so, the helipad will realize savings not only in electricity, but also significant savings on maintenance and spares.

CHALLENGE

Bingham Memorial Hospital has a helipad for use by Medevac helicopters. The existing lighting system was at an age that spares were becoming harder to find, and the maintenance costs required to keep it compliant were high. The hospital operations staff needed guidance on upgrading the lighting system, to ensure that new lighting would be in compliance with Standard 325 of the Canadian Aviation Regulations.



i series

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



SOLUTION

Aviation Renewables was able to assist the Bingham Memorial Hospital with a design, compliance reports and installation guidance for a new LED helipad lighting system.

The System uses 120v elevated LED lights, that meet the requirements for ICAO Annex 14 Volume II and the Canadian Aviation Regulations, Standard 325 for Heliports. In addition to the TLOF lighting, frangible 120v low-profile floodlighting was provided to aid in depth perception for pilots and safe maneuvering for ground support staff. These LED lights require no maintenance other than the occasional lens cleaning, and have an expected life of 50,000 hours.

The hospital's existing windcone was end of life, including a damaged electrical circuit that was beyond economic repair. In order to keep installation costs to a minimum, a Solar Series LED Helipad windcone was supplied, complete with frangible fuse bolts. This windcone is completely stand-alone, and requires no trenching or wiring during installation. A 5-year battery replacement and 2-year fabric replacement are the only maintenance items. The structure of the Solar Series Windcones, being aluminum, has been known to last in excess of 50 years.

The helipad requires snow clearing operations in the winter. In order to mark the location of the elevated lights, Aviation Renewables supplied the RELM1200 snowplow markers. These marker wands feature a highly reflective sleeve, which reflects light using micro-prismatic reflectivity. The markers ensure that whether the lights are on or off, they are highly visible to the snow clearing team, avoiding costly damage.

