

CASE STUDY

SOLAR OBSTRUCTION LIGHTS FOR TRANSMISSION TOWERS

Obstruction Lighting Solutions

Middle East



Avlite[®]
www.avlite.com



Avlite Systems is an international designer & manufacturer of complete aviation lighting systems; airfield, heli & obstruction

We believe technology improves navigation™

Project Overview

Application:

Permanent ICAO LIOL Type A fixtures for 132 kV electricity transmission towers

Product:

ICAO LIOL Type A AV-C310-R

Location:

Middle East

Site:

Undisclosed

Date:

July 2013



Avlite's reliable, self-contained, solar powered ICAO LIOL Type A fixture is quickly and easily installed on transmission towers in the Middle East

Background

The customer required an ICAO compliant night time warning light system for transmission towers across the Middle East. The system needed to be low-cost, quick and easy to install and completely self-contained with an integrated power supply and fully automated to enable the lights to activate at dusk and deactivate at dawn.

A low-maintenance lighting system was also needed that wouldn't require constant repairs or component replacement and that would run reliably for many years with minimal operator

intervention. If maintenance was required however, the light fixtures or their components needed to be easily replaced without interrupting or effecting the tower's operation or the performance of the lights on other towers close by.

The solution

Avlite's authorised distributor for the Middle East, recommended Avlite's ICAO compliant solar-powered obstruction lighting solution to the customer as it met with their requirements.

To comply with ICAO standards, Avlite's AV-C310 is independently tested to meet the photometric

Benefits

- ICAO compliant LIOL Type A
- Lightweight, completely self-contained fixture easily installed by a small crew
- Automatic dusk-till-dawn operation
- Fit-for-purpose, straight from the box
- Robust and long-lasting
- Over 100,000 hours of LED life - never need to change a globe
- User-replaceable battery
- Available in a larger model AV-C410 for use in areas with lower sunlight
- GPS & GSM versions available

“ Avlite's light-weight ICAO compliant obstruction lights were installed quickly and easily, fulfilled the customer's requirements and are now operating in the Middle East.

– Authorised Avlite Distributor
Middle East



requirements set out by ICAO for lighting towers up to 45 meters.

The customer selected Avlite's AV-C310 ICAO LIOL Type A fixture after a successful 2-year product trial, many in-country visits - including product familiarisation and training hosted by Avlite's manufacturing facility in Australia.

The AV-C310 is fit-for-purpose, straight from the box and factory set to its steady-on, dusk-till-dawn operation mode allowing for efficient installation. The local installation crew needed only to activate the lights (prior to installation) by connecting the 4Pin battery connector inside the unit and securing the light head with just four bolts. The completely self-contained fixture - weighing only 9.1kg - was then hoisted up and fixed to the apex of each tower and quickly and easily bolted into position by two crewmen. Once bolted on, the lights were fully operational.

The project ran without complication with an impressive 18 lights installed per day.

Avlite's solar powered ICAO LIOLA fixture;

- is lightweight, self-contained and quick and easy to install
- has a dusk-til-dawn mode for complete automatic operation
- is cost effective both in terms of initial outlay and total cost of ownership
- is energy efficient, reliable and low maintenance
- has zero operating costs
- can be easily retrofitted to new and existing structures
- does not interfere with tower performance
- withstands the harshest of environments



All Avlite Systems products are manufactured to exacting standards under strict quality control procedures. Avlite's commitment to research and development, investing in modern equipment and advanced manufacturing procedures has made us an industry leader in solar aviation lighting.

By choosing Avlite Systems you can rest assured you have chosen the very best.

Experienced & Trained Personnel

•
Worldwide Distribution Team

•
Agile Manufacturing

•
Product Innovation

•
Precision Construction

•
Total Quality Management

•
ISO9001:2008

•
Rapid Turnaround



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