



The simplicity of the self-contained light and the option to use a PALC leaves no doubt why they chose Avlite helipad lighting.

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Application

Offshore
Oil Platforms



Location

Gulf of Mexico



Date

2020 and Ongoing



Products

- A704-VL Solar Lights
- L-806 Wind Cone
- PALC Pilot Activated Lighting Control

Solar Lighting Reshapes Offshore Safety

Background

Located in the Gulf of Mexico, the Ku-Maloob-Zaap oilfield operated by Pemex Exploración y Producción, is a vital asset situated off the coasts of Campeche and Tabasco. After more than two decades of operation, it has played a crucial role in Mexico's energy landscape, contributing significantly to the nation's oil production over the years. This field is considered to be in the mature stage of exploitation.

Challenge

Air transport is the sole means of access to the remote Ku-Maloob-Zaap oilfield platform. Unlike some platforms, this specific installation lacks a housing area, which presents a significant challenge, particularly during nighttime outages.

The absence of on-site personnel increases the difficulty in managing the helideck lighting system, creating a scenario where traditional wired systems prove impractical. The need for a reliable and autonomous solar LED helipad lighting solution became clear. Recognizing this, Pemex sought a solution to overcome these operational hurdles.

Solution

Leveraging over 18 years of industry expertise, the project partnered with [ERCOMAR/GRUPO INSOLAR](#), experts who advocated for the implementation of Avlite's A704-VL-PMX solar helipad lighting and advanced remote pilot-control solutions.

The easy-to-install A704-VL-PMX offers autonomous operation, infrared (IR) compatibility, and a rugged chassis for enhanced environmental longevity. With flexible configurations and minimal maintenance, it provides a reliable and cost-effective solution for heliport lighting needs.



Additionally, the newly installed solar LED lights operate via a Pilot Activated Lighting Control (PALC) device, also known as an Aircraft Radio Control of Aerodrome Lighting (ARCAL) L-854 radio controller. This allows the pilots to activate the heliport lighting system as needed, conserving energy and prolonging equipment life.

Unlike traditional systems that require extensive wiring, Avlite's solar helipad lights were **installed in less than one day**, offering a substantial improvement in deployment time. The previous



system required a crane to be mounted to the side of the platform for several days to install the ducts, supports, wiring, control system, and battery banks to support the legacy helipad lighting system.

Notably, the self-contained solar lights are also less susceptible to piracy and armed robbery, which has been a frequent issue for PEMEX in the Gulf of Mexico. Unlike the previous wired system, the A704-VL lights have endured **five years without any incidents of vandalism**. This not only ensures uninterrupted operation but also eliminates the need for expensive anti-piracy measures.

Outcome

The installation of Avlite's A704-VL-PMX lights and L-806 wind cone complemented by the PALC/ARCAL system, has significantly enhanced safety and operational efficiency at the Ku-Maloob-Zaap oilfield platform. Pilots can now confidently land under varied weather conditions, addressing emergencies promptly.

Thanks to ERCOMAR/GRUPO INSOLAR and the innovative and reliable nature of the A704-VL, operational continuity, enhanced safety, and simplified management of helideck lighting is assured for PEMEX, even in the absence of a housing area. Note, the helideck lighting system, has operated consistently **without error since its installation**.

Put your trust in an industry leader, choose Avlite.



Reliable Performance

Rechargeable batteries that are field-tested to an average 7-year lifespan.



Easy Installation

Complete helipad installed in less than one day.