CASE STUDY
Solar Airfield Lighting Solution aids Regional Development in Brazil

Cajazeiras Regional Airport Brazil
Background
Cajazeiras is a city of approximately 65,000 people in the state of Paraiba, Brazil. Located in a rural section of Northeast Brazil, the area urgently required development of its air transportation routes and infrastructure since access [to the area] required long vehicular trips over rigorous landscape. Deliveries of important building and food supplies as well as access to urgent medical care was extremely limited. While Cajazeiras had an airport with a relatively new passenger terminal, the airport could not attract commercial flight routes or medical air service with the existing, traditional airfield lighting which was unreliable during grid outages or failures. Additionally, the Government of Brazil committed to its residents access to operational airports within a 100km/62 mile radius as part of the country’s overall development plan. To keep that promise, the Cajazeiras Airport needed to be fully operational.

The Challenge
The Cajazeiras Regional Airport required a renovation for the development and expansion of commercial air transportation, but a major problem for the airport was lack of consistently functioning electrical service to reliably power the airfield lighting for safe night operations. Another hurdle to overcome was the difficult transport of materials to the airport; the rural location combined with the lack of solid road infrastructure made material and equipment delivery (for a traditional wired airfield lighting system) difficult, while Avlite’s solar airfield lighting system required no special tools, equipment or cabling – just the lights themselves.

“Avlite delivered a full lighting system for this rural Brazilian airfield. The modern lighting, introduction of regularly scheduled air service and positive impact on the local and regional economies made this a success for everyone.”
- Charles Bergeyre, Avlite Business Development Manager

**Project Overview**

**Application**
Solar Airfield Lighting Solutions aids Regional Development in Brazil

**Product**
Avlite’s AV-426 runway lighting, AV-PAPI (Precision Approach Path Indicator), AV-70 taxiway lighting, AV-C310 obstruction lighting

**Location**
Cajazeiras Regional Airport, Paraiba, Brazil

**Date**
December 2017
The Solution
The airport owner, the municipality of Cajazeiras selected a complete Avlite ICAO compliant solar airfield lighting solution for the 1800m/5900’ airfield. The installation included Avlite’s AV-426 runway lighting, AV-PAPI (Precision Approach Path Indicator), AV-70 taxiway lighting. Avlite’s Solar Airfield Lighting System eliminated the complex and time-consuming need for ground trenching in which to lay traditional electrical cables enabling it completely grid independent which ensures safe operation, even during grid outages. Installation was quick and easy, rendering the airport almost immediately operational. Wireless RF Control was included for remote operation and programming of all lights. Avlite’s self-contained solar AV-C310 Obstruction Lighting was also included for a nearby communications towers that was deemed a hazard to aircraft using the airfield.

Outcome
The fully operational Cajazeiras Regional Airport has assisted the region by creating new sources of tourism through shortened distances between populates areas in Northeast Brazil. Most importantly, by offering a grid-independent, reliable means for medevac and evacuation flights, the region’s residents can access lifesaving care regardless of the time of day or condition of electrical grid.
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
- ISO9001:2015
- Rapid Turnaround