



LOCATION Central Africa

DATE 2022

CLIENT Private Helipad

EQUIPMENT Solar Series Micro Weather Sensor (MWS) and VHF broadcast

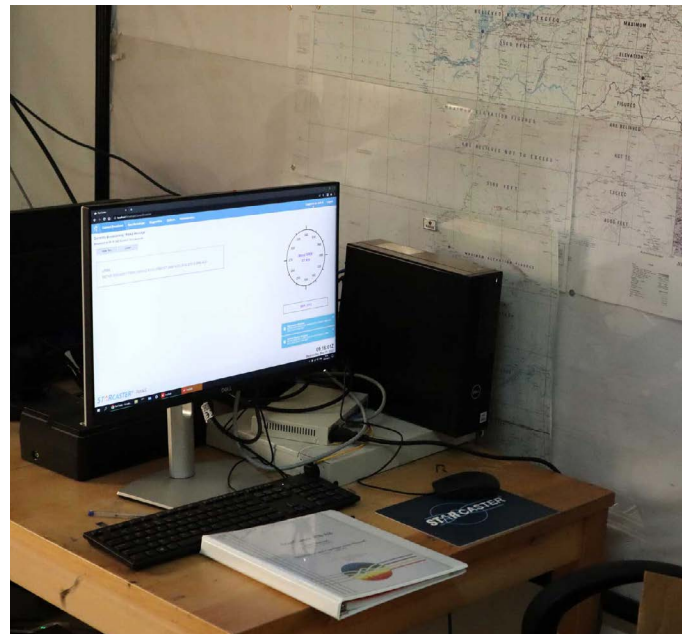
APPLICATION Safety Helipad 24/7 Operations

SYNOPSIS

Aviation Renewables was awarded a contract to deliver, install and commission a Micro Weather Sensor (MWS) with a continuous VHF broadcast for a helicopter operator in Central Africa. Aviation Renewables spearheaded the product development and system integration in order to provide pilots with real time weather information on the landing site.

CHALLENGE

The helicopter operator conducts operations over long stretches of Jungle with little to no cell phone coverage available. As a result, any weather information is only able to be relayed via VHF radio. There are limited staff at most remote landing sites, which restricts the ability to receive weather reports from on-site observers. The client was operating on a limited budget which precluded a full Automated Weather Observation System (AWOS), many of which include a VHF broadcast component. As the intention is to receive weather information from multiple landing sites throughout a wide area of operations, keeping the price of the solution to a reasonable level was key to the project.





SOLUTION

Aviation Renewables delivered, installed and commissioned a Micro Weather Sensor that operates autonomously, 24/7 to record weather observations. The small compact unit records: Wind Direction and Speed, Temperature, Humidity, Altimeter Setting, Precipitation type and rate, Cloud Ceiling, Visibility and Lightning distance. Aviation Renewables worked with a world leader in digital speech technology to design a proprietary software to continuously broadcast weather information on an assigned VHF frequency. Aviation Renewables supplied and installed the system with a high-quality 50W VHF radio, resulting in the pilots hearing the broadcast from well over 50 miles.

The software is hosted on a computer at the base, and is configured to display the current weather observations on the computer terminal. This gives pilots the ability to do flight planning at the terminal on the ground prior to flight. The entire system was supplied and installed at a fraction of the price of a conventional AWOS system, and results in increased flight safety throughout the operator's base locations.

