BORDER SECURITY MONITORING

PASSIVE RF SURVEILLANCE



Offshore infrastructure & maritime security (Nigeria) simulation

Off the Nigerian coast, surveillance needs incorporate three elements – oil and gas infrastructure protection, maritime / USV security and smuggling. In this simulation, passive RF technology is used to protect critical oil and gas infrastructure from piracy and RF monitoring and signal geolocation enables a rapid operational response by combined border and security resources.

SIMULATED ENVIRONMENT:

Using RFeye SITE v1.51.2, we show a line-of-sight solution offering 30km RF surveillance 24/7/365.

AT A GLANCE:

- Hostile neighbours
- Port protection
- Illegal migrants
- Smuggling
- Transnational criminals
- Coastal surveillance
- Multi-domain



14 RFeye Arrays have been deployed on 15m tower (masts) based on geometry. The simulation shows RF Propagation Analysis with SOI running at 400 MHz with a power level of 44 dB at a roaming height of 10m. This can be changed.

- 30km line of sight to sea
- Surveillance and C2 solution for PMR, drone and USV threats, and smuggling

EQUIPMENT USED





RFeye® Array
Direction finding from
20MHz to 40GHz





RFeye® Site

Real-time spectrum monitoring & geolocation toolkit





RFeye® Mission Manager

Automated spectrum monitoring & mission management



EXTRAORDINARY RF TECHNOLOGY

CRFS is an RF technology specialist for the defense industry, national security agencies, and systems integration partners. We provide advanced capabilities for real-time spectrum monitoring, situational awareness, and electronic warfare support to help our customers understand and exploit the electromagnetic environment.



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