

BORDER SECURITY MONITORING

# PASSIVE RF SURVEILLANCE



## Airspace control (Latvian border) simulation

RF monitoring for airspace control is paramount to monitor and secure territorial airspace.

The border between Latvia and Russia is highly sensitive. Latvia is at the forefront of the NATO front line. RFeye is a passive RF solution (TRL-9). In this simulation, Latvia can passively monitor, geolocate and capture signals of interest within a 60km range across their border and build a signal library.

### SIMULATED ENVIRONMENT:

Using RFeye SITE v1.51.2, the simulation shows how two inter-connected surveillance areas can be joined together providing a complete monitoring system as part of a national defense strategy.

### AT A GLANCE:

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



Eight RFeye Arrays are illustrated on 20m tower (masts) based on geometry. The simulation shows RF Propagation Analysis with a simulated signal running at 1.09 GHz at a roaming height of 1,000m. This can be changed.

- TDOA and AOA
- Geolocate aircraft and drones



Arrays offering up to 18 GHz DF with 100 MHz IBW could also be vehicle-mounted. In addition, long duration high-fidelity RF recording and generation of I/Q data, can provide an enhanced intelligence picture.

## 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



### RFeye® Sens Remote

High fidelity RF Recording (I/Q data)  
for enhanced intelligence

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.

