NEW SOLUTION FOR MICROWAVE MONITORING

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Make ideas real

AGENDA

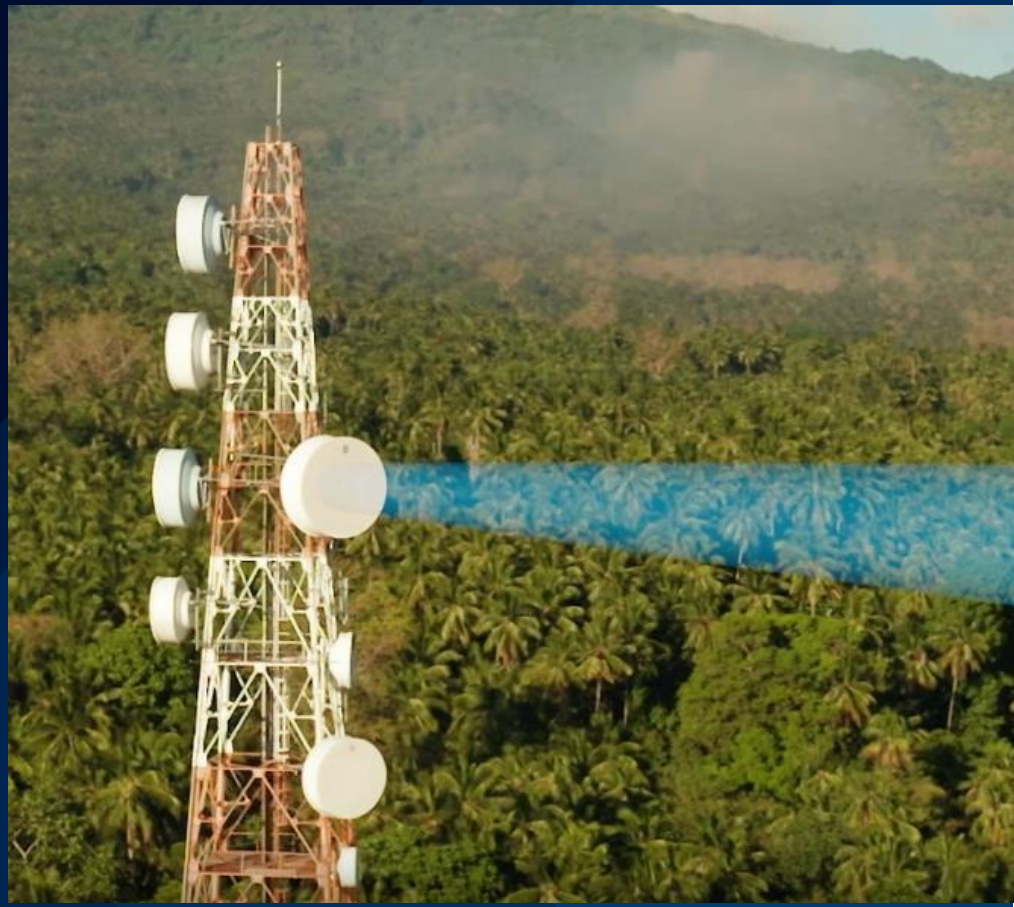
- Introduction
- Aerial microwave monitoring solution
- Customer feedback
- Aerial monitoring solution for interference hunting

MOTIVATION

- Identify characteristics of licensed microwave links
- Quickly identify interference sources in microwave links
- Find unlicensed microwave links

CHALLENGE: MICROWAVE MONITORING

- Challenging circumstances often make measurements in the main loop impossible
- Complex antenna setups can complicate identification of the transmitting antenna and its operator
- Interference hunting can be tedious and very time consuming



NEW SOLUTION: DRONE BASED MONITORING

- Fast, efficient setup & measurement
- Accurate & reliable measurement data

USE CASE: MICROWAVE LINK ANALYSIS

- Center frequency & signal bandwidth
- Antenna polarization verification

INTERFERENCE HUNTING

- Record spectrum at interfered antenna or anywhere on the track
- Identify interfering signal
- Locate source of interference

COMMENT BY HECTOR

SYSTEM

R&S®AMS on X25

R&S®AMS on 600M

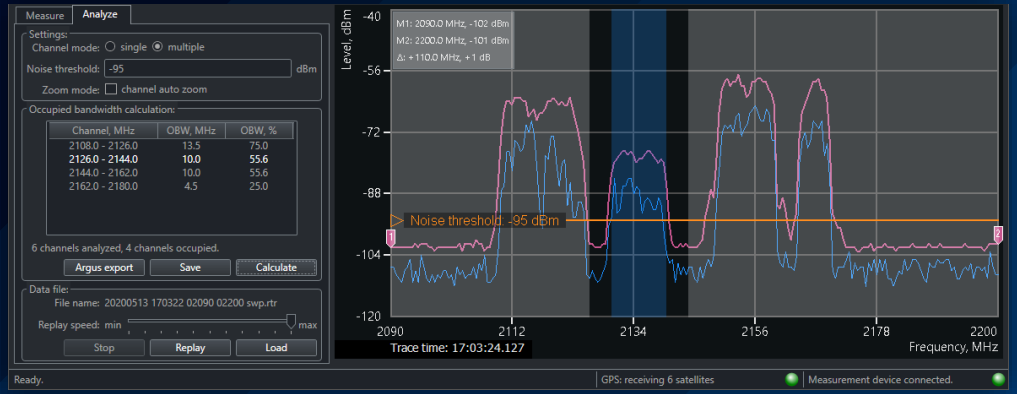
- Drone-independent payload
- Drone platforms:
  - Multicopter - X25
  - DJI - 600M
  - Freefly Systems - Alta X
  - Hexacopter - Acecore Noa
- Range and flight time drone dependent

R&S®AMS PAYLOAD

- Wideband antenna
  - 4 GHz – 40 GHz
  - Polarization horizontal/vertical
- Drone-independent comms link and battery
- Automatic measurement of multiple frequency ranges
- Uses R&S®FPH

MODE OF OPERATION

- Autonomous
  - Monitoring expert preconconfigures tasks
  - Tasks run automatically
- Real-time control
  - Monitoring expert controls operation via WIFI connection
  - Live data view



THANKS