StealthNet NOLER AEROSPACE

PASSIVE RADAR SYSTEM-

Redefining Surveillance and Situational Awareness





High Fidelity Real-World Target Tracking Overlay Active vs. Passive Radar @300km

Small-form factor Node

Features and Benefits

- Covertly detects and tracks aerial target
- Exploits analog FM broadcasting and
- Digital Audio Broadcasting (DAB)
- for non-cooperative aerial targets detection
- Simultaneously processes multiple
- FM and DAB broadcast
- Immune to jamming
- Exploiting Illuminators: FM/DVB-T
- Coverage:
- 360 azimuth degree coverage 2D Track
- Range Resolution:
- FM: Better than 1500m DVB-T: Better than 40m
- Velocity Resolution: 3 m/s
- Typical Performance:
- Range up to 300 km for Commercial Airliner, Range up to 120 km for Light Utility Aircraft, Range up to 80 km for Fighter Aircraft, Range up to 50 km for Class 2 UAV (based on 4s processing interval)

Step into the future of covert surveillance with **StealthNet**, the cutting-edge passive radar system that transforms how you monitor and protect. Engineered to deliver unmatched operational advantages, StealthNet is truly undetectable—emitting zero transmitted energy while harnessing existing VHF and DTV signals from radio and television. This revolutionary approach eliminates emissions from targets and avoids overloading the electromagnetic spectrum.

Whether for early warning or covert surveillance, StealthNet adapts to every mission. Its modular, scalable design ensures enhanced survivability in even the most demanding conditions. From portable, soldier-friendly systems to expansive UHF/VHF arrays, StealthNet excels in air, land, sea, and even space monitoring. With 24/7 hemispherical coverage, instant deployment, and the ability to detect diverse targets while resisting jamming, StealthNet is the smart, cost-effective choice for tactical and strategic operations. Ideal for both stand-alone and meshed network configurations, it delivers cutting-edge performance at a fraction of the cost of traditional radar systems.

StealthNet PASSIVE RADAR SYSTEM

Detection Ranges

- » Early warning
- » Instantaneous hemispherical coverage
- » Multi domain: sea, air, land, and space
- » Simultaneous detection and tracking
- Diverse target detection characteristics
 Increased resilience in EW denied environments
- » 24/7 covert surveillance
- » Low power, size and cost
- » Modular and scalable



🕂 AIRCRAFT

- Low cost procurement & maintenance
- No transmitter needed, COTS computers)
- Easily deployed, light weight
- Operates anywhere
- Low cost sensors network
- Works in cluster of nodes
- · Easily and covertly installed
- Remote, stand-alone operation

SUPPORT

- On-site support
- Hardware and software updates
- Wide range of training/upgrades
- Pre/Post Design Services

- Detects non-emitting targets
- StealthNet sensor fusion with other sensors like active radars & PET
- Sensor clusters extending coverage
- Usable without authority approvals
- Covert surveillance tasks
- Use in areas of
 electromagnetic congestion
- Minimum Configuration:
- 2-3 Receiver Nodes and 2-3 FM Transmitters
- Antenna-to-Track Delay: 1.5s (based on 1s processing interval)
- Track Update Rate: 0.5s
 - Live Air Picture Display Interface w/ ASTERIX Output via Ethernet





4- Node Deployment for Johannesburg ATC

