LOCATE-T

LOCATE-T is an advanced tactical, transportable Electronic Support capability, which is proven in complex environments. With comprehensive training and support, LOCATE-T delivers a step-change in tactical SIGINT capability.

KEY FACTS

Tactical HF SIGINT system

In operational use by NATO forces worldwide

Super-resolution direction find to 1°

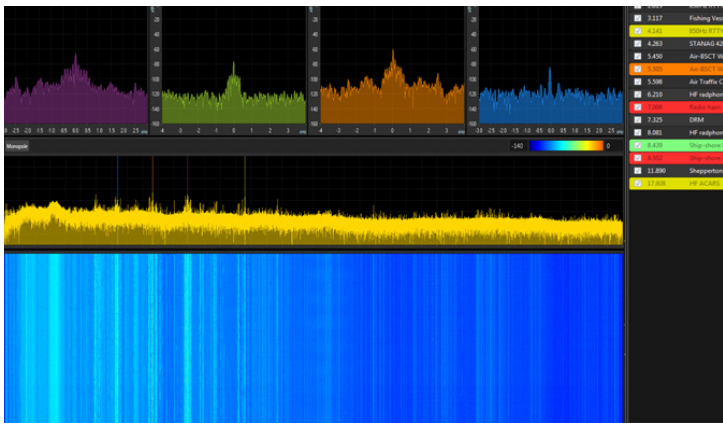
LOCATE-T

What is LOCATE-T?

By combining the LOCATE-T system with the RESOLVE man pack HF antenna system, Roke has developed a unique capability. This enables rapid deployment of a tactical transportable SIGINT system for use within the 2-30 MHz HF band, to meet any operational needs.

Key features:

- Super resolution direction finding (SRDF)
- Based upon the widely recognised Multiple Signal Classification (MUSIC) algorithm, simultaneously producing directional finding results in both azimuth and elevation for co-channel signals
- Resilient to jamming and decorrelated multipath
- DF ground wave accuracy is a function of array aperture in wavelengths, array layout accuracy, environmental scattering, and signal to noise ratio (SNR)
- Option to add Adaptive digital beam-forming (ADBF) capability
- SRDF provides the ability to resolve two or more signals whose angular separation is less than the natural beam width of the array
- SRDF algorithms operate with very few samples and are not fixed to particular array geometries
- HF Electronic Support capabilities are available in a compact form that enables flexible operation from tactically deployed semi-mobile and static positions
- LOCATE-T provides the user with a capability associated with the strategic LOCATE system
- Adaptive digital beam-forming (ADBF) provides the ability to extract co-channel signals based upon their direction of arrival



- ADBF is used to synthesise array patterns, which simultaneously point a beam at a Signal of Interest (SOI), whilst directing nulls in the array pattern, to suppress multiple co-channel interferers
- The enhanced output data may then be demodulated regardless of the presence of other signals
- ADBF can be applied to multiple SOIs simultaneously, improving the signal to noise ratio and the signal to interference ratio

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