LOCATE

LOCATE is a suite of integrated products for spectrum monitoring, direction finding, adaptive beamforming and geolocation of high frequency (HF) signals.

KEY FACTS

Strategic HF SIGINT system

Deployed on four continents

Super-resolution direction find to 1°

LOCATE

What is LOCATE?

LOCATE components are in operational use at numerous sites around the world, including both new installations and mid-life upgrades to existing ones. For example, the AX-19 'Pusher' High Frequency Direction Finding (HFDF) system can be enhanced by adding the latest Super-Resolution Direction Finding (SRDF) and Adaptive Digital Beamforming (ADBF) technology.

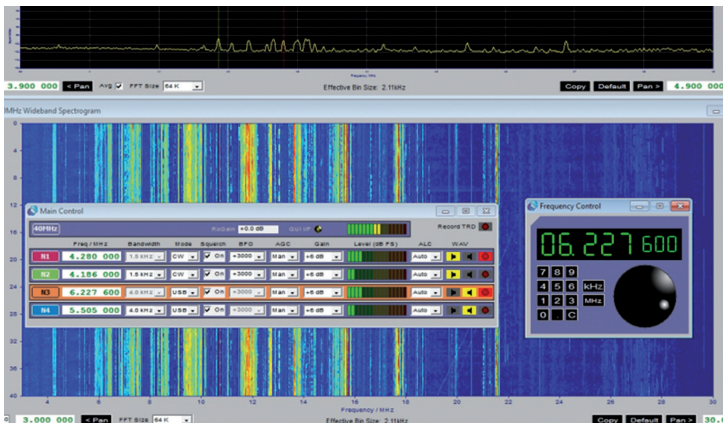
The product range includes antennas, receivers and processing software which can be combined to create a system designed for the exact specific application.

MCDWR16 Digital Wideband Receiver

The MCDWR16 offers multichannel monitoring and combines a maximum of nine DWR16 receivers into a convenient 2U package. The receivers can be configured to provide up to 36 simultaneous, independently tuned, narrowband frequency channels. Alternatively, Direction Finding (DF) is supported over a maximum of four simultaneous frequency channels. Two MCDWR16 units can be connected together for larger systems.

Signals Monitoring Application (SMA)

The SMA is the principal operator/ sensor interface for the manual search and HF survey/DF tip-off modes, specifically designed for use by skilled and semi-skilled operators. The Graphical User Interface layout is operator-defined in real-time, allowing the operator to configure the system as appropriate for specific missions, and to suit their particular skillset.



DiVA WIDEBAND STARE

Using advanced proprietary techniques, the DiVA Wideband Stare application permits the LOCATE operator to enter thousands of prioritised Frequencies of Interest (FOIs) throughout the full HF band. Upon detection of activity on a specific FOI, DiVA Wideband Stare will instantaneously log, record, and tip the detected activity to compute real-time Super-Resolution Direction Finding (SRDF) solutions. Remaining fully operational when 'operator not present', DiVA Wideband Stare renders legacy narrowband fast scanning techniques obsolete.

Key features:

- Signals Intelligence (SIGINT) and geolocation
- Detection, interception and collection of Signals of Interest (SOIs)
- Monitoring of interference
- Estimation of spectrum occupancy
- Tasking of array systems for radio direction finding (DF) and beamforming
- Spectrum policing
- Enhanced signal reception to increase link availability
- Research into high frequency (HF) propagation to enhance ionosphere models

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