

COMPACT AIRBORNE HF COMINT/DF 3D SYSTEM

■ ELK-7065

General

HF communications play an increasingly significant role in military, para-military and civilian applications. Current HF DF COMINT systems are cumbersome and require very large antennas rendering them unpractical for compact and mobile applications. The ELK–7065 is a revolutionary compact HF COMINT and 3D Geolocation system that provides instantaneous and precise location of HF transmitters. It is designed to be installed on board airborne platforms, such as mission aircraft of all sizes and UAVs, and is suitable to operate in the harsh electromagnetic environment characterizing the HF band. The system tags and identifies signals characteristics in a multi-dimensional domain, composed of signal identifiers such as power, center frequency, modulation, geo-location, polarization and more. These techniques enable swift labeling of the received signals, identification and reliable Electronic Order of Battle (EOB) generation.

Features

- Small array dimensions with high accuracy 3D direction finding
- Instantaneous azimuth and elevation measurement
- Fast and accurate waveform classification and identification
- Instantaneous geo-location utilizing DTM
- Polarization estimation
- High probability of interception
- Rapid spectrum exploration, analysis and detection of advanced HF communication signals
- Signal demodulation for voice and text data production
- Real-time and off-line analysis tools
- Can share V/UHF COMINT DF LRU installation





