SKYHAWK MARITIME HF DIRECTION FINDING SYSTEM

Instantaneous Warning of In-Theater Threats

DESCRIPTION
- Breakthrough, low-SWaP maritime HF Direction Finding (DF) system
- Measures instantaneous Line-of-Bearing (LOB) and elevation angle from only a single pulse
- Single, compact (24" x 30") mast-mount radome
- DF service to existing COMINT systems via Application Program Interface (API) over Ethernet
- Optional expansion to MF, VHF and UHF bands

BENEFITS
- High-accuracy DF of MF/HF/VHF/UHF single-pulse transmissions
- Discriminates Skywave, Near Vertical Incidence Signals (NVIS) and airborne emitters from surface wave
- Instantaneous warning of in-theater threats
- Compact, lightweight radome results in lower maintenance costs compared to large mast-mount and deck-edge DF antenna arrays

Use of US DoD visual information does not imply or constitute DoD endorsement.
FEATURES

Revolutionary approach to maritime Direction Finding (DF)

• Measures an instantaneous vector to surface and airborne targets

• Utilizes small, fractional wavelength antenna elements

Superior DF approach compared to traditional systems (e.g., amplitude, phase, TDOA, FDOA)

• Adds measurement of elevation angle

• Discriminates Skywave, Near Vertical Incidence Signals (NVIS) and airborne emitters from surface wave

• Permits operator to discriminate between in-theater threats and out-of-theater emitters

Frequency Coverage:

• HF: 2 MHz to 30 MHz

• MF: 300 KHz to 2 MHz (Option)

• VHF/UHF: 30 MHz to 3 GHz (Option)

40 MHz IBW Receiver

DF Accuracy: 2.5° RMS (Azimuth & Elevation)

Cursor-on-Target (CoT) messaging compatible with existing C2 systems

JICD 4.2 compliant

PHYSICAL CHARACTERISTICS (RADOME)

Size: 30” diameter x 24” high

Weight: 85 pounds

Power: 80 watts

No below-deck hardware required

ENVIRONMENT

Temperature: -40 °C to +50 °C

NETWORK INTERFACES

Gigabit Ethernet for Command, Control and Data