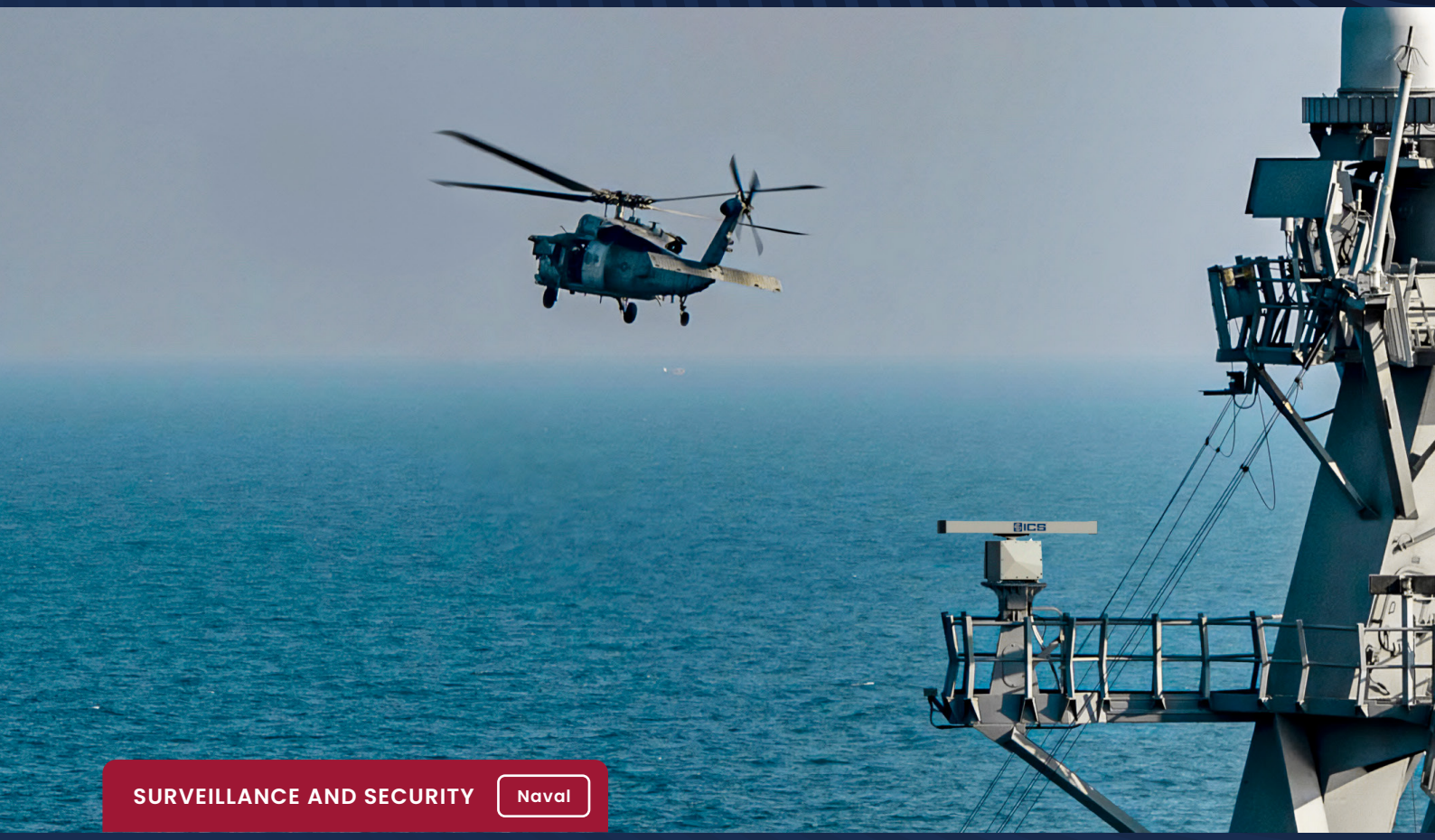
ICS TECHNOLOGIES

YOUR MISSION, OUR TARGET



SURVEILLANCE AND SECURITY | Naval

HELOGARD

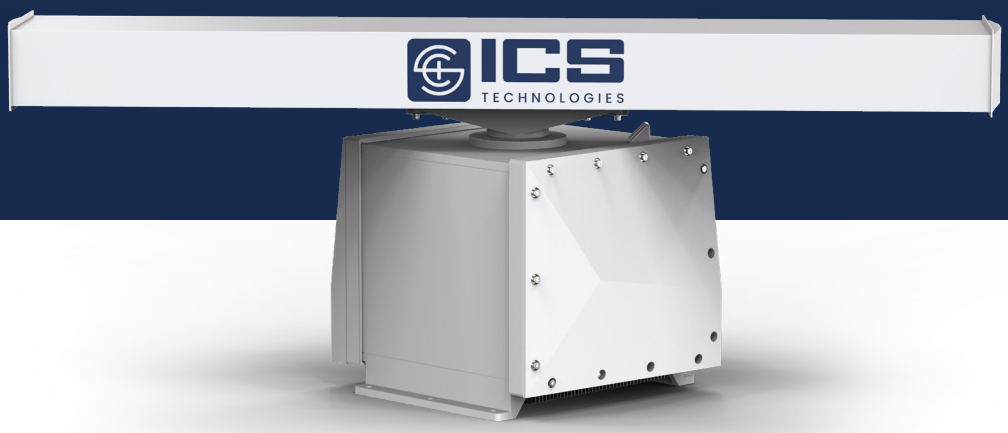
HIGH DEFINITION HELO DECKING RADAR

The **HELOGARD** radar is a **High Resolution Radar**, designed to support **helicopter approach and landing** maneuvers tasks. Detects low Cross Section targets, like helicopters are, in **severe clutter environments**, providing early warning of a helicopter approaching and information for control and guidance. The system uses the **latest pulse compression techniques** with the result that the detection range is comparable to conventional pulsed radars with power levels of several kW, enabling HELOGARD to detect targets at the **longest range with minimal transmission power**. Specialized small target tracking algorithms based on advanced image processing assure the full advantage of **high-resolution detection** in association with a superior radar image. HELOGARD can also feature communication and integration with other onboard systems and sensors. When integrated with the **ADS-B system**, HELOGARD will also **determine and show on display flying data**, including altitude, broadcasted by the helicopter, as well as the presence and data of all aircraft in the area. The altitude of the helicopter, or any other flying target, is determined automatically when HELOGARD is used in association with one of the ICS electro-optic families.

KEY STRENGHTS

Utilizing cutting-edge solid-state technology, pulse compression, and Doppler filtering, this system can track a helicopter down to the ship's deck, providing essential aid to the pilot for safe landing.

- Peak power of 400 W
- High pulse repetition frequency (PRF)
- Fully solid-state coherent transceiver
- Features advanced pulse compression and doppler techniques
- Automatic weather data representation
- Highly accurate position reporting and corrections
- Seamless integration with Combat Management Systems (CMS) and other on board sensors
- Squintless antenna with a cosecant square elevation beam pattern
- Built-in test equipment (BITE) for continuous system function monitoring
- External Inertial Measurement Unit (IMU) for automatic control of landing spot position for enhanced landing security
- Advanced clutter filtering
- Specialized small target in adverse weather conditions tracking algorithms



MAIN FEATURES

Zero Attenuation

This innovative concept integrates **transceiver into the turning unit**, eliminating the need for waveguide paths. This **reduces installation time** and **costs** significantly while enhancing **short-range radar visibility** and **echo strength**.

Plug & Play

This radar series uses **advanced fiber optic** connections to simplify installation with a **"Plug & Play" design**, ensuring fast data transmission and strong signal integrity. The reduction in onsite wiring decreases human error and eliminates the need for special tools, streamlining setup and enhancing performance.

Easy Maintenance

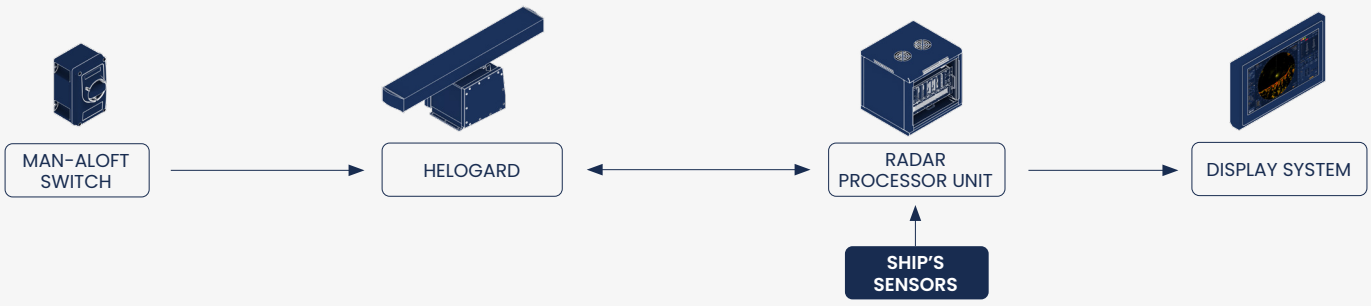
We prioritize preventive maintenance over corrective measures, focusing on **proactive strategies**. Our commitment to quality extends to **reliability** through technical measures aimed at reducing the need for preventive maintenance tasks and **minimizing total life-cycle costs**.

RADAR DISPLAY

The standard radar display for **helicopter decking** is designed to **simplify operations** and **enhance safety on the bridge**. With advanced features like **Full Chart Radar**, **multi-radar option**, **multi-sensor target fusion** (radar and AIS), and **Picture-in-Picture** (PIP) display of real-time video from the onboard EOS, operators have access to a comprehensive suite of functionalities. Additionally, the system can be upgraded to a **Multi-Function Display (MFD) version** with **ECDIS** and **CONNING software applications** or integrated into an **Integrated Bridge System (IBS)**, providing exceptional support for helicopter landing and decking operations.

SPECIFICATION	HELOGARD X-BAND
Operating Frequency	9300 ÷ 9500 MHz
SSPA RF peak	400W
Instrumented range	24 nmi
Sector blanking	16 simultaneous sectors
Power sector mode	16 individual sectors where the transmitted power can be reduced up to 16dB.
Electronic Counter-Countermeasure	ECCM, and jamming immunity, ensured by power sector mode, frequency diversity, stagger and enhanced pulse compression technique.
Cell size	Down to 1.2 m
Dynamic range	≥140dB *(According to the MODE of OPERATION in use)*
External interfaces	Asterix CAT-253; Asterix CAT-48; Asterix CAT-240
Extractor-tracker module	Single or dual *(embedded into Radar Processor Unit)*
Doppler processing	This option enables best target separation taking into consideration additional info from doppler processing.
Antenna size and weight	6ft

SYSTEM CONFIGURATION



INTEGRATED LOGISTIC SUPPORT

Longevity, Reliability, Remote Support

To **enhance efficiency** and **reduce costs**, our systems offer **full remote access** for **direct transmission of diagnostic logs**, **minimizing onsite visits**, **reducing operational expenses**, and improving turnaround times. Our Service Level Agreement **(SLA)** ensures this **efficient support**. Each Line Replaceable Unit **(LRU)** has a **QR code for quick information access**, improving communication and service responsiveness.

Client-Centric Support

We prioritize client support throughout the entire process. Our technical team conducts **on-site system commissioning**, including **standalone** and **live tests** in various environmental conditions alongside cooperating vessels. Comprehensive **technical documentation**, structured with DataModules following the **S1000D standard**, accompanies our systems.

After-Sales Services & SLA Options

We offer **after-sales services** such as **installation and maintenance courses**, along with an advanced **ticketing platform** for streamlined communication. Our maintenance services, including preventive, corrective, and **SLA options**, are tailored to meet the specific operational needs of our customers. We have **service centers** strategically located across the globe.

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NCAGE Code **AS545**

CERTIFIED MANAGEMENT SYSTEM
ISO 9001 - ISO 14001

© July 2024 – rev 01