Effective Mission Capabilities for Naval Forces

MIMS NAVAL

Mission System

SCYTALYS
Interoperability Systems

Naval Forces and Coast Guard authorities being increasingly challenged in an ever-growing asymmetrical threat/task scenarios are required to undertake a wide range of Missions, typically demanding advanced and versatile operational capabilities.

MIMS Naval

is a Mission System software that generates the Common Operational Picture, enhances Situational Awareness, and improves the operational capabilities of maritime platforms.

Designed to be efficiently operated by a limited number of onboard crew addressing Special Operations Crafts Situational Awareness (SA) requirements and significantly increasing their mission effectiveness.

Its modular architecture and hardware agnostic technology allows for seamless integration to an extensive range of maritime platforms (SOC, OPV, General purpose ISR vessels and USVs) and sensors. In addition, easy adaptation to customer's specific requirements provides for effective mission management capabilities.

MIMS NAVAL
Mission System

Supports a variety of missions, including:

Maritime Surveillance (MS)
- Search & Rescue SAR
- Drug Trafficking
- Illegal immigration
- Tactical navigation, abnormal behavior detection, tactical formations, environmental protection, Man Overboard (MOB), CPAs etc.
- Anti-smuggling control
- Fishery control

Anti Surface Warfare (ASuW)
- Surface Picture Compilation
- TacPlans Execution
- Network Centric Node
- Comms Relay
- Third Party Targeting
- Battle Damage Assessment
- Suitable for weapons integration (Remote Weapon Stations, missiles etc)
- UAS integration

Special Operations
- Targeting and Close Air Support
- Special Reconnaissance
- Infiltration/exfiltration & Comms Relay Support
- VBSS
- Combat SAR

Operational Capabilities

- Effective Decision Support tools empowering the mission crew
- Modern applications for efficient ISR, SA and Targeting capabilities
- Mission oriented data workflow
- Merging of sensor input and Geospatial data processed and analyzed to provide Decision Support
- Tasks automation relieving the crew and allowing them to focus on mission-critical tasks
- Advanced Graphical User Interface adjustable to end user's specific needs and simplifying the operator's tasks.

Interoperability and Net Centricity

Key elements of MIMS Naval rendering the platform into a true Network Centric hub participating in a broader Interoperable environment.

Mission related information (data, audio and video) can be exchanged in an efficient and secure manner between the mission's participants (e.g. dismounted Special Operations team with on-board crew and higher echelon), as well as other assets.

- Tactical Data Links through the embedded ULS Multi Data Link Processor, providing with concurrent connectivity to NATO (Link 11/ Link 16 / JREAP / Link 22) or National Data Link networks
- Tactical RF Communications Suite providing the following features:
  - UHF/VHF with high bandwidth for efficient dissemination of Data, Video and Audio
  - MANET topologies providing robust communication network with BLOS capabilities through relaying

Tactical area

Line of Sight

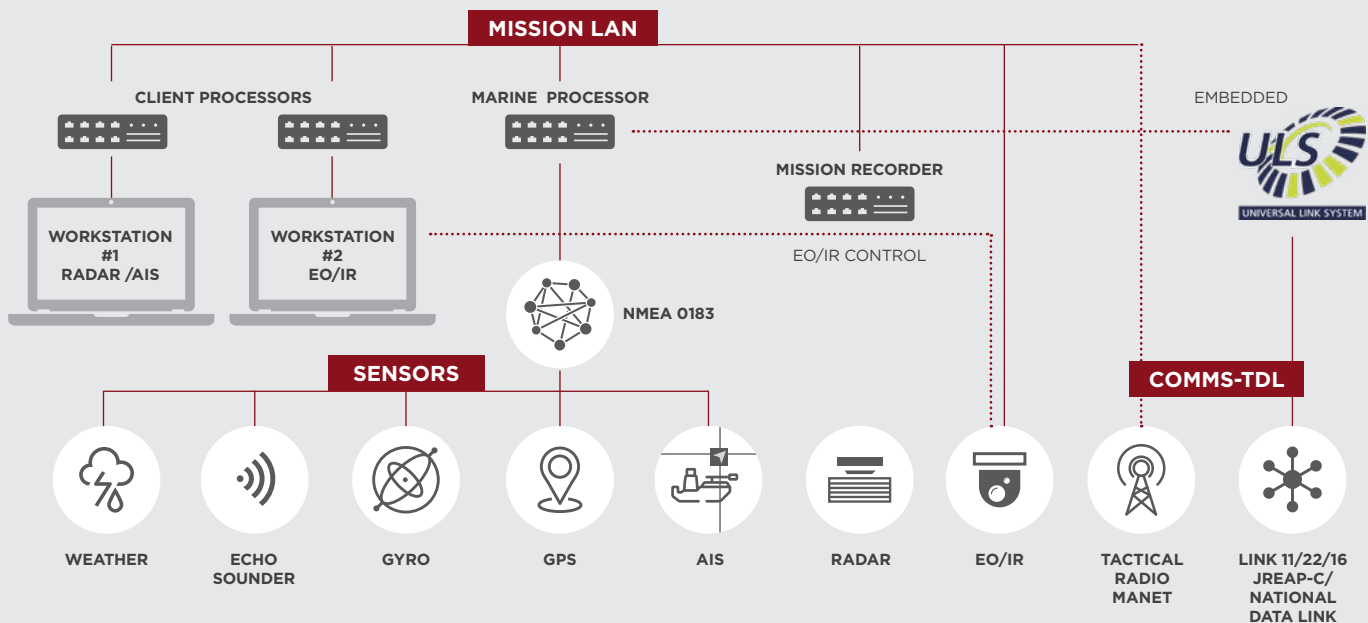SAR expanding square

Collision avoidance

Product Design Principles

- Affordable, small footprint and easy to integrate on new or existing vessels
- Modular, flexible and scalable architecture allowing for a gradual product upgrade, as needs increase in time with add-ons (e.g. Tactical data links, ESM, gun mount, advanced algorithms etc.)
- Multi Mission support capability
- Sensor agnostic
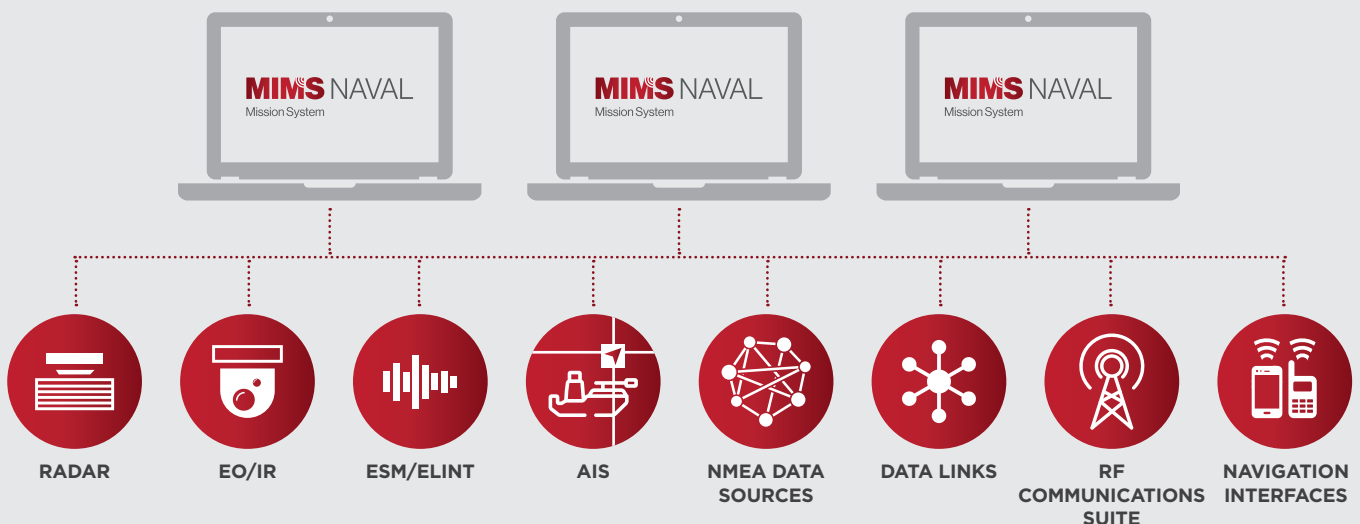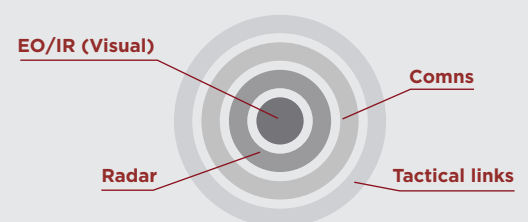- Reduced workload for the Mission System operators

Transportable Configuration

MIMS Naval Architectural Overview

MISSION LAN

CLIENT PROCESSORS

MARINE PROCESSOR

EMBEDDED

ULS
UNIVERSAL LINK SYSTEM

MISSION RECORDER

WORKSTATION
#1
RADAR /AIS

WORKSTATION
#2
EO/IR

EO/IR CONTROL

NMEA 0183

SENSORS

COMMS-TDL

WEATHER

ECHO
SOUNDER

GYRO

GPS

AIS

RADAR

EO/IR

TACTICAL
RADIO
MANET

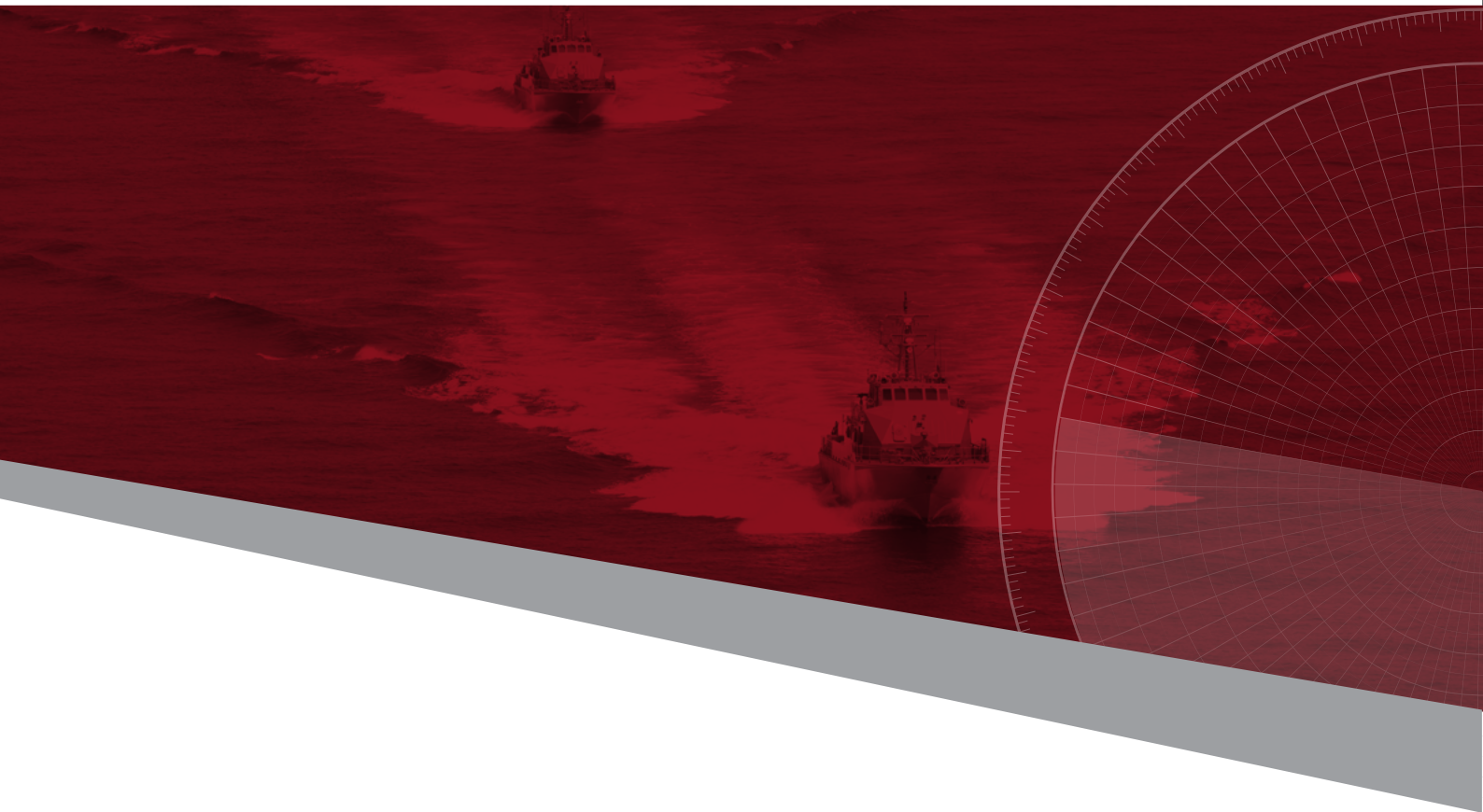LINK 11/22/16
JREAP-C/
NATIONAL
DATA LINK

Integration and Management of Sensors and Systems

MIMS Naval based on its modular architecture and sensor agnostic interfacing technologies allow it to seamlessly interface with a large variety of sensors and systems integrated on the platform.

EO/IR (Visual)

Comns

Radar

Tactical links

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Mission System

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RADAR

EO/IR

ESM/ELINT

AIS

NMEA DATA
SOURCES

DATA LINKS

RF
COMMUNICATIONS
SUITE

NAVIGATION
INTERFACES

MIMS NAVAL

Mission System

SCYTALYS
Interoperability Systems

ITAR FREE

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