

# AIRBORNE SYSTEMS



**GENERAL DYNAMICS**  
Mission Systems

## GENERAL DYNAMICS MISSION SYSTEMS OVERVIEW

The General Dynamics' portfolio of communications systems, networks, and products are engineered to provide an effective game-changing capability for Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR). They enable operators to rapidly assess tactical data, communicate efficiently, select appropriate courses of action and execute mission orders with ease and confidence in any environment within the operational theater.

### WHY GENERAL DYNAMICS MISSION SYSTEMS?

Our 60+ year legacy and worldwide reputation for excellence in the production of technology-based, integrated solutions for land, airborne and maritime applications are why the United Kingdom, Canada, United States, Japan, Korea and other nations choose General Dynamics year after year as a preferred supplier of airborne ISR solutions.

## APPLICATIONS

### Mission Systems for Every Application From Tactical Helicopters To Long Range Maritime Patrol Aircraft

#### Integrated Systems

- » Radar (multimode)
- » Electronic Support Measures
- » Dipping Sonar
- » Advanced Sonobuoy Processing
- » Electro-Optical/Infrared Imager
- » Self-protection Systems
- » Stores and Weapons Management
- » Automatic Identification System
- » Tactical Data Link Processing

#### Features

- » Fully integrated mission system Flexible configurations support between 1 and 7 operators
- » Cockpit integration for improved situational awareness
- » Intuitive operator interface reduces operator workload and enhances situational awareness
- » Tactical data link processing for cooperative operations
- » High-reliability, conduction cooled hardware suite
- » Advanced anti-submarine warfare suite
- » Support for weapons integration (missiles and torpedoes)
- » Rugged hardware solutions support fixed and rotary wing applications
- » ITAR free





## TACTICAL DATA LINK PROCESSING

Provision of multi-link processing and smart forwarding using accurate information translation between various secure tactical data networks and the operator.

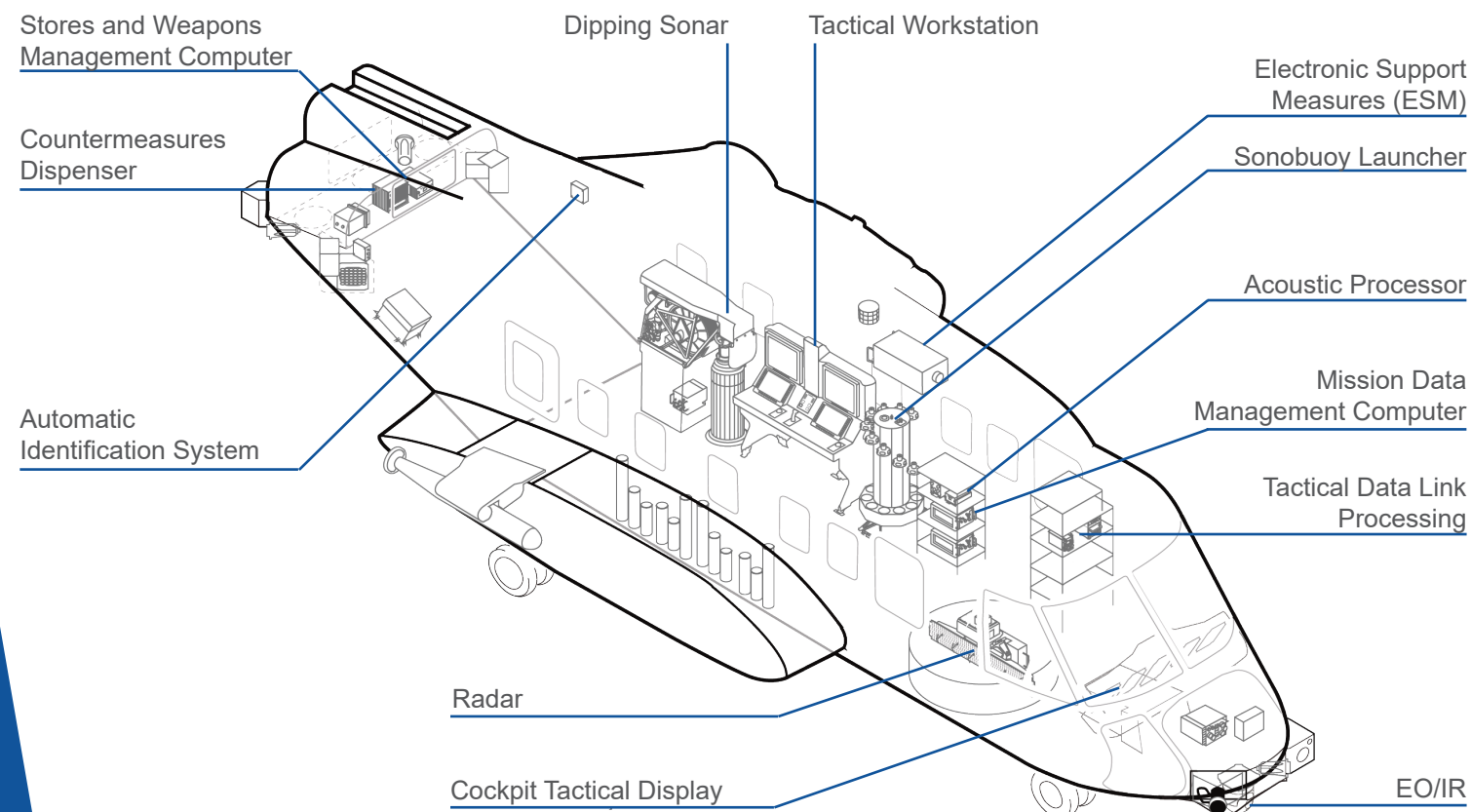
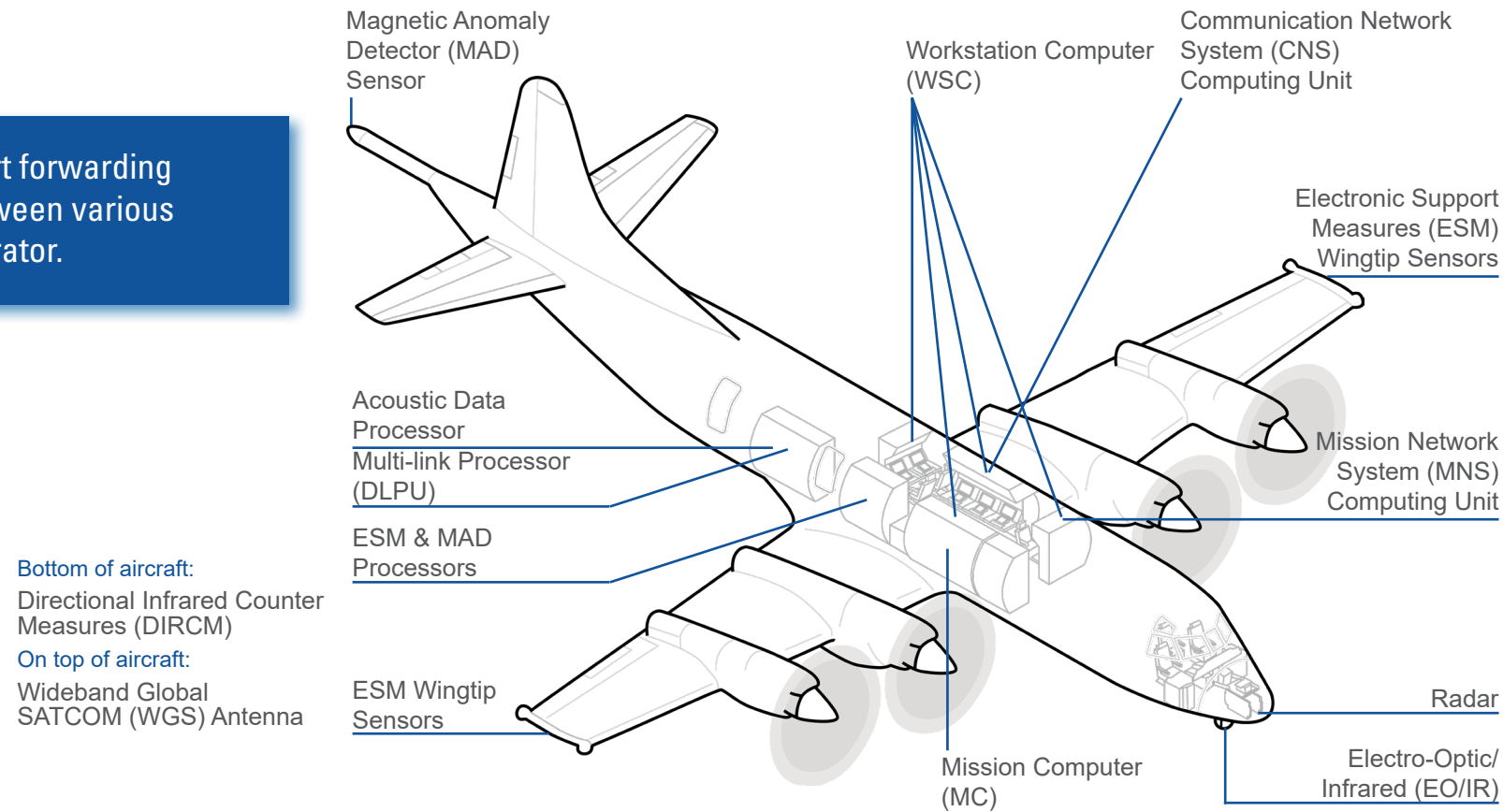
### Tactical Data Link Processing

- » Link 11 / 16 / 22
- » JREAP
- » VMF (MIL-STD-6017)
- » AFAPD
- » UK Sat Com Blue Force Tracker
- » AIS
- » NATO NFFI Friend Force Tracker
- » Bowman (UK Tactical Land Comms System)

### Features and Capabilities

- » Rotary and fixed wing Link 16 integration experience
- » C2 and non-C2 messaging to support all platform implementations
- » Multi link processing engine to provide a coherent single operating picture
- » Message Forwarding and Correlation to enable full integrated joint operations
- » Data looping suppression to avoid multiple reporting for a single track; avoids network overloading and loss of operator situational awareness
- » Variety of implementation options to support ease of platform integration
- » Extensive experience of message standards, interoperability and terminal integration including optimized navigation solutions
- » Support for wide range of radio and terminal equipment to give full flexibility to the platform integrator

## MISSION SYSTEM INTEGRATION



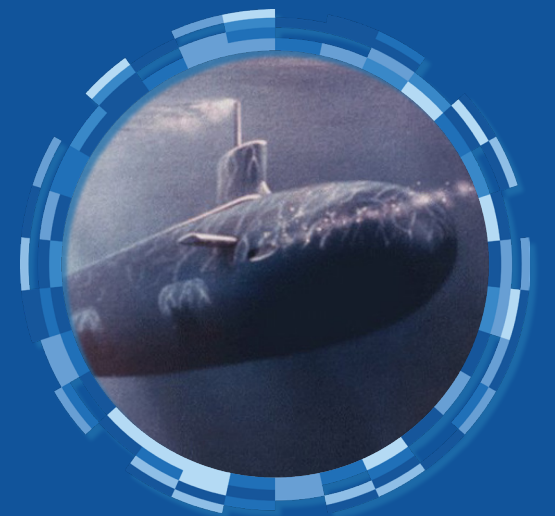
## ANTI-SUBMARINE WARFARE

World Leading Detection of Submarines In Littoral And Blue Waters

General Dynamics has delivered hundreds of airborne acoustic processors to allied forces worldwide. Our combination of best-in-world performance in a small, low cost package is unrivaled.

### Acoustic Processing

- » Excellent performance in Passive, Active, and Multistatic operating modes
- » Simultaneous processing for large fields of up to 64 sonobuoys
- » Dipping sonar support for rotary wing applications
- » Offered as standalone systems or integrated with customer mission systems
- » Wide range of sonobuoys supported
- » Small size and low cost simplify platform integration
- » ITAR free and in service world wide



## TACTICAL MISSION COMPUTING

A comprehensive range of open system mission computing solutions that meet the demands of current and future manned and unmanned platforms.

### Features

- » High performance processing to support the most intensive and demanding software applications
- » Connectivity from legacy up to the latest high speed interfaces
- » Graphics generation to provide HMI overlays for multiple screens at high definition resolutions
- » Video manipulation that supports all EO sensor feeds providing functions such as resizing, blending, image enhancement to improve operator situation awareness
- » Accredited secure data storage to ensure data integrity and security for mission sensitive information
- » Digital mapping for real-time situation awareness visualization in both 2D and 3D. All current military digital map formats supported
- » Design for high integrity using industry certification standards (DO178/254)
- » A range of sizes to afford platform integrators maximum flexibility (ATR ¼, ½, ¾, 1; and 1kg low SWaP unit)

## WEAPONS INTEGRATION



### Features

- » Wide range of weapons and store types to support all modes of operation (air to air; air to ground; air to surface and air to sub-surface)
- » Supports legacy and full MIL-STD-1760 interfaces
- » Designed to meet the highest levels of integrity (hardware and software)
- » Supporting test sets for lab and the flight line
- » Management of current and future complex weapons including issues such as network enabled weapons, post launch control and security
- » Meets the latest stringent environmental conditions allowing for integration on the latest composite platforms or at the wingtip
- » Comprehensive integration environment to dramatically reduce risk and on-board time
- » Range of solutions from single station, low SWaP distributed and 6 station LRI
- » Reduced development costs through 'plug and play' techniques: model driven architectures, modular certification and data driven design



# AIRBORNE SYSTEMS PROVIDER TO THE WORLD



**GENERAL DYNAMICS**  
Mission Systems

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