



GAMAS - GALILEO AIRBORNE MODULAR ACOUSTIC SYSTEM

GAMAS is a family of Acoustic Systems developed to meet the requirements of a wide range of ASW missions for maritime patrol fixed and rotary wing aircraft. The GAMAS family includes the Sonobuoy sub-system for the OTS-90 Sonic System which is operational on the NFH-90 helicopter.

KEY FEATURES

- Sonobuoy localisation capability.
- Monitoring of both passive and active sonobuoys
- Search, detection, localisation and classification of submarines with both active and passive sonobuoy operation capabilities
- Target range, bearing and Doppler velocity computation
- Automatic tracking of multiple targets
- Sound velocity profile and environment noise measurement
- Acoustic performance estimation
- Classification library management.



Acoustic Processor



Sonobuoy VHF Receiver



Acoustic Data Recorder

SYSTEM COMPOSITION

The standard system architecture comprises a powerful Sonobuoy Processor, a VHF receiver (with optional SLS) and a Digital Recorder. Configurations at 16, 32 and 64 Channels are available in order to meet the most demanding MPA requirements.

Acoustic Processor

The Acoustic Processor performs passive and active processing, audio processing, tracking algorithms, localisation and classification of targets. It features:

- Open system architecture based on COTS boards
- Video Processing and stereo audio for two acoustic operators
- Processing capability for the following sonobuoys:
 - LOFAR
 - VLAD
 - BT
 - VLA
 - BARRA
 - ANM
 - DIFAR
 - DICASS
- Command generator for DICASS active sonobuoy through client/server model
- Interface to Mission Data Bus (MIL-STD 1553B)
- Interface with intercom system for active sonobuoy command transmission and audio output
- Dedicated interface for the management of classified data (classification library).

Sonobuoy VHF Receiver

The VHF Receiver demodulates RF signals and sends base band signal to the Acoustic Processor.

Main characteristics include:

- High sensitivity / wide dynamic range
- Excellent out-of-band rejection
- Low inter modulation
- Linear phase shift
- Low acoustic noise generation
- Comprehensive Built-In-Test
- Built in simulation / training capabilities.

Acoustic Data Recorder

The Acoustic Data Recorder provides long-term data/ signals storage for on-board and off-board analysis with key features that include:

- Ultra compact and light weight configuration
- Large storage capacity (28Gb cartridge available)
- Simultaneous acquisition of time code
- Easy data download/playback.