L3HARRIS™
FAST. FORWARD.

MODEL 980 ACTIVE LOW-FREQUENCY TOWED SONAR (ALOFTS)

Maximum Anti-Submarine Warfare (ASW) Performance for Ships as Small as Offshore Patrol Vessels

The L3Harris Model 980 ALOFTS counters the submarine threat, including quiet diesel boats in the deep ocean and littoral water environments.

The ALOFTS system is a robust, proven system with extensive at-sea operating time. A modular system tailored to meet customer requirements, ALOFTS is fielded on fast-attack craft, catamarans, and frigates.

ALOFTS combines a high-powered, active source in a variable-depth towed body. A directional towed array receives active and passive signals. This combination allows high levels of acoustic energy to be transmitted by the active source in broad transmit beams. These beams are received by the narrow, highly-directional, noise-rejecting receive beams of the towed array.

The towing and handling system combines the active source and passive towed array to achieve a single "short scope" tow. This provides rapid response to ship maneuvers and is effective in the littoral, shallow water environment where other towed arrays are ineffective. System features include automatic depth keeping, automatic bottom avoidance and depth control from the sonar operator's console.

BENEFITS

- Single-tow, active and passive sonar quickly localizes below layer threats to control the undersea battlespace
- Active sonar operates in three frequency bands permitting multiple systems to operate in close proximity
- Long-range detection maximizes flexibility for ASW planners
- Identifies quiet threats in deep and littoral waters and creates an accurate underwater tactical picture (UTP)
- Torpedo defense capability increases platform survivability
- Commercial off-the-shelf (COTS) components and open system architecture (OSA) minimizes costs

ALOFTS is a complete ASW combat management system with scalable interfaces to a state-of-the-art torpedo fire control system, an advanced torpedo countermeasures capability and the ship's combat management system.

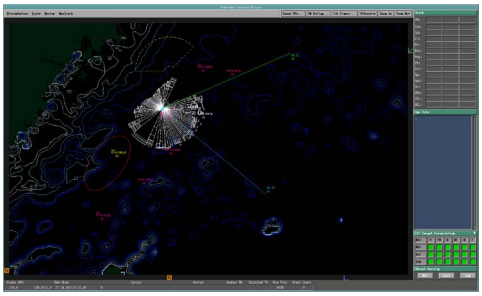
The ALOFTS user interface was developed in conjunction with naval operators to produce a user-friendly set of displays that maximizes operator efficiency while minimizing workload.

SYSTEM FEATURES	DISPLAY FEATURES
> Reverberation reduction	> Active 360 ° search
> Simultaneous continuous wave (CW) and frequency modulation (FM)	> Built-in test (BIT) reporting
> Directional transmission	> Active sector search
> Proven tow body	> Performance prediction
> Embedded high-fidelity trainer	> Active classification (3-D display)
> High-capacity recording system	> Underwater tactical picture
> Automatic depth keeping	> Tactical geographic display
> Flow noise minimization at high speed	> Passive broadband search and track
> Automatic bottom avoidance	> Passive classification: broad band, narrow band and demodulated noise (DEMON)
> Multi-target tracking	
> Short scope tow	
> Target motion analysis	
> 3-D active classification	
> Embedded trainer	
> Embedded expendable bathythermograph (XBT) / performance prediction system	

FEATURES

- > Operationally proven on platforms under 500 tons and water-jet propelled craft
- > Operational tow speed of 22 knots
- > Survivable to 30 knots, sustained
- > Configurable for all ship sizes
- > Port/starboard ambiguity resolution
- > Full azimuth coverage in broadband and narrowband
- > Logistics support available ranging from indigenously managed to full supported

Platform-Scalable ASW Solution



Underwater ASW Combat Management System

ALOFTS 07/19 JP

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

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