Anti-Submarine Warfare

AN/AQS-22 AIRBORNE LOW FREQUENCY SONAR (ALFS)

Considered the centerpiece of the U.S. Navy’s airborne anti-submarine warfare mission, AN/AQS-22 Airborne Low Frequency Sonar is the primary undersea anti-submarine warfare sensor for the U.S. Navy’s MH-60R multi-mission helicopter.

ALFS is highly integrated with the helicopter, other battlegroup assets and with the MK 54 lightweight torpedo – providing the full detect to engage ASW capability.

Highly integrated with helicopter, other battlegroup assets and MK 54 lightweight torpedo. Broader range of interchange between helicopter and ships. Only in-service dipping sonar with multi-frequency operation.

3-7x acoustic capability of previous/legacy dipping sonars

MH-60 Helicopter

Permits a longer detection range over a wider area, reducing the number of helicopters required to perform active ASW screening.

23+ years providing the Navy with these critical ASW capabilities

RAPID SEARCH RATE
Identifies and neutralizes threats sooner, enabling it to cover a larger area.

HIGH PERFORMANCE in both deep and shallow water

AFFORDABLE
- Driving lower total ownership cost
- Life cycle, operational, maintenance, upgradable
- Decreasing acquisition cost
- Technology refresh focused on best value
- Leveraging the global marketplace

HIGHLY CAPABLE
- Shifts the advantage from the submarine to helicopter
- Essential capabilities include: submarine detection, tracking, localization, classification, acoustic intercept, underwater communication and environmental data collection
- Designed to survive harsh environments without breaking
- Maximizes sonar performance using multi-frequency operation that adapts to changing environmental conditions

TESTED AND PROVEN
- Rigorously deployed, tested and proved
- Identified by the U.S. Navy as a “game changing attribute” to the MH-60 helicopter
- Performance and capabilities tested and proved during U.S. Navy undersea warfare exercises
- Carrier strike groups successfully detected all exercise submarines during deployments

“What makes the [helicopter] effective against submarines, is its enhanced sonar – the AN/AQS-22...”
- U.S. Navy H-60 deputy program manager