



LIVING MARINE RESOURCES PROJECTS 52, 53, 54

Studying Marine Mammal Behavioral Response to SURTASS LFA Sonar

NEED

The Navy plans to continue to train and test with the Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) sonar systems in the western and central North Pacific and eastern Indian oceans. Because acoustic stimuli from SURTASS LFA sonar use during training and testing has the potential to cause harassment of marine mammals, additional study and new data on these potential effects are needed. Understanding behavioral response to the LFA source is a priority.

SOLUTION

The goal of this effort is to update previous studies done with LFA sources during the 1990s, based on lessons learned and best practices from controlled and observational behavioral response studies using other sonar sources conducted over the last 10 years. The Navy will evaluate the feasibility and appropriate methods to collect new data to supplement the data available on behavioral responses of marine mammals to SURTASS LFA sonar using newer methods and technologies.

METHODOLOGY

This will be a two-phase approach. Phase I is a feasibility study to investigate the best approach to designing a scientific study to assess behavioral response to LFA sonar. This will involve discussions with the program managers regarding Navy participation, appropriate LFA sound sources and a final plan to conduct a study to collect data to best characterize behavioral responses to LFA sonar. The following three projects were awarded under Phase I:

- **Project 52:** Low Frequency Active Sonar Scientific Research Project 4 Feasibility Study (Adam Frankel, Marine Acoustics, Inc.)
- **Project 53:** Approaches for Examining Behavioral Responses of Whales to SURTASS Low Frequency Active Sonar (John Calambokidis, Cascadia Research Collective/Brandon Southall, Southall Environmental Assoc.)
- **Project 54:** Simple and Understated: Risk Team Assessment of Low-Frequency Active Sonar (SURTASS LFA) (Stephanie Watwood, Naval Undersea Warfare Center/Greg Schorr, Marine Ecology and Telemetry Research)

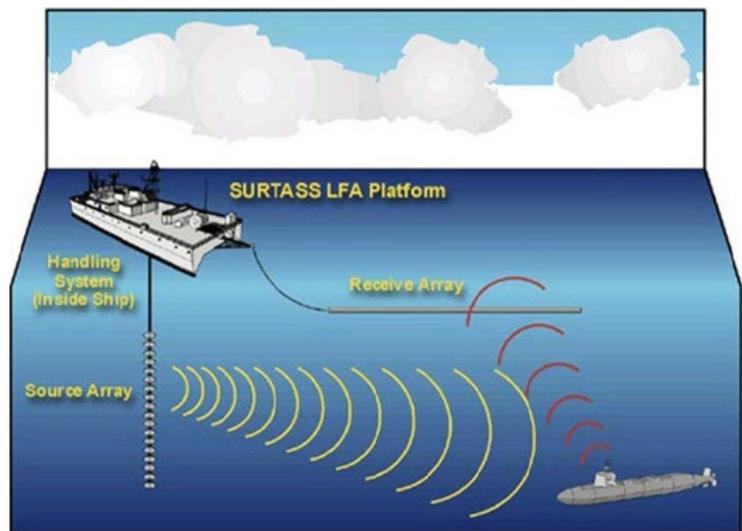


Diagram showing operation of a Navy SURTASS LFA platform at sea.

The Phase I product will be a Phase II proposal. Phase II will be a separately funded and solicited effort. Phase I awardees will need to compete for a Phase II award.



The ocean surveillance ship USNS Able (T-AGOS 20).
MC2 Brian G. Reynolds

SCHEDULE

Phase I will be initiated in November 2021 and have a period of performance through 2022. Final products of Phase I will be a final brief to the LMR program and the Phase II proposal submission. The Phase II period of performance will be based on proposed study design requirements, not to exceed five years.

NAVY BENEFITS

The results of the Phase II effort will provide the Navy with important and current data needed to meet environmental compliance for using SURTASS LFA during training and testing activities.

TRANSITION

The data will be provided to the Navy and will support the at-sea environmental compliance community in environmental criteria development.

About the LMR Program

The Living Marine Resources (LMR) program seeks to develop, demonstrate, and assess data and technology solutions to protect living marine resources by minimizing the environmental risks of Navy at-sea training and testing activities while preserving core Navy readiness capabilities. For more information, contact the LMR program manager at exwc_lmr_program@navy.mil or visit www.navfac.navy.mil/lmr.

