

WHO

SYSCOM: NAVSEA
Sponsoring Program: NAVSEA, PEO Integrated Warfare Systems (IWS-6)
Transition Target: Cooperative Engagement Capability (CEC)/Combat Systems
TPOC: (202) 781-3014

Other Transition Opportunities: NAVAIR Minotaur Program, NAVWAR, PMW-150 Command and Control Tactical, COMTHIRDFLT MIOC, COMPACFLT

Notes: AI/ML processes to autonomously characterize behaviors of self-reporting maritime traffic using AIS data in order to use these behavioral models and data to (1) identify apparent shipping lanes and (2) detect anomalous behavior in support of determining surface vessel intent.

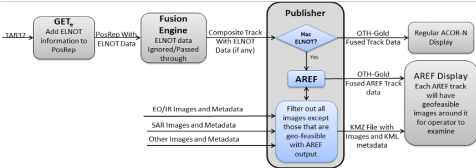


Image courtesy Jove Sciences.

WHAT

Operational Need and Improvement: Detection, Tracking, Classification (DT&C) of Contacts of Interest provided by the Advanced Correlator-Navy (ACOR-N) – cueing for dark contact acquisition through optimized search.
ACOR-N tracks Automatic Identification System (AIS) ships accurately to declutter non-interest to enhance contact DT&C.
Specifications Required: AI/ML processes to autonomously characterize behaviors of self-reporting maritime traffic using AIS data in order to use these behavioral models and data to (1) identify apparent shipping lanes and (2) detect anomalous behavior in support of determining surface vessel intent. ACOR-N will enhance the performance of limited numbers of interdiction assets to patrol large areas.

Technology Developed: ACOR-N's data fusion and characterization is well tested, and associated enhancement applications support mission execution. Future capabilities being developed include fusion of data from other sources for a clearer operational picture.

Warfighter Value: Through data fusion and characterization, ACOR-N detects contacts of interest in dense and cluttered maritime environments. ACOR-N uses AI/ML processes to autonomously characterize behaviors of self-reporting maritime traffic using AIS data in order to use these behavioral models and data to (1) identify apparent shipping lanes and (2) detect anomalous behavior in support of determining surface vessel intent.
ACOR-N's fusion of sensor sources integrated to operational picture enhances interdiction probability.

WHEN

Contract Number: N00024-24-C-S002 **Ending on:** Dec 22, 2024

Milestone	Risk Level	Measure of Success	Ending TRL	Date
ACOR-N Transition to program of record	Medium	SBIR Phase 3 contract award	8	3rd QTR FY26
Develop ACOR-N for commercial applications, such as IUU Fishing detection and tracking, Drug Runner detection and tracking, and pirate ship detection and tracking	Medium	SBIR Phase 3 contract award	8	3rd QTR FY25

HOW

Projected Business Model: Current overall TRL 6; associated applications vary in TRL, but all applications integrate with the fusion engine. Optimize ACOR-N and incorporate with various Civilian and DoD platforms.
Company Objectives: Develop and refine ACOR-N to add further Warfighter value. Collect AIS and other ship track data in Areas of Interest to support mission execution. Provide a Pattern of Life (PoL) ship historical baseline.
Potential Commercial Applications: Jove Sciences, Inc. is a specialist in signal processing, underwater acoustics/noise modeling and ship track data fusion. Technology developed could be used IUU Fishing detection and tracking, maritime drug running detection and interdiction, and pirate ship detection and tracking