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Topic # N132-135 Fusion in a Cloud Jove Sciences, Inc.

| WHO  |  |  |                                     |  | WHAT  |
|--|--|--|-------------------------------------|--|---|
| SYSCOM: NAVAIR   |  | GET, Fusion<br>TABLE Add ELNOT PostRep Wath Fusion Composite Track | Publisher<br>Has OTH-Gold           | Regular ACOR-N   | <b>Operational Need and Improvement:</b> Detection, Tracking, Classification (DT&C) of Contacts of Interest   |
| Sponsoring Program: NAVAIR PMA 290<br>Patrol and Reconnaissance Aircraft (MPRA                                   | - Maritime   | ne<br>am   |                                     |  | optimized search.   |
| Transition Target: Minotaur Program - Mir  | otaur  | EO/IR Images and Metadata  | Filter out all images except        | will have<br>geofeasible<br>mages around it<br>for operator to   | Automated data fusion of EO/IR/SAR with ELINT/SIGINT and COMINT required for contact DT&C – cueing tactical asset search areas.   |
| Bloodhound Sidecar   | lotadi   | Other Images and Metadata  | geo-feasible<br>with AREF<br>output | examine  | ACOR-N tracks AIS ships accurately to declutter non-interest to enhance contact DT&C  |
| <b>TPOC:</b> (301) 997-3125  |  | Advanced Correlator-Navy (   | ACOR-N) Uniq                        | lue  | <b>Specifications Required:</b> Data Fusion: Improve DT&C of contacts of interest by increasing information and   |
| Other Transition Opportunities: NAVSEA PEO IWS-6   |  |  | Capabilities. Im                    | age  |   |
| Cooperative Engagement Capability (CEC)<br>COMTHIRDFLT MIOC, COMPACFLT   |  |  |                                     | Hunting without Maritime Patrol Aircraft, using ACOR-N capabilities to DT&C contacts of interest over vast areas that need search and screening. ACOR-N's advanced sensor detection to improve DTC&I is game changing for tracking and identification. |   |
| Notes: Major take-away(s): IMINT/SIGINT data fusion critical to detecting and tracking contacts of Interest - no |  |  |                                     |  |   |
| single sensor is a silver bullet.  |  |  |                                     | MPA Surface Asset Utilization with ACUR-N data fusion: ACUR-N will enhance the performance of ilmited  |   |
| Advanced Correlator-Navy (ACOR-N) ennances:<br>Counter-Intelligence, Surveillance, Reconnaissance, and Targeting |  |  |                                     | maximum potential and utility.   |   |
| Persistent Long-Range Maritime Targeting   |  |  |                                     |  | Technology Developed: ACOR-N's data fusion is well tested, and associated enhancement applications  |
| Persistent Larget Engagement   |  |  |                                     | support detecting intermittent SIGINT now and COMINT in the future.  |   |
| Rattlespace Awareness  |  |  |                                     | ACOR-N's Global ELINT Tracker-enhanced (GETe) detects ELNOTS of interest from time sparse  |   |
| Command and Control (C2)   |  |  |                                     |  | transmissions.  |
|  |  |  |                                     |  | ACOR-N uses a Vector Space Model ML algorithm for IMINT/SAR/ISAR detection and tracking   |
| Advanced Correlator-Navy (ACOR-N) Near   | r-Real Time N  | OS/Organic Data Fusion Code De                                     | livery with Fina                    | al   |   |
| Report and Transition Plan.  | fusion to dete   | ct track classify and identify three                               | ats of high inte                    | ract   | Warfighter Value: Detection of contacts of interest in difficult, dense maritime environments for contacts  |
| ACOR-N is TRL-8 and ready for detection tracking classification and identification of adversary naval            |  |  |                                     |  | Sensors, and manned/unmanned airborne sensors necessary to detect contacts of interest with low RCS or  |
| combatants.  |  |  |                                     |  | non-emitting contacts   |
| PoLP is TRL-4 that can rapidly be developed into a near-real time processor connected to ACOR-N                  |  |  |                                     |  | ACOR-N's fusion of sensor sources integrated to operational picture enhances interdiction probability.  |
| ACOR-N / PoLP address the Adversary Naval Combatant and Adversary Naval Support Ship threat in                   |  |  |                                     |  |   |
| Specific examples available upon request.  |  |  |                                     |  |   |
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| WHEN Contract Number   | <b>TEN</b> Contract Number: N68335-22-C-0244 Ending on: Jun 28, 2024 |  | 1                                   | HOW  |   |
| Milestone  | Risk Level   | Measure of Success   | Ending TRL                          | Date   | <b>Projected Business Model:</b> Current TRL 8; associated applications vary in TRL, but all integrate with the fusion engine.  |
| ACOR-N Transition to Program of Record   | Medium   | SBIR Phase II.5 contract award                                     | 8                                   | TBD  | Company Objectives: Develop Minotaur ACOR-N "Sidecar" to add value to the Minotaur Program. Collect   |
|  |  |  |                                     |  | AIS and other ship track data in Area of Interest before mission execution date to provide a Pattern of Life (PoL) ship historical baseline.                                  |
|  |  |  |                                     |  |   |
|  |  |  |                                     |  | <b>Potential Commercial Applications:</b> Develop Minotaur ACOR-N Sidecar for commercial detection and tracking applications, such as IUU fishing, drug runners, and pirates. |
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