CANUS Maritime Information Sharing Pilot Project: Puget Sound

Evaluation and Recommendations

Executive Summary

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Acknowledgements

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Executive Summary

The CANUS Maritime Information Sharing Pilot Project: Puget Sound (CANUS) evaluated the effectiveness and mission impact of enhanced radar detection capabilities provided to selected U.S. units along the Pacific Northwest international maritime border. This pilot project ushered in new capabilities enabling enforcement personnel to detect, monitor, analyze, and share radar tracks of small and previously dark vessels. CANUS extends Canadian dark vessel radar coverage, leading to new U.S.-Canadian information sharing opportunities. This pilot project resulted in "game-changing" gains for U.S. and Canadian maritime law enforcement agencies enabling them to more effectively plan and execute their missions.

CANUS provides a wide range of strategic, operational, tactical, and practical lessons with significant implications for future U.S. international maritime border security. These include:

1. Enhanced radar detection of previously dark vessel tracks is a "game-changer" for U.S. maritime law enforcement agencies. It strongly tilts the playing field in their favor. What was a dark area (aside from large and AIS self-identified vessels) that was selectively illuminated using limited on-water assets (that in turn could be seen by potential adversaries), is now a well-lit field where suspicious vessels can be identified and observed without revealing the location of agency assets.
2. Enhanced radar detection is an asset multiplier. Until now, law enforcement agency vessels have patrolled in hopes of encountering suspicious vessels. Now, these vessels can be positioned to optimize response to identified suspicious activity or used to for other missions.
3. Enhanced radar detection introduces effective new situational options such as:
    a. Use of historical replay to investigate tips on suspicious behavior,
    b. Protection of assets and critical infrastructure with a radar-monitored interdiction "fence" rather than a formation of vessels, and
    c. Observing illegal activity to see how it plays out.
4. Enhanced radar historical tracks and analysis tools provide maritime border agencies with effective new intelligence analysis options.
5. The use of two SIGNALIS workstations in the Pacific Northwest (USCG and CBP AMO) generated considerable enthusiasm among other regional units for additional access to workstations and capabilities. These units planned innovative uses of enhanced maritime radar that they desire to test and, if successful, implement.
6. A common picture of real-time previously dark vessel tracks enhanced coordination among U.S. border agencies and between U.S. and Canadian law enforcement units.
7. The full suite of enhanced radar capabilities is most appropriately situated within a 24/7 command center environment, but field units can benefit greatly as well.

8. CANUS revealed both encouraging and challenging technical issues. There were no negative effects on the VTS unit used to acquire its signal, and on-water tests showed a high degree of confidence in the existence of detected vessels. However, there was not a similar level of confidence that all existing dark vessels are detected, and there were challenges for operators related to track display.
9. A number of technical issues stemmed from the temporary configuration that was not fully integrated into formal networks as a system of record.
10. Various agency stakeholders indicated a desire to revisit current concept of operations in light of these new radar capabilities and interagency opportunities.

Despite the wealth of lessons learned, there were limitations during year one of the pilot that prevented us from conducting the full range of quantitative tests desirable for justifying acquisition of a major new system. In a sense, we completed a successful "proof-of-concept" and now, with the system and operational knowledge gained as well as the enthusiasm generated in the field, regional agencies are ready to conduct tests that will provide quantitative measures and qualitative arguments for system acquisition.

Following are recommendations for moving forward with enhanced maritime radar detection:

1. Conduct second-year metrics-based pilot tests aimed towards justifying acquisition and formal system of record status for deployment of enhanced radar systems.
2. Provide a workstation to U.S. Border Patrol Port Angeles and to Pacific Northwest Field Intelligence Group as part of the second-year pilot testing.
3. Identify a system owner.
4. Train the system to highlight anomalous vessel behavior and filter out vessels that are clearly obeying the law (e.g. on-water vessels that report U.S. entry using the new mobile CBP ROAM application).
5. Explore mobile delivery of enhanced radar for field units to better coordinate with operators of command center workstations.
6. Revise current concept of operations to take advantage of new collaborative operational opportunities.
7. Clarify and formalize U.S.-Canadian coordination for the management of a co-owned international border system.

Overall, CANUS demonstrated positive results and generated considerable enthusiasm among regional border law enforcement agencies and personnel. There is general agreement among these units to participate in a second year of testing and evaluation focused on issues of acquisition, system ownership, and implementation of a formal system of record.