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Optimizing Employment of Search Platforms
to Counter the Self-Propelled
Semisubmersible (SPSS)

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<http://hdl.handle.net/10945/71154>

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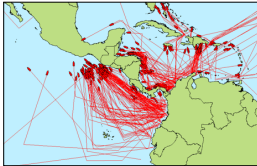
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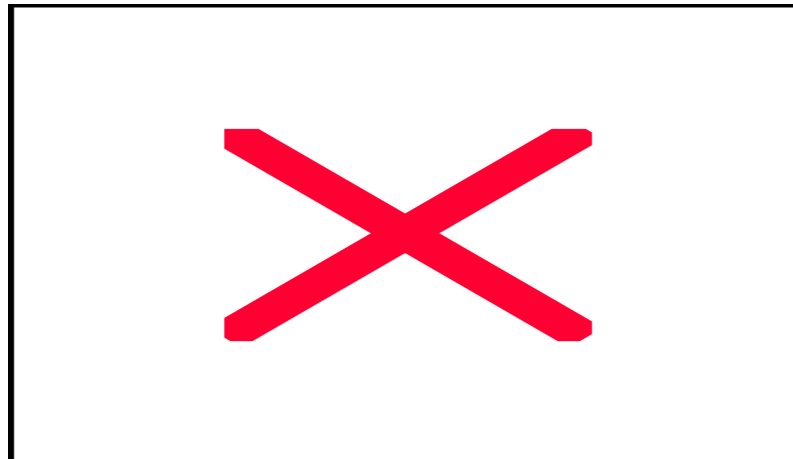


Purpose:

This research develops an operational level mission planning aid to counter self-propelled semi-submersibles (SPSS) currently being used by narcoterrorists. It will provide optimal placement and disposition of friendly search platforms while considering the intelligent response of the enemy SPSS operators.



- 60x60 nm cells
- X - non available for navigation
- G - SPSS goal cells
- E - SPSS entry cells
- 3 - Example search cells
- 2 - Example SPSS path



- Caribbean model is shown above (Eastern Pacific also modeled)
 - SPSS chooses a path from any entry cell to any goal cell
Objective – Maximize probability of evasion
 - Searcher chooses platform positions and how much to spread effort
Objective - Minimize probability of evasion
- Provides a method to evaluate risk vs resources



Captured self-propelled semisubmersible