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Reducing Asymmetry in Countering Uncrewed Aircraft Systems

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Reducing Asymmetry in Countering Uncrewed Aircraft Systems

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Bottom Line Up Front

Problem Statement:

- The current short-range air defense is insufficient in its ability to counter the threat posed by uncrewed aircraft systems.

Why?

- In the U.S. there has yet to be a serious incursion or multi-wave attack using only unmanned systems.

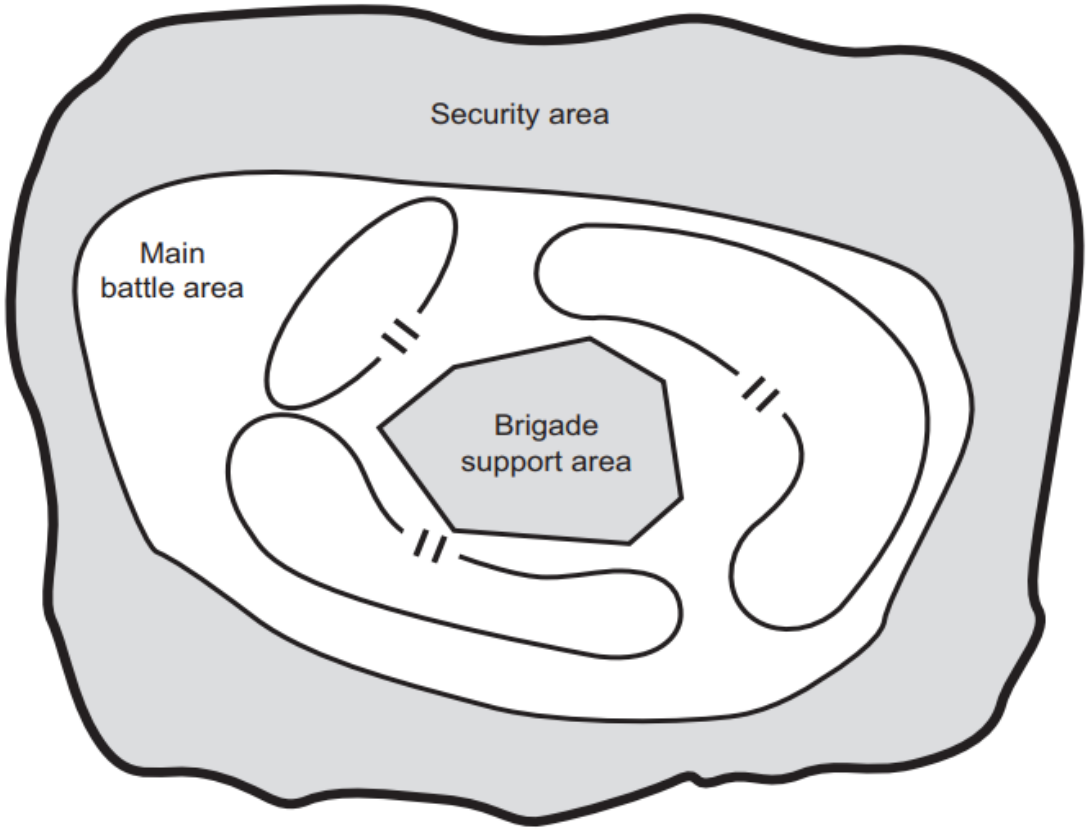
What is the Solution?

- Aerial Interdiction for Countering-Uncrewed Aircraft System using stand-in cyber and EW devices

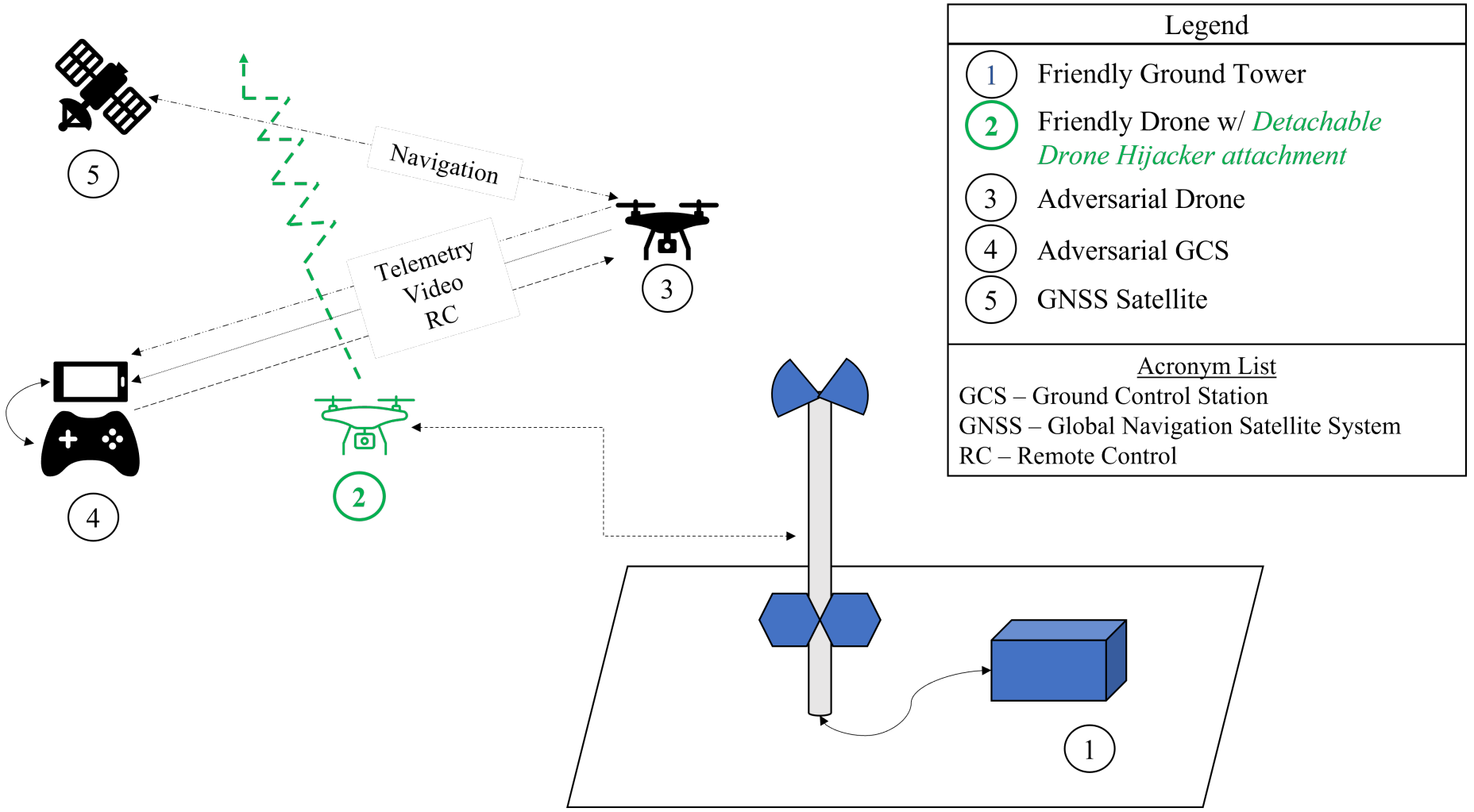
Background/Motivation

Current Approach

Defense in Depth



Solution – The Detachable Drone Hijacker



Initial Testing and Results

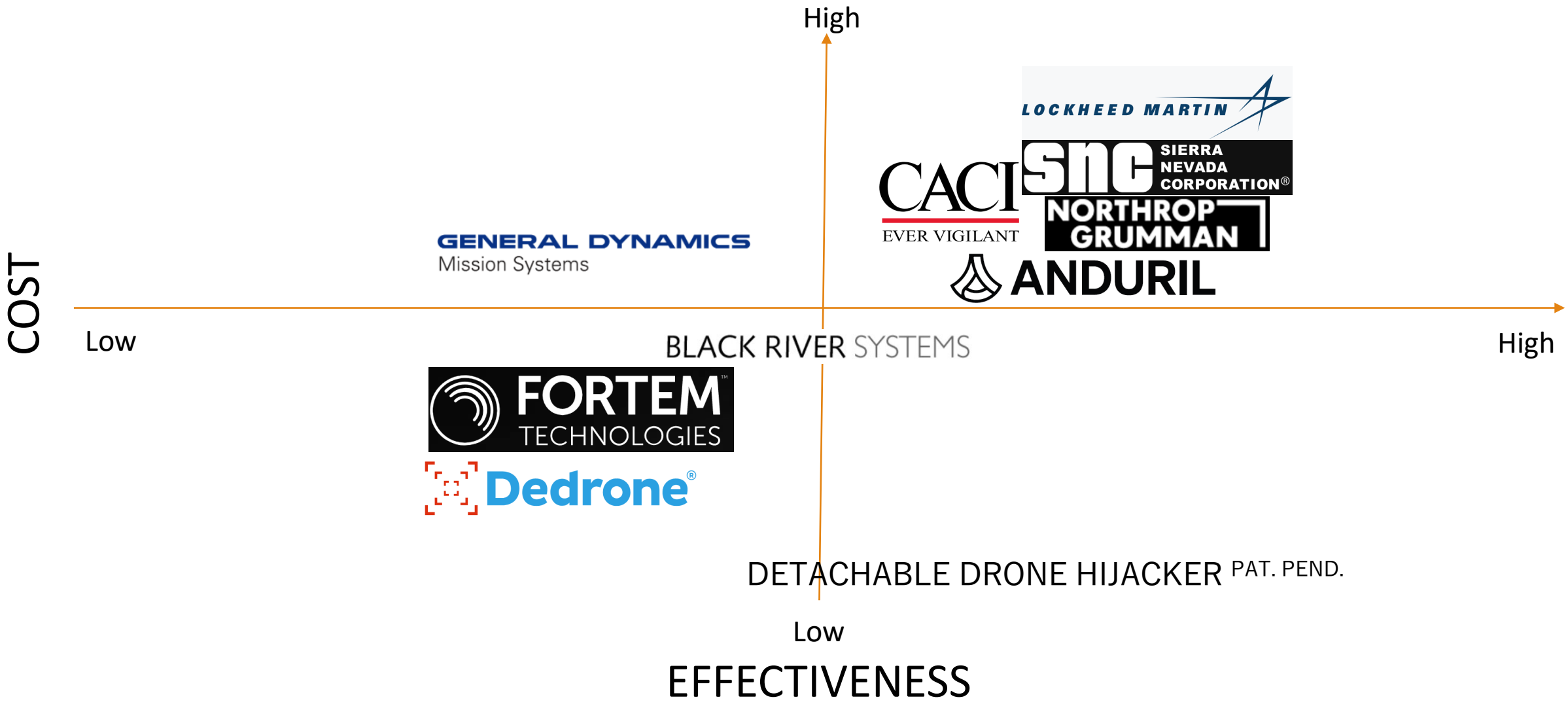
Lines of Effort:

- LOE1: Test design development (Complete)
- LOE2: Further partnership with digital signal processing subject matter experts (In-Progress – funding dependent)
- LOE3: Field testing (Future)

Results

- Weight: 400g
- Power Output: ~1W (Peak)
- Effective Range: 250m + (Line-of-Sight)
- Target Behavior: Attacker Loses Control
- Thermal Characteristics: 3.3-15°C Increase
- Cost: $250

Cost Effectiveness Model – Current Systems



Questions?