# Reducing Asymmetry in Countering Uncrewed Aircraft Systems

Captain Christian Thiessen, USMC

Dr. Britta Hale, PhD

Dr. Douglas Van Bossuyt, PhD

# 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.

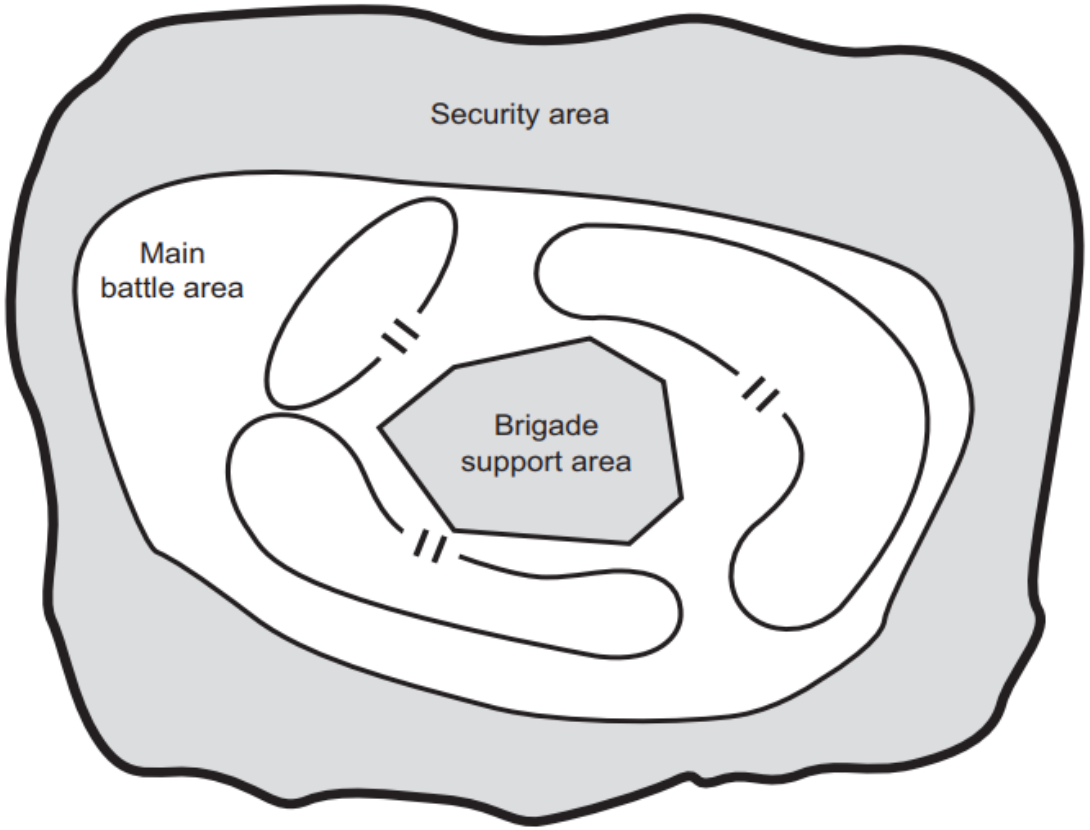
**What is the Solution?**

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

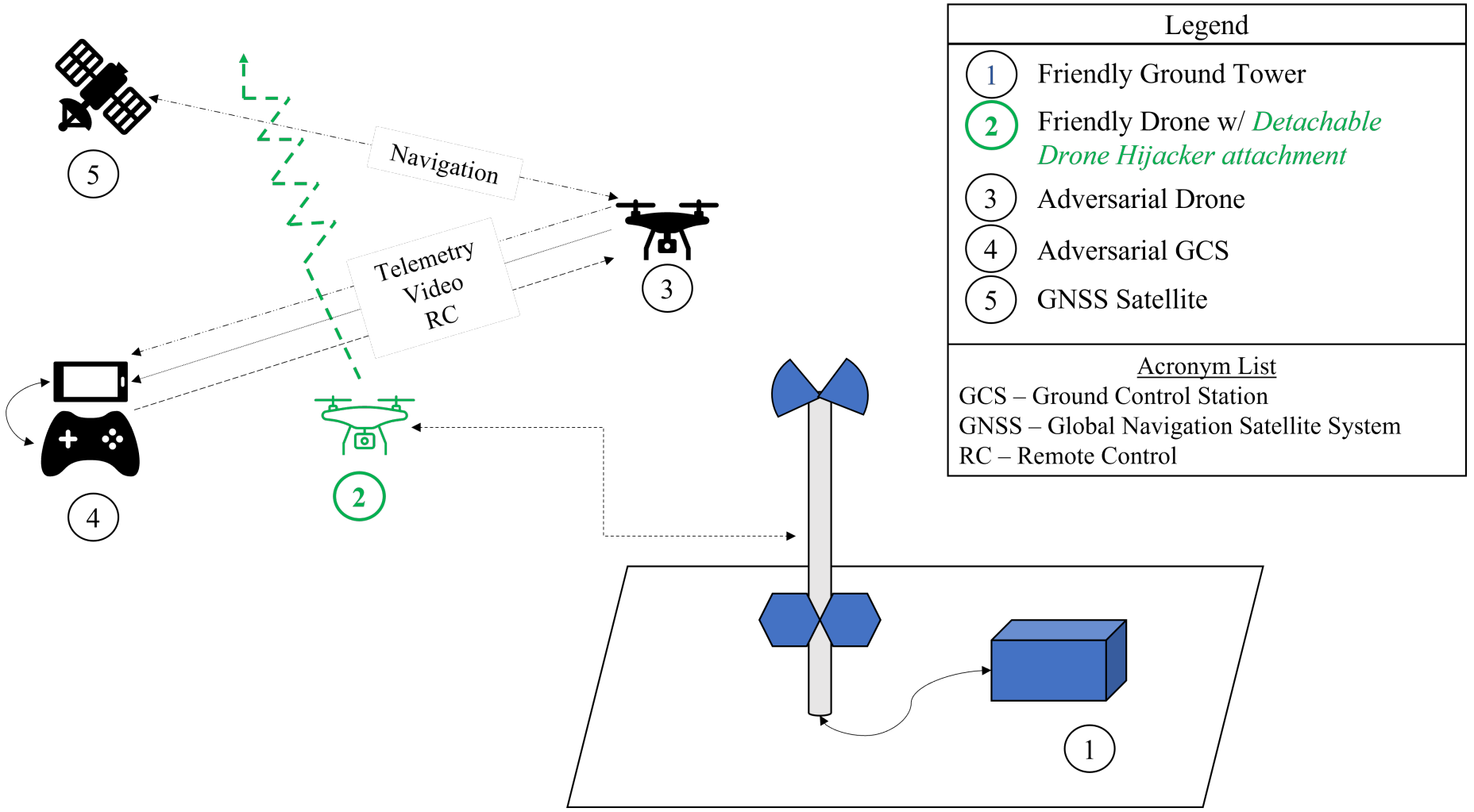
# Background/Motivation


# Current Approach

# Defense in Depth




# Solution – The Detachable Drone Hijacker



# Initial Testing and Results

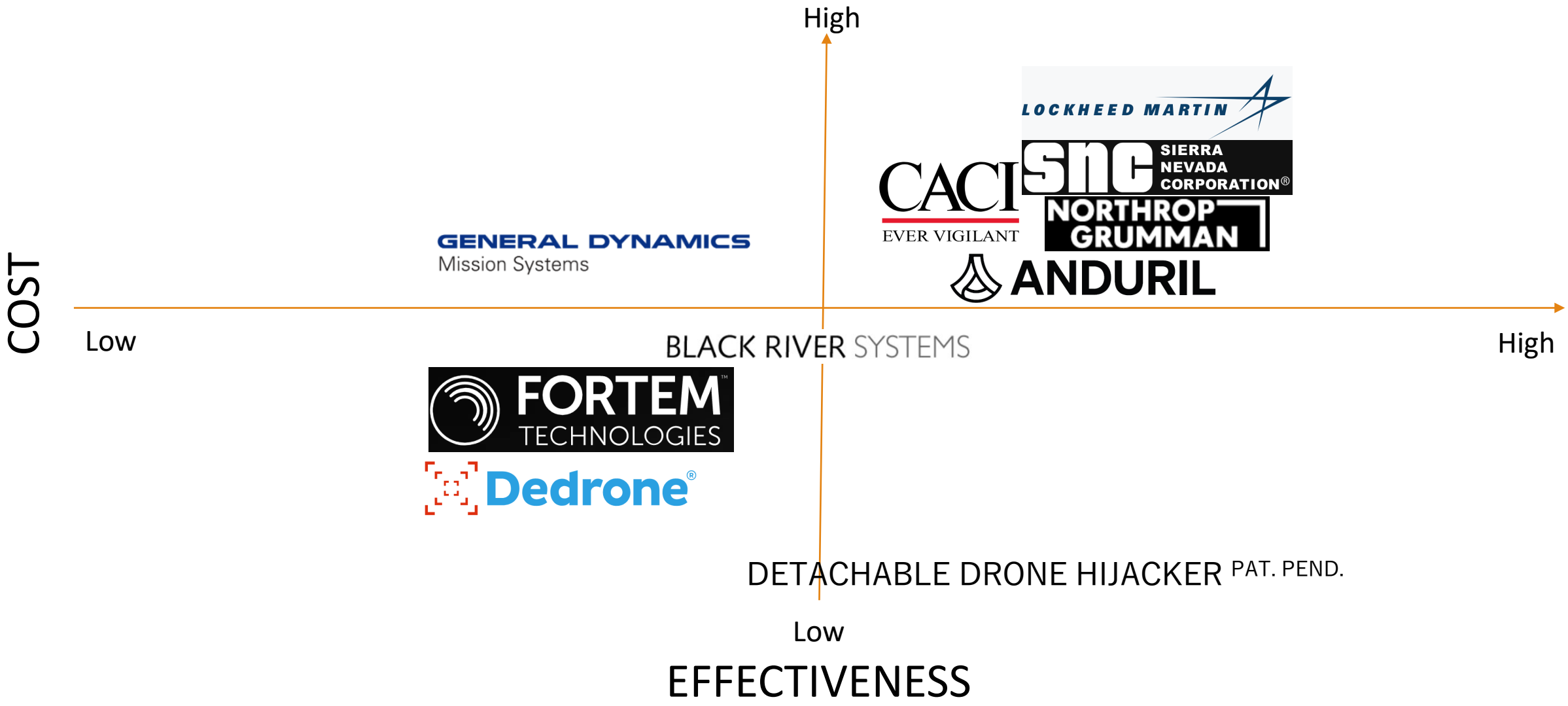
**Lines of Effort:**

- 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?