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2022-05-06

# Reducing Asymmetry in Countering Uncrewed Aircraft Systems

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Monterey, California. Naval Postgraduate School

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# Reducing Asymmetry in Countering Uncrewed Aircraft Systems

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# Bottom Line Up Front

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## **Problem Statement:**

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

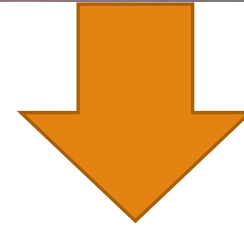
## **Why?**

- 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

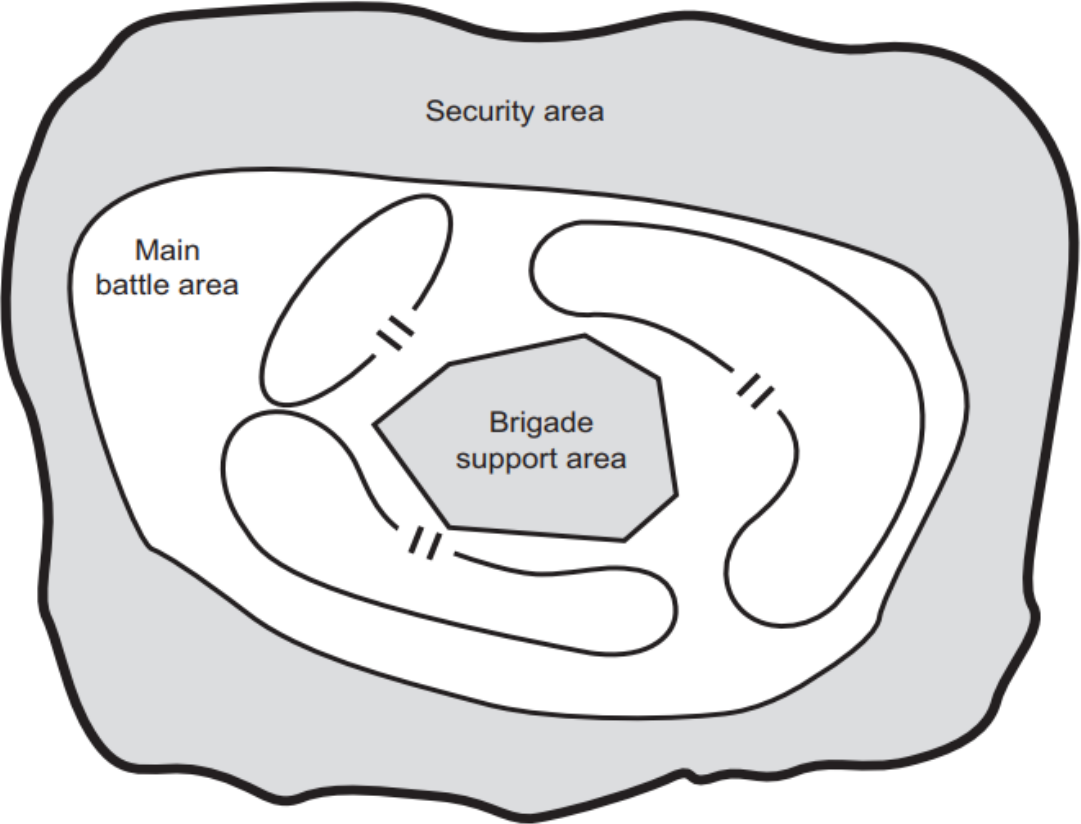
# Background/Motivation



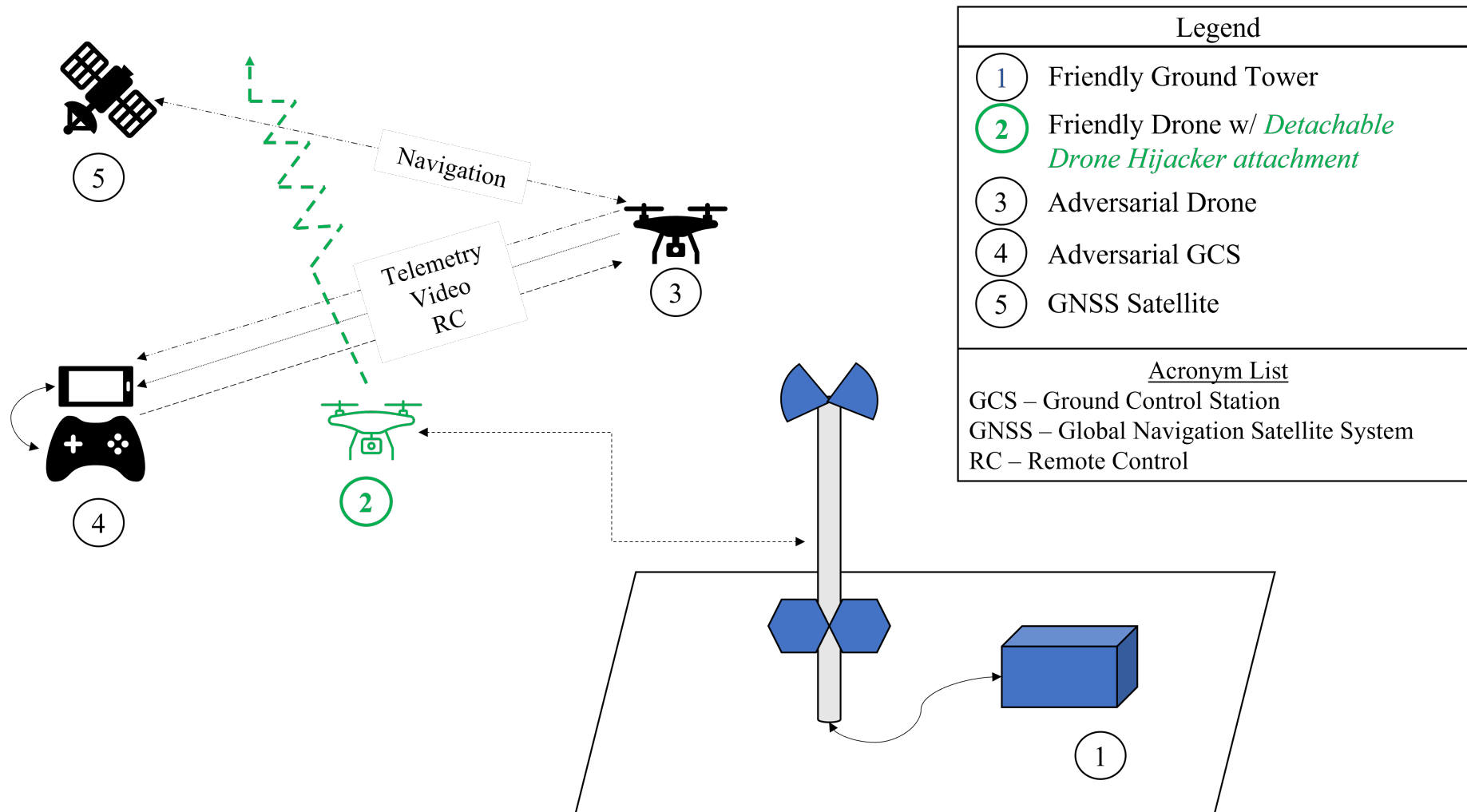
# Current Approach



# Defense in Depth



# Solution – The Detachable Drone Hijacker





# Initial Testing and Results

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## **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?

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