## **Cooperative Rendezvous**

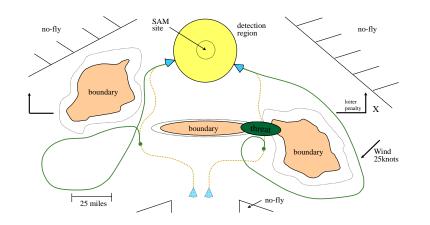


**Objective:** To maximize the element of surprise, a team of UAVs is autonomously maneuvered to simultaneously arrive at a specific location.

Principle Investigators: Tim McLain, Randy Beard

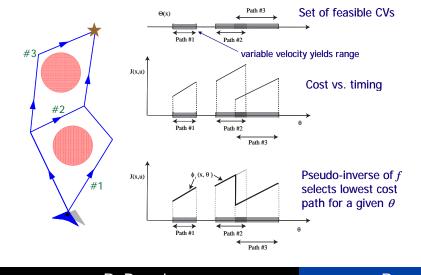
**Sample Publication:** Timothy W. McLain, Randal W. Beard, "Coordination Variables, Coordination Functions, and Cooperative Timing Missions," *AIAA Journal of Guidance, Control, & Dynamics*, vol. 28, no. 1., January, 2005, p. 150-161.

## **Problem Summary**



Funding Source: AFOSR.

## **Results**



Approach

- Successful flight test with three UAVs in summer 2005.
- Simultaneous rendezvous in moderate winds.
- Timing error less than 0.1 seconds.