Vision: To provide a diverse academic and research venue to foster the holistic, multidisciplinary approach to the design, employment and future concept development of robotic and unmanned systems.

Autonomous Swarm of 42 20 30 50 UAVs, Demonstrated on August 27, 2015 at Camp Roberts
Introducing Aerial Combat Swarms
A Grand Challenge Competition

Mission: Deploy a large team of UAVs to:

- Protect your own high value home base
- Attack your opponent’s home base and/or its defenders

Task: Develop the enabling technologies to realize this scenario

Aerial Combat Swarms is designed to explore:

- Defensive and offensive swarm tactics
- Holistic systems approach to future complex systems
- Advanced challenges in comms, coordination, and control
- Open ecosystem for hardware, software, and tactics
  - Easy-entry hardware, shared software library, implemented tactics playbooks

The ARSENL 50 -- Flying a UAV Swarm of 50 Aerial Robots

Achieving the "Unpossible" – 50 UAVs on August 27th, 2015

50-UAV Mission Playback

(Visualization in Gazebo, 10x speed)