UCSD AUVSI TEAM

University of California San Diego Aerial Unmanned Vehicle Systems International (UCSD AUVSI) is a student managed team that designs and builds an unmanned aerial vehicle (UAV). The UAV is engineered to fly hands free and its payload designed to autonomously locate, identify and analyze targets.

Members of the UCSD AUVSI consist of engineering students from the Jacobs School of Engineering and the UCSD student chapters of the American Institute of Aeronautics and Astronautics (**AIAA**) and the Institute of Electrical and Electronics Engineering (**IEEE**). The team is composed of aerospace, electrical, mechanical and structural engineering students at both the undergraduate and graduate levels. The UCSD AUVSI is subdivided into three specialized groups.

- The **Payload Team** engineers and manages the autonomous target recognition system. They administer sensor components and software required for the system.

- The **Autopilot Team** is responsible for assuring data is fed properly from the autopilot to the onboard computer, while maintaining full control of the aircraft from target location to target location.

- The **Structures Team** is in charge of handling all the fabrication, assembly, and maintenance of the aircraft.

UCSD AUVSI team in action at the competition in June 2006.

The plane warming up for a test flight.

Thank you for your interest and support.

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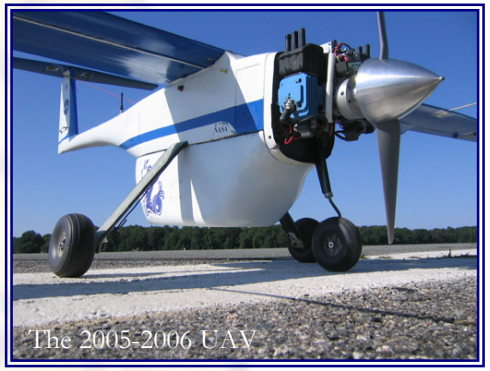
UCSD AUVSI



2006-2007

STUDENT UNMANNED AERIAL VEHICLE

Delivering the future

in unmanned systems


The 2005-2006 Team

THE COMPETITION

The competition sponsored by the AUVSI is held at Webster Field in Maryland mid- June each year. Now in its fifth season, the competition challenges university teams to assemble an autonomous aircraft capable of traversing given waypoints and identifying targets within a mission area.

- **Flight Performance** During the mission, teams are judged upon target accuracy and professionalism.
- **Technical Paper** Details the airplane and package that will be presented at the competition.
- **Oral presentation** Prior to flight, judges get a sample of what systems are integrated into the final product)

- **UCSD PLACED 5TH OVERALL**
  (highest ranking first year team!)

PLATFORM/COMPONENTS

2005-06 System:

- Aircraft composed of composites, weighing roughly 60 lbs (fully loaded) and a wingspan of 12 feet.
- Piccolo Autopilot
- Black Widow Video System (Captured and relayed video to ground for processing)

2006-07 Proposed Additions to Plane:

- Autonomous target recognition software – Software developed specifically to identify alphanumeric characters and report their GPS position as well as their orientation.
- Digital Still Camera
- Live User Controllable Gimbaled Video Camera
- WI-Fi Communication System (networking UAV to ground station)
- Construction of a competition ready backup aircraft and matching system.

SPONSORSHIP LEVELS

Platinum Sponsor ($10,000+)

- Always mentioned as a primary sponsor
- XL logo on top of wing
- Everything listed below

Gold Sponsor ($5,000)

- Large logo displayed on fuselage/ payload tray
- Invitation to all test flights
- Everything listed below

Silver Sponsorship ($2,500)

- Access to student résumés
- Medium logo displayed on fuselage/ tail
- Everything listed below

Bronze Sponsorship ($1,000)

- Handsome team polo shirt
- Everything listed below

Copper Sponsorship ($500)

- Small logo displayed on fuselage
- DVD of design, building, and 2006 competition summary
- Featured on webpage with company link

ALTERNATIVE DONATIONS

If you are interested in assisting the UCSD AUVSI and instead wish to donate professional suggestions or hardware please visit.
http://acs.ucsd.edu/~aiaaucsd/auvsisponsorship.html