



SENIOR DESIGN ORGANIZATION SYNOPSIS – SPRING 2013

AUTONOMOUS UAV HELICOPTER SPONSORED BY NASA & SGA

Team 7: Luis Ramos, Daniel Reyes, Alejandro Diaz

Faculty Advisor: Dr Tansel

Our team will be participating in the SUAS AUVSI Student competition. The focal object of the competition is to create and operate an unmanned aerial vehicle that is capable of autonomous target reconnaissance, navigation, takeoff and landing operations. The judges will score the participants based on their system's performance composed of three sections: a final journal paper, oral presentation, and a flight demonstration. It is a performance-based competition where multiple government agencies and corporate partners will attend. As part of the senior design project, we will be designing, assembling and programming flight controls along with image recognition algorithms.

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This project is on scale that would be impossible to individually fund, therefore we have set on numerous fund raising efforts such as the NACME, NASA, and SGA grants & sponsorship programs to supply our proposed plan. Provided with sufficient funds and support, we will strive to perform at the upmost level and ensure to apply all of our engineering knowledge in order to stand out and put FIU on the Student National Aviation Union. Being able to compete will also impact all of our team members greatly. We are all looking for an exceptional opportunity to showcase our knowledge and experience in the engineering field.