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RECONSO CubeSat

The RECONSO mission is designed to demonstrate visual detection and tracking of space debris from a small Cubesat platform. The spacecraft has been designed, fabricated and tested by a team of Georgia Tech undergraduate and graduate students who will also be responsible for mission operations. Photographs of the sky regions of interest will be acquired during the sunlight portion of the orbit. Onboard processing will occur during the eclipse periods. Image processing will detect moving objects in the acquired series of images and assign orbital parameters to the detected objects. Downlinked data will be the estimated orbital elements for the debris, not raw images. RECONSO contains no propulsion system, and is pointed using a 3°axis magnetorquer system.

Planned Orbit:
Apogee – 500 km
Perigee - 800 km
Inclination - 75 deg
Period: - 97.728 min