

The Georgia Institute of Technology Prox-1 mission is designed to demonstrate automated trajectory control in low-Earth orbit relative to a deployed cubesat. Funded by the Air Force Office of Scientific Research/Air Force Research Laboratory University Nanosatellite Program, 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. The Prox-1 spacecraft is equipped with thermal and visible imagers provided by Arizona State University. Prox-1 will deploy The Planetary Society's LightSail-B solar sail spacecraft. Prox-1 will fly in close proximity to LightSail-B, demonstrating automated trajectory control based upon relative orbit determination using passive imaging. Prox-1 will also acquire images of the LightSail-B solar sail deployment event, and provide first-time flight validation of a microsatellite control moment gyroscope unit, a small satellite propulsion system, and a lightweight thermal imager.