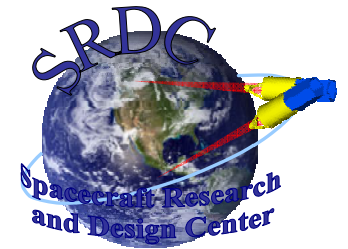# Satellite Operations: OS/COMET and FLTSATCOM

Project Objective:

To provide a modern satellite ground control system for academic training and research. OS/COMET is a state-of-the-art C+C system currently used for the operation of numerous active satellites. The FLTSATCOM lab provides actual spaceflight and ground control hardware; OS/COMET is an extensible ground control system that supports modular software components. The combination of both yields the capability for the development and use of custom software, and experimental work involving hardware-in-the-loop, partial-simulation, or full-simulation satellite operation exercises.

Research/Thesis Topics:

- Application to SS3051: Space Systems and Operations II
- Investigation of advanced C+C systems and processes for space assets.
- Collaboration with NAVSOC to migrate operational telemetry data to the NPS facilities.
- Development of unique spacecraft simulations and ground control scenarios.
- Development of improved task scheduling and automation processes for ground control tasks.
- Development of more efficient operational solutions for existing or proposed space systems, potentially involving multiple spacecraft.