



# COMPOSITE FILAMENT ATMOSPHERIC ASSESSMENT (CFAA)



**SCHOOL:** KATHLEEN SENIOR HIGH SCHOOL - CENTRAL FLORIDA AEROSPACE ACADEMY

**LOCATION:** LAKELAND, FL

**FLIGHT PROVIDER:** WORLD VIEW

**GRADES:** HIGH SCHOOL

## STUDENT EXPERIMENT DESCRIPTION

Our experiment aims to test levels of degradation on 3D printed materials due to exposure to ionizing radiation in the upper atmosphere. High-altitude radiation levels will affect the rate of degradation of filament materials in varying levels, thereby aiding in identifying materials better suited for long-term use in extreme environments. The engineering program at our aerospace-focused school provided us experience using CAD software, inspiring us to design this experiment using these skills.