



## ATHENA 1111



**SCHOOL:** LAWRENCE E. ELKINS HIGH SCHOOL

**LOCATION:** MISSOURI CITY, TX

**FLIGHT PROVIDER:** WORLD VIEW

**GRADES:** HIGH SCHOOL

### STUDENT EXPERIMENT DESCRIPTION

Our experiment aims to study the impact of atmospheric conditions, elevation, and radiation on bit-flips. We are utilizing a microcontroller and Pocket Geiger to measure and gather this data. We have also incorporated additional microcontrollers to cause bit-flips in memory and run checks, detect, and log these events. Through this experiment, we seek to gain a deeper understanding of how radiation affects electronic devices and develop strategies to minimize the occurrence of bit-flips.