

Research Project Description

TJ REVERB Cubesat Mission, ELaNa-21

The Thomas Jefferson High School for Science and Technology (TJHSST) CubeSat project, titled the Research and Education Vehicle for the Evaluation of Radio Broadcasts (REVERB), is a nanosatellite of 2U form factor. It will be launched to and deployed from the ISS by NASA in November as part of ELaNa-21. REVERB's primary purpose is conducting educational outreach and comparing the effectiveness of two different onboard radio systems, one of which is an Iridium transceiver. The Iridium radio will communicate via the Iridium Satellite Constellation while in Low Earth Orbit (LEO) and be both a proof of concept mission for future educational institutions and backup radio in the event of primary radio failure. The mission will end upon satellite reentry.