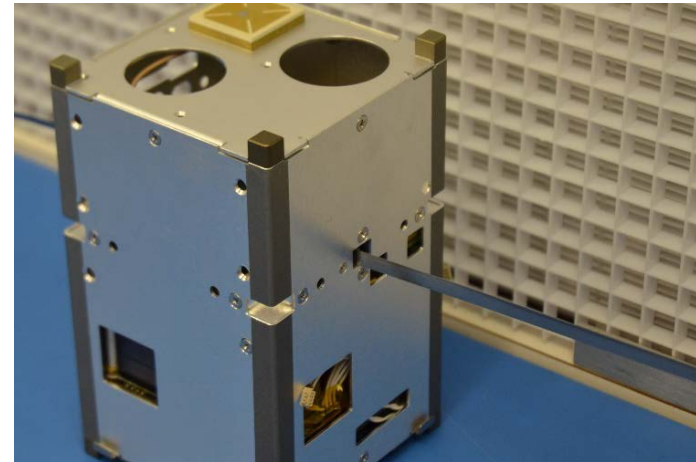


# Satellite Radio Overview

- Lithium Radio (Li-2) from AstroDev
  - Frequency: 437.425 MHz
  - GMSK, 19k2 baud down, 9k6 uplink,
  - AX.25 protocol
- Antenna
  - **Type:** single phase monopole antenna
  - **Length:** 17.3cm
  - **Design:** Tape measure whip



# Ground Station Radio Overview



- SSEL Ground Station: K7MSU
- Operations
  - Licensed Student Operators
  - Tracking verification: NORAD TLEs
- Hardware
  - Circularly polarized cross-yagi (70cm)
  - Software Defined Radio: USRP N200
- Software
  - Tracking: Supernova for Linux
  - Rotor control: LabJack U12 DAQ, Supernova interface
  - Radio Tuner: GNU Radio
  - Data Handling: L3 InControl