

SPACECRAFT DEPLOYMENT
SEQUENCER SUPPORT

Aerospace

*Project
Management*



*Systems
Engineering*



*Electrical
Engineering*



*Software
Engineering*



SOFTWARE SATELLITE DEPLOYMENT SEQUENCER WITH MISSION-CRITICAL TIMING CONTROLS

APPROACH

- Provide remote program support, hardware and software troubleshooting, and subcontract vendor oversight
- Assess software, specifications, requirements, and test protocols
- Provide on-site functional test support and independent functional verification

RESULTS

- Developed ground support software package to enable engineering testing without access to the complete system
- Identified flow-down discrepancies and resolved them for accurate verification traceability
- Provided recommendations to resolve hardware issues with an I²C data bus
- Provided alternatives to address software issues in data encoding and CRC
- Achieved critical program milestone dates

KEY TECHNOLOGIES

- GNU Radio
- Data encoding schemes (HDLC, NRZ, etc.)
- C, Python
- I²C