Morehead State University
Space Science Center

Spacecraft Environmental Testing and Ground Operation Services

Cost Basis

Ground Operations

The high-gain 21 M Space Tracking Antenna at Morehead State University has extensive capabilities and a high degree of flexibility that has the potential to provide significant benefit to government and commercial satellite programs. The 21 M can provide TT&C services to a wide variety of missions, including satellites in Low Earth Orbit (LEO), Geostationary Orbit (GEO), Lunar Orbit and beyond. The 21 M has full capabilities for TT&C and data downlink services for satellites, launch systems and launch and early-orbit phase operations for spacecraft.

MSU offers payload data reception and level-zero processing of data in S-, X-, Ku- and L-band. MSU offers transmission and uplink capabilities at S-band (and other frequencies by arrangement). Additionally, MSU has an experienced staff that offers mission-specific development and integration.

Downlink Only Cost Basis

Dedicated Service
$2,850 per day dedicated use of 21 M

Non-Interventional Service
$300 per hour for non-exclusive, non-intervening use during business hours (defined as 8:00 am to 5:00 pm Eastern Standard Time (EST), $450 per hour from 5:00 pm to 8:00 am EST, weekends, and holidays recognized by Morehead State University. Cost for best effort basis.
Downlink at X-band and S-band available.

Uplink/Downlink
Costed by task based on complexity, pass profile instrumentation and software requirement.

For Scheduling or Additional Information on Cost Structure contact:
Dr. Ben Malphrus (606) 783-2212 b.malphrus@moreheadstate.edu

Version 10/15/2020

Morehead State University
Space Science Center

Spacecraft Environmental Testing and Ground Operation Services

Cost Basis

Spacecraft Environmental Testing*

Vibration Analysis
Proto-Qual
$4,800 for sine and random vibe to NASA GEVs levels or specified in ICD (baseline utilizing PPOD/TPOD and existing fixturing) with report including CAC measurements pre and post

Acceptance Testing
$4,800 for sine and random vibe to NASA GEVs levels or specified in ICD (baseline utilizing PPOD/TPOD and existing fixturing) with report including CAC measurements pre and post

Communications Systems Testing
Antenna Characterization in EM Chamber
360 degree patterns, Co-Pol Axial ratio, Gain with report
$7,200

T-Vac
Thermal cycling under vacuum and bake-out to CubeSat Standards with report
$5,600

Residual Gas Analysis to 100 AMU
$4,800

*Note: Prices listed are estimates. Final costs are dependent upon specific mission requirements.

For Scheduling or Additional Information on Cost Structure contact:
Dr. Ben Malphrus (606) 783-2212 b.malphrus@moreheadstate.edu

Version 10/15/2020