

Michael D. Commons

Jr. Thermal Engineer

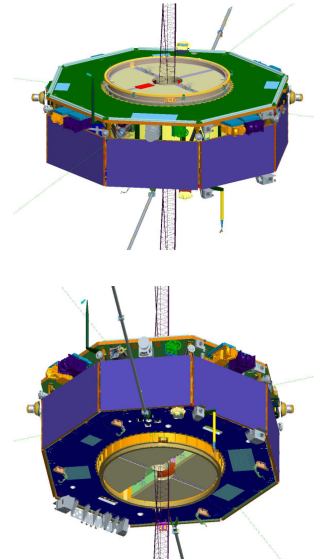
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AEROSPACE/JR THERMAL ENGINEER

EXPERIENCE

7/12 - PRESENT **Magnetospheric Multi-Scale (MMS) Mission Junior Thermal Analyst**

- Support the observatory Thermal Vacuum (TV) and Thermal Balance (TB) test thermal analysis
- Provide observatory Thermal Vacuum (TV) and Thermal Balance (TB) test support
- Develop Thermal Desktop™ models of the spacecraft test configuration
- Develop test support documentation (GSE TV/TB settings, test prediction results)
- Responsible for the integration of the observatory thermal model with the test configuration
- Responsible for performing the observatory level Thermal Desktop™ model test analysis and presenting the thermal analysis results at engineering peer reviews
- Support thermal and spacecraft subsystem engineering meetings, trade studies and development tests
- Knowledge of thermal coatings, thermal control system (TCS) hardware and thermal design techniques
- Supported TV and TB tests at NASA/GSFC and NRL
- Performed thermal model correlation from thermal balance (TB) test data



Summer 2011 **Field Engineer Intern, Little Patuxent Water Reclamation Plant**

- Prepared and managed construction documents and records
- Monitored Subcontractor Performance
- Interpreted construction drawings and conducted field calculations/tests

RELATED SKILLS

- Proficient in AutoCAD, Pro-E, SolidWorks, Java, MATLAB, C++
- Proficient in Thermal Desktop™ and SINDA/FLUINT
- College Park Scholars Honors Program (Emphasis on Business, Society, and the Economy)
- National Society of Collegiate Scholars
- Primannum Honor Society
- President's Scholarship
- Six Sigma Green Belt

RELATED COURSE WORK

- Finite Element Analysis, Elec. & Dig. Circuit Lab, Programming, Product Eng. & Manufacturing, Fluid Mechanics, Dynamics, Thermodynamics, Electronics
- Proficient in Microsoft Word, Excel, Access, and PowerPoint

EDUCATION

B.S., Mechanical Engineering, May 2012
University of Maryland, College Park, MD

College Activities

- Brother, Pledge Educator and Intramural Chair of Kappa Sigma Fraternity
- Member of American Society of Mechanical Engineers (ASME) and Institute of Electrical and Electronics Engineers (IEEE)
- Technician for WMUC, Maryland Sports Radio Club (Responsible for broadcast set-up and recording)

INTERESTS

All Sports