

Jong S. Kim

Senior Thermal Engineer

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AEROSPACE/SENIOR THERMAL ENGINEER

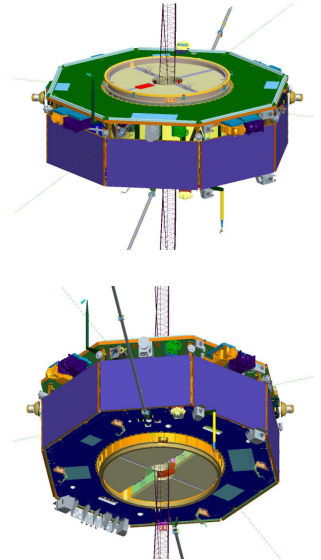
EXPERIENCE

Senior Thermal Engineer, Vertex Aerospace, LLC

3/13 - PRESENT

Magnetospheric Multi-Scale (MMS) Mission I&T Senior Thermal Engineer, Vertex Aerospace

- Responsible for the receiving, reviewing and integration instrument and component thermal models to the observatory Thermal Desktop™ model
- Support Observatory Thermal Balance (TB) and Thermal Vacuum (TV) testing
- Perform Thermal Desktop™ SINDA/FLUINT thermal analysis for predicting the hot/cold operational and survival temperatures and heat flows
- Perform Thermal Desktop™ SINDA/FLUINT thermal analysis for predicting heater power duty cycles
- Develop test models for the MMS Mag Boom AFG/DFG sensors
- Support TV/TB testing of Mag release and deployment mechanisms and AFG/DFG sensors
- Performed thermal model correlation of the MMS Mag Boom AFG/DFG sensors and deployment mechanisms
- Work closely with Junior Thermal Engineers – review and direct thermal analysis work assignments



4/00-2/12

Senior Thermal Engineer, Orbital Sciences Corporation NASA/GSFC Support

- Supported Deformation Ecosystem Structure and Dynamics of Ice (DESDynI) project during early Phase A as a lead thermal analyst. Built the spacecraft level thermal model to optimize the in power and heater requirements for the lasers. Improved the detailed modeling of the laser to provide accurate predictions for the temperature and heater design.
- Supported Hubble Space Telescope (HST) in Flight Systems and Servicing Mission for timeline thermal analyses and transport thermal analyses for Servicing Mission 4 (SM4). Support Mission Operation, Systems Engineering and Software to perform thermal analyses to support optimum operation configuration. Responsible for integrated modeling of overall HST thermal model that includes four axial and radial science instruments; Advanced Camera for Survey (ACS), Cosmic Origins Spectrograph (COS), Near Infrared Camera Multiple Object Spectrometer (NICMOS), Space Telescope Imaging Spectrograph (STIS), Wide Field Camera, and Fine Guidance Sensors (FGSs).

Related Skills

- Use of thermal analysis tools SINDA, Thermal Desktop, TSS and TRASYS.
- Use of mechanical analysis tools ABAQUS, PATRAN/PTThermal, Pro/Engineer, IDEAS and AutoCAD

EDUCATION

B.S., Mechanical Engineering, August 2004
University of Maryland, College Park, MD

INTERESTS

- Golf