

Walter Kaden

Systems Engineer (Senior Staff)

Bordentown, NJ - Email me on Indeed: [indeed.com/r/Walter-Kaden/e84a613f4956361a](https://www.indeed.com/r/Walter-Kaden/e84a613f4956361a)

Over twenty-nine years of experience in the design of spaceflight power and battery systems and requirements management. Lead Design Engineer responsible for all technical aspects in the development and qualification of battery designs including subcontract management activities. Lead of the Commercial Space Systems Requirements, Analysis and Verification (RAV) group, providing technical supervision and mentoring to other engineers, enabling the use of standardized practices and managing staffing plans and labor charging performance.

- Battery Design
- Requirements Development, Management and Verification/Validation
- Electrical Power Systems

Authorized to work in the US for any employer

WORK EXPERIENCE

Systems Engineer (Senior Staff)

LOCKHEED MARTIN COMMERCIAL SPACE SYSTEMS - Newtown, PA - 2001 to April 2015

Lithium-Ion Cell and Battery Certified Principal Engineer for the GOES-R Program

- Guided overall technical management of the Lithium-Ion Cell, the first large quantity procurement of flight quality Lithium-Ion storage cells by Lockheed Martin.
- Lead Lockheed Martin team for the subcontract of the Lithium-Ion Battery, the first procurement of a high power Lithium-Ion Battery for a demanding government customer.
- Provided thorough reviews of the Saft America, Inc, battery thermal, structural, mechanical and electrical designs, manufacturing and test documentation in order to minimize the pathfinder learning curve.
- Streamlined manufacturing processes and functional, performance, environmental and safety test methodology to reduce schedule.
- Provided technical leadership of nonconformance and test failure root cause investigations, corrective actions and nonconformance closures, resulting in a 90% reduction in cell level and 50% reduction in battery level defects.
- Performed final hardware acceptance and certification reviews.

Lead of Requirements, Analysis and Verification Group in Systems Engineering

- Supervised the day to day activities of several engineers including management of staffing plans and performance to schedule and cost requirements.
- Managed the flowdown of all program performance requirements to lower levels and verification of requirements during all phases of design, analysis and test, including noncompliance resolution.
- Supplied engineering support to LMCSS Commercial and Government New Business opportunities, including technical review of all request for proposal (RFP) contractual requirements documents and implementation of changes to those documents to reflect the LMCSS standard product line and performance.
- Supported CMMI Project Assessment in the Requirements Development, Requirements Management, Validation and Verification process areas, with particular emphasis on the implementation of bi-directional requirements traceability.
- Achieved significant leveraging of a previous program's verification effort, resulting in a 67% reduction in the number of charged engineering hours.

Systems Engineer

SYSTEM DESIGN CONCEPTS - Lawrenceville, NJ - 1998 to 2001

Power Subsystem Engineer

- Analyzed the Power Subsystem requirements (voltage drop, wire sizing) and performed trade studies (cell bypass, battery charging system) for the STS Electrical Auxiliary Power Unit (EAPU) while on site at Boeing Space Systems (Torrance, CA)

Walter M. Kaden wckaden@erols.com

- Developed system model of the Electrical Power Subsystem and Control Electronics used on Hubble Space Telescope and performed voltage drop, fuse sizing and worst case analysis using Pspice and SABER
- Authored a proposal for a 270V Battery System, including safety and risk assessment, for use on the X-38 Program
- Prepared a performance specification, an electrical and mechanical interface requirements document and a technical assessment of the major suppliers for a Lithium-Ion Battery proposed for the Next Generation Space Telescope Program

Systems Engineer

LOCKHEED MARTIN MISSILES AND SPACE - East Windsor, NJ - 1986 to 1998

Power Subsystem Engineer for the Defense Meteorological Satellite Program (DMSP)

- Interfaced with the customer and senior management to provide status and to resolve issues related to the power subsystem
- Verified compliance to program requirements for all power component designs and spacecraft integration and test activities related to the power subsystem

Design Engineer

Lead Engineer for battery design teams for several commercial programs, with accountability for designs from proposal stage to on-orbit operation

- Developed standardized, modular battery design for the A2100 program commercial satellites

EDUCATION

B.A. in Physics

Wake Forest University - Winston-Salem, NC

1985

LINKS

<https://www.linkedin.com/pub/walter-kaden/12/507/61a>