

Battel Engineering

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Steven Battel has 33 years experience as an engineer and manager in multiple aerospace and scientific disciplines. President of Battel Engineering since 1990, he provides engineering, development and review services to NASA, DOD, University, and Industrial clients. Areas of specialization include program management, systems engineering, precision electronics design, scientific instrument design, spacecraft avionics, power systems, high voltage systems, technology development and technology assessment.

Recently completed hardware development projects include flight high voltage power, low voltage power and other electronic systems for the Mars-Phoenix TEGA-MS sensor, the Mars Science Laboratory SAM Instrument, CRaTER detector electronics and AIM-CIP camera. Current hardware developments include electronic systems for the LADEE and MAVEN projects, prototype high voltage systems for space tether and x-ray spectroscopy applications plus advanced hardware concepts and prototypes for missions to Mars, Europa and other solar system targets.

In addition to hardware projects, Mr. Battel participates in NASA review and advisory activities. He was a member of the HST External Readiness Review Team for the SM-2, SM3A, SM3B and SM4 missions, the AXAF/Chandra Independent Assessment Team, the Mars Polar Lander Failure Review Board and JPL Genesis Failure Review Board. Mr. Battel also served as a Red Team or IRT member for the TDRS-H/I/J, GRACE, HESSI, MAP, CHIPS, AQUA, Contour, Cassini, Dawn, SIM, GLAST, STEREO, SDO, New Horizons, Spitzer, MESSENGER, Deep Impact, CloudSat, OCO, Dawn and Mars Odyssey missions. He is a current member of the NESC Power and Avionics SPRT activities and a board member on mission-level NASA SRB and technical support activities for TDRS K/L, RBSP, OCO-2, Aquarius, JUNO, SMAP, MMS and MSL-RAD.

Outside of NASA, Mr. Battel has participated or currently participates in multiple advisory activities. He was a member of the HNS-SPACEWAY broadband satellite Technical Oversight Team and a former member of the Solar Observatory Council for the National Solar Observatory. He is a current member of the Space Studies Board and the Committee on Earth Studies for the National Research Council while also currently serving on two National Academy Committees: "Astro 2010 Decadal Survey for Astronomy and Astrophysics" and "A Decadal Strategy for Solar and Space Physics". Previous National Academy assignments include the "Committee On Assessment of Options for Extending the Life of the Hubble Space Telescope", the "NASA Astrophysics Performance Assessment" and "The Role and Scope of Mission-Enabling Activities in NASA's Space and Earth Science Missions".

Mr. Battel is a graduate of the University of Michigan. Prior to being President of Battel Engineering, he worked as an engineer, researcher and manager at the University of Michigan, Lockheed Palo Alto Research Laboratory, UC Berkeley, and the University of Arizona Lunar and Planetary Laboratory. At UC Berkeley, Mr. Battel was Project Manager for the Extreme Ultraviolet Explorer (EUVE) Project. He is the recipient of several awards including the NASA Public Service Medal and thirty-two NASA/GSFC/JPL individual and group achievement awards. In 2008 he was Mr. Battel was elected a National Associate of the National Research Council of the National Academies. He is the author or a co-author on twenty-two engineering and scientific papers and is a member of several engineering and scientific societies including Tau Beta Pi, Eta Kappa Nu, AIAA (Assoc Fellow), IEEE (Senior), ASME, SPIE, OSA, AIP, SAE, INCOSE, NYAS, SHOT and the AAAS.