

Call for Papers

SAE 2014 Aerospace Systems and Technology Week

September 23 – 25 2014 – Cincinnati, OH, USA

Abstract Deadline	February 18, 2014
Review-ready Manuscript	April 1, 2014
Final Manuscript due to SAE	July 29, 2014

The inaugural SAE Aerospace Systems and Technology Week incorporates the highly successful SAE Power Systems Conference (this would be the 11th edition of that event) with the equally successful SAE Avionics event, along with new topics for propulsion and unmanned systems. The combination of these events reflects the continued progress of the integration of propulsion, power, and control in providing ever-increasing performance. This event will highlight technology in transition, focusing on past successes, ongoing efforts and existing or perceived future impediments to fielding new technologies from the user perspective for military & commercial aerospace and other aerospace system applications.

The 2014 event will focus on the theme: "Propulsion, Power, and Avionics: Performance through Integration." Through the early definition of system interfaces, technology development can ensure that emerging and future highly integrated platforms avoid integration conflicts that limit their performance.

The conference will provide a forum that not only addresses the most recent technical achievements, but also provides a mechanism for the technology and user communities to work together to ease the process of bringing these technologies to fruition. In order to provide more opportunities for technology transition and networking, the Planning Committee has assembled a diverse group of government and industry leaders to organize the technical program.

The Planning Committee is seeking abstracts on the following topics. The committee will also consider abstracts on other topics related to the scope of this conference.

Integrated Propulsion, Power and Avionics

- Integrated flight/propulsion control systems
- Propulsion integration: electrical and thermal management
- Systems integration
- Energy optimization
- Health monitoring, prognostics/diagnostics
- Modeling, simulation, analysis & control
- Aircraft wiring systems
- Systems safety
- Flight/vehicle management systems
- Unmanned systems / avionics, controls and payloads

Power Systems

- Battery systems for ground, air and space applications
- Commercial power systems
- Electric actuation
- Fuel cell systems
- High temperature electronics
- Thermal management for aerospace power systems & applications
- Aircraft power management & distribution
- Power technologies for UAV's
- Interagency Advanced Power Group overview (IAPG)

Avionics Systems

- Avionics SW/HW certification: DO-178 and DO-254
- Integrated architectures and IMA
- RTOS and software platforms
- Model-based architecture and application design
- Avionics Networks

- Fiber optics
- System testing and simulation
- Flight controls, navigation and guidance
- Cabin systems
- Cyber-security
- Aircraft displays, instruments and instrumentation
- Aircraft lighting
- Sensor integration/interfaces
- Embedded COTS
- Obsolescence and counterfeit parts management

Propulsion

- Turbo-machinery and combustors
- Powerplant systems & functions
- Aircraft integration
- Propulsion and integrated controls
- Engine and controls system certification

Unmanned Aerial Systems

- Aerodynamics
- Cooperative systems
- Cyber-security
- Detect sense and avoid
- Guidance, navigation and control
- Micro air vehicles
- Propulsion
- Safety, certification and standards
- System integration
- Payload integration/interfaces/architectures
- UAS human-machine interface
- UAS datalinks

Space Systems

- Avionics
- Cyber-security
- Networks, datalinks, and data bus technologies
- Power Systems
- Propulsion
- Safety, certification and standards
- System integration

Abstracts should be 300-500 words in length, present facts that are new and significant, and should include results achieved, if applicable. Abstracts, including paper title, author name(s), mailing address, telephone number, facsimile number, and email address, should be submitted no later than **February 18, 2014**. Abstracts may be submitted [ONLINE](#).

For assistance with on-line abstract submission, please contact Joan Hudson at jhudson@sae.org; 724-772-4003.

To obtain an exhibition prospectus, contact: Vanessa Reddick, SAE Corporate Customer Sales, Telephone: 724-772-7591 or 1-888-875-3976 Fax: 1-724-776-3087, Email: vreddick@sae.org.