CALL FOR PAPERS

ABSTRACT SUBMITTAL DEADLINE 30TH JUNE 2014

THE LEADING DEDICATED EXHIBITION & CONFERENCE FOR THE AVIATION ELECTRONICS & AVIONICS COMMUNITY

CREATING DISCUSSIONS FOR A SAFER SKY

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CONFERENCE CALL FOR PAPERS

The Conference & Advisory Committee is now accepting abstracts for the Aviation Electronics Europe Conference 2015 and invites you to submit your abstract for consideration.

SUGGESTED ABSTRACT TOPICS

Your abstract should address one or more of the following suggested topics or can be anything else you feel is relevant to the industry.

AVIONICS INDUSTRY OVERALL

- Regulatory issues and information impacting the avionics industry
- Certification requirements, tools and advice on achieving certifications
- Standards impacting the avionics market, such as FACE, small form factors, more
- Market analysis and future outlook for commercial, general, and defense avionics
- Increasing efficiency, such as in flight plans, reduced separation minima, fuel reduction technology, etc.
- Importance of rugged, high-reliability, and radiation-tolerant/hardened systems and components
- Safety and quality management systems (SMS/QMS)
- Cockpit display systems including Flight Critical Displays, Mission Display Units, Digital Map, Control Display Units, and Processing Units
- Databus Technologies
- Enhanced vision system (EVS), synthetic vision system (SVS), combined vision system (CVS), and enhanced flight vision system (EFVS) use, trends, equipment, benefits/drawbacks
- Power electronics, wiring harness, and thermal management issues (design issues, requirements management, battery safety, power conversion, heat dissipation and generation) in aircraft and rotorcraft, UAVs, spacecraft, satellites
- Embedded systems & software development trends & technologies current and future
- Software considerations, tools, concerns, and benefits, including secure real-time operating systems, (RTOS) development platforms and environments, code verification, electronic design automation (EDA), product lifecycle management (PLM), human-machine interfaces, and more
- Simulation and training, for pilots (flight simulation/training)
- Testing & measurement certification, trends, requirements, issues, tools & training
- Data acquisition, data exploitation, data transmission, data security, data storage, including sensors, electro-optics, cameras (still and video, thermal, etc.) used in data acquisition from satellites, gimbals on aircraft and rotorcraft, UAVs, etc.
- Various sensors and associated hardware and software technologies employed on commercial and defense aircraft and satellites, including UAVs
- Pilot issues, needs, technologies, trends, and tools
- Electronic flight bag (EFB) innovations, trends, tools, benefits over alternatives, and adoption
- Air traffic management challenges, concerns, solutions, and options; comparing and contrasting methods; work being done at the government, association, and local levels
- Pilot display technologies and trends; comparing heads up and heads down displays
- Global positioning system (GPS), Bluetooth, and Wi-Fi avionics innovations, caveats
- Connectivity, communications, IFE, datalink and voice
- Aircraft Communications Addressing and Reporting System (ACARS) datalink vs. voice prompts, communications, and confirmations
- Aircraft Communications Security Issues and technologies
- Software Defined Radios, VHF/UHF Transceivers for Airborne Communications
- Unmanned aircraft & ground control technologies
- Other relevant topic

COMMERCIAL AND BUSINESS AVIONICS

- Commercial Avionics Market outlook
- SESAR and NextGen challenges, issues, solutions
- Buy new aircraft vs. upgrade avionics in existing fleet
- Avionics upgrade modernisation and retrofit
- Equipage and regulatory/certification issues for SESAR/NextGen in the cockpit
- Successes/Case studies on integrating new avionics into older aircraft
- New developments in cockpit displays
- New developments in cockpit controls
- ADS-B In technology, ADS-B Out, and ATSAW
- Airline, pilot, regulatory body perspectives on electronic flight bags, Apple’s iPad as an electronic flight bag
- Achieving standardization in flight management systems -- case studies and lessons learned
• Harmonization efforts between SESAR and NextGen technologies
• Challenges and solutions for integrating unmanned aerial vehicles into civilian airspace
• Latest avionics roadmaps from avionics system integrators; e.g., Thales, Rockwell Collins, Honeywell, Garmin, Universal Avionics, GE Aviation, etc.
• Airbus and Boeing avionics roadmaps
• Solutions for preventing runway incursions and excursions
• GPS technology for avionics systems
• ARINC Standards updates
• Required navigation performance (RNP), required communication performance, and required surveillance performance methods and tools for avionics systems
• Airline roadmaps for avionics and next-generation air traffic management (ATM) solutions
• Pilot perspective/lessons learned/human factors analysis of flying RNP, learning to use new next generation avionics systems
• ASAS tools for the pilot
• 4D trajectory technology
• Other relevant topic

HELIICOPTER/ROTORCRAFT AVIONICS
• Meeting regulatory requirements; financial concerns, business cases, advice, tools
• Market/community concerns, including lack of new pilots, reduced flight hours, new taxes and fees, noise ordinances
• Helicopter terrain avoidance warning systems (HTAWS)
• Market analysis and outlook for commercial and defense rotorcraft
• Glass cockpit upgrades in defense and civil helicopter platforms
• Situational Awareness
• NVG Technologies, issues & solutions
• Health and Usage Monitoring Systems (HUMS). Should this be fitted on more aircraft?
• Hybrid and electric rotorcraft designs, innovations
• Modifying, retrofitting new and existing rotorcraft for myriad applications (Medevac, oil and gas, etc.)
• Leveraging open standards and COTS technology for helicopter cockpit retrofits
• Flight data recording, transmission, analysis, and storage systems for helicopters
• Managing obsolescence and lifecycle costs of helicopter avionics systems
• Helicopter safety concerns, solutions, technologies
• Manned and unmanned rotorcraft training and simulation
• Other relevant topic

DEFENSE AVIONICS
• Defense avionics market analysis, opportunities, and future outlook
• Managing obsolescence in modern avionics systems
• Secure Communications including methods for anti-jam communications, Wideband interfaces for external encryption devices and Tap- and spoof-proof communications through integrated encryption.
• Impact of SESAR/NextGen airspace changes on military aviation
• Case studies on military avionics retrofits
• COTS vs custom electronics in military avionics
• Electronics for size, weight, and power (SWaP)-constrained environments/cockpits
• Power and thermal management challenges and avionics solutions
• Avionics test and evaluation challenges for military aircraft
• Managing software changes in defense avionics systems
• Rapid system deployment for meeting immediate battlefield needs
• Detecting and avoiding counterfeit components
• Import/export (ITAR) compliance challenges when dealing with US government
• Lead-free challenges in military avionics
• Defense avionics for targeting
• Global positioning systems (GPS) in avionics
• Satellite avionics innovations and geospatial imagery
• Aerial weaponry, including smart bombs with GPS-based avionics
• Bluetooth, Wi-Fi, and 3G/4G technologies on the battlefield (manned and unmanned aircraft)
• Wrist computer systems and digital flight gloves for pilots
• Voice and touch-screen control in the cockpit
• Innovative avionics on the horizon, for the future force
• Other relevant topic
UNMANNED & OPTIONALLY MANNED AERIAL VEHICLE AVIONICS
- Challenges and solutions for controls, avionics and instruments in optionally manned aircraft
- Weight challenges and solutions for avionics, instruments & components in UAV’s
- Managing shock and vibration in UAV avionics
- Rugged, high-reliability components and systems for UAV avionics
- UAVs in public airspace: concerns, considerations, systems, solutions, impediments, advice
- Power and thermal avionics issues and innovations for UAVs
- Security issues related to UAVs, UAV ground controls, data links, software code, sensors, more
- Software challenges and solutions for unmanned avionics
- Real-world UAV applications and success stories (civil and defense)
- UAV global market analysis, opportunities, and future outlook
- Weaponized UAV concerns, challenges, caveats, and solutions
- Autonomy in UAVs: challenges and solutions
- Other relevant topic

SATELLITE AND SPACE AVIONICS
- Global space market forecast, opportunities (civil and defense)
- Commercial (COTS) technology for satellite and spacecraft avionics
- Radiation-hardened and radiation-tolerant challenges and solutions
- Opportunities afforded by the commercial spaceflight industry (manned and unmanned)
- Other relevant topic

ABSTRACT SUBMITTAL
- Abstracts must have a title and list all authors. Full contact information for the primary contact, authors (company affiliation, telephone number and email address) must be provided.
- Please designate which author would be the speaker.
- Presentations must be of interest and of practical value to executives, managers, engineers engaged in the avionics industry.
- Papers will be selected based on a review of abstracts by the Advisory Board.
- Papers must not be commercial in nature. They should be relative, informant or educational but solutions & examples from your own products, technologies or services can of course be used as examples.

INITIAL ABSTRACTS SHOULD BE OF 150 TO 250 WORDS AND ALSO CONTAIN THE FOLLOWING INFORMATION
- Abstract Title
- What general and/or specific conference topic it should come under.
- Why you think this would be relevant to the conference

PLEASE SEND COMPLETED ABSTRACT FOR CONSIDERATION BY THE CONFERENCE COMMITTEE TO
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FOR MORE INFORMATION OR TO SUBMIT ONLINE PLEASE USE THE LINK BELOW

Read more and to submit your abstract >>

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