

FBW10

CANEUS FLY-BY-WIRELESS WORKSHOP 2010

August 24-27, 2010 Orono, ME, USA
www.caneus.org/fbw10

Technical Co-Sponsors: CANEUS, NASA, WiSe-Net Lab, IEEE R1/R7/Montreal/Maine/COMSOC

2010 CANEUS Fly-by-Wireless Workshop will bring together leaders from aerospace industry, academia, and government agencies, to discuss recent advances in wireless communications focused on applications in aerospace industry. The workshop will be hosted by the University of Maine, Orono, Maine, USA, on August 24-27, 2010. The Workshop remains a unique forum for wireless technology providers and end-users to discuss aerospace roadmap for future research and development and form meaningful partnerships. New innovations such as battery-free wireless sensor systems, reliable multi-tier wireless networks, and high temperature sensors will be highlighted at the workshop. Ultimately, this effort will contribute to minimizing cables and connectors across the aerospace industry by providing more reliable and higher performance wireless alternatives at lower cost.

The 2010 CANEUS FWB Workshop, third of its kind, builds on the successes from the 1st Joint CANEUS/NASA 2007 "Fly-by-Wireless" Workshop, held in March 2007 at Grapevine, Texas and the 2nd CANEUS "Fly-by-Wireless" Workshop held in June 2009 at Montreal, Canada. The first CANEUS/NASA FBW workshop grew out of an identified need from the CANEUS 2006 Aerospace End-User Committee on SHM - Structural Health Monitoring held at Toulouse. Organizations from the Americas, Europe and Asia regions, attending CANEUS workshops, have taken concrete steps to continue development of their wireless programs and also establish successful collaborative projects, e.g. Wi-Testbed, Frequency Spectrum, Wi-Engine, Wi-SHM, Wi-Sense, and others.

CANEUS FBW10 Scope

1. Provide international forum on user needs & wireless alternatives to precipitate cooperation and partnerships.
2. Promote understanding of the maturity and capability of alternatives to wired infrastructure.
3. Identify key challenges and solution paths and capturing lessons learned from wired or wireless connectivity that need to be addressed in future architectures and technologies.
4. Quantify the life cycle return on investment or mission need for various applications and opportunities to establish which investments and partnerships have promise.
5. Identify & enable partnerships, working groups, projects & plans to implement "FBW" in aerospace vehicles.

Application End-Users Categories	Technology Developers Categories
<ul style="list-style-type: none">• Sensor DAQ Micro-Miniaturization• Less-Wire Architectures• Structural Health Monitoring (SHM)• RF immunity in Electromagnetic Environment• Frequency Spectrum allocation• Aircraft/Rotorcraft/Spacecraft/Rockets• Manned and Unmanned• Jet Engines and Rockets (hot/cold sections)• Ground Support Systems & instrumentation• Inflatable Wireless Antennas and Structures	<ul style="list-style-type: none">• Passive wireless RFID & sensor tags• Standalone, robust wireless data acquisition• Self contained miniaturized wireless sensors• Low weight implementation of SHM• Scavenge and Rechargeable power sources• Harsh Environment wireless sensors• Robust Programmable wireless radios• High speed wireless avionics communications• Multi-drop systems & Data on power lines• Standard interfaces for HW/SW & RF

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Paper Submission

Original papers in the area of wireless communications with applications in aerospace industry may be submitted in an extended summary format (2 pages, Font 12, double column, IEEE Format) with sufficient details to allow a critical review. The paper submission deadline is **5:00PM EDT, July 30, 2010**. Papers shall be submitted using the EDAS paper submission system to one of the two "application end user" or "technology developer" categories.

Registration

For more info and registration please visit workshop website www.caneus.org/fbw10. Deadline for early registration is **July 30, 2010, 5:00pm EST**. Registration Fee is **\$150** and includes 3 lunches, one dinner and all morning and afternoon breaks plus paper abstracts and presentations on a CD. The registration fee will increase to **\$250 after July 30, 2010** and will close on **August 14** or when the **limit of 250 attendees** is reached, whichever comes first. **IEEE Members will receive a \$50 rebate on their registration at the event.**

Organizing Committee

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