
Sponsored by the Arizona Chapter of the American Helicopter Society

January 20-22, 2015
Scottsdale, AZ, USA

CALL for PAPERS

Overview: The 21st century has seen a continued emphasis on Unmanned Air Vehicles (UAVs) and autonomous behavior development for both military and civilian applications on a global basis. Numerous unmanned rotorcraft are in varying stages of development all over the world along with the technologies that will safely integrate them into commercial airspace.

Papers are invited for this Specialists’ meeting in the areas of unmanned rotorcraft platform design from micro UAVs to optionally piloted designs; analysis, simulation and testing of autonomous behaviors; UAV test sites capabilities, both military and the new FAA UAV test sites; workload reduction and improved man-machine operator interfaces for control and mission operation; Topics of interest include, but are not limited to configuration design, fault tolerant control systems, low Reynolds number aerodynamics (applicable to micro and organic air vehicles), active flow control (development of hingeless aerodynamic surfaces), self repairing structures, technologies that cover innovative algorithms, sensors, etc., for autonomous rotorcraft operations in cluttered and obstacle rich environments, zero-zero sensor-based auto land, collaborative flight between unmanned and other manned/unmanned rotorcraft systems, networked communications in low altitude flights, areas of unique design and testing of unmanned micro and organic air vehicles, and design and testing of “green” rotary wing UAVs powered by fuel cells or alternative fuels.

In addition, the overwhelming focus on Network Centric Operations (NCO) and its application to rotorcraft and Unmanned Aerial Systems (UAS) has expanded the scope of the 2015 Specialist’s Meeting. Subjects may include but are not limited to, sharing of information across the operational field of use, command-and-control, ad hoc network enabled systems, UAS control and interoperability with both ground and other aerial systems, networked sensor integration, and NCO related analysis, modeling, and simulation.

Abstract Submittal: Abstracts should be limited to no more than 1000 words, present the status of the background data to be used, summarize figures and illustrations to be used (with samples), and include a summary of important conclusions with a statement as to whether similar results have been, or may be, presented or published elsewhere. The abstract should be sufficient to enable the reviewer to determine the quality, scope, significance, and current completion status of the information that will be submitted in the final paper. Priority will be given to papers in which significant results and conclusions will be provided and in which future research and development are clearly defined. Abstracts must be submitted no later than September 2, 2014. Electronic submittals (pdf format) are strongly preferred. Abstracts should be submitted to the Technical Chairman of the Meeting:

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Completed Papers: Authors will be notified of final selection by October 3, 2014. Format for the papers will be sent with the notification of selection. No paper will be scheduled for presentation if a written paper has not been received by January 12, 2015. It will be author’s responsibility to obtain all necessary clearances. Additional Information: For additional information regarding the meeting, please contact Mr. Dino Cerchie, Administrative Chairman, at dino.a.cerchie@boeing.com or (480) 891-0223 or 480-209-7711.