

# International Specialists' Meeting on Unmanned Rotorcraft Systems

Sponsored by the Arizona Chapter of the American Helicopter Society



January 20-22, 2009  
Phoenix, Arizona, USA



## CALL for PAPERS

**Overview:** The 21<sup>st</sup> century has seen a renewed emphasis on Unmanned Air Systems (UASs) for both military and civilian applications on a global basis. The US Department of Defense has embarked on an ambitious development program aimed at fielding several fixed-wing and rotary-wing unmanned systems in the next decade. In the US, several unmanned rotary-wing developmental programs are underway including the A-160 Hummingbird, Unmanned Little Bird and the Fire Scout.

There has also been significant activity in the development of Micro Air Vehicles.

This Specialists' meeting will focus on the design, control and testing of unmanned rotorcraft systems as well as any other VTOL (vertical takeoff and land) capable systems. Papers are invited in the areas of unmanned rotary wing platform designs, with emphasis on long duration endurance, survivability and affordability. Topics of interest include, but are not limited to, concept of operations (CONOPS), self-repairing structures, fault-tolerant control systems, low Reynolds number aerodynamics (applicable to micro and organic air vehicles), active flow control (development of hingeless aerodynamic surfaces), sensor capabilities for autonomous rotorcraft, zero-zero sensor-based auto land, collaborative flight between unmanned and other manned/unmanned rotorcraft systems, modeling and simulation, ground control, networked communications in low altitude flights and various levels of autonomy and associated technologies applicable to VTOL UASs. Papers are also invited in the areas of unique design and testing aspects of unmanned rotorcraft especially micro and organic air vehicles.

**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 July 31, 2008. 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 August 15th, 2008. 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 December 15, 2008. It will be author's responsibility to obtain all necessary clearances.

**Additional Information:** For additional information regarding the meeting, please contact Mr. Scott Swinsick, Administrative Chairman, at [scott.swinsick@boeing.com](mailto:scott.swinsick@boeing.com) or (480) 891- 8429.