



**International Specialists' Meeting on  
Unmanned Rotorcraft and Network Centric Operations**  
*Sponsored by the Arizona Chapter of the American Helicopter Society*

**January 25-27, 2011  
Tempe Mission Palms Hotel, Tempe, AZ, USA**

**CALL for PAPERS**

**Overview:** The 21<sup>st</sup> century has seen a renewed emphasis on Unmanned Air Vehicles (UAVs) 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 development/production programs are underway including the A-160 Hummingbird, Unmanned Little Bird and the Fire Scout. The development of Micro Air Vehicles continues to be of significant interest in today's operational environments. In addition, numerous unmanned rotorcraft for civil applications are in varying stages of development all over the world.

Papers are invited for this Specialists' meeting in the areas of design, control, testing, and operation of unmanned rotorcraft, with emphasis on long endurance, survivability and affordability. Topics of interest include, but are not limited to, 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), 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 fuel alternatives.

In addition, the overwhelming focus on Network Centric Warfare and its application to rotorcraft and UAS has expanded the scope of the 2011 Specialist's Meeting. Papers are invited that include, but are not limited to, sharing of tactical information across the battlefield, battlefield command-and-control, ad hoc network enabled systems, UAS control and interoperability with both ground and other aerial systems, networked sensor integration, and NCW 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 July 30th, 2010. Electronic submittals (pdf format) are strongly preferred. Abstracts should be submitted to the Technical Chair of the Meeting:**

**Dr. Ram D. JanakiRam**  
Boeing Rotorcraft  
Mail Stop M530-B229  
5000 E. McDowell Road  
Mesa, AZ 85215

**e-mail: [ram.d.janakiram@boeing.com](mailto:ram.d.janakiram@boeing.com)**  
**Phone: (480) 891-6057**  
**Fax: (480) 891-7671**

**Completed Papers:** Authors will be notified of final selection by **September 24, 2010**. 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 17, 2010**. 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.