

2015 INTERNATIONAL CONFERENCE ON UNMANNED AIRCRAFT SYSTEMS (ICUAS'15)

June 9-12, 2015, Denver Marriott Tech Center
4900 S. Syracuse Street, Denver CO 80237

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The 2015 International Conference on Unmanned Aircraft Systems, **ICUAS'15**, will be held in Denver, CO, on June 9-12. Denver is a metropolitan city with major attractions, and Colorado is the second in Aerospace Industry companies in the U.S. June 9 will be a Workshop/Tutorial day, followed by a three-day technical Conference. Judging from the interest ICUAS has drawn over the past seven years and its growth, **ICUAS'15** is expected to continue on this path and attract the highest number of participants from academia, industry, federal/state agencies, government, the private sector, users, practitioners and engineers who wish to be affiliated with and contribute technically to this highly demanding and rapidly evolving and expanding field. Details may be found at <http://www.uasconferences.com> and related links. **ICUAS'15** will be fully sponsored by the **ICUAS Association**, a non-profit organization; Information about the organization may be found at www.icuas.com. The theme of **ICUAS'15** will focus on the very challenging and timely topic of **'integrating UAS into the national airspace'**.

National and international organizations, agencies, industry, military and civilian authorities are working towards defining roadmaps of UAS expectations, technical requirements and standards that are prerequisite to their full utilization, as well as legal, policy and ethical issues. The 2013 calendar year has been the critical year for UAS R&D: the FAA announced the six UAS sites within the U.S., and roadmaps towards UAS integration into the national airspace have been published in Europe and in the U.S. The next generation of UAS is expected to be used for a wide spectrum of civilian and public domain applications. Challenges to be faced and overcome include, among others, see-and-avoid systems, robust and fault-tolerant flight control systems, payloads, communications, levels of autonomy, manned-unmanned swarms, network-controlled swarms, as well as challenges related to policies, procedures, regulations, safety, risk analysis assessment, airworthiness, certification issues, operational constraints, standardization and frequency management, all of paramount importance, which, coupled with 'smart', 'environmentally friendly' cutting edge technologies will pave the way towards full integration of UAS with manned aviation and into the respective national airspace.

ICUAS'15 aims at bringing together different groups of qualified military and civilian representatives worldwide, organization representatives, funding agencies, industry and academia, to discuss the current state of UAS advances, and the roadmap to their full utilization in civilian and public domains. Special emphasis will be given to current and future research opportunities, and to 'what comes next' in terms of the essential technologies that need to be utilized to advance further UAS. Conference topics include:

Airspace Control	Integration	See-and-Avoid Systems
Airspace Management	Interoperability	Security
Airworthiness	Levels of Safety	Sensor Fusion
Air Vehicle Operations	Manned/Unmanned Aviation	Simulation
Autonomy	Micro- and Mini- UAS	Smart Sensors
Biologically Inspired UAS	Navigation	Standardization
Certification	Networked Swarms	Swarms
Control Architectures	Payloads	Technology Challenges
Energy Efficient UAS	Path Planning	Training
Environmental Issues	Regulations	UAS Applications
Fail-Safe Systems	Reliability of UAS	UAS Communications
Frequency Management	Risk Analysis	UAS Testbeds

Through Keynote/Plenary addresses, invited and solicited presentations, and round table discussions, it is expected that the outcome of the Conference will be a better understanding of what industry, the military and civilian national and international authorities need, and what are the crucial next steps that need to be completed before UAS are widely accepted even in everyday life applications.

IMPORTANT DATES

February 16, 2015 (Extended):	Full Papers/ Tutorial Proposals Due
April 24, 2015:	Acceptance/Rejection Notification
May 11, 2015:	Upload Final, Camera Ready Papers
April 24 – May 11, 2015:	Early Registration

PAPER SUBMISSION

Papers must be submitted and uploaded **electronically** through controls.papercept.net. Go to <https://controls.papercept.net>. Click on the link "Submit a Contribution to **ICUAS'15** and follow the steps. The paper format must follow IEEE paper submission rules, two-column format using 12 point fonts, Times New Roman. The maximum number of pages per submitted paper is **10**. Illustrations and references are included in the page count. Submitted papers will undergo a peer review process coordinated by the Program Chairs, the ICUAS Advisory Committee Members, the IPC and qualified reviewers. Authors will be notified of acceptance at the latest by April 24, 2015. **Accepted papers must be uploaded electronically no later than May 11, 2015.** Authors are encouraged to accompany their presentations with multimedia material (i.e., videos), which will be included in the Conference Digital Proceedings. Conference Proceedings will be acquired by IEEE and they appear in IEEE Xplore. After the Conference, authors of accepted papers are strongly encouraged to submit **significantly different and enhanced** versions of their papers (with < 40% overlap) to: i.) Either the Special Issue on "Advances in Unmanned Aircraft Systems" to be published in the **Unmanned Systems Journal**, World Scientific; ii.) Or the Edited Book on: **Unmanned Aircraft Systems: Theory and Applications**, to be published by Springer. Special Issue and Edited Book All contributions will undergo a peer review process coordinated by the Guest Editors and expert reviewers. **Special Issue and Edited Book submission deadline is August 31, 2015.**