

CONTRIBUTING STAKEHOLDERS

Remote Control Aerial Photography Association



By Patrick Egan, Director Special Programmes & Board Member

RCAPA® (Remote Control Aerial Photography Association) is a professional association of dedicated remote control aerial photographers. RCAPA provides operational safety guidelines, best business practices, networking and new technology information.

RCAPA currently represents 1600 + members in 25 countries outside of the United States and Canada. The membership is made up of, but is in no way limited to, manufacturers of UAS components and systems, professional photographers, students and RC AP enthusiasts. The members employ a myriad of different camera platforms and the overall philosophy is that this diversity represents a, «tool(s) in the toolbox» analogy. These platforms include both fixed and rotary wing, blimps, kites, poles and members have also been know to employ manned aircraft.

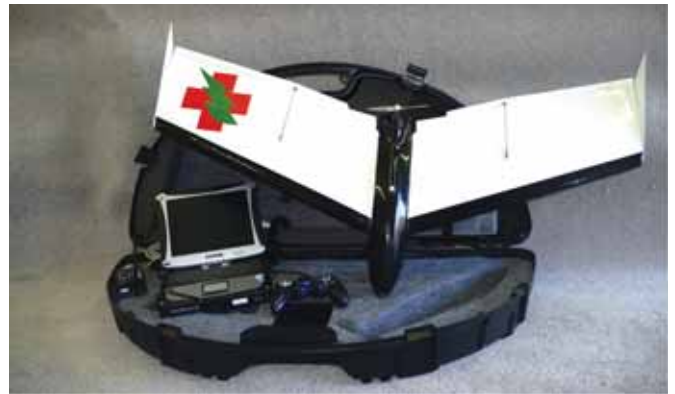
Commercial uses for these platforms include, but are not limited to: agriculture, geographic information systems, search and rescue, real estate, construction, civil engineering, archeological research, insurance loss investigation, motion picture/television work, news gathering, public and private asset management.

How RCAPA Works

The structure of our association is one of a participatory nature, wherein the direction or focus is consensus based. As this approach is less encumbered by rigid structure, it fosters innovation in new and creative uses for the technology. Unlike the hierarchical structure explored/exploited in academia or corporate settings, members are encouraged to let their ideas/goals and objectives be known, then they are encouraged to work up/on solutions to further those suggested ends. These solutions must be committed to by the originating member or group and must then be supported by the board. If at any point the majority of those participating in said action concludes that the concept is evolving into something outside of either the scope and or limitations of the association, a meeting is called. The concerns are either addressed and the appropriate changes are agreed upon, and made or the program is officially terminated. No one member sets or controls policy, members are encouraged to act, but those actions we trust, are tempered by the effect they may have on the membership present and future.

Association Funding & Underwriting

Primary association funding is voluntary and donation based, limited advertising/underwriting may be undertaken to facilitate special programs that further the goal(s) of the association. Those types of programs facilitate attendance to meetings, hearings and symposia. A professional membership program with corresponding yearly dues was raised but the idea was shelved for various reasons, thus the membership will remain free until further notice.



RCAPA: A Brief History

The Remote Control Aerial Photography Association was formed in May of 2004 and went public in June of that same year. Those flying in the early days flew under the auspices of AC 91-57^[1], and not just the members, but DoD contractors too. Mainly the AMA version that inadvertently had a grammatical error contained in it that led most to believe there was no altitude restriction when operating outside of a three mile radius of an airport. In those days the nomenclature was ROA (remotely operated aircraft), or UAV, before the now commonly used UAS, and incidentally the inception of the FAA's Unmanned Aircraft Program office, AIR-160. It was decided that we would move toward the objective of building a clearing house for information pertaining to the use and applications of RC AP (remote control aerial photography). My motive for joining the association (member #11), lies in standards, ethics and the best practices a professional guild could bring by a working consensus. The distinguishing attribute in this instance, is one of an accelerated learning curve afforded by a peer review, of style and technique that only a specialized type of association could bring. All of these factors taken into consideration, bring credibility in a refined final product and confidence brought by learning through the collective experience.



The association's first major professional goal was to find and or develop a program that would facilitate commercial liability underwriting insurance. That goal was achieved after about a year of looking, repeated negotiation, and hard work. What had finally assuaged the underwriter's

concerns was that RCAPA had developed a set of best practices and a corresponding test that would expose the uninitiated membership to the basic rules of the NAS i.e. airspace classes, NOTAM(s), VFR, etc. The impetus is to get the testing member to go to and use the resource that is the FAA's web page. This self certifying program proved the touchstone for satisfying the AAA rated companies concerns, and an insurance program was set up and is still in effect today.

RCAPA's efforts and goals were first recognized in the mainstream during testimony to the Committee on Transportation and Infrastructure, Aviation Subcommittee U.S. House of representatives (March of 2006). It was entered in to evidence that RCAPA promoted the idea of commercial use of UAV's in the NAS. [2]



Prior to February 13, 2007, many operators including DoD (and contractors), flew under the auspices and guidance of AC 91-57. (No one could honestly venture a guess as to what auspices are being flown under today.) Over the past 7 years many of thousands of sorties have been flown, and hitherto (and to the best of the author's knowledge), none have resulted in any serious injuries or loss of property.

Activities Supporting UA NAS Integration

RCAPA has participated and shares information/insight with the ASTM F-38 committee on Unmanned Aerial Vehicle Systems. It became apparent that the committee's lack of civilian/commercial focus was not in our best interest.

RCAPA worked extensively with the RTCA SC-203 «Lightly Regulated» sub-group. Members provided SUAS con-ops for several of the different platform types and their respective applications. We also contributed our best practices and worked within the framework to help produce what RTCA SC-203 submitted to the FAA. [3]

RCAPA has also interfaced directly with the FAA AIR-160 office and is slated to participate in the upcoming SUAS Aviation Regulatory Committee. We also support a confirmation hearing for acting FAA director Robert «Bobby» Sturgell.

Our Philosophy

Safe UAS NAS integration is possible with common sense policy. 400' AGL, VLOS (visual line of sight), pilot in command to 1500'. These parameters are self limiting in size and scope and accomplish much in the way of mitigating those concerns voiced by the AOPA and FAA order 7910.4. We are the only segment that has a viable «organic» sense and avoid system (hear, see, avoid). As it admittedly is not the end-all be-all, it



would go a long way in opening the door to partial use beneficial for education, and light commercial work. Thus at the very least leaving the door open for innovation and providing small business the opportunity to cultivate a self-sustaining revenue stream.



Moving Into The Future

What we want to accomplish for our members, and not just those names on the roster today, but also into the future, is an environment in which to flourish. This is RCAPA's commitment that must be sustained across the multi-national multi-year timeframe. Many operators in the United States have patiently waited for the FAA to move forward in a business-like timeframe. Those who chose to stand down have lost tens of thousands of dollars and countless man hours in development and investment. In my conversations with people from the community, the climate is evolving into one of open rebellion and a general disregard for an





administration and policy that appears inept, oppressive and out of touch with reality. It's a new world, with new ideas and technologies. The time has come for those that regulate to fulfil their mandate. We can either have a climate of cooperation and safety for all, or one that is full of contempt for both the regulators and other airspace users! This reality must be faced, and users should soon be able to take back to the sky. The American SUAS community is withering on the vine in that they are unable to legally participate in a viable commercial market, while enduring a 20th century regulatory process. The sector's manufacturers face the stark reality of on one hand having to turn down six figure contracts and on the other the prospect of the market being flooded with \$1000 Chinese UAS in North American law enforcement vehicles.

The U.S. small UAS industry is ceasing to exist as we once knew it, vibrant, full of innovation and dynamic in its progress. The days of fluid advances in capabilities will slow as developers and users continue to be culled by what can only be called a lack of policy action. It is foolish to think those in

the contractor strata will be immune as they will find it impossible to compete in anything, but the large UAS market(s), that too will only be short lived.

RCAPA supports the concept and ideals of UVS International's 'Global Access Initiative', and will continue to spend it's resources working in cooperation with whomever shares the goal of common sense airspace integration. RCAPA salutes those countries whose representatives and regulatory bodies have shown the prescience and fortitude to pave the way for integration of a technology that can and will change our world.

^[1] Advisory Circular 91-57, 06/09/1981

^[2] Mr. Andrew V. Cebula, on behalf of the membership of the AOPA in his testimony to the Committee on Transportation and infrastructure, aviation subcommittee U.S. House of representatives (March of 2006).

^[3] RTCA Appendix I – Best Practices for Small Unmanned Aircraft Systems

