

# Remote Control Aerial Photography Association

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## Commercial UAS Missions – And the Lack of Regulatory Opportunity

Those budding commercial operators face the unenviable regulatory situation that stifles not only small business, but also innovation. In the United States, at least two years have passed since the FAA has issued their clarification of policy and yet, there is still very little in terms of a viable solution on the horizon. You may question, with all of the money and time spent on the global efforts and all of the supposed progress, how one can say that? Well, I would consider myself somewhat involved on most fronts and can say that these efforts, however noble, constitute little more than kicking the can down the road. Most of those with a passion for this technology and its promise share in either global regulatory frustration or a sort of regulatory denial that allows them to justify going on. With almost limitless possibilities (beyond just what has normally been accomplished and traditionally associated with manned aviation), these new applications can solve problems as well as build upon new opportunities past the limitations of those with the «man» in the aircraft.

The RCAPA maxim is that we advocate for the commercial and civil use of this technology and guard and nurture those advantages which give this technology viability. Should unmanned aviation be held to the same standard as commercial carriage aircraft? We don't carry live persons (yet). With what is on the table, we'll be unable to fly farther than VLOS for say the next 10 to 15 years. From my shared vantage point, we run the real risk of potentially mitigating an industry and its viability out of existence. This actuality is totally unacceptable. Do I lay all of this at the feet of the regulator? No! There is plenty of blame to go around for all involved, and I'll aptly take this opportunity to point a finger at those who are not.

This predicament is one that is multi faceted, and in the estimation of some, solvable. We must look and learn from our past mistakes and the many missed opportunities. Let's take a moment to muse on that which we know. The regulators or CAA's are a risk adverse group and the manufacturers and users are ready to go to work yesterday. My engineering colleagues say that to build a safety case one must first define the risks. As I reflect on my experiences, this has not fully transpired. Many of those who have attempted to do so, lack the experience of operating unmanned aircraft. The effort, by and large, constitutes a manned aviation overlay and only leads to misconception pertaining to a newer technology and its uses.

Most of what I've witnessed is emotional responses to perceived dangers and a discounting of empirical data. Where are the statistics? I contend that they are self evident. We have throngs of small operators around the world who are still flying, contrary to the intended FAA et al policy clarifications and «would be» restrictions. The undeniable fact is that more people fly today than ever before and this number continues to grow steadily. This is one of those off the shelf anomalies that will soon resemble the model of the Citizens Band radio explosion of the 1970's. The technology got beyond what the

regulator could police and this is headed (if not already there), in the same direction. Incidentally and to the chagrin of many involved, these people operate well beyond what is being proposed and will continue to do so as long as there are faced with commercial extinction. Sadly, people are turning their backs on expensive commercial liability insurance as there is a valid concern that the underwriter would not cover losses from this activity because of the current FAA policy. This, I believe, helps to illustrate that the CAA's run the real risk of a change in the regulatory status quo. In many peoples opinion, this situation could start a reaction that degrades the safety of the entire airspace system.

## The Two Track System...

Globally, we have a growing open source type of internet based community that does not give thought to anyone having jurisdiction over their activities nor are they waiting on anyone else's timeline. Some of us believe that the regulator needs to get ahead of the curve with some sort of common sense regulation/guidelines that promote safety and cooperation between the airspace users. The current path is one that may very well end up with some starting point regulations being trotted out and hailed as safe stakeholder conciliation. After much fanfare and self adulation, this work will largely go ignored as it will have been outpaced and overrun well before the ink is even dry. Therefore we have no choice but to accept a process that is really no closer to legally allowing an activity that is already taking place.

One possible factor in the lack of regulatory urgency could be that up to this point, the segment has yet to show itself to be the menace painted by some. Incidentally the only real group that is limited in their operations are the law abiding and the vendors. The vendors want to fulfil the proverbial swords into ploughshares analogy yet they can't see integration beyond their respective business plan(s). Military to civilian based business models make for bad policy or even worse, and what we have here, no policy at all. There are few involved who can be looked upon as having a truly objective opinion and most are discounted as only interested in UAS integrations as a means to pilot wheelbarrows full of money to the bank. Objectivity (from all sides), this process resembles a pack of hyenas dining on a zebra carcass.

The standards groups are fine in theory, but the reality is that only well-healed interests can support the effort. Well, you say, what are we to do? Let me expand upon this statement and also offer up a possible solution.

As a past member and contributor to several of the standards groups and the ensuing process, I give this contributor perspective. This is an inherently hard process for a small business person to adhere to. For instance, the travel and teleconferences involve multiyear commitments of both time and money, precious resources that most small businesses just do not possess. If a business has that type of capitol reserve, it would more than likely be put it into product development or research that would latter bear fruit as an income stream. Most of us do not have the luxury of dipping

into overhead budgets of lucrative military contracts or the ever elusive development grant. For the most part, participants have no idea what we do and in most cases have absolutely no idea what is involved in running a small business, yet the process allows them to hold sway over your future. Five years ago, few people held the view that sUAS were commercially viable. I would say that only in the last year or so have some come around to the notion that there could very well be something here.

Should anyone be faulted for trying to make a living? Absolutely not! Should others be barred from making a living? I can only offer the same response. What may be needed is for industry (and not the military industry), to heed the call of Civil Aviation Authority visionaries and develop a commercial Industry Code of Practice. A code would be developed around a small business plan, something considered commercially viable with smaller frangible aircraft that pose less risk (lethality), than those systems developed for the battlefield. I offer the notion that we would be better off having regulations built around the concept of commercial viability (industry consensus of 80% +/-) and safety rather than existing product that fits poorly into would be civil applications. This document could

be analysed objectively by independent safety risk management engineers who would have a starting point in which to define the risks of viable operations. This approach constitutes a fresh look as the processes thus far has only substitute feelings for science and the reality is that feelings are subjective and have done, and will do, little to nurture this budding industry.

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