Where Did All Those Drones Come From?

Thoughts on the collision between the old world and the new.

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Jim Walker shows off one of his experimental Sonic Control Gliders in Oregon in the 1940s.

One of my earliest memories — I must have been five or six at the time — was when my father decided it was time to pass along his lifelong love of all things that fly, and bought us a <u>Guillow's Javelin</u>. My brother and I were absolutely *not* capable of assembling the delicate balsa wood frame, not to mention attaching the diaphanous green and yellow tissue. So really it was more of an exercise in Dad building, and us watching, but the smell of the dope on the tissue was intoxicating. More so than even I realized at the time.

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We took the finished product out beside the Trans-Canada highway in suburban Montréal, wound up the rubber motor and watched, transfixed, as it curled into the summer sky. Seeing the translucent, green and yellow profile against the sun is an image as vivid today as it was back then. I was totally, completely and utterly hooked. That it still holds the same fascination 50 years later means, in my mind, it is one hell of a hobby. Or maybe it just takes that long to finally get good at it.

Later in my youth, having spent a dusty, hot Vancouver summer mowing lawns, my brother and I, with our parents help, finally managed to scrape together the money to buy the kit of our dreams — a 'Boss T' sailplane along with a Heathkit radio control system. We built it together in our shared room and it took seemingly forever to finish. We finally took the results of our year's labour to the flying field and almost instantly transformed it back into a kit trying to recover from a bad launch. Picking dollar bill-sized shards of balsa wood out of the grass just so you can glue them together again teaches you something really valuable about loss and recovery and never, ever giving up.

We tied our fair share of tissue bags of flour to our model airplanes and tried to figure out ways of dropping them off. We loved to see that little puff of 'smoke' as they hit the ground. So it didn't come as any great shock when a couple of decades later, the radio controlled airplanes of my youth were reborn, writ large in matte grey paint, air force markings and given menacing names like Reaper and Predator. First they only had that ominous, Orwellian, unblinking, all-seeing eye but it was really only a matter of time before they started strapping Hellfire missiles on them. Radio controlled warriors rarely seen or heard before they made their presence felt.

"A drone...more accurately known as a multi-rotor, is what you get when you take an airplane and remove as much of the hardware as you can." Suddenly realizing, way too late, I had unwittingly let yet another fantastic career option slip through my fingers, I visited with a Professor at the local university who specialized in the development of what are, no doubt about it, just sophisticated radio controlled planes. His office was a sunny, beige version of J.F. Sebastian's damp, nightmarish lab from Bladerunner. The contact folder on his desktop was tantalizingly opened to the very card of the same local hobby shop I frequented. Entrails of various projects lay scattered around his office, and I remember thinking, "wow, if I had known I could do this for a living, I would have stayed in school."

A drone, or at least one kind of drone more accurately known as a multi-rotor, is what you get when you take an airplane and remove as much of the hardware as you can. They are flying software, more than anything else. This also makes them subject to all of the frailties of software that we hear about with increasing frequency. There's a reason that <u>commercial aircraft can land safely</u> after losing great chunks of their primary structure: they are built like tanks out of really tough stuff, manned by humans with an ability to reason and a will to live.

A drone, on the other hand, is subject of the whims of the misplaced comma. Literally, not getting the code right at least most of the time could be the difference between a drone getting <u>sucked into a jet engine</u>, or not. It could be the difference between landing safely out of harm's way or plowing into the assembled, suddenly dumbfounded crowd which it then proceeds to devour with whirling Kevlar knives. I think of these contingencies with complete horror and know that statistically it is really just a matter of time before they, and worse things, begin to happen.

And I'm a fan.

The inevitable reaction, of course, is to try and put this genie back in the bottle. Surprisingly, for a country that routinely turns on itself when debating the rights and freedoms associated with other technologies, the US federal government recently mandated the <u>registration of all</u> drones over 250 grams — a little over a half a pound. That is without a significant whiff of opposition to what, on the face of it, is a fairly sound idea. However, it does seem just a tweak shy of ironic that if there are two guys in a field, one with a drone and one with a 12 gauge trying to blast it out of the sky, the guy with the transmitter in his hands is the more likely of the two to spend the night in jail.

What's bad about the idea is that it does not distinguish even a little bit between the 40 pound, carbon fiber, flying Chop-o-matic and an ever so slightly larger version of that Guillow's Javelin. We are now in the realm of unintended consequences. With our desire to quickly rein in what we have unleashed, the kids and their folks standing in the field on a summer's day with their model airplane will be the baby getting turfed out with the proverbial bath water.

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At first I thought perhaps — *just maybe* — reason and good common sense would prevail. I hoped that 50 years after my personal 'first flight' I would still be able to wander down to the local park and steer around my 21st century version of the Guillow's Javelin without fear of doing hard time. Then I thought of the guy on YouTube who, with what is seemingly the 21st century version of the flour bomb, attached a real gun and flamethrower to a drone and I thought...*nah, ain't going to happen*.

It was entirely unexpected when just recently, as midlife grinds on, I found myself craving the inimitable smell of balsa wood, tissue paper and dope with its attendant slightly narcotic, why-do-you-think-they-call-it-dope effect. I also think of the smell of freshly cut grass, families, summer evenings and rubber powered stick-and-tissue airplanes curling through the sky and wonder if, like the days of my youth, they are lost forever.

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