

5Jul16

London Police Weighing Use Of UAVs To Chase Thieves On Motorcycles.

The [London \(UK\) Evening Standard](#) (7/4) reports that the Metropolitan Police Service in London is evaluating the use of UAVs to pursue thieves riding motorcycles through the streets of the British capital. The article explains that Scotland Yard has begun a review of pursuit tactics after a jury determined that 18-year-old Henry Hicks, who had not been involved in a theft, was “trying to flee police in two unmarked cars” when he fatally crashed his moped during a high-speed chase. Deputy Commissioner Craig Mackey “said crime involving thieves on two wheels was rising but that police face difficulties in tackling moped gangs due to the dangers of pursuing them.” He also “said the Met was reviewing all its options and considering all available tactics, including the use of drones.”

Investments Booming For Space Startups.

[MIT Technology Review](#) (7/1) reported that space balloon startup World View recently “closed a \$15 million round of funding led by Silicon Valley venture capital firms Canaan Partners and Norwest Ventures,” constituting “the latest in a string of substantial space investments.” The article highlighted that while the commercial space industry “has been dominated in recent years by companies founded and largely financed by a few passionate billionaires,” the efforts by those companies have now “spawned a number of startups backed by entrepreneurs and smaller investors who see the potential for profits in space.” World View CEO Jane Poynter said, “Space is finally being taken seriously by the investment community,” adding, “We’ve been talking about a vibrant ecosystem of entrepreneurs and investors for decades, and finally it’s actually emerging.”

States Passing Cyberspace, Drone Privacy Laws.

[PBS NewsHour](#) (7/1) reports that the increase in civilian UAV activity has contributed to the “widespread concern about sensitive data and images ending up in the wrong hands,” with 12 states having “placed new restrictions on drone users this year, with two of the laws, in Oregon and Vermont, restricting law enforcement or government use.” Meanwhile, a law in Kansas outlaws stalking someone using a UAV, while three other states have restricted UAS operation “near police or firefighter activity.”

North Dakota UAV Industry Expecting Rise In Activity Following New FAA Regulations.

[Bloomberg Research](#) (7/2) reported that several members of the UAV industry in North Dakota view the FAA’s recently issued commercial UAV regulations as “paving the way for larger, more lucrative ventures in the state.” Grand Forks Region Economic Development Corporation’s Director of UAS Sector Development Terry Sando said that in coming years, “the nation’s public will see UAS as a tool and not so much as the privacy issues we’ve dealt with in the past,” adding, “Once it becomes a tool, and they see it flying in the airspace, it’ll pave the way for larger systems to follow quickly after that.” The article further highlighted the viewpoints of several other members of the UAV industry in North Dakota, and their outlooks for the sector.

White House Releases Report On Military Drone Strikes.

The release Friday by the Office of Director of National Intelligence (ODNI) of the tally of deaths from air strikes received extensive media coverage, with several sources highlighting the unique nature of the release. In addition, several media outlets observed that the reported number of civilians killed was far lower than what numerous groups have previously estimated. [NBC Nightly News](#) (7/1, story 7, 0:25) reported that the Obama Administration released a report Friday that revealed that outside of war zones, US air attacks, primarily composed of drone strikes, have killed between 64 and 116 civilians. The [CBS Evening News](#) (7/1, story 4, 0:35) reported that the figures also indicate that between 2009 and 2015, US drones also killed over 2,300 combatants in 473 airstrikes.

6Jul16

Drones Could Be 'Grown' With Chemputer Machine

By Anthony Cuthbertson On 7/4/16 at 11:33 AM

The future of warfare is chemical, though not in the way you might imagine. By the year 2100, scientists believe it will be possible to “grow” drones and military aircraft from chemical compounds, using a machine called a Chemputer. In a video reminiscent of the android liquid reconstruction scene in Terminator 2: Judgment Day, scientists and engineers from BAE Systems and the University of Glasgow imagined what the Chemputer might look like in action, forming a drone from just a vat of chemicals.

“This is a very exciting time in the development of chemistry,” said Lee Cronin, Regius Professor at the University of Glasgow and one of the developers of the Chemputer. The use of Chemputers in manufacturing has previously been theorized by Cronin for the use of drug production, with the idea of one day allowing people to “print” their own pharmaceuticals at home. Transferring this idea to the complexities of electronic circuits and intricately complex mechanical parts takes things radically further, something BAE Systems hopes to make a reality before the end of the century.

<http://www.newsweek.com/chemputer-grow-drones-bae-systems-477472>

Grand Forks area law enforcement tries pairing dogs and drones together

By Brandi Jewett on Jul 4, 2016 at 10:07 p.m.

After taking a deep sniff from a bag, Daisy bolted into the thick prairie brush in search of her target. It's not the first time the bloodhound and her handler, North Dakota State Trooper Cody Harstad, have hit the trail in search of a person, but it is the first time they've had help from what could become a routine partner.

Hovering hundreds of feet above Daisy's head was a unmanned aircraft operated by Grand Forks area law enforcement officers. Equipped with video and thermal cameras, the aircraft allowed the officers to monitor both the K-9 team and a suspect hiding among the foliage. This particular search was a drill, part of a monthly training exercise members of the Northeast Unmanned Aircraft Systems Unit undergo to keep their skills sharp and research new applications for unmanned aircraft, also known as drones.

<http://www.grandforksherald.com/news/crime-and-courts/4067411-grand-forks-area-law-enforcement-tries-pairing-dogs-and-drones>

Juno Spacecraft Settles Into Jupiter's Orbit, Poised To Unlock Mysteries Of Solar System.

ABC World News Tonight (7/5, story 8, 1:40) reported that NASA's Juno spacecraft is “now in orbit around Jupiter, after a journey of more than 1.7 billion miles that took five years to” complete, adding that “in spite of those staggering numbers, Juno arrived just one second off” the forecasted arrival time. Reporting from the headquarters of Lockheed Martin Space Systems in Denver, where Juno was built, ABC Correspondent Clayton Sandell explained, “Juno hit a target so precise, engineers say it's like launching a golf ball from New York to LA and getting a hole in one.”

In the Tuesday broadcast for [CBS Evening News](#) (7/5, story 10, 2:00), correspondent Dan Dahler reported that when the spacecraft entered Jupiter's gravitational field, "it was traveling faster than any human-made object ever, 165,000 miles an hour," adding that it also "endured radiation the equivalent of more than 100 million dental x-rays, which could have fried its electronics." **Although not UAS or SmallSats, it's impressive!**

Drones Interfere In Wildfire-Fighting Efforts.

The [Wall Street Journal](#) (7/5, Subscription Publication) reports on the problem of drones disrupting wildfire-fighting efforts out West. Drone sightings can stall efforts if they lead to firefighting aircraft having to be grounded. The FAA has rules that prohibit drone operators from flying above 400 feet and require them to keep clear of any piloted aircraft. Since firefighting planes fly low and slow, and there is poor visibility from the fire, unmanned drones pose serious risks to the piloted aircraft. This week, the FAA sent an email to registered drone operators to remind them of these rules and of a potential \$27,500 civil penalty for flying drones over or near wildfires.

7Jul16

Boeing Opens New Facility To Advance Autonomous, Interconnected Drone Technology.

The [Daily Caller](#) (7/6) reports that Boeing is now experimenting with self-guided and interconnected drones at its recently opened Collaborative Autonomous Systems Laboratory (CASL). According to the article, "The Castle" is a "playground" for researchers and engineers to experiment and develop new drone capabilities, "including further autonomy, but especially collaboration between systems, otherwise known as swarm technology." At the opening ribbon-cutting ceremony of "The Castle" last week, Boeing demonstrated "some of their synced technology." The article explains that the intrinsic cooperation within interconnected systems "allows once difficult tasks to be completed easily through aggregation."

8Jul16

FAA Bill Extends Use Of Drone Testing Sites. [New Jersey Local News](#) (7/7) reports that the FAA legislation also extends the use of six FAA sites set up to test drones until September 30, 2019, including the Mid-Atlantic Aviation Partnership, which "encompasses New Jersey, Virginia and Maryland and uses the Cape May County Airport." The data from these sites are collected at the FAA's William J. Hughes Technical Center in Atlantic City, along with other research projects on drones and cybersecurity. **Good news!**

Editorial: Launch Competition Revolutionizing Space Industry.

In an editorial, the [Orlando \(FL\) Sentinel](#) (7/7) states that although some lament that the US is "no longer great," others such as "astropreneurs" Elon Musk and Jeff Bezos are "busy proving it still is." The Sentinel notes that both Musk and Bezos have "set their sights beyond the horizon with private space initiatives that just a few years ago were the stuff of dreams." The editorial explains that the competition between Musk's SpaceX and Bezos' Blue Origin is "revolutionizing the space industry," adding that recent industry innovations come at "a critical juncture as NASA is stalled by uncertainty over its next major mission." The Sentinel also contends **that the modern space race is "now between corporations with profit as an incentive."**