Israel The Largest Exporter Of UAVs Worldwide.

TechCrunch (9/9) reported that Israel has become the largest exporter of UAVs in the world, "supplying almost 61 percent of the drones sold since 1985," due in large part to its "pioneering work with military drone technology." TechCrunch listed Israel Aerospace Industries, Elbit Systems, Rafael, and Aeronautics as among the country's "global visionaries" in the UAV industry, and reported that there are "close to 40" Israeli commercial UAV startups addressing the needs of "a wide range of sectors." TechCrunch discussed the different categories of UAV startups and called out "companies to watch" for each category.

PrecisionHawk Launches LATAS UAV Tracking System.

Avionics Magazine (9/9) reported that PrecisionHawk has launched a Low-Altitude Traffic and Airspace Safety Platform (LATAS) that links UAV, ground, and manned aircraft FAA data "into a single system that tells a drone operator when and where it is safe to fly." The launch follows a deal signed with FAA systems integrator Harris Corp. to integrate manned aircraft data from Harris. The LATAS concept was initially "proved" under the FAA Pathfinder program and with the Department of Homeland Security.

British Army Vet Develops UAV "With Edible Wings" For Famine Relief Missions.

The Daily Mail (9/9) reported that a British Army veteran is developing a UAV "with edible wings that is capable of carrying 100-pounds of vacuum-packed food and medical supplies" for use in famine relief missions. The frame of the aircraft will be made from wood, "which can be used for cooking and heating."

Palm Beach UAV Ordinance Violates FAA Authority.

The Palm Beach (FL) Daily News (9/11) reports that the local government in Palm Beach adopted an ordinance in June that "says operators can't fly drones or model aircraft within town unless they meet certain exemptions for law enforcement or they apply for a permit for educational, environmental or commercial purposes." However, after several notifications from UAV operators in the area, town officials have come to the realization that the town airspace is under the jurisdiction of the FAA, making the ordinance illegal. The Town Council is now working to decide whether to rescind the UAV ordinance or revise it "to comply with FAA rules."

Patent Shows Amazon UAVs Could Hitch Rides On Buses, Trucks.

Wall Street Pit (9/12) reports that a newly approved patent shows that Amazon's "top-secret" UAVs might "hitch rides on buses and trucks en route to the delivery location" in order to "conserve energy and provide options for emergency landings in case the drone comes across problems during the delivery." The company could partner with transportation providers and shipping companies for "permission to land drones on vehicles in exchange for compensation, among other things," and the "drones could use their identifying markings and GPS coordinates to seek vehicles" on which to land.

Autonomous Aircraft Technology Profiled.

BBC News (UK) (9/13) reports on several efforts to develop autonomous air transportation systems. For example, "at the Consumer Electronics Show (CES) in Las Vegas in January, Chinese company Ehang unveiled the first-ever passenger drone, the electric-powered Ehang 184." Meanwhile, in the US, "a twin-propeller experimental plane with two passenger seats and two cockpit seats was flight-tested last year." In addition, BBC reports that "Airbus Group is

working on Vahana, an autonomous 'flying car' for passengers or cargo, while in Germany the Volocopter project hopes to build a 'scaled-up' drone that can carry one or two people." The article goes on to point out that autonomous flights would overcome the potential for "human error," but risk being hacked.

FAA: Federal Authority Preempts State Or Local UAV Statutes.

The Valley Advocate (MA) (9/12) reports that the city of Northampton in Western Massachusetts passed a resolution in 2013 banning the expansion of "navigable airspace" below 500 feet, citing a 1946 Supreme Court case as precedent for asserting control of "the immediate reaches of the enveloping atmosphere." Now Northampton finds itself "at odds" with a new FAA rule stating that commercial UAVs must stay below 400 feet, barring "special circumstances." The FAA stated that its statutory authority "generally preempts any state or local government from enacting a statute or regulation" in contradiction, including those that prohibit or limit the operation of UAVs.

Epson & DJI to Develop AR Smart Glasses for UAV Pilots Published: 10 Sep 2016

Epson has announced a partnership with DJI to create new solutions for the Epson Moverio smart glasses and DJI's suite of products and software development kit (SDK) that enhance the safety, productivity and capabilities of UAVs for hobbyists and professionals alike.

As one of the first initiatives of the partnership, DJI will optimize the DJI GO app for the Epson Moverio BT-300 AR smart glasses, shipping late Q4. With the app and the Moverio glasses, drone pilots will be able to see crystal clear, transparent first person views (FPV) from the drone camera while simultaneously maintaining their line of sight with their aircraft. The DJI GO app works with the DJI Phantom, Inspire and Matrice series flying platforms as well as the Osmo handheld gimbal and camera. The two companies will co-market the Moverio BT-300 as a compatible DJI accessory. The Epson smart glasses will be available for purchase on DJI.com while the DJI GO app will be available for download from the Moverio Apps Market.

http://www.unmannedsystemstechnology.com/2016/09/epson-dji-to-develop-ar-smart-glasses-for-uav-pilots/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=860d043534-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-860d043534-111778317

14Sep16

Prodrone Hoverbot UAV Can Lift 44 Pounds.

CNET News (9/13) features a photo gallery and video of Prodrone's PD6B-AW-ARM hoverbot UAV, which can "fly up to 6 km per hour and stay in the air for 30 minutes," as well as lift 44 pounds. According to Prodrone, the PD6B-AW-ARM can be used to lift cargo, cut cables, or "drop a lifesaving buoy."

Drone Delivery Canada Tests New Semi-Autonomous Autopilot Capabilities.

Avionics Magazine (9/13) reports that Drone Delivery Canada has achieved "payload pickup and drop-off capabilities utilizing its semi-autonomous autopilot system," which enables UAVs to take off, land, navigate, and perform pre-programmed maneuvers. Drone Delivery Canada CEO Tony Di Benedetto said, "These new technical achievements are essential for future commercial operations."

DropIn Aims To Use UAVs To Capture Imagery For Insurance Appraisals.

TechCrunch (9/13) reports that LA-based startup DropIn is proposing to use UAVs to gather imagery of properties or disaster areas for use by insurance companies in appraising damage. The company already has a network of 1,100

licensed UAV operators who can travel to a site to pilot the UAV, capturing video and pictures for transmission to insurance agents.

BlueBird's SpyLite Mini, ThunderB UAVs Integrated With New Payloads.

Flightglobal (9/13) reports that Israel's BlueBird Aero Systems "has integrated a high-definition surveillance sensor and a communications payload" into its SpyLite Mini and ThunderB UAVs, enabling the transfer of "long-range, high-resolution HD video in real time" by the aircraft. The HD payload was developed by Controp Precision Technologies, while the communications payload was developed by BlueBird.

DARPA Solicits Technology To Track UAVs Over Cities.

Popular Science (9/13) reports that the Defense Advanced Research Projects Agency (DARPA) has posted a solicitation on FedBizOpps calling for an "Aerial Dragnet" that "seeks innovative technologies to provide persistent, wide-area surveillance of all UAS operating below 1,000 feet in a large city." The solicitation notes that "while Aerial Dragnet's focus is on protecting military troops operating in urban settings overseas, the system could ultimately find civilian application to help protect US metropolitan areas from UAS-enabled terrorist threats. … To track drones over a city, DARPA envisions 'a network of surveillance nodes, each providing coverage of a neighborhood-sized urban area, perhaps mounted on tethered or long-endurance' on other unmanned aerial systems."

Orbital ATK: Antares Launch Planned For October.

Space News (9/13, Subscription Publication) reports that an Orbital ATK official announced Tuesday that the launch of the company's Antares rocket with its new first stage engine is now planned for early October. Speaking at AIAA SPACE 2016, John Steinmeyer said, "We're working with NASA to select an optimal launch date. ... We're very diligent in our preparations for that launch, and making sure we completely validate the system and the RD-181 engines." Antares was scheduled to carry a Cygnus cargo spacecraft to the International Space Station (ISS) in mid-August, but the launch was postponed due to both ISS activities as well as "continuing processing, inspection and testing" of the rocket. This one is scheduled to be launched from the MARS pad at Wallops.

Google tests of delivering burritos by drone underway in Blacksburg

Posted: Tuesday, September 13, 2016 10:23 am By Jacob Demmitt jacob.demmitt@roanoke.com 381-8621

BLACKSBURG — The future of food delivery arrived at Virginia Tech this week, as Google began its much-anticipated — and secretive — experiment to lower Chipotle burritos from drones to a select group of university students. A drone was spotted buzzing overhead just before 1 p.m. Monday. It descended to about 10 feet, hovered over a grass patch and then lowered a large white package to the ground on a string. The drone then flew away, leaving the package and string on the ground. A woman with a clipboard walked over somewhat unceremoniously, cut the string and carried the package back to a staging area where test subjects watched from behind a safety net. The process was repeated about 10 times in a 30-minute span on Monday. Sometimes, multiple orders were brought in at the same time on two separate drones flying near each other.

The meals were only carried about a tenth of a mile, maintaining the line-of-sight flights that the Federal Aviation Administration prefers. Google said last week that the drones would be flown autonomously, with pilots standing by just in case. Virginia Tech, which was selected as a designated drone test site by the FAA in 2013, provided safety oversight.

The experiments were conducted by the Project Wing team devoted to the company's drone ambitions. Project Wing is part of Alphabet, Google's parent company. Project Wing spokeswoman Jacquelyn Miller said last week that the experiments would be closed to the public and media. But the flights were clearly visible from a nearby vantage point.

Miller declined to comment on the video Tuesday, saying the company plans to release more information as the experiment continues.

http://www.roanoke.com/business/google-tests-of-delivering-burritos-by-drone-underway-in-blacksburg/article_935087d3-af6c-5eca-b898-26a890456117.html

UGVs and UAS Used to Inspect Churches in Italy Devastated by Earthquakes By AUVSI News posted 5 days ago

Recently, unmanned technologies were used to assist in the relief efforts in Amatrice, Italy, after a massive earthquake hit that town and surrounding ones last month. The TRADR (Long-Term Human-Robot Teaming for Robot-Assisted Disaster Response) project is providing the technologies that helped inspect two badly damaged churches, the San Francesco and Sant`Agostino. Using two UGVs and three UAS, the TRADR project was able to create 3-D textured models of the churches. Both buildings were in a state of partial collapse, so the technologies were used to help the process of shoring operations and seeing the conditions of valuable objects within the churches. The UGVs traveled inside of the churches, while the UAS provided coverage from both inside and outside of the churches.

 According to people involved, the use of the technologies was very successful. They provided enough data to construct the 3-D textured models, and that information will be given to the Italian Vigili del Fuoco and the Italian Ministry of Culture. The TRADR project was also able to deploy the technologies to the town within 48 hours of receiving the request for help.

http://www.auvsi.org/blogs/auvsi-news/2016/09/09/ugvs-and-uas-used-to-inspect-churches-in-italy-devastated-by-earthquakes

AT&T and Qualcomm to Test UAS on 4G Networks By AUVSI News posted 7 days ago

AT&T and Qualcomm are conducting tests of operating UAS on the 4G LTE cellular network. The UAS connect to the same towers that cell phones connect to, and will be operable as long as they are within range of a tower. The two companies will seek to provide solid evidence that UAS can be controlled safely beyond visual line of sight when operating on cell towers. If there is constant communication between a UAS and its operator, then the possibilities of operating beyond the visual line of sight become more realistic, opening up opportunities for companies such as Amazon and 7-Eleven, both of which are currently looking to begin making deliveries via UAS.

 The UAS that are operating on the networks will collect data like other technologies that operate on the 4G LTE network. Some of the possible pros of using a 4G LTE network, and future 5G networks, include widespread signal coverage and reliability of connections. The testing will be conducted at Qualcomm's UAS Flight Center in San Diego. The Flight Center is designed to replicate real-world areas and scenarios, as it includes commercial areas, residential areas, uninhabited areas and Federal Aviation Administration-controlled airspace.

http://www.auvsi.org/blogs/auvsi-news/2016/09/07/att-and-qualcomm-to-test-uas-on-4g-networks

15Sep16

Airline Executives Discuss NextGen, UAVs.

Avionics Magazine (9/14) reports that executives from Alaska Airlines, JetBlue, and UPS met at Tuesday's Airlines for America (A4A) Commercial Aviation Summit in Washington, DC, where they discussed how the FAA's new NextGen airspace modernization program will affect company operations and how UAVs will be integrated into the National Airspace System (NAS). Alaska Airlines Senior Vice President Joseph Sprague predicted that NextGen's biggest benefit would come from Performance Based Navigation (PBN), while UPS Director of Operations Chris Williams said he saw UAVs being used for aircraft inspection, among other applications.

16Sep16

GoPro Releases "Teaser Video" For Karma Quadcopter UAV.

Investor's Business Daily (9/15) reports that GoPro has released a "teaser video" for its Karma quadcopter UAV, to debut Monday. GoPro will hold an analyst and investor event to introduce the Karma, "and perhaps the Hero 5 camera and new accessories." Investor's Business Daily cites analyst Charles Anderson, who "said GoPro risks pricing itself out of the market" as competitors are "rapidly coming down in price" for UAVs with similar capabilities.