### **SpaceX Completes Historic Booster Landing At Sea.**

The <u>Washington Post</u> (4/8) reported that following four previously unsuccessful attempts to land a spent rocket booster on a drone ship at sea, SpaceX "finally pulled off the dramatic feat Friday afternoon in its first launch to resupply the International Space Station since its rocket exploded last year." According to the *Post*, the sea landing, the "first-ever" for a first-stage booster, "was heralded as a breakthrough for the burgeoning commercial spaceflight industry, and its leader, SpaceX." In a press conference following the successful landing, SpaceX founder and CEO Elon Musk remarked, "It's another step toward the stars. In order for us to really open up access to space we have to have full and rapid reusability."

### **Drones Considered For First Response.**

In continuing coverage, <u>The Hill</u> (4/10) reports that one of the world's largest drone manufacturers, DJI, is partnering with the European Emergency Number Association (EENA) with the aim of developing "a blueprint for using unmanned aircraft for emergency response efforts." Stateside, Virginia Sen. Mark Warner (D-VA) is pushing for a similar agenda. The article reports that Warner "filed an amendment to the Senate's long-term reauthorization of the Federal Aviation Administration that would authorize public entities to use drones in response to disasters, catastrophes and other emergencies." He said, "I firmly believe that unmanned systems have the potential to revolutionize how we go about our business and our lives."

#### Orbital ATK Receives \$200 Million NASA Contract.

Zacks Investment Research (4/8) reported that NASA has presented Orbital ATK with the Sounding Rocket Operations Contract III, worth nearly \$200 million with options included. The contract will ensure that the company supports the agency's Sounding Rockets Program per its one-year base period, and includes four one-year options.

Under the contract, Orbital ATK, along with LJT and Associates, Inc., the Hammers Company and Hawk Institute for Space Sciences, will employ technical and administrative staff at the Wallops Flight Facility and the White Sands Missile Range. http://finance.yahoo.com/news/orbital-atk-oa-clinches-contract-153003997.html

## FAA Reviews Proposal To Allow Drones To Fly Over People.

In continuing coverage, the <u>Bismarck (ND) Tribune</u> (4/9) reported on the Micro Unmanned Aircraft Systems Aviation Rulemaking Committee's recommendations to the FAA that "could pave the way for unmanned aircraft to fly directly over people, which local operators say translates to progress for the industry."

KOLN-TV Lincoln, NE (4/9) Lincoln, NE also reported online.

## Hawaii Moves To Strengthen UAS Testing Program.

KHON-TV Honolulu (4/8) Honolulu reported online that Hawaii Gov. David Ige "recently approved \$135,000 to hire a chief operating officer for" the state's UAS testing program. Lawmakers say the program which "could bring high tech jobs to Hawaii is finally getting the funding it needs." The article points out that the "FAA is using these test sites to see how to integrate drones into airspace that is already used by planes and helicopters."

12Apr16

## **ULA To Launch Expandable Habitats To Space For Tourists, Researchers.**

The Washington Post (4/11) reports that although Bigelow Aerospace's expandable habitat was just delivered to the International Space Station (ISS)on Sunday, the company is already mulling "flying even larger inflatable habitats into

space to be used for research and even space hotels." In a news conference at the annual Space Symposium on Monday, the company revealed that in 2020, United Launch Alliance (ULA) will start ferrying the habitats to space as part of a deal that the two companies say constitutes the "first-ever commercial partnership between a launch provider and a habitat provider." According to the article, Bigelow Aerospace founder Robert Bigelow "hopes that eventually his space habitats could provide another destination in low Earth orbit besides the space station."

# SpaceX Drone Ship Landing Touted As Modern-Day Moon Walk For New Space Age.

Bloomberg News (4/11) reports that on Friday, in a moment that "heralded a new era of affordable, reusable rockets," Hawthorne, California-based SpaceX "won over the Internet as countless thousands tuned in to watch the Falcon 9 rocket launch and, roughly eight minutes later, its spectacular first-ever landing at sea." Remarking on the renewed enthusiasm not seen in generations, Marco Caceres, senior analyst at consultant Teal Group, said, "This is the dramatic visual of the new space age," adding, "NASA has been trying to recreate the excitement of the Apollo era. Elon Musk just did it." Meanwhile, in an interview, Martin Halliwell, chief technical officer for SpaceX partner SES, which partners with SpaceX for satellite launches, said, "The fundamental difference that SpaceX has is that they are on a mission, and the mission is to go to Mars," adding, "It's a true passion felt by Elon and every single person in the company."

### Senators Look To Amend Local Drone Laws Language In FAA Bill.

The Hill (4/11) reports that some senators are looking to change language in the FAA reauthorization bill, which "state and city officials fear would curtail their ability to establish and enforce local laws dealing with drones."

The Hill suggests that the bill's sponsors are unlikely to support any changes, "arguing that local governments aren't precluded from carrying out privacy and safety laws related to drones as long as the statutes don't specifically mention drones, also known as unmanned aircraft systems (UAS)." Dianne Feinstein (D-CA) argued, "Reckless drone use varies significantly in different states and even within a state, which is why we need to maintain the ability for states to set their own standards of drone operation."

## Wallops Island Ideal Location for Navy MQ-4C Triton Unmanned Aircraft

**Washington, D.C.** – Congressman J. Randy Forbes (VA-04) visited Wallops Island on Tuesday, April 12<sup>th</sup>, 2016 to tour space facilities and meet with the Wallops Island Regional Alliance. His visit coincided with the Navy's consideration of Wallops Island as the East Coast base for the MQ-4C Triton unmanned maritime surveillance aircraft, which would require the stationing of up to 400 personnel plus family members at Wallops. The facility at Wallops Island, Virginia is home to some of the most innovative work in the commercial space industry, and supports the needs of both NASA and the Department of Defense. Whether it is providing field carrier landing practice to Navy pilots, supporting rocket launches as part of Missile Defense Agency exercises, or serving as one of two U.S. sites launching vital cargo to support the International Space Station, Wallops is an integral part of U.S. space efforts. <a href="https://forbes.house.gov/updates/documentsingle.aspx?DocumentID=399018">https://forbes.house.gov/updates/documentsingle.aspx?DocumentID=399018</a>

# Praxis Aerospace Partners with Griffiss Airport UAS Test Site for NASA Research 08 Apr 2016

Praxis Aerospace Concepts International, Inc., a developer of unmanned robotics technologies, has announced that it has entered into a partnership with the New York UAS Test Site, Griffiss International Airport, to provide the Test Site with additional expertise as they accomplish requirements toward their support of NASA research into integration of unmanned air vehicles into everyday life.

NASA has invited test sites to participate in NASA activities, as well as to encourage teaming across test sites to gain cost efficiencies and maximize research data that will be delivered to NASA. The Unmanned Aircraft Systems Integration in the National Airspace System project, or UAS in the NAS, will contribute capabilities designed to

reduce technical barriers related to safety and operational challenges associated with enabling routine UAS access to the NAS. <a href="http://www.unmannedsystemstechnology.com/2016/04/praxis-aerospace-partners-with-griffiss-airport-uas-test-site-for-nasa-">http://www.unmannedsystemstechnology.com/2016/04/praxis-aerospace-partners-with-griffiss-airport-uas-test-site-for-nasa-</a>

research/?utm\_source=Unmanned+Systems+Technology+Newsletter&utm\_campaign=cdd60d6e14-Unmanned\_Systems\_Technology\_eBrief&utm\_medium=email&utm\_term=0\_6fc3c01e8d-cdd60d6e14-111778317#sthash.O8BtTMb6.dpuf

13Apr16

### China Deploys Pollution-Monitoring UAVs.

The <u>Economic Times (IND)</u> (4/12) reports that China has deployed three UAVs at its environment tracking station in the Hebei province to identify and reduce potential sources of pollution across the region. The article explains that three unmanned aerial vehicles, "two with fixed-wings and one with multi-rotors, will take aerial photographs of suspect factories and workshops to provide evidence of polluting activities." Cao Yaming, an engineer at the tracking station said, "Flying at up to 3,500 meters off the ground with a top speed of 140 kilometers per hour, the UAVs can effectively monitor mountainous areas even under poor weather conditions," adding, "They can make up for any shortfalls in human-led ground inspections and satellite remote sensing monitoring."

### Insurers Utilizing Drone Analytics To Assess Weather Damage.

Claims Journal (4/12) reports on drone analytics technology currently being developed by U.S. DataWing Aerial Analytics that insurance companies are using to assist in the claims process. "According to Steven Fargo, company president, the insurance industry has provided the most rapid growth, likely the result of the big data analytic product component. ... He explained the typical use by an insurer after a roof sustains hail or wind damage. Rather than sending out a company or independent adjuster to climb the roof, inspect the damage and prepare a diagram, a drone is used to capture images and data. The reduction in such a manual, labor intensive process like visual analysis or inspection offers real value, said Fargo."

### **Newt Gingrich Endorses Georgia Spaceport.**

The <u>Atlanta Journal-Constitution</u> (4/12) reports that according to the <u>Brunswick (GA) News</u> (4/9), former U.S. House Speaker Newt Gingrich has endorsed the construction of a spaceport in Camden County, Georgia, as well as legislation designed to attract commercial space ventures to the region. In a letter of support, Gingrich said, "I have always believed that Georgia should actively pursue today's \$300-plus billion commercial space industry, including by promoting a coastal-area site for launching satellites and humans on commercial missions." The *Journal-Constitution* adds that the idea "has provoked a mixed reaction within the coastal community."

14Apr16

## New Study Details Commercial Uses Of UAVs.

<u>USA Today</u> (4/13) reports that according to a new study by the Association for Unmanned Vehicle Systems International (AUVSI), the most popular commercial purposes for UAVs include photography, real estate, and various types of inspections. The study, which reviewed more than 3,000 of the nearly 4,700 permits granted by the FAA, found that UAV permits have been issued to businesses in all 50 states, including 360 permits in California, 328 in Florida, and 268 in Texas. In addition, among the FAA exemptions reviewed in the study, which cited <u>38 different business functions for UAVs</u>, there "were 2,557 for photography, 1,969 for real estate and 1,671 for inspections." AUVSI CEO Brian Wynne said in a statement that the UAV industry "is poised to be one of the fastest-growing sectors in the U.S. and these numbers demonstrate that a wide variety of industries are eager to take advantage of this technology."

### **ESPN To Broadcast Drone Racing.**

CNBC (4/13) reported that on Wednesday, the International Drone Racing Association (IDRA) announced that it had reached a multi-year agreement with ESPN to broadcast "the new sport of drone racing to the sports network." In a statement, Matthew Volk, director of programming and acquisitions for ESPN, remarked that drone racing is "an opportunity to reach and connect with a growing and passionate audience." Meanwhile, IDRA Chairman Dr. Scot Refsland explained that since "everyone can experience the thrill of racing as if they were sitting in the drone cockpit, the sport is skyrocketing," adding that going from "a first ever, US national drone race to partnering with ESPN for international distribution in eight months is truly a sign of great things ahead."

## U.S. Space Command Supports Use Of Spare ICBMs For Commercial Launches.

Reuters (4/14) reports that during a press conference on Thursday, U.S. Air Force General John Hyten, head of the United States Space Command, said that he is in favor of a change in policy to allow decommissioned intercontinental ballistic missiles (ICBMs) to be used to launch commercial satellites, a move advocated by Orbital ATK but opposed by other private launch providers such as Virgin Galactic. Still, Hyten stressed that the spare ICBMs should not be handed out freely, nor be allowed to flood the commercial launch market. Hyten remarked, "I would like to figure out how to get some value out of the hundreds of millions investment we have in those excess ICBMs, but we cannot destroy the small launch business in doing that," adding, "There's got to be a way to find the sweet spot."

Meanwhile, <u>Defense News</u> (4/15) highlights additional comments made by Hyten during that media briefing, explaining that "the Pentagon is looking to leverage a recent boom in commercial space innovation for military applications."

## LATimes: FAA Bill's Strict Regulations On UAVs Are Necessary To Keep Aircraft Safe.

The Los Angeles Times (4/14) editorializes that UAVs and aircraft can be kept at a safe distance if Congress approves "the Federal Aviation Administration reauthorization bill that's working its way through the Senate this month." The *Times* notes that the bill includes "some of the strictest regulations for commercial and hobby drones yet." The article adds that the need for such regulation was proven a few weeks ago "when the pilot of a Lufthansa A380 passenger jet reported that a drone passed within 200 feet of the plane as it approached Los Angeles International Airport." The article added that the drone was never identified, which would not have been the case under the new bill. The *Times* emphasizes the importance of accountability, particularly as drone sales continue to grow.