## Nevada Governor's Office of

## **ECONOMIC DEVELOPMENT**

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## FOR IMMEDIATE RELEASE

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## Drone America and NIAS participate in first-of-its-kind, bi-state, multi-agency evacuation drill

NORTH LAKE TAHOE, Calif./Nev. (May 30, 2018) -- On May 19, Drone America, supported by the Nevada Institute for Autonomous Systems (NIAS), participated in a bi-state, multi-agency evacuation drill that was conducted at the north end of Lake Tahoe on the Nevada and California border. This exercise involved more than 17 separate first responder agencies and helped further Drone America's mission to serve communities through the safe application of state-of-the-art unmanned technology.

The drill was a collaboration between Drone America, North Lake Tahoe Fire Protection District along with Washoe County Emergency Management, Washoe County Sheriff's Office, Nevada Division of Forestry (NDF), Nevada Army National Guard, Nevada Highway Patrol, California Highway Patrol, North Tahoe Fire Protection District, Cal Fire, Placer County Emergency Management, Placer County Sheriff's Department, Red Cross, IVGID, and other partner agencies.

The exercise, which occurred in Kings Beach, Incline Village, and Crystal Bay, marked the first time in the United States where commercial drones conducted simultaneous operations with manned emergency aircraft in the same airspace during a real-time scenario with the common mission of saving lives and property.

During the drill, Drone America's flight team established a forward operating base at Burnt Cedar Beach with the company's vertical take-off and landing (VTOL) Savant unmanned aerial vehicle (UAV). Incident command called for support for a severely injured firefighter in need of plasma and medical supplies until air extraction could arrive.

Taking off at a ground altitude of 6,236 feet and covering a flight distance of 4.5 miles, the drone climbed 1,000 feet to 7,250 feet mean sea level (MSL), 250 feet above ground level (AGL) at the drop point. Due to the tall tree cover and lack of a safe landing zone, the package was airdropped successfully by parachute to the waiting ground team. The mission took six minutes and 45 seconds to air drop the supplies around steep terrain and other air traffic.

Following the successful drop, incident command requested real-time visual reconnaissance of the affected ground team to address concerns about the simulated fire front advancing during treatment of victim.

To accomplish this, the flight team readied the information surveillance and reconnaissance (ISR) payload and, following return of the drone, replaced the payload carriage was with the ISR payload. The drone was launched with only a 10-minute turnaround time. The drone achieved the commanded ISR target altitude of 8,200 feet MSL, 1,200 feet AGL at the target area and transmitted live video immediately during its flight.

During the ISR flight to the location, the recovery UH-60 Blackhawk helicopter was dispatched. The drone arrived on scene first and transmitted geo-referenced live video of the affected firefighting team to multiple locations, including incident command and flight operations. Sharing the same airspace, the recovery helicopter arrived 10 minutes later and operated between 700 and 1050 feet below the drone.

The simulated injured firefighter was airlifted to safety. The team on the ground was advised of the advancing fire in real time and incident command maintained situational awareness of the developments on the ground. The drone successfully returned to base with a total time for both primary and secondary missions of one hour 16 minutes. Total distance covered was 23.4 miles.

"The capabilities and expertise on display by Nevada-born business Drone America, NIAS, and the multi-agency first responders from California and Nevada is truly impressive," **said Paul Anderson, executive director of Nevada Governor's Office of Economic Development**. "This life-saving technology clearly has a role to play in the public safety of our region and I look forward to what the future holds."

"This joint operation integrating drones into all aspects is a perfect public safety *use case* to enhance safety for the public, first responders, and emergency management officials—the largest in Nevada to date involving drones. Nevada companies like Drone America are setting the standard for full integration of drones into wildland firefighting, medical air delivery of critical supplies, and wildland fire surveillance while ensuring drones are safely integrated into the National Airspace System," said Chris Walach, senior director of all FAA-designated Nevada UAS Test Sites and NIAS.

"Working side by side with emergency services while integrating our unmanned systems into a real-world exercise give us further insight into operational safety and effectiveness. Delivering value in the form of data, video or critical supplies is our upmost priority allowing us to better protect the lives of those that serve us," said Mike Richards, president and CEO of Drone America.

"North Tahoe Fire Protection District's Unmanned Aerial Systems (UAS), strives to accomplish an innovative approach to using drones during emergency incident responses. Drone America illustrated the capabilities of drone incident response at the Bi-State Evacuation Drill; confirming the mission of the District's UAS program. We look forward to ongoing growth in technology and seeing increased public safety benefits from incident responses utilizing (UAS) drones," said Michael Schwartz, fire chief, North Tahoe Fire Protection District.

"North Lake Tahoe Fire Protection District is in the process of becoming a response partner with Drone America due to their capabilities and their intelligence gathering. The Bi-State Evacuation Drill was a clear demonstration of how we can all work together, potentially saving lives and saving tax payers dollars. It is a pleasure working with Drone America and we look forward to future endeavors, together," said Ryan Sommers, fire chief of North Lake Tahoe Fire Protection District.

About the Governor's Office of Economic Development: Created during the 2011 session of the Nevada Legislature, the Governor's Office of Economic Development (GOED) is the result of a collaborative effort between the Nevada Legislature and Governor Brian Sandoval to restructure economic development in the state. GOED's role is to promote a robust, diversified and prosperous economy in Nevada, to stimulate business expansion and retention, encourage entrepreneurial enterprise, attract new businesses and facilitate community development. More information on the Governor's Office of Economic Development can be viewed at www.diversifynevada.com.

About the Nevada Institute for Autonomous Systems (NIAS): The Nevada Institute for Autonomous Systems (NIAS) and FAA-designated Nevada Unmanned Aviation Test Site leads the growth of the Nevada Unmanned Aviation Systems (UAS) Industry through business teaming relationships, collaborating with primary research institutions on UAS research and development, and enhancing the Nevada UAS Industry knowledge base to attract new and permanent business and create jobs in the State of Nevada. Learn more at <a href="https://www.nias-uas.com.">www.nias-uas.com.</a>

**About Drone America:** Drone America strives to be one of the World's Top Providers of Autonomous Unmanned Vehicles, high tech equipment and services. Our mission is to use UAS technologies as a means to survey, protect, and preserve human life and strategic resources around the Globe. For more information about Drone America please visit <a href="www.droneamerica.com/">www.droneamerica.com/</a>.



Photo Caption: BlackHawk Helicopter and Firefighter Ground Team seen from the VTOL Savant UAS

Credit: Drone America



Photo Caption: Drone America VTOL Savant Over the operations area @ 8,200 Ft MSL

Credit: Drone America



Photo Caption: Multi-agency air mission briefing taking place before the mission.

Credit: NIAS



Photo Caption: NIAS, Drone America, and NDF shown here with the VTOL Savant after the successful missions.

Credit: NIAS



 ${\it VIDEO: Time-lapsed\ drill\ showing\ the\ DA\ Savant\ flight\ and\ feed\ from\ the\ ISR\ payload}$ 

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