JOINT PUBLIC SAFETY BULLETIN

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(U//FOUO) Drones: A Threat to Public Safety Personnel, Assets & Response

(U//FOUO) Encounters in 2015 of unauthorized unmanned aircraft systems (UAS), also known as drones, with public safety aircraft during emergency events underscore the potential threats UAS pose to response efforts—notably search-and-rescue, firefighting and police air assets—as well as the lives, property and natural resources already at risk.

- (U) More than ten unauthorized UAS have interfered with or hampered emergency response efforts thus far in California's 2015 fire season, according to the California Department of Forestry and Fire Protection.
- (U) Two UAS nearly collided with a New York Police
 Department helicopter over the George Washington Bridge in mid-2014, forcing the aircraft to change course, according to local press reports.
- (U) Although many of the drones flying today weigh only a
 few pounds, a US Airways flight crash-landing on the Hudson
 River in 2009 in New York—which involved a bird striking the
 aircraft's engine—illustrates the threat drones pose to public safety aircraft.

(U) UAS Quick Facts

- (U) "Model aircraft" means an unmanned aircraft that is capable of sustained flight in the atmosphere; flown within visual line of sight of the person operating the aircraft; and flown for hobby or recreational purposes. (Section 336 of P.L. 112-95)
- (U) The FAA currently estimates as many as 7,500 small commercial use UAS may be in use by 2018, assuming the necessary regulations are in place.

(U//FOUO) Unauthorized UAS flying in the area of a public safety incident have forced public safety managers to suspend aerial coverage, which could potentially delay containment efforts.

- (U) During the North Fire, which began on July 17 near Interstate 15 in the Baldy Mesa area, a UAS halted
 aerial tanker operations for approximately 25 minutes, delaying firefighting efforts, according to local press
 reports. A Federal Aviation Administration (FAA) Temporary Flight Restriction (TFR) was in effect at the time,
 prohibiting any private aircraft or UAS from flying into the fire's airspace. TFR violators face serious criminal
 charges if caught, even without a TFR, as hampering firefighting efforts is a crime.
- (U) A UAS shut down evening aerial firefighting operations over the Lake Fire in the San Bernardino National
 Forest in mid-June, according to press reports. The UAS was spotted flying between two fixed-wing aircraft
 battling the wildfire burning south of Big Bear Lake—it was flying roughly 800 to 900 feet off the ground,
 above the 400 feet permitted by the FAA.

(U) HSEC-2.2.2: HSEC-2.2.3 STAC-20150805

(U) UAS Incident/ Arrest Information

(U//FOUO) Law enforcement should consider collecting the following information when drafting UAS incident/arrest reports:

- Altitude and type or model of the UAS;
- Photos of the UAS if possible;
- Details on the endangerment to persons or property on the ground; and
- Denote any interference with aircraft in flight.

(U) FAA Contact Information

- (U) FAA Regional Operation Center (ROC): Western ROC (425) 227-1999 or email: 9-ANM-ROC@faa.gov; and
- (U) FAA assistance for agencies is available via the FAA's Law Enforcement Assistance Program Office at (202) 267-4641.

(U) The FAA Modernization and Reform Act & Other UAS Laws

16 USC 1133—**UAS cannot take off or land in national wilderness areas**. This code stipulates no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport in national wilderness areas.

The FAA Modernization and Reform Act of 2012 (Act), P.L. 112-95. Congress required the FAA to develop a plan to safely integrate and regulate UAS via this Act. As a result, the FAA published proposed UAS regulations. These proposed regulations regulate small, commercial UAS, but they do not regulate UAS "model aircraft" that adhere to the requirements in Section 336 of the Act. Nonetheless, the FAA does prohibit model aircraft from endangering the safety of the National Airspace System.

Section 336 of P.L. 112-95 (FAA Modernization and Reform Act)—Special Rule for Model Aircraft. The FAA may not promulgate any rule or regulation regarding model aircraft. For a UAS to be considered a model aircraft under the Act, it must satisfy five conditions. These conditions are:

- The aircraft is flown strictly for hobby or recreational use;
- The aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
- The operator does not fly the aircraft within 5 miles of an airport unless the operator has provided prior notice of the operation to the airport and control tower;
- The aircraft does not weigh more than 55 pounds, unless otherwise certified through a design, construction, inspection, flight test and operational safety program administered by a community-based organization; and
- The aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft.

While the FAA may not regulate the use of model aircraft, it may pursue enforcement actions against model aircraft operators who endanger the National Airspace System.

14 CFR Sections 91.13 and 91.15—Careless or Reckless Operation. No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

14 CFR Sections 91.119—Minimum Safe Altitudes. Except during takeoff and landing, no person may operate aircraft below the following altitudes:

- Anywhere: an altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- Congested Areas: An altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- Other Than Congested Areas: An altitude of 500 feet above the surface, except over open water or sparsely
 populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel,
 vehicle, or structure.

^{*} This list does not include all federal and state laws applicable to UAS operations, nor does it include local ordinances and municipal codes that may apply in a particular jurisdiction and/or under specific circumstances. It is important to consult with your home agency policies and guidelines when handling incidents involving potentially illegal UAS activity.

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14 CFR Part 73 and 14 CFR Sections 91.126 through 91.135—Rules Governing Operations in Designated Airspace. Regulations apply to aircraft operations in designated classes of airspace and restricted areas, and operation in some classes of airspace, such as in the vicinity of airports, requires prior authorization from air traffic control.

14 CFR Sections 91.137 through 91.145—Rules Regarding Operations in Areas Covered by Temporary Flight Restrictions (TRFs) and Notices to Airmen (NOTAMs). The FAA may issue flight restrictions in certain areas, such as in the vicinity of a disaster or hazard, to provide a safe environment for the operation of disaster relief aircraft. The FAA may also issue NOTAMs in the area of certain major sporting events.

(U) Select California Code Sections that May Apply to UAS Operations

Cal. Penal Code Section 148.2. Every person who willfully resists or interferes with the efforts of firemen or emergency rescue personnel to discharge an official duty, such as extinguishing a fire, is guilty of a misdemeanor.

Cal. Penal Code Section 402. Individuals impeding emergency personnel in the performance of their duties in coping with an emergency are guilty of a misdemeanor.

Cal. Public Resources Code Section 4156. Certain employees designated by the Cal FIRE director have the powers conferred upon peace officers and statewide authority, provided that their primary duty is the enforcement of forest laws and regulations, state and county fire laws, and certain other laws. Any such peace officer may enforce federal fire laws to the extent that he/she is authorized.

Cal. Penal Code Section 602. This section defines and prohibits criminal trespassing.

Cal. Penal Code Sections 240-48. These sections define and prohibit assault and battery.