LAW ENFORCEMENT GUIDANCE FOR SUSPECTED UNAUTHORIZED UAS OPERATIONS

Issue

There is evidence of a considerable increase in the unauthorized use of small, inexpensive Unmanned Aircraft Systems (UAS) by individuals and organizations, including companies. The FAA retains the responsibility for enforcing Federal Aviation Regulations, including those applicable to the use of UAS. The agency recognizes though that State and local Law Enforcement Agencies (LEA) are often in the best position to deter, detect, immediately investigate,\(^1\) and, as appropriate,\(^2\) pursue enforcement actions to stop unauthorized or unsafe UAS operations. The information provided below is intended to support the partnership between the FAA and LEAs in addressing these activities.

Discussion

The general public, a wide variety of organizations, including private sector (e.g., commercial companies), non-governmental (e.g., volunteer organizations), and governmental entities (e.g., local agencies) continue to demonstrate significant interest in UAS. The benefits offered by this type of aircraft are substantial and the FAA is committed to integrating UAS into the National Airspace System (NAS). This introduction, however, must address important safety and security considerations. The increasing number of cases of unauthorized use of UAS is a serious concern for the FAA and, in terms of safety and security challenges, many of its interagency partners.

This document is intended to assist LEAs in understanding the legal framework that serves as the basis for FAA legal enforcement action against UAS operators for unauthorized and/or unsafe UAS operations (Section 1) and to provide guidance regarding the role of LEAs in deterring, detecting, and investigating unauthorized and/or unsafe UAS operations (Section 2).

SECTION 1.

Basic Legal Mandates

The FAA’s safety mandate under 49 U.S.C. § 40103 requires it to regulate aircraft operations conducted in the NAS,\(^3\) which include UAS operations, to protect persons and property on the

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\(^1\) At least in terms of initial contact with the suspected offender.

\(^2\) Applying any laws falling within the enforcement authority of the LEA in question.

\(^3\) The NAS is “the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas . . . . Included are system components shared jointly with the military.” See FAA Pilot/Controller Glossary (Apr. 3, 2014), available at http://www.faa.gov/air_traffic/publications/media/pcg_4-03-14.pdf.
ground, and to prevent collisions between aircraft and other aircraft or objects. In addition, 49 U.S.C. § 44701(a) requires the agency to promote safe flight of civil aircraft in air commerce by prescribing, among other things, regulations and minimum standards for other practices, methods, and procedures the Administrator finds necessary for safety in air commerce and national security.4

A UAS is an Aircraft that Must Comply with Safety Requirements

A UAS is an “aircraft” as defined in the FAA’s authorizing statutes and is therefore subject to regulation by the FAA. 49 U.S.C. § 40102(a)(6) defines an “aircraft” as “any contrivance invented, used, or designed to navigate or fly in the air.” The FAA’s regulations (14 C.F.R. § 1.1) similarly define an “aircraft” as “a device that is used or intended to be used for flight in the air.” Because an unmanned aircraft is a contrivance/device that is invented, used, and designed to fly in the air, it meets the definition of “aircraft.” In addition, on December 16, 2015 the FAA promulgated an Interim Final Rule (80 Fed. Reg. 78594) that defined Unmanned Aircraft, Model Aircraft, Small Unmanned Aircraft and Small Unmanned Aircraft System in 14 C.F.R. § 1.1. The FAA has promulgated regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 C.F.R. § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

Model Aircraft Operations

An important distinction to be aware of is whether the UAS is being operated for hobby or recreational purposes or for some other purpose. This distinction is important because there are specific requirements in the FAA Modernization and Reform Act of 2012, Public Law 112-95, (the Act) that pertain to “Model Aircraft” operations, which are conducted solely for hobby or recreational purposes. While flying model aircraft for hobby or recreational purposes does not require FAA approval, all model aircraft operators must operate safely and in accordance with the law. The FAA provides guidance and information to individual UAS operators about how they can operate safely under current regulations and laws. Guidance may be found at: http://www.faa.gov/uas/publications/model_aircraft_operators/

Section 336(c) of the Act and 14 C.F.R. § 1.1 define “Model Aircraft” as an unmanned aircraft that is –

(1) Capable of sustained flight in the atmosphere;
(2) Flown within visual line of sight of the person operating the aircraft; and
(3) Flown for hobby or recreational purposes.

Each element of this definition must be met for a UAS to be considered a Model Aircraft under the Act and the regulation. Under Section 336(a) of the Act the FAA is restricted from conducting further rulemaking specific to Model Aircraft as defined in section 336(c) so long

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4 FAA action on these security concerns support and are informed by the national defense, homeland security, and law enforcement statutory responsibilities and authorities of our interagency partners.
as the Model Aircraft operations are conducted in accordance with the requirements of section 336(a). Section 336(a) requires that—

(1) The aircraft is flown strictly for hobby or recreational use;
(2) The aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
(3) The aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
(4) The aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
(5) When flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).

Model Aircraft that Operate in a Careless or Reckless Manner

Section 336(b) of the Act, however, makes clear that the FAA has the authority under its existing regulations to pursue legal enforcement action against persons operating Model Aircraft when the operations endanger the safety of the NAS, even if they are operating in accordance with section 336(a) and 336(c). So, for example, a Model Aircraft operation conducted in accordance with section 336(a) and (c) may be subject to an enforcement action for violation of 14 C.F.R. § 91.13 if the operation is conducted in a careless or reckless manner so as to endanger the life or property of another.

UAS Operations that are not Model Aircraft Operations

Operations of UAS that are not Model Aircraft operations as defined in section 336(c) of the Act and conducted in accordance with section 336(a) of the Act may only be operated with specific authorization from the FAA. The FAA currently authorizes non-hobby or recreational UAS operations through one of three avenues:

(1) The issuance of a Certificate of Waiver or Authorization, generally to a governmental entity operating a public aircraft;
(2) The issuance of an airworthiness certificate in conjunction with the issuance of a Certificate of Waiver or Authorization; or
(3) The issuance of an exemption under part 11 of title 14, Code of Federal Regulations that relies on section 333 (Special Rules for Certain Unmanned Aircraft Systems) of the Act for relief from the airworthiness certificate requirement, also in conjunction with the issuance of a Certificate of Waiver or Authorization.
It is important to understand that all UAS operations that are not operated as Model Aircraft under section 336 of the Act are subject to current and future FAA regulation. At a minimum, any such flights are currently required under the FAA’s regulations to be operated with an authorized aircraft (certificated or exempted), with a valid registration number (“N-number”), with a certificated pilot, and with specific FAA authorization (Certificate of Waiver or Authorization).

Regardless of the type of UAS operation, the FAA’s statutes and the Federal Aviation Regulations prohibit any conduct that endangers individuals and property on the surface, other aircraft, or otherwise endangers the safe operation of other aircraft in the NAS. In addition, States and local governments are enacting their own laws regarding the operation of UAS, which may mean that UAS operations may also violate state and local laws specific to UAS operations, as well as broadly applicable laws such as assault, criminal trespass, or injury to persons or property.

**UAS Compliance with Airspace Security Requirements**

As an aircraft, UAS operations (including those involving Model Aircraft) must be conducted in accordance with the airspace-centric security requirements prescribed by the FAA’s regulations and various implementation tools used by the FAA, specifically including airspace with special flight rules and Notices to Airmen (NOTAM) that define Temporary Flight Restrictions (TFR). It is important that UAS operators and LEAs be familiar with the airspace restrictions respectively relevant to their operations and their enforcement area of responsibility.

Flight restrictions are used to protect, but are not limited to, special security events, sensitive operations (e.g., select law enforcement activity, space flight operations, etc.), and Presidential movement. The most up-to-date list of TFRs is available at [www.tfr.faa.gov](http://www.tfr.faa.gov).

See Attachment A for reference resources.\(^5\)

**UAS Registration Requirements**

All unmanned aircraft over 0.55 pounds and less than 55 pounds that are components of Small Unmanned Aircraft Systems (sUAS)\(^6\) and operated as Model Aircraft in the NAS must be registered with the FAA. sUAS operated exclusively as Model Aircraft (as defined in sec. 336(c) of Public Law 112-95 and 14 C.F.R. § 1.1) must be registered under either 14 C.F.R. Part 47 or Part 48.\(^7\) Those purchased on or after December 21, 2015, and used exclusively as model aircraft must be registered prior to operating in the NAS. UAS that have been operated in the NAS by the current owner, and used exclusively as model aircraft prior to December 21, 2015, must be registered by February 19, 2015.

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\(^5\) Attachment A also includes a NOTAM concerning avoidance (including no loitering) over power plants, dams, refineries, industrial complexes, and military facilities. Although not a restriction, this TFR urges aircraft operators to avoid these locations.

\(^6\) Small Unmanned Aircraft Systems (sUAS) are defined in 14 C.F.R. § 1.1 as a small unmanned aircraft and its associated elements (including communication links and the components that control the small unmanned aircraft) that are required for the safe and efficient operation of the small unmanned aircraft in the national airspace system.

\(^7\) 14 CFR part 47 is the legacy system by which aircraft owners use a paper based process to register aircraft. An alternative process for registration and marking of small unmanned aircraft was established under 14 CFR part 48.
sUAS currently operating under a COA or an exemption, such as public aircraft or those operating for commercial use, must continue to be registered under the provisions of 14 CFR Part 47. Beginning on March 31, 2016, owners of UAS operated for purposes other than hobby or recreation may also register sUAS under Part 48.

The FAA will issue a unique registration number that must be placed on the UAS so that it is readily visible (this may be inside a battery compartment provided no tools are needed to open the compartment). This number will be unique to the operator if operating strictly for hobby purposes, and unique to the aircraft if operating for purposes other than hobby. The operator of the UAS must carry a Certificate of Aircraft Registration and make it available to law enforcement upon request. Operators may verify registration by carrying a paper copy or by showing an electronic registration.

SECTION 2.

The Role of Law Enforcement

The FAA promotes voluntary compliance by educating individual UAS operators about how they can operate safely under current regulations and laws. The FAA also has a number of enforcement tools available including warning notices, letters of correction, and civil penalties. The FAA may take enforcement action against anyone who conducts an unauthorized UAS operation or operates a UAS in a way that endangers the safety of the national airspace system. This authority is designed to protect users of the airspace as well as people and property on the ground.

However, as noted above, State and local Law Enforcement Agencies (LEA) are often in the best position to deter, detect, immediately investigate, and, as appropriate, pursue enforcement actions to stop unauthorized UAS operations. Although the FAA retains the responsibility for enforcing FAA’s regulations, FAA aviation safety inspectors, who are the agency’s principal field elements responsible for following up on these unauthorized and/or unsafe activities, will often be unable to immediately travel to the location of an incident.

While the FAA must exercise caution not to mix criminal law enforcement with the FAA’s administrative safety enforcement function, the public interest is best served by coordination and fostering mutual understanding and cooperation between governmental entities with law enforcement responsibilities. Although there are Federal criminal statutes that may be implicated by some UAS operations (see e.g., 49 U.S.C. § 46307), most violations of the FAA’s regulations may be addressed through administrative enforcement measures. As with any other civil or criminal adjudication, successful enforcement will depend on development of a complete and accurate factual report contemporaneous with the event.

Although certainly not an exhaustive list, law enforcement officials, first responders and others can provide invaluable assistance to the FAA by taking the actions outlined below:

8 At least in terms of initial contact with the suspected offender.
9 Applying any laws falling within the enforcement authority of the LEA in question.
(1) **Witness Identification and Interviews.** Local law enforcement is in the best position to identify potential witnesses and conduct initial interviews, documenting what they observed while the event is still fresh in their minds. In addition, local law enforcement is in an optimum position to secure all information necessary for our safety inspectors to contact these witnesses in any subsequent FAA investigation. Administrative proceedings often involve very technical issues; therefore, we expect our own safety inspectors will need to re-interview most witnesses. We are mindful that in many jurisdictions, state law may prohibit the transmission of witness statements to third parties, including the FAA. In those circumstances it is extremely important that the FAA be able to locate and conduct independent interviews of these individuals.

(2) **Identification of Operators.** Law enforcement is in the best position to contact the suspected operators of the aircraft, and any participants or support personnel accompanying the operators. The FAA has previously exercised enforcement discretion in not requiring persons to register sUAS used exclusively as model aircraft, so educating the community on these requirements will be an ongoing process. We continue to identify operators engaged in commercial operations who have not received authorization from the FAA to do so. However, in our enforcement proceedings, we bear the burden of proof, and showing who actually is operating the unmanned aircraft is critical. Therefore, evidentiary thresholds must be met even when using data or video acquired via the internet. Likewise, the purpose for the operation (such as in support of a commercial venture, to further some business interest, or to secure compensation for their services) may become an important element in determining what regulations, if any, may have been violated by the operation. Identification and interview of suspected operators early on will help immeasurably to advance enforcement efforts.

(3) **Viewing and Recording the Location of the Event.** Pictures taken in close proximity to the event are often helpful in describing light and weather conditions, any damage or injuries, and the number and density of people on the surface, particularly at public events or in densely populated areas. During any witness interviews, use of fixed landmarks that may be depicted on maps, diagrams or photographs immeasurably help in fixing the position of the aircraft, and such landmarks also should be used as a way to describe lateral distances and altitude above the ground, structures or people (e.g. below the third floor of Building X, below the top of the oak tree located Y, anything that gives reference points for lay witnesses).

(4) **Identifying Sensitive Locations, Events, or Activities.** The FAA maintains a variety of security-driven airspace restrictions around the country to help protect sensitive locations, events, and activities through Temporary Flight Restrictions (TFR), Prohibited Areas, and other mechanisms such as the Washington, DC Flight Restricted Zone (DC FRZ). UAS operations, including Model Aircraft flights, are generally prohibited within these defined volumes of airspace. LEAs should become familiar with the steady-state airspace restrictions active within their area of responsibility, along with as-needed TFRs, which could be instituted to help protect sensitive events (e.g., major gatherings of elected officials) and activities
(e.g., Presidential movements). If there is any question as to whether a TFR has been established in a given location, contact the nearest air traffic facility or flight service station for further information or visit http://tfr.faa.gov/tfr2/list.html for a graphic representation of TFRs locatable by state and effective dates.

(5) **Notification.** Immediate notification of an incident, accident or other suspected violation to one of the FAA Regional Operation Centers (ROC) located around the country is valuable to the timely initiation of the FAA’s investigation. These centers are manned 24 hours a day, 7 days a week with personnel who are trained in how to contact appropriate duty personnel during non-business hours when there has been an incident, accident or other matter that requires timely response by FAA employees. A list of these centers and telephone numbers is included as Attachment B to this letter. FAA Law Enforcement Assistance Program (LEAP) Special Agents are also available to provide investigation support. LEAP Special Agent contact information is included as Attachment C to this letter.

(6) **Evidence Collection.** Identifying and preserving any public or private security systems that may provide photographic or other visual evidence of UAS operations, including video or still picture security systems can provide essential evidence to the FAA. Many times these systems do not permanently store information but erase it as the system recycles at a given interval. Local law enforcement is in the best position to inquire and make initial requests to identify and preserve this form of evidence or obtain legal process for securing this evidence in the context of an investigation of a possible violation of state criminal law. In addition, some UAS may be marked with identification numbers (“N-numbers”) signifying FAA registration under a commercial or governmental authorization. All other UAS weighing greater than 0.55 pounds and operated for hobby or recreational purposes are required to be marked with a registration number assigned to the owner. The presence or lack of these identification numbers may be significant in an FAA investigation. For example, an operator may state that he or she is conducting an approved commercial activity, which usually requires registered aircraft. However, the absence of registration markings on the UAS may indicate that the aircraft is not registered, meaning the operation may not be authorized. Note that identification numbers may not be conspicuous from a distance because of the size and non-traditional configuration of some UAS. The registered owners of UAS operating under an approved commercial or governmental authorization bearing identification numbers can be found by searching for the N-number on the FAA’s website: www.faa.gov. Hobby UAS greater than 0.55 pounds must be marked with a registration number and the operator must provide evidence of registration upon request by law enforcement. These numbers can be verified by contacting an FAA Regional Operations Center, the Washington Operations Center or your FAA LEAP Special Agent.

Virtually all of the items listed above are already in the tool box for law enforcement officers. Other investigative methods also may prove useful, such as consensual examination of the UAS, equipment trailers and the like. However, other law enforcement processes, such as arrest and detention or non-consensual searches almost always fall outside of the allowable methods to pursue administrative enforcement actions by the FAA unless they are truly a by-
product of a state criminal investigation. We do not mean to discourage use of these methods and procedures where there is an independent basis for them under state or local law. We simply wish to emphasize that work products intended for FAA use generally should involve conventional administrative measures such as witness interviews, “stop and talk” sessions with suspected violators, consensual examination of vehicles and equipment, and other methods that do not involve court orders or the potential use of force by law enforcement personnel.

It is extremely difficult to provide a “one size fits all” guide to cooperative investigation of unauthorized UAS operations considering the myriad jurisdictions and the associated statutory and constitutional restraints and requirements. State and local officials are always urged to use their governmental unit’s legal resources and their own management chain to develop acceptable protocols for dealing with these instances. In some situations, there may be legal bars to the sharing of some information or the use of databases designed for conventional law enforcement. However, with appropriate data collection during first responses and early reporting to the FAA, Federal, State and local agencies will be in the best position to both collect and share information that may be of interest to each jurisdiction. FAA aviation safety inspectors are adept at coordination with our own legal resources to ensure unauthorized operators are properly accountable for the potential risk they create to both people and property. In addition, we have specially trained inspectors within the FAA UAS Integration office who can provide expertise in this area.

If you have any questions or your agency would like to pursue advance planning on how to address these situations, please feel free to contact your local FAA Law Enforcement Assistance Special Agent or the FAA’s Law Enforcement Assistance Program Office at (202) 267-4641 or (202) 267-9411.
Excerpts

FDC 4/7607 ZBW RL AIRSPACE PROVIDENCE, RHODE ISLAND. TEMPORARY FLIGHT RESTRICTIONS. OCTOBER 16, 2014 LOCAL. THIS NOTAM REPLACES NOTAM 4/7600 DUE TO SCHEDULE CHANGE. PURSUANT TO 49 USC 40103(B) THE FEDERAL AVIATION ADMINISTRATION (FAA) CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AS ‘NATIONAL DEFENSE AIRSPACE’. PILOTS WHO DO NOT ADHERE TO THE FOLLOWING PROCEDURES MAY BE INTERCEPTED DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. ANY OF THE FOLLOWING ADDITIONAL ACTIONS MAY ALSO BE TAKEN AGAINST A PILOT WHO DOES NOT COMPLY WITH THE REQUIREMENTS OR ANY SPECIAL INSTRUCTIONS OR PROCEDURES ANNOUNCED IN THIS NOTAM:
A) THE FAA MAY TAKE ADMINISTRATIVE ACTION, INCLUDING IMPOSING CIVIL PENALTIES AND THE SUSPENSION OR REVOCATION OF AIRMEN CERTIFICATES; OR
B) THE UNITED STATES GOVERNMENT MAY PURSUE CRIMINAL CHARGES, INCLUDING CHARGES UNDER TITLE 49 OF THE UNITED STATES CODE, SECTION 46307; OR
C) THE UNITED STATES GOVERNMENT MAY USE DEADLY FORCE AGAINST THE AIRBORNE AIRCRAFT, IF IT IS DETERMINED THAT THE AIRCRAFT POSES AN IMMINENT SECURITY THREAT.

C. THE FOLLOWING OPERATIONS ARE NOT AUTHORIZED WITHIN THIS TFR: FLIGHT TRAINING, PRACTICE INSTRUMENT APPROACHES, AEROBATIC FLIGHT, GLIDER OPERATIONS, SEAPLANE OPERATIONS, PARACHUTE OPERATIONS, ULTRALIGHT, HANG GLIDING, BALLOON OPERATIONS, AGRICULTURE/CROP DUSTING, ANIMAL POPULATION CONTROL FLIGHT OPERATIONS, BANNER TOWING OPERATIONS, SIGHTSEEING OPERATIONS, MAINTENANCE TEST FLIGHTS, MODEL AIRCRAFT OPERATIONS, MODEL ROCKETRY, UNMANNED AIRCRAFT SYSTEMS (UAS), AND UTILITY AND PIPELINE SURVEY OPERATIONS.
DC FRZ

FDC 0/8326 ZDC PART 1 OF 10 FLIGHT RESTRICTIONS, WASHINGTON, DC, EFFECTIVE 1012010401 UTC UNTIL FURTHER NOTICE. THIS NOTICE WILL REPLACE NOTAM 0/9477 DUE TO A CHANGE IN RESTRICTIONS. THIS NOTAM AND A NOTAM FOR THE LEESBURG MANEUVERING AREA SUPPLEMENT SUBPART V, 14 CFR PART 93 FOR THE WASHINGTON, D.C. SPECIAL FLIGHT RULES AREA (DC SFRA). PURSUANT TO 49 USC 40103(B), THE FAA HAS ESTABLISHED THE DC SFRA AREA AS 'NATIONAL DEFENSE AIRSPACE. ANY PERSON WHO DOES NOT COMPLY WITH THE REQUIREMENTS APPLICABLE TO THE DC SFRA MAY BE INTERCEPTED, DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. ANY OF THE FOLLOWING ADDITIONAL ACTIONS MAY ALSO BE TAKEN AGAINST A PILOT WHO DOES NOT COMPLY WITH THE REQUIREMENTS OR ANY SPECIAL INSTRUCTIONS OR PROCEDURES ANNOUNCED IN THIS NOTAM: A) THE FAA MAY TAKE ADMINISTRATIVE ACTION, INCLUDING IMPOSING CIVIL PENALTIES AND THE SUSPENSION OR REVOCATION OF AIRMEN CERTIFICATES; B) THE UNITED STATES GOVERNMENT MAY PURSUE CRIMINAL CHARGES, INCLUDING CHARGES UNDER TITLE 49 OF THE UNITED STATES CODE, SECTION 46307; C) THE UNITED STATES GOVERNMENT MAY USE DEADLY FORCE AGAINST THE AIRBORNE AIRCRAFT, IF IT IS DETERMINED THAT THE AIRCRAFT POSE: AN IMMINENT SECURITY THREAT.

A. THE FOLLOWING OPERATIONS ARE NOT AUTHORIZED WITHIN THE DC FRZ: FLIGHT TRAINING, AEROBATIC FLIGHT, PRACTICE INSTRUMENT APPROACHES, GLIDER OPERATIONS, PARACHUTE OPERATIONS, ULTRA LIGHT, HANG GLIDING, BALLOON OPERATIONS, TETHERED BALLOONS, AGRICULTURE/CROP DUSTING, ANIMAL POPULATION CONTROL FLIGHT OPERATIONS, BANNER TOWING OPERATIONS, MAINTENANCE TEST FLIGHTS, MODEL AIRCRAFT OPERATIONS, MODEL ROCKETRY, FLOAT PLANE OPERATIONS, UNMANNED AIRCRAFT SYSTEMS (UAS) AND AIRCRAFT/HELICOPTERS OPERATING FROM A SHIP OR PRIVATE/CORPORATE YACHT. B. IT IS HIGHLY RECOMMENDED THAT A PILOT CONTINUOUSLY MONITOR VHF FREQUENCY 121.5 OR UHF FREQUENCY 243.0 FOR EMERGENCY INSTRUCTIONS WHEN OPERATING AN AIRCRAFT IN THE DC FRZ, EITHER IN AN AIRCRAFT THAT IS SUITABLY EQUIPPED, OR BY USE OF PORTABLE EQUIPMENT.

Avoidance of Power Plans Etc. (Applied to all Aircraft, including UAS)

FDC 4/0811 SPECIAL NOTICE. THIS IS A RESTATEMENT OF A PREVIOUSLY ISSUED ADVISORY NOTICE. IN THE INTEREST OF NATIONAL SECURITY AND TO THE EXTENT PRACTICABLE, PILOTS ARE STRONGLY ADVISED TO AVOID THE AIRSPACE ABOVE, OR IN PROXIMITY TO SUCH SITES AS POWER PLANTS (NUCLEAR, HYDRO-ELECTRIC, OR COAL), DAMS, REFINERIES, INDUSTRIAL COMPLEXES, MILITARY FACILITIES AND OTHER SIMILAR FACILITIES. PILOTS SHOULD NOT CIRCLE AS TO LOITER IN THE VICINITY OVER THESE TYPES OF FACILITIES.
Select Sporting Events

FDC 4/3621 FDC SPECIAL SECURITY NOTICE. SPORTING EVENTS. THIS NOTAM REPLACES FDC NOTAM 9/5151 TO REFLECT A TSA WEBSITE UPDATE AND ADDITIONAL INFORMATION CONCERNING AIRSPACE WAIVERS. FLIGHT RESTRICTIONS IN THIS NOTAM COMPLY WITH STATUTORY MANDATES DETAILED IN SECTION 352 OF PUBLIC LAW 108-7 AS AMENDED BY SECTION 521 OF PUBLIC LAW 108-199. PURSUANT TO 49 USC 40103(B), THE FEDERAL AVIATION ADMINISTRATION (FAA) CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AS 'NATIONAL DEFENSE AIRSPACE'. ANY PERSON WHO KNOWINGLY OR WILLFULLY VIOLATES THE RULES PERTAINING TO OPERATIONS IN THIS AIRSPACE MAY BE SUBJECT TO CERTAIN CRIMINAL PENALTIES UNDER 49 USC 46307. PILOTS WHO DO NOT ADHERE TO THE FOLLOWING PROCEDURES MAY BE INTERCEPTED, DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. PURSUANT TO 14 CFR SECTION 99.7, SPECIAL SECURITY INSTRUCTIONS, COMMENCING ONE HOUR BEFORE THE SCHEDULED TIME OF THE EVENT UNTIL ONE HOUR AFTER THE END OF THE EVENT. ALL AIRCRAFT OPERATIONS; INCLUDING PARACHUTE JUMPING, UNMANNED AIRCRAFT AND REMOTE CONTROLLED AIRCRAFT, ARE PROHIBITED WITHIN A 3 NMR UP TO AND INCLUDING 3000 FT AGL OF ANY STADIUM HAVING A SEATING CAPACITY OF 30,000 OR MORE PEOPLE WHERE EITHER A REGULAR OR POST SEASON MAJOR LEAGUE BASEBALL, NATIONAL FOOTBALL LEAGUE, OR NCAA DIVISION ONE FOOTBALL GAME IS OCCURRING. THIS NOTAM ALSO APPLIES TO NASCAR SPRINT CUP, INDY CAR, AND CHAMP SERIES RACES EXCLUDING QUALIFYING AND PRE-RACE EVENTS. FLIGHTS CONDUCTED FOR OPERATIONAL PURPOSES OF ANY EVENT, STADIUM OR VENUE AND BROADCAST COVERAGE FOR THE BROADCAST RIGHTS HOLDER ARE AUTHORIZED WITH AN APPROVED AIRSPACE WAIVER. AN FAA AIRSPACE WAIVER DOES NOT RELIEVE OPERATORS FROM OBTAINING ALL OTHER NECESSARY AUTHORIZATIONS AND COMPLYING WITH ALL APPLICABLE FEDERAL AVIATION REGULATIONS. THE RESTRICTIONS DESCRIBED ABOVE DO NOT APPLY TO THOSE AIRCRAFT AUTHORIZED BY AND IN CONTACT WITH ATC FOR OPERATIONAL OR SAFETY OF FLIGHT PURPOSES, DEPARTMENT OF DEFENSE, LAW ENFORCEMENT, AND AIR AMBULANCE FLIGHT OPERATIONS. ALL PREVIOUSLY ISSUED WAIVERS TO FDC NOTAM 9/5151 REMAIN VALID UNTIL THE SPECIFIED END DATE BUT NOT TO EXCEED 90 DAYS FOLLOWING THE EFFECTIVE DATE OF THIS NOTAM. INFORMATION ABOUT AIRSPACE WAIVER APPLICATIONS AND TSA SECURITY AUTHORIZATIONS CAN BE FOUND AT HTTP://WWW.TSA.GOV/STAKEHOLDERS/AIRSPACE-WAIVERS-0 OR BY CALLING TSA AT 571-227-2071. SUBMIT REQUESTS FOR FAA AIRSPACE WAIVERS AT HTTPS://WAIVERS.FAA.GOV.
Disney Theme Parks

FDC 4/XXXX ZZZ SECURITY SPECIAL NOTICE DISNEY WORLD THEME PARK ORLANDO FL THIS NOTAM REPLACES NOTAM 9/4985 TO REFLECT A TSA WEBSITE UPDATE AND ADDITIONAL INFORMATION CONCERNING AIRSPACE WAIVERS. FLIGHT RESTRICTIONS IN THIS NOTAM COMPLY WITH STATUTORY MANDATES DETAILED IN SECTION 352 OF PUBLIC LAW 108-7 AS AMENDED BY SECTION 521 OF PUBLIC LAW 108-199. PURSUANT TO 49 USC 40103(B), THE FEDERAL AVIATION ADMINISTRATION (FAA) CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AS 'NATIONAL DEFENSE AIRSPACE'. AN PERSON WHO KNOWINGLY OR WILLFULLY VIOLATES THE RULES PERTAINING TO OPERATIONS IN THIS AIRSPACE MAY BE SUBJECT TO CERTAIN CRIMINAL PENALTIES UNDER 49 USC 46307. PILOTS WHO DO NOT ADHERE TO THE FOLLOWING PROCEDURES MAY BE INTERCEPTED, DETAINED AND INTERVIEWED BY LAW ENFORCEMENT/SECURITY PERSONNEL. PURSUANT TO 14 CFR SECTION 99.7, SPECIAL SECURITY INSTRUCTIONS, ALL AIRCRAFT FLIGHT OPERATIONS TO INCLUDE UNMANNED AND REMOTE CONTROLLED AIRCRAFT ARE PROHIBITED WITHIN A 3 NMR OF 282445N/0813420W OR THE ORL238014.8 UP TO AND INCLUDING 3000 FT AGL. THE RESTRICTIONS DO NOT APPLY TO THOSE AIRCRAFT AUTHORIZED BY AND IN CONTACT WITH ATC FOR OPERATIONAL OR SAFETY OF FLIGHT PURPOSES, AND DEPARTMENT OF DEFENSE, LAW ENFORCEMENT, AND AIR AMBULANCE FLIGHT OPERATIONS. FLIGHTS CONDUCTED FOR OPERATIONAL PURPOSES OF ANY DISNEY WORLD EVENT AND VENUE ARE AUTHORIZED WITH AN APPROVED WAIVER. AN FAA AIRSPACE WAIVER DOES NOT RELIEVE OPERATORS FROM OBTAINING ALL OTHER NECESSARY AUTHORIZATIONS AND COMPLYING WITH ALL APPLICABLE FEDERAL AVIATION REGULATIONS. ALL PREVIOUSLY ISSUED WAIVERS TO FDC NOTAM 4/4985 REMAIN VALID UNTIL THE SPECIFIED END DATE BUT NOT TO EXCEED 90 DAYS FOLLOWING THE EFFECTIVE DATE OF THIS NOTAM. INFORMATION ABOUT AIRSPACE WAIVER APPLICATIONS AND TSA SECURITY AUTHORIZATIONS CAN BE FOUND AT HTTP://WWW.TSA.GOV/STAKEHOLDERS/AIRSPACE-WAIVERS-0 OR BY CALLING TSA AT 571-227-2071. SUBMIT REQUESTS FOR FAA AIRSPACE WAIVERS AT HTTPS://WAIVERS.FAA.GOV
Attachment B.

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<td>Central ROC</td>
<td>AR, IA, IL, IN, KS, LA, MI, MN, MO, ND, NE, NM, OH, OK, SD, TX and WI</td>
<td>817-222-5006</td>
<td><a href="mailto:9-CSA-ROC@faa.gov">9-CSA-ROC@faa.gov</a></td>
</tr>
<tr>
<td>Southern / New England ROC</td>
<td>AL, CT, FL, GA, KY, MA, ME, MS, NC, NH, PR, RI, SC, TN, VI and VT</td>
<td>404-305-5156</td>
<td><a href="mailto:9-ASO-ROC@faa.gov">9-ASO-ROC@faa.gov</a></td>
</tr>
<tr>
<td>Eastern ROC</td>
<td>DC, DE, MD, NJ, NY, PA, VA and WV</td>
<td>718-553-3100</td>
<td><a href="mailto:7-AEA-ROC@faa.gov">7-AEA-ROC@faa.gov</a></td>
</tr>
<tr>
<td>Washington WOC</td>
<td></td>
<td>202-267-3333</td>
<td><a href="mailto:9-awa-ash-woc@faa.gov">9-awa-ash-woc@faa.gov</a></td>
</tr>
</tbody>
</table>
A model aircraft is 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. When flying a model aircraft (including a drone or UAS) for hobby or recreational use, the aircraft should be operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization.

Information source: Section 336 of the FAA Modernization and Reform Act of 2012.

For more information, visit: WWW.FAA.GOV/UAS

For all operating rules, visit: www.faa.gov/uas/getting_started/fly_for_fun

The FAA may pursue enforcement action against anyone operating model aircraft in a way that endangers the safety of the national airspace system.
DRONE USERS OPERATING UNDER FAA RULES

Users of small unmanned aircraft systems (sUAS) must:

- **Register** your aircraft, registermyuas.faa.gov
- **Obtain** an FAA remote pilot certificate
- **Follow** FAA regulations
- **Be at least** 16 years old
- **Fly** a UAS weighing less than 55 lbs
- **Perform a pre-flight check** to ensure the flight can be conducted safely
- **Fly only within class G airspace** (Class B, C, D and E airspace needs FAA approval)
- **Fly within** visual line of sight*
- **Fly at or below** 400 feet*
- **Fly during** the day*
- **Fly at or below** 100 mph*
- **Yield** right of way to manned aircraft*
- **Not Fly** over people*

*The operator may apply for a waiver to these rules.

For more information, visit: [WWW.FAA.GOV/UAS](http://WWW.FAA.GOV/UAS)

For all operating rules, visit: [www.faa.gov/uas/resources/uas_regulations_policy](http://www.faa.gov/uas/resources/uas_regulations_policy)

The FAA may pursue enforcement action against anyone who operates an unmanned aircraft system in violation of FAA regulations.
State and Local Regulation of Unmanned Aircraft Systems (UAS)
Fact Sheet

Federal Aviation Administration
Office of the Chief Counsel

December 17, 2015

BACKGROUND

Unmanned aircraft systems (UAS) are aircraft subject to regulation by the FAA to ensure safety of flight, and safety of people and property on the ground. States and local jurisdictions are increasingly exploring regulation of UAS or proceeding to enact legislation relating to UAS operations. In 2015, approximately 45 states have considered restrictions on UAS. In addition, public comments on the Federal Aviation Administration’s (FAA) proposed rule, “Operation and Certification of Small Unmanned Aircraft Systems” (Docket No. FAA-2015-0150), expressed concern about the possible impact of state and local laws on UAS operations.

Incidents involving unauthorized and unsafe use of small, remote-controlled aircraft have risen dramatically. Pilot reports of interactions with suspected unmanned aircraft have increased from 238 sightings in all of 2014 to 780 through August of this year. During this past summer, the presence of multiple UAS in the vicinity of wild fires in the western U.S. prompted firefighters to ground their aircraft on several occasions.

This fact sheet is intended to provide basic information about the federal regulatory framework for use by states and localities when considering laws affecting UAS. State and local restrictions affecting UAS operations should be consistent with the extensive federal statutory and regulatory framework pertaining to control of the airspace, flight management and efficiency, air traffic control, aviation safety, navigational facilities, and the regulation of aircraft noise at its source.

Presented below are general principles of federal law as they relate to aviation safety, and examples of state and local laws that should be carefully considered prior to any legislative action to ensure that they are consistent with applicable federal safety regulations. The FAA’s Office of the Chief Counsel is available for consultation on specific questions.

WHY THE FEDERAL FRAMEWORK

Congress has vested the FAA with authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source. 49 U.S.C. §§ 40103, 44502, and 44701-44735. Congress has directed the FAA to “develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace.” 49 U.S.C. § 40103(b)(1). Congress has further directed the FAA to “prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes)” for navigating, protecting, and identifying aircraft; protecting individuals and property on the ground; using the navigable
airspace efficiently; and preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. 49 U.S.C. § 40103(b)(2).

A consistent regulatory system for aircraft and use of airspace has the broader effect of ensuring the highest level of safety for all aviation operations. To ensure the maintenance of a safe and sound air transportation system and of navigable airspace free from inconsistent restrictions, FAA has regulatory authority over matters pertaining to aviation safety.

REGULATING UAS OPERATIONS

In § 333 of the FAA Modernization and Reform Act of 2012 (Public Law No. 112-95), Congress directed the Secretary to determine whether UAS operations posing the least amount of public risk and no threat to national security could safely be operated in the national airspace system (NAS) and if so, to establish requirements for the safe operation of these systems in the NAS.

On February 15, 2015, the FAA proposed a framework of regulations that would allow routine commercial use of certain small UAS in today’s aviation system, while maintaining flexibility to accommodate future technological innovations. The FAA’s Notice of Proposed Rulemaking offered safety rules for small UAS (under 55 pounds) conducting non-recreational or non-hobby operations. The proposed rule defines permissible hours of flight, line-of-sight observation, altitude, operator certification, optional use of visual observers, aircraft registration and marking, and operational limits.

Consistent with its statutory authority, the FAA is requiring Federal registration of UAS in order to operate a UAS. Registering UAS will help protect public safety in the air and on the ground, aid the FAA in the enforcement of safety-related requirements for the operation of UAS, and build a culture of accountability and responsibility among users operating in U.S. airspace. No state or local UAS registration law may relieve a UAS owner or operator from complying with the Federal UAS registration requirements. Because Federal registration is the exclusive means for registering UAS for purposes of operating an aircraft in navigable airspace, no state or local government may impose an additional registration requirement on the operation of UAS in navigable airspace without first obtaining FAA approval.

Substantial air safety issues are raised when state or local governments attempt to regulate the operation or flight of aircraft. If one or two municipalities enacted ordinances regulating UAS in the navigable airspace and a significant number of municipalities followed suit, fractionalized control of the navigable airspace could result. In turn, this ‘patchwork quilt’ of differing restrictions could severely limit the flexibility of FAA in controlling the airspace and flight patterns, and ensuring safety and an efficient air traffic flow. A navigable airspace free from inconsistent state and local restrictions is essential to the maintenance of a safe and sound air transportation system. See Montalvo v. Spirit Airlines, 508 F.3d 464 (9th Cir. 2007), and French v. Pan Am Express, Inc., 869 F.2d 1 (1st Cir. 1989); see also Arizona v. U.S., 567 U.S. ___, 132 S.Ct. 2492, 2502 (2012) (“Where Congress occupies an entire field . . . even complimentary state regulation is impermissible. Field preemption reflects a congressional decision to foreclose any

state regulation in the area, even if it is parallel to federal standards.”), and Morales v. Trans World Airlines, Inc., 504 U.S. 374, 386-87 (1992).

EXAMPLES OF STATE AND LOCAL LAWS FOR WHICH CONSULTATION WITH THE FAA IS RECOMMENDED

• Operational UAS restrictions on flight altitude, flight paths; operational bans; any regulation of the navigable airspace. For example – a city ordinance banning anyone from operating UAS within the city limits, within the airspace of the city, or within certain distances of landmarks. Federal courts strictly scrutinize state and local regulation of overflight. City of Burbank v. Lockheed Air Terminal, 411 U.S. 624 (1973); Skysign International, Inc. v. City and County of Honolulu, 276 F.3d 1109, 1117 (9th Cir. 2002); American Airlines v. Town of Hempstead, 398 F.2d 369 (2d Cir. 1968); American Airlines v. City of Audubon Park, 407 F.2d 1306 (6th Cir. 1969).

• Mandating equipment or training for UAS related to aviation safety such as geo-fencing would likely be preempted. Courts have found that state regulation pertaining to mandatory training and equipment requirements related to aviation safety is not consistent with the federal regulatory framework. Med-Trans Corp. v. Benton, 581 F. Supp. 2d 721, 740 (E.D.N.C. 2008); Air Evac EMS, Inc. v. Robinson, 486 F. Supp. 2d 713, 722 (M.D. Tenn. 2007).

EXAMPLES OF STATE AND LOCAL LAWS WITHIN STATE AND LOCAL GOVERNMENT POLICE POWER

Laws traditionally related to state and local police power – including land use, zoning, privacy, trespass, and law enforcement operations – generally are not subject to federal regulation. Skysign International, Inc. v. City and County of Honolulu, 276 F.3d 1109, 1115 (9th Cir. 2002). Examples include:

• Requirement for police to obtain a warrant prior to using a UAS for surveillance.
• Specifying that UAS may not be used for voyeurism.
• Prohibitions on using UAS for hunting or fishing, or to interfere with or harass an individual who is hunting or fishing.
• Prohibitions on attaching firearms or similar weapons to UAS.

CONTACT INFORMATION FOR QUESTIONS

The FAA’s Office of the Chief Counsel is available to answer questions about the principles set forth in this fact sheet and to consult with you about the intersection of federal, state, and local regulation of aviation, generally, and UAS operations, specifically. You may contact the Office of Chief Counsel in Washington, D.C. or any of the following Regional Counsels:

RTCA DAC 000050
Revised 000051
APPENDIX – LIST OF AUTHORITIES

Federal Statutes


Federal Regulations

• Title 14 of the Code of Federal Regulations, Chapter 1.

The U.S. Supreme Court

• “Congress has recognized the national responsibility for regulating air commerce. Federal control is intensive and exclusive. Planes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands. The moment a ship taxies onto a runway it is caught up in an elaborate and detailed system of controls. It takes off only by instruction from the control tower, it travels on prescribed beams, it may be diverted from its intended landing, and it obeys signals and orders. Its privileges, rights, and protection, so far as transit is concerned, it owes to the Federal Government alone and not to any state government.” Northwest Airlines v. State of Minnesota, 322 U.S. 292, 303 (1944)(Jackson, R., concurring).

• “If we were to uphold the Burbank ordinance [which placed an 11 p.m. to 7 a.m. curfew on jet flights from the Burbank Airport] and a significant number of municipalities followed suit, it is obvious that fractionalized control of the timing of takeoffs and landings would severely limit the flexibility of FAA in controlling air traffic flow. The difficulties of scheduling flights to avoid congestion and the concomitant decrease in safety would be compounded.” Burbank v. Lockheed Air Terminal Inc., 411 U.S. 624, 639 (1973).

• “The Federal Aviation Act requires a delicate balance between safety and efficiency, and the protection of persons on the ground … The interdependence of these factors requires a uniform and exclusive system of federal regulation if the congressional objectives underlying the Federal Aviation Act are to be fulfilled.” Burbank at 638-639.

• “The paramount substantive concerns of Congress [in enacting the FAA Act] were to regulate federally all aspects of air safety … and, once aircraft were in ‘flight,’ airspace management.…” Burbank at 644 (Rehnquist, J. dissenting).
U.S. Courts of Appeals

- “Air traffic must be regulated at the national level. Without uniform equipment specifications, takeoff and landing rules, and safety standards, it would be impossible to operate a national air transportation system.” *Gustafson v. City of Lake Angeles*, 76 F.3d 778, 792-793 (6th Cir. 1996)(Jones, N., concurring).

- “The purpose, history, and language of the FAA [Act] lead us to conclude that Congress intended to have a single, uniform system for regulating aviation safety. The catalytic events leading to the enactment of the FAA [Act] helped generate this intent. The FAA [Act] was drafted in response to a series of fatal air crashes between civil and military aircraft operating under separate flight rules …. In discussing the impetus for the FAA [Act], the Supreme Court has also noted that regulating the aviation industry requires a delicate balance between safety and efficiency. It is precisely because of ‘the interdependence of these factors’ that Congress enacted ‘a uniform and exclusive system of federal regulation.’” *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007), citing *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 638-39 (1973).

- “[W]hen we look to the historical impetus for the FAA, its legislative history, and the language of the [FAA] Act, it is clear that Congress intended to invest the Administrator of the Federal Aviation Administration with the authority to enact exclusive air safety standards. Moreover, the Administrator has chosen to exercise this authority by issuing such pervasive regulations that we can infer a preemptive intent to displace all state law on the subject of air safety.” *Montalvo* at 472.

- “We similarly hold that federal law occupies the entire field of aviation safety. Congress’ intent to displace state law is implicit in the pervasiveness of the federal regulations, the dominance of the federal interest in this area, and the legislative goal of establishing a single, uniform system of control over air safety. This holding is fully consistent with our decision in *Skysign International, Inc. v. Honolulu*, 276 F.3d 1109 (9th Cir. 2002), where we considered whether federal law preempted state regulation of aerial advertising that was distracting and potentially dangerous to persons on the ground. In upholding the state regulations, we held that federal law has not ‘preempt[ed] altogether any state regulation purporting to reach into the navigable airspace.’ *Skysign* at 1116. While Congress may not have acted to occupy exclusively all of air commerce, it has clearly indicated its intent to be the sole regulator of aviation safety. The FAA, together with federal air safety regulations, establish complete and thorough safety standards for interstate and international air transportation that are not subject to supplementation by, or variation among, states.” *Montalvo* at 473-474.

- “[W]e remark the Supreme Court's reasoning regarding the need for uniformity [concerning] the regulation of aviation noise, see *City of Burbank v. Lockheed Air Terminal*, 411 U.S. 624 (1973), and suggest that the same rationale applies here. In *Burbank*, the Court struck down a municipal anti-noise ordinance placing a curfew on jet flights from a regional airport. Citing the ‘pervasive nature of the scheme of federal
regulation,’ the majority ruled that aircraft noise was wholly subject to federal hegemony, thereby preempting state or local enactments in the field. In our view, the pervasiveness of the federal web is as apparent in the matter of pilot qualification as in the matter of aircraft noise. If we upheld the Rhode Island statute as applied to airline pilots, ‘and a significant number of [states] followed suit, it is obvious that fractionalized control ... would severely limit the flexibility of the F.A.A ....’ [citing Burbank] Moreover, a patchwork of state laws in this airspace, some in conflict with each other, would create a crazyquilt effect ... The regulation of interstate flight-and flyers-must of necessity be monolithic. Its very nature permits no other conclusion. In the area of pilot fitness as in the area of aviation noise, the [FAA] Act as we read it ‘leave[s] no room for ... local controls.’ [citing Burbank]. French v. Pan Am Express, Inc., 869 F.2d 1, 6 (1st Cir. 1989).