Drone/UAS Operator Safety Guidelines and FAQs about Privacy



Prepared by the UAS Legislative Task Force 29th Alaska State Legislature

Alaskans guard their personal privacy very seriously. How do we define privacy when it comes to Unmanned Aircraft Systems (UAS) commonly known as drones? Because of the rapid development of UAS technology, this question is being contemplated worldwide, and new boundaries must be identified. A threat to safety can be pinpointed more easily because a person can see the aircraft, operator and its effects; on the other hand, a threat to privacy is not so easily pinpointed because it involves thought, sentiment, emotion and perception.

Unmanned Aircraft Systems Legislative Task Force established by HJR 15, SLA 14

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When does a flying drone breach privacy?

All Alaskans have a reasonable expectation of privacy to live without fear of unwarranted personal invasion. With equal importance, Alaskans enjoy the right to be left alone. The definition for **Reasonable Expectation of Privacy** directly relates to law enforcement requirements to obtain a warrant before actions of search and seizure.

The **United States Constitution Fourth Amendment** forbids the government from performing warrantless and unreasonable searches of any area in which a person maintains a reasonable expectation of privacy.

Alaska's Constitution guarantees Alaskans the right to privacy. Article 1, Section 22 states, "The right of the people to privacy is recognized and shall not be infringed. The legislature shall implement this section." The legislature has a long-standing history of protecting Alaskans' privacy by instituting **statutes** regarding stalking, harassment, indecent viewing, sending explicit images, and misusing confidential information. The UAS Legislative Task Force (UASLTF) continues to review these protections particularly as they relate to unmanned aircraft systems.

The UASLTF has prepared this document to address privacy guidelines with respect to drones and to educate UAS operators and citizens. We will look at privacy as it pertains to the specific act of intrusion into another's privacy, the prevention of intrusion into one's own privacy, and/or the act of exposing elements of one's privacy against an individual's will. This concept is recognized as "**the right to be left alone.**"

Private Citizen: Please recognize that individuals experience different levels of sensitivity to interruption to privacy. Was the drone flight intentionally directed at you or just passing through? Do you believe the operator of the drone was flying in an inappropriate way? Be as specific as possible so that you can report the incident to local law enforcement.

Drone Operator: Will you be perceived as intruding on someone's privacy? Would you act in person as you do with your drone? Be courteous and respectful to others.



FAA and 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, 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 FAAs 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 49 U.S.C. § 44711), 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.

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FAA and the Role of Law Enforcement cont.

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:

(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.

(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. Our challenges in locating violators are marked in that very few of these systems are registered in any federal database and rarely will they have identifiable markings such as used for conventional manned aircraft.

(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.

(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.

(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.

(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.

My neighbor is sunbathing on her deck and my son is flying his drone...

Although the FAA governs the airspace from the ground up, help your son understand courteous flying so he doesn't disturb the neighbors or fly somewhere he shouldn't. He should never hover over your neighbor's yard.

Know Before You Fly provides recreational flying rules for hobby pilots: www.alaskadrones.org.

Private Citizen: The FAA governs the airspace from the ground up regardless of whether the property owner is private, public, corporate, or government. While we enjoy the sense of privacy on our property, we may not control what occurs above our heads.

Drone Operator: Fly with respect. Don't fly your drone where people typically expect privacy. Don't use your drone to harass people. In public areas, don't invade people's personal space and their solitude.

EXAMPLE

Someone is flying their drone and interrupting my relaxing evening barbequing in my backyard. They won't stop even when I "shoo" it away...

Try to identify where the drone operator is located. Provide as much information as possible to local law enforcement. This might be a situation of harassment.



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Alaska's Know-Before-You-Fly Drone Safety Guidelines

FAA allows the operation of model aircraft, also known as small Unmanned Aircraft Systems (sUAS) or drones, for recreational purposes under the Special Rule for Model Aircraft. Recreational UAS must be operated in accordance with a community-based safety program and the FAA's guidance in Advisory Circular 91-57.

What is recreational use of a sUAS (Drones)?

Recreational use is the operation of a sUAS for personal interests and enjoyment, and not for compensation or hire. For example, using a sUAS to take photographs for your own personal use would be considered recreational; using the same device to take photographs or videos for compensation or sale to another individual would be considered commercial. You should check with the FAA for further determination as to what constitutes commercial sUAS operation.

SAFETY GUIDELINES FOR RECREATIONAL USERS OF SUAS (DRONES)

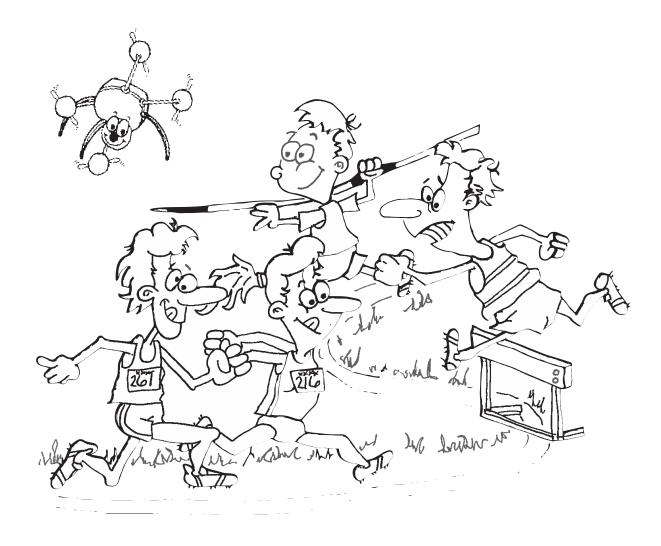
- Users should follow community-based safety guidelines, as developed by organizations such as the Academy of Model Aeronautics (AMA)
- Users should fly no higher than 400 feet and remain below surrounding obstacles when possible
- Users must be able to see their sUAS at all times, and use an observer to assist them if needed
- Users should remain well clear and must not interfere with manned aircraft operations, must see and avoid other aircraft and obstacles at all times, must avoid any activity that would cause a manned aircraft pilot to divert from planned operations, and must give way to all other aircraft at all times.
- Users must not intentionally fly over unprotected persons or moving vehicles, and should remain at least 25 feet away from individuals and vulnerable property
- Users must contact the airport or control tower before flying within five miles of an airport
- Users should be aware that in addition to public airports, Alaska has many private airstrips as well as bodies of waters used for take-off and landing by float planes and should not fly a UAS in the vicinity of these locations
- Users should not fly a UAS weighing more than 55 lbs unless it's certified by an aeromodelling community-based organization.
- Users should not fly in adverse weather conditions such as in high winds or reduced visibility
- Users must not fly under the influence of alcohol or drugs
- Users should ensure the operating environment is safe and that the operator is competent and proficient in the operation of the sUAS
- Users should not operate on or fly over private property without first obtaining permission from the property owner and/or tenant
- Users should not fly near or over sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, etc.
- Users should not conduct surveillance or photograph persons in areas where there is an expectation of privacy without the individual's permission (See AMA's privacy policy)

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Additional safety resources:

AMA National Model Aircraft Safety Code FAA What Can I Do With My Model Aircraft?

This hand-out is a public education resource provided by Alaska's Unmanned Aircraft Systems Legislative Task Force (UASLTF) to raise awareness by providing a brief summary of the laws applicable to sUAS. For more information, contact 907-376-3725 or Rep.Shelley.Hughes@akleg.gov . The UASLTF would like to thank Academy of Model Aeronautics and the Association of Unmanned Vehicle Systems for their joint campaign to promote safe operations of UAS and for providing the safety guidelines listed above. All sUAS operators are responsible for reviewing and complying with applicable state and federal laws that may apply to flying sUAS. While this hand-out provides a summary of the laws applicable to sUAS, users of sUAS should not rely on this hand-out for a full understanding of applicable laws and are responsible for independently reviewing federal and state law before flying sUAS.



Can I shoot it down if it's flying over my house?

Remember that drone is someone else's personal property. It's best to know:

- "Why is a drone flying over your property?"
- "Is it violating the law?"
- "Who and where is the drone operator?"

If you shoot it down or damage it, you may be liable for:

- Destruction of property
- Discharging a weapon in a restricted area
- If you think a drone operator is in violation of the law, immediately contact your local law enforcement agency, and provide as much detail as you can about the encounter.

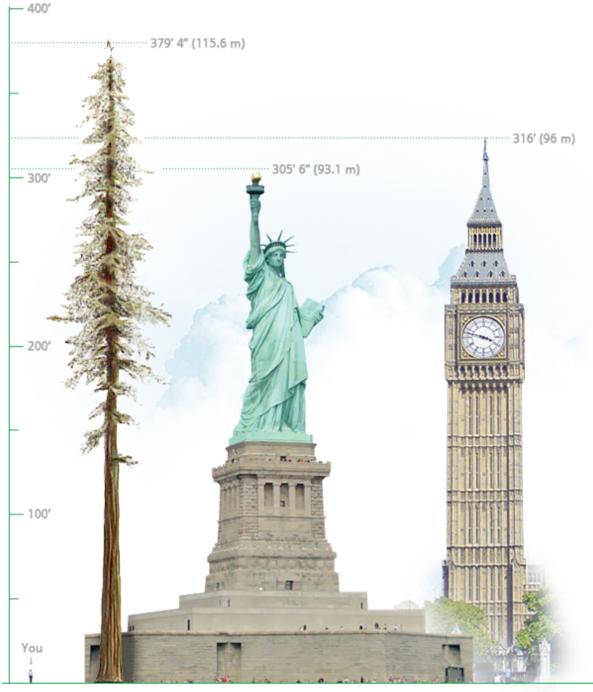
Private Citizen: The value associated with a recreational drone could be \$25 to much more than \$1,000. The FAA is rapidly authorizing commercial use, so that a small drone could be carrying specialized equipment and cost more than \$100,000. Both the hobby drone and the commercial drone may look very similar as you view it from the ground.

Drone Operator: Before you fly over private property, consider the impact of your flight on someone's privacy. Obtain the owner's permission if you plan to hover and take photos or video. If you do not have permission, data you capture should not exceed what a smart phone could capture from a public viewpoint or area nearby. Avoid flying over populated areas.

"Looks like a moving target to me!"







Height comparison of the Hyperion tree (iltwmt.com)

What if a drone is photographing through my window or hovering around my house?

If you feel threatened or concerned, contact local law enforcement. Alaska has laws that address stalking and "peeping Tom" activities.

Private Citizen: A camera mounted on a drone may be treated in the same way as another camera. If an individual is flying a drone in such a way that you feel violated, local law enforcement should be contacted.

Drone Operator: Enjoy your drone with your family and friends who welcome its presence. When you don't have permission, don't hover and capture images that you couldn't capture on your smart phone while walking down the street, or from a nearby building, or from a manned aircraft overhead.

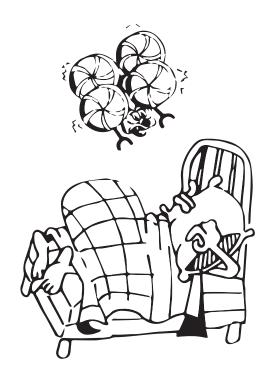


Welcomed Drone

The family drone hovering and taking a portrait when grandma came to visit.

Unwelcomed Drone

You weren't dreaming and the buzzing sound was not your alarm clock. The drone was spying through the bedroom window. Who knows where the pilot is and how those pictures might be used?



The neighbor is chasing my dog with his drone!

Although the pet's owner may have introduced the dog to a flying toy, the noise and unfamiliarity of the neighbor's drone buzzing around could frighten Fido and could be considered harassment. If the dog swats the drone out of the sky and chews it up, would it be considered damaging another's personal property or self defense by the dog? Who is harrassing who? Did it occur on the dog owner's property or in a public place? There are many factors to consider.

Private Citizen: Know and follow your local animal control laws. If you're in a public area such as a local park, keep your pet away from people flying model aircraft and drones.

Drone Operator: Harassing an animal may come with criminal penalties. Be smart and protect your expensive piece of technology from animals that might view your drone as a threat and attack it.





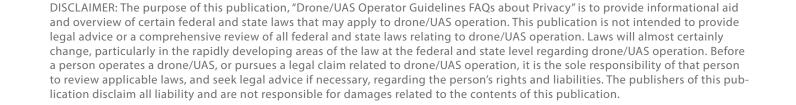
What can I do if the drone's "buzzing" is annoying me?

A drone typically makes less noise than a standard lawn mower, so fortunately you probably won't find the noise overbearing. But if the noise is annoying, likely the drone is too "near ears" and should be redirected away from people. If the drone is flown during locally recognized waking hours, a drone is probably not in violation of a noise ordinance. Because drones are relatively quiet, any noise you hear might instead be an alert to the bystander that the drone operator is flying too close to people and should be reported to the FAA for unsafe operations. This might be a situation of harassment.

Private Citizen: Many annoying noises are allowable in both public and private areas. The decibel limit separating acceptable noise level is generally compared to the noise of a standard lawn mower or small engine.

Drone Operator: The drone's "buzzing" may not be the only problem. The proximity of the aircraft to another person and the length of time in that proximity may be the real issue. Be courteous to others, don't hover your UAS "near ears," and stay away unless invited.

"That buzzing sound is as irritating as a mosquito! I can't swat it away like a mosquito but I can call local authorities if it is a persistent pest."



I understand why it's not safe to fly a drone near heavy traffic but what about privacy?

A drone flying near traffic could distract drivers and create unsafe driving conditions including accidents. Drivers should keep their eyes on the road, and drone operators should keep their UAS away from traffic.

Private Citizen: Not only are drones dangerous over busy traffic but most drivers don't want to be GPS tracked and photographed. If you see one, keep your eyes on the road. Pull over to report it to local law enforcement if you think it's creating unsafe conditions or collecting data inappropriately. **Drone Operator:** Flying over roads can cause distraction and potential automobile accidents on a road system. Don't fly your drone near high traffic roadways.



What safety and privacy concerns can there be when you're in a crowd?

Sometimes photographing a crowd could result in the capture of inadvertent images. If the drone image shows Captain Blowhole with a catch beyond his limit, that image could be provided to the authorities for legal review.

Private Citizen: Typically, if you're in a crowd, privacy is limited. Although the safety concerns are paramount when a drone is flying above a crowd, the photography could identify something that a citizen would not want shared, such as your secret fishing hole.

Drone Operator: Never fly above a crowd; even a happy drone can create quite a stir. As a drone operator, you know how easy the slightest wind change can cause your aircraft to change direction quickly or drop out of the sky. Although most recreational drones are very light weight, spinning propellers can cause injury.

Safety

If the drone were to fall out of the sky it could injure a bystander. The drone could also compromise the safety of the crowd by interfering with the activity or distracting people, thus rendering them unaware of happenings nearby.

Privacy

During fishing season, this drone inadvertently photographed Clyde's map to Grandpa's secret fishing hole. Because the map was visible in a public area, the photo of the map might be shared with others. Clyde's secret fishing hole is no longer secret.

How will the photos/video be stored or used?

Inappropriate use of images or data captured by technological devices concern Alaskans. If you believe someone has obtained images or data illegally or plans to use them illegally, contact local law enforcement. Be able to answer the following questions: Is the drone operator using the images for inappropriate purposes? Are images being posted in an inappropriate way? Are the images being used for personal gain? Was personal identification stolen?

Private Citizen: Many recreational drone operators have posted video and pictures on social media sites. Enjoy this new interesting form of photography. If you come across footage that you believe may be a violation of privacy, contact local law enforcement.



Drone Operator: If you are photographing something with your drone in a place where you would not be welcomed if you were taking pictures in person, you shouldn't be there. Make sure you don't save or post footage that breaches someone's privacy. If you don't want someone else posting similar footage of you or your property, destroy the footage. Don't post it.

EXAMPLE

A drone is used to record your PIN over your shoulder while you are at the ATM.

A drone records images through your office window of a newly signed contract.

A drone peers through the window while your child is napping.

What happens if a drone captures inadvertent images?

Private Citizen: What happens if a drone captures inadvertent images and those images are posted on social media or reveal something questionable? Photographing in a public area could result in capturing an image that may not have been planned. The image could be of a person not wanting to be photographed but may not be a breach of privacy since it occurred in a public place.

Drone Operator: Be aware of and be sensitive to what you are photographing. Are you capturing proprietary information? If you capture an image of someone appearing to break the law, you may want to surrender images to local authorities. Some people may not want to be photographed and their expectation of privacy could result in an angry situation. Again, if you are photographing something with your drone, in a place where you would not be welcomed if you were taking pictures in person, redirect your drone elsewhere.

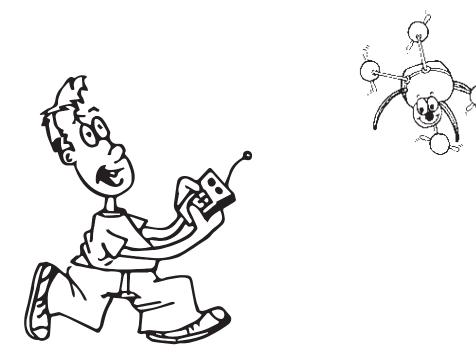
Not about privacy, but another common question...

Can I use a drone for my business?

Today, the FAA prohibits commercial use of unmanned aircraft systems unless the business has been granted a waiver to use the aircraft for specific purposes in the business. Businesses are beginning to receive authorization to use Unmanned Aircraft Systems for commercial use. Thus far, the most common authorizations have been awarded for specific movie production and specific agriculture tasks.

Aircraft continue to advance technologically and many people are waiting for the opportunity to use drones as part of business.

You must obtain authorization from the FAA if you want to use your drone for commercial purposes. The time will come when safety concerns have been well vetted and business use will become commonplace, but at this time, any commercial use of your drone must be authorized by the FAA at the Aviation Safety Hotline 866-835-5322 option 4 for unmanned aircraft reporting and information or online at FAA.gov/contact/safety.



Thank you for reviewing these guidelines! Know your rights and your responsibilities. Now go enjoy life in a world where UAS technology is changing daily and where the UASLTF continues to look out for you!

For more information and hyperlinks to websites, go to:

www.alaskadrones.org

Please visit the following web sites for additional information regarding flying your drone:

Federal Aviation Administration, unmanned aircraft section www.faa/gov/uas Academy of Model Aeronautics, www.modelaircraft.org Alaska State Legislature, www.alaskadrones.org University of Alaska Fairbanks, www.acuasi.alaska.edu FAA UAS Test Range, www.acuasi.alaska.edu/pputrc

To report suspicious behavior of a drone and its operator, please contact your local law enforcement authority.

Alaska Statutes that could be applied to inappropriate drone use:

AS 11.16.120(a)(6) AS 11.41.270 Stalking, nonconsensual conduct prohibits monitoring by technical means AS 11.61.120(a)(6) Harassment, publishing or distributing certain images AS 11.61.123 indecent viewing or photography AS 45 Personal Information Protection Act AS 11.61.116 Sending an explicit image of a minor AS 11.76.113 and AS 11.76.115 Misconduct involving confidential information in the first and second degree