



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Airport Safety and Standards

800 Independence Avenue, SW
Washington, DC 20591

October 3, 2023

Dear Airport Sponsor:

This letter provides information for the use of unmanned aircraft systems (UAS) in dispersing wildlife at an airport, and related permitting requirements under the Airborne Hunting Act (AHA), in conjunction with an airport's Part 139 Wildlife Hazard Management Plan or wildlife program. Prior to operating UAS for the purpose of dispersing wildlife, UAS operators shall:

- Coordinate with the airport operator or sponsor.
- Have an approved airspace authorization and other necessary approvals as needed.
- Contact respective regional U.S. Fish and Wildlife permitting offices.

Due to the nature of the technology, the FAA has specific requirements and guidance addressing operating requirements, registration, pilot and certifications, as well as waivers and airspace authorizations for UAS. More information about airport sponsor coordination of UAS and their types of operations at an airport is available in the letter dated October 19, 2022, to airports regarding policies and general best practices for UAS activities on airports.¹

Although infrequently tested for wildlife applications, the varied characteristics of UAS and their capabilities have the potential to be used as a wildlife mitigation tool. Prior to the use of UAS for this type of application, the Office of Airports is informing airport sponsors and stakeholders that the AHA¹ generally prohibits harassment of wildlife from any aircraft. For the purposes of the AHA and its regulations, an aircraft includes "any contrivance used for flight in the air."

If an airport sponsor plans to use an unmanned aircraft systems to disperse wildlife at an airport, it is important to understand that regulations of the AHA describe the—

"prohibition against shooting or harassing of wildlife from any aircraft, provide the requirements for the contents and filing of annual reports by the States regarding permits issued for such shooting or harassing, and provide regulations necessary for effective enforcement of the Fish and Wildlife Act of 1956 as amended."

Below are exclusions to the regulation explaining that:

- A. A person may fall under an exception to the AHA's general prohibition of harassing wildlife from aircraft. In order to fall within an exception, regulation 50 CFR 19.12 states that the person must—

¹ Letter to Airport Sponsors about Policies and Best Practices for UAS Activities on Airports:
https://www.faa.gov/airports/new_entrants/on_airport_operations/airport_sponsor_letter_sUAS.

1. Be acting within the scope of their official duties as an employee or authorized agent of a state or the United States to administer or protect land, water, wildlife, livestock, domesticated animals, human lives or crops; OR
 2. Is acting within the limitations of a permit referred to in 50 CFR 19.21 or 50 CFR 19.31.
- B. People who are not covered in Paragraph A may fall under an exception. Those not acting within the scope of their official duties as described above could fall within an exception if the person is acting within the limits of a permit described under 50 CFR 21.100². To meet this requirement, the person must acquire or amend the appropriate Federal or state permit in order to meet the terms of the exception under the AHA. Permits must include a condition to use UAS for mitigating wildlife.
1. Federal Permit – Migratory Bird Depredation Permit³ 50 CFR 19.21 states: “No Federal permits will be issued to authorize any person to hunt, shoot, or harass any wildlife from an aircraft, except for Federal permits to scare or herd migratory birds referred to in § 21.100 of this subchapter.”
 2. State Permits – 50 CFR 19.31(a) states: “Except as provided in § 19.3, States may issue permits to persons to engage in airborne hunting or harassing of wildlife for purposes of administering or protecting land, water, wildlife, livestock, domestic animals, human life or crops. States may not issue permits for the purpose of sport hunting.”

Those individuals who may not need a permit under the AHA to utilize unmanned aircraft for dispersing wildlife at an airport may be required to obtain a special permit if a species is protected by the Bald and Golden Eagle Protection Act (BGEPA) and Endangered Species Act (ESA).

Anyone who is not Federal or state personnel, or their authorized agent, should contact their state office⁴ to request a state permit as per 50 CFR 19.31.

Once a permit is issued, it is recommended that sponsors coordinate with their Airport Certification Safety Inspector (ACSI) for Part 139 considerations and/or FAA Environmental Protection Specialist (EPS) for those National Environmental Protection Agency (NEPA) considerations. Please note that, while UAS can generally be used for avian dispersal, research and testing is currently being conducted within the airport environment and further guidance will be published after this research is completed.

²See 50 CFR § 21.100: [https://www.ecfr.gov/current/title-50/chapter-I/subchapter-B/part-21/subpart-D/section-21.100#p-21.100\(a\)](https://www.ecfr.gov/current/title-50/chapter-I/subchapter-B/part-21/subpart-D/section-21.100#p-21.100(a))

³See 50 CFR § 21.41; <https://www.fws.gov/forms/3-200-13.pdf>

⁴For further reference see *CertAlert No. 13-01: Federal and State Depredation Permit Assistance* at: <https://www.faa.gov/sites/faa.gov/files/cert1301.pdf>

The United States Department of Agriculture (USDA) has laid out the following standards to improve the effectiveness when mitigating bird hazards with UAS⁵:

- Recommend the use of targeted UAS flights for dispersing groups of vultures, gulls, and other hazardous avian species on the ground.
- Targeted flights should be lower for songbirds and higher for vultures and other soaring birds.
- Angle of targeted approach can include 0°, 45°, and/or 90°.
- Recommend the use of a predator UAS for the dispersal of hazardous avian species.
- Recommend the use of a fixed-wing UAS to disperse vultures quickly.
- Recommend the use of a multirotor UAS for dispersing the most vultures with the fewest targeted flights.
- Recommend the use of a predator UAS or fixed-wing for the dispersal of geese. (However, anecdotal observations from a USDA/Wildlife Services Biologist indicate that multi-rotors are useful in herding geese during molt.)
- It is possible to elicit faster reactions from vultures with flying a multirotor in a 0°-degree targeted pattern than in an overhead approach pattern.
- Flying a fixed-wing UAS overhead of vultures could elicit reaction times similar to targeted approaches.
- Repetitive nocturnal UAS flights can be used to disperse gulls from a roosting location.

Please refer to [FAA CertAlert No. 13-01, Federal and State Depredation Permit Assistance](#), dated January 30, 2013, as a resource to complement this letter and ongoing research related to the use of UAS in the airport environment for wildlife mitigation and dispersal.

If you have questions specific to wildlife management, please feel free to contact John Weller and Amy Anderson, National Wildlife Biologists, at 202-267-3778 and 202-267-7205. For questions related to the use of unmanned aircraft systems or applications at an airport environment, please contact Mike Branum, Program Manager, Airports Emerging Entrants Division, at 817-222-5669.

Sincerely,



John R. Dermody, P.E.
Director
Office of Airport Safety and Standards

⁵Blackwell, B. F., T. L. DeVault, T. W. Seamans, S. L. Lima, P. Baumhardt, and E. Fernández-Juricic. 2012. Exploiting avian vision with aircraft lighting to reduce bird strikes. *J. Applied Ecology* 49:758–766.

Egan, C., B. F. Blackwell, E. Fernández-Juricic, and P. Klug. 2020. Testing a key assumption of wildlife monitoring using drones: do birds perceive drones as risky? *Condor* 122:1–15.

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