
Unmanned Aircraft Systems (UAS) Policy

Directive No: 2137.1

*Issued by the EPA Chief Information Officer,
Pursuant to Delegation 1-19, dated 07/07/2005*

Unmanned Aircraft Systems (UAS) Policy

1. PURPOSE

The purpose of this policy is to provide EPA with rules on the use of Unmanned Aircraft Systems (UAS) and any data collected using UAS at EPA's direction. The term UAS, as used in this policy, is intended to serve as an umbrella term that encompasses all sizes of UAS, including small, medium, and large UAS, as well as Unmanned Aerial Vehicles. This policy enables the Agency to comply with the 2015 Presidential Memorandum: Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights and Civil Liberties in Domestic Use of Unmanned Aircraft Systems as well as FAA Order 8900.1, Volume 16, Unmanned Aircraft Systems (UAS).

2. SCOPE

This policy covers data collected using UAS at EPA's direction. This EPA UAS Policy does not apply to UAS-collected data submitted by the public to EPA. As of the writing of this document, EPA does not have the statutory authority to own UAS due to appropriations limitations prohibiting the use of funds to buy, maintain, or operate aircraft except where authorized by law. In addition, leasing of UAS by EPA personnel is not permissible at this time due to unresolved training, tracking and liability concerns. Permissible access to UAS through different mechanisms is described in detail in this document. This policy covers use requirements for funding operation of UAS; privacy, civil rights, and civil liberty protections; security; and data management at EPA.

3. AUDIENCE

The audience for this policy includes all EPA organizations, officials, employees, and contractors who direct data collection using UAS.

4. BACKGROUND

The purpose of drafting a UAS Policy for EPA is to articulate a framework through which EPA Regions, Program offices and grant recipients can take advantage of UAS. UAS will allow EPA to meet its mission goals with additional data collection capabilities while increasing safety, reducing costs, and increasing efficiency.

For example, safety is increased by allowing EPA staff to monitor hazardous conditions from a safe distance, identify hazards before entering a hazardous zone, and allowing access to difficult and/or dangerous areas with minimal risk. Costs are reduced by enabling the Agency to use UAS to collect critical data for a fraction of the cost of human-centered data collection methods or traditional airplanes. Efficiency is increased in the ability to quickly

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deploy a UAS asset in hours, instead of the days that it can take to deploy personnel-intensive teams. UAS also allow multiple locations to be monitored simultaneously with fewer personnel.

The [2015 Presidential Memorandum: Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems](#) states that Federal Agencies are required to develop policies for UAS that take into account privacy, civil rights and civil liberties protections, accountability, and transparency. In addition, one of the primary drivers for this policy is the safety of EPA staff and contractors tasked with capturing data in hazardous circumstances. Having a framework under which UAS are used enables EPA to increase safety for staff and contractors. Allowing EPA use of UAS also increases EPA's ability to effectively collect data, including furthering research that is critical for protecting the public and the environment.

UAS offer data collection advantages by:

- Increasing safety:
 - Affording operators safe monitoring distances.
 - Affording operators an opportunity to identify the location of hazards before entering a hazardous zone.
 - Accessing difficult or dangerous to access locations with minimal risk.
- Reducing costs
 - Providing cost-effective data (\$1000s vs other methods which can be more costly).
 - Deploying fewer personnel.
- Increasing efficiency:
 - Can be quickly deployed (hours not days).
 - Monitoring multiple locations simultaneously with fewer personnel.
- Allowing the deployment of additional technologies for data collection and research purposes, such as:
 - Photo/Video: High resolution, infrared/thermal, and multispectral cameras
 - Gas Sensors: H₂S, SO₂, NO, NO₂, HCHO, VOCs, CO, Cl, HCl, HCN, NH₃, CH₃, dioxins, particulates, other air sampling capabilities
 - ERT VIPER integration possible for real-time data collection and transmission
 - Remote Sensing: Imaging spectroscopy, LiDAR, 3D models, volume measurement (landfill assessment/excavation areas), vegetation analysis, point of view (POV) depiction, including for emergency situations

5. AUTHORITY

- [2015 Presidential Memorandum: Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems](#)
- [Federal Aviation Administration \(FAA\) 14 CFR Part 91—GENERAL OPERATING AND FLIGHT RULES](#)
- [FAA 14 CFR Part 107 - SMALL UNMANNED AIRCRAFT SYSTEMS](#)
- [FAA Order 8900.1, Volume 16. Unmanned Aircraft Systems \(UAS\)](#)

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6. POLICY

- FAA regulation at 14 CFR 1.1 defines “aircraft” as a device that is used or intended to be used for flight in the air. UAS are considered aircraft and must comply with applicable regulations, policies and procedures required by FAA and EPA and its offices. All data collected by EPA staff or contractors via UAS must adhere to all relevant laws and regulations, EPA policies and procedures regarding data management, security, records retention and schedules, audits, reports, and other applicable agency directives.
- **Use of EPA Appropriated Funds for UAS Activities**
 - **UAS purchase/ownership prohibited by law:** Currently EPA may not purchase, own, or otherwise take title to any aircraft or UAS. 31 U.S.C. 1343(d) states that agencies may not buy, maintain, or operate aircraft unless an appropriation account is made specifically available for that purpose. EPA currently has no appropriations legally available to purchase aircraft.
 - **UAS leasing by EPA prohibited:** As a policy matter, EPA does not allow the leasing (either short term operating lease, i.e. rental, or long-term lease) of UAS because EPA currently has no programs in place for training pilots, tracking pilot certifications, or for property tracking and maintenance of leased UAS.
 - **Contractors and/or other federal agencies may operate UAS on EPA’s behalf if certain appropriation accounts are used to fund the activity:** 31 U.S.C. 1343(d) states that agencies may not buy, maintain, or operate aircraft unless an appropriation account is made specifically available for that purpose. Accordingly, EPA may only use certain funds that have been specifically appropriated for the “maintenance” or “operation” of aircraft to fund those activities by contractors (via contract) or other federal agencies (via funds-out interagency agreement). Where such funds are used, the contractor or other federal agency may own, lease, rent, maintain, and operate a UAS as necessary to provide the requested work consistent with their own authorities. The contract or interagency agreement may not contain terms that transfer ownership of the UAS to EPA at any time and may not lease the UAS to EPA or allow EPA staff to directly operate the UAS. As of the date of this Policy’s issuance, EPA appropriation accounts that may be used to fund a contractor or other federal agency to operate a UAS on EPA’s behalf currently include¹:
 - Science & Technology (including reimbursable funds from another federal agency under an interagency agreement or from a research partner under a Cooperative Research and Development Agreement (CRADA) deposited into this account as otherwise appropriate)
 - Environmental Programs & Management (including, for example,

¹ These accounts are the only types that may be used to fund the maintenance and operation of balloons as well.

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reimbursable funds from the Federal Emergency Management Agency (FEMA) under a Stafford Act Mission Assignment, or reimbursable funds from another federal agency deposited into this account as otherwise appropriate)

- Superfund Trust Fund money (including reimbursable funds from another federal agency, state remedial Superfund cost share, or special account funds deposited into this account as otherwise appropriate)
- Oil Pollution Act (including, for example, reimbursable funds from U.S. Coast Guard under a Pollution Removal Funding Agreement (PRFA) deposited into this account as otherwise appropriate)²
- **Grant (including Cooperative Agreement):** EPA grantees are not restricted by 31 U.S.C. 1343(d) from using grant funds awarded from any appropriation account that is otherwise an appropriate source of funding for the grant (such as, for example, the State and Tribal Assistance Grants (STAG) account) for UAS-related costs so long as doing so would be within the scope of the grant and otherwise allowable under the grant regulations. Therefore, EPA grant and cooperative agreement recipients may use EPA awarded funds for UAS-related costs where the costs are reasonable and necessary for the performance of the Federal award. However, programs must not direct, encourage or suggest that financial assistance recipients transfer title or possession of UAS to EPA. Additionally, grantees are not subject to the NPM Established Categories and Conditions for UAS Uses as described in section 7 of this document.
- **Privacy, Civil Rights and Civil Liberties Protections**
 - In accordance with the 2015 Presidential Memorandum: Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems, EPA will adhere to the Constitution and all Federal and Agency privacy, civil rights, and civil liberties laws, as well as applicable policies and procedures.
 - **Privacy Protections:**
 - All EPA employees will comply with the Privacy Act as applicable, [EPA's Privacy Policy](#) and procedures, any other [EPA privacy guidance](#) as well as all applicable laws, regulations and privacy requirements. This means that any EPA-directed data collection effort that collects, maintains, or stores Personally Identifiable Information (PII) in a new system requires submission of a Privacy Impact Assessment (PIA) to the National Privacy Program. Data collection efforts that use existing systems must comply with the existing PIA or submit a new or revised PIA if there is a significant modification or where changes have been made to the system that may create a new privacy risk. Data collection efforts that do not collect any PII do not require a Privacy Impact Assessment.

² For legal advice on the use of any other appropriation account to fund the operation of aircraft by contractors or other federal agencies, please see the Office of General Counsel, Civil Rights and Finance Law office.

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- Information collected by EPA using UAS must be retained in accordance with the appropriate Records Control Schedule. Consult your Records Liaison Officer (RLO) for assistance.
- Even if there may not be any constitutional or civil rights law concerns raised by the proposed use of an UAS, EPA directed UAS operations that may impair the use of private property, may first need to obtain a property access agreement unless EPA already has the authority to enter the property. For questions about any of the potential legal issues discussed in this section, contact regional counsel or OGC's Civil Rights and Finance Law Office.
- **Civil Rights and Civil Liberty Protections:** In order to protect civil rights and civil liberties, all EPA directed UAS data collection activities will adhere to the Constitution and all applicable laws, Executive Orders, and Presidential directives. Data will not be used, retained, or disseminated in any manner that will violate the First or Fourth Amendments, EPA's Privacy Policy, or in any manner discriminate against persons based upon their race, sex, national origin, religion, sexual orientation, or gender identity. EPA is in the process of developing civil rights and civil liberties complaint procedures to receive, investigate and address, as appropriate, civil rights and civil liberty complaints regarding the EPA's use of UAS.
- **Accountability:** EPA will ensure that:
 - Oversight procedures for agencies' UAS use including audits or assessments comply with existing agency policies and regulations.
 - The Agency will verify that rules of conduct and training for all Federal personnel and contractors directed by EPA comply with requirements, rules of behavior and procedures for reporting suspected cases of misuse or abuse of UAS technologies as is required for other data collection technologies. This includes policies and procedures set forth by the EPA's [Quality Program](#).
 - Policies and procedures are established, or confirm that policies and procedures are in place, which provide meaningful oversight of individuals who have access to Controlled Unclassified Information (CUI) (including any PII) collected using UAS.
 - Any data-sharing agreements or policies, data use policies, and records management policies applicable to EPA directed data collection efforts using UAS conform to applicable laws, regulations, and policies.
 - State, local, tribal, and territorial government recipients of Federal grant funding, or any party participating in a project funded via Federal grants for the purchase or use of UAS for their own operations have in place policies and procedures to safeguard individuals' privacy, civil rights, and civil liberties prior to expending such funds.
 - Every three years there is an examination of existing UAS policies and procedures relating to the collection, use, retention, and dissemination of UAS collected information to ensure the privacy,

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civil rights, and civil liberties are protected.

- **Transparency:** EPA will promote transparency about EPA directed UAS activities while not revealing information that could reasonably be expected to compromise privacy, law enforcement or national security. EPA will provide notice to the public regarding the status of the Agency UAS Program, where they are authorized to operate and descriptions of categories of UAS missions as well as changes that would significantly affect privacy, civil rights, or civil liberties. Data from UAS missions will be made publicly available in accordance with [EPA's Enterprise Data Management Policy](#) and Title 2 Open Government Data Act of the 2018 Foundations for Evidence-Based Policymaking Act - 2018 Open Government Data Act.
- **IT Security**
 - Current regulatory guidance informs the acquisition and management of IT assets and the governance of data collected through [EPA's Information Security Policy](#).
 - As EPA's technical infrastructure grows to support full integration of UAS, revisions and additional protocols will be introduced. This includes new or revised policies, regulations, processes, and procedures. Special consideration is being given to address privacy concerns and the practical management of personal and sensitive information gathered through UAS operations.
 - Coordination with the Chief Information Officer (CIO) and the Chief Information Security Officer (CISO) should occur to ensure appropriate data security and data regulations are met through the Agency's FITARA and IT Portfolio Review process.
- **Data Management**
 - Data collected by EPA employees or contractors using UAS shall adhere to requirements set forth in [EPA's Enterprise Data Management Policy \(EDMP\)](#), [H.R.4174 -Foundations for Evidence-Based Policymaking Act of 2017](#) and [H.R. 302 Subtitle F Geospatial Data Act of 2018](#). Data shall also be managed according to the appropriate records management schedule and adhere to requirements outlined in [EPA's Records Management directives and memoranda](#).
 - Specifically, EPA organizations, officials, employees and individuals, shall ensure information is:
 - Planned and managed according to a defined information life cycle process (appropriate for the information type) and in accordance with enterprise systems and solutions.
 - Catalogued and/or labeled with metadata, including geographic references, as appropriate, in EPA and Federal-wide registries, repositories, or other information systems.
 - Developed, maintained, and preserved in open and machine-readable formats using established standards that make information discoverable and accessible, where appropriate and feasible.
 - Made and maintained to be open and publicly accessible, unless

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there is a documented National Security Information (NSI) or CUI requirement outlined within a statute/law, regulation, and/or government-wide policy, or unless otherwise protected from disclosure under federal law or EPA regulation. In these cases, internal, external, and associated safeguards must be instituted.

- EPA shall only collect information using UAS, or use UAS-collected information, to the extent that such collection or use is consistent with and relevant to an authorized purpose.
- UAS collected information that is not maintained in a system of records covered by the Privacy Act shall not be disseminated outside of the agency unless dissemination is required by law or fulfills an authorized purpose and complies with agency requirements.

7. ROLES AND RESPONSIBILITIES

- **National Program Managers/Assistant Administrators (AA) are responsible for:**
 - Developing a procedure which will establish categories and conditions under which the use of UAS will and will not be allowed within their respective programs consistent with existing Delegations of Authority, hereafter referred to as “NPM Established Categories and Conditions of UAS Uses”.
 - NPMs are required to review procedures every two years.
 - Complying with Agency UAS policies, procedures and guidelines and ensuring adequate oversight and program audit/assessment.
 - Developing and instituting organization specific training in accordance with the Agency-wide UAS policy issued by the EPA CIO.
 - Reporting to the EPA CIO on an annual basis a summary of all UAS operations conducted by the NPM or Regions during the previous fiscal year related to those activities in the NPM’s Established Categories and Conditions of UAS Uses. Include a brief description of the types of categories of missions flown, summaries of sensors employed, types of information acquired and whether any information was retained or disseminated as well as the number of times assistance was provided to other Federal departments and agencies, or to State, local, tribal, or territorial governments, and under what authority such assistance was provided.
- **Regional Administrators (RA) and Other Key Officials, (e.g., Deputy Regional Administrators, Mission Support Division Directors and Office Directors, Senior Information Officials, Information Management Officers, Senior IT Leaders) are responsible for:**
 - Complying with Agency UAS policies, procedures and guidelines, including NPM Established Categories and Conditions of UAS Uses and ensuring adequate oversight and program audit/assessment.
 - Except in exigent circumstances, provide written notification at least three working days in advance of any use (single use/event) of UAS to the Regional Public Affairs Director. The Regional Public Affairs Director is to coordinate with the Office of Public Affairs as needed. During exigent circumstances, use of UAS must still comply with UAS policies, procedures and guidelines, including NPM Established Categories and Conditions of UAS Uses, and advance notice should be provided to the Regional Public Affairs

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Director as soon as possible. The Regional Administrator (RA) and other Key Officials may designate others to notify the Regional Public Affairs Director.

- **Office of Mission Support Deputy Assistant Administrator for Administration and Resources Management is responsible for:**
 - Providing oversight and support for contracts, grants and Interagency Agreements used to collect data through UAS.
- **Chief Information Officer (CIO) is responsible for:**
 - Approving, issuing, and managing EPA-wide policies, standards, procedures, and guidance on Unmanned Aircraft Systems (UAS). UAS policy issued by the CIO is applicable to the entire Agency.
 - Publishing privacy policy, providing guidance, and collaborating with Programs and Regions to evaluate program activities to ensure privacy considerations are addressed for the collection, use, retention and dissemination of Personally Identifiable Information and appropriate safeguards are implemented to protect individual privacy, civil rights, and civil liberties.
 - Collecting and sharing with the public an annual report summarizing UAS operations in the Agency during the previous fiscal year, including a brief description of the types of categories of missions flown, summaries of sensors employed, types of information acquired and whether any information was retained or disseminated as well as the number of times assistance was provided to other Federal departments and agencies, or to State, local, tribal or territorial governments, and under what authority such assistance was provided.
- **Chief Financial Officer (CFO) is responsible for:**
 - Providing guidance on UAS budget and financial issues, particularly regarding which sources of funding may be used to fund UAS operations.
 - Issuing guidance regarding how UAS resources should be coded.
- **General Counsel is responsible for:**
 - Providing legal guidance and advise on legal matters.
 - Providing civil rights policy and program guidance on claims of race, sex, and national origin discrimination.

8. RELATED INFORMATION

EPA has developed an Unmanned Aircraft Systems (UAS) Handbook that provides information regarding EPA use of UAS. It is meant to aid project leads and managers in topics such as UAS contracts considerations, data delivery specifications and information management.

9. DEFINITIONS

- **Aircraft** – a device that is used or intended to be used for flight in the air.
- **Balloon** – a [lighter-than-air aircraft](#) that is not engine driven, and that sustains

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flight through the use of either gas buoyancy or an airborne heater.

- **Controlled Unclassified Information (CUI)** – information that requires safeguarding or dissemination controls pursuant to and consistent with applicable law, regulations, and government-wide policies, but is not classified under Executive Order 13526 or the Atomic Energy Act, as amended. The [CUI Program](#) across the Executive Branch is led by the National Archives and Records Administration. PII is a category of CUI. National Security Information (NSI) – Information designated for protection against unauthorized disclosure pursuant to [EO 12356](#).
- **Personally Identifiable Information (PII)** – Covers data that could be used to identify a specific individual (see CUI and [EPA's Privacy Program](#) for more details).
- **Small Unmanned Aircraft System (sUAS)** – A small UA less than 55 pounds and its associated elements (including communication links and the components that control the small UA that are required for the safe and efficient operation of the small UA in the NAS.
- **Unmanned Aircraft System (UAS)** – An unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system. This includes all sizes of UAS, including small, medium, and large UAS, as well as Unmanned Aerial Vehicles.

10. WAIVERS

None.

11. MATERIAL SUPERSEDED

EPA Unmanned Aircraft System Policy (December 2020).

12. CONTACTS

Office of Mission Support – Environmental Information; Office of Information Management

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and Chief Information Officer
U.S. Environmental Protection Agency