## Memorandum of Agreement between the U.S. Department of the Interior and the Federal Aviation Administration Regarding Operation of Small Unmanned Aircraft Systems in Class G Airspace

**A.** <u>Introduction</u>: This Memorandum of Agreement (MOA) between the U.S. Department of the Interior (DOI) and the Federal Aviation Administration (FAA) sets forth provisions that will allow DOI-operated small Unmanned Aircraft Systems (sUAS) increased access to Class G airspace for public aircraft operations in accordance with applicable laws and government agency policy.

**B.** <u>**Purpose**</u>: The purpose of this MOA is to allow DOI to access the National Airspace System (NAS) through the Certificate of Waiver or Authorization (COA) via Notification process for small UAS operations.

**C.** <u>Scope:</u> The policies, procedures and operations prescribed in this MOA apply to DOI sUAS operations involving scientific applications, wildlife surveys and Search and Rescue (SAR) efforts, that qualify as a public aircraft operation under 49 U.S.C. §§ 40102(a)(41) and 40125. All operations will be conducted within Class G airspace at or below 1200 ft. Above Ground Level (AGL), and authorized through a Certificate of Waiver or Authorization (COA) via Notification procedures.

**D.** <u>Authority:</u> Title 49 of United States Code (49 USC) § 106 provides the authority to the FAA to set aviation safety standards and regulate aviation operations in the National Airspace System (NAS). Title 49 U.S.C. §§ 40102(a)(41) and 40125 provide the legal basis for operation of public aircraft operations in the United States.

**E.** <u>UAS Airworthiness Certification:</u> The DOI assumes responsibility that the sUAS it will operate under this MOA are airworthy and in condition for safe operation based on the manufacturer's specifications, technical manuals and maintenance recommendations for the aircraft, control station, and associated support equipment. Where appropriate for unmanned aircraft, the aviation standards detailed in DOI Department Manuals 351 DM, Flight Operations Standards and Procedures, and 352 DM, Aviation Safety, shall be applied. More specific guidance is contained in DOI Operational Procedures Memorandum (OPM) No.11, DOI Use of Unmanned Aircraft Systems, and Office of Aviation Services (OAS) Instruction 5400-202.</u>

All DOI sUAS will be inspected for airworthiness and kit condition by OAS designated aircraft inspectors at the same interval as DOI manned aircraft.

**F.** <u>UAS Pilot/Crewmember Qualification:</u> The pilot in command (PIC) and flight crewmembers, including visual observers, of DOI sUAS shall be qualified in accordance with the appropriate certification of DOI. Visual observers are required to have an appropriate current medical exam in accordance with DOI OPM No. 11 and sUAS pilots and observers will be subject to annual flight evaluations administered by DOI Office of Aviation Services designated pilot inspectors.

**G. <u>Spectrum and Associated Documents</u>:** DOI will be responsible for ensuring that the appropriate frequency spectrum approvals are obtained in advance of any sUAS operation.

**H. DOI UAS Access to the NAS Using COA via Notification Procedures:** In addition to the use of standard COAs, the FAA agrees to authorize access for DOI sUAS outside of Restricted, Warning or Prohibited Areas operations in Class G airspace through the COA via Notification procedure that meet the following conditions and qualify as a public aircraft operation. COA via Notification procedures may be authorized as follows:

- 1. Operations may only be conducted with sUAS weighing less than 55 pounds and at altitudes at or below 1200 ft. AGL.
- 2. DOI will notify the FAA via the COA On-line process and publish a Notice to Airmen (NOTAM) to alert non-participating aircraft of the operation 24 hours prior to the proposed operation.
- 3. Operations will be conducted within visual line of sight of the pilot/operator utilizing Class G Visual Flight Rules (VFR) weather minimums of 14 C.F.R. § 91.155.
- 4. COA via Notification operational, incident, and accident data will be reported via COA online as soon as practicable.

## I. Specific Provisions for DOI UAS Operations over Federal Lands:

- 1. DOI will be responsible for coordinating its sUAS operations over lands owned or managed by the DOI Bureaus.
- 2. For operations over other U.S. government, state or privately-owned or managed lands,

excluding DOD restricted areas/airspace, DOI will coordinate with the appropriate authority and ensure the property owners have advance notice prior to the proposed sUAS operation. This coordination must include anticipated periods of operation, purpose of the flights, and contact information for the responsible agency should questions or issues arise.

## J. General Limitations to Operations in Class G Airspace:

- 1. Operations will not be conducted over populated places. For planning purposes, populated places are addressed in the FAA's Aeronautical Chart User's Guide found at *https://www.faa.gov/air\_traffic/flight\_info/aeronav/digital\_products/aero\_guide/media/Chart\_Users\_Guide\_12thEd.pdf*.
- 2. Flights will be planned to avoid sustained/repeated overflight of heavily trafficked roads or highways but may briefly cross over active roads as necessary. Surveillance of roads or outside gatherings of people shall be accomplished with offset surveillance techniques to minimize risk to persons or property on the ground.
- 3. Flights will be conducted in compliance with all applicable FAA Regulations.
- 4. Operations within Class G airspace underlying Class B or C airspace generally require a transponder and must be conducted via a regular COA.
- 5. The sUAS will remain beyond five (5) Nautical Miles (NM) from any civil airport or heliport airport reference point when operated between 400 ft. AGL and at or below 1,200 ft. AGL. sUAS operated at or below 400 ft. AGL must remain beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or seaplane landing areas as listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications:
  - a) 5 nautical miles (NM) from an airport having an operational control tower; or
  - b) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or
  - c) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
  - d) 2 NM from a heliport
- 6. Night operations are authorized.

Note: night operations occur between the end of evening civil twilight and the beginning of morning civil twilight as published in the American Air Almanac, converted to local time.

K. Implementation Plan: The FAA's Office of Primary Responsibility is the Airspace Services Directorate. DOI's Office of Primary Responsibility is the Office of Aviation Services. This MOA will be reviewed annually and is effective upon the date of the last signature. Additionally, this MOA may be cancelled at any time by either party upon notification to the other party in writing.

U.S Department of the Interior:

**MARK BATHRICK** 

Digitally signed by MARK BATHRICK DN: c=U5, o=U.S. Government, ou=Department of the Interior, ou=Office of the Secretary of the Interior, cn=MARK BATHRICK, 0.9.2342.19200300.100.1.1=14001000695089 Date: 2015.09.10 09:04:40 -06'00'

Mark L. Bathrick, Director, Office of Aviation Services

Federal Aviation Administration:

Jodi S. McCarthy, Director, Airspace Services

9/11/15

Date

Date