Memorandum of Agreement between the U.S. Department of the Interior and the Federal Aviation Administration Regarding Beyond Visual Line of Sight Operations of Unmanned Aircraft Systems in Support of Emergency Assistance Within an Active Temporary Flight Restriction

- A. Introduction: This Memorandum of Agreement (MOA) between the U.S. Department of the Interior (DOI) and the Federal Aviation Administration (FAA) sets forth provisions based on current airspace policy and regulations and granting airspace access that will allow DOI operated Unmanned Aircraft Systems (UAS) to fly in support of emergency operations to include beyond visual line-of-sight (BVLOS) operations, by granted Title 14 Code of Federal Regulations (CFR) §11.15 exemption, within an established and active temporary flight restriction (TFR) during emergency situations supporting fire and search and rescue operations.
- **B.** Scope: The policies, procedures and operations prescribed in this MOA apply to DOI UAS operations involved in emergency operations when authorized through issuance of an Emergency Certificate of Waiver or Authorization (ECOA).
- C. Authority: Title 49 of the 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 USC provides the authority for government agencies to conduct public aircraft operations in the national airspace subject to certain limitations § 40125.
- **D.** UAS Airworthiness Certification: The DOI assumes responsibility that the UAS 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 351DM, 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.

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

E. UAS Pilot/Crewmember Qualification: The pilot in command (PIC) and other flight crewmembers including visual observers, of DOI UAS shall be qualified in accordance with DOI manuals and instructions. UAS pilots and observers are required to have an appropriate current medical exam in accordance with DOI OPM No. 11 and will be subject to annual flight evaluations administered by DOI OAS designated pilot inspectors.

- **F.** Spectrum and Associated Documents: DOI will be responsible in ensuring that the appropriate frequency spectrum approvals are obtained in advance of any UAS operation.
- G. DOI UAS Airspace Access Using ECOA Procedures: The FAA agrees to authorize requests for ECOAs to support firefighting efforts and search and rescue operations within an active temporary flight restriction (TFR) established to support the identified emergency. The TFR and granted exemption to Title 14 CFR §91.113 will facilitate and act in part to mitigate beyond visual line of sight (BVLOS) operations within the established TFR. ECOA procedures may be authorized as follows:
 - 1. ECOA procedures may be used for emergency situations where the use of a UAS will enhance incident response functions.
 - 2. DOI will request an ECOA from the FAA via direct communication with the designated FAA representative and publish a Notice to Airmen (NOTAM) to alert non-participating aircraft of the operation.
 - 3. Operations BVLOS will be initiated and terminated entirely within the confines of an existing and active TFR.
 - 4. UAS operations will be segregated from participating manned aircraft at the discretion of the agency in charge of aviation operations as specified in the TFR.
 - 5. ECOA operational, incident, and accident data will be reported via COA On-line.
 - 6. For operations over other U.S. government, state or privately-owned or managed lands, DOI will coordinate with the appropriate authority and ensure the property owners have advance notice prior to the proposed UAS operation.
 - 7. Flights will be conducted in compliance with all applicable Code of Federal Regulations, state, and local rules and regulations and in accordance with any applicable Special Flight Rules Area considerations.

H. Implementation: The FAA's office of primary responsibility is Mission Support Services, 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 last signature. Additionally, this MOA may be cancelled at any time by either party upon notification in writing.

U.S Department of the Interior:

MARK BATHRICK

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Mark L. Bathrick, Director, Office of Aviation Services

Date

Federal Aviation Administration:

Jodi S. McCarthy, Director, Airspace Services

8-13-15Date