I. Purpose
Unmanned Aircraft Vehicles (UAV) will have many uses and will support multiple activities within the Delaware Department of Transportation (DelDOT). It is essential that UAVs operated by and for DelDOT be operated in a safe manner and adhere to all relevant FAA and DelDOT regulations, policies and operational procedures. All DelDOT personnel participating in the UAV program must meet and maintain FAA and DelDOT training, certifications, and operation requirements.
II. Policy

Procedures

1. Program Oversight

a. The Transportation Management Center (TMC) Operations Manager shall appoint an Unmanned Aircraft System (UAS) Program Manager to oversee the Delaware Department of Transportation (DelDOT) Unmanned Aircraft System program.

b. The UAS Program Manager, subject to the direction and control of the TMC Operations Manager, shall be the administrator of the DelDOT’s UAS program and shall be responsible to the TMC Operations Manager for carrying out the program and ensuring it follows all applicable Federal and State requirements.

c. The UAS Program Manager will provide oversight of all DelDOT UAV pilot certification and UAV training. All UAV operations by DelDOT personnel will follow this policy.

d. All personnel contracted to fly small UAVs for DelDOT will abide by the Federal Aviation Administration regulations for flying small Commercial UAVs and will be responsible for their own aircraft procurement, insurance, maintenance, training, and pilot certification. In addition, all contractors flying for DelDOT or working on a DelDOT project must abide by 9a and 9b of this policy.

2. Operational Directives

a. All references to UAVs in this policy will be considered small UAVs. A small UAV is less than 55 pounds, including everything that is onboard or otherwise attached to the aircraft, and can be flown without the possibility of direct human intervention from within or on the aircraft.

b. All DelDOT personnel flying small UAVs will meet DelDOT’s training and certification requirements, DelDOT’s Certificate of Waiver or Authorization (COA) requirements, and abide by all Federal Aviation Administration regulations for flying small UAVs that apply.

c. No DelDOT personnel will fly DelDOT UAVs until the UAS Program Manager has signed the appropriate document confirming that the trainee has successfully met the requirements in the DelDOT UAS training program and has obtained a FAA Remote Pilot Certificate with a small UAS rating. Once so licensed, the UAS Program Manager will issue a Pilot Qualification (PQ) card to the individual identifying them as a member of the DelDOT UAS Program and what aircraft they are qualified to fly. The UAS Program Manager shall maintain a database of all UAS Program Members. The PQ card shall be carried on the individual during all missions as Pilot in Command working on a DelDOT UAS flight.
d. All UAV flights must utilize a “2-person rule” as the minimum at all times. The minimum “2-person rule” will consist of a remote Pilot in Command (PIC) and a Visual Observer. The Visual Observer is designated by the PIC to assist the PIC to see and avoid other air traffic or objects aloft or on the ground.

3. Division Participation

a. Each Division that participates in the UAS Program will be responsible for purchasing their own UAV kit(s). UAVs/UAV kits will be purchased from an equipment list that has been developed by the UAS Program Manager, only UAVs purchased with the UAS Program Managers approval will be used for DelDOT UAV flying.

b. Supervisor authorization is required before anyone is allowed to participate in the DelDOT UAS program.

c. Each Division will pay all costs associated with training and certifying an individual from their Division as a Remote Pilot Certificate with a small UAS rating.

4. Equipment

a. All DelDOT aircraft will be properly registered and maintained in accordance with the FAA rules and regulations.

b. It will be the responsibility of each Division to ensure their aircraft meets all safety requirements; to include all software and firmware updates.

c. Any additional equipment that will be attached to the UAVs will be approved by the UAS Program Manager.

d. All DelDOT UAV kits at a minimum will have a yearly inventory and Preventive Maintenance inspection done by the UAS Program Manager prior to April 30th of each year or the UAV will be grounded until the inspection is complete.

5. Training

a. All DelDOT UAV Pilots will meet the training requirements that are established in the DelDOT UAV Training Manual and be certified by the UAS Program Manager.

6. Certification

All DelDOT UAV Pilots must receive their Remote Pilot Certificate with a small UAS rating prior to having their DelDOT UAV Training records signed off by the UAS Program Manager or designated representative before they will be allowed to fly a UAV for DelDOT as Pilot in Command.
7. Recertification
   a. All DelDOT UAV Pilots will be required to be recertified for their Remote Pilot Certificate with a small UAS rating every 24 months.

8. Disqualification
   a. Anyone found in violation of this policy or flying a UAV in an unsafe manner is subject to disqualification from the DelDOT UAS Program. If an individual is removed from the UAS program he/she will not be readmitted to the DelDOT UAV program until the TMC Operations Manager has given written approval.

   a. All UAS missions whether they are flown by DelDOT or a hired contractor, if flying on a DelDOT project require a pre-flight plan to be filed with the TMC in advance of the mission. All UAV flight operations will call the TMC and provide a start time (10-8), with standard information conveyed such as crew members, location, purpose, anticipated end time, and actual end time (10-7).
   b. Appropriate ground signage according to the Delaware MUTCD shall be erected prior to flight operations when operating a UAV within DelDOT Rights of Way.
   c. All flights will be logged into a database immediately after the flight or at the end of the day for multiple flights in one day. Copies of the logged flights will be sent to the UAS Program Manager by the 3rd day of the month (This will allow the UAS Program Manager to upload the required monthly data into the FAA website).

III. Justification
The FAA created the National Airspace System (NAS) to protect persons and property on the ground, and to establish a safe and efficient airspace environment. The NAS is made up of a network of air navigation facilities, ATC facilities, airports, technology, and appropriate rules and regulations that are needed to operate the system. FAA policy for UAS operations is that no public agency may operate a UAS in the NAS without specific authority. It is imperative that all DelDOT UAV pilots know how to operate the UAV within the confines of the FAA rules and regulations and meet a higher standard of training and certification required by DelDOT.

IV. Effective Date
This policy shall become effective immediately after signature by the Secretary, or, if applicable, upon compliance with the regulatory process required by the Administrative Procedures Act (29 Del.C. Ch. 101)