

## 2023 Maryland Natural Resources Police Unmanned Aircraft Systems (UAS) Annual Report

The following Annual Report has been compiled based on missions flown by the members of the Maryland Natural Resources Police Unmanned Aircraft Systems (UAS) Team during 2023. This report satisfies the requirement of NRP Policy 710.8(C) and shall be distributed as required.

### MISSIONS

During 2023, the Maryland Natural Resources Police UAS Team completed **304 missions** totaling **192 hours and 3 minutes** of actual flight time. Of those missions, over 82 hours of flying was training related (new pilot training, monthly training, and currency training). The Unmanned Aircraft Systems were flown in the following mission types during the year:

<u>Mission Types</u>	<u>Number of Missions</u>
Body Recovery/Dive Team	1
Crabs	5
Criminal (not Natural Resources related)	4
Hunting (big game- deer, bear, etc)	10
Hunting (waterfowl)	43
Other Natural Resources (boating, etc)	3
Search and Rescue/Missing Person	8
Shellfish	99
Special Event or Disaster	3
Striped bass & other fisheries	3
Tactical (TRT, K-9, Homeland Security, etc)	7
Training	118

### ASSISTANCE TO ALLIED AGENCIES

The Maryland Natural Resources Police UAS Team provided assistance to allied agencies on 15 missions during 2023.

- Four missions involved partner agencies that have concurrent missions with the Maryland Natural Resources Police (US Coast Guard-1, US Fish & Wildlife-2, Maryland Park Service-1).
- Nine UAS missions supported State, County, and local law enforcement for Search & Rescue missions or tactical situations that had other NRP units on scene assisting.
- In two instances, NRP UAS pilots were used to assist local law enforcement in locating armed suspects who had fled from police into the woods or local neighborhoods. In both instances, a NRP UAS pilot was already in the area and offered assistance to the allied agency in order to support officer safety during the search for the suspects.



### **EFFECTIVENESS OF THE UAS PLATFORM**

The UAS platforms proved effective in the development of many significant cases during 2023. The UAS platform has allowed officers to cover large amounts of area much quicker than by foot. This has allowed officers to address more problem areas and stay on top of ongoing cases instead of having to guess which few spots to patrol by foot or boat during their shifts. The aircraft has also been key in responding to emergencies and enforcing violations on the waterways. At altitude the aircraft have been able to locate vessels in distress much more easily thanks to thermal imaging and the ability to see much further than by officers on vessels using binoculars. We have also been discovering more natural resources violations occurring on the waterways because radar and lookouts at the marinas traditionally have been giving violators a heads up that officers are out on boat patrol.

### **APPROPRIATENESS OF USE**

No inappropriate uses of the UAS were found during monthly audits in 2023.

### **SAFETY CONCERNS**

There were no major safety concerns found during 2023. The NRP UAS Team has multiple safety management systems in place to make sure the UAS pilots are safe to fly each mission and are flying in a safe manner. The UAS Program also utilizes checklists and has a maintenance program in place to ensure that the equipment is functioning properly. Monthly training also reinforces that pilots are using all the systems built into the aircraft to make sure they are flying in the safest manner possible.

### **EQUIPMENT CONCERNS**

The only minor equipment concern raised during 2023 was that some aircraft have limited thermal camera capability which hampers a pilots ability to fly at night. To mitigate those concerns, pilots are allowed to turn down missions at night if they feel unsafe, can fly at higher altitudes than normal, utilize extra visual observers, and can illuminate what they are looking at with aircraft mounted spotlights. NRP aircraft are also equipped with obstacle avoidance sensors which can assist the pilot in keeping the aircraft in the sky and the public safe.

### **ADHERENCE TO AGENCY POLICY, PROCEDURE, AND DIRECTIVES**

There were no violations of Agency policy, procedure, or directives found during monthly audits in 2023. All updates to the NRP UAS Policy and Procedures were addressed with UAS Team members to ensure they were understood and followed.

### **COMPLIANCE OF PROTECTING PERSONALLY IDENTIFIABLE INFORMATION**

There were no missions or digital media evidence collected during 2023 that involved personally identifiable information while using NRP unmanned aircraft systems.

This Annual Report was prepared and submitted by Cpl. Andrew Brayman, UAS Program Coordinator

