THE **NECP**
National Emergency Communications Plan

NECP Spotlight:

Implementing UAS Programs to Support Emergency Operations

INTRODUCTION

Unmanned aircraft systems (UAS), commonly called drones, are a tool increasingly used by emergency responders to provide additional support to traditional relief and rescue operations. Drone is an informal name for unmanned aerial vehicles (UAV) and UAS. The term UAS refers to the entire system for using a drone, including the aircraft and the ground control unit, while UAV refers only to the vehicle itself. Drones can be used to conduct risk assessments and collect valuable information in lieu of using aircraft flyovers or satellite images, all of which can be slow to deploy, costly, and potentially dangerous to personnel.[1]

The National Emergency Communications Plan (NECP) emphasizes the importance of accurately sharing information across the Emergency Communications Ecosystem, including the various functions and people that exchange information before, during, or after incidents and planned events. Adequate information sharing across the Ecosystem is critical when introducing new training that addresses emerging technology. This spotlight will examine how the Virginia Beach Police Department (VBPD) established its drone usage policies, procedures, and a training program to help other city agencies improve situational awareness and operations.

AN IN-DEPTH LOOK

Under the advisement of the VBPD, the city of Virginia Beach recognized the increased value that drones could bring to the city's operations compared to helicopters, including lower operating costs and a higher return on investment. Because of this, VBPD's Aviation Unit was provided a small budget to purchase two drones to help with law enforcement operations. The drones proved incredibly useful in assessing flood and tornado damage, documenting fatal accident scenes, searching for missing/suicidal persons, executing SWAT search warrants, and in dealing with barricaded subject incidents.[2]

Once the value of the drones was established, the Aviation Unit focused on formalizing usage policies, procedures, and training protocols to accompany its newest technology.[1]

The VBPD Aviation Unit developed a 40-hour in-house training that includes methods of safe conduct, crew resource management, missions and fleet management, operational guidelines, understanding of the Federal Aviation Administration, presenting UAS-collected data, and ensuring compliance with constitutional protections and state legislation. For example, Virginia House Bill No. 2125 requires law enforcement agencies to obtain a warrant before using a drone for any purpose except during defined circumstances such as damage assessment, traffic assessment, flood stage assessment, and wildfire assessment[2] which are not solicited by law enforcement. The VBPD helped other city agencies, including the Virginia Beach Fire Department (VBFD) and the Office of Emergency Management, tailor the training to meet their own agency-specific needs and standard operating procedures (SOPs) for operating drones.

Today, all city departments share an online flight management tool that tracks each agency's request and flight schedule to ensure the city maintains continued communications before, during, and after each drone takes off. The program's success also influenced the VBPD to author a list of best practices and recommendations to advise other cities interested in launching a drone program. Some of these best practices include transparent communication with local governance bodies and stakeholders like the city council, elected officials, community members, and close coordination with other local, state or federal agencies or partners that may also operate in the same air space. Close coordination ensures that all parties are able to collaboratively develop SOPs.

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NECP ALIGNMENT

The following chart aligns specific NECP recommendations to real world examples highlighted in the VBPD's creation of a citywide drone program.

NECP Goal	Objective	Objective Description	Real World Example
Goal 3: Training, Exercises, and Evaluation	3.1	Update and ensure the availability of training and exercise programs to address gaps in emergency communications	The VBPD recognized that few city agencies had staff with experience operating drones. The VBPD developed a 40-hour in-house training program and helped train other agencies so they could establish guidelines and protocols for their agency-specific drone programs.
Goal 4: Communications and Coordination	4.2	Enhance coordination and effective usage of public safety communications resources at all levels of government	The VBPD was the first of all the Virginia Beach departments to acquire drones and develop a drone training program. The agency was responsible for developing a citywide drone program that uses uses SOPs to interoperate and coordinate the use of shared air space with other local agencies and federal entities.
Goal 5: Technology and Infrastructure	5.3	Support data interoperability through the development of effective and sustainable information sharing and data exchange standards, policies, and procedures	The VBPD has established cross-agency communications through an online flight management tool that allows other agencies within the city, such as the VBFD and Office of Emergency Management, to track each agency's request and flight schedule. Data is secured and only shared according to tenets laid out in the interagency SOPs.

RESOURCES

Emerging technologies, like drones, can be leveraged to enhance and strengthen emergency response capabilities. To ensure that these new technologies meet public safety's mission-critical needs, state, local, tribal, and territorial public safety organizations must continue to evaluate their current resources and plan for the integration of new technologies and capabilities into their training and exercises. To learn more about adopting new and emerging technologies, visit: cisa.gov/necp.

Want to share your organization's successes and alignment to the NECP? Email us at: necp@cisa.dhs.gov.

For more information on drone technology visit: cisa.gov/publication/responding-drone-calls-guidance-emergency-communications-centers

1. Office of Community Oriented Policing Services. (2020). (rep.). Drones A Report on the Use of Drones by Public Safety Agencies— and a Wake-Up Call about the Threat of Malicious Drone Attacks. Washington , DC.

2. Title 19.2. criminal procedure. § 19.2-60.1. Use of unmanned aircraft systems by public bodies; search warrant required. (2021). Retrieved November 2, 2021, from https://law.lis.virginia.gov/vacode/title19.2/chapter5/section19.2-60.1/.

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