

NATIONAL FRATERNAL ORDER OF POLICE ®

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Unmanned Aerial Systems

Definitions

- Unmanned Aerial System (UAS): An unmanned aircraft and its associated elements including communication links, an internal global positioning system, software, and the components that control the unmanned aircraft.
- Unmanned Aerial Vehicle (UAV): An aircraft without any human pilot, crew, or passengers on board.
- **Counter Unmanned Aerial System (cUAS)**: A term that describes measures or actions taken to counter UAS activity or flight patterns.
- **Drone**: An informal term used to describe a UAV, and solely refers to an unmanned aircraft and no other related components that may or may not contribute to the vehicle's airworthiness.
- Small Unmanned Aircraft: Any unmanned aircraft that weighs less than 55 pounds.
- Large Unmanned Aircraft: Any unmanned aircraft that weighs 55 pounds or more.

What is a Unmanned Aircraft System or UAS?

An unmanned aircraft system is an unmanned aircraft and its associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate the aircraft safely and efficiently in the national airspace system. An unmanned aircraft itself is a component, but not solely a UAS. It is defined by statute as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft (Public Law 112-95, Section 331(8)). The airworthy device at the center of this technology (unmanned aircraft) is more commonly referred to as a "drone." The term unmanned aircraft system was first defined and adopted into Federal law in 2005 by the U.S. Federal Aviation Administration (FAA) and the U.S. Department of Defense (DoD).

Unmanned aircraft come in all shapes and sizes and are not limited by any size or weight restrictions by the existing definition. A "small unmanned aircraft," is designated as an unmanned aircraft weighing less than 55 pounds, and a "large unmanned aircraft" is designated as an unmanned aircraft weighing 55 pounds or more. The DoD has a much larger variety of categories for unmanned aerial vehicles. However, these distinctions are solely for military purposes and are not necessarily relevant to public safety use. The average battery life of most unmanned aircraft sustains around 30 minutes of flight time, although this varies greatly depending on the size, model, and activity of the drone.

How do Law Enforcement Officers Utilize Unmanned Aircraft Systems?

According to studies, the number of public safety agencies with drones has drastically increased in recent years. Police Chief Magazine <u>reports</u>:

"In 2017, 347 law enforcement agencies in 43 U.S. states were using UAVs (unmanned aerial vehicles) to assist officers in the field.¹" Since that year, drone usage in public safety pursuits has greatly increased. "Police agencies are (increasingly) using UAVs for search and rescue, traffic collision reconstruction, investigations of active shooter incidents, crime scene analysis, surveillance, and crowd monitoring².

-- BUILDING ON A PROUD TRADITION --

Despite this wide range of use cases, most law enforcement agencies currently deploying UAVs are using them only for preplanned operations and scene documentation."

Issues Surrounding Unmanned Aircraft System

One of the most immediate hot-button issues surrounding unmanned aircraft systems is the technology's country of origin. Many lawmakers are eying bans and increased tariffs on various Chinese products due to China's recent adversarial stances. While there is an existing 25% tariff on Chinese UAS technology, many of these same lawmakers are considering increasing penalties to further combat their market dominance and national security concerns. Fueling anxieties over their market dominance, Chinese statesponsored company Da-Jiang Innovations (DJI), the largest drone manufacturer in the world, now holds 70% of the global market share for this product³. The greatest of these two concerns, however, is public safety officials' use of Chinese technology, since it is viewed as a national security risk. These concerns primarily extend to the software of the UAS, rather than the hardware components.

Many rank-and-file officers, however, support the use of Chinese drone technology. They believe the national security risk is overstated and point out the lack of access to American UAS technology. With 70% of the global market share being owned by DJI, it is increasingly difficult to identify drone technology from alternative sources. Additionally, aside from the obvious supply issues, "many American commercial drones cost tens of thousands of dollars more each than a Chinese model⁴." This presents a formidable issue for the majority of departments that struggle to fund routine department equipment. Such funding concerns leave many departments only able to afford Chinese drones or leave them unable to afford any drones at all. Representative Elise Stefanik (R-NY) has introduced **H.R. xxx**, the "*Drones for First Responders Act*" in an attempt to address this concern.

Another serious concern is the amount of red tape that prevents rank-and-file officers and State and local agencies from addressing public safety emergencies involving UASs on their home turf. No law enforcement body or professional should be turned away from protecting their community. This jurisdiction breakdown is in large part due to how novel the issue of UAS is in public safety. The heart of the issue is not that there are arbitrary rules surrounding this issue, but rather the fact that there are no rules outlining law enforcement's place in taking counter-UAS (cUAS) actions in the interest of public safety. To put it plainly, there is no precedent for law enforcement to take cUAS measures and protect their community. It is paramount that common-sense regulations are implemented so that the law allows law enforcement officers to perform their sworn duty and protect their communities, and **H.R. 4333/S. 1631**, the "*Safeguarding the Homeland from the Threats Posed by Unmanned Aircraft Systems Act,*" aims to accomplish this goal.

Legislation Facing Unmanned Aircraft Systems and Law Enforcement

- **H.R. 4333/S. 1631**, the "Safeguarding the Homeland from the Threats Posed by Unmanned Aircraft Systems Act": This comprehensive measure is aimed to eliminate arbitrary red tape preventing certain law enforcement officers and agencies from taking cUAS measures when the unauthorized or unsafe use of drones threatens public safety. Currently, State, local, and Tribal officers do not have the proper authority to respond to such incidents, which this bill would address.
- **H.R. 5879**, the "*Drone Research and Innovation for Law Enforcement Act*": The legislation would establish a pilot research program within the FAA located at Mississippi State University for the use of non-lethal de-escalation conducted energy devices integrated with unmanned aerial vehicles (UAV) for public safety purposes.
- **H.R. xxxx**, the "*Drones for First Responders Act*": This bill would impose an annual growth rate tariff on imported Chinese drone technology beginning at 30% and topping out at 50% after five

years. The money received from this tariff will be put towards establishing a new grant program for first responders, farmers, ranchers, and providers of critical infrastructure to purchase secure drones manufactured in the U.S. or allied countries.

Citations

1. Fleming, Curt. "<u>Remote Drones Dispatch: Law Enforcement's Future?</u> ." Policechiefmagazine.org, International Association of Chiefs of Police, Accessed 15 Apr. 2024.

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3. Holdeman, Eric. "Federal Government Will Require Purchase of 'Made in America' Drones." GovTech, GovTech, 8 Jan. 2024,

4. Jackson, Jon. "America's Drones Are Too Expensive..." Newsweek, Newsweek, 11 Apr. 2024,