18TH ANNUAL
HOMELAND SECURITY WEEK

RISKS AND BENEFITS OF DRONES ON THE SOUTHERN BORDER

PRESENTED BY:

IDGA
Institute for Defense and
Government Advancement

Risks and Benefits of Drones on the Southern Border

In December 2023, migrant encounters at the US-Mexico border reached a record high, according to Pew Research Center. Although by August 2024, those encounters had dropped 77%, migrants crossing the southern border illegally were still occurring at higher rates than much of the past decade.

The recent decline in migrant encounters is partially attributed to policy changes on both sides of the border. The Washington Post reported this September that authorities in Mexico have stepped up their efforts to prevent migrants from reaching the southern border. Meanwhile the Biden administration issued an executive order this June that ordered an asylum ban for migrants crossing the southern border illegally.

Besides policy changes, another factor in improving the mitigation of illegal border crossings are the technologies and personnel Customs and Border Patrol (CBP) have committed to over the past year.

One such technology is unmanned aerial systems, or drones. CBP has begun expanding the role of drones in its operations, which has offered significant benefits in terms of time and cost savings, and officer safety. This report will analyze not only how CBP is leveraging drones on the southern border, but inversely, the risks drones present on the southern border when used maliciously.

To learn more about drone use on the southern border, and other CBP initiatives, be sure to register for next year's Homeland Security Week starting March 25 in Arlington, Virginia.

This two-day summit will focus on advancing cybersecurity/biometric measures, optimizing border security strategies, counter-UAS, enhancing infrastructure resilience, strategies of local law enforcement, and more.

A history of drones in the CBP

CBP has a long history of using drones on the southern border to improve operations. Starting in 2005, CBP introduced the MQ-9 Predator B Unmanned Aircraft System (UAS), marking a significant advancement in their surveillance and reconnaissance capabilities along the southern border. The Predator B drones are essential in tracking and interdicting illegal cross-border activities, such as human trafficking and drug smuggling, while providing extended aerial surveillance over vast and remote areas.

The Predator B, and its maritime variant, the Guardian, are key assets in CBP's Air and Marine Operations (AMO). These drones are used to provide real-time intelligence, streaming video, and reconnaissance support for border patrol agents on land, at sea, and in coordination with foreign law enforcement agencies.

Initially deployed along the Southwest border, this drone use was expanded to the Northern border in 2009, and later, AMO added advanced radar systems, such as the Vehicle and Dismount Exploitation Radar (VADER), to detect movement across wide areas.

On top of using these drones for surveillance on the southern border, CBP have used the drones to provide emergency support during hurricanes and floods.

Over the years, CBP has expanded its drone use by increasing flight hours and the number of successful interdictions. In fiscal year 2022, for example, AMO UAS crews detected over 104,000 instances of suspected illegal activity and helped seize large quantities of drugs. By 2023, CBP had flown over 10,000 sorties

Over the past four years CBP has also increased its use of small drones on the southern border, which has lead to significant border security improvement opportunities. These drones provide rapid, flexible aerial surveillance that complements traditional manned aircraft. Small drones, which can be quickly deployed from patrol vehicles, offer agents a bird's-eye view of hard-to-reach areas like dense fields, brush, or rugged terrain. For instance, a drone helped agents locate 19 suspects hiding in tall grass near Yuma, Arizona, within seconds of being launched, showcasing the technology's effectiveness in tracking and apprehending individuals that would otherwise be difficult to find.

Border Patrol agents operate two types of drones: a quadcopter for vertical takeoff and a fixed-wing model resembling a small airplane. These drones are equipped with infrared cameras and powerful zoom capabilities, enabling both daytime and nighttime surveillance from up to 1,200 feet in the air. They provide real-time data to agents on the ground, sending precise coordinates of targets and even using lasers to mark points of interest. The drones can fly autonomously, allowing agents to focus on ground operations while monitoring their surroundings remotely.

This technology not only increases the efficiency of agents but also enhances their safety by allowing them to assess potentially dangerous situations before entering. Border Patrol agents trained to operate these drones are part of a growing program that has already deployed over 135 systems, with plans to expand to 460.

Nefarious drone use on southern border

In February 2023, Gloria Chavez, Chief Patrol Agent of the U.S. Border Patrol's Rio Grande Valley Sector, testified before the House Oversight and Reform Committee regarding security concerns at the southern border. During her testimony, Chavez highlighted cartels increasing use of drones along the southern border to aid in their illegal activities, including drug and human smuggling.

According to Chavez, in 2022, the Rio Grande Valley sector alone experienced over 10,000 drone incursions and 25,000 sightings. In March 2024 the U.S. Northern Command's top general testified before congress that there are more than 1,000 monthly drone incursions along the southern border. These drones give cartels a significant advantage, allowing them to monitor U.S. Border Patrol positions and plan their operations more effectively. They use drones to scout for vulnerabilities, track agent movements, and gather intelligence, often flying over border patrol stations and ports of entry.

The ongoing drone use by cartels doesn't just pose a threat to CBP personnel on the southern border, but it endangers those living along the border. Cartels like the Sinaloa cartel are using drones in their conflicts with rival groups, such as Los Pelones, to drop explosives and gain tactical advantages. These incidents have escalated concern for CBP, with reports of drones carrying large amounts of ammunition and even targeting areas near farms in Arizona. While this violence has remained on the Mexico side of the border so far, it is happening dangerously close to US territory.

This growing threat has led U.S. lawmakers to call for stronger measures, such as the Countering Drone Incursions Act, to give the Department of Defense more authority to respond to these incursions.

The Countering Drone Incursions Act aims to advance counter-UAS measures to mitigate risks posed by unauthorized drones. This means securing telecommunication networks from disruptions, maintaining uninterrupted power generation and distribution operations, and enhancing security at large public events.

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THIS YEAR'S SPEAKERS INCLUDE:

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Department of Homeland Security

Lewis "Lew" Monroe III,
Associate Administrator and Chief for the Office of Defense Nuclear Security,
National Nuclear Security Administration (NNSA) Department of Energy

Kevin Davis,
Chief of Police,
Fairfax County, Virgina

Scott Parker
Branch Chief, Advanced Threats Security, Cybersecurity & Infrastructure Security Agency (CISA)
Department of Homeland Security

Perry Tarrant
Director, Law Enforcement Engagement and Integration Office
Federal Emergency Management Agency (FEMA)

RADM, USCG (ret.) Christopher J. Tomney
Director, Office of Homeland Security Situational Awareness (OSA)
Department of Homeland Security