September 2025

Persistent Threats: How Human Smugglers Are Exploiting Drone Technology Along the U.S.-Mexico Border

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Executive Summary

On August 28th, Secretary of Defense Pete Hegseth acknowledged the increasing national security threats related to drones (also called small Unmanned Aerial Systems, sUAS). He established a new task force to take the lead in advancing capacities for defeating small drones for the Department of Defense. This piece argues that the United States should fortify these counter-drone measures (C-sUAS) by integrating them more profoundly into the Department of Homeland Security and border control. Successful defense against smugglers using drones for illegal immigration relies on empowering agents along the border so they can rapidly address this emerging threat.

Since taking office, the Trump administration has overseen a dramatic decrease in unauthorized border crossings along the US-Mexico border. This trend, which began during the final months of the Biden administration, has continued into 2025. According to the most recent data available, US Border Patrol apprehensions in June 2025 fell by over 90% compared to June 2024. While these figures may give the impression that the challenge of human smuggling has been effectively addressed, this perception masks a more complex, and evolving, reality.

Alien Smuggling Organizations (ASOs), many of which operate in tandem with Mexican cartels, have not disappeared. Rather, they have adapted. These organizations, which constitute the primary criminal infrastructure facilitating illegal human crossings, are shifting from high-volume tactics to precision operations that prioritize stealth, efficiency, and technological advantage. These adaptations challenge existing US countermeasures which are less prepared for precision operations facilitated by drone usage.

1. Background: Alien Smuggling Organizations and Their Operational Evolution

ASOs have direct links with Mexican Cartels. Specific cartels, such as the Northeast Cartel and the New Juarez Cartel, are much more involved in human smuggling operations, compared to others such as the Jalisco New Generation Cartel or the Sinaloa Cartel, who focus more on drug smuggling into the United States. The tactics they adopt with smuggling migrants into the United States can easily be used in much more dangerous scenarios.

ASOs operate transnationally, with infrastructure on both sides of the US-Mexico border. Many are local or familial networks that have long specialized in human smuggling. Their business model has shifted from moving large groups of migrants across the border, often aiming to

overwhelm US authorities, to more selective, calculated incursions aimed at avoiding detection altogether.

A key element of this shift involves the increasing use of technological tools, namely [tunnels](#) and small [Unmanned Aerial Systems](#) (sUAS), to bypass traditional border security measures, such as border walls or agents operating along the border. While tunnels have long been used by cartels and smugglers to move narcotics and people beneath border defenses, the growing integration of drone technology presents a newer and arguably more difficult challenge to US Homeland Security. In other words, while tunnels are not new, using drones enhances their effectiveness or even reduces their use as tunnels once discovered are inoperable.

Human smugglers now routinely deploy drones to support and coordinate cross-border operations. A common tactic involves using drones to surveil US Border Patrol movements while [guiding migrants in real time](#). Operatives on the Mexican side monitor live video feeds and relay instructions to the migrants being smuggled on the ground. This method not only reduces the risk of direct confrontation but also provides a near-complete picture of US patrol patterns, without the need to place human spotters in contact with law enforcement personnel.

The use of aerial surveillance gives Alien Smuggling Organizations an asymmetric advantage over law enforcement institutions. Migrant crossings become more precise and significantly harder to detect. Crucially, this new drone-based approach removes many of the physical limitations that have historically constrained smuggling activity and enables successful smuggling operations in more urban centers that generally have a [higher concentration of Border Patrol agents](#).

2. Main Argument: Gaps in Counter-sUAS Capabilities as US Vulnerabilities

The US Border Patrol currently lacks the technological capabilities and regulatory authority to effectively counter this drone threat. This gap is the result of both procurement shortfalls and outdated regulatory frameworks governing US airspace. In addition, as with the deployment of military forces along the border, counter [sUAS radar systems](#) have also arrived but such deployments rely solely at the discretion of the Department of Defense. As such, those assets can quickly be repurposed in case of a crisis anywhere around the world. The Department of Homeland Security should adequately equip their forces not to be solely reliant on the Department of Defense.

At present, US counter-sUAS (C-sUAS) doctrine treats drones primarily as threats [to fixed sites](#), such as military installations, airports, or critical infrastructure. This posture is both outdated and insufficient. Drones are now a persistent tactical tool in the daily operations of criminal networks along the border. As one of the main focuses of ASOs using drones along the border is to track US Border Patrol, military personnel and other law enforcement members patrolling the border, the threat is no longer solely on fixed sites such as ports of entries. Therefore, the United States should rethink its approach and expand the C-sUAS mission to include mobile enforcement units like those operated by Border Patrol.

3. Policy Context: Learning from Mexico as a Bilateral Imperative

To mitigate the described vulnerability, Congress and the Department of Homeland Security (DHS) should significantly increase investment in counter-drone systems specifically tailored for border enforcement.

Every Border Patrol sector should be equipped with the tools necessary to detect, track, and neutralize rogue drones in real time. Moreover, the authority to deploy such systems should be delegated to field agents, as drone interdiction constitutes a form of non-lethal force well within [existing legal frameworks](). As such, individual counter-drone systems should be a priority for US Border Patrol agents operating along the border.

It is also essential to recognize that most counter-sUAS deployments along the border would occur in remote or sparsely populated areas, far from commercial aviation routes. Regulatory concerns over airspace safety, while legitimate, should not be a barrier to empowering Border Patrol Agents to respond effectively to these threats.

Furthermore, the Department of Homeland Security should adopt a dedicated training program for all agents active along the border to mitigate sUAS threat and develop proficiency on how to operate counter drone systems. Currently there is partial lack of human technical capacity to operate counter drone systems at scale. This training should encompass all available agents active along the border and not be solely focused on a specialized team of operators.

Mexican security forces at the local, state, and federal levels, have already embraced the need for counter-drone capabilities in a more flexible manner. It is now common to see Mexican law enforcement units [equipped with C-sUAS tools]() to protect against cartel-operated drones used in surveillance and targeted attacks. The United States should adopt a similar mindset if it hopes to maintain operational parity with ASO and cartels across the border.

Furthermore, the bilateral dimension of this challenge cannot be overstated. In April 2025, the Department of Homeland Security

conducted a [successful joint C-sUAS exercise]() with Canadian counterparts, showcasing a high level of interoperability and coordination. A similar framework should be pursued with Mexico.

4. Policy recommendations: A New Chapter in Border Security

The Department of Homeland Security should prioritize the creation of a dedicated US-Mexico counter-drone program, involving coordination with the Mexican National Guard (the lead agency for border enforcement), as well as key state police forces operating already along the US-Mexico border. The goal should be to establish a joint operational mechanism to detect, track, and interdict drone activity linked to smuggling networks on both sides of the border.

The dramatic reduction in border apprehensions over the past year should not be mistaken as a win. Alien Smuggling Organizations are evolving faster than the US government's ability to adapt. The growing use of drone technology by these networks represents a clear and present danger to US sovereignty and security. Failure to act now will only widen the gap between enforcement and evasion.

If the United States is to remain effective in securing its southern border, it must embrace a new doctrine, one that treats drones not as emerging threats, but as current and active components of cross-border crime. The tools exist. What is needed now is increased financial spending, regulatory reform, and strategic cooperation, both domestic and international, to deploy them.

Author

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