

Harnessing Insurgent and Narco-Criminal Drone Tactics for Special Operations

Description

Editor's note: This article is part of Project Air Power, which explores and advocates for the totality of air, aviation, and space power in irregular, hybrid, and gray-zone environments. We invite you to contribute to the discussion, explore the difficult questions, and help influence the future of air and space power. Please [contact us](#) if you would like to propose an article, podcast, or event.

The US Army recently took the bold initial step to fund and field [commercial drones in infantry units](#), something many experts have been urging for some time. In a sense, the Ukraine warfighting experience has finally shifted the Army's perspective on the [combat effectiveness of low-cost, advanced commercial drones](#) compared to expensive aircraft and military-grade drones. This shift has led to soldiers being encouraged to freely experiment and innovate in addressing the challenges of modern warfare.

This is precisely what violent non-state actors and criminals have been doing for years. Taking a needed step back, this piece explores the benefits behind commercial drone exploitation, similar to the US Marine Corps's study of how to capitalize on the [logistical merits](#) of drug-running [narco subs](#). The latter entails experimenting with prototype logistics supply drones, whose low profile and wake make them rather stealthy for operating in sea lanes contested by great power naval forces.

Such fighting fire with fire approaches can readily be applied to insurgent and organized crime groups using air power based on relatively cheap consumer drones. Media attention related to these systems has increasingly been in the news initially in fits and starts over the last decade. Their pronounced use, first by the Islamic State [as a surrogate air force](#) and later by other terrorist groups, has steadily increased along with their ongoing fielding by Mexican cartels, initially to smuggle narcotics and [later as weapon systems](#). Consumer drones carrying improvised explosive devices (IEDs), including modified RPG warheads, are now daily social media fare in the Russia-Ukraine War, with [tens of thousands](#) of these systems being deployed on the battlefield.

Non-state belligerents and criminals have been particularly creative with these platforms. They have utilized both rotary and fixed-wing drones in conflict. In addition to consumer models, they have fielded do-it-yourself kits, built-from-scratch drones, as well as hybrid systems merging commercial and military-grade components. The emergence [of attempts](#) to develop terrorist jet engine drones instead

of electric motors has also taken place, along with the use of [3D computer printers](#) to fabricate parts and bespoke drones. [Kamikaze drones](#) were an initial mainstay of criminal, terrorist, and insurgent air forces, which later transitioned to include aerial bombardment capabilities typically progressing from dropping a single bomblet to multiple small bombs on multiple targets. Production began in smaller numbers of [artisanal devices](#) and later swelled through more [institutionalized \(factory-like\)](#) processes.

The Marines and Army are increasingly using tactical drones, and [some observers](#) suggest [the Air Force](#) do the same. However, another group could dramatically benefit from this capacity: special operations forces (SOF). Given SOF's entrepreneurial ethos and decentralized approach to operations, they are ideally suited to adopt commercial drone strategies from armed non-state actors. What follows is a short list of some of the capabilities these systems can offer US Special Operations Command (USSOCOM) and US Air Force Special Operations Command (AFSOC) in the form of new technologies and operational concepts.

Close Air Support (CAS)

Historically, gaining a close air support capability has been expensive and has significant logistical, maintenance, and training requirements. SOF can now field its own drone air force at a fraction of the cost of a traditional one. As a result, forces can readily exploit the direct attack and aerial bombardment capabilities of relatively inexpensive and commercially available drones in coordination with their ground teams and local allied forces. This would allow for an organic capability that can immediately respond to changing battlefield threats and pop-up targets of opportunity. Further, once acquired, these capabilities naturally lead to extending and broadening their use to achieve local air superiority.

Several insurgent and criminal forces have rudimentarily used drones for aerial attacks, yet few have significantly advanced their tactics. With its recent assault on Israel, [Hamas might be an exception](#). Achieving greater impact would likely involve more semi-autonomous, AI-based systems, shifting to humans on-the-loop (vs. in-the-loop) command and control for quicker decision-making. Further borrowing a page from terrorist tactics directed at commercial airliners, these early AI mesh networks could coordinate drones to disrupt enemy aircraft by targeting engines or rotors. For example, SOF teams facing hostile gunships might deploy a drone swarm to target the enemy's engines or tail rotors, causing damage through direct collision with the airframe or entangling wires or nets in the rotor systems.

Intelligence, Surveillance, and Reconnaissance (ISR)

Reusable drones used for intelligence, surveillance, and reconnaissance (ISR) present a lower risk of being targeted and destroyed. Notably, non-state actors in some conflicts have leveraged commercial drones to achieve superior tactical and operational ISR capabilities compared to state adversaries. Both the [Islamic State](#) and the [Jalisco New Generation Cartel](#) developed specialized drone units ahead of the Iraqi and Mexican militaries they were (and are) fighting. Multiple cartels and even some vigilante groups are now using drones for reconnaissance, ambushes, and real-time surveillance during assaults.

While SOF teams and some larger units already access diverse ISR tools, adopting commercially available drones hardened for datalink security would extend this capability down to the lowest operational elements. Furthermore, hybrid drones offer plausible deniability in sensitive environments and can operate on unconventional frequencies like cell phone bands, reducing detectability. Over the long term, military-grade drones will, given their cost points, be unable to fulfill the growing ISR needs of SOF teams on increasingly contested battlefields. No choice will exist but to deploy cheaper systems that will be good enough to meet mission requirements.

Winning the Narrative Fight

Criminal, terrorist, and insurgent groups have long recognized the propaganda and psychological advantages of using imagery to influence opinions and behavior. Consumer drones and modern cameras now enable them to create videos and photographs from previously inaccessible vantage points and across nearly all light levels. Some of the earliest adopters were US anarchists engaging in questionable, and occasionally illegal, street activities and protesters who had [live-streaming broadcast](#) capability as early as 2011. The Islamic State was acutely aware of the value of drone imagery for its [propaganda value](#), which bolstered perceptions of the group asserting national sovereignty in the airspace above their claimed caliphate. This group also pioneered combat imagery filmed by drones flying over Syrian bases, suicide attacks, and aerial bombardment of Iraqi soldiers and materiel—visuals that are now commonplace in the Ukraine conflict. Even the Mexican cartels have employed [drone imagery](#) to promote their battlefield successes and humanitarian activities. During the COVID pandemic, one [cartel filmed aid distribution](#) in a village under its control with overhead drone videos set to folk music.

SOF could also utilize drone videography for both offensive and defensive narrative production. They can highlight the success of their activities and provide forensic evidence of the operational ground truth to set the record straight. This will become increasingly vital as Russian, Chinese, and other state-based disinformation agencies refine their use of advanced [deep fake AI](#) technologies. Imagine, for example, that China attempted to create a fictitious international incident over a contested atoll in the South China Sea with an allied government. A counter narrative forensically validated via drone

imagery would help shut down such propaganda gambits.

Just-In-Time Logistics

Criminals and cartels use small drones to smuggle items like cigarettes, cell phones, and narcotics into [prisons](#) and across [borders](#), setting a precedent for logistical exploitation. This method can transport nearly any small item on demand — ammunition, medical supplies, batteries, or food and water. Such tactics align with Amazon's ongoing tests for [home delivery services](#). Similarly, drones could resupply SOF teams from forward operating bases, riverine craft, or even transport aircraft, providing essential items stealthily and efficiently during missions. This approach would immediately remove human personnel from harm's way for basic resupply tasks and free them up for more important tip-of-the-spear actions. Conversely, drones can expedite the secure extraction of high-value assets or individuals to controlled areas. Although the technology for transporting people via aerial drone is still developing, it has been [making slow progress](#) since 2016.

Shaping the Operational Environment

Drones can be used to shape the operational environment. Non-state groups seem to have taken a lesson from what the major powers achieved using medium altitude endurance drones against al Qaeda and Islamic State and applied them to small, commercially available systems. Insurgent groups and criminals have adopted tactics and operations to [avoid the sensors](#) of MQ-1 Predators and MQ-9 Reapers. In a reversal of roles, cartels and terrorists now use small drones to influence military operations and [intimidate](#) civilian populations. Just the presence of an unrecognized drone causes changes in behavior. Soldiers and civilians have no way of knowing if the drone is friend or foe and, therefore, must treat each instance as a potential risk to the mission or a risk to the force.

USSOCOM and AFSOC have the resources, expertise, and potential to take these technologies and operational concepts much further in scale and scope than non-state groups. SOF has been lacking the freedom and will to do so, much of which can be attributed to past bureaucratic inertia. In addition to the preplanned shaping capability, drones can also provide impromptu support functions as dynamic operations unfold, such as dropping anti-vehicular mines to help channel opposing forces, providing pop-up barriers like [minefields](#) to protect SOF raids, or laying acoustic and other sensory devices for flank security or early warning.

Suicide Fighters

First-person view (FPV) drones can exploit a fast and nimble platform with deadly tactical capabilities. Videos of French [racing drones](#) competing in forested areas, reminiscent of miniaturized Star Wars

pod racers, debuted a decade ago. These drones inspired an early concept of [virtual martyrdom](#) — explosive-laden, one-way drones that functioned as unmanned kamikazes. There were speculations that Islamic State developed [inghima](#) drones equipped with small arms, such as pistols or other light weaponry, that could later detonate their onboard explosives after expending their ammunition. Although this has yet to materialize, it seems inevitable that either a non-state group or a state will soon refine this tactic, potentially deploying it in either a remote hunter-killer role or integrating it directly into combat units to provide armed overwatch.

FPV drones could also function as a unique form of suicide fighter, one that first launches its weapons at the intended target and then detonates among them. While this scenario once belonged to the realm of science fiction, advances in artificial intelligence have [simplified](#) the integration of facial recognition technology, enabling these systems to operate autonomously. However, the identification of friend or foe, as well as the implementation of non-combatant protection protocols, still require further development.

Conclusion

USSOCOM and AFSOC should not underestimate the expanding role of drone capabilities, increasingly employed by violent non-state actors, criminals, and state adversaries. The deadly realities of the Russo-Ukrainian War, as well as what the cartels are doing along the United States's southern border, reinforce this. The traditional model of deploying a single or a few Reaper drones for targeting strikes is rapidly becoming economically and strategically outdated. Instead, US SOF should focus on scaling up both the quality and quantity of consumer and hybrid drones. Describing these systems as merely disruptive would be an understatement; their impact is revolutionary, driven by these drones's mass deployment and sophisticated networking.

Criminals and violent non-state actors have quickly recognized and exploited the potential of these systems, often using basic technology in innovative ways and prioritizing outcomes over procedural adherence. SOF can adopt a similar approach by leveraging the narco-trafficking model for rapid-cost effective prototyping — a strategy already aligned with SOF's acquisition philosophy. As major global powers continue incorporating commercial technologies into their militaries, the United States must also explore, experiment with, and develop capabilities to deploy, manage, and sustain these unconventional technologies. Given the [benefits](#) of drone technology, SOF appears ideally positioned to capitalize on the creativity and ingenuity initiated by insurgents and criminals.

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Main image: A quad copter drone flying over the road with a car in the background (Photo by [Matthew Henry](#) from [Freerange Stock](#))

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Date Created

2024/04/30