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Armed Drones: Evolution as a Counterterrorism Tool

Armed drones (also commonly called Unmanned Aerial Vehicles, or UAVs) are unmanned aircraft designed to identify, surveil, and engage ground-based targets—ranging from materiel to individuals—with kinetic weapons. The United States has significantly increased its use of armed drones to attack global counterterrorism targets since the terrorist attacks of September 11, 2001 (9/11). Prior to 9/11, the United States deployed unarmed drones at various places around the world primarily to support surveillance activities. Congress plays a continuing role in approving, funding, and overseeing the use of UAVs.

Evolution of Armed Drone Usage

With the Curtiss NSC-2, the U.S. military first started using remote-controlled aircraft in the 1930s—initially for intelligence, surveillance, and reconnaissance (ISR) missions, and later for deploying torpedoes and land-attack bombs. The United States first employed drones in a combat role in the course of the Vietnam War, including the AQM-34 Firebee. The Firebee initially flew in the 1950s as an aerial gunnery target drone, and then in the 1960s as an intelligence-collection drone, and ultimately was modified to deliver payloads in 2002. In September 2000, the United States used an ISR drone over Afghanistan to find Osama Bin Laden as he was being sought for his role in the 1998 terrorist attacks against the U.S. embassies in Kenya and Tanzania. After the drone proved successful in ISR operations—and in response to a need for additional lethal tools after the attacks of 9/11—the U.S. military increasingly outfitted drones with lethal payloads and deployed them to a variety of geographic locations where suspected terrorists resided.

While the specific number of global armed drones being used for counterterrorism missions is not publicly available, reporting suggests that the U.S. use of armed drones has increased in the 20 years since they were first employed. For example, from 2010 through 2020, the United States undertook over 14,000 drone strikes in Afghanistan, Pakistan, Somalia, and Yemen. Some security observers have suggested that, as the United States has withdrawn troops from many overseas locations and transitioned away from manned counterterrorism missions, it is likely the use of armed drones will increase.

Types of Targets: Surveillance or Kinetic Strikes

Drones perform a variety of national security missions for the United States. Specific to how armed drones support counterterrorism missions, the following are commonly performed functions:

- Identifying High-Value Targets: conducting ISR to identify terrorist leaders or those possessing special skills deemed to be a significant threat to the United States. Operators can use both armed and unarmed drones for such a mission.
- Executing Signature Strikes: lethally targeting unidentified individuals based on behaviors, patterns, and locations often associated with terrorist organizations.
- Targeting Equipment/Facilities: destroying buildings or training areas used to house or support terrorist activity.

Figure 1.Armed Predator Drone

Source: U.S. Department of Defense Photos.

Possible Advantages of Using Armed Drones

Some national security professionals suggest there are many positive aspects to the use of armed drones instead of traditional manned aircraft, including the following:

- Safety: unmanned drones reduce the risk that a pilot could be killed, injured, or captured should the platform be damaged or destroyed.
- Precision: the ability of unmanned drones to get closer to ground-based targets than traditional aircraft could enables greater precision in targeting, thereby reducing the risk of unintentional death and injury to noncombatants and destruction of civilian property.
- Loitering: drones are able to linger and surveil targets for longer than manned aircraft.
- Expense: the costs associated with acquiring, maintaining, and operating unmanned drones are less than that of manned aircrafts. In addition, the costs and accompanying employment benefits associated with training drone pilots are less than those for pilots of manned aircraft.

Possible Disadvantages of Using Armed Drones

Other national security professionals suggest that there could be negative aspects to using armed drones instead of traditional manned aircraft, including the following:

- Normalization: Based on the aforementioned positive aspects of drones and the lower downsides of use—namely, reducing the risk of pilots being killed or captured—the threshold for deciding to use armed drones may lead to less rigorous policy or operational deliberations when deciding to employ this capability.

- Collateral Damage: Because drones likely offer greater precision in targeting, operators may use them in situations in which a lethal strike could not—or would not—be executed with manned aircraft. U.S. operators may also use armed drones in counterterrorism operations where there are no friendly observers on the ground to analyze potential collateral damage. This may result in increased collateral deaths of the civilian population.

- Counter-Productive: Noncombatants in affected countries may see widespread use of this capability negatively, if they view it as involving indiscriminate killings. This dynamic could turn supportive and sympathetic civilians in the affected area away from U.S. policies and lead some individuals to be drawn to joining terrorist groups or taking other actions counter to U.S. interests.

- Mental Health: With many of the drone pilots being located in the United States when remotely engaging suspected terrorist targets located overseas, the physical separation from the theater of combat and erroneous killings of civilians has led to concerns associated with post-traumatic stress disorder.

Historical Presidential Approval Process for the Use of Armed Drones

Since 9/11, the approval process for the use of armed drones to engage counterterrorism targets overseas has evolved with each Administration. The Authorization for Use of Military Force (AUMF)(P.L. 107-40)—passed soon after the terrorist attacks on 9/11—gave the President the ability to employ a variety of tools to track down, capture, or kill suspected terrorists. Various Administrations have interpreted the AUMF to (1) tighten or loosen the restrictions on the use of armed drones in various parts of the world, and (2) retain within the Office of the President or delegate approval authority to field commanders for use of this capability.

The George W. Bush Administration—soon after 9/11, when increased funding significantly advanced armed drone technology—focused counterterrorism strikes mostly on the tribal areas of Pakistan. When the Obama Administration came into office, the use of armed drones increased throughout the world, targeting suspected terrorists associated or affiliated with Al-Qaeda, ISIS, Boko Haram, and other entities. As armed drone usage increased, so did the instances where U.S. drones mistakenly targeted and killed civilians. Some security observers suggest that it was due to the increased use of this capability and targeting mistakes that President Obama assumed control of the decisionmaking and approval process for targeting suspected terrorists. Under the Trump Administration, the use of armed drones increased across many theaters of operations where suspected terrorists resided with less national-level oversight. President Trump delegated to field commanders the final authority in deciding whether to employ this capability.

Under the Biden Administration, geographic constraints and final approval authority appear to have changed. Reportedly, the Biden Administration issued rules in October 2022 directing that armed drones be used primarily in recognized war zones (i.e., Iraq and Syria), where field commanders will still retain delegated final authority. These rules reportedly require presidential approval to add suspected terrorists located outside of these two countries to a list whereby they can be targeted for lethal action, including a drone strike. Liz Sherwood-Randall, President Biden's Homeland Security Advisor and the person who oversaw the review of the armed drone policy, stated that the policy is to ensure that the U.S. government is "discerning and agile in protecting Americans against evolving global terrorist challenges ... [while] minimizing civilian casualties."

Potential Questions Facing Congress

In light of the trend of increasing armed drone strikes against counterterrorism targets, Congress may retain or amend the 2001 AUMF to expand or restrict the use of armed drones. Congress may also consider the following questions in conducting oversight activities and reviewing future funding requests for the use of armed drones for counterterrorism purposes.

- How and where are armed drones currently being used to support counterterrorism missions?

- How effective has the use of armed drones been in stopping terrorists from targeting United States global security interests?

- Does the use of armed drones allow for cost savings compared with other counterterrorism capabilities?

- Based on two decades of lessons learned regarding the use of armed drones for counterterrorism missions, what are the advantages and disadvantages of the use of this capability in supporting national security policies and goals?

- What is the current approval process for the use of armed drones for the various types of counterterrorism-related targets?

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