

“Kamikaze Drone” Accurate and Versatile for Military Missions

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Unmanned Aerial Vehicles (UAVs), or drones, are increasingly used in the military due to their accuracy and gathering and disseminating capabilities. Used heavily in U.S. counterterrorism, drones remain one of the most effective tools of the warfighter, especially in situations where placing physical troops would be unfeasible or high risk due to terrorist control of an area. Efforts to make UAVs more accurate and versatile led to developing the Switchblade UAV, which has been dubbed the “Kamikaze Drone” due to its tactical use. [1]



Direct fire munitions increase lethality, reduce collateral damage. (Image courtesy of the U.S. Army)

The Switchblade weighs less than six pounds and utilizes a controller commonly used by the warfighter, reducing the amount of additional equipment and weight needed. The drone can be carried and deployed by an individual soldier. [2] The drone takes off from within a tube and can launch from nearly any environment, including the ground, a ship or an aircraft. [2] After launch, the Switchblade’s four wings spring open and the device transmits live video and GPS data to the drone’s controller. [1]

Using the Switchblade for intelligence gathering functions allows for more accurate identification of terrorist targets with minimized collateral damage. The drone can track the target for extended periods of time prior to making a strike decision, ensuring proper identification of the intended target. [3] Using real-time video surveillance also gives the controller the ability to loiter above the target while waiting for the best time strike, reducing potential civilian casualties. [4] If at any point the situation presents a need to disengage, the UAV can be called off and set to loiter until there is a clear shot at the target. [2]

Once the operator gives the command to strike, the Switchblade locks on and follows even if the target moves. It sets

into a nosedive toward the target, detonating upon impact. [1] [2] The warhead carried by the drone is similar in payload to a grenade, and generates a smaller and more precise blast zone than drone strikes that yield significantly larger payloads. [4] Other drones, such as the Predator and Reaper, tend to carry much larger munitions. [1] These strikes could decimate entire buildings, while the Switchblade could pinpoint a sniper on the roof and pick him off without completely destroying the surrounding infrastructure. [1]

Increased use of drones on the battlefield allows the Department of Defense to survey and strike enemy combatants without needing to put soldiers in harm’s way. Remote locations and areas of high risk create a need for more versatile intelligence and strike capabilities. Combining the intelligence capabilities of modern drones with weapon payloads enables more rapid decision making in the field and allows for strikes to occur immediately if needed. Before the use of drones on the battlefield, the time required to call in for air support could allow the enemy to slip away, thus compromising the mission. [2] Utilizing smaller payloads on drones keeps the

blast radius to a minimum and reduces damage to surrounding areas. Isolated targeting by UAVs contributes to fewer civilian deaths by drone strikes in recent years. [3]

“All the evidence we have so far suggests that drones do better at both identifying the terrorist and avoiding collateral damage than anything else we have.” says Bradley J. Strawser, a former Air Force Officer and assistant professor at the Naval Postgraduate School. [3]

References:

- [1] Hennigan, W. J. (12 June, 2012) [New Switchblade A Lethal Weapon: US Backpack ‘Kamikaze Drones’](#). *Sydney Morning Herald*.
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- [3] Shane, S. (14 July, 2012) [The Moral Case for Drones](#). *The New York Times*.
- [4] Byman, D. L. (July/August 2013) [Why Drones Work: The Case for Washington’s Weapon of Choice](#). Brookings.

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