

Birth of the Armed Predator

In mid-2003, Americans still had little knowledge of USAF's armed unmanned aerial vehicles (now known as RPAs, or remotely piloted aircraft). James G. Roche, the Secretary of the Air Force, decided to lift the veil a bit. Speaking to a UAV trade association, he gave a short version of how the armed Predator came into being and how it could transform the battlefield. His prediction has come true.

This story comes from ... a battle fought near the top of a 10,000-foot peak in Afghanistan—now known to us as Roberts Ridge. On that day—March 4, 2002—an Air Force terminal attack controller and about two dozen others—Army Rangers and Air Force special operations forces—were engaged in a fierce fight for their lives with Taliban militiamen. Their disabled helicopter marked the spot where the Americans were pinned down—with little cover and fighting an entrenched, well-armed enemy. They were taking heavy, sustained, and accurate fire. ...

Worse still, they were running out of options. Two F-15E Strike Eagles and two F-16s had already strafed the enemy, and the F-16s had already dropped three 500-pound bombs—virtually on top of the friendly position—but still the enemy fought on. With snow up to their knees, open ground between the enemy and their position, and seemingly no other means available to take out their adversaries save frontal assault, they turned their fate over to a weapon system about which they were unfamiliar and one in which they had little confidence—the Predator unmanned aerial vehicle equipped with two Hellfire missiles.

After calling for a test shot into the side of the mountain—in fact, at a particular tree—to confirm the accuracy of the weapon, our skeptical combatant commandos allowed the Predator pilot to fire his missile into the enemy position, less than 50 meters from their location. Just as the operator promised over the radio, he hit the target with deadly accuracy, destroying the enemy position and turning the battle for survival in favor of the Americans. ...

The system that saved the lives of [the US] team—the Hellfire-equipped Predator A—was developed by warfighters for warfighters. It was delivered in record time using innovative new approaches to acquisition, training, and employment. ...

But that is not to say we haven't experienced obstacles to change. My partner in leading the Air Force, our outstanding Chief of Staff General John Jumper, frequently tells the story of the challenges he faced in evolving the Predator from reconnaissance aircraft into a system that could help us in many other ways.

When we first fielded the Predator, the Intelligence Community owned it. So in Kosovo, when the Predator found Serb forces in a village there, we'd have one of those frustrating yet predictable, conversations as we tried to come up with ways to make these new systems work for the warfighters. When they'd see a tank between two red-roofed buildings, the Predator pilot or systems operator would try to talk the eyes of the A-10 pilot onto the tank.

USAF photo by Lt. Col. Leslie Pratt

“Applying UAV Lessons”

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But the people flying the Predator were not people who were schooled in close air support or the tactics of forward air control. ...

You'd have this “dialogue of the deaf” between the Predator crew and the A-10 crew: “Sir, it's the tank between the two red roofed buildings.” Of course, the A-10 sees 40 [buildings], all with red roofs. The operator of the Predator is looking through a soda straw at 10-power magnification. He says, “Well, if you look over to the left there's a road right beside the two houses. A tree line is right next to that. A river is running nearby.” Forty-five minutes later, the A-10 might be in the same ZIP code, but certainly hasn't gotten his or her eyes on the target.

After too many of these exasperating exchanges, John said, “Let's put a laser designator on the Predator.” The rapid-reaction part of the acquisition community came in and did just that. It took them just two weeks to put a laser designation device on the Predator. Then we quickly learned how to do target designation and talk others onto a target. As you might expect, however, when the conflict was over, the tyranny of our acquisition process engaged again, and that laser designator came off the aircraft because it wasn't “in the program.” Thanks to John's determination, he had it put back on, but not without difficulty.

Then he said, “If this thing can find the targets and can laser designate the targets, why can't it shoot at the targets? Let's put a Hellfire missile on it.” Again the acquisition system rattled around, not because the system is full of bad people, but because the system isn't designed to be adaptive, innovative, nor is it designed to be fast. ... You can predict what happened next: The team came back and said, “We can put a Hellfire on the Predator, but it's going to take about four or five years, it's going to be about \$15 million to develop it, and it's all high risk.” Of course, John said, “Here's \$3 million, take three months, get out there and make this Predator shoot a Hellfire.”

And, of course, they, along with Army colleagues, ... did it. And I doubled the rate of production of the Predator-A, and decided that all of them would be built with wings capable of carrying Hellfire. And, yes, it worked. As a result, in Afghanistan, Iraq, and Yemen, unmanned combat air vehicles were used for the first time—and to great effect. ★

