

What follows is an edited version of an article which appeared in the New York Times on March 17th. The full article can be found [here](#)

A missile fired by an American drone killed at least four people recently at the house of a militant commander in northwest Pakistan, the latest use of what intelligence officials have called their most effective weapon against Al Qaeda.

Pentagon officials say the remotely piloted planes, which can beam back live video for up to 22 hours, have done more than any other weapons system to track down insurgents and save American lives in Iraq and Afghanistan. The planes have become one of the military's favourite weapons despite many shortcomings resulting from the rush to get them into the field.

Air Force officials acknowledge that more than a third of their unmanned Predator spy planes (which are 27 feet long, powered by a high-performance snowmobile engine, and cost \$4.5 million apiece) have crashed.

Pilots, who fly them from trailers halfway around the world using joysticks and computer screens, say some of the controls are clunky. For example, the missile-firing button sits dangerously close to the switch that shuts off the plane's engines. Pilots are also in such short supply that the service recently put out a call for retirees to help. But military leaders say they can easily live with all that.

As the Obama administration prepares its first budget, officials say they plan to free up more money for simpler systems like drones that can pay dividends now, especially as fighting intensifies in Afghanistan and Pakistan.

Field commanders in Iraq and Afghanistan, where the Air Force is in charge of the Predators, say their ability to linger over an area for hours, streaming instant video warnings of insurgent activity, has been crucial to reducing threats from roadside bombs and identifying terrorist compounds. The C.I.A. is in charge of drone flights in Pakistan, where more than three dozen missiles strikes have been launched against Al Qaeda and Taliban leaders in recent months.

Considered a novelty a few years ago, the Air Force's fleet has grown to 223. Including drones that the Army has used to counter roadside bombs and tiny hand-launched models that can help soldiers to peer past the next hill or building, the total number of military drones has soared to 5,500, from 167 in 2001.

The urgent need for more drones has meant bypassing usual procedures. Some of the 70 Predator crashes, for example, stemmed from decisions to deploy the planes before they had completed testing and to hold off replacing control stations to avoid interrupting the supply of intelligence.

It is easier, of course, for the military to take more risks with unmanned planes.

Complaints about civilian casualties, particularly from strikes in Pakistan, have stirred some concerns among human rights advocates. Military officials say the ability of drones to observe targets for lengthy periods makes strikes more accurate. They also said they do not fire if they think civilians are nearby.

The Predators were still undergoing basic testing when they were rushed into use in Bosnia and Kosovo in the 1990s and then hastily armed with missiles after the September 2001 terrorist attacks. But it was only after the military turned to new counterinsurgency techniques in early 2007 that demand for drones became almost insatiable.

The Drones are now flying 34 surveillance patrols each day in Iraq and Afghanistan, up from 12 in 2006. They are also transmitting 16,000 hours of video each month, some of it directly to troops on the ground.

The strains of these growing demands were evident on a recent visit to Davis-Monthan Air Force Base in Tucson, Ariz., one of four bases where Air National Guard units have been ordered to full-time duty to help alleviate crew shortages

The Guard members, along with Air Force crews at a base in the Nevada desert, are 7,000 to 8,000 miles away from the planes they are flying. Most of the crews sit at 1990s-style computer banks filled with screens, inside dimly lit trailers. Many fly missions in both Iraq and Afghanistan on the same day.

Another problem has been that few pilots wanted to give up flying fighter jets to operate drones. Given the shortages, the Air Force has temporarily blocked transfers out of the program. It also has begun training officers as drone pilots who have had little or no experience flying conventional planes.