WIRED.CO.UK

UK-style surveillance state spreads to Afghanistan

By David Axe and Jason Reich | 01 October 2009 | Categories: Politics

"Intelligent" cameras mounted on airships and towers are being installed in Afghanistan, with the aim of protecting coalition troops and reducing civilian casualties – but Afghans value their privacy and many are suspicious of British and American motives

Wardak Province, Afghanistan: There was a noise like a monstrous kettle boiling over, followed by a deep crunch, as the Chinese-made rocket arced through the sky and exploded on the flat, sandy ground. A couple of minutes later, two American mortar rounds punched the earth about three miles away from Combat Outpost Blackhawk, catching the five Taliban rocketeers as they scurried home. Three died. Two survivors scattered.

This counter-attack on the morning of August 15 was a rare victory for coalition forces, who are usually helpless to stop the Taliban shooters. Even if coalition troops see them coming, their rules of engagement – that is, the list of conditions governing the use of heavy weapons – often mean they can't shoot back at all. "I took one look at our 25-page ROE book and said to myself, 'I will never get to call in a fire mission here'," grumbled US Army Sergeant Eric Kloberdantz, an artillery forward observer from the 10th Mountain Division, which provides the bulk of the troops for Wardak province.

In this case, the troops had been lucky. A tiny radar installed at the outpost had tracked the incoming rocket and extrapolated the launch point. They would normally have had to survey the location before firing mortars, to reduce the risk of hitting civilians, but the troops at Blackhawk had already mapped out the area and knew that no innocent Afghans lived anywhere nearby. Had the Taliban fired from a nearby village, surrounded by civilians, the coalition would have been powerless to strike back.

The relative helplessness of soldiers in Afghanistan could soon end. In the next few months, a surprisingly unwarlike piece of kit inspired by the CCTV cameras that have proliferated in British cities and beyond, might tip the odds in favour of successful coalition counter-strikes, while reducing further the risk to civilians. That, in turn, could help turn the tide against the Taliban in embattled provinces such as Wardak.

Cameras, infrared sensors and miniature radars, mounted in clusters to 30-metre towers or dangled from a 15-metre-long aerostat blimp, are giving more and more coalition troops such a precise view of Taliban shooters that coalition artillery and mortar crews will be cleared to fire back more often, confident that they won't hit civilians.

Eyes in the sky

Officially called the "Base Expeditionary Targeting and Surveillance Sensors-Combined," but usually referred to as the "Rapid Aerostat Initial Deployment" (RAID), the elevated sensor system is central to the strategy of the British, American, Canadian and Dutch forces in Afghanistan.

Altogether, the sensors will monitor at least 50,000 square miles of the country, around the clock. Ever-smarter computer algorithms allow operators to analyse vast amounts of imagery and data, giving the coalition an unprecedented – and exponentially growing – record of human activity in occupied Afghanistan.

RAID tower *Photo: Raytheon*

Surveillance technology just might help win the Afghanistan war for the coalition, but it would be a victory at a high price. Just as the spread of security cameras in the UK has alarmed civil rights advocates and the many everyday citizens caught in their unblinking gaze, the expanding Afghan surveillance state buys security at the price of the very freedoms the coalition is trying to bring to Afghanistan.

RAID started as a small-scale experiment in Afghanistan in 2003. The idea, according to Peter Schoate, the Raytheon program manager, was to take the military's standard daytime and infrared cameras and give them a wider field of view by elevating them. "They liked it and it took off," Schoate said of his military customers. The Pentagon and the British Ministry of Defence bought extra RAID sets – some strictly tower-mounted, others strapped to blimps – and installed them at the biggest bases in Iraq and Afghanistan. In 2006, a RAID-style aerostat was a veritable landmark, bobbing over the sprawling British military base in Basra province, southern Iraq. Soon smaller bases began getting them too.

Today, there are "several hundred" installed RAID systems, Schoate told Wired.co.uk. Most of them are the tower variety. "There are less than a hundred of the aerostat systems deployed," he said. As the number of installations increased, the military and industry began exploring different sensor set-ups and improved processing capability. In addition to the basic day and night cameras, RAID towers can now be fitted with ground-mapping radars, acoustic sensors and flash sensors – the latter for spotting incoming rocket and mortar fire.

The sensors are the most visible aspect of RAID, but it's what inside that represents the system's greatest potential. "It's all driven by software," Schoate explained. He said Raytheon is "migrating to an open architecture" that will allow RAID to combine with unmanned aerial vehicles and other airborne and ground-based sensor platforms, to feed vast streams of imagery and data into a single database accessible by many users. Everyone from base security guards to unit commanders and military forensic investigative teams will be able to tap into the steadily expanding surveillance network.

"RAID is all about what's happening in your area, in real time," Schoate said. But the system can also peer into the past and future. New forensic functions allow investigators to zoom in on, say, the site of a recent roadside bomb attack, in order to pinpoint who placed the bomb and when. Past events can also feed new "predictive" technology, recently added to RAID, that allows analysts to detect behaviour patterns and anticipate a suspect's next move.

Just as importantly, the latest RAID sets allow analysts to peel off certain types of information from a given video recording – say, the locations and directions of cars and trucks – and share that data with other users. "You're not just pumping tons of video streams across the network," Schoate said.

Soldier-proof

For all its sophistication, RAID is surprisingly easy to install. A week after the successful counter-attack in Wardak province, an unmarked shipping container arrived at Combat Outpost Blackhawk along with a team of civilian contractors. Within two hours, a telescoping tower had risen high over the base. A $400,000, ball-shaped camera turret topped the tower like the head of a pin. After some quick calibrations, the system was fully operational. All that was left was for the contractors to train the outpost's soldiers how to use their new all-seeing eyes.

Inside the base's air-conditioned command post, a small room crowded with computer monitors, one contractor – a burly, former US Marine with close-cropped brown hair – showed the soldiers how RAID works. He plugged a Thrustmaster joystick of a type popular with flight-sim enthusiasts into a Toughbook laptop. With a flex of his wrist, he centred the daytime camera on a mountain range, about four miles away. He pressed a button and the powerful camera – one of four separate sensors clustered on this particular tower – zoomed in on a shepherd herding his flock. The resolution was high enough to make out the weathered staff in the shepherd's hands.

The RAID control room *Photo: US Army*

"Using these towers, I can see a guy eight kilometres away and tell you what he is carrying," the contractor said, speaking on a condition of anonymity, since he was not authorised to speak to the press. With the press of another button, RAID could give the contractor precise GPS coordinates for whatever he was looking at. Before, it might take a spy plane flying overhead, or a soldier standing in the spot with a GPS receiver, to gather such fine-grain data. And that meant that soldiers rarely had targeting coordinates when they needed them.

For soldiers in Wardak, this speed and ease of use is critical. They're mostly interested in RAID as a means of spotting targets for mortar teams, so that the teams can strike back at Taliban rocketeers. One American artilleryman, whose base did not yet have RAID, summed up the frustration that comes from being rocketed on a daily basis, without always being able to shoot back. "I've seen maybe two or three fire missions in all of my time in Afghanistan," said Captain Scott Bowerman, several months into his Afghan tour. "It's pathetic."

Cultural walls

While gratifying to long-frustrated coalition artillerymen, RAID has the effect of placing tens of thousands of everyday Afghans under constant surveillance. This worries at least one analyst. "It's not a panacea," said David Rittger, a former Army officer now working as an analyst for the Cato Institute. In his three tours in Afghanistan, Rittger learned that Afghans are serious about their privacy. "When an Afghan builds his home, the first thing he builds is the wall, then the buildings inside."

"It's possible we'll lose a certain amount of rapport" with Afghans, over the surveillance issue, Rittger said, and that might negate any security benefits of the ever-expanding RAID network. In Kabul recently, an Afghan cab driver pointedly mentioned the ever-visible RAID towers and aerostats and told his passenger that the surveillance devices were Israeli in origin. It wasn't true, but that's beside the point. In traditionally Muslim cultures, labelling something "Israeli" is akin to calling it "bad." Already, Afghans are bristling under the expanding military surveillance.

Despite the risk, Schoate expects demand for RAID to increase. And the system might even find domestic applications, he said. One can imagine tower-mounted CCTVs and other sensors, as a sort of "super" version of today's police surveillance systems. In that way, RAID might come full circle. Inspired by police CCTVs and modified for wartime, RAID could wind its way back into home service. Would British civilians object to military-style surveillance, like Afghans do?

Online editing by Holden Frith

PHOTO CREDIT: Raytheon

Comment

Post comment

NAME

EMAIL ADDRESS

CAPTCHA Type the characters you see in the image below

COMMENTS

POST