Drones to be equipped with HD cameras?

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The Consumer Electronics industry is already discussing glasses-free 3D televisions [1]. But for Airmen monitoring drone feeds, they're forced to stare at grainy, SD video. You might say the military is a tad behind. Yet according to a piece in the Air Force Times [2], the times they are a-changin'—the military may soon have HD cameras on drones.

According to Lt. Gen. David Deptula, USAF, Ret., former deputy chief of staff for intelligence, surveillance and reconnaissance, "We're working on HD capability right now. That is something that is being worked on today."

One of the barriers to implementation is the available infrastructure. If dining facilities in a warzone are more spartan than your average office building, you can bet the bandwidth is at a premium.

You need encoders to compress the signal, while managing the drone's take-off weight. As the AF Times points out, each extra pound is one less pound of fuel. At the Association for Unmanned Vehicle Systems International's Unmanned Systems North America 2010 conference, various companies unveiled solutions to this tricky conundrum.

FLIR and L3 designed HD sensor balls with built-in encoders, and according to the companies, their sensors are only slightly heavier than their SD counterparts.

Beyond sensor configuration, there's the issue of electricity requirements. There's also the simple question of "Why"? Why does the military need HD video feeds?

"What military operations, what tasks do we need high definition in our sensors and in our full motion video?" said Brig. Gen. H.D. Polumbo, who oversees plans and programs for Air Combat Command. "When you find those repeatable military tasks that require it, we get it done."

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