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## Opinion Back Talk



# Fly more Joint STARS

The key to effective ISR in the war zones is command and control



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The way America fights its wars continues to evolve.

But one change that is indisputable is the influence and value of real-time intelligence, surveillance and reconnaissance. We see that change every day in action in Afghanistan and Iraq. The contribution of ISR is profound, a game-changer in sports talk. During traditional conflict, ISR assets support future planning and operations. In the asymmetric environments our forces face today, ISR becomes vital to success in real-time operations and events.

Our forces need more and better ISR assets. Secretary of Defense Robert Gates has called for more effective ISR systems, and Gen. David Petraeus pleaded for more ISR in recent testimony to Congress.

Much of the focus and attention has been on unmanned aerial systems. These are important contributors but, because of the dynamics of the modern battlefield, the key to effective ISR is command and control.

With roughly 700 unmanned systems deployed today in Iraq and Afghanistan, there doesn't appear to be a shortage of sensors. The problems and shortfalls are in processing, fusing, distributing and directing the flow of sensor information at the right place and time to make an immediate impact and sustain battle rhythm and momentum.

The most effective, but greatly undervalued, ISR system operating in combat today is the Air Force's manned E-8C Joint Surveillance Target Attack Radar System, or Joint STARS,

aircraft. Battle-proven over Iraq in the 1991 war, Joint STARS now fly every day over Iraq to provide battle management, C2 and ISR capability to support the fighting forces. Several E-8Cs are flying Operation Enduring Freedom and Operation Iraqi Freedom missions, with about 200 people deployed at any time. The planes have flown 35,000 hours on their patrols, according to their home unit, the 116th Air Control Wing at Robins Air Force Base, Ga.

UAVs detect activity over small areas. In contrast, the Joint STARS aircraft has a powerful surveillance radar that can detect moving targets over an extremely large area and during all weather conditions.

Unlike most ISR systems, Joint STARS operates with a skilled Army and Air Force mission crew that provides on-scene, real-time command-and-control support. The mission crew is poised to provide situational awareness to land forces, respond to improvised explosive devices and direct Air Force fighters against insurgent targets. The crew can access the Defense Department's classified internet to update critical information worldwide. Joint STARS also can send its sensor data directly into the cockpits of Army helicopters. No other system can communicate and share information as effectively or as rapidly as Joint STARS to support both air and ground forces.

I suggest that the most effective way to optimize the effectiveness of our numerous UAVs, such as the MQ-1 Predator, is to increase the number of Joint STARS aircraft in theater. Joint STARS can re-task UAV systems immediately in response to real-time requests from land forces. The onboard mission crew can use its extensive communications capability to generate vital information to assist ground forces and direct attacks.

Imagine a scenario in which an Army combat team is on patrol. Overhead is a Joint STARS aircraft in constant contact with the Army unit, providing situational awareness and

communications support. As the team approaches a village of interest, Joint STARS detects approaching vehicles. The unknown vehicles concern the Army team, which requests further assistance from Joint STARS. The Army crew members on board Joint STARS pass a request for Predator support to the Air Force mission director on board, who immediately contacts the Predator Mission Operation Center. The nearest Predator is redirected to support the combat team and the full-motion video provided by the Predator clearly identifies the unknown vehicles as insurgent.

Within minutes, the vehicles are engaged by Army Apache helicopters provided with target data from Joint STARS via a direct link. Our Army patrol safely passes. Scenarios such as this are happening every day in Iraq and Afghanistan.

Air Force studies show the aircraft has useful life well beyond 2050. However, the sensor system is becoming obsolete, inhibiting its ability to see smaller targets of interest and respond as rapidly as it should. To remedy this situation, the Air Force should plan to modify the fleet of Joint STARS with more powerful engines; a modern, state-of-the-art radar named the Multi-Platform Radar Technology Insertion Program; and an Advanced Battle Management system.

The MP-RTIP radar will detect virtually every moving target on the battlefield, regardless of size, and help air and ground forces sort out and identify enemy and friendly combatants. MP-RTIP also has the added capability to detect airborne targets that are difficult to find, such as low-flying cruise missiles.

Advanced Battle Management will deliver a "blitz-like" capability to rapidly interpret and act on information provided by on-board and off-board sensors. The Joint STARS crew members could directly receive video and imagery data from other ISR assets. The mission crew also would be able to directly task the sensors on these systems to respond

rapidly to changing battlefield conditions.

Joint STARS has proven itself as a remarkable weapon system that has made a real difference in helping our forces achieve success in Iraq and Afghanistan. But it can be improved so that it meets the increased demands of today's evolving battlefields and anti-terror scenarios.

We must heed Gates' and Petraeus' plea for more effective ISR in Iraq and Afghanistan. The answer is an expanded fleet of Joint Stars, upgraded with the MP-RTIP radar, the Advanced Battle Management System and newer engines. This integrated combination then can become the robust platform necessary to anchor the ISR and C2 needs of the present and future.

This additional investment in a system we already own and operate will yield more payoff at lower cost than adding any other combination of manned or unmanned systems. ■