Time-sensitive targeting adds combat flexibility

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04/18/03 - OPERATION IRAQI FREEDOM (AFPN) -- An infusion of human decision making and 21st century technology has resulted in a system that has helped U.S. forces and their coalition partners dominate the battlefield in Iraq.

Known as time-sensitive targeting -- TST for short -- this rapid response system is building a new level of flexibility into combat for allied forces.

TST, one of the Air Force’s top priorities since the Gulf War, is the equivalent of a floating football linebacker, keeping eyes on the field and ready to sack the enemy at a moment's notice. In Iraq, this linebacker focuses on a field stretching approximately 500 miles wide and 700 miles long.

The Combined Air Operations Center's TST cell, based at an air base on the Arabian Peninsula, uses the latest in computer technology to collect information from the battlefield. This includes human and electronic intelligence, overhead surveillance and space-based data. A few clicks of a computer mouse boils this stream of data down to the bare facts.

This specialized team of soldiers, sailors, airmen, Marines and allied military troops gives coalition air force units the option to engage enemy forces not identified in each day's battle plan, according to Lt. Col. Gary Backes, the cell's surface track coordinator.

"The challenge is you don't know exactly when it's going to happen or what your first indication is going to be," he said. "We might get someone tapping us on the shoulder saying, 'I just got a phone call from back in the United States, and they want (a certain location) targeted in 45 minutes.' Other times, aircraft will report enemy contact and request permission to engage now."

When targets emerge on the battlefield, time is critical, according to Backes, who deployed from Hurlburt Field, Fla. The TST cell may have only minutes to properly identify a target, determine the best action and send in the appropriate combat power.

The computer systems fueling this decision-making might were based on technology originally developed during Joint Expeditionary Force Experiment 2002 and included tests on the new Automated Deep Operations Coordination System. Through ADOCS, the TST incorporates lessons learned from past combat operations, including allied combat missions over Afghanistan as part of Operation Enduring Freedom. Live-fire exercises and the Central Air Force's 2002 Internal Look Exercise refined the system further.

Gone are the times where military planners spent days planning one combat strike against one fixed target. TST gives friendly forces the option of striking targets minutes after they are identified, according to Maj. Alex Koven, TST command and control operations director.

"We've had instances where (special operations forces) teams needed immediate support. We were able to provide that support within two to three minutes," said Koven, who deployed from the 8th
Weapons Squadron at Nellis Air Force Base, Nev.

On any given day, the cell's 25-person team focuses on thousands of pieces of information critical to instantaneous combat execution. At the same time, the cell keeps watch on coalition air and ground forces to help prevent friendly fire incidents.

Backes demonstrated the speed and flexibility at his computer station in the CAOC. With a few clicks of a computer mouse, the colonel identified a target -- a mobile radar truck on the southern outskirts of Baghdad. At his beck and call are satellite photos and maps, lists of airborne strike and surveillance aircraft, inventories of available weapons and more. All of this data helps planners decide in minutes whether or not to strike, what weapons to use and when and how to attack.

When it comes to sharing information in the cell, nothing's withheld, according to Backes. "We all work together to positively identify and engage these targets."

Checks and balances are built into the system as well. The cell works with the other military planners in the CAOC before any attack receives the green light. It is a balance of quick decision making and putting steel on target. Once approved, the TST's command and control operations director has direct contact with forces in the field to dispatch aircraft, missiles or artillery where and when they are needed.

Backes, who flew combat missions during Operation Allied Force, used a recent combat mission involving an Air Force B-1 Lancer to demonstrate the effectiveness of time-sensitive targeting. The bomber, flying home after a scheduled bombing mission, was directed to strike a time-sensitive leadership-type target elsewhere in Iraq. After that strike, still loaded with additional bombs and ready to go home, Army ground forces radioed in for help after coming under attack by Republican Guard troops. The bomber swung back into the battlefield and coordinated between the soldiers and the TST cell to unload precision weapons onto the Iraqi positions.

"To run the distance of the 'field' is quite a test," Backes said. "It's not unheard of to quickly send a crew 200-plus miles north to support (special operations forces) engaged with the enemy and then coordinate additional priority targets for the crew to attack out west on their way home."

As the technology continues to advance, the colonel's team is taking the next logical step forward -- developing what he calls "right-time" targeting.

"Thanks to the caliber and operational experience of this team, we've been able to practice and now very effectively employ a TST process capable of accommodating targets in ... minutes or plan complex strike packages against heavily-defended top-priority targets with consistent results -- target destroyed," he said.

As decision makers and technology continue to shape the battlefield, U.S. and coalition pilots are finding one major difference in their missions -- they are returning to bases short on munitions, according to Capt. Dave Doss, TST attack coordinator, who deployed from the 7th Weapons Squadron at Dyess AFB, Texas.

"Our goal is to send our people home (from their combat missions) without any bombs under their wings," Doss said.