CHIEF's Sight Picture

17 July 2003

Technology-to-Warfighting: Delivering Advantages to Airmen

Our Air Force's legacy of employing cutting-edge technology to confront threats to our nation's security has never been more evident than in our recent conflicts. Airmen, equipped with new capabilities developed and delivered by other airmen, have won unprecedented success in the battlespace. They have demonstrated that dominance in air, space, and cyberspace yields decisive combat results. As we upgrade existing systems and develop future capabilities to enhance our warfighting edge, it is imperative that we retain and invest in the foundation that underpins these great successes -- the airmen who conceptualize, acquire, test, deliver, and sustain these new and innovative technologies. By investing in our airmen, we fulfill our first core competency and provide a critical element necessary to enable our other core competencies, including our ability to deliver technology to warfighting.

Our technology, conceived in the minds of innovative airmen to answer warfighting needs, born and nurtured in our laboratories, guided and shaped by concepts of operations, refined in our battlelabs and joint exercises, and forged into revolutionary capabilities by our product and logistics centers, has given us unprecedented ability to achieve that dominance on the battlefield. The effects made possible by this applied technological know-how are the result of our air and space power vision made real by airmen throughout the Air Force. From the time the Wright Brothers first flew one hundred years ago, the contributions of visionary airmen have defined us as a service today, and promise to transform our Air Force in decades to come.

As Secretary of Defense Donald Rumsfeld has made clear, there will be no point at which we can say we have transformed the Air Force. Instead, we are engaged in "building a culture of continual transformation, so that we are always several steps ahead of any potential adversaries." To reach this promise requires a new way of thinking. We must continue to break down the functional stovepipes and tribal loyalties that stand in the way of translating our vision into decisive operational capability. We must get out of the mode of thinking only in terms of platform rather than in terms of capabilities. The time will come when we no longer have platforms dedicated to a single role or mission. Platforms must be capable of delivering multiple capabilities. We must also transform how we do business. We have made tremendous progress in shortening the acquisition timeline and streamlining the bureaucratic processes, as evidenced by our ability to employ new systems like Predators and Global Hawks -- to great effect -- before they were formally declared "operational." Through our agile acquisition approach, we can field today's technology today, providing new capabilities as they become available.

The day is coming when prompt global strike will be a reality, when the kill chain will be reliably and consistently compressed to minutes instead of hours or days, and when the sum of all our sensor, command and control, and information capabilities will be a cursor on the target and steel on the enemy. But there is work to be done. As we experiment with machine-to-machine conversations across the global grid, shortening the timeline from sensor detection to weapons on target, we envision a future where network-centric warfare gives our nation an even greater asymmetric advantage in the war on global terrorism and in future combat operations. To achieve this goal, we need innovative thinking from all of our people involved in system development, acquisition, and operational employment, translating the capabilities we need into technical solutions, weapon systems, and concepts of operations, tactics and techniques for their employment.

Though we are developing new systems such as the F/A-22, Space-Based Radar, Multi-sensor Command and Control System, and Airborne Laser to counter the threats of today and the future, we have also achieved dramatic results by modifying and updating our older systems and reconsidering how we employ them. Adding advanced data links to our fighters, anti-jamming capabilities for our GPS-guided weapons, smart weapons and satellite communications to our bombers, and better self-protection systems to our airlifters will vastly improve our ability to generate the effects we want in the battlespace. Some of these modifications have been implemented with unprecedented speed -- such as the installation of Litening II targeting pods and Predator video on our B-52s. Such modifications are a testament to the skill, inventiveness, and determination of the airmen who tackle these challenges, and to what they can do when unshackled from a risk-averse bureaucracy.

Technology-to-warfighting is a key to our third core competency -- integrating operations. We have not yet captured the full magnitude of what we've achieved in integrated operations during Operations IRAQI FREEDOM and ENDURING FREEDOM with our sister services and allies. At first glance, the results indicate that we're delivering on the promise and vision we set down years ago, and that we can continue to develop the effects-based warfighting capabilities that will bring us victory over terrorism, and real security in the face of emerging threats around the globe. I'm proud of all who are making that happen for our Air Force and our Nation.