

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE

HOUSE ARMED SERVICES COMMITTEE  
SUBCOMMITTEE ON AIR AND LAND FORCES

UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: Air Force Intelligence, Surveillance and Reconnaissance (ISR) Programs

STATEMENT OF: Lieutenant General David A. Deptula, USAF  
Deputy Chief of Staff, Intelligence  
Surveillance and Reconnaissance  
United States Air Force

April 19, 2007

NOT FOR PUBLICATION UNTIL RELEASED  
BY THE HOUSE ARMED SERVICES COMMITTEE  
UNITED STATES HOUSE OF REPRESENTATIVES

Mr. Chairman, distinguished members of the committee, I appreciate this opportunity to address you today as the first Air Force Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance (AF/A2). The Chief of Staff of the Air Force established this 3-Star position as a Deputy Chief of Staff to acknowledge the growing importance of intelligence, surveillance and reconnaissance (ISR) in the Air Force of the 21st Century.

Our vision is to transform Air Force intelligence into a preeminent U.S. military intelligence organization, with the most respected intelligence personnel, and the most valued ISR capability. As such, we are establishing Headquarters Air Force (HAF) A2 as the focal point for *all* things AF ISR. We are transforming our approach to ISR by managing systems, platforms, and personnel through a capabilities-based construct, rather than solely through individual program elements. What this means is that for everything from planning to programming to acquisition to employment, ISR requirements and capabilities are driving and shaping the effort to satisfy the needs of the warfighter—not numbers of platforms or pots of money. We have charted and embarked upon a way ahead that includes top-to-bottom changes in the way we do business—from realigning organizations, to recapitalizing capabilities, to refocusing our skills training programs to ensure the talents of our Airmen are optimized.

In the hearing invitation letter, your committee asked that I address major ISR investment programs and focus on specific objectives including a summary of current field operational experience for existing programs, Air Force views on the Aerial Common Sensor program, the Air Force plans for the U-2 mission, and the Air Force's decision to terminate the E-10. I address each of those subjects in detail later in this statement. First, however, I want to address the Air Force's proposal for Executive Agent (EA) for Medium- and High-Altitude Unmanned Aerial Vehicles (UAVs).

## **PROPOSED EXECUTIVE AGENT FOR MEDIUM- AND HIGH-ALTITUDE UAVS**

The Chief of Staff of the Air Force recently sent a memo to the Deputy Secretary of Defense, the Chairman of the Joint Chiefs, the Service Chiefs, and combatant command (COCOM) commanders articulating the benefits of designating the Air Force as the Department of Defense (DoD) executive agent for medium- and high-altitude UAVs. I have provided that memo at the end of my testimony for easy reference.

In one sentence, the intent of the AF Chief's UAV executive agent proposal is to improve delivery of ISR information to America's joint warriors on the ground, at sea, and in the air while increasing jointness and achieving resource efficiencies. Specifically, the benefits of designating the Air Force as executive agent for medium- and high-altitude UAVs fall in three major categories: 1) Achieving efficiencies in acquisition; 2) Increasing warfighting effectiveness in designing an optimal medium- and high-altitude UAV concept of operations; and 3) Enhancing UAV interoperability by directing common, synchronized architectures, data links, radios, etc.

Why appoint an executive agent for medium- and high-altitude UAVs? In the dynamic post 9-11 world the DoD deployed multiple UAVs of all shapes and sizes to meet an immediate need. However, because of that proliferation, it is time to re-examine how to best orchestrate these resources jointly to ensure that the right information gets to the right combat unit at the right time.

In light of increasing resource constraints, the Services do not have the luxury of duplicating multiple UAV program offices, duplicating multiple independent training operations, duplicating multiple logistics and maintenance operations, duplicating multiple intelligence

support facilities, sustaining multiple procurement contracts, etc. This approach does not pass the common sense test with respect to economy of effort, or optimizing the way to get ISR information to America's joint warriors around the world.

The 2006 Quadrennial Defense Review (QDR) recognizes that an executive agent definition may vary, but the universal intent is to ensure joint efforts are efficiently managed and resourced. In the case of medium- and high-altitude UAVs, the executive agent would integrate the development, acquisition, and procurement of jointly designed, standardized UAVs and their associated equipment and ground-control stations. This is not unlike executive agent responsibilities assigned to the Air Force for other programs.

Advantages to the Nation derive from having a single focal point—a single Service—leading medium- and high-altitude UAV design, acquisition, and procurement. Specifically, as executive agent, the Air Force would merge and streamline the separate Service acquisition stovepipes that currently exist for medium- and high-altitude UAVs, eliminating costly duplication of effort. Immediate benefits would include reduced research, development, testing and evaluation costs, as well as decreased per-unit procurement costs resulting from greater economies of scale.

The primary focus of the executive agent would be on programs where the majority of DoD's near-term investments are being made—MQ-1 Predator, MQ-1C Warrior, RQ-4 Global Hawk, Broad Area Maritime Surveillance (BAMS), and MQ-9 Reaper. It is reasonable to expect that the present medium- and high-altitude UAV investment budget could be reduced. Additional efficiencies could be achieved through common basing, training, sustainment, and employment.

In an environment of increasingly constrained resources, the DoD cannot afford the inefficiencies that result from individual Service UAV stovepipes. Without an executive agent, the Services will likely continue their separate design and procurement efforts, and the DoD will have forfeited the considerable savings it could have realized. Additionally, the DoD will have lost an opportunity to create and harness the inter-Service synergies that would result from building upon – rather than duplicating – each Service’s strengths. The Services need to be moving toward increased *interdependency*, vice resourcing to achieve *self-sufficiency*.

The UAV executive agent construct embraces the necessity (and the *benefits*) of true Joint interdependence—the notion that each Service should hone its own core competencies and rely on their sister Services to do the same. The goal is to provide an array of capabilities from which the Joint Force Commander can choose, without suffering from either significant overlap that our department’s resources *cannot* sustain, or gaping holes that our warfighters *cannot* accept.

As UAV executive agent, the AF will not eliminate or subsume existing UAV “Centers of Excellence” (the Army’s Center at Fort Rucker and the Joint Center outside Las Vegas) that craft tactics, techniques, and procedures for effective UAV employment. Rather, General Moseley has stated that as executive agent, the Air Force will continue to draw upon the expertise of these established Centers and synchronize their efforts to provide the Joint Force Commander with a more robust, flexible and responsive capability.

Given the aforementioned, demonstrable benefits of having an executive agent for medium- and high-altitude UAVs, which Service is best positioned to effectively serve in this role? The Air Force emerges as the logical choice for a variety of reasons.

First, the Air Force has the most experience—over a decade—in developing and fielding cutting-edge medium- and high-altitude UAV platforms and technologies. While other Services do operate similar systems, in the case of medium- and high-altitude UAVs, their systems are derivatives of technology demonstrators initially produced and fielded by the Air Force. Key to being an effective executive agent is the ability to translate joint ISR requirements into the capabilities that meet them—whether or not such capabilities currently exist. The Air Force has been succeeding in this realm for years.

A related issue is that of operational control. Currently in joint theaters around the globe, manned aircraft operating above a specified coordinating altitude (ranging from 1500 ft to 3500 ft) come under control of a Joint/Combined Force Air Component Commander (J/CFACC) as described in US Joint Doctrine. General Moseley's memo recommends applying the same operating procedures to UAVs. While operational control is not an executive agent responsibility, there is an important area of convergence. Specifically, all UAVs operating above the designated coordinating altitude must have common, interoperable systems to facilitate J/CFACC control for safe and seamless operations. As executive agent for medium- and high-altitude UAVs, the Air Force would be postured to integrate these requirements into the UAV programming and acquisition process at the outset.

With respect to numbers, from a strictly budgetary perspective, accounting for the entirety of UAVs as a system (i.e., airborne platforms, ground stations, data-handling architecture, personnel, and facilities poised to exploit, and then disseminate collected data), the Air Force surfaces as the heavy-lifter in this realm. Perhaps more telling to medium- and high-altitude UAV success are not platform counts or dollar investments, but employment usage.

Numbers aside, all the persistent surveillance in the world buys us nothing if we can't expedite the collected data to operational processing and analysis elements in a timely manner, and then get the finished intelligence into the hands of America's warriors when and where they need it. The Air Force has the most mature and robust ISR collection, processing, analysis, and dissemination architecture in place to facilitate rapid information transfer. The critical link in that chain is provided by our experienced and highly skilled intelligence professionals – without whom simple *data* would never be converted into usable *intelligence*.

The mission of the Air Force is to fly, fight, and win in air, space and cyberspace. As such, Air Force senior leaders are appointed to serve as joint force air component commanders (JFACCs) providing the theater joint force commander (JFC) a subordinate commander responsible for unifying air and space operations from all the Service components to achieve joint force objectives. At the same time the JFACC fulfills the roles of Airspace Control Authority and Area Air Defense Commander. The JFACC is charged with tasking and controlling air- and space-based assets in accordance with the Joint Force Commander's stated priorities. Using airborne assets and capabilities to meet joint force requirements is an Air Force role, one in which the Air Force has the preponderance of experience.

Designating the AF as executive agent for medium- and high-altitude UAVs is not a panacea. There will never be enough capacity to satisfy every desire for the information that UAVs provide. This sufficiency problem however, should not be confused with a lack of responsiveness. Per Joint Publication 2.0, Doctrine for Intelligence Support to Joint Operations, "Because intelligence needs will always exceed intelligence capabilities, prioritization of efforts and ISR resource allocation are vital aspects of intelligence planning." The demand for ISR assets argues for "centralized control and decentralized execution" to optimize effects required to

support respect to the JFC's highest priorities. It argues against organically assigning medium- and high- altitude UAVs to individual units solely for that unit's use precluding their benefit to the entire theater joint fight. Accordingly, optimal warfighting ISR effectiveness is gained by prioritizing medium- and high-altitude UAV allocation based on Joint Force Commander guidance to the JFACC, who will task and command and control them where they are needed most, while deconflicting them from other on-going air operations, and tracking them as part of air defense procedures.

Today, all operational Air Force medium- and high-altitude UAVs are assigned to Central Command (CENTCOM), but that will not always be the case. The war on terror is by definition “global.” At some point medium- and high-altitude UAVs will be allocated to theaters other than CENTCOM—perhaps in locations without significant U.S. ground presence. A joint approach to optimal employment of these assets in any assigned COCOM in any region of the world is embedded in the JFACC structure.

Given National Security Strategy guidance mandating the intelligence enterprise become more unified, coordinated, and effective—and that it eliminate redundancy—appointing an executive agent for medium- and high-altitude UAVs is a step we can take now that will significantly contribute to that directive.

Appointing the Air Force as executive agent for medium- and high-altitude UAVs will ensure the most efficient use of DoD resources, will maximize UAV effectiveness, and will produce the most seamless array of medium- and high-altitude UAV capabilities for Joint Force and Combatant Commanders.

## **MAJOR ISR INVESTMENT PROGRAMS**



Air Force ISR has been engaged in active combat operations, continuously, for more than 16 years. Since September 11, 2001, we have exceeded the operational pace previously thought possible. Requirements have grown each year, as has our capacity to collect intelligence anywhere, anytime, day or night, under virtually all weather conditions. Our high-altitude ISR aircraft, consisting of the manned U-2 and the RQ-4 Global Hawk, are currently flying in excess of 90 missions per month in CENTCOM alone. Our fleet of medium-altitude MQ-1 Predator UAVs has expanded such that we can now support indefinitely up to 12 simultaneous combat air patrols (CAPs) 24 hours-a-day, 7-days-a-week. We will increase this capacity to 16 CAPs by the end of the next year. Our RC-135 Rivet Joint aircraft and crews persevere in spite of being deployed in excess of what their infrastructure is designed to support. The same holds true for numerous other systems and associated personnel. To accomplish this feat the Air Force has operated at extended “above-max-surge” levels of effort. There has been a price—our systems are aging at a rate far above what was anticipated. To mitigate this, we are investing heavily in our existing systems to keep them functional while leveraging advanced technologies to optimize the capabilities of our personnel and platforms.

The Air Force is committed to enhancing our Global Hawk UAV fleet. Ongoing plans to structure its future acquisition and employment are being calculated to ensure that as the U-2 is retired from active service, there is no loss in continuity with currently provided ISR capabilities. Accordingly, in addition to developing and testing new technologies, the Air Force is also providing Global Hawk with an interim combat capability and accelerating employment options to execute the National Military Strategy.

In an effort to continue and strengthen the critical support this system is providing to CENTCOM in both OEF and OIF, the FY08 budget procures five additional Global Hawk

aircraft and sensors, one ground-control station and advanced technologies procurements for all five aircraft. The FY08 budget submission also starts funding of a much-needed maintenance depot, provides for system modifications implemented through a series of new capabilities spirals and funds the stand-up of a second Main Operating Base at Grand Forks AFB, North Dakota by FY10. Additional funding provides for RDT&E to be used to support the ongoing spiral development. Included among the many significant program events taking place this calendar year is the first flight of the larger, Block 20 aircraft on 1 March and the commencement of Global Hawk sorties in support of SOUTHCOM.

With respect to the MQ-1 Predator medium-altitude UAV, the FY08 budget request procures 24 additional aircraft and 12 Ground Control Stations. These assets represent the continuation of our planned build toward an ultimate objective force structure of 170 aircraft, covering 21 Combat Air Patrols (CAPs) by FY10. Additionally, the FY08 POM assists us in meeting the increased training capacity necessary as we continue to grow the numbers of these systems, their combat and collection capabilities and thus our reliance on this resource in meeting ever-growing warfighter requirements.

We are also continuing spiral modernizations of the RC-135 Rivet Joint signals intelligence (SIGINT) fleet. These upgrades are necessary to keep pace with the wide-ranging and continuously evolving threat posed by our adversaries, particularly in light of the rapid and continual evolution and advancements being made in the commercially available personal communication systems. This spiral modernization will be accomplished through a series of baseline modifications, designed to ensure there is no interruption in the sizeable contribution this asset brings to the fight. The FY08 budget allows for the fielding of our Baseline 8 aircraft and starts the critically needed work on Baseline 9.

In addition to improving its current collection capabilities, the Rivet Joint will also field upgrades in Net-Centric Collaborative Targeting technology; this allows multi-platform, multi-INT target geo-location, and a “reachback” capability to enable task-saturated Rivet Joint crews to send a portion of their collection to rear area facilities and operators for processing and analysis.

Just as airborne ISR collection platforms are being employed at above-maximum surge levels, so too the Air Force Distributed Common Ground System (AF DCGS). Many of the system’s elements are maintained through the use of contractor support, and, as critical cogs in the AF DCGS enterprise, they have also been logging long hours and sustaining high PERSTEMPOs to prosecute the GWOT. For this reason, the FY08 GWOT request includes funding of critical Contractor Logistics Support (CLS) for these worldwide activities, essential to ensuring AF DCGS’ continued ability to conduct timely exploitation of the data collected by ISR platforms.

The FY08 GWOT request also funds advancements in a number of technical capabilities across all intelligence disciplines that will improve our capacity to share data with coalition and national mission partners and to decrease the “kill-chain” timeline (the amount of time that passes between when identification of a target is made and when the appropriate assets are employed to neutralize it). It also ensures the AF DCGS weapon system is capable of leveraging data and information from an ever increasing number of ISR collection systems.

Unmanned aviation technology has matured greatly in recent years and will continue to advance at a rapid pace. UAVs such as the RQ-4 Global Hawk started out as an advanced concept technology demonstration (ACTD), a proof of technological concept. Lighter-than-air (LTA) aviation such as airships and powered wings are advancing rapidly technologically, and

we are aware of their potential benefits. Starting this year, we are evaluating several joint concept technology demonstrators (JCTD) that may be promising in the LTA regime as future technologies for niche ISR applications. While it will take time to develop and field long duration LTA and powered wing platform technology, we are evaluating candidates such as Global Observer and the SA-90 low altitude airship that may yield small-scale residuals to support unique COCOM requirements. This is another incremental step towards battlespace ISR “persistence.”

## **THE AIR FORCE’S ACQUISITION STRATEGY FOR ISR PROGRAMS AND THE ANALYSIS THAT SUPPORTS THAT STRATEGY**

The Air Force acquisition strategy for ISR programs is a dual approach designed to ensure proper stewardship of taxpayers’ dollars while supporting joint warfighter needs. The Air Force continues to advance existing ISR capabilities under traditional acquisition timelines while rapidly providing enhanced capabilities in support of the GWOT.

Experience has shown that normal acquisition processes and government oversight is key to providing and sustaining long-term ISR capabilities. The Air Force follows the Integrated Defense Acquisition, Technology, & Logistics Life Cycle Management Framework for developing systems like the RQ-4 Block 30 Global Hawk and upgrading systems such as re-engining the E-8C JSTARs aircraft. Analyses conducted as part of the Joint Capabilities Integration and Development System process identify measurable needs that are entered into user Capability Development Documents (CDDs). These CDDs are used to identify baseline program capabilities, as well as incremental Pre-planned Product Improvements that are time-phased with the program budget. Air Force system program offices analyze capability needs,

required timelines, technology readiness levels and industrial capacity when starting new efforts using traditional acquisition strategies.

Another approach involves our evolutionary acquisition improvements that are managed via incremental baseline upgrades. The RC-135 Rivet Joint and MQ-1 Predator programs are prime examples of Air Force ISR programs using this acquisition approach. As noted previously, the Rivet Joint fleet is continually being upgraded with enhanced capabilities. Its new baselines are developed approximately every three years and Quick Reaction Capability (QRC) enhancements are incorporated to keep pace with rapidly evolving technologies in target communications. A second example of this acquisition strategy is the Air Force's plan to integrate Target Location Accuracy improvements on the MQ-1 Predator. This 18-month development effort will provide coordinate-seeking-weapons (e.g., JDAM) quality target coordinates automatically from the MQ-1 sensor's aimpoint.

At times, traditional acquisition strategies lack the responsiveness needed to meet warfighter requirements. A validated, combatant commander-identified "joint urgent operational need" may have a fielding solution goal of 120 days or less. Clearly, normal acquisition strategies cannot support such dynamic timelines should a materiel solution be the only possible response. The Air Force, typically in support of the Joint Staff or OSD, follows well-established procedures to determine if rapid acquisition is appropriate and has formalized programs and strategies to facilitate obtaining the needed capabilities. These rapid acquisition processes were instrumental, for instance, in providing Counter-Improvised Explosive Device (C-IED) capabilities for the GWOT, fielding one especially effective measure within four months.

## **SUMMARY OF CURRENT FIELD OPERATIONAL EXPERIENCE FOR EXISTING**

## **PROGRAMS**

***U-2 Dragon Lady:*** The U-2 remains the workhorse of America's high-altitude ISR collection and dissemination mission, providing all-weather surveillance and reconnaissance, day or night, in direct support of Air Force, DoD and national requirements. Overall, the U-2 has a fully mission capable (FMC) rate of 88.2%. Its bandwidth is more than adequate for the extended tether program (ETP) or for direct downlinking via the Interoperable Airborne Data Link (IADL). The average class "A" mishap rate per 100,000 hours is 4.39 since September 2001 and 6.63 across the U-2's lifetime. Two U-2s have been lost since September 2001, one in PACOM in 2003 and one in CENTCOM in 2005. Neither aircraft was replaced. Of significant note, in varying configurations, the U-2 has flown more than 3,700 missions accumulating in excess of 32,900 hours in support of the GWOT.

***RQ-4 Global Hawk:*** The RQ-4 Global Hawk provides persistent, high-altitude electro-optical, infrared and synthetic aperture radar payloads with its integrated sensor system. Current OIF and OEF operations are conducted via remoted satellite communications data relay from ground control stations located at Beale AFB. There have been two platform losses since September 2001, both in CENTCOM. One was lost in December 2001, the other in July 2002. Neither aircraft was replaced (and were residual advanced concept technology demonstration platforms). Of significance, in the first year of operations in Southwest Asia, over 4,000 combat support hours were logged with two aircraft providing in excess of 64,000 images with a scheduled mission effectiveness rate of 90.3%. Since May 2004, Global Hawk has flown approximately 7,600 hours in support of the GWOT, collecting 102,000 images.

***RC-135 Rivet Joint:*** The RC-135 Rivet Joint provides medium-altitude signals intelligence (SIGINT) collection coverage in support of the full spectrum of combat operations

and meets a host of national information needs. It flies approximately 73 missions per month in four theaters, 50-60 in support of operations in Afghanistan and Iraq. Its FMC rate stands at greater than 95%. There are no bandwidth limitations on the Rivet Joint and it has the added benefit of an organic processing, exploitation and dissemination capability. Its class “A” mishap rate is zero and there have been no losses since 2001. Since September 2001, the Rivet Joint has flown approximately 36,300 hours comprising 4,200 missions in support of the GWOT.

***MQ-1 Predator:*** The MQ-1 Predator, an armed/weaponized UAV, delivers long-dwell reconnaissance and target acquisition in support of the joint force commander. It flies 12 Combat Air Patrols (CAPs) per day in OEF and OIF, providing 24x7 full-motion video in support of warfighters. Its FMC rate is greater than 90%. Currently, the Predator uses beyond-line-of-sight for reachback command and control and imagery datalink. As we increase capacity (i.e., number of CAPs), bandwidth allocations need to increase accordingly. The MQ-1’s class “A” mishap rate is 23.8 per 100,000 hours or an 8-year annual average of 3.13 mishaps. There have been 20 other-than-combat losses since September 2001 and funding for the replacement of 18 has been requested in the FY07 GWOT supplemental. The MQ-1 has logged over 200,000 hours since September 2001 including 63,000 flying hours in 2006 alone.

### **AIR FORCE VIEWS ON THE AERIAL COMMON SENSOR PROGRAM**

The RC-135 Rivet Joint aircraft is the Air Force’s “heavy lift” medium-altitude SIGINT platform. We have completed re-engining and cockpit modernization for the entire fleet and our proven baseline modernization strategy provides incremental upgrades to pace advances in adversary communications. As a result, the Rivet Joint does not require recapitalization until 2023 and, with a relatively minor service life extension, will remain a viable platform until 2040.

We continue to monitor the Aerial Common Sensor development activities however, we are aware that the Army and Navy are pursuing different paths to recapitalize their aging airborne fleets. We understand the Army's and Navy's requirements and will continue to track their efforts to develop and field new airborne collection platforms. However, the Services need to strike a balance between ISR requirements and the concern for "assured support." The establishment of a joint theater ISR strategy for all medium- and high-altitude theater ISR assets including establishing an Executive Agent for medium-and high altitude UAVs will improve DoD stewardship of limited resources and better meet the needs of the Joint Force Commander.

### **AIR FORCE PLANS FOR THE U-2 MISSION**

As previously noted, the U-2 has been deployed to Southwest Asia for more than 6,000 days (over 16 years). During that time it has continued to supply vital intelligence to warfighters at every echelon of command. A testament to the value placed upon its ability to gather and provide intelligence, the U-2 has experienced a 30% increase in sustained operations tempo (OPSTEMPO) since 9/11. However, as this committee is aware, we are recapitalizing our U-2 fleet with the Global Hawk UAV, providing much greater persistence, longer endurance and more capacity than the current U-2 fleet.

To mitigate the risk as we retire the U-2 and field Global Hawk, we have developed a High-Altitude Transformation Flight Plan centered on an Integrated Master Schedule. The schedule is a synchronized transition plan linking successful RQ-4 operational stand-up events to specific U-2 divestiture decisions through FY12. It is designed to ensure there will be no significant ISR capability gaps during the transition. For example, we do not take any irrevocable actions until the beginning of FY10 with the termination of Program Depot



Maintenance (PDM) for the U-2 and closure of the Flying Training Unit (FTU) at Beale AFB. Our programming actions for the FY10 Budget Request are aligned with the successful completion of Global Hawk Initial Operational Test & Evaluation in FY08. If Global Hawk were to miss this milestone, we would take the appropriate actions in our FY10 Budget Request to extend PDM activities and keep the FTU operating.

Any identified disconnects will be operationally mitigated or programmatically addressed in the FY09 or the FY10 budget requests. As noted earlier, the FY08 President's Budget continues the department's high-altitude ISR transformation by providing RQ-4 air vehicles, ground segments, personnel, communications infrastructure and the processing, exploitation, and dissemination architecture necessary to stand-up our Main Operating Bases and Forward Operating Locations. Additionally, we have requested sufficient funding to maintain U-2 operations until FY12 to ensure continued COCOM high-altitude ISR support.

### **THE AIR FORCE'S DECISION TO TERMINATE THE E-10**

In 2005 an OSD-directed restructure reshaped the E-10A program into a flight demonstration for 2010 with the weapon system development phase fielding a capability in 2018. However, the 2006 Quadrennial Defense Review recommended removal of E-10A production funds. The QDR sponsored the technology development, but wanted to see results of test flights in 2010-2011 before any future program decisions were made. Therefore, the FY07 President's Budget only funded the E-10 Technology Development Program and related Multi-Platform, Radar Technology Insertion Program (MP-RTIP) developments.

In light of this and overwhelming fiscal pressures during this difficult budget cycle, the Air Force had to cancel the E-10A and its associated MP-RTIP Wide Area Surveillance radar

development. The FY08 PB funding supports moving forward with only the smaller advanced MP-RTIP variant for Global Hawk. When installed on the Global Hawk Block 40, MP-RTIP will provide improved GMTI and SAR imaging. The weight and power restrictions of the platform, however, drive a smaller Global Hawk Radar design and determine its performance.

## **CONCLUSION**

The USAF is organized, trained and equipped for command and control of air, space and cyber assets and capabilities. The Air Force is deeply committed to delivering premier ISR capabilities in defense of our nation. We appreciate this opportunity to provide an overview of our programs, and your support in keeping the US Air Force America's asymmetric advantage.