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SENATE ARMED SERVICES COMMITTEE  
AIRLAND SUBCOMMITTEE  
UNITED STATES SENATE

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE SENATE ARMED SERVICES COMMITTEE  
AIRLAND SUBCOMMITTEE  
UNITED STATES SENATE

SUBJECT: AIR FORCE TACAIR PROGRAMS

COMBINED STATEMENT OF:

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APRIL 13, 2010

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**Senate Armed Services Committee  
Airland Subcommittee**

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Combined Statement of  
Lt Gen Mark D. Shackelford (SAF/AQ)  
Maj Gen Johnny A. Weida (AF/A3/5)**

**I. Introduction**

Chairman Lieberman, Ranking Member Thune, and distinguished members of the subcommittee, thank you for calling this hearing, and for the opportunity to provide you with an update on Air Force modernization efforts and other matters important to our Air Force and to the Nation. Your Air Force is fully engaged in operations across the globe, including overseas contingency operations (OCO) and supporting the Combatant Commanders (COCOM) and enabling them to successfully execute their missions. In the coming year, we will assess how the Fiscal Year (FY) 2011 budget aligns with standing operational requirements and future needs of the entire Air Force. The Secretary of Defense, in the recent 2010 Quadrennial Defense Review (QDR), set four objectives to guide our current actions and future planning: prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the all-volunteer force. Your Air Force is vectoring to meet these objectives, balancing risk appropriately, and preparing to prevent, prevail, and preserve well into our Nation's future.

We frame our decisions and recommendations using the 2010 QDR and the Air Force's top five priorities, established by the Secretary and Chief of Staff of the Air Force. We understand your focus today is on the Air Force's priority to modernize our air and space

inventories, organizations and training. Our rapidly aging aircraft fleet drives our urgent need to balance between acquiring new inventory with sustaining our current fleet. We look forward to discussing how we can match the requirements with available resources in order to execute the National Military Strategy.

## **II. Contributions of our Air Force**

Today, your Air Force flies and fights in air, space, and cyberspace--globally and reliably--as a valued member of our Joint and coalition teams. More than 40,000 Airmen are deployed, with over 29,000 in and around Afghanistan and Iraq, as we unwaveringly do whatever it takes to prevail in today's wars. Airmen, Soldiers, Sailors, and Marines who cross outside the wire do so with the asymmetric advantage of armed overwatch, globally integrated intelligence, surveillance, and reconnaissance, combat search and rescue, and aero-medical evacuation. In Afghanistan alone, last year your Air Force flew 26,474 close air support sorties, a 39 percent increase over 2008. Our joint force in the Central Command area of responsibility is sustained by around-the-clock rapid global mobility operations that included, in 2009, 52,905 airlift sorties delivering 264,839 short tons of cargo, over 32 million pounds of airdropped cargo, and 1.3 million passengers. In addition, sometimes overlooked is the fact that approximately 43 percent of our total force is daily engaged in out-of-theater support to COCOMs; a remarkable contribution enabled by past investments in technology and infrastructure that allow your Air Force to project global vigilance, reach, and power while minimizing vulnerability.

On the home front, since September 11th, 2001, your Air Force has flown over 57,942 total sorties under Operation NOBLE EAGLE, including 41,269 fighter sorties, 11,511 tanker sorties, and 1,850 early warning sorties. As a testament to the total force, the Air National Guard has flown more than 70 percent of these sorties and currently operates 16 of 18 Air Sovereignty Alert sites. As we continue to accomplish our current mission sets and plan for future threats, we must remain mindful of the increasing age and costs of operating our air fleet. Our Air Force leadership is scrutinizing programs and budgets to find acceptable solutions to meet growing demands that are competing for limited funds.

### **III. Fighter Aircraft Shortfalls**

We constantly assess the Combat Air Force structure in relation to the dynamic security environment and the evolving needs of our joint force. At this time, your Air Force does foresee a fighter inventory shortfall when we compare force structure to COCOM plans and requirements.

In April 2008 the Air Force informed Congress of a projected fighter gap of over 800 aircraft in 2024. Since that testimony, three key fighter force structure assumptions have changed. First, during the FY10 budget cycle the Air Force elected to accept increased short to mid-term war fighting risk and a subsequent smaller fighter force in exchange for modernization. Second, the F-35 procurement rate was officially increased from 48 to 80 per year. Third, the approach to fighter service life computations was refined. The combination of these changes significantly reduced the fighter gap. Numerous internal and external assessments of the future

security environment, including the 2010 QDR, have determined our current fighter force plans will fulfill COCOM requirements with a moderate amount of risk.

#### **IV. Status of Combat Aircraft Acquisition**

##### Fighter Force

The average age of all Combat Air Force aircraft is 21.7 years. In August of this year, your Air Force will have been engaged in combat operations for over 21 continuous years. The assessment of our aircraft's longevity is complicated by the fact that we are currently flying the oldest Air Force fleet in our history and using them longer and more frequently than was envisioned during their design. This presents considerable challenges in a difficult fiscal environment. In response, we have conducted an extensive investigation into the service life of our fighter aircraft. This is an ongoing effort and will be informed by detailed fatigue testing of our A-10, F-15 and F-16 fighters to better understand the life-limiting factors of these aircraft, and the feasibility of extending their service life given the economic and operational environment. The work to date has reinforced our need to recapitalize our aging fleet by acquiring next-generation systems and modernizing selected legacy platforms.

##### A-10

The A-10 provides our Joint Force Commanders lethal, precise, persistent, and responsive firepower for close air support and combat search and rescue. It has performed

superbly in Operations DESERT STORM, ALLIED FORCE (OAF), ENDURING FREEDOM (OEF) and IRAQI FREEDOM (OIF). However, the A-10's age and high operations tempo have taken a toll on the fleet. The A-10 fleet's aircraft availability rating for FY10 is 52 percent.

Your Air Force plans to retain the venerable A-10 fleet beyond 2030, based on implementation of the proper care, investment, and fleet management recommendations specified by the 2006 Fleet Viability Board. In FY07 the A-10 fleet began a robust depot-level modification schedule that runs through the Future Years Defense Program (FYDP). This year we begin installing "thick-skin" center wing panels on 233 A-10s--nearly two-thirds of the fleet, and begin improving the fuselage structure. Your Air Force is also modernizing 347 A-10s to the "C" configuration with anticipated completion by April of FY11. This upgrade includes precision engagement modifications to integrate targeting pods and digital data links into the aircraft avionics, enabling use of global positioning system-aided munitions such as the Joint Direct Attack Munitions (JDAM) and Wind Corrected Munitions Dispenser. Also, we integrated a digital data link and advanced targeting pods with video downlink and replaced monochrome cockpit displays with color multi-function displays. In addition, we installed new pilot throttle and stick controls, a moving map capability and a mass-memory upgrade. Finally, we integrated beyond line of sight radios into the A-10 for faster communication with ground units, forward controllers, and command and control centers. Together, these modifications will allow the A-10 to continue its record of close air support excellence over the next two decades.

F-15 C/D

The F-15 C/D is an air superiority fighter with an average age of over 25 years. We project the F-15C/D fleet is viable until 2025-2030 and will consider the airframe's service life extension requirements following full-scale fatigue testing. This testing is scheduled to begin this summer and conclude in FY14. Your Air Force is managing the fleet through scheduled field and depot inspections under an individual aircraft tracking program. For FY10, the F-15C/D's aircraft availability is 65 percent.

We continue to modernize our long-term F-15 fleet with Active Electronically Scanned Array (AESA) radars, infrared search and track capabilities, and a more capable aircraft mission computer to boost the air superiority capabilities of this aircraft. We expect these efforts to successfully enable the 176 F-15C/D "Long-Term Fleet" to operate safely and effectively through at least 2025, as determined by the full-scale fatigue test.

In addition, in FY10 the USAF reduced F-15C/D force structure by 132 permanently assigned aircraft and retired 112 aircraft to the Aerospace Maintenance and Regeneration Group at Davis-Monthan AFB in Arizona. This leaves 199 permanently assigned aircraft (250 total active inventory) for FY11 and beyond.

## F-15E

The F-15E fleet, with an average age of over 16 years, continues to provide support for on-going operations in Afghanistan and Iraq. Like the A-10, the F-15E performed superbly in Operations DESERT STORM, OAF, OEF and OIF. In 2009, F-15Es delivered 54% of the

2000lb JDAMs and 29% of the 500lb JDAMs employed in that area of operations. The FY10 aircraft availability rate for the F-15E is 59 percent.

Your Air Force works hard to improve the F-15E's ability to rapidly engage and destroy time-sensitive targets. This includes adding secure radios and data links for faster communications with ground units and forward controllers. In addition, we integrated the latest precision weapons to hit targets accurately and reduce collateral damage. Also, your Air Force added a helmet mounted cueing system that will reduce the F-15E's time to engage a target by up to 80%. Finally, we added the state-of-the-art AESA radar system that advances capabilities to identify and engage targets as well as share information with other aircraft. Your Air Force plans for the F-15E to be an integral part of the Nation's force through at least 2035.

## F-16

Our multi-role F-16 comprises the majority of the fighter fleet. There has been a 3.6% drop in the F-16 fleet's aircraft availability since FY05. Drivers contributing to this decline are the Falcon STAR (all blocks) structural integrity program, 341 bulkhead repair/replacement (block 40/50), engine inlet ram (all blocks), lower wing skin cracking (blocks 25/30/32), and aft cockpit corrosion for the two seat aircraft. We expect these drivers to continue to impact aircraft availability through FY15. The F-16's FY10 aircraft availability is 67 percent.

Extensive flight hours and more stressing mission profiles resulted in the need for significant structural modifications to the F-16. This upgrade program, scheduled to complete in



FY13, replaces known life-limited structural components and will maintain the original design airframe life of 8,000 flight hours. Wing pylon rib corrosion, a known problem with the F-16, is an issue we monitor closely through inspections every 800 hours. This corrosion can prevent the F-16s from carrying pylon mounted external fuel tanks which limits its effective combat range. In partnership with industry, the Air Force has recently developed and certified a procedure that repairs affected aircraft at the unit in a single day rather than a lengthy overhaul at the depot.

In other inspections, maintainers have found bulkhead cracks in approximately 68 percent (271 of 397) of our Block 40/42 F-16 aircraft. 170 aircraft have been repaired and 49 aircraft had the bulkheads replaced with 13 more in progress. An additional 145 aircraft continue to fly with increased inspection requirements to measure crack growth. We will continue to monitor this situation closely. Similar to the F-15, the Air Force will start conducting a full-scale durability test for the F-16 in FY11 to determine the modifications required to extend the service life of the newer F-16s (Blocks 40-52) beyond 8000 equivalent flight hours.

The Common Configuration Implementation Program is a top F-16 priority and will enable the maintenance of a single operational flight program configuration on the Block 40/42/50/52 F-16s. The Block 50/52 modification is complete, and the Block 40/42 modification will be complete this year. It combines several modifications including a new mission computer, color displays, air-to-air interrogator (Block 50/52 only), Link-16, and Joint Helmet Mounted Cueing System. The F-16 is expected to be a capable element of the fighter force well into 2024.

Fifth Generation Fighters

Fifth generation fighters like the F-22A and the F-35 are key elements of our Nation's defense and ability for deterrence. Hostile nations recognize that U.S. airpower can strike their vital centers with impunity which enhances all other U.S. Government instruments of power. This is the timeless paradox of deterrence; the best way to avoid war is to demonstrate to your adversaries that you have the capability and will to defeat them.

The F-22A and F-35 represent our latest generation of fighter aircraft. Both aircraft are necessary to maintain a margin of superiority that permits our air and ground forces freedom of maneuver and attack. The F-22A and F-35 each possess unique, complementary, and essential capabilities that provide the synergistic effects across the spectrum of conflict. The Office of the Secretary of Defense (OSD)-led 2006 QDR Joint Air Dominance study underscored that our Nation has a critical requirement to recapitalize TACAIR forces. Legacy 4th generation aircraft simply cannot survive to operate and achieve the effects necessary to win in an integrated, anti-access environment.

#### F-22A Future Capabilities & Modifications

The F-22A Raptor is your Air Force's primary air superiority fighter providing unmatched capabilities for air supremacy and homeland defense for the Joint team. The multi-role F-22A's combination of speed, stealth, maneuverability and integrated avionics ensures this remarkable aircraft accesses and survives high-threat environments. Its ability to find, fix, track,

and target enemy air- and surface-based threats ensures air dominance and freedom of maneuver for all Joint forces.

Similar to every other aircraft in the U.S. inventory, there is a plan to regularly incorporate upgrades into the F-22A to ensure it remains the world's most dominant fighter in the decades to come. The F-22A modernization program consists of two major efforts that will ensure every Raptor maintains its maximum combat capability: the Common Configuration program and a pre-planned product improvement program (Increments 2, 3.1, and 3.2). We are approximately at the mid-point of this effort.

As of 2 April 2010, your Air Force had accepted 158 F-22A aircraft out of a programmed delivery of 187. We will continue to upgrade the F-22A fleet under the Joint Requirements Oversight Council-approved Increment 3 upgrade designed to enhance both air-to-air and precision ground attack capability. Raptors from the production line today are wired to accept Increment 3.1. This upgrades the APG-77 AESA radar for synthetic aperture radar ground mapping capability, provides the ability to self-target JDAMs using on-board sensors and allows F-22As to carry and employ eight Small Diameter Bombs (SDBs). Your Air Force will begin to field Increment 3.1 in FY11.

Responding to current threat assessments, the next upgrade will be Increment 3.2 “Accelerated” which will complete development in FY13. 3.2 “Accelerated” is a software-only upgrade and provides significant additional Electronic Protection, Link 16 improvements, and a better combat identification capability. In the future, F-22As will receive the Increment 3.2 full

upgrade, which features multi-function advanced data link, improved SDB employment capability, improved targeting using multi-ship geo-location, additional electronic protection and combat identification, automatic ground collision avoidance system and the capability to employ our enhanced air-to-air weapons (AIM-120D and AIM-9X). Increment 3.2 should begin to field in FY16. The current F-22A modernization plan will result in 34 Block 20 aircraft used for test and training, 63 Block 30s, 87 Block 35s, and two Edwards AFB-test coded aircraft.

#### F-22A Procurement Plans

The F-22A production program is currently delivering Lot 8 aircraft ahead of scheduled contract delivery dates at a rate of about two per month. Lot 8 Raptors are the second lot of the three-year multiyear procurement contract awarded in the summer of 2007. The Air Force completed F-22A deliveries to Elmendorf AFB, Alaska and is currently delivering to two squadrons at Holloman AFB, New Mexico with expected completion in January 2011.

When the plant delivers the last Lot 10 aircraft in 2012, we will have completed the program of 187 Raptors. The average unit cost for the 60 aircraft in the multiyear procurement was \$142.6 million. The Lot 10 unit flyaway cost is estimated at \$153.2 million. This is \$10.6 million higher than under the multiyear procurement due to higher material costs for a much smaller lot buy, loss of the multiyear procurement savings in parts and labor and inflation.

#### F-35

The F-35 program will develop and deploy a family of highly capable, affordable, fifth generation strike fighter aircraft to meet the operational needs of the Air Force, Navy, Marine Corps, and Allies with optimum commonality to minimize life-cycle costs. The F-35 was designed from the bottom-up to be our premier surface-to-air missile killer. It is uniquely equipped for this mission with cutting edge processing power, synthetic aperture radar integration techniques, and advanced target recognition. The F-35 also provides “leap ahead” capabilities in its resistance to jamming, maintainability, and logistics support. The F-35 is currently in the 9th year of a 14 year Engineering and Manufacturing Development (EMD) phase.

The F-35 is projected to meet all Key Performance Parameters and as of 17 December 2009, AA-1 completed its 91st and final test flight. The second F-35A, AF-1, completed its first flight test on 14 November 2009. The first Short Take-Off and Vertical Landing (STOVL) flight test aircraft, BF-1, successfully completed several flights leading toward the program’s first vertical landing, which occurred on 18 March 2010. Currently, there are three STOVL flight test aircraft at Patuxent River Naval Air Station. As of March 2010, 16 of 19 development test aircraft have been produced, including 6 ground test aircraft and 10 flight test aircraft. In addition, the F135 Conventional Takeoff and Landing (CTOL) engine reached Initial Service Release on 5 March 2010, and the first F135 production engine was delivered to the government on 29 January 2010. The Cooperative Avionics Test Bed continues to provide unprecedented risk reduction at this stage in a major weapon system not seen in any legacy program. The F-35 program was restructured and funded to be consistent with the most recent independent estimates, removing \$2.3 billion from procurement and adding \$1.4 billion to RDT&E across the

FYDP. In addition, CTOL quantities were reduced by 67 across the FYDP. The FY11 President's Budget provided funding for 22 CTOL, 13 STOVL and 7 CV aircraft, as well as 1 OCO CTOL aircraft.

#### Joint Strike Fighter (JSF) Alternate Engine Program

Your Air Force's position regarding the JSF alternate engine program is that a second engine is unnecessary, too costly, and risks diverting resources from production. The FY11 Presidential Budget does not request funding for the development and procurement of the F136 alternate engine. The Air Force and Navy continue to execute the funding appropriated by Congress in the previous budgets to continue the F136 program.

The Office of the Secretary of Defense for Cost Assessment and Program Evaluation estimated that the Department of Defense will have to fund approximately \$2.9 billion to take the F136 engine to competition in FY17, including development, directed buys, and the necessary logistics support. Continued funding for the F136 engine carries cost penalties to both the F135 and F136 engines in the form of reduced production line learning curves and inefficient economic order quantities. The department concludes that maintaining a single engine supplier provides the best balance of cost and risk. We believe the risks associated with a single source engine supplier are manageable due to improvements in engine technology and do not outweigh the investment required to fund a competitive alternate engine.

#### **Remotely Piloted Aircraft**

MQ-9A Reaper

The MQ-9 Reaper is a multi-role remotely piloted aircraft capable of providing battlespace awareness, armed over-watch and light strike against critical, emerging time-sensitive targets with self-contained hard-kill capability. SDD for the first increment began in FY05, and additional SDD efforts are currently on-going. An interim combat capability aircraft deployed to CENTCOM in September 2007 and more have continued to deploy. There are 13 U.S. MQ-9 Combat Air Patrols (CAPs) supporting Central Command's (CENTCOM) Area of Responsibility (AOR). The MQ-9 has military-standard 1760-based stores management capability, GBU-12/AGM-114 Hellfire weapon and 500-lb JDAM (GBU-38) capabilities. As of Jun 09, the MQ-9 was designated a Major Defense Acquisition Program (MDAP). The FY11 President's Budget requests increased procurement of MQ-9s to achieve 65 combat air patrols (CAP). Rapid MQ-9 fleet expansion with concurrent development and integration of advanced payloads is stressing its development and testing capacity.

#### MQ-1B Predator

The MQ-1 Predator is a medium-altitude, long-endurance, remotely piloted aircraft for providing battlespace awareness with the ability to provide modest armed over-watch and reconnaissance against critical, perishable targets. When the MQ-1 is not actively pursuing its primary mission, it acts as the Joint Forces Air Component Commander-owned theater asset for reconnaissance, surveillance and target acquisition in support of the Joint Forces commander. Airmen made history in March 2010 when they surpassed the 700,000 flight hour mark in the MQ-1B. The last 200,000 Predator hours were flown in just over 12 months. There are 28 MQ-

1 CAPs supporting CENTCOM's AOR. The MQ-1B is also transitioning to a MDAP. The FY11 President's Budget extends the lifetime of MQ-1Bs to achieve 65 CAPs and provides funding to continue MQ-1 operations beyond the FYDP.

## **Missile Programs**

### **Joint Air-to-Surface Stand-off Missile (JASSM)**

The JASSM is the Nation's only stealthy, conventional, precision, launch-and-leave, stand-off missile capable of being launched from fighter and bomber aircraft. The JASSM achieved operational capability on the B-52, B-1, F-16 and B-2 and puts an adversary's center-of-gravity targets at risk even if protected by next-generation air defense systems.

The Air Force postponed the JASSM FY09 production contract due to unsatisfactory flight tests of the Lot 5 JASSM production missiles. Of the 10 flight tests, we considered six to be complete successes. To address issues discovered during the JASSM test program to date, we paused FY09 missile production to incorporate reliability improvements and conducted Lot 7 reliability tests which achieved 15 for 16 successful hits. The FY11 President's Budget requests funds for the procurement of 171 missiles to include the first order of the Extended Range variant.

### **Legacy Bomber Fleet**



The B-1, B-2 and B-52 remain engaged in today's fight while retaining an ability to meet future challenges. Air Force bombers have been on rotating deployments to Southwest Asia since September 11th. The bomber aircraft inventory is 162 and averaged at 33.7 years old. Your Air Force continues its commitment to future long-range strike capabilities as part of a comprehensive, phased plan, valued at \$5.5 billion over the FYDP, to modernize and sustain our bomber force. B-1

B-1 aircraft availability rates remained relatively level for FY02-07 with a drop in FY08 and FY09 primarily driven by modernization efforts. To mitigate manpower shortages and reduced maintenance experience levels, B-1 bases have been augmented by a contract field team which will continue through April 2011. Manning authorizations have been approved but manning will continue to affect the B-1's aircraft availability rating into the distant future while personnel are trained and gain experience.

The B- has maintained an unflagging deployed presence since September 11, 2001 in support of OEF and OIF. During that time, the B-1 fleet and its crews have flown more than 6,900 missions and amassed more than 70,000 combat hours. In OEF alone, the B-1 has employed nearly 40 percent of all munitions while flying only 5 percent of all sorties.

Given the B-1's critical contributions to today's fight and its corresponding high operations tempo, your Air Force places great emphasis on sustaining the B-1 fleet. B-1 sustainment efforts address several issues which, if left unchecked, could critically limit aircraft availability and leave a gap in our power projection capability. Although these modifications

represent a significant investment, they are critical to supporting our deployed combat forces by ensuring continued B-1 availability.

Your Air Force's primary B-1 modernization effort is the Fully Integrated Data Link (FIDL). FIDL gives aircrew enhanced situational awareness and combat effectiveness by incorporating Link-16 data link and Joint Range Extension Beyond Line-of-Sight capabilities. FIDL also provides the backbone infrastructure for a substantial upgrade to the existing cockpit including modern multi-function color displays that provide aircrew with a new level of fused data.

Your Air Force continues to deploy the highly successful Laptop Controlled Targeting Pod (LCTP) modification for the B-1. Initiated in 2007 in response to an urgent need request and operational since 2008, LCTP provides the B-1 with targeting pod capabilities via the Sniper Advanced Targeting Pod (ATP). The B-1 combined with the Sniper ATP delivers an unprecedented level of payload precision to the fight. Efforts continue to outfit the entire B-1 fleet for Sniper operations and provide a Moving Target Kill capability via employment of laser-guided weapons.

## B-2

The B-2 is significant to Pacific Command's (USPACOM) Continuous Bomber Presence to assure allies and support US interests in the Pacific. The B-2 Spirit Advanced Technology Bomber provides a lethal combination of range, payload, and stealth. It remains the world's sole long-range, low observable bomber. It is the only platform capable of delivering 80

independently targeted 500-lb Joint Direct Attack Munitions (GBU-38). While B-2 availability has steadily increased over the past five years, in part due to enhancements in low observable maintenance such as the highly successful Alternate High Frequency Material program, it faces increasing pressures to upgrade avionics originally designed over twenty years ago. The Extremely High Frequency Satellite Communications and Computer Upgrade Program (EHF SATCOM and Computer Upgrade) has three increments. Increment 1 upgrades the Spirit's flight management computers as an enabler for future avionics efforts. Increment 2 integrates the Family of Beyond-line-of-sight Terminals (FAB-T) along with a low observable antenna to provide secure, survivable strategic communication, and Increment 3 connects the B-2 into the Global Information Grid. Increment 1 of EHF SATCOM and Computer Upgrade is in EMD and on track to begin procurement in FY-2011 for fleet installations beginning at the end of FY-2013. The Department is also investing in the B-2's Defensive Management System to ensure continued survivability. This will allow the B-2 to continue operations in more advanced threat environments while decreasing the maintenance required operating the system.

We will also replace the B-2's original radar antenna, upgrade selected radar avionics and change the radar operating frequency as part of the Radar Modernization Program (RMP). We signed the Low Rate Initial Production (LRIP) contract for the first six production radar kits in December 2008 and contracted the second and final full-rate buy for the remaining seven ship sets in November 2009. Also, we bought seven radar ship sets during development and are installing in fleet aircraft to round out the twenty aircraft B-2 fleet. The developmental units will be retrofitted to the final production configuration. This program successfully achieved required assets available on 15 March 2010. Thanks in large part to Congressional support, the RMP

acquisition strategy was modified to include life-of-type component buys to avoid diminishing manufacturing source issues during the production run.

## B-52

The B-52 Stratofortress is our nation's oldest frontline long-range strategic bomber with the last airframe entering service in 1962. It amplifies the consistent message of long-range US airpower in a theater like USPACOM where distances drive decisions. Equipped with advanced targeting pods, the B-52s can also provide real-time intelligence, surveillance and reconnaissance with full-motion video, enhanced situational awareness, a demonstrable overwatch presence and precision joint fires in support of USPACOM's objectives. In addition to supporting the Continuous Bomber Presence at Anderson AFB on Guam, the B-52 continues to maintain a high-state of readiness for the nuclear deterrence mission.

Your Air Force has invested in modernization programs to keep the B-52 platform viable and operationally relevant. Major B-52 modernizations include the Combat Network Communications Technology (CONNECT), EHF SATCOM, Strategic Radar Replacement (SR2), and the 1760 Internal Weapons Bay Upgrade programs. CONNECT provides an integrated communication and mission management system with machine to machine data link interfaces for weapons delivery. The digital infrastructure provided in CONNECT is the backbone for EHF SATCOM and SR2. The EHF SATCOM program integrates the FAB-T providing assured, survivable two-way strategic command and control communications. The SR2 program, starting in FY10, integrates modern non-developmental radar to address systemic sustainment issues,

replacing the legacy APN-166 radar. Finally, the 1760 Internal Weapons Bay Upgrade provides internal J-series weapons capability through modification of Common Strategic Rotary Launchers and an upgrade of stores management and offensive avionics software. Updated with modern technology the B-52 will be capable of delivering the full complement of jointly developed weapons and will continue into the 21st century as an important element of our nation's defenses.

### **Long Range Strike (LRS)**

The FY11 Presidential Budget began funding for technology industrial base sustainment in anticipation of a future long range strike (LRS) platform program. This effort develops and demonstrates LRS technologies and concepts in support of Air Force Global Strike and Global Persistent Attack Concepts of Operations. This effort will provide capability improvements in the areas of strike responsiveness, survivability, lethality, connectivity, and affordability. The QDR-directed study will help inform and shape the requirements for LRS.

The FY11 Presidential Budget adds \$199 million in FY11 and \$1.7 billion over the FYDP for LRS. FY11 investments will reduce technology risk, preserve critical technology industrial base skills and refine requirements for a future long range strike platform. Investment areas of interest include advanced sensors, electronic warfare and countermeasures, survivability, manufacturing readiness, net-ready communications, open systems and multi-level security architectures, mission management, weapon effectiveness and survivability, and combat identification.

## **V. Closing**

Your Air Force stands ready to win today's Joint fight and plan for tomorrow's challenges. We are committed to working together to determine the right procurement, sustainment and retirement strategy to ensure we are prepared for the current fight as well as posturing for future demands. Dominance of air, space, and cyberspace continues to be requisite to the defense of the United States. USD/At&L, Ash Carter recently testified that: "I support, as does the Secretary, the initiatives the Congress directed when it unanimously passed the Weapon Systems Acquisition Reform Act (WSARA) or 2009. Acquisition reform is one of the DoD's High Priority Performance Goals presented in the Analytic Perspectives volume of the President's FY 2011 Budget. The Department is moving out to implement these initiatives." The Air Force TACAIR Program actions described above are consistent with WSARA implementation and DoD's Acquisition Reform goal. We appreciate your continued support and look forward to working in concert to ensure our decisions enable us to strengthen our Air Force to meet future requirements.