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HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON AIR AND LAND FORCES
SUBCOMMITTEE ON SEAPOWER AND EXPEDITIONARY FORCES
U.S. HOUSE OF REPRESENTATIVES

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE HOUSE ARMED SERVICES COMMITTEE

AIR AND LAND FORCES SUBCOMMITTEE
AND
SEAPOWER AND EXPEDITIONARY FORCES SUBCOMMITTEE

March 24, 2010

SUBJECT: USAF Aviation Programs

COMBINED STATEMENT OF:

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I. Introduction

Chairmen Smith and Taylor, Ranking Members Bartlett and Akin, and distinguished members of the committee. Thank you for the opportunity to address this committee regarding some of your Air Force's aviation programs.

The Secretary of Defense, in the recent 2010 Quadrennial Defense Review, 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.

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 30,000 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. Additionally, sometimes overlooked is the fact that approximately 43 percent of our total force is daily engaged in out-of-theater support to Combatant Commander operations; 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 57,391 total sorties under Operation NOBLE EAGLE, including 41,219 fighter sorties, 11,507 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.

While we fight today, your Air Force is also scanning an increasingly complex security horizon so that we can help deter, and if necessary, defeat a variety of potential adversaries in a wide range of contingency operations. As successors of the great strategic thinker General Curtis LeMay, and stewards of two-thirds of the Nation's nuclear deterrence triad, we continue to strengthen our nuclear enterprise. Furthermore, our initial investments in a family of long-range strike capabilities mark our commitment to sustaining power projection capabilities well into the future. Finally, your Air Force is extremely proud that there have been no fatal air attacks on American ground forces in almost 57 years. Such air supremacy is not coincidental, and the F-35 will be central to your Air Force's continued ownership of the air domain.

This committee asked that we address some specific aviation programs and issues, each vital to your Air Force's sustained excellence and our National Military Strategy, including: the Joint Strike Fighter, the CV-22, Personnel Recovery, future fighter aircraft shortfalls, the health of the fighter and bomber aircraft fleets, safety, and the Joint Air-to-Surface Stand-off Missile.

III. Joint Strike Fighter (JSF) Alternate Engine Program

Your Air Force's position regarding the Joint Strike Fighter 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 (CAPE) 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 has concluded 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.

IV. CV-22

Air Force special operations capabilities play a vital role in support of U.S. Special Operations Command and geographic combatant commanders. As the Department of Defense increasingly develops irregular warfare capabilities, the Air Force is investing in special operations airlift like the CV-22 Osprey.

In FY11, the Air Force CV-22 Osprey program will receive the 13th CV-22 of a 50 aircraft program of record, declaring Full Operational Capability in FY16. Air Force Special Operations Command (AFSOC) declared the CV-22's Initial Operational Capability in March 2009 and stood up the third CV-22 operating base at Cannon AFB, NM. AFSOC's CV-22s have self-deployed overseas to Africa, Central America, and most recently Iraq. They are currently enroute for another operational deployment.

The CV-22 has encountered challenges with its high operational tempo and small fleet size. This coupled with lower priority versus combat operations on spare parts has resulted in lower availability rates. The FY11 President's Budget added $126.2 million through the FYDP, for initial spares and support equipment. The Joint CV-22 Program

Office along with the cooperation and support of industry partners are aggressively working to increase the reliability and availability of the CV-22 platform.

V. Personnel Recovery

Today your Air Force is meeting the Secretary of Defense's 60 minute goal for combat aero-medical evacuations 98 percent of the time, and we continue to strive for perfection in this endeavor. This responsive casualty stabilization and extraction capability is making the "Golden Hour" a reality for our wounded joint warriors. We have several programs that comprise our combat search and rescue capability, including HH-60s, HC-130s, and Guardian Angels.

The President's Budget Request for FY11 seeks funding for six HH-60G Operational Loss Replacement aircraft (including 3 from OCO funding). These aircraft will continue to restore the legacy HH-60G fleet to the 112 aircraft program of record. The Air Force will procure the current in-production variant, UH-60M, and modify them with CSAR mission equipment. Additional funding would be used to accelerate fielding of loss replacement aircraft.

Your Air Force is currently working with the Office of the Secretary of Defense and Joint Staff to finalize the requirements and Acquisition strategy for a full fleet recapitalization of the legacy HH-60G fleet. FY 11 budget request contains initial funding for this program with aircraft procurement expected to begin in FY12. In the case of H-60 Recapitalization, additional funding will not accelerate initial programs deliveries, but could be applied later in the program to increase per-year quantities to replace the aging HH-60G.

The HC-130 is on schedule to recapitalize the current fleet of 37 airplanes with C-130J model aircraft. The first two aircraft will be delivered to the FTU in September 2011, with an additional 2 aircraft being delivered in 2012. We are currently working with OSD to right size our fixed-wing capability.

Under the Guardian Angel program, your Air Force is developing mission critical equipment that increase our joint forces combat rescue operational capability to respond in adverse conditions and environments. This equipment includes technical rescue kits, Search Sonar, collapsed structure/confined space extrication kits, and advanced parachute delivery systems.

VI. 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 Combatant Commander 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 Air Force F-35 procurement rate used for planning was 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 Quadrennial Defense Review, have determined our current fighter force plans will fulfill Combatant Commander requirements with a moderate amount of risk.

Your Air Force intends to manage the risk assumed by a fighter shortfall, in part, by accelerating the planned retirement of our oldest 257 fighter aircraft, upon completion of the required reports to Congress later this year. This retirement will free resources to

recapitalize the remaining legacy fighter fleet, providing a bridge until the F-35 and F-22 fighter force is fully capable. Finally, the A-10 and F-16 fleets are currently postured to absorb modest F-35 program delays.

The future balancing of our fighter fleet must now be viewed through the FY11 President's Budget and planned adjustments to the F-35 investment and procurement profile. These necessary modifications unfortunately reduce near-term procurement, shifts resources into research and development, and delay the fielding of this essential aircraft. We are working closely with the F-35 Joint Program Office and our service partners to fully understand the impact on fielding the capability we require to meet Combatant Commander needs.

VII. Health of 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 are 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, the feasibility of extending their service life and the economic and operational sense of doing so. The work to date has reinforced our need to recapitalize our aging fleet using a combination of the acquisition of next-generation systems and modernization of selected legacy platforms.

A10

The A-10 provides our Joint Force Commanders lethal, precise, persistent, and responsive firepower for CAS and combat search and rescue. It has performed superbly in Operations DESERT STORM, ALLIED FORCE (OAF), OEF and OIF.

However, the age of the A-10 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 the proper care, investment, and fleet management recommendations of a 2006 Fleet Viability Board. In FY09 the A-10 fleet began a robust depot-level modification schedule that runs through the FYDP. This year we will begin installing new wings that have "thick-skin" center wing panels on 233 A-10s--nearly two-thirds of the fleet; and we will soon begin a program to improve the fuselage structure. Your Air Force is also modernizing 347 of our A-10 fleet to the "C" configuration, anticipating completion by April of FY11. This upgrade includes precision engagement modifications that integrate targeting pods and digital data links into the aircraft avionics, enabling use of GPS-aided munitions such as the Joint Direct Attack Munitions and Wind Corrected Munitions Dispenser; integrates a digital data link and advanced targeting pods with video downlink; replaces monochrome cockpit displays with color multi-function displays; installs new pilot throttle and stick controls; adds a moving map capability and a mass-memory upgrade; and doubles current DC power. Additionally, we have integrated beyond line of sight radios into the A-10 for faster communication with ground units, forward controllers, and command and control (C2) 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 scheduled to begin this summer and conclude in FY14. Your Air Force is managing the fleet through scheduled field / 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 radars, infrared search and track capabilities, and a more capable aircraft mission computer to boost and extend 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.

Additionally, 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, OIF, and continues to be heavily tasked for operations in Afghanistan. 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 has been working hard to improve the F-15E's ability to rapidly engage and destroy time sensitive targets by adding secure radios and data links for faster communications with ground units and forward controllers; by integrating the latest precision weapons that not only hit a target accurately but are designed to reduce collateral damage; by adding a helmet mounted cueing system that will reduce the F-15E's time to engage a target by up to 80%; and by adding a state-of-the-art, Active Electronically Scanned Array (AESA), radar system that not only addresses sustainment issues with the current system but will give the F-15E advanced capabilities to identify and engage targets, and 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 aircraft, 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 their effective combat range. In partnership with industry, the Air Force has recently developed and certified an effective repair allowing repair of affected aircraft at the unit in a single day instead of requiring a lengthy wing 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 have 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 help establish the maximum service life and more effectively manage structural health of the fleet.

The Common Configuration Implementation Program (CCIP) 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. As long as hostile nations recognize that U.S. airpower can strike their vital centers with impunity, all other U.S. Government efforts are enhanced, which reduces the need for military confrontation. This is the timeless paradox of deterrence; the best way to avoid war is to demonstrate to your enemies, and potential enemies, that you have the ability, the will, and the resolve to defeat them.

Both the F-22A and the F-35 represent our latest generation of fighter aircraft. We need both aircraft to maintain the margin of superiority we have come to depend upon, the margin that has granted our forces in the air and on the ground freedom to maneuver and to attack. The F-22A and F-35 each possess unique, complementary, and essential capabilities that together provide the synergistic effects required to maintain that margin of superiority across the spectrum of conflict. The Office of the Secretary of Defense-led 2006 Quadrennial Defense Review 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 gives this remarkable aircraft the ability to gain access to, and survive in, 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 the Raptor remains the world's most dominant fighter in the decades to come. The F-22A modernization program consists of two major efforts that, together, will ensure every Raptor maintains its maximum combat capability: the Common Configuration program and a pre-planned product improvement (P3I) program (Increments 2 and 3). We are currently in year six of the planned 13-year program.

As of 26 February 2010, your Air Force has accepted 155 F-22A aircraft out of a programmed delivery of 187. We will continue to upgrade the F-22A fleet under the JROC-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, which, among other hardware changes, upgrades the APG-77 AESA radar to enable 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 (SDB). 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, with completes 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 MADL, improved SDB employment capability, improved targeting using multi-ship geo-location, additional Electronic protection and Combat ID, automatic ground collision avoidance system (Auto GCAS) 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 we are currently underway with deliveries 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 $142.6M. The Lot 10 unit flyaway cost is estimated at $153.2M. $10.6M 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 and 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 logistic 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 (KPP) 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 system development and demonstration (SDD) Short Take-Off and Vertical Landing (STOVL) aircraft, BF-1, successfully completed several flights leading toward the program's first vertical landing, which occurred on 18 March 2010. The second SDD STOVL aircraft, BF-2, had its first flight in February 2009. As of March 2010, 16 of 19 SDD aircraft have been produced, including 6 ground test aircraft and 10 flight test aircraft. In addition, the F135 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 (CAT-B) 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 $2.3B from procurement and adding $1.4B to RDT&E across the FYDP. In addition, CTOL quantities were reduced by 67 across the FYDP. The FY11President's Budget provided funding for 22 CTOL, 13 STOVL and 7 CV aircraft, as well as 1 OCO CTOL aircraft.

VIII. Health of Bomber Force

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 to modernize and sustain our bomber force. We will continue planned legacy bomber sustainment and modernization to increase the capabilities of the fleet.

B-1

The B-1 is fighting in Afghanistan by providing long-range persistent airpower in direct support of NATO, US and Afghan troops. The B-1 provides real-time intelligence,

surveillance and reconnaissance with full-motion video, enhanced situational awareness, and a demonstrable over watch presence. B-1s added SNIPER Advanced Targeting Pod capability in summer 2009 to provide aircrews with positive identification capability and the ability to share video with ground forces. The AF developed this capability on an accelerated 18-month timeline in response to a CENTCOM tasking. Other B-1 modernization programs include the Fully Integrated Data Link (FIDL), Radar Reliability and Maintainability Improvement Program and the Inertial Navigation System & Gyro Stabilization System.

B-1 aircraft availability rates remained relatively level for FY02-FY07 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. Your Air Force continues to modernize and support its bomber fleet with over $5.5B planned over the FYDP in modernization and sustainment investments. The B-1, B-2 and B-52 bombers each have programs to ensure their viability into the future.

The B-1B Lancer has maintained an unflagging deployed presence since September 11, 2001 in support of Operations ENDURING FREEDOM and IRAQI FREEDOM. 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 Operation ENDURING FREEDOM 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, or 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 develop the highly successful Laptop Controlled Targeting Pod, or LCTP, modification for the B-1. Initiated in 2007 in response to a CENTAF Urgent Need Request and operational since 2008, LCTP provides the B-1 with targeting pod capabilities via the Sniper Advanced Targeting Pod, or 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 a part of supporting US Pacific Command's Continuous Bomber Presence to assure allies and support US interests in the Pacific. The B-2 is undergoing a Radar Modernization Program and will attain FOC in FY13. The Defensive Management System will provide improved capability for the B-2 to penetrate modern threat environments. B-2 aircraft availability rates have improved steadily since FY05; however, they are projected to remain below target due to upgrade and modernization programs. Obsolescence in avionics and diminishing manufacturing sources continue to cause supportability issues.

The B-2 Spirit Advanced Technology Bomber provides a lethal combination of range, payload, and stealth, and 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 Engineering and Manufacturing Development 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 (RAA) 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 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 ISR with full-motion video, enhanced situational awareness, a demonstrable over watch presence and precision joint fires in support of CDRUSPACOM objectives.

The B-52 fleet's aircraft availability rates remained relatively level until FY08. Reduction in aircraft availability due to an increase in PDM induction was driven by a 2008 NDAA decision. The bow wave is expected into FY10, but the mitigation efforts in place should achieve improvements by the end of FY10. Additional factors affecting the fleet include fleet repairs and new capability modernization, including Advanced Weapons Integration and Advanced Targeting Pod, Combat Network Communications Technology, Extremely High Frequency Satellite Communications (SATCOM), and the Strategic Radar Replacement.

The B-52 Stratofortress is our nation's oldest frontline long-range strategic bomber with the last airframe entering service in 1962. Your Air Force has invested in modernization programs to keep the platform viable and operationally relevant. Major B-52 modernizations include the Combat Network Communications Technology (CONECT), EHF SATCOM, Strategic Radar Replacement (SR2), and the 1760 Internal Weapons Bay Upgrade programs. CONECT provides an integrated communication and mission management system with machine to machine datalink interfaces for weapons delivery. The digital infrastructure provided in CONECT 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 Quadrennial Defense Review-directed LRS 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.

XI. Aviation Safety

The Air Force experienced the safest year in Air Force history in FY09 with a .80 rate per 100,000 hours, and only 17 Class A Mishaps (accidents involving more than $1 million dollars, destroyed aircraft, loss of life or permanent total disability). So far in FY 10, we have experienced an even better rate than last year's record safety rates with a .56 rate per 100,000 hours as of 15 March 10. There are no mishap trends or other "significant aviation-related safety issues" from those fleets impacting their ability to execute the National Military Strategy. The Air Force continues to pursue lessons learned and conducts thorough investigations making sure any and all critical safety information is delivered across the Air Force and to sister services, to ensure we continue to have a safe and effective fighting force.

XII. 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 an operational capability on 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 in order 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.

X. Conclusion

Your Air Force and its outstanding Airmen remain focused on the mission--the continued security of our great Nation. We are convinced that a balanced force structure will enable us to extend our Nation's supremacy in the air domain, and--along with our joint partners--prevail today and tomorrow. 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) of 2009.Acquisition Reform is one of 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 actions described above are

part of and consistent with WSARA implementation and DoD's Acquisition Reform goal. We thank this committee for your shared commitment and for this opportunity to meet with you today.