

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES
U.S. HOUSE OF REPRESENTATIVES

SUBJECT: USAF Bomber Force Structure – Current Requirements and Future Vision

STATEMENT OF: ARNOLD W. BUNCH, JR., Lieutenant General, USAF
Military Deputy to the Assistant Secretary of the Air Force
(Acquisition)

Mr. Randall G. Walden
Director
Air Force Rapid Capabilities Office

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Introduction

Long range bomber capability provides the President with options to hold targets at risk around the globe. As part of the airborne leg of the triad, the Long Range Strike Bomber (LRS-B) will provide a visible and flexible nuclear deterrent capability that will assure our allies and partners around the world. The Strategic Guidance for the 21st Century Defense reaffirmed the need for a new, survivable bomber capable of projecting power and deterring adversaries in anti-access and area denial environments. The LRS-B will provide our COCOMs critical operational flexibility across a wide range of military operations providing both conventional and nuclear capability in fulfillment of national objectives for years to come. In the near future, our legacy bombers will be increasingly challenged to operate in contested environments, and the Air Force must develop the LRS-B now to ensure we maintain the capability to counter emerging threats. As we develop this advanced LRS-B capability, we will continue to modernize the legacy bomber fleets—B-1, B-2 and B-52—to ensure they remain viable through 2040 as a key part of our National Military Strategy.

Long Range Strike Bomber

The LRS-B program is the Air Force's number one investment in research, development, test and evaluation (RDT&E). LRS-B is part of a family of systems (FoS) which includes delivery vehicles, missiles, ISR, electronic warfare, stealth and communication components. The FoS has the highest level of technology maturity of their type of programs to date. This aircraft will form the backbone of our future deterrence and strike capability and restore critical capabilities eroded by the proliferation of modern air defenses. LRS-B will achieve initial

operational capability (IOC) in the mid-2020s to provide conventional and nuclear strike capability with the capability of employing a wide mix of direct attack and stand-off weapons.

In February 2011, SECDEF directed streamlined acquisition of the LRS-B program and assigned it to the Air Force Rapid Capabilities Office. The program office has established a highly credible and stable program. We have performed extensive tradeoffs to establish disciplined requirements which had been in place since the May 2013 Joint Requirement Oversight Council (JROC) approval.

From the onset of the LRS-B program, we have set requirements at levels which provide the desired capability while minimizing development risk. This allows for the use of mature systems and technologies to help reduce development challenges experienced on past programs. Over the past three years the program office has worked closely with industry to ensure designs and requirements remain stable. We have completed Preliminary Design Reviews PDR and Manufacturing Readiness Reviews to establish a higher level of technology maturity than any new developmental aircraft program to date. Platform designs are now at the subsystem level: this provides substantial fidelity and confidence in the areas of overall structure, electronics, hydraulics, engines, air data systems and low-observable technology.

We take very seriously our responsibility of acquiring the right technology, capability and training for our Airman at an affordable cost. We have carefully balanced cost considerations across the life cycle— development, production and sustainment. This ensures that we can afford to acquire this critical capability and continue to operate and sustain the LRS-B fleet at the levels needed to support the National Military Strategy. The Average Procurement

Unit Cost (APUC) \$550M, in base year 2010 dollars for 100 aircraft, defined the requirements and technology trades. This has been very important in balancing design with system cost. The stable requirements and mature platform design imbue cost confidence in the program.

Sustainment of this aircraft during its service life of 30+ years is a key element of the acquisition strategy. As such, the LRS-B is being designed to have an open architecture. The Air Force Open Mission Systems (OMS) standards enable open architecture, provide streamlined processes for systems integration, and will encourage competition. This enables us to more swiftly integrate new technology and future capabilities to respond to future threats across the full spectrum of operations. OMS sustains competition throughout the aircraft design and life cycle, and enables long-term affordability while enhancing supportability.

All of these elements offer greater confidence in development program outcomes and ensure the Air Force delivers critical system capabilities reliably and affordably. We recognize that significant integration work still lies ahead but are confident that we have the right talent, acquisition strategy, and budget realism to effectively and affordably bring LRS-B into the Air Force inventory.

The source selection for LRS-B is on-going and we expect a decision soon. Source selection is a deliberate process; we are executing our plan with discipline and rigor. The Air Force is committed to a fair, deliberate, disciplined, and impartial process in all of its competitive procurements. The contract, when awarded, will include the Engineering, Manufacturing and Development (EMD) of the LRS-B and its associated training and support systems through a cost reimbursable type contract with appropriate incentives to control cost. It also includes

fixed-price commitments from industry on the first five production lots. This represents approximately one-fifth of the 100 aircraft fleet which are typically the most expensive aircraft in the production phase of the program.

Until LRS-B is fielded, we continue modernizing our legacy bomber fleet in order to maintain the ability of our Air Force to accomplish the mission and provide Nuclear Deterrence Operations, Nuclear Response, Global Strike, and Global Precision Attack.

B-1

The B-1B is a long-range, air refuelable, multi-role bomber capable of flying intercontinental missions and penetrating enemy defenses with the largest payload of guided and unguided weapons in the Air Force inventory. The B-1B is the only bomber that has been continuously deployed since 2001, and it remains so today.

The Integrated Battle Station upgrade is the B-1B's largest modernization effort since its production and will provide enhanced situational awareness and precision engagement capabilities. The B-1B will complete this modernization effort in 2019. The first aircraft with this upgrade was completed in January 2014. To date, a total of ten aircraft have been modified. Five additional aircraft are planned for completion by December 2015.

Other efforts to update the navigation and radar systems are well underway and will complete in 2015. These efforts will improve reliability and maintainability of these critical systems. Additionally, OCO funding is included in the FY15 budget to provide a Service Life Extension Program (SLEP) for B-1 engines. This funding will replace parts that have been

degraded by nearly 15 years of combat and restore a portion of the B-1 engines to their original specifications. Finally, ongoing structural testing is validating the B-1B's structural integrity to ensure that it remains viable through its service life of 2040. Additional modernization efforts are envisioned to sustain the B-1B's proven-combat capability.

The B-1B is the Air Force threshold platform for early operational capability of the Long Range Anti-Ship Missile which is transitioning from a Defense Advanced Research Projects Administration (DARPA) demonstration to the Navy-led Offensive Anti-Surface Warfare Program. Integration of this weapon, coupled with the B-1B's long range, high speed and large payload, will posture the B-1B for an important role in 'Pivot to the Pacific' scenarios.

B-2

The B-2 is the only long-range strike aircraft capable of penetrating advanced Integrated Air Defense Systems to deliver weapons against heavily defended targets. Its unique attributes of intercontinental range, precision strike, large conventional or nuclear payloads, ability to penetrate defenses, and low observable profile allow it to prosecute Nuclear Deterrence Operations, Nuclear Response, Global Strike, and Global Precision Attack missions. The Air Force will continue to modernize the B-2 to ensure it remains effective and retains its unique set of capabilities as enemy defensive systems continue to advance. Current efforts to modernize the Defensive Management System will ensure the B-2 can continue to counter sophisticated air defense networks and operate in highly contested environments. The Air Force will, at the same time, continue development efforts to re-host the Stores Management Operational Flight Program software in the Flexible Strike program which will enable the B-2 to take advantage of advanced digital weapon interfaces such as those used by the B61-12. The Air Force will

continue efforts to field the Common Very-Low-Frequency (VLF) Receiver program to provide the B-2 with a VLF receiver for secure, survivable strategic communications capability. The Air Force will also continue fielding the Extremely High Frequency Satellite Communications and Computer Increment 1 program, a mid-life avionics upgrade to the flight management computers, and digital storage and data buses. In 2016, the Air Force will begin acquisition planning efforts for Strategic Communications to provide survivable two-way communications to the B-2. Finally, the Air Force will continue to pursue a number of B-2 sustainment initiatives to improve aircraft supportability and increase aircraft availability.

B-52

The B-52 Stratofortress is our nation's oldest and most versatile frontline long-range strategic bomber with the last airframe entering service in the Air Force in 1962. The Air Force continues to invest in modernization programs to keep the platform operationally relevant and updated with state-of-the-art capabilities. B-52 major modernization efforts include the Combat Network Communications Technology (CONNECT) and 1760 Internal Weapons Bay Upgrade (IWBU) programs. CONNECT provides an integrated communication and mission management system as well as a machine-to-machine interface for weapons retargeting for the entire fleet of 76 B-52Hs. To date, six aircraft have completed modification with two additional expected by December 2015. The digital infrastructure and architecture provided by CONNECT is the backbone for the 1760 IWBU and future modification efforts. The 1760 IWBU provides internal J-series weapons capability through modification of Common Strategic Rotary Launchers (CSRLs). Both increments of this program are fully funded and, when complete, will significantly increase the B-52's capability to store and deliver the Joint Direct Attack Munition (JDAM); Laser-JDAM; Joint Air-to-Surface Standoff Missile (JASSM) and its extended range

variant; and the Miniature Air Launched Decoy (MALD) and its jamming variant. The Air Force is committed to modernization of the B-52 using modern technology to ensure the aircraft remains relevant through 2040 and beyond as an important element of our nation's defenses.

Conclusion

The Air Force remains committed to excellence and ensuring our global reach programs reflect the needs of our Nation. We will continue to modernize the legacy bomber fleets—B-1, B-2 and B-52 – as we develop the LRS-B capability. A key part of our National Military Strategy is to ensure that the current legacy fleet remains viable through 2040. The Strategic Guidance for the 21st Century Defense reaffirmed the need for a new, survivable bomber capable of projecting power and deterring adversaries in anti-access and area denial environments. We believe the LRS-B is the platform that will provide a visible and flexible nuclear deterrent capability; providing our COCOMs critical operational flexibility across a wide range of military operations. Providing both conventional and nuclear capability, LRS-B will give the President options to hold targets at risk around the globe; thus, fulfilling our national security objectives for years to come.