Senate Armed Services Committee Strategic Forces Subcommittee

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Subject: USAF Bomber Fleet

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The 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-2, B-52 and B-1 bombers each have programs to ensure their viability into the future.

B-1

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, the Air Force places great emphasis on sustaining the B-1 fleet. B-1 sustainment efforts currently 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.

The 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.

The Air Force continues to develop the highly successful Laptop Controlled Targeting Pod, or LCTP, modification for the B-1. Begun in 2007 as a 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-1fleet for Sniper operations and provide a Moving Target Kill capability via employment of laser-guided weapons.

B-2

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 three increment Extremely High Frequency Satellite Communications and Computer Upgrade program (EHF SATCOM and Computer Upgrade) seeks first, in Increment 1, to upgrade 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, while Increment 3 will connect the B-2 into the Global Information Grid. Increment 1 of EHF SATCOM and Computer Upgrade is currently in Engineering and Manufacturing Development (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 to operate 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). The Low Rate Initial Production (LRIP) contract for the first six production radar kits was awarded in December 2008, with the second and final full-rate buy for the remaining seven ship sets awarded in November 2009. Seven radar ship sets were previously procured during development and are currently being installed in fleet aircraft. Upon delivery and installation of the radar ship sets, the twenty aircraft B-2 fleet will have completed its radar modernization efforts. The developmental units will be retrofitted to the final production configuration. 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. The 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 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 a modern non-developmental radar to address systemic sustainment issues, replacing the legacy APN-166 radar. Finally, 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.

The FY11 PB 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.