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HOUSE ARMED SERVICES COMMITTEE  
STRATEGIC FORCES SUBCOMMITTEE  
UNITED STATES HOUSE OF REPRESENTATIVES

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE HOUSE ARMED SERVICES COMMITTEE  
STRATEGIC FORCES SUBCOMMITTEE  
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: Status of the Air Force Nuclear Security Roadmap

STATEMENT OF: Brigadier General Everett H. Thomas, Commander  
Air Force Nuclear Weapons Center

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Chairman Langevin, Ranking Member Turner and distinguished members of the Committee thank you for this opportunity to discuss the current state of the Air Force's nuclear sustainment efforts. On behalf of a dedicated team of military, civilian and industry professionals, I'm pleased to report our sustainment of the Air Force nuclear enterprise is much improved. We are today continuing the evolution of the Air Force's vision to address gaps in the nuclear enterprise that were evident as early as 2003 when a series of reports highlighted the need for a single manager for nuclear weapons sustainment, consolidation of management sustainment activity and a unified funding strategy. In response, Air Force Materiel Command (AFMC) embarked on an initial two-phase effort to establish a new specialized center responsible for nuclear sustainment. Phase I was completed in March 2006 with the activation of the Nuclear Weapons Center, later renamed the Air Force Nuclear Weapons Center (AFNWC). Continuing progress was made over the next two years consolidating a fragmented nuclear enterprise. The completion of Phase II occurred from April to May 2008 when I was assigned as the first flag-level commander and the Intercontinental Ballistic Missile (ICBM) program office was realigned from the Ogden Air Logistics Center in Utah to the AFNWC. This particular realignment was reminiscent of the Air Force's decision in 1949 to create a "Center of Excellence" with a single responsibility – nuclear sustainment.

As members of this committee know quite well, subsequent reassessments in the wake of well publicized incidents involving stewardship of nuclear resources highlighted the need to go beyond the organizational consolidation envisioned in the two-phase approach into a new third phase. Phase III kicked off with the signing in February 2009 of Program Action Directive (PAD) 08-05 where the Air Force Secretary and Chief of Staff directed a fuller reinvigoration of the nuclear enterprise and the reestablishment of an enterprise-wide culture of zero-defect standards.

While we continue to perform critical self-assessments, independent inspections and senior level progress reviews, we have largely moved out of the discovery and into the execution and validation phases of reinvigorating the nuclear enterprise. If there was one major underlying theme borne out in the various assessments conducted during our discovery efforts, it was this: the focus on existing standards had atrophied over the years. What enabled this decline was a

strategy to organize, train and equip that created three seams in the nuclear world: a lack of nuclear expertise, a lack of nuclear focus and a lack of authority.

The standup of Air Force Global Strike Command as well as establishing the third phase of AFNWC's mission alignment are closing these three seams in the areas of nuclear operations, sustainment and acquisition. For our part, PAD 08-05 gave us two main tasks: streamline sustainment and exercise positive control. What drives our efforts today is a renewed commitment to the oldest, highest, most fundamental and most demanding tenet of nuclear capability – surety. The opening declaration of the policy directive on nuclear surety (AFPD 91-1, *Nuclear Weapons and System Surety*) sums it up best: “Nuclear weapons and weapon systems receive special attention and consideration because of their political and military importance, their destructive power and the potential consequences of an accident or unauthorized act.”

Building upon the premise of “special attention and consideration” within the tasks assigned to us under Phase III, AFMC and AFNWC have made significant progress. We recognized first and foremost that reinvigorating the nuclear enterprise was about the robust standup or expansion of organizations – bringing on board the right talent, in the right numbers, to drive discipline, rigor, oversight, standardization, partnerships and integration.

Along with the assignment of a flag-level officer to AFNWC and the realignment of organizations, the Air Force clearly acknowledged that the Commander, AFMC, General Donald Hoffman, was/is the single four-star officer responsible for nuclear sustainment. This acknowledgement was profound because since 1992, with the inactivation of Strategic Air Command, there was no single four-star officer charged with understanding and articulating the needs of the Air Force with regard to nuclear sustainment below the Chief of Staff. Today, you have a one-star officer working the day-to-day nuclear sustainment issues with oversight of an entire major command; and a four-star officer clearly charged with keeping the Secretary of the Air Force, Chief of Staff of the Air Force and the commander of Air Force Global Strike Command informed and engaged in the sustainment of nuclear weapons, delivery vehicles and associated support equipment.

AFMC created a new directorate (AFMC/A10) focused solely on nuclear matters to act as our major command's (MAJCOM's) outward face to the warfighters and policy makers while

providing critical staff integration and policy formulation to field units. For our part, the AFNWC recently achieved Initial Operating Capability (IOC). This declaration was based on three main factors: reaching at least 50% hired end strength against the Unit Manning Document outlined in PAD 08-05, initiation of the Sustainment and Integration Center (STIC), and successful transition of Continental United States (CONUS) Weapon Storage Area (WSA) operations.

We must, however, put this milestone into perspective. Though AFNWC has existed for over three years, until early 2009, the center consisted of a small command and support staff. PAD 08-05 directed the standup of a robust center with the necessary staffing to provide integration, oversight and discipline to our nuclear sustainment units. In essence, the Air Force Secretary and Chief of Staff vitalized the AFNWC. As such, AFNWC as a whole has only now achieved IOC, and it is still growing.

We've made considerable progress in the area of direct support to the warfighter through the transition of WSA operations under one command. In the mid-1980s, there were 22 CONUS WSAs operated by two commands. By the mid-1990s these had dropped by over half to 10 WSAs operated by three commands. Today the remaining five CONUS WSAs fall under AFNWC. The local, operational units maintain facilities and provide security while AFNWC personnel conduct logistical operations and deliver weapons to the operational unit. This division of duties and responsibilities ensures the strictest control with checks and balances over our assets. Our promise to the warfighter is that we'll be ready whenever they need support. Our promise to the nation, you, and the Department of Defense is that we'll exercise positive control over the weapons as one major command – AFMC. The main advantage of this is having one command team focused on WSA production from a systemic view – balancing, controlling and standardizing expertise, training, evaluation, certification and production while minimizing risks and limiting deviations. Our focus is paying off in enhanced support to meet US Strategic Command and Air Force Global Strike Command requirements. To support the WSAs in the field we created a Directorate of Nuclear Surety to treat the WSAs as a coherent and integral weapon system – performing system-of-systems integration of requirements within civil engineering, communications, security and safety disciplines. This directorate has already

brought together WSA stakeholders from across the Air Force and Navy in recurring council sessions to deliberately work through WSA requirements and to advocate with one voice.

To ensure a robust and enduring ICBM capability through 2030 as directed by Congress we've taken several critical steps to sustain today's aging forces. To date we delivered the last assets for the Guidance Replacement and Propulsion Replacement Programs as well as began Full Rate Production 2 of the Safety Enhanced Reentry Vehicle program. This month will complete our internal Mk21 Fuze Refurbishment Assessment Team analysis. We have aggressively screened existing Mk21 fuzes to ensure the maximum potential number of usable assets for the warfighter. This latest assessment will provide the final refurbishment strategy to meet the warfighter's needs for the most reliable, capable and safest warhead in our inventory. We continue to work closely with our partners at the Ogden Air Logistics Center to certify their refurbishment process for the Mk12A Fuze and together we are meeting all production targets. We continue to assess the stockpile's state of health working very closely with the National Nuclear Security Administration (NNSA) and the national laboratories to promote stockpile sustainment efforts. As such we developed a Joint Air Force/National Nuclear Security Administration Memorandum of Agreement on Test and Assessment of the Nuclear Weapons Stockpile. A key aspect of this agreement refines the roles, responsibilities and deliverables of the Cruise Missile, Gravity Bomb and ICBM Joint Test Working Groups. With testing as a central pillar in sustainment, we brought on board a dedicated Center Test Authority to provide an independent look at all future developmental testing programs in support of acquisition programs as well as current ICBM and cruise missile test launches.

A critical aspect of nuclear sustainment which has suffered from past neglect is the state of nuclear support equipment. These unique assets represent the weakest leg of the critical path to operational capability. For example, without adequate test sets, fielding of fully refurbished Mk21 fuzes cannot occur. Every aspect of maintaining today's warfighting capability or fielding of tomorrow's replacement programs requires one or more unique test assets. We have taken aggressive steps to eliminate production constraints in the repair network caused by non-mission ready support equipment. One such component, the Reentry System Test Set (RSTS), has risen to an 80% availability rate at operational units. In fact, focused engineering support, supply discipline and training have today reduced the RSTS as a limiting factor in WSA production. To

maintain the highest level of focus on our support equipment we have a dedicated program manager at AFNWC assisting field units in conjunction with HQ teams assigned to each of the top most concerning assets. In addition we successfully migrated to the Integrated Maintenance Data System to ensure robust, standardized tracking and analysis of maintenance actions.

In the area of Nuclear Weapons Related Materiel (NWRM) we continue to gain and refine Positive Inventory Control (PIC) through the steady application of standard supply discipline practices. In concert with the Air Force Global Logistics Support Center we've put over 15,000 NWRM assets into Air Force control from the Defense Logistics Agency. Over 29,000 assets are now being managed in the Air Force supply and maintenance systems with 94% and growing under serial number control. PIC facilities are operating at Hill Air Force Base Utah and Tinker Air Force Base Oklahoma. To support this effort we have created a dedicated Program Manager for NWRM and created the AFNWC Sustainment and Integration Center (STIC). The STIC, among other tasks, will provide 24-7/365 tracking of the kind, condition, count and location of all NWRM.

To bring our actions together in a comprehensive way, we've made great strides in deliberate planning. We recently published our baseline ICBM Systems Roadmap – the first robust, system-wide government product of its type in over a decade. Subsequent versions are in progress now and will provide even greater fidelity on costs and program risks. We're also developing a Nuclear Sustainment Decision Matrix Tool which for the first time will apply Multiple Objective Decision Analysis to the task of nuclear sustainment. This tool has brought together all stakeholders, including the NNSA, and promises to be a major factor in how we evaluate complex and competing courses of action ahead.

In fact for all our current and future planning efforts we've worked hand in hand with partners across the Air Force, Strategic Command, the Defense Threat Reduction Agency (DTRA), NNSA, Sandia National and other Department of Energy (DOE) Labs, the Navy's Strategic Systems Programs as well as colleges and universities to ensure an integrated team is working together to address these issues.

Indeed, these partnerships are essential to meeting the challenges ahead. While we've made tremendous progress to date, we're not ready to declare victory yet. It will take years to

overcome decades of atrophy and inattention in nuclear sustainment. As such, we will remain focused on using our resources to execute the plan. The goal is not necessarily to follow a set schedule rigidly, but rather produce sustained results for the nation. To reach Full Operational Capability we must create enduring staff processes and instructions to codify our best practices and standards, successfully advocate for the resources needed to continue on plan, mature and fully man our staffs and finally validate our actions through independent assessments with measurable, repeatable successes in our support to the warfighter.

So, even as we work today's Mk21 and Mk12a Fuze refurbishments we are also providing technical support to senior deliberations over the next joint/common fuze ensuring sustainment risks and equities are represented and understood. As we work on a comprehensive life extension of the versatile B61 we are also studying the need for weapons to meet future delivery platform requirements; all of which will be informed by the upcoming Nuclear Posture Review (NPR). As we refine and execute the roadmaps we also recognize that our current ICBM prime integration contract will soon transition to a new structure. While we continue to lock down all NWRM through unique identifiers and supply chain discipline we also understand there will be occasional discoveries of newly uncovered assets for years to come. We've prepared for this in two ways. First, we have responsive teams ready to take aggressive actions to immediately gain control, evaluate condition and then induct the asset into the supply system under PIC procedures. And second, we will prioritize and execute a comprehensive multi-year plan to demilitarize NWRM assets no longer needed. In fact, the Air Force recently demilitarized over 53,000 nuclear weapons-related legacy assets from ICBM, aircraft and space test programs. Our dedicated NWRM program manager is supported by a dedicated demilitarization program manager. While we shore up today's aging and fragile nuclear support equipment we will develop executable acquisition plans for the next generation. For example, our plan to replace the problematic RSTS involves fielding the Reentry Field Support Equipment (RFSE) program to verify Mk21 functionality, lower lifecycle costs, increase maintenance flexibility, reduce the logistics footprint and incorporate a new fuze with least impact. As always, ensuring enough resources to support the timely fielding of these capabilities remains a critical challenge. And even as we instill a new sense of focus in our nuclear culture and rebuild the training, policies and procedures to support that culture, we can expect it will take time to bring our performance in line with our standards. Recent inspection results reflect our absolute

commitment to thorough, independent and rigorous validation of the military's most exacting, no-defect standards. Just as we are progressing in every area of nuclear sustainment, our inspections are also becoming more progressive – understanding exactly how to look at processes/procedures and how to discern perfection from routine. Across the board, we're getting past just meeting standards to moving clearly on a path to truly exceeding standards when it comes to nuclear sustainment.

But perhaps the most significant challenge that lies ahead is with our most important asset – our people. Today we are behind the power curve as a result of two gaps. First, the existing pool of talent is finite and everyone in the nation's nuclear enterprise is competing for this scarce resource. This naturally leads to the second gap where we must hire a generation of motivated, talented but inexperienced personnel. As such, the future looks bright when this new generation grows to take on the middle and senior level positions of responsibility of tomorrow but today we deliberately leverage a small and aging technical workforce of nuclear professionals. Today's force is heavy with experience at the top and with fresh faces at entry level. But, there is a gap in-between. To manage this balance we have taken deliberate steps to identify key nuclear billets requiring nuclear expertise; to create and deliver relevant nuclear training; to partner with learning institutions to ensure a steady pipeline of expertise; to utilize the Total Force by reaching out to Guard and Reserve partners as a bridge to future permanent manning and, finally, to lay out career paths that develop today's sustainers, logisticians, scientists, engineers, acquirers and program managers to become tomorrow's leaders of the force. We have fielded an Air Force Nuclear Fundamentals Course that encompasses nuclear weapon fundamentals, force structure, nuclear stockpile guidance and planning, nuclear surety, the nuclear enterprise, etc. We intend to partner with DTRA University to share best practices and resources.

In summary, our team has stepped out quickly across AFMC and in partnership with the Air Staff and Air Force Global Strike Command to address the most pressing concerns in the nuclear enterprise. We are very excited about our progress to date and the potential that lies ahead.

Thank you for the opportunity to address these issues with you and I look forward to your questions.