Summary of DoD Internal Nuclear Enterprise Review

Earlier this year, after a series of missteps involving the nation's nuclear deterrent forces and their senior leadership, Secretary Hagel directed both an internal Department of Defense (DoD) review and an external, independent review of the DoD nuclear enterprise. This includes Air Force Intercontinental Ballistic Missiles (ICBMs), nuclear-capable bombers and tactical fighters, Navy ballistic missile submarines, and the supporting infrastructure to build, maintain, and control these assets. The internal review was led by then-Assistant Secretary of Defense Madelyn Creedon, Rear Admiral Peter Fanta formerly from the Joint Staff, and Command Sergeant Major Patrick Alston from U.S. Strategic Command. The external review was led by former Air Force Chief of Staff and Commander of Strategic Air Command, General Larry Welch (retired), and former Commander of Fleet Forces Command, Admiral John Harvey (retired).

The review leaders and their staffs visited all of the operational U.S. nuclear bases and key supporting facilities. They interviewed more than a thousand officers, enlisted personnel, civilians, and contractors from across the armed services. Both review teams found participants that were open, candid, and eager to engage in dialogue regarding their ability to perform their mission.

The internal review was specifically asked by the Secretary of Defense to examine the nuclear mission regarding personnel, training, testing, command oversight, mission performance, and investment. This review also looked into mission readiness and other operational issues and therefore remains classified. The internal report is consistent with the findings and conclusions of the external review.

The internal review disclosed systemic problems across the nuclear enterprise. In general, these problems can be divided into several categories: longstanding, known problems that remained unaddressed and so became, over time, under-reported; known problems that were addressed but the corrective actions made the problem worse (or created new problems); and problems that were common knowledge in the field but which were never communicated to leadership. Significantly, the review determined that many of these problems were inextricably interrelated, with one problem begetting another. While many issues will need additional investments, in many cases the necessary corrective actions are cultural and structural. These measures will take time to implement, and must also be sustained over the long-term.

The review provided a number of recommendations for both short and long-term action; some are service-specific, some are at the departmental level and others are relevant to the entire enterprise. The review team made clear that this essential mission requires refocused attention and resources at all levels of the Department. The review organized its inquiry, findings, and recommendations into four categories: personnel, inspections, investment, and organization.

- The review of *personnel* issues identified issues with accountability, manning and skills mix, career development, morale and recognition, the personnel reliability program, and security forces. Within these areas, some issues manifested at the departmental level, in both services, or in a specific service. Key findings include:
 - A blurring of the lines between accountability and perfection in the Air Force;
 - Inadequate facilities and equipment, including IT systems, for the civilian workforce;
 - A rapidly aging civilian workforce in Navy shipyards, with a significant mid-career gap;

- Lack of promotion opportunities generally in the nuclear career field and lack of a
 defined, sustainable career path for nuclear officers in Air Force, and career constraints
 resulting from nuclear specialization for both officers and enlisted personnel;
- Stress on submarine crews created by shipyard shortfalls in the Navy;
- Unduly burdensome, overly technical, and excessively risk-averse implementation of the personnel reliability program.
- The internal review's inquiry into *inspections* found that the nuclear enterprise is subject to a culture of excessive inspections. The problem is particularly acute in the Air Force, in part owing to the relative scope of inspections (a submarine inspection involves 180 sailors, a missile wing inspection involves ~4000 airmen) and in part owing to important cultural differences between the services; in particular, the demand for perfection and lack of a meaningful self-assessment program.
- Regarding investment, the review surveyed an aging nuclear enterprise with a focus on sustainment, operations and maintenance (O&M) funding, and infrastructure issues. The review determined that as this infrastructure continues to age, sustainment will become increasingly more difficult, time-consuming and expensive. Findings included:
 - The lack of "weapon system" approach to the ICBM force, leading to disparate and inefficient sustainment and investment decisions for different system components;
 - Component issues resulting from an aging, unique, and (relative to other weapons programs) small-sized, programs and systems;
 - Serious shortfalls in basic O&M requirements; and
 - Shipyard inefficiency caused by use of obsolete and/or temporary facilities.
- Finally, looking at the *organization* of the nuclear enterprise, the internal review echoed the finding of the external review regarding the absence, at the departmental level, of an integrated "nuclear enterprise." This absence led to reduced awareness of issues in the nuclear field, particularly those issues that cut across individual stovepipes.

Collectively, the internal and external reviews found a nuclear workforce that was dedicated, capable, and performing well in spite of challenges resulting from being understaffed, underresourced, and reliant on an aging and fragile supporting infrastructure in an over-inspected and overly risk-averse environment. Both reports identified serious issues with potential real world consequences if not addressed -- some of which require long term and permanent cultural and structural changes.

As a result of these reports, the Department is undertaking a comprehensive effort to revitalize and integrate the nuclear enterprise. As long as the need for effective U.S. nuclear deterrence endures, the United States must operate its nuclear forces with world-class professionalism, ensure its plans and capabilities are tailored to emerging nuclear threats, and retain the human capital and infrastructure to adapt as the strategic landscape changes. The Department is using this opportunity to refocus attention and resources to continue to ensure the safety, security and effectiveness of our nuclear enterprise.