U.S. Nuclear Weapons Policy and Programs

The U.S. Nuclear Modernization Program

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The fundamental role of U.S. nuclear weapons is to deter nuclear attack on the United States and its allies and partners.

- U.S. nuclear weapons also support nonproliferation objectives by assuring allies they do not need to develop their own nuclear deterrent.

Stable and effective deterrence is best provided by sustaining our nuclear Triad (strategic bombers, submarines, and ICBMs) and Dual-Capable Aircraft.

Modernization will allow the United States to do just that—sustain our nuclear deterrent—and meet the challenges of a dynamic security environment.
The Role of Nuclear Weapons and Strategic Stability

- Strategic Stability requires a solid foundation that is not susceptible to any single point of failure, and each leg of the Triad makes its own unique and critical contribution:
  - Strategic submarines designed for survivability
  - A highly responsive ICBM force
  - A bomber force that is both survivable once alerted and recallable

- The need to sustain effective deterrence and strategic stability drives the requirement to modernize U.S. nuclear forces.
The Ageing U.S. Nuclear Arsenal and the Need for Modernization

- U.S. nuclear forces are ageing out and must be modernized.
  - The United States has only recapitalized its strategic forces twice before—in the 1960s and in the 1980s.
  - U.S. systems have already been in use decades past their intended service lives.
    - For example, production for the B-2 bomber started 30 years ago—and it is the newest system in the U.S. Triad.

- Modernization will allow the United States to sustain a stable and effective deterrent—with a reduced stockpile—as the security environment evolves.
The Prague Agenda and Nuclear Modernization

How does nuclear modernization fit with the Prague Agenda?

Nuclear modernization is an integral component of the President’s Prague Agenda. The U.S. approach to modernization:

- Sustains a safe, secure, and effective nuclear deterrent;
- Reduces the numbers and types of weapons; and
- Serves as a nonproliferation measure by assuring allies they do not need their own arsenals.
- These elements work together to reduce the risk of nuclear war and make progress toward the long-term goal of nuclear disarmament.
The President’s plan focuses on sustaining and modernizing the Triad’s platforms, delivery systems, and extending the life of warheads to preserve existing military capabilities in the face of evolving threats, rather than developing new nuclear weapons with new military capabilities.

Nuclear modernization is also designed to decrease the likelihood of a future arms race. For example:

- Modernization sustains a range of capabilities without requiring the United States to match potential adversaries system-for-system and yield-for-yield.
- Modernization will enable further reductions in a U.S. nuclear stockpile that is already dramatically lower than the Cold War arsenal.
The planned sizing of U.S. nuclear forces will be consistent with New START force levels and will be structured to enable further negotiated reductions.

The United States remains willing to negotiate further nuclear reductions with Russia to levels up to one-third below the New START limits.
The Modernization Program: Ballistic Missile Submarines

- Contribution to Deterrence: Ballistic missile submarines provide a survivable and assured response capability.

- The OHIO Replacement Program will result in the deployment of new ballistic missile submarines as hulls of the current OHIO class submarines become too old to safely sustain pressure at depth.

- The OHIO Replacement submarine will carry 16 Trident missiles; this is fewer than the 24 or 20 missiles the OHIO class currently carries.

- This replacement platform will ensure that the sea-based leg of the Triad remains survivable against future anti-submarine warfare threats.
The Modernization Program: ICBM Force

- Contribution to Deterrence: Land-based ICBMs provide our most rapid response capability.

- Our Ground-Based Strategic Deterrent Program will replace the Minuteman III ICBM with:
  - New missiles
  - New associated launch control facilities
  - New Command and Control

- The United States will continue to sustain the Minuteman III to ensure it remains effective until the late 2020s, when the cost and technical challenges for continued sustainment will become prohibitive.
The Modernization Program: ALCM

- Contribution to Deterrence: The ALCM helps to deter deliberate escalation and limited nuclear attack.

- The ALCM is an air-launched cruise missile carried by a strategic bomber that can be launched from outside adversary air defense ranges.
  - The United States has eliminated all other nuclear-armed cruise missile variants.

- The existing ALCM is already 30 years beyond its original designed lifetime and its viability cannot be ensured beyond the next decade.

- The Long-Range Standoff (LRSO) Weapon will replace the ALCM and sustain the ability to penetrate advancing air defenses.

- The LRSO will utilize a refurbished version of the current ALCM warhead and will not provide new military capabilities.
The Modernization Program: Strategic Bomber

- Contribution to Deterrence: Nuclear-capable bombers provide the flexibility, visibility, and the ability to forward deploy, which supports extended deterrence and assurance of U.S. allies and partners.

- The U.S. strategic bomber modernization program is designed to ensure the United States retains the ability to deliver nuclear and conventional weapons from penetrating bombers and from standoff bomber aircraft.

- The existing nuclear-capable bomber force is ageing:
  - The B-52H entered into service in 1961.
  - The B-2 entered into service in 1993.

- The B-21 program will provide the next-generation penetrating bomber.
The Modernization Program: Dual-Capable Aircraft

- Contribution to Deterrence: Dual-capable aircraft are critical to maintaining U.S. extended deterrence commitments around the world.

- The U.S. Dual-Capable Aircraft modernization program will replace the nuclear-capable F-15E and F-16 fighter aircraft with a nuclear-capable version of the F-35A.

- This will ensure the Dual-Capable fighters remain effective against advanced future air defenses.

- The B61-12 gravity bomb can be carried by Dual-Capable fighters. The life-extended B61-12 will replace multiple strategic and non-strategic variants of existing bombs.
  - This is helping to enable a reduction from six gravity bomb types to one.
Conclusion

- The U.S. modernization program is not a military response to a particular state, but the *sustainment* of our current nuclear deterrent.
  - The U.S. modernization program retains only those capabilities needed to sustain stable and effective deterrence.

- "To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same. Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies."

  – President Obama, April 5th, 2009 Prague

Questions?