U.S. Intercontinental Ballistic Missiles

The land-based leg of the U.S. nuclear triad is currently composed of 400 deployed Minuteman III Intercontinental Ballistic Missiles (ICBMs) based out of Malmstrom, Minot, and Warren Air Force bases in underground silos stretching across Montana, North Dakota, Wyoming, Nebraska, and Colorado. Each ICBM carries one warhead — either the W87 or the W78 — but could theoretically hold two or three warheads each. In 2015, the Air Force completed a decades-long, $7 billion program to extend the life of the Minuteman III through at least 2030. The Air Force has referred to the recently refurbished stock of ICBMs as "basically new missiles except for the shell."

Ground Based Strategic Deterrent

As a part of the $1.5 trillion nuclear modernization plan, the Air Force plans to replace the Minuteman III with a completely new ICBM, the Ground Based Strategic Deterrent (GBSD); a new ICBM warhead, the W87-1; and modernized launch facilities. The GBSD is expected to be capable of carrying single or multiple warheads and will likely have a greater range than existing ICBMs, though it is unlikely to be able to target countries like China, North Korea, and Iran without flying over Russia.

Northrop Grumman, which was the eventual sole bidder for the GBSD and also has the contract to build the Air Force's new B-21 nuclear bomber, was awarded an initial $13.3 billion engineering and manufacturing development (EMD) contract in September 2020 for the GBSD. The Air Force plans to buy 659 missiles from the defense contractor, 400 of which would be deployed and the rest used for testing and spares, at a cost of at least $95 billion. When accounting for total life-cycle costs, the Department of Defense projects the total cost of the GBSD could be as high as $264 billion. This number does not include costs for the W87-1, which the Government Accountability Office estimates will cost up to $14.8 billion.

The Future of ICBMs

The main rationale for maintaining silo-based ICBMs is to complicate an adversary's nuclear strategy by forcing them to target 400 missile silos dispersed throughout the United States to limit a retaliatory nuclear strike, which is why ICBMs are often referred to as the "nuclear sponge." However, with the development of sea-based nuclear weapons, which are essentially undetectable, and air-based nuclear weapons, which provide greater flexibility, ground-based ICBMs have become increasingly technologically redundant.

Furthermore, U.S. ICBMs are constantly held in a state of high alert. If the United States were to detect an incoming attack or what looks like an incoming attack, an extreme psychological pressure would be placed on the President to quickly order a launch before the ICBMs could be destroyed in their silos — a sort of "use them or lose them" mentality. This increases the risk of accidental war over a false alarm from the United States' missile detection system. Indeed, there have been several near catastrophes in the past.

The static nature of ICBM silos explicitly invites an attack on the U.S. homeland and increases the risk of miscalculation. It is the combination of the vulnerability of ICBMs, the risk of miscalculating the need for their use in a moment of uncertainty, and the overall costs that should lead Congress to question whether plans to completely replace U.S. ICBMs at the existing deployed levels is the best choice for the safety and security of the United States.