China’s Nuclear Inventory

The People’s Republic of China (PRC) began its nuclear weapons program in the 1950s with significant help from the Soviet Union, which contributed advisors and technical equipment. When Sino-Soviet relations cooled at the end of that decade, China independently and successfully tested its first nuclear weapon in October 1964. The PRC is the last of the five nuclear weapon states recognized under the Nuclear Non-Proliferation Treaty (NPT) to develop a nuclear program.

Beijing’s nuclear strategy centers around deterrence through “assured retaliation.” This means that China believes it can survive an initial nuclear attack and retaliate proportionately or to such a degree as to inflict unacceptable damage on any attacker.

China keeps most of its nuclear weapons on low alert, meaning warheads, missiles, and launchers are stored separately until they are paired in preparation for a strike. However, Beijing’s Rocket Forces conduct monthly combat readiness and high alert duties and rotate missile battalions from standby to ready-to-launch status.

The PRC officially maintains a No First Use policy (NFU), which means it will not be the first to use a nuclear weapon in a conflict; rather, it will only use nuclear weapons in retaliation to a nuclear attack against its territory or military personnel. The PRC has additionally committed itself not to use nuclear weapons against non-nuclear-weapon states or in nuclear-weapon-free zones. However, in light of recent Chinese statements, some experts have begun to question China’s commitment to this policy.

How Many?

The Pentagon estimates that China has a stockpile upward of 400 nuclear warheads. The PRC are upgrading and can deliver these weapons by air, sea and land – completing a full but still nascent nuclear triad. While Beijing has long focused on maintaining a minimum deterrent, its nuclear stockpile has increased beyond this point and may reach 1,500 warheads by 2035 if it continues at its current rate of proliferation.

Air

The Peoples’ Liberation Army supports its air-based component of the Chinese triad through the H-6N bomber. The bomber has an air-to-air refueling mechanism to extend its range of 1,800 km as well as recessed fuselage modifications to enable its carrying of air-launched nuclear missiles. China is also expected to develop a new strategic bomber and air-launched ballistic missiles. This includes the development of the nuclear-capable subsonic strategic stealth bomber, the Xian H-20, which could enter service as early as 2025. This would be very similar to the U.S. B-2 bomber and would wield a global range of over 10,000 km with aerial refueling capabilities.

Sea

China conducts near-continuous at-sea deterrence patrols with its six Jin-class nuclear powered ballistic missile submarines (SSBN). Each SSBN can carry up to 12 submarine-launched ballistic missiles (SLBMs) known as JL-2 and JL-3 missiles. The range limitations of the JL-2 would require the PLA to operate near Hawaii to target the east coast of the United States, but JL-3 missiles may successfully reach the east coast from China’s littoral waters. The PRC is also developing Type 096 SSBNs with the ability to launch SLBMs with multiple independent reentry vehicles (MIRVs).
Land

The Department of Defense estimates that China has approximately 300 nuclear-capable land-based missiles which may launch as many as 400 warheads. Many of these are silo-based DF-5A and DF-5B as well as the more modern and road-mobile DF-31 and DF-41 class missiles. The PRC is establishing additional nuclear units and increasing the number of launchers in mobile ICBM units from 6 to 12. DF-5 class missiles have a range of 13,000 km whereas DF-31 and DF-41 rockets range from 7,000 to 15,000 km.