CENTER FOR ARMS CONTROL AND NON-PROLIFERATION

Pakistan's Nuclear Inventory

Pakistan tested its first nuclear weapon in 1998, becoming the world's 7th state to officially test a nuclear weapon. The exact yields of the weapons in the country's current arsenal are not known, but general estimates are between 5-12 kilotons (kt) for most weapons, with some longer-range ballistic missiles possibly reaching 40 kt. Pakistan has not declared a strategic nuclear policy, but appears to maintain "minimum credible deterrence" against India's nuclear and superior conventional forces. Pakistan has adopted a position of "no first use" against non-nuclear weapon states.

How Many?

Pakistan is believed to have a stockpile of approximately 160 warheads, making it the 6th largest nuclear arsenal. Pakistan is actively developing nuclear weapons, and experts project that it may have the 5th largest arsenal by 2025 with 220-250 warheads.

Pakistan has been working toward a sea-based deterrent, and has successfully tested a nuclear-capable submarine-launched cruise missile from a submerged platform twice, once in January 2017, and again in March 2018. Once this missile is fully developed and tested on-board a submarine, Pakistan will have a nuclear triad, with air, sea and land capabilities.

Air

The F-16 combat aircraft, along with some Mirage III and V aircraft, are believed to be dual-capable (capable of both conventional and nuclear strikes) and constitute the air component of Pakistan's nuclear force. Pakistan has approximately 36 warheads for the nuclear air branch. The F-16 A/B has about 24 launchers and a range of 1,600 kilometers (km) while the Mirage III/V has approximately 12 launchers and a range of 2,100 km. A new, highly accurate air-launched cruise missile, the Ra'ad, has a range of 350+km.

Sea

In January of 2017 Pakistan tested for the first time the Babur-3, the sea-launched version of the ground-launched nuclear-capable Babur-2. Because the test launch took place on a submerged platform, not a submarine, Pakistan is not yet considered to have a sea-based deterrent.

Land

Pakistan's nuclear missile arsenal consists primarily of short to medium-range ballistic missiles but is making significant progress in its cruise missile capabilities. The ground arsenal consists of approximately 102 land-based missiles with yields of 5-40 kt. Pakistan is in possession of several nuclear-capable, road-mobile ballistic missiles, including the short-range Abdali, Ghaznavi, Shaheen-1 and NASR and medium-range Shaheen-2 and Ghauri. Pakistan has 6 operational nuclear-capable ballistic missiles. The Shaheen III and Shaheen 1A are under development with ranges of 2,750 km and 900 km, respectively. Pakistan is also developing the Ababeel medium-range ballistic missile (MRBM) that is believed to have multiple independently targetable reentry vehicle (MIRV) capabilities.

Pakistan's development of non-strategic nuclear weapons has been criticized as destabilizing for severely lowering the nuclear-use threshold. Pakistan has developed the NASR (Hatf-9) ballistic missile, which, with a range of just 60-70 km, cannot hit strategic targets in India. The new weapon has been tested using a road-mobile launcher and is thought to have been created for combating conventional Indian forces. In February 2021, Pakistan tested a short-range ballistic missile, capable of carrying a nuclear or conventional warhead over 289 kilometers (180 miles).

Sources: Federation of American Scientists, Congressional Research Service, CSIS Missile Defense Project, Carnegie Endowment for International Peace, and Reuters