



North Korea Missile Test Activity

Origins

Throughout the 1960s and early 1970s as part of military cooperation pacts with the Soviet Union, North Korea was delivered surface-to-air and artillery rockets and trained on how to build and operate multiple-rocket launchers. Separately, it reached agreements with the People's Republic of China to provide coastal defense capabilities such as anti-ship cruise missiles and the transfer of China's missile research and development. This foundational know-how was the [basis](#) on which the North Korean indigenous missile program was established.

The North Korean ballistic missile program began in 1976 when it first acquired the SCUD-B from the Soviets, brokered through Egypt. After reverse engineering the SCUD technology, it began missile testing in 1984 and has conducted more than 244 tests of numerous missile capabilities since that time, including short-, medium-, intermediate- and intercontinental- range ballistic missiles, as well as submarine-launched ballistic missiles and space-launch vehicles.

The [failure rate](#) of its missile tests remains high but has also improved over time. Through 1994, the failure rate was roughly 50%. Between 1994 and 2011, that failure rate dropped to approximately 23%, and between 2011 and 2023 the failure rate dropped to roughly 15%.

Through the Kim Dynasty

Kim Il Sung (1984-1994)

Under the Kim Il Sung regime, North Korea conducted 17 missile tests, 16 of which were carried out at the Tonghae Satellite Launching Ground near Musudan-ri. Seven original tests were carried out in 1984 followed by a period of no tests between 1985 and 1989, with 10 follow-on tests taking place between 1990 and 1994. The first capabilities tested were short- and medium-range SCUD variants, including the Hwasong-5, Hwasong-6, and the No Dong-1. Additionally, in the Spring of 1994, North Korea tested its first cruise missile capability, the KN-01.

Kim Jong Il (1994-2011)

The North Korean missile program progressed glacially for the first half of Kim Jong Il's reign. From 1994 to 2002, North Korea would test only once, debuting the Taepodong-1 prototype in August 1998 as a space launch vehicle. Between 2003 and 2009, missile activity spiked. North Korea conducted 43 tests during this window that included further refinement of its cruise missile platform and short- and medium-range ballistic capabilities. In 2006, it introduced the Taepodong-2, which would later be used as part of the Unha-3 orbital launch system unveiled in 2009. Notably, in 2006, North Korea conducted its [first nuclear test](#) at the Punggye-ri Nuclear Test Facility, and its second in May 2009 interspersed between tests of its medium-range and space launch capabilities. The regime would conduct zero missile tests during the final 2 years of Kim Jong Il's tenure.

Kim Jong Un (2011-Present)

Upon assuming leadership, Kim Jong Un undertook a concerted effort to expand and develop North Korea's ballistic missile program. Between 2012 and 2023, North Korea has conducted more than 214 missile tests and debuted a variety of missiles with increasing ranges. Missile testing and development infrastructure has also expanded, and in some cases been established in proximity to and in connection with the state's nuclear facilities. In 2015, the North debuted its first SLBM, the KN-11, and its first IRBM, the BM-25



Musudan, one year later, testing each several times. Multiple nuclear tests have also been conducted over this time, with the [largest and most recent](#) occurring in September 2017.

As of publication, North Korea touts several theater cruise capabilities; short-, medium- and intermediate-range missile capabilities; at least two SLBM varieties; a long-range cruise missile; and two ICBM platforms, the Hwasong-17 and Hwasong-18. In 2023 alone, North Korea has been confirmed to have tested 36 missiles, mostly of the short- and medium-range variety, with the most recent demonstration of an ICBM in July — however, North Korea often tests multiple missiles at once, so the actual number is likely higher than 36 missiles.

This year, the North has also attempted on three separate occasions to place a satellite in orbit. The first two attempts suffered failure during boost phase. The North was able to successfully place its spy satellite in orbit upon its third launch attempt. The regime's space-launch efforts to establish satellite capabilities are significant because the space-launch vehicles use the same ICBM motors to power flight, and satellite capabilities would provide it greater intelligence and targeting abilities.