Center For Arms Control and Non-Proliferation

North Korea Missile Launch 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 300 launches 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 launches 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%.

While many of North Korea's missile launches are designed to support the development and validation of new systems, not every launch is strictly a "test." Some serve political or strategic purposes, timed to coincide with military or diplomatic events, demonstrate resolve, or send a message to domestic or foreign audiences. Others may be operational training exercises or demonstrations of deployed capabilities. As such, this fact sheet refers broadly to *missile launches*, recognizing that these events often serve multiple overlapping objectives aside from purely technical validation.

Through the Kim Dynasty

Kim Il Sung (1984-1994)

Under the Kim Il Sung regime, North Korea conducted 17 missile launches, 16 of which were carried out at the Tonghae Satellite Launching Ground near Musudan-ri. Seven original launches were carried out in 1984 followed by a period of no launches between 1985 and 1989, with 10 follow-on launches 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 launch 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 launches 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 launches of its medium-range and space launch capabilities. The regime would conduct zero missile launches 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 2025, North Korea has conducted more than 272 missile launches and debuted a variety of missiles with increasing ranges. Missile launch 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, flight-testing each several times. Multiple nuclear tests have also been conducted over this time, with the largest and most recent occurring in September 2017.

Today, North Korea touts several theater cruise missile 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, North Korea was confirmed to have launched 36 missiles, mostly of the short- and medium-range variety. However, North Korea often launches multiple missiles at once, so the actual number is likely higher than 36 missiles.

In 2023, the North 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.

North Korea began 2024 with a January launch of an intermediate-range ballistic missile fitted with a hypersonic glide vehicle and debuted several new systems, including the Pulhwasal-3-31 cruise missile and the Padasuri-6 anti-ship missile. Throughout the year, launches highlighted theater-range cruise and ballistic missile capabilities, culminating in October's launch of the solid-fuel Hwasong-19 ICBM. By year's end, North Korea had conducted at least 30 missile launches.

North Korea conducted its first missile launch of 2025 on January 6 when it launched an upgraded version of its Hwasong-16, an intermediate-range ballistic missile fitted with a wedge-shaped payload billed as a "hypersonic glide vehicle." According to Japanese and South Korean military intelligence, the missile flew approximately 700 miles before landing in the Sea of Japan, and although the North claimed that the hypersonic vehicle successfully conducted evasive maneuvers during flight, both South Korean and Japanese sources dispute this.

On January 14, the DPRK fired several short-range ballistic missiles that travelled for approximately 150 miles before landing in the Sea of Japan, according to South Korean sources. On January 26, the North launched several sea-to-surface cruise missiles into the Yellow Sea. It referred to the cruise missiles as "strategic," likely intended to denote their ability to carry nuclear warheads, though this has not been confirmed by independent sources. On February 26, Kim Jong Un oversaw the launch of two cruise missiles from the West Sea Barrage area. The missiles flew approximately 4 miles before appearing to strike a building on Sangchuira Island near Nampho. At the onset of the U.S.-ROK's annual joint exercise, "Freedom Shield," on March 10, North Korea launched multiple ballistic missiles toward the Yellow Sea. According to South Korea's Joint Chiefs of Staff, the missiles were likely short-range.

On April 28 and 29, North Korea conducted the first weapons launch from its newly launched Choe Hyon-class destroyer, purportedly firing supersonic cruise missiles, strategic cruise missiles, surface-to-air anti-aircraft missiles, as well as non-specified "ship-to-ship tactical guided weapons," among other non-kinetic defensive systems. After observing the missile launches, Kim Jong Un suggested that testing of the ship's short-range ballistic missile system would occur in the near future.

On May 8, North Korea launched multiple short-range ballistic missiles from Wonsan, with the longest traveling approximately 800 kilometers before landing in the Sea of Japan. South Korean military officials indicated that the launch may have been conducted to assess the performance of missile systems potentially intended for export. On May 22, North Korea fired multiple cruise missiles into the East Sea. The launches followed the failed launch of a new 5,000-ton-class destroyer at Chongjin Port a day before.

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After a lull in missile launch activity between the end of May and early October, North Korea fired several short-range ballistic missiles around the area of Junghwa, just south of Pyongyang, on October 22. South Korea's Joint Chiefs of Staff said that an unspecified number of missiles flew approximately 350 kilometers before striking inland targets. The approximate target area coincides with a new missile base the North constructed in Junghwa in recent years, and which has been used in other recent SRBM exercises.

On October 28, 2025, North Korea launched several of its new "strategic" sea-to-surface cruise missiles from one of its new warships from its west coast. It was North Korea's fourth known cruise missile launch in the past year. Later, on November 7, the North launched a single ballistic missile — likely a short-range or intermediate-range — from the Taegwan County region into the East Sea, with the missile flying approximately 435 miles.

On January 4, 2026, North Korea launched multiple ballistic missiles from the vicinity of Pyongyang into the East Sea, marking its first missile launch of the year. South Korean and Japanese authorities assessed that at least two missiles flew approximately 1,000 kilometers. DPRK state media later claimed the launch involved hypersonic missiles, while open-source analysis indicates the launch may have involved the Hwasong-11E, a short- or medium-range platform debuted in October 2025 with a wedge-shaped hypersonic glide vehicle.