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By: TA | AP Insight

How close is North Korea to building a nuclear-powered submarine?

North Korea displayed apparent progress in the construction of a nuclear-powered submarine, with state media photos showing a largely completed hull, as leader Kim Jong Un condemned rival South Korea's push to acquire the technology.

North Korea's official Korean Central News Agency said Kim visited a shipyard to inspect the construction of what the North describes as an 8,700-ton-class nuclear-propelled submarine, which the leader has called a crucial step in the modernization and nuclear armament of North Korea's navy.

The North has indicated it plans to arm the submarine with nuclear weapons, calling it a "strategic guided missile submarine" or a "strategic nuclear attack submarine."

During the visit, Kim described South Korea's efforts to acquire its own nuclear-powered submarine, which have been backed by U.S. President Donald Trump, as an "offensive act" that severely violates the North's security and maritime sovereignty.

He said that the South Korean plan further underscores the need to advance and nuclear-arm North Korea's navy, and claimed that the completion of his nuclear-powered submarine would be an "epoch-making" change in strengthening its nuclear war deterrent against what he called enemy threats.

The agency did not specify when Kim visited the shipyard but released photos showing him inspecting a huge, burgundy-colored vessel, coated with what appears to be anti-corrosion paint, under construction inside an assembly hall with senior officials and his daughter.

It was the first time North Korean state media had released images of the submarine since March, when they mostly showed the lower sections of the vessel.

It was not immediately clear how close North Korea is to completing the vessel.

But because submarines are typically built from the inside out, the release of what appears to be a largely completed hull suggests that many core components, including the engine and possibly the reactor, are already in place, said Moon Keun-sik, a submarine expert at Seoul's Hanyang University.

"Showing the entire vessel now seems to indicate that most of the equipment has already been installed and it is just about ready to be launched into the water," said Moon, a former submarine officer in the South Korean navy, who believes the North Korean submarine could possibly be tested at sea within months.

A nuclear-powered submarine is Kim's next major military goal

A nuclear-powered submarine was one item on a long wish list of sophisticated weaponry that Kim announced during a major political conference in 2021 to cope with what he called growing U.S.-led military threats.

Other weapons were solid-fueled intercontinental ballistic missiles, hypersonic weapons, spy satellites and multi-warhead missiles.

North Korea has conducted a series of tests to develop some of those systems and recently unveiled a new naval destroyer, which Kim hailed as a major step toward expanding the operational range and preemptive strike capabilities of the country's nuclear forces.

> There have been questions about whether North Korea could get resources and technology to build nuclear-powered submarines

If North Korea obtains a submarine capable of operating stealthily for extended periods and launching missiles from underwater, it would be a worrying development for its neighbors, as such launches would be difficult to detect in advance.

But there have been questions about whether North Korea, a heavily sanctioned and impoverished country, could get resources and technology to build nuclear-powered submarines.

Some experts say North Korea's recent alignment with Russia — including sending thousands of troops and military equipment to support President Vladimir Putin's war in Ukraine — may have helped it to receive crucial technologies in return.

While some analysts suspect North Korea may have sought a reactor from Russia, possibly from a retired Russian submarine, Moon said it's more likely that North Korea designed its own reactor, while possibly receiving some technological assistance from Russia.

South Korea seeks its own nuclear-powered submarine

During a summit with Trump in November, South Korean President Lee Jae Myung called for U.S. support for South Korea's efforts to acquire nuclear-powered submarines, while reaffirming a commitment to increase defense spending to ease the burden on the United States.

The US is open to sharing closely held technology to allow South Korea to build a nuclear-powered submarine

Trump later said that the United States is open to sharing closely held technology to allow South Korea to build a nuclear-powered submarine, but it's not immediately clear where and when the vessel would be built and how Seoul would get the nuclear fuel and reactor technology required.

In a separate report, KCNA said Kim on Wednesday supervised tests of new antiair missiles fired into the sea.

South Korea's Joint Chiefs of Staff later said it had detected the North launching several missiles from an eastern coastal town, and that South Korean and U.S. intelligence agencies were assessing the details of the weapons.

Tensions on the Korean Peninsula have worsened in recent years as Kim accelerated his military nuclear program and deepened alignment with Moscow following Russia's invasion of Ukraine.

His government has repeatedly dismissed calls by Washington and Seoul to revive negotiations aimed at winding down his nuclear and missile programs, which derailed in 2019 following a collapsed summit with Trump during the American president's first term.