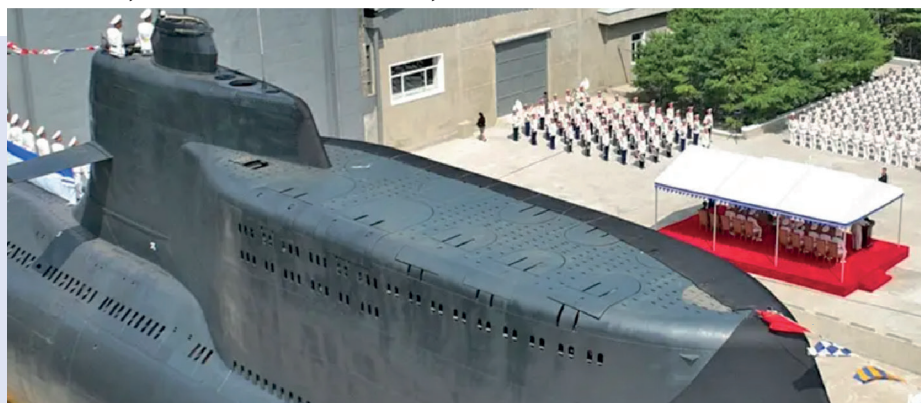


North Korea's new submarine

Kim Jong-un was present at the launch of North Korea's latest "tactical nuclear attack submarine." A radically modernised Soviet-designed Romeo-class boat, named *Hero Kim Gun-ok*, with hull number 841



Bow: Shortened, more rounded

Possibly lacks torpedo tubes – they will occupy crew space

Dive planes: Moved from bow to sail

Crew quarters

Missile compartment: Built into sail with two rows of five missile hatches. For'ard four missile hatches are larger than aft six, suggesting mixed load of missiles

Standard Romeo-class stern

841

North Korea's submarine-launched ballistic missiles (SLBMs)

Size of missile hatches implies *Pukguksong-1* and *Pukguksong-3* or *Hwasal-2* land-attack cruise missile (LACM)

Pukguksong-1: Two-stage, solid-fuelled SLBM. 9m long, 1.5m in diameter

Range: 1,200km

Pukguksong-3: Two-stage, solid-fuelled SLBM. 7.8-8.3m long, 1.4-1.5m in diameter

Range: 1,900km

Two diesel engines

Twin shrouded screws

Two aft-facing torpedo tubes

Hwasal-2: Strategic cruise missiles test-fired in Feb and Mar 2023*

Propellant: Unknown

Range: 1,500km-plus

*North Korea often uses "strategic" to refer to weapons that are nuclear capable

Test launches from submarines: Entire South Korea and possibly U.S. *Kadena* **airbase** in Okinawa, Japan, where U.S. F-22 Raptor jets are stationed, could be within range of North Korea's submarine-launched LACMs

