

Open Nuclear Network's

ESCALATING TENSIONS ON THE KOREAN PENINSULA

Late September to
early November 2022

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ESCALATING TENSIONS ON THE KOREAN PENINSULA: Late September to early November 2022

Since late September, the Korean Peninsula has witnessed a new round of escalation of tensions. Coinciding with multiple joint and individual military exercises of the US, ROK and Japan, the DPRK launched at least 30 ballistic missiles from 25 September to 14 November and fired artillery shells into the maritime buffer zone of the Comprehensive Military Agreement and/or around the Northern Limit Line (NLL, the de-facto maritime border between the two Koreas) on five occasions.

SUMMARY OF TENSIONS

DPRK missile activities

Between 25 September and 9 November, the DPRK fired at least 30 ballistic missiles, including intermediate and intercontinental-range ballistic missiles (IRBM, ICBM), coinciding with multiple joint and individual military exercises conducted by the ROK, the US and Japan since 26 September.

Shelling around the Northern Limit Line

In addition to one missile that reportedly landed south of the NLL on 2 November,[1] the DPRK fired artillery shells into the maritime buffer zone of the Comprehensive Military Agreement and/or around the NLL on five occasions since early October.[2] The DPRK and the ROK also exchanged warning shots along the NLL on 24 October.[3]

Responses from the US and allies

On 4 October, ROK fighters dropped precision bombs on the Jikdo firing range (located on an ROK island in the Yellow Sea) in a demonstration of power.[4] Similarly, on 5 October, the ROK and the US fired short-range ballistic missiles (SRBMs) into the East Sea (Sea of Japan).[5] The US and the ROK also extended by one day their five-day Vigilant Storm exercise, which was originally scheduled to end on 4 November.[6]

STATE OF ESCALATION

Escalation controlled, for now

Shelling around the NLL has particular potential to trigger further escalation, as evidenced by a number of inter-Korean military incidents that have taken place in this contested area, for example the Battle of Yeonpyeong in 2002, the sinking of the South Korean corvette Cheonan in 2010, and the shelling of Yeonpyeong also in 2010. That said, on 7 November, a "report" by the General Staff of the DPRK's Korean People's Army (KPA) summarized its recent military activities, saying it "will continue to correspond to all the anti-DPRK war drills of the enemy," implying the KPA's counteractions have fully met their intended purposes for the time being.

Context

The unusually heightened level of DPRK reaction to US-ROK joint military drills in recent weeks is consistent with "the Party's invariable fighting principle of power for power," which Kim Jong Un first mentioned during the Eighth Party Congress.[7] The DPRK's recent spate of military activities may also be viewed in the broader context of its pivot to China and Russia and a possibly larger shift in its US policy since the invasion of Ukraine.[8]]

POSSIBLE FUTURES

The 7 November KPA General Staff "report" suggests the DPRK will suspend its military activities as long as there are no further major US-ROK joint military drills. Nevertheless, the situation in the region could still evolve in several different ways, including, but not limited to, the following:

- The KPA may resume military activities as it enters its annual winter training season around December.
- The DPRK could conduct a seventh nuclear test and/or further ICBM test(s).
- The DPRK may deliberately trigger small-scale armed conflicts with the ROK. A failure to control such conflicts could increase the risk of the use of a nuclear weapon on the Peninsula, especially in light of the DPRK's revised nuclear law, which expands the scope of nuclear use.[9]

APPENDIX 1

COMPILATION OF DATA ON DPRK MILITARY ACTIVITIES, AS REPORTED BY ROK, DPRK AND JAPAN

ONN has compiled information on DPRK military activities since 25 September. The last two columns of this table are based on the information kindly shared with ONN by Michael Madden and his colleagues at the Stimson Center.

Full table available here: [DPRK Military Activities 25 September - 14 November 2022](#)

APPENDIX 2

EXAMINATION OF PHOTOS RELEASED BY THE DPRK AND THE ROK

The DPRK launched an IRBM on 4 October, which reportedly flew ~4,500 km with an apogee of ~1,000 km. This is the fifth confirmed IRBM launch, the second this year, and the third to overfly Japan. The DPRK claimed that, instead of the Hwasong-12 IRBM, it used a "new-type ground-to-ground intermediate-range ballistic missile" for this launch. Based on available images, it is difficult to determine what mechanism was applied for the attitude control of the missile (Figure 1). The bottom of this "new-type" IRBM looks too rounded and smooth for a liquid propellant ballistic missile of this type (Figure 1), indicating that image manipulation may have been involved.[1]

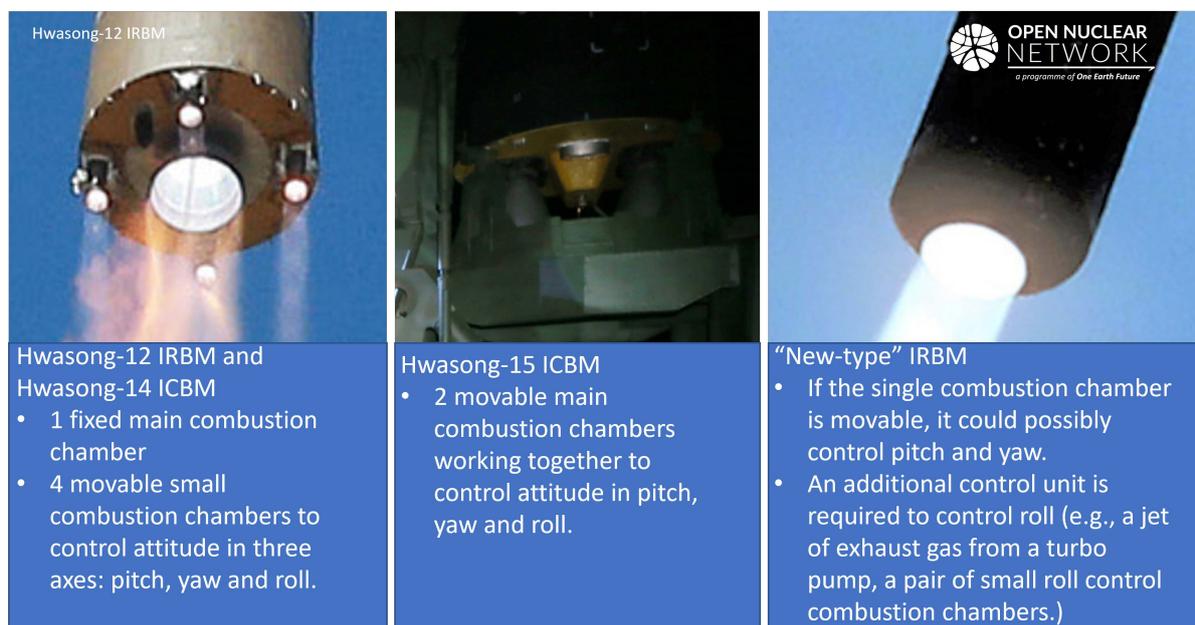


Figure 1. Comparison of the propulsion units between existing Hwasong strategic missiles and the "new-type" IRBM. Images: sogwang media corporation, KCNA, KCNA/Reuters[2]

The DPRK also launched two "long-range strategic cruise missiles" on 12 October 2022. However, The DPRK might have used a previously unpublished photo from a cruise missile test in September 2021 in its reporting on the 12 October cruise missile launch event. Note the shape of the dust clouds in Figure 2 are consistent, a strong indicator that the two photos may have been taken from the same event. The DPRK also claimed it launched another two such missiles on 2 November. The ROK disputed this claim, saying the launch did not take place.[3]

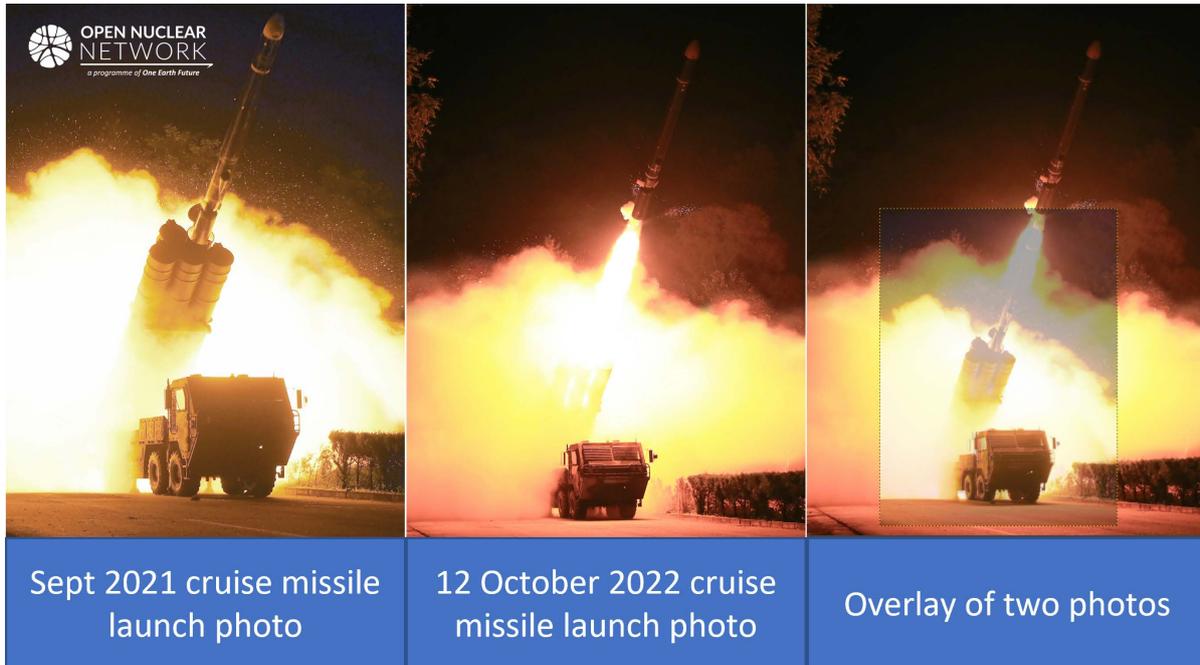


Figure 2. Comparison between cruise missile launch photos released by the DPRK in Sep 2021 and Oct 2022. Images: KCNA

The photo album published by the DPRK covering its 2 to 5 November launch campaign[4] contains a photo of a small ballistic missile that was first publicly revealed in April 2022.[5] However, a comparison of the launch photos indicates that the DPRK re-used an old photo from April 2022 in its report covering its 2 to 5 November launch campaign (Figure 3), reducing the credibility of the DPRK's announcement.



Figure 3. Comparison of ballistic missile launch photos released by the DPRK in April 2022 and November 2022. Images: KCNA

The DPRK described its allegedly failed ICBM launch on 3 November as "a ballistic missile to paralyze enemy operation command systems". According to the image released by the DPRK on 9 November, the missile appears to be a shortened and modified Hwasong-15 ICBM (Figure 4); however, there is not sufficient evidence at this time to make any confident conclusions. The ROK previously assessed the 3 November ICBM to be a Hwasong-17 and has not updated its assessment since then.



Figure 4. Comparison between the ballistic missile photo released on 7 November and the photo of Hwasong-15 ICBM launched in 2017 (right). Images: KCNA

The ROK military stated that the missile fired by North Korea that landed south of the NLL (Figure 5) on 2 November was an SA-5 (Soviet S-200) surface-to-air missile (SAM).[6] According to the ROK military, instead of performing maneuvers to hit a moving aerial target, this missile followed a standard ballistic trajectory.[7] This statement suggests that the DPRK may have converted obsolete SAMs into ballistic missiles. While the DPRK still referred to them as SAMs, the ROK may have assessed them as SRBMs on the basis of their ballistic trajectories.



SA-5 (Soviet S-200) surface-to-air missile launched by the DPRK on 2 Nov



Debris of SA-5 displayed in the ROK on 9 Nov

Figure 5. The ROK has salvaged debris of at least one SA-5 SAM from the sea. Images: KCNA, Yonhap News TV (right).[8]

Report Endnotes

[1] NLL 이남에 날아온 'SA-5 지대공'...탄도미사일 궤적 [The SA-5 that flew across the NLL followed a ballistic trajectory], Yonhap News TV, 9 November 2022, available at: <https://www.yonhapnewstv.co.kr/news/MYH20221109013900038>

[2] Song Sang-ho, "(3rd LD) N. Korea fires 1 short-range ballistic missile, about 170 artillery shots: S. Korean military", Yonhap News Agency, 14 October 2022, available at: <https://en.yna.co.kr/view/AEN20221014000553325?section=search>; "(2nd LD) N. Korea lobes coastal artillery shells into Yellow, East Seas: S. Korean military", Yonhap News Agency, 14 October 2022, available at: <https://en.yna.co.kr/view/AEN20221014011052325?section=search>; "N. Korea fires artillery shells into inter-Korean buffer zone: JCS", Yonhap News Agency, 19 October 2022, available at: <https://en.yna.co.kr/view/AEN20221019000200325?section=search>; "N. Korea fires another round of artillery shells into western 'buffer zone': S. Korean military", Yonhap News Agency, 19 October 2022, available at: <https://en.yna.co.kr/view/AEN20221019006500325?section=search>; "N. Korea fires 100 artillery shots into S. Korea's maritime 'buffer zone': JCS", Yonhap News Agency, 2 November 2022, available at: <https://en.yna.co.kr/view/AEN20221102010300325?section=nk/nk>; "(2nd LD) N. Korea fires 3 short-range ballistic missiles toward East Sea: S. Korean military", Yonhap News Agency, 4 November 2022, available at: <https://en.yna.co.kr/view/AEN20220307008954325?section=search>

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[4] "S. Korean F-15K fighter fires 2 JADAM precision bombs in response to N.K. missile launch", Yonhap News Agency, 4 October 2022, available at: <https://en.yna.co.kr/view/AEN20221004011100325>

[5] By Joori Roh, Josh, Michelle Nichols, "South Korea, U.S. fire missiles to protest 'reckless' North Korean test", Reuters, 5 October 2022, available at: <https://www.reuters.com/world/asia-pacific/skorea-us-military-launch-4-surface-to-surface-missiles-response-nkorea-missile-2022-10-04/>

[6] Michael Lee, "Vigilant Storm ends with more North Korean missile launches", Korea JoongAng Daily, 6 November 2022, available at: <https://koreajoongangdaily.joins.com/2022/11/06/national/defense/Korea-North-Korea-missile/20221106164513734.html>

[7] "On Report Made by Supreme Leader Kim Jong Un at Eighth Congress of WPK", KCNA, 10 November 2022, available at: <http://kcna.kp/en/article/q/4bd89fa5293bdf0a82d3f4323d1636e2.kcmsf>

[8] Rachel Minyoung Lee, "The Real Significance of North Korea's Recent Military Activities", 38North, 2 November 2022, available at: <https://www.38north.org/2022/11/the-real-significance-of-north-koreas-recent-military-activities/>

[9] "Law on DPRK's Policy on Nuclear Forces Promulgated", Rodong Sinmun, 9 September, available at: <http://www.rodong.rep.kp/en/index.php?MTJAMjAyMi0wOS0xMC1OMDAyQDE1QDFAQDBAMg==>

Appendix 2 Endnotes

[1] For more information see: Tianran Xu, "Analysis of the DPRK's Ballistic Missile Launch Campaign in September/October 2022", Open Nuclear Network, 14 October 2022, available at: https://opennuclear.org/publication/analysis-dprks-ballistic-missile-launch-campaign-septemberoctober-2022?language_content_entity=en

[2] Cynthia Kim and Josh Smith, "North Korea says missile tests simulate striking South with nuclear weapons", Reuters, 10 October 2022, available at: <https://www.reuters.com/world/asia-pacific/nkoreas-kim-jong-un-oversaw-tactical-nuclear-military-training-2022-10-09/>

[3] Hyonhee Shin, Josh Smith, "North Korea says launches were simulated attack, as South recovers missile parts", Reuters, 7 November 2022, available at: <https://www.reuters.com/world/asia-pacific/north-korea-says-south-korea-us-air-exercises-were-open-dangerous-provocation-2022-11-06/>

[4] Full KCNA album of the 2 to 5 November missile launch campaign available at: "Report of General Staff of KPA on Its Military Operations Corresponding to U.S.-South Korea Combined Air Drill", 7 November 2022, available at: <http://kcna.kp/en/media/photo/q/f4bf17a4b55717beb51b479bf73484f4e73212e708098c2c1dd27ac3b8f60650.kcmsf>

[5] Xu Tianran, "Increasing Nuclear Risk on the Korean Peninsula. The DPRK's Pursuit of Tactical Nuclear War-Fighting Capabilities", ONN, 25 April 2022, available at: https://opennuclear.org/publication/increasing-nuclear-risk-korean-peninsula-dprks-pursuit-tactical-nuclear-war-fighting?_ga=2.140504698.890229673.1668005434-1283166496.1626093903

[6] "详讯：韩军研判朝鲜越界发射SA-5防空导弹" [Detailed report: ROK military assessed that the missile flew across the NLL was a SA-5 SAM], Yonhap News Agency, 9 November 2022, available at: https://cn.yna.co.kr/view/ACK20221109002800881?site=lang_cn

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[8] NLL 이남에 날아온 'SA-5 지대공'...탄도미사일 궤적 [The SA-5 that flew across the NLL followed a ballistic trajectory], Yonhap News TV, 9 November 2022, available at: <https://www.yonhapnewstv.co.kr/news/MYH20221109013900038>

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OPEN NUCLEAR NETWORK

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One Earth Future's Open Nuclear Network programme is a non-aligned, non-governmental entity that seeks to increase security for all States by ensuring that nuclear decision makers have access to high quality, shareable open source information which enables them to make the best decisions in the face of escalating conflict.

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