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INTERNATIONAL PEACE

North Korean Nuclear Deterrence and Its Consequences

January 15, 2025

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"He would probably be there, anywhere between 1 a.m. and 3 a.m., would probably be gone before sunrise," he says.

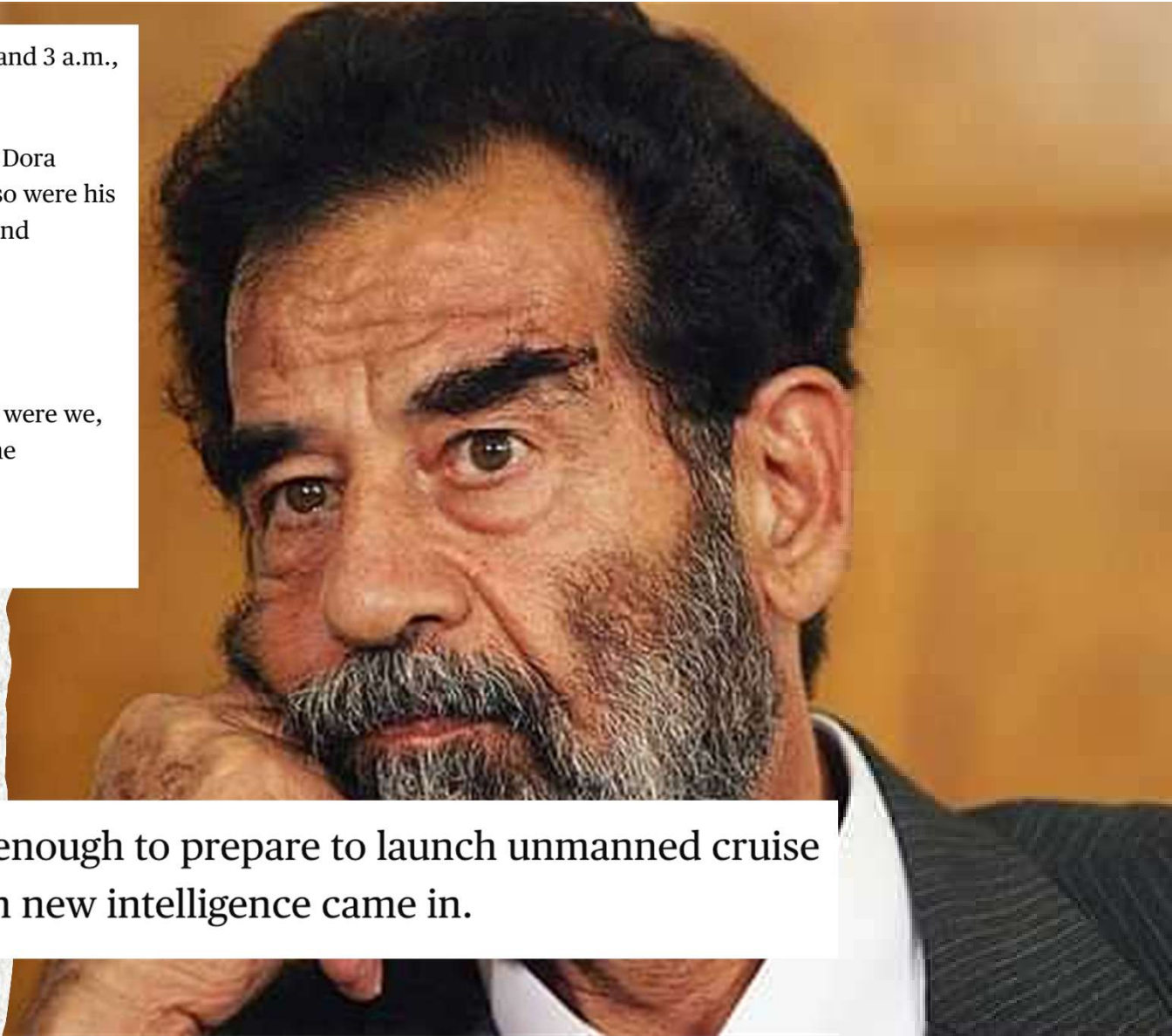
"There" was a palatial retreat outside Baghdad known as Dora Farms. Not only was Saddam supposed to be there, but so were his sons Uday and Qusay. A single strike could kill them all and perhaps head off war.

The president asked Rueda how confident he was.

"He asked a lot of questions about the sources, how sure were we, what the odds were," Rueda says. He put a number on the certainty for the president.

"I said it's about 60 to 70 percent," he says.

That was good enough to prepare to launch unmanned cruise missiles. But then new intelligence came in.



March 2003:

“...a virtual war-footing...”

“...longest disappearance
since 1994...”

- Axis of Evil
- North Korean NPT withdrawal notice
- Collapse of Agreed Framework





April 7, 2003 (Korean Central News Agency):

The UN [Security Council]'s discussion of the Iraq issue was misused by the U.S. as an excuse for war. The U.S. intends to force the DPRK to disarm itself. The Iraqi war shows that to allow disarming through inspection does not help avert a war but rather sparks it.

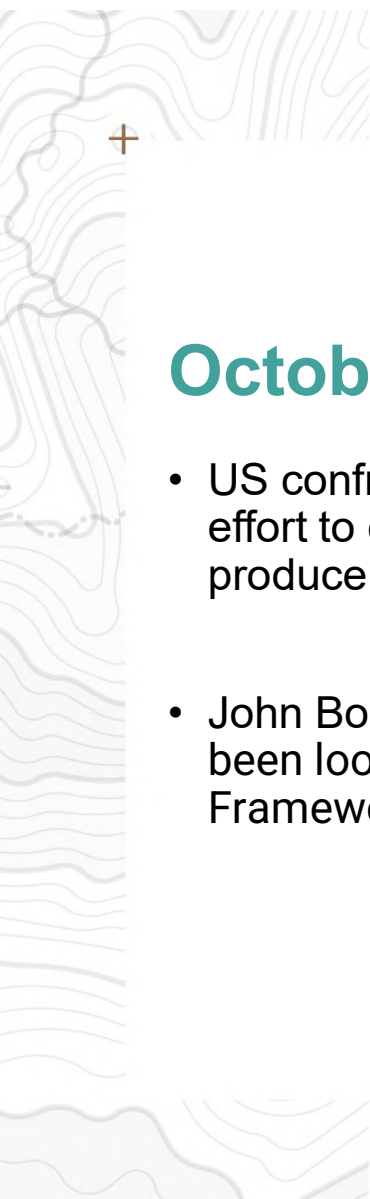
This suggests that even the signing of a non-aggression treaty with the U.S. would not help avert a war. Only the physical deterrent force, tremendous military deterrent force powerful enough to beat back an attack supported by any ultra-modern weapons, can avert a war and protect the security of the country and the nation.





US Ambassador Robert Gallucci and DPRK Vice Minister Kang Sok-ju sign the Agreed Framework. 21st October 1994

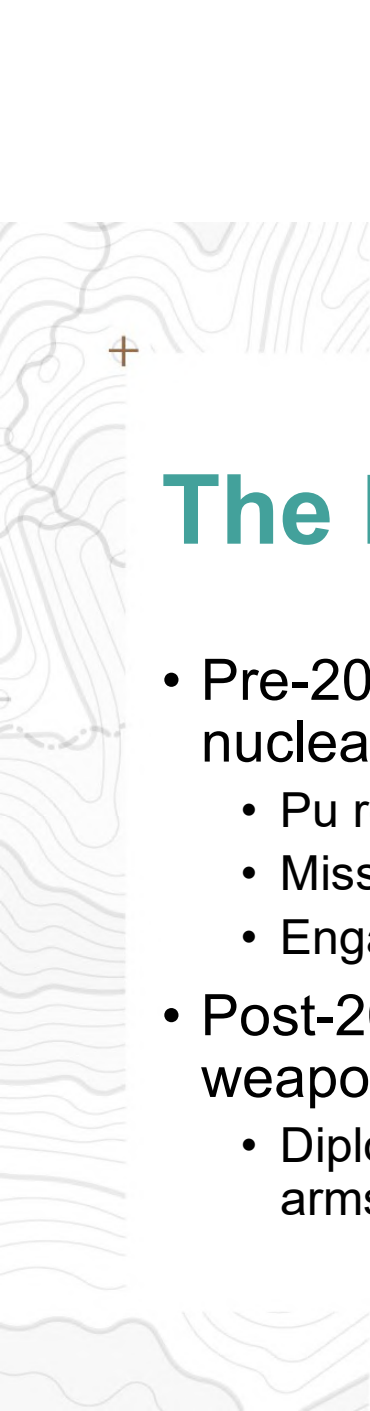




October 2002:

- US confronts North Korea about undeclared effort to establish a domestic capacity to produce highly enriched uranium.
- John Bolton: "This was the hammer I had been looking for to shatter the Agreed Framework."





The Late-2003/2003 Decision Point

- Pre-2003: Exploratory, uncertain, bargaining-oriented approach to nuclear experimentation and development:
 - Pu reprocessing and initial move toward HEU via AQ Khan
 - Missile development efforts modest; interest in onward proliferation for cash
 - Engagement with United States after loss of Soviet patronage and support
- Post-2003: Focus on deterrence and the “physical” power of nuclear weapons.
 - Diplomacy primarily a mechanism to buy time; determined to acquire nuclear arms against all odds.





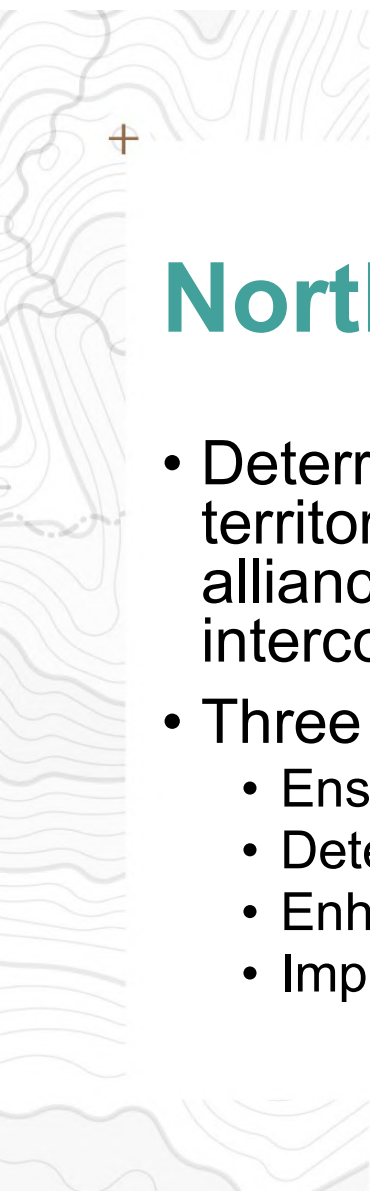
North Korea: A Primer

- Founded in 1948 (Workers' Party of Korea formed in 1945)
- Korean War (1950-1953)
- 26 million people (2025)
- GDP:~ \$28 billion (2023 estimate)
- Estimated 20-30% of GDP spent on military
- 1-1.2 million active-duty troops; 200,000 internal security forces
- Totalitarian governance system with effective hereditary monarchy



An aerial photograph of North Korea, showing a dense urban grid in the upper left and a large river flowing through the center. The entire image is overlaid with a semi-transparent teal color. The title 'North Korean Nuclear Strategy' is written in white, bold, sans-serif font across the lower half of the image.

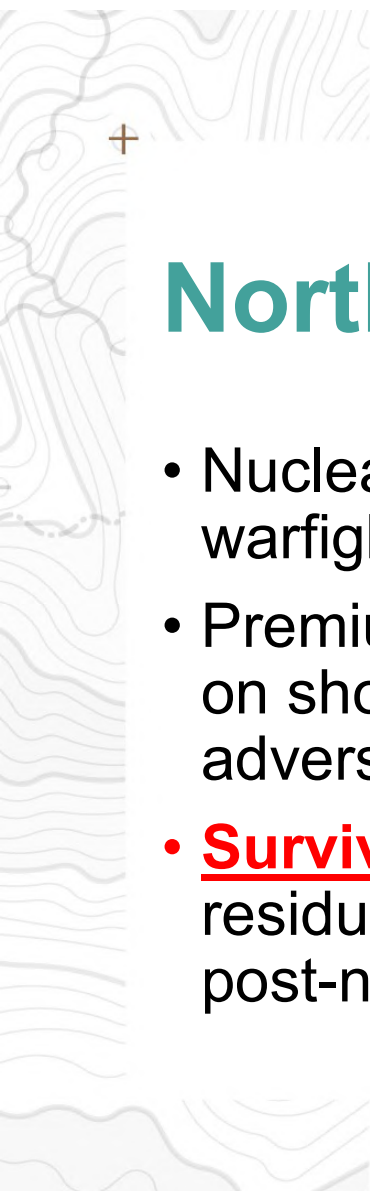
North Korean Nuclear Strategy



North Korean Nuclear Strategy

- Deterrence problem without precedent in nuclear age: deter territorially contiguous, conventionally superior, nuclear-backed alliance, and deter a global nuclear superpower at intercontinental ranges simultaneously.
- Three goals for nuclear weapons acquisition:
 - Ensure survival of regime through strategic deterrence
 - Deter aggression against territory
 - Enhance political autonomy and enable bargaining with adversaries
 - Improve country's international status and prestige

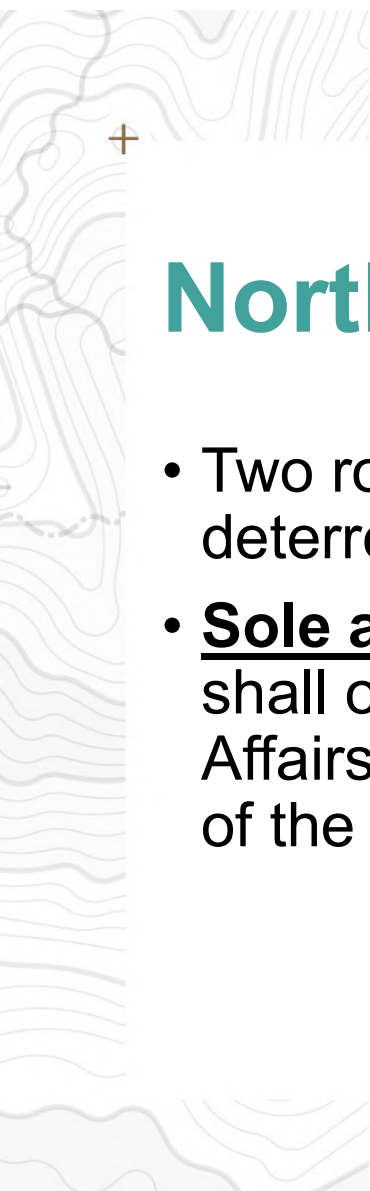




North Korean Nuclear Strategy, Cont.

- Nuclear weapons are an offset to limited conventional warfighting capacity.*
- Premium on nuclear first-use, with a low threshold: reliance on short-, medium-, and intermediate-range missiles to degrade adversary's conventional warfighting capability.
- Survivable intercontinental and regional countervalue residual capability essential for war-termination and survival post-nuclear use.



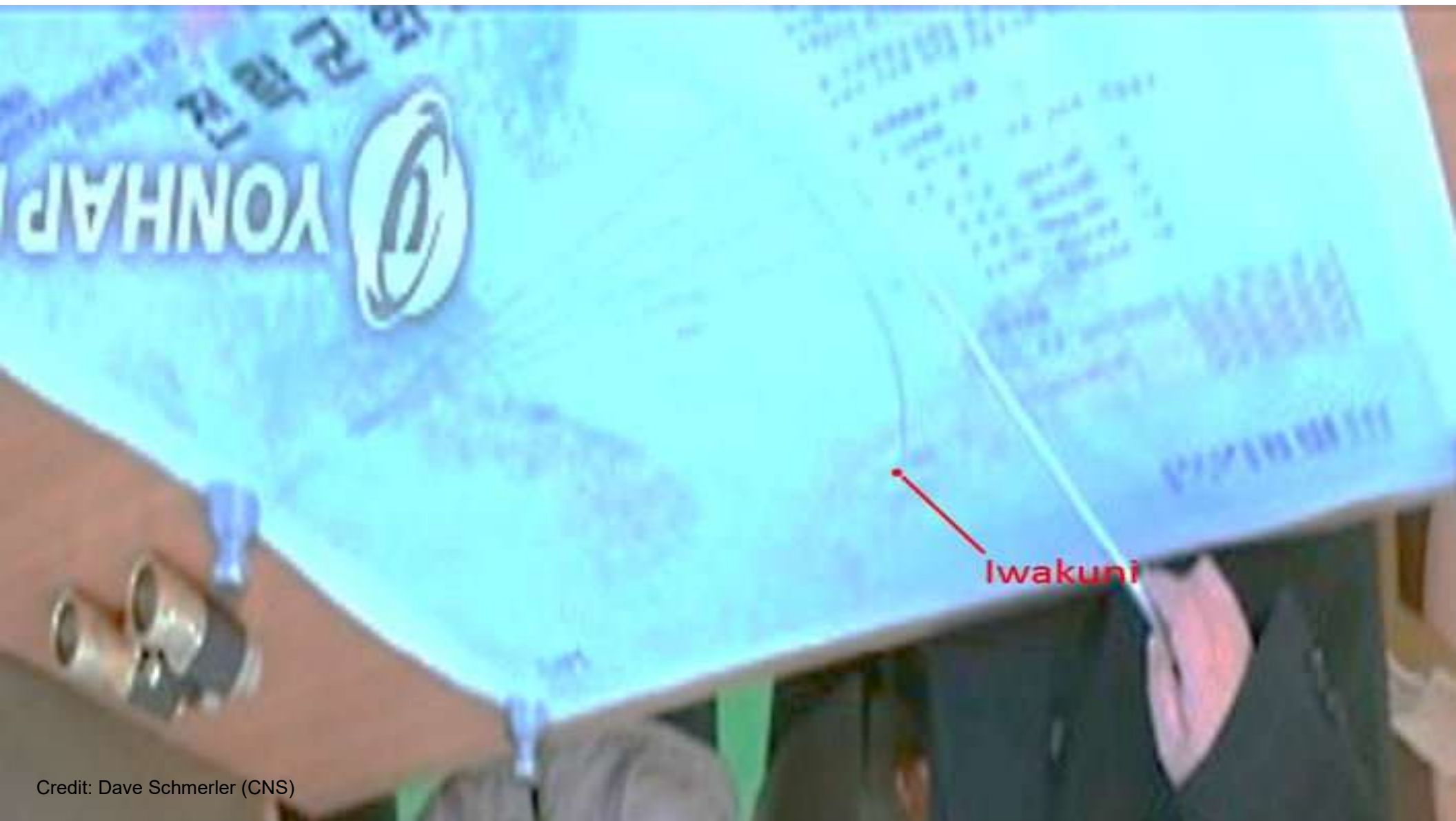


North Korean Nuclear Strategy, Cont.

- Two roles for nuclear weapons, per Kim: “deter” and, should deterrence fail, “repel” adversaries.
- **Sole authority** rests with Kim: “The nuclear forces of the DPRK shall obey the monolithic command of the president of the State Affairs of the DPRK.” (2013: ...can be used only by a final order of the Supreme Commander of the Korean People’s Army.)







Credit: Dave Schmerler (CNS)



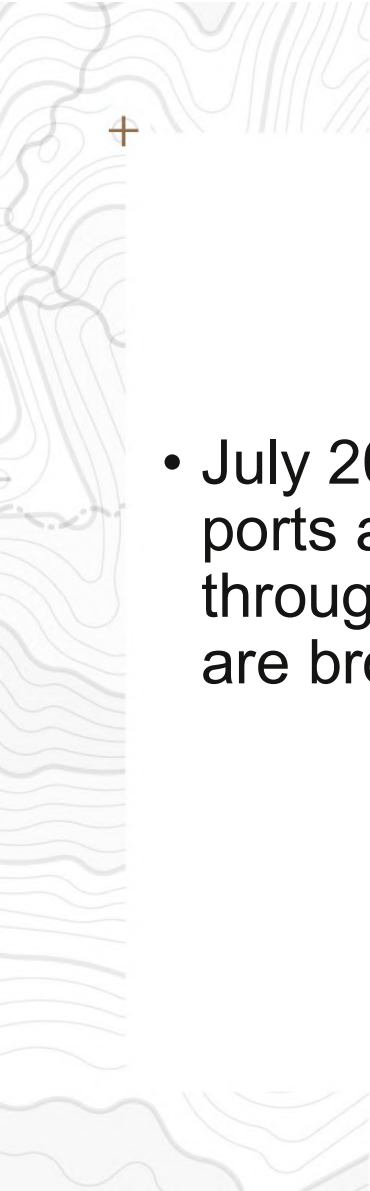
NEWS | Jan. 18, 2017

Lightning II Strikes Iwakuni, F-35B Arrives

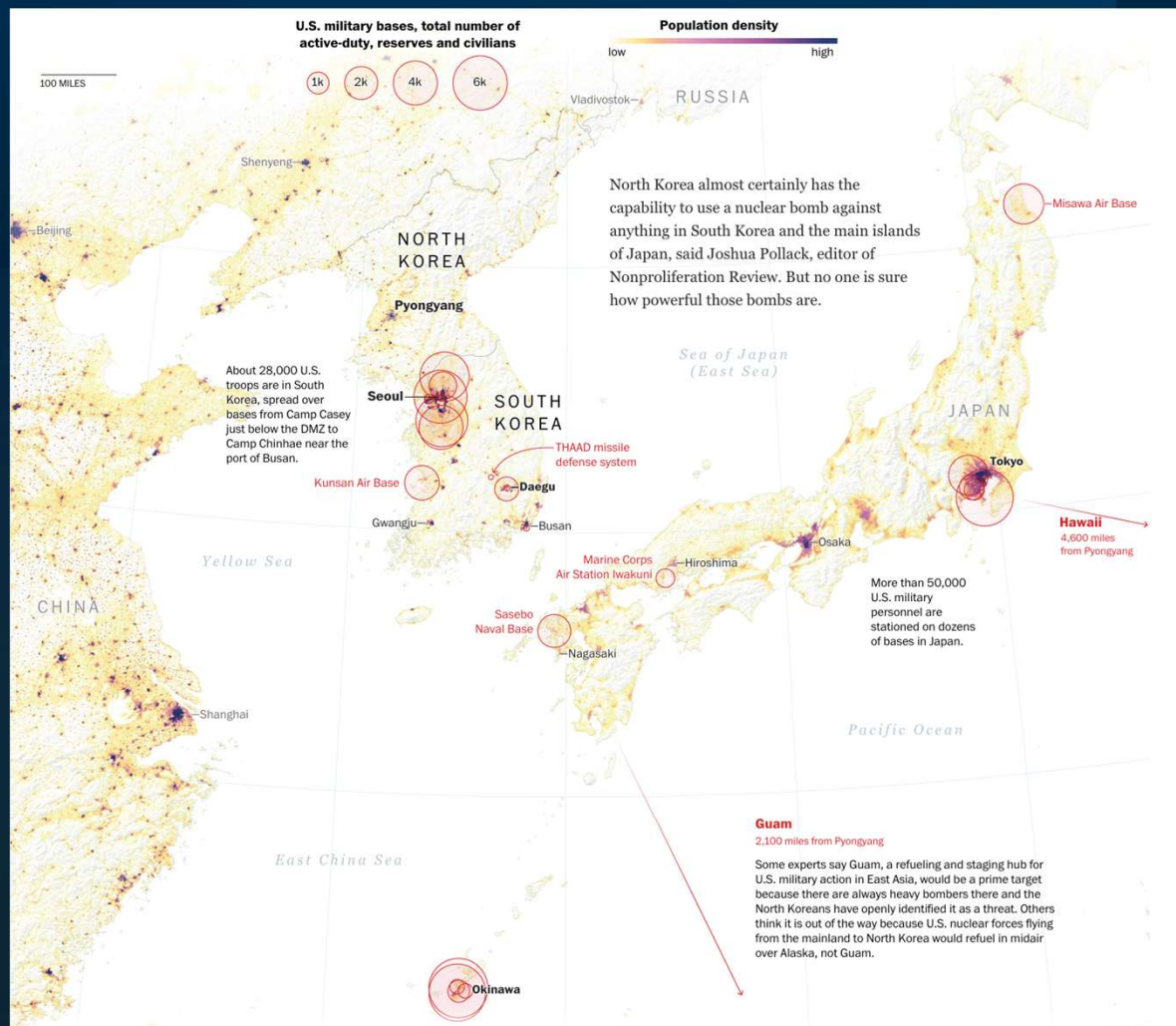
"If we notice any sign of assault on our sovereignty, our army will launch merciless military strikes against the US aggressors, wherever they may exist, from the remote US lands to the American military bases on the Korean peninsula, such as those of Japan and elsewhere."

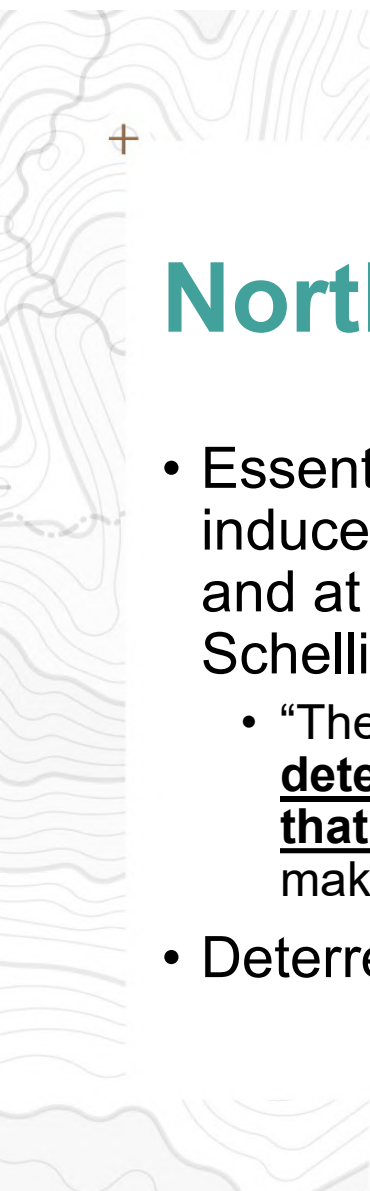
Sin Hong Chol, North Korean deputy foreign minister, April 2017

A decorative teal wave graphic at the bottom of the slide, consisting of two curved lines that create a valley shape, filled with a solid teal color.

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- A fragment of a topographic map is visible on the left side of the slide, showing contour lines and a small brown cross symbol.
- July 2016: Exercises to simulate “preemptive strikes on the ports and air-fields in the operational theater of South Korea through which nuclear war equipment of the U.S. imperialists are brought in.”







North Korean Nuclear Strategy, Cont.

- Essential belief in **existential deterrence**: nuclear possession will induce caution in great power adversary, including at low numbers and at low levels of reliability. (Weak nuclear revolution and Schelling's "uncertain retaliation".)
 - "The nuclear forces of the DPRK shall regard it as their main mission to deter war by making hostile forces have a clear understanding of the fact that the military confrontation with the DPRK brings about ruin, and make them give up attempts at aggression and attack." (2022)
- Deterrence depends on 3 Cs: **credible communication of capability**.





Regional nuclear forces **do not** offer a convincing answer for deterring US strategic retaliation.

Credit: Washington Post

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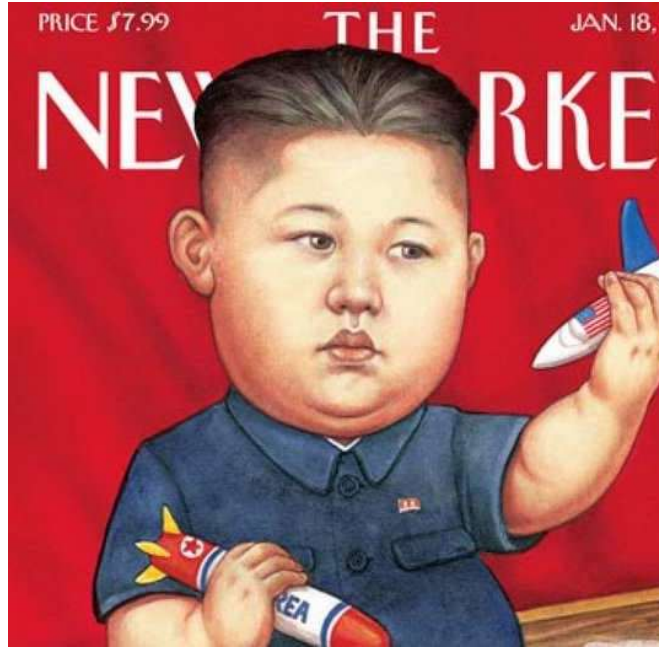








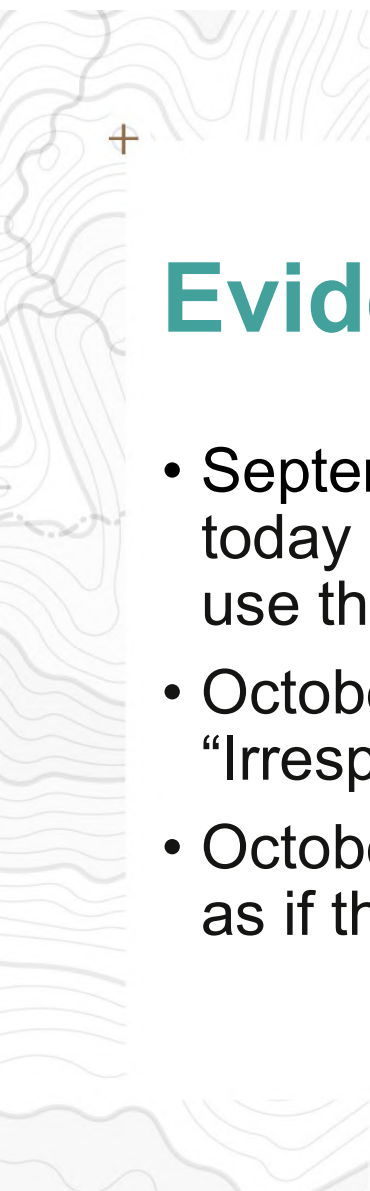
**“...fourth-rate
pipsqueak...”**



“New Toys”



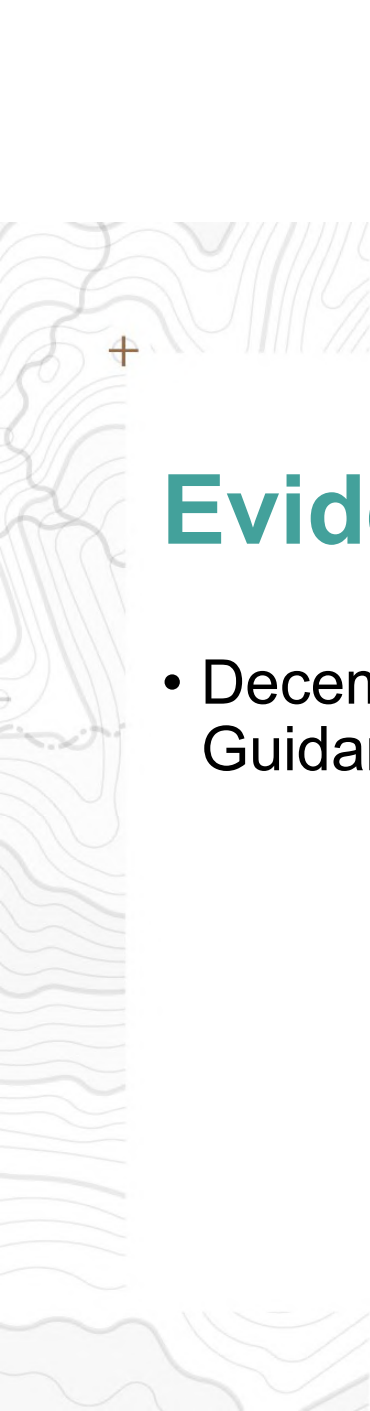
**“...all his rockets are
crashing...” – Trump,
to Philippine
President Rodrigo
Duterte, 2017**



Evidence of Change in US Views?

- September 2017: Gen. Dunford, US CJCS: “We should assume today that North Korea has that capability and has the will to use that capability.”
- October 2017: Gen. Hyten, US STRATCOM Commander: “Irresponsible” to not account for North Korean ICBMs.
- October 2017: CIA Director Mike Pompeo: “We ought to behave as if they are on the cusp of achieving [ICBMs].”





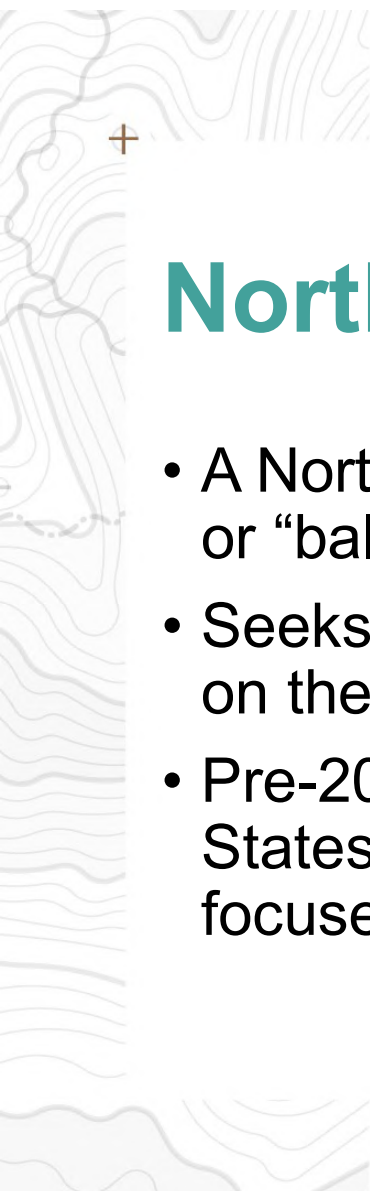
Evidence of Change in US Views?

- December 2024: Biden administration Nuclear Employment Guidance:

Security Environment

The United States confronts multiple nuclear competitors, with each adversary presenting unique challenges for U.S. strategists to confront, stressing strategic stability in diverse ways, and complicating deterrence challenges around the globe. Russia poses an acute threat with its large, modern, and diversified nuclear arsenal of strategic and theater-range weapons as well as its pursuit of novel nuclear systems. It has demonstrated its willingness to brandish nuclear weapons to shield its illegal and dangerous behavior. The People's Republic of China (PRC) has embarked on an ambitious expansion, modernization, and diversification of its nuclear forces and established a nascent nuclear triad. The PRC's lack of transparency and growing military assertiveness raise questions regarding its intentions, nuclear strategy, and doctrine. The Democratic People's Republic of Korea (DPRK) also continues to expand, diversify, and improve its nuclear, ballistic missile, and non-nuclear capabilities.





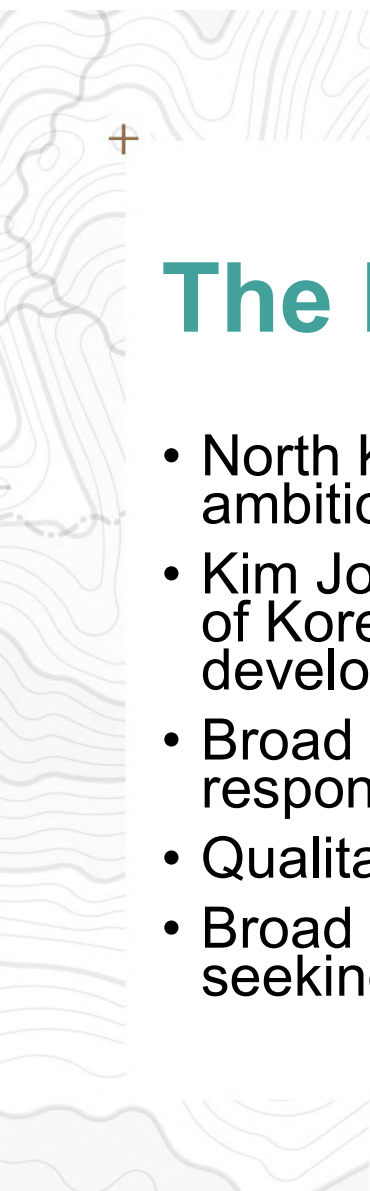
North Korean Nuclear Strategy, Cont.

- A North Korean theory of strategic stability: “equilibrium of force” or “balance of power”.
- Seeks the imposition of the condition of mutual vulnerability on the United States.
- Pre-2019: interested in new strategic bargain with the United States and a transition away from post-1991 nonproliferation-focused approach.



An aerial photograph of a city in North Korea, likely Pyongyang, is shown with a semi-transparent teal overlay. The image displays a dense urban grid, a river, and various industrial and residential structures. The text "North Korean Modernization (Post-2021)" is superimposed in white on the lower-left portion of the map.

North Korean Modernization (Post-2021)



The Big Picture

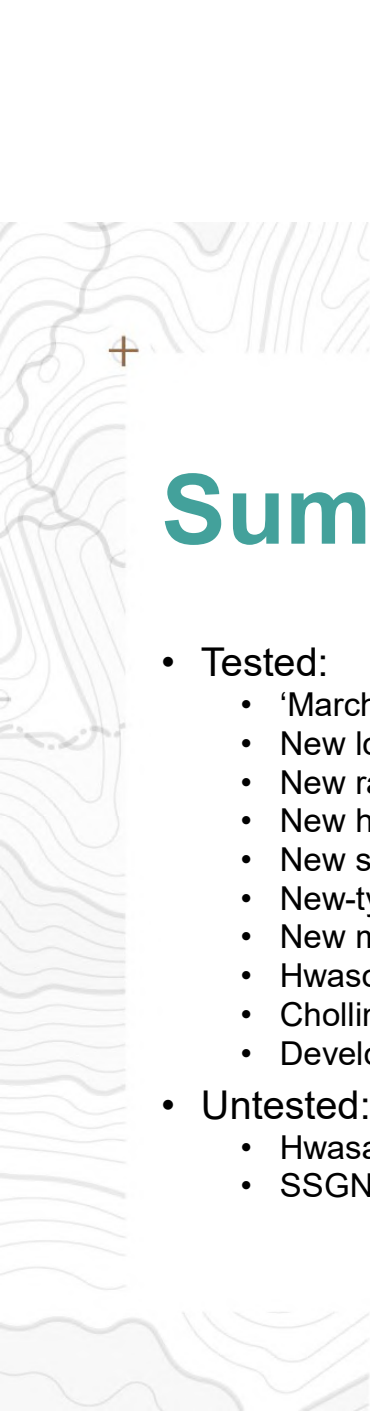
- North Korea is about to conclude a five-year plan, which includes ambitious military modernization objectives.
- Kim Jong Un's report to the 8th Party Congress of the Workers' Party of Korea in January 2021 foreshadowed many ongoing developments.
- Broad focus on rendering nuclear force more survivable and responsive. Missile defense penetration is another focus.
- Qualitative modernization and quantitative expansion continue.
- Broad strategic objectives include bolstering nuclear deterrent and seeking added leverage in future diplomacy with the United States.



Renewed National Defense Focus

- *“Every piece of those military hardware tells many unforgettable tales about our defence scientists and technicians and workers in the munitions industry who, following the Party, have braved all manner of difficulties on the road of defence upbuilding; it is also permeated with the blood and sweat of these scientists, technicians and workers, who have worked self-sacrificingly by devoting their enthusiasm and wisdom.”*
- Kim Jong Un, commemorative speech at the Defense Development Exhibition, October 12, 2021 (KCNA)





Summary of Changes

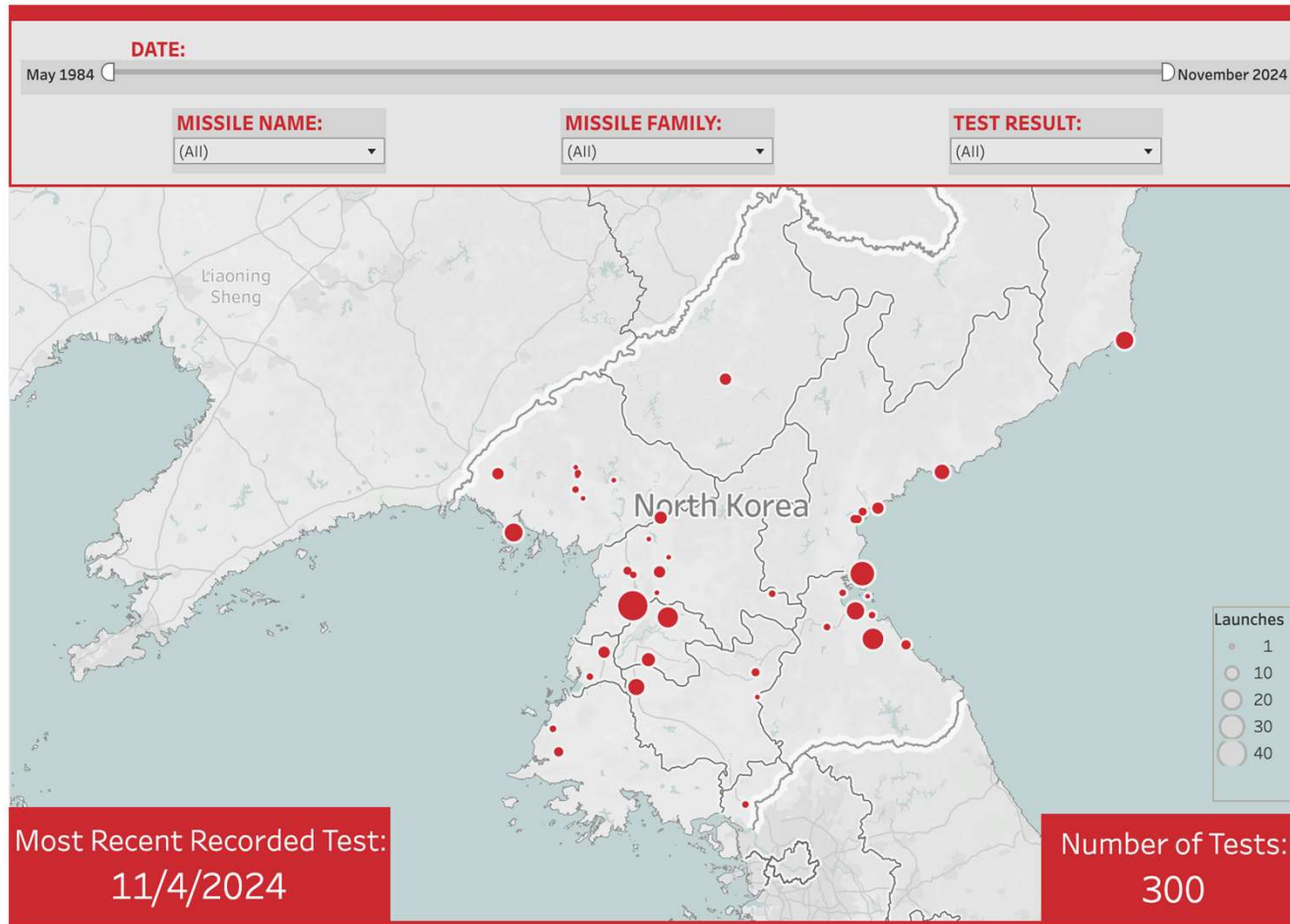
- Tested:
 - 'March 2021' SRBM: 2.5 ton claimed conventional payload; gliding flight
 - New long-range cruise missile ("strategic" weapon)
 - New rail-mobile basing mode for SRBMs (Railway Mobile Missile Regiment (철도기동미사일련대))
 - New hypersonic boost-glide vehicle (Hwasong-8)
 - New surface-to-air missile system
 - New-type submarine-launched ballistic missile
 - New maneuverable reentry vehicle-capable liquid-propellant missile
 - Hwasong-18/Hwasong-19 solid-propellant ICBMs
 - Chollima-1 SLV and Malligyong-1 military reconnaissance satellite
 - Developmental MIRV test
- Untested:
 - Hwasan-31 tactical nuclear warhead (and other possible warhead designs)
 - SSGN/SSBN (?)

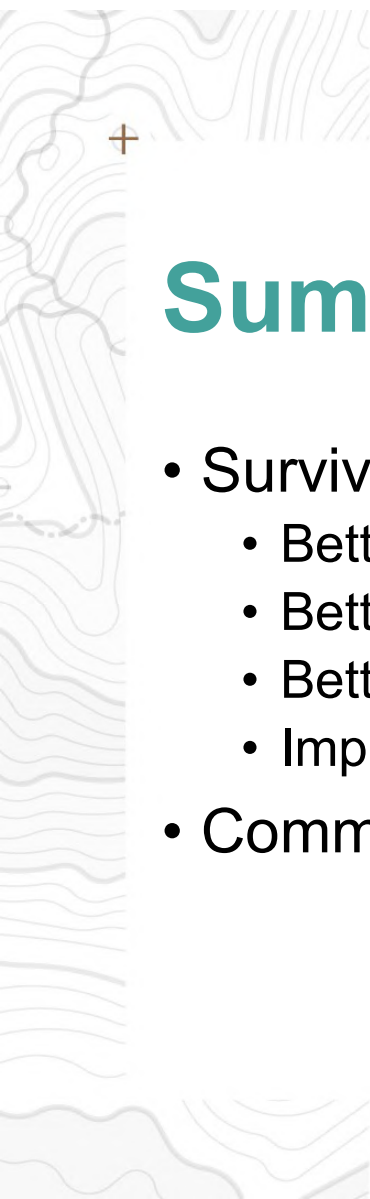


The North Korean Missile Test Tracker

Created by
CNSO

Funded by
NTI
BUILDING A SAFER WORLD





Summary of Changes

- Survivability improvements along multiple axes:
 - Better concealment (submarines, lake-basing, off-road mobility)
 - Better promptness (silo-basing SRBMs)
 - Better hardening (new tunnel networks and missile shelters)
 - Improved redundancy and complication of adversary targeting
- Command and control/situational awareness modernization

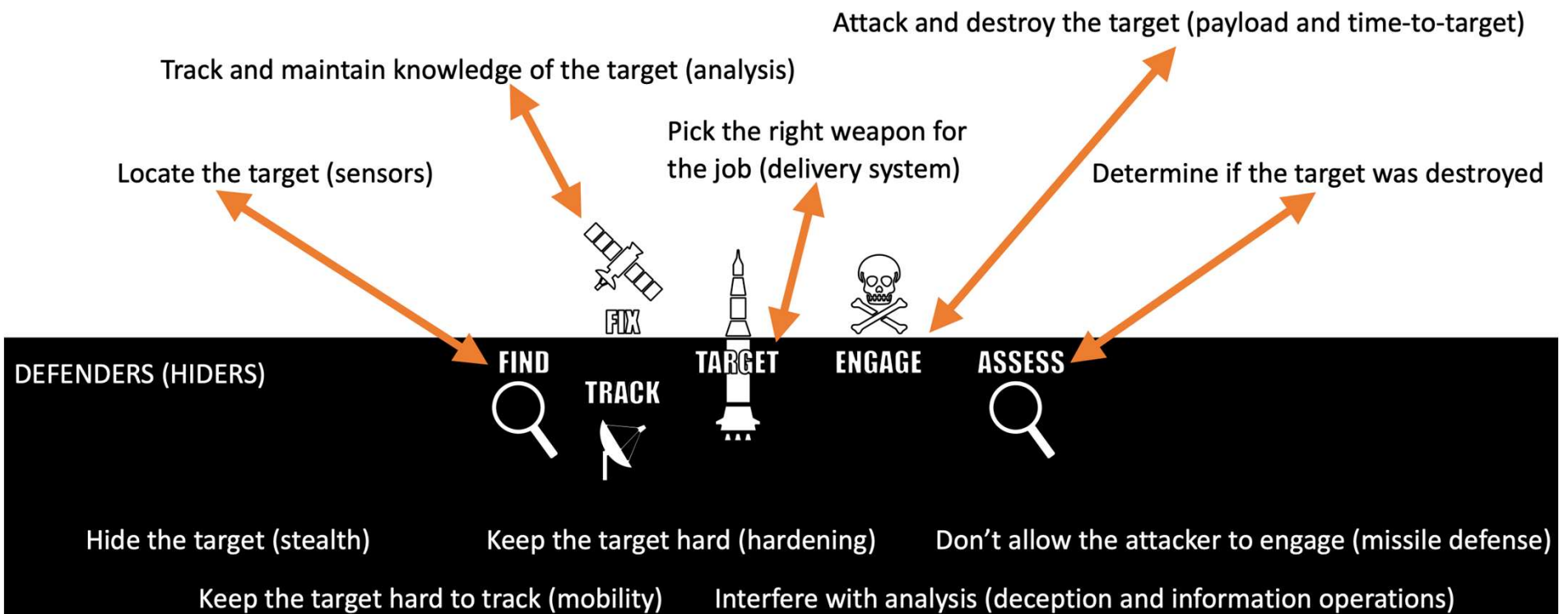


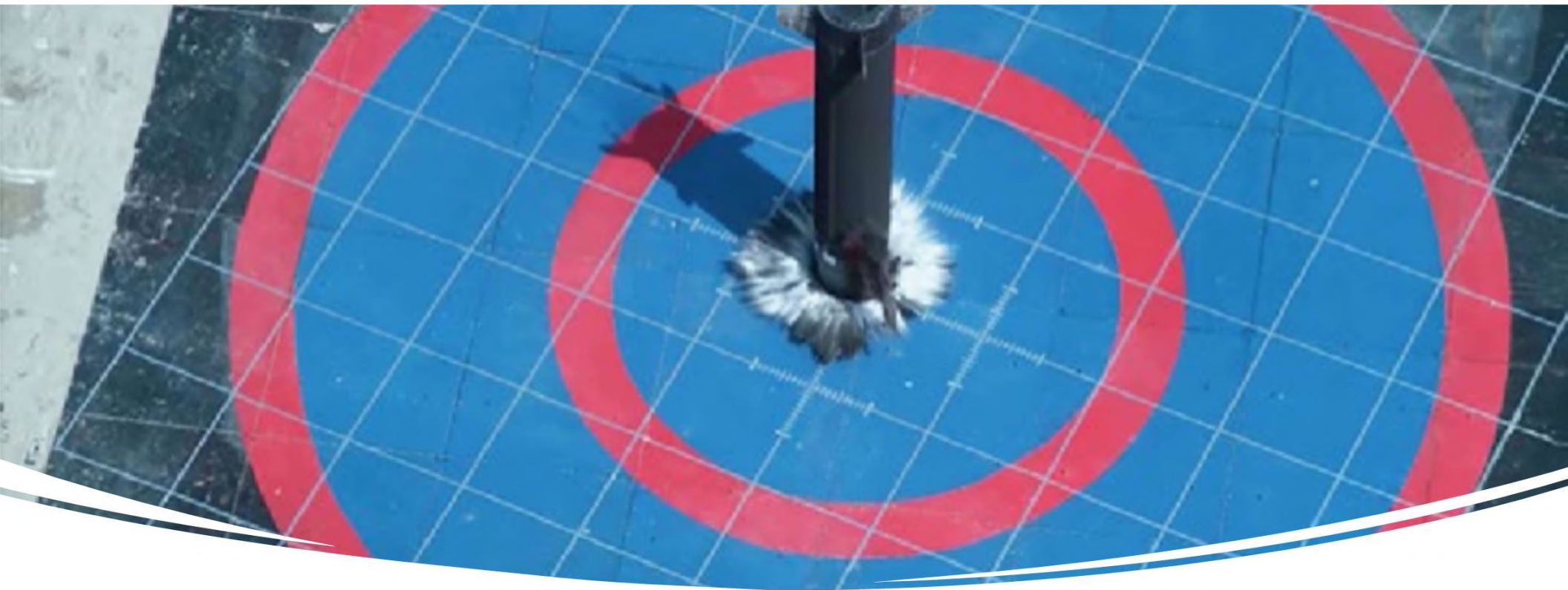






ATTACKERS (FINDERS)





The Decapitation Problem, Revisited

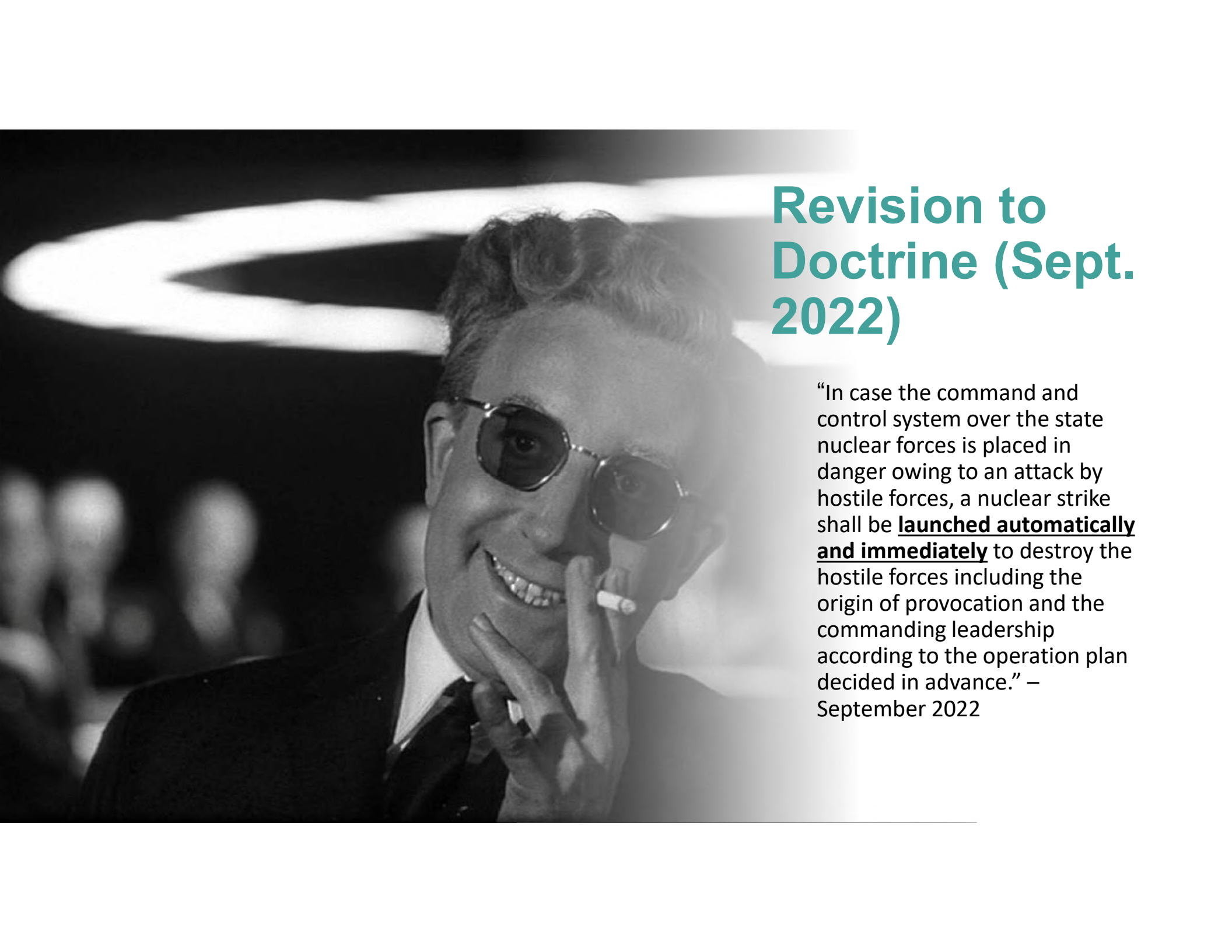
- South Korea pursues suite of advanced conventional “counterforce” capabilities.
- Includes doctrinal emphasis on decapitating leadership (Korea Massive Punishment and Retaliation) and Preemption (Kill Chain).



THE RECIPROCAL FEAR OF SURPRISE ATTACK

If I go downstairs to investigate a noise at night, with a gun in my hand, and find myself face to face with a burglar who has a gun in his hand, there is danger of an outcome that neither of us desires. Even if he'd prefer just to leave quietly, and I'd like him to, there is danger that he may think I want to shoot, and shoot first. Worse, there is danger that he may think that I think he wants to shoot. Or he may think that I think he thinks I want to shoot. And so on. "Self defense" is ambiguous, when one is only trying to preclude being shot in self defense.



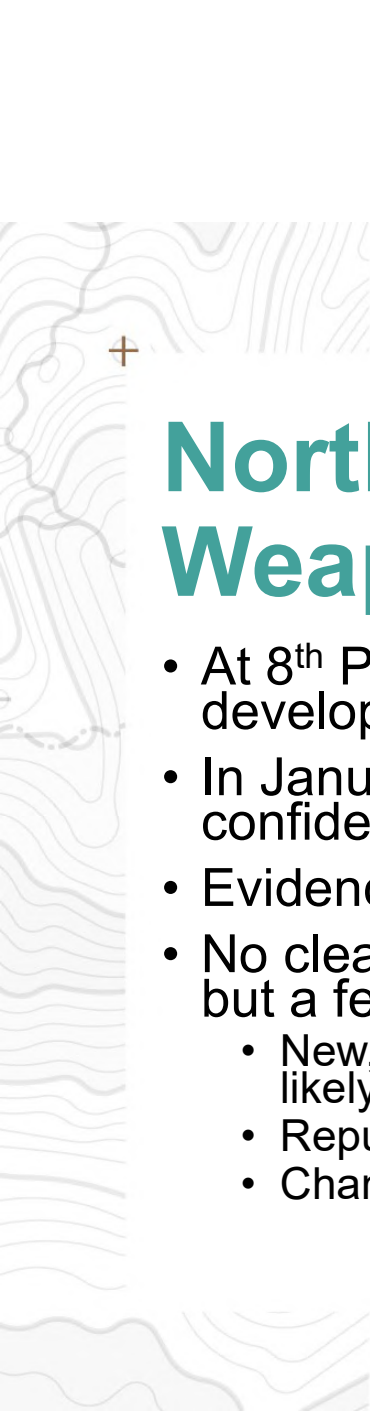


Revision to Doctrine (Sept. 2022)

“In case the command and control system over the state nuclear forces is placed in danger owing to an attack by hostile forces, a nuclear strike shall be **launched automatically and immediately** to destroy the hostile forces including the origin of provocation and the commanding leadership according to the operation plan decided in advance.” –
September 2022

An aerial photograph of Hiroshima, Japan, overlaid with a semi-transparent blue filter. The image shows the city's grid-like street pattern, the Yodoko River, and the atomic bombing site marked by a dark, irregular shape. The title 'Tactical Nuclear Weapons' is centered in white text.

Tactical Nuclear Weapons



North Korea Seeks Tactical Nuclear Weapons

- At 8th Party Congress, Kim Jong Un for the first time calls for the development of “tactical nuclear weapons” (“전술핵무기”).
- In January 2022, Kim, at Politburo meeting, calls to reconsider “all” confidence-building steps offered in April 2018 (moratorium).
- Evidence in recent years of reconstitutive activities at Punggye-ri test site.
- No clear definition of what tactical nuclear weapon means to North Korea, but a few options:
 - New, smaller warhead designs for lower-yield nuclear detonations (Pu-based most likely). Fissile material constraints?
 - Repurposing existing warheads for warfighting missions under aegis of “tactical” use.
 - Changes in procedural and technical nuclear command and control practices.



Post-2019: No Interest in Engaging the United States

- The Hanoi Summit was a costly embarrassment for Kim Jong Un.
- North Korea availing of great power competition to build closer ties with Russia; maintaining cordial ties with China (though some tension).
- Kim has suggested he will tolerate sanctions for “one thousand” years and will “never” disarm of nuclear weapons. (No more conditional statements.)
- Nuclear status embedded in state constitution and status of nuclear possession is “irreversible.”



An aerial photograph of a city, likely San Francisco, showing a dense urban grid, a large body of water (the bay), and a prominent bridge. The image is overlaid with a teal color. The text "5 Closing Observations" is written in white, bold, sans-serif font across the lower portion of the image.

5 Closing Observations

1. US-North Korea nuclear deterrence and “denuclearization”

- August 2022: US STRATCOM has a symposium on nuclear deterrence vis-à-vis North Korea
 - Biden administration nuclear employment guidance cites North Korea alongside Russia and China as a nuclear adversary
 - US military and IC increasingly seized of North Korean nuclear posture and strategy.
 - US policy community (including State Department regional bureaus) continue to prioritize “denuclearization” and a nonproliferation approach.
-

WORLD | ASIA

U.S. Confronts the Reality of North Korea's Nuclear Program

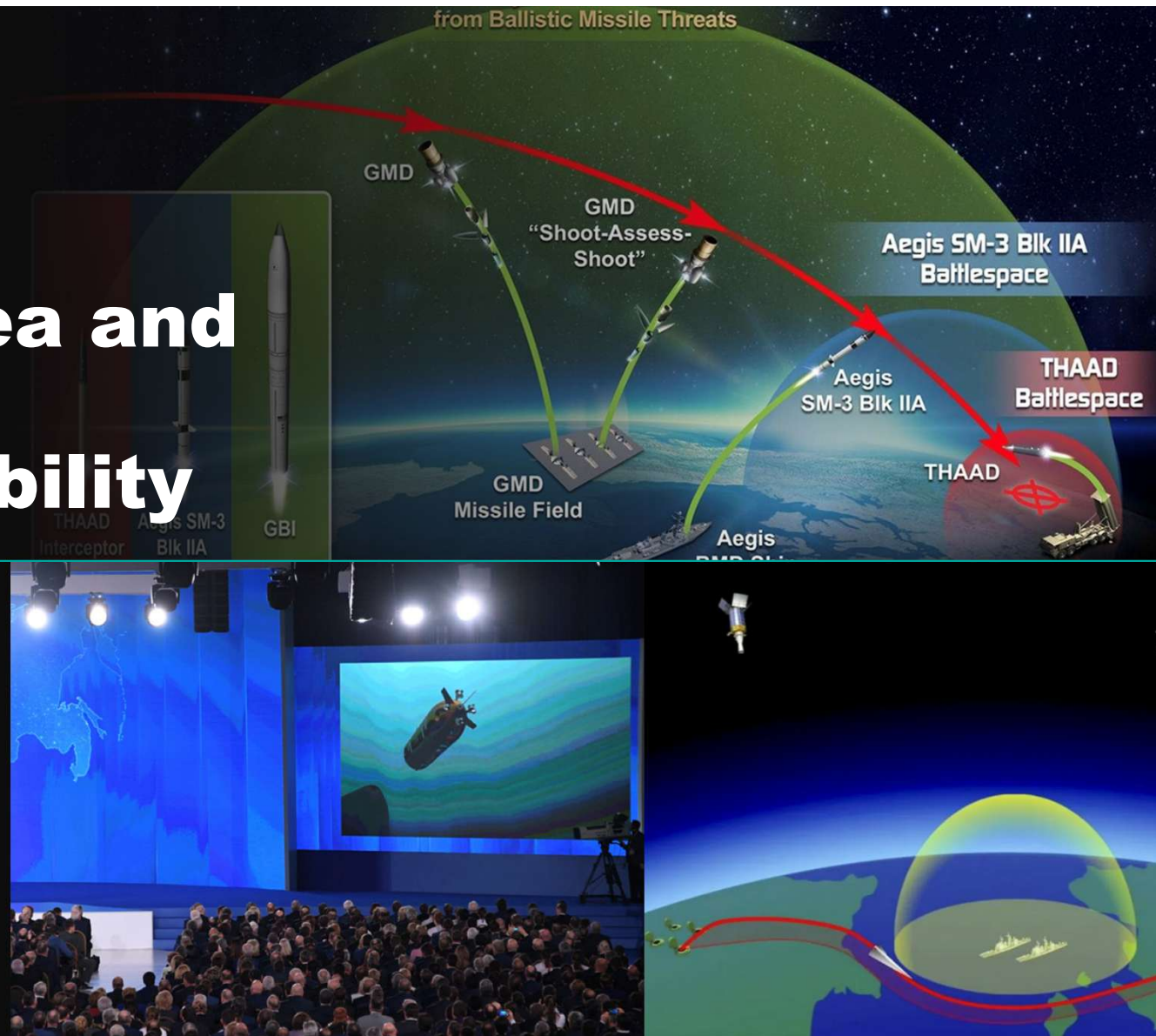
U.S. Strategic Command hosted first meeting on Pyongyang's weapons program; event showed priority is deterrence not disarmament, some participants say

By [Alastair Gale](#) [Follow](#)

July 20, 2022 9:00 am ET

2. North Korea and great power strategic stability

US focus on North Korea-oriented homeland missile defense prompts counter-reactions from Russia and China. Golden Dome will accelerate these dynamics.





3. South Korean proliferation pressures

Approximately 70 percent of South Koreans view nuclear weapons acquisition as beneficial.

In January 2023, Yoon Suk-yeol becomes first democratically elected US allied leader since the end of the Cold War to cite nuclear weapons a policy option.



4. An emboldened North Korea takes more risks

- Korean People's Army personnel in Kursk fighting alongside Russia.
 - This was North Korea's idea; not Russia's.
 - New Russia-North Korea alliance will have several longer-term consequences.
 - Loss of US diplomatic leverage vis-à-vis Pyongyang.
 - Renewed risks of onward proliferation.
 - Russian assistance shifts North Korean conventional and nuclear proficiency.
-





5. North Korea as the laboratory for US counterforce innovation

- US missile defense policy will continue to focus on North Korea; innovations (boost-phase concepts or space-based concepts) will have a role for North Korea.
- North Korea is seen as the most tractable AI-enabled counterforce ISR test case. (Likely over-hyped.)
- US and allied efforts on conventional-nuclear integration (ROK and Japan) will develop with a focus on North Korea, with implications for Russia and China.

"I'm a father and a husband. And I have children. And I don't want my children to carry the nuclear weapon on their back their whole life."

- Kim Jong Un, quoted by Andrew Kim (2019, said to Mike Pompeo in Pyongyang)

