

The Status of Nuclear Non-Proliferation in the Era of Renewed Russian Aggression

Aidan Keaveney

AIP Mather Policy Intern

Rep. Bill Foster (IL-11)

U.S. House of Representatives



Russia's Nuclear Threats

Putin publicly put Russian nuclear forces on high alert. What should we make of that?

March 29, 2022 · 4:25 PM ET
Heard on [All Things Considered](#)

Ukraine: Putin declares war and warns foreign powers of unprecedented 'consequences' if they interfere

The Independent, February 24, 2022

Russia's nuclear forces holding manoeuvre drills - report

Reuters, May 31, 2022

Nuclear Risks: Russia's Ukraine War Could End in Disaster

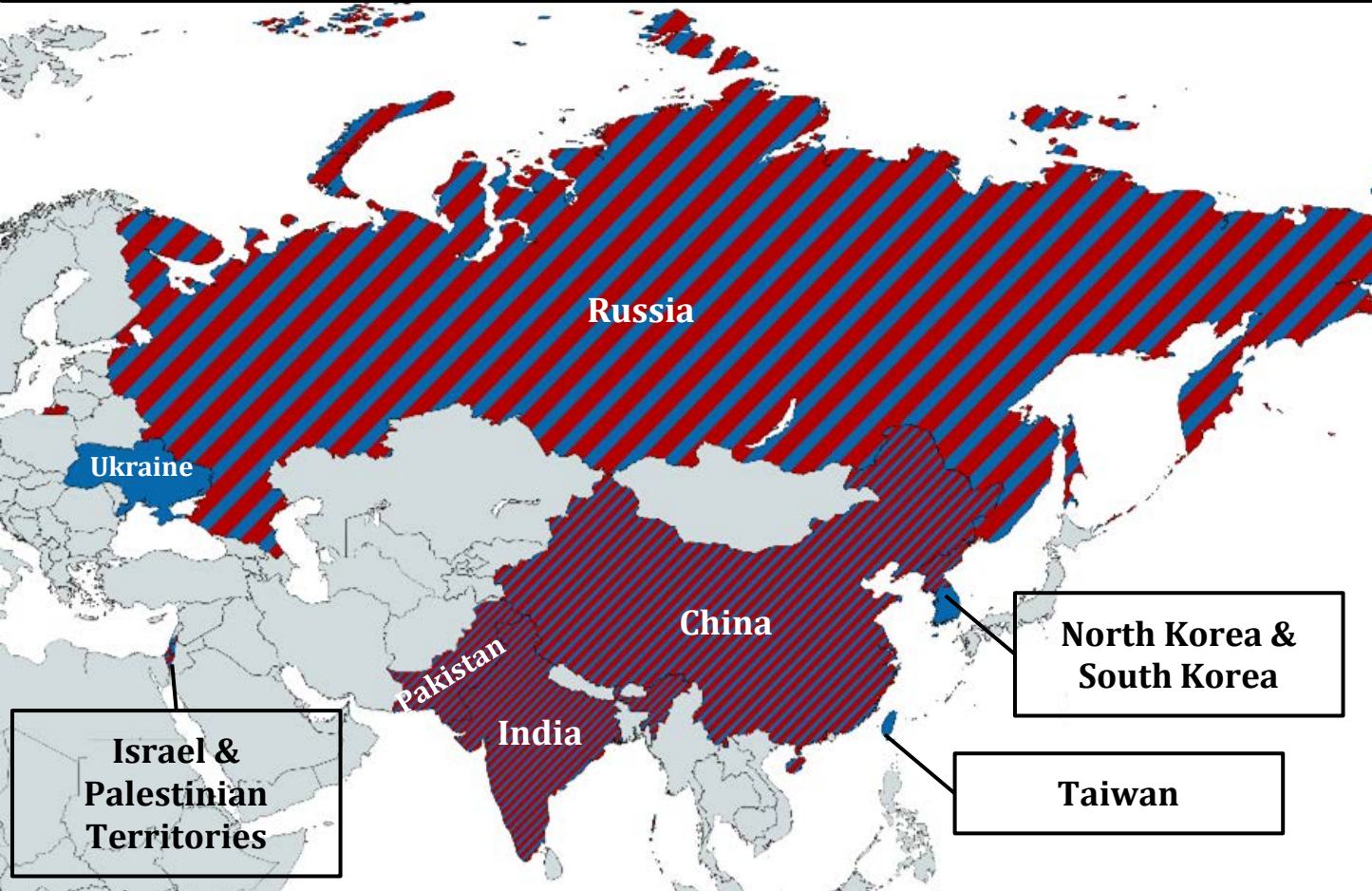
The National Interest, July 31, 2022

“So what message does this send to any country around the world that may think that it needs to have nuclear weapons to protect, to defend, to deter aggression against its sovereignty and independence? The worst possible message.”

“Regional actors with nuclear ambitions, such as Iran and Saudi Arabia, are watching closely.” ~ German Institute for International and Security Affairs



Border Conflicts & Nuclear States



Blue: States in Border Conflict

Blue/Red: Nuclear States in Border Conflict

Things to Think About

Short Term

Provide aid to Ukraine. Sanction Russia. Don't let Russia "win".

Medium Term

Re-enter negotiations to replace New START Treaty

Long Term

Continue to reduce our nuclear stockpiles. Advocate for diplomacy in other global conflicts.



Rep. Bill Foster's Leadership

- Translator of science
- Legislation to minimize risk of theft and accidents
- Amendments to various major appropriations packages
 - National Defense Authorization Act
 - CHIPS and Sciences Act

Closing Thought

**Scientists created this problem.
Scientists have to solve it.**

Acknowledgements and Thanks!

- Rep. Bill Foster & Team Foster
- Dr. John Mather & John and Jane Mather Foundation
- Society of Physics Students & American Institute of Physics
- Y'all :)



Scientists as Translators

“The IR-6 centrifuges being installed at Natanz are seven to eight times more efficient than the IR-1 machines Iran is allowed under the nuclear deal.

Enriching uranium to 20% purity and beyond also increases the potential for it being used for military purposes because the effort required to refine it to this point from its natural state is 90% of the total effort needed to get it to weapons grade.

The US-based Arms Control Association (ACA) said that once Iran had accumulated 170kg of 20%-enriched uranium, it would be able produce one bomb's worth, or 25kg, of uranium enriched to weapons-grade in less than two months.

Iran had about 17kg of uranium enriched to 20% purity as of mid-February and it has said it plans to produce 120kg in total during 2021. It is also currently producing nine grams per hour of 60%-enriched uranium.”

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