STRICTLY EMBARGOED UNTIL NOVEMBER 14, 9:00AM US eastern time

THE MISSILES ON OUR LAND

Confronting the risks of America's land-based nuclear missiles.

An investigation by the Princeton University's Program on Science & Global Security,
Nuclear Princeton, and Columbia University's School of Journalism,
in partnership with *Scientific American*.

PRESS CONTACTS

Sebastien Philippe, Princeton University, sebastien@princeton.edu

Nina Berman, Columbia University, njb22@columbia.edu

Laura Helmuth, Scientific American, laura.helmuth@sciam.com

ABOUT THE PROJECT

The United States has begun its biggest nuclear weapons project since the end of the Cold War. Every nuclear weapon, missile, submarine and bomber will be replaced at an estimated cost of $2 trillion. Within this project, one element stands out: the new Sentinel land-based missile program led by the US Air Force.

Four hundred new missiles, which will replace the current Minuteman III missiles, are to be deployed in underground concrete silos across five states in the Great Plains. The Air Force believes that to destroy these missiles, any adversary would have to launch such a massive nuclear attack on the United States that it would be too costly to contemplate.

We performed hundreds of nuclear war simulations to understand what would happen if the missile silos were attacked. We reviewed thousands of pages of Air Force documents, including the recent Sentinel Environmental Impact Statement. We conducted dozens of interviews in Washington DC, North Dakota, Montana, Wyoming, Colorado, Nebraska, and New Mexico with nuclear weapons experts, military officials, and members of the public, including those living amid the nuclear missile silo fields.

The MISSILES ON OUR LAND aims to provide information that everyone in the United States, and especially the communities living closest to the missile fields, need to know so that they can understand and be part of the discussion as to the full extent of the risks associated with deploying the new Sentinel nuclear-armed missiles.

The package includes a special issue of Scientific American, a documentary film, a podcast series, and a website with interactive maps. Further details are below.

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PACKAGE CONTENT

The **MISSILES ON OUR LAND** combines state-of-the-art simulations of the consequences of nuclear war with journalism, including podcasting, photography and cinematography to shed light on the consequences of the most significant nuclear weapons build-up since the end of the Cold War. The project includes:

The Missiles on Our Land, a webstory by Sebastien Philippe (Princeton Program on Science and Global Security) and Nina Berman (Columbia School of Journalism) on the human and environmental risks associated with the new Sentinel land-based nuclear missile program.

Under the Nuclear Cloud, an interactive map to explore the fallout consequences of nuclear strikes on US missile silos across North America, produced by Sebastien Philippe (Princeton University Program on Science and Global Security) and Katie Watson (Brown Institute for Media Innovation | Columbia University).

Fallout, a 23-minute video documentary directed by Nina Berman and Duy Linh Tu from Columbia University School of Journalism and produced by *Scientific American*. *Fallout* looks at the environmental legacy and current risks posed by the US government's plan to overhaul its nuclear weapons arsenal at a cost of nearly two trillion dollars.

The Missiles on Our Rez, a five-part investigative podcast by Ella Weber (Nuclear Princeton) and produced by *Scientific American* in partnership with the Princeton University Program on Science and Global Security and Nuclear Princeton. The Missiles on Our Rez explores the past, present, and future of nuclear missiles in the only Native American tribe hosting nuclear weapons in the United States.

In addition, *Scientific American* is publishing a Special Report: **The New Nuclear Age** in the December 2023 Issue. It includes three feature pieces:

- **Boom Times,** The new costs—and long shadow—of living in a nuclear nation
  By Abe Streep (journalist), Photographs by Nina Berman (Columbia School of Journalism), Edited by Jen Schwartz
- **Inside the Pit Factory,** For the first time in decades the U.S. is ramping up production of plutonium cores for nuclear weapons
  By Sarah Scoles (journalist), Edited by Clara Moskowitz
- **Sacrifice Zones,** What happens if silo-based nuclear missiles are attacked?
  By Sebastien Philippe (Princeton University's Program on Science and Global Security), Edited by Madhusree Mukerjee and Jen Christiansen

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On publication, the Scientific American special report can be accessed at the following URL: https://www.scientificamerican.com/report/the-new-nuclear-age

VISUAL ASSETS

Photos (credits to Nina Berman):
https://drive.google.com/drive/folders/1u8S7a-dTT5FNqyzjFAvVJXU5lR6X43n3?usp=drive_link

Maps (credits to Sebastien Philippe, Svitlana Lavrenchuk, Ivan Stepanov):
https://drive.google.com/drive/folders/1u93cNckL5vHHbOqFXmx11YLJkD7ToXHR?usp=sharing

CREDITS

Principal Investigators: Sébastien Philippe (PI, Princeton Program on Science and Global Security), Nina Berman (co-PI, Columbia School of Journalism), Ryo Morimoto (co-PI, Princeton Anthropology and Nuclear Princeton), Zia Mian (co-PI, Princeton Program on Science and Global Security)

Web story: Sébastien Philippe (Text), Nina Berman (Text and Photography), Zia Mian (Editing)

Film: Jeffery DelViscio (Executive Producer | Scientific American), Nina Berman (Director, Cinematography, Editing), Duy Linh Tu (Director, Cinematography), Sebastien Tuinder (Cinematography, Editing), Dominic Smith (Motion Graphics)

Podcast: Tulika Bose (Executive Producer and Editor | Scientific American), Ella Weber (Reporting, Hosting), Sebastien Philippe (Producer), Todd Whitney (Consultant | Brown Institute for Media Innovation), Jeffery DelViscio (Mixing and Production | Scientific American)

Data: Katie Watson (Design, Production | Brown Institute for Media Innovation), Sebastien Philippe (Production, Scientific modelisation, Data Analysis), Ivan Stepanov (Scientific modelisation, Data Analysis), Svitlana Lavrenciuc (Digital cartography, data visualization)

Website: Dominic Smith | Smith Robinson Multimedia

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ABOUT THE PARTNERS

Princeton University's Program on Science and Global Security (SGS), based in the School of Public and International Affairs, conducts scientific, technical and policy research, analysis and outreach to advance national and international policies for a safer and more peaceful world.

Nuclear Princeton is a research project at Princeton University that brings together Native American and other Indigenous students with researchers and faculty to explore the impacts of the nuclear age on Native lands and communities and to develop alternative narratives that center indigenous experiences and justice.

Columbia University's School of Journalism is one of the leading journalism schools in the world. It is also one of the oldest with more than 100 years of experience in educating journalism's future leaders and trailblazers. Its tradition is rooted in the bedrock values of journalistic ethics and excellence, but is also a leader of cutting-edge journalistic innovation and media scholarship.

The Brown Institute for Media Innovation is a collaboration between Columbia University and Stanford University, designed to encourage and support new endeavors in media innovation. At Stanford, the primary focus is on media technology, and the Institute is anchored in the School of Engineering. At Columbia, the primary focus is on content, and the Institute is anchored in the Graduate School of Journalism.

Scientific American covers the most important and exciting research, ideas and knowledge in science, health, technology, the environment and society. It is committed to sharing trustworthy knowledge, enhancing our understanding of the world, and advancing social justice. Founded 1845, Scientific American is the oldest continuously published magazine in the United States.