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Title: The continuing risk of nuclear war: How Citizen-scientists, can help reduce the threat

Abstract

"The public, including most physicists, and Congress, assume that, since the Cold War ended, the danger of nuclear war must have diminished to a negligible level. The danger of deliberate nuclear use has diminished but the danger of accidental nuclear war may be increasing. US and Russian strategic missiles remain in a launch-on-warning posture in an era when hackers have penetrated some of our supposedly most secure computer systems. Both Russia and the United States have halted their nuclear reductions at levels an order of magnitude higher than required by minimum deterrence. Both countries have committed to hugely costly programs to replace their nuclear weapons with new systems designed to maintain that status quo for the remainder of the century. And both are introducing hypersonic glide reentry vehicles with unpredictable trajectories. Meanwhile, an offense-defense nuclear arms race is developing between the US and China, which is building up the number of its nuclear weapons that can reach the US as the US increases the number of its ballistic missile interceptors – nominally to defend against North Korea.

In the past, independent physicists have played leading roles in informing Congress about the dangers and offering ideas for how to reduce them – both unilaterally and through agreements with our adversaries. The American Physical Society is supporting the engagement of more independent physicists and other physical scientists and engineers with this effort by cosponsoring a new Physicists Coalition for Nuclear Threat Reduction."

BIO: Prof. Frank N. von Hippel, a nuclear physicist by training, co-founded Princeton University's Program on Science and Global Security. The focus of his research and policy activism is nuclear arms control and nonproliferation. During 1993-4, he served as Assistant Director for National Security in the White House Office of Science and Technology Policy.