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COMMENTARY

Our Endangered Nuclear Weaponeers

No more nukes means no more experts, and their talents have kept us safe.

By J. Douglas Beason
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It takes a nuclear weaponeer to stop a nuclear weaponeer. And I should know.

In the 1990s, I designed nuclear bombs at Lawrence Livermore National Laboratory. In the 2000s at Los Alamos, I ran one of the largest programs to reduce the threat of weapons of mass destruction, directing hundreds of professionals who had worked for decades on all aspects of nuclear weapons. The background, experience and judgment of these weaponeers were responsible for successfully mitigating and preventing various nuclear threats, details of which are still classified.

The U.S. is now in danger of forever losing this talent that keeps the nation safe. That is a disturbing development, because the threat isn't going away. Iran is producing enriched uranium, North Korea in February detonated its third nuclear weapon since 2006, and terrorists continually seek this ultimate capability. The risk endures and is growing.

Policy luminaries such as former Defense Secretary William Perry and former Secretary of State George Shultz have called for the elimination of nuclear weapons, and the Obama administration embraces this goal. In a perfect world with complete transparency, a nuclear-free planet would be the ideal for ensuring peace.

But the world has pursued quixotic goals before and has repeatedly found that the genie can't be stuffed back in its bottle. The Versailles Treaty of 1919 and the Geneva Protocols of 1925 outlawed the use of chemical weapons. But this year, even after President Obama established a very clear red line, Syria used chemical weapons against its own citizens.

In 1980 the World Health Organization announced that it had eradicated smallpox. But the U.S. and Russia still hold small quantities of the virus in reserve to make vaccines if needed. The concern is that terrorists will weaponize the virus. Smallpox has been all but zeroed out, yet the world

can't afford to lose its ability to combat the disease.

Today, Russia stockpiles the greatest number of nuclear weapons on the planet. A handful of other countries—some allies of America, some not—have their own nuclear capability. Yet the Obama administration's strategy is to drive the U.S. stockpile to zero. The reasoning is that by reducing the country's weapons and its nuclear complex—people, resources and infrastructure—the U.S. will lead the way in reducing the nuclear threat. Others will then follow.

Aside from the inconvenient fact that others don't always adhere to treaties, there is a major problem in this calculus. The people who design, build and maintain America's nuclear weapons are the only ones who have the expertise to anticipate and deter the nuclear threats that adversaries dream up. They're the same men and women who build the sensors that can detect nuclear explosions from space. And they're the same professionals who know whether to "cut the red or blue wire" in a terrorist device.

When dealing with a threat this serious, we can't afford to have second-rate talent hastily trained in nearly forgotten methods. That's why the esoteric knowledge these first-string weaponeers possess—gained over decades working on nuclear weapons—is invaluable.

First-stringers have intimate knowledge of the materials and manufacturing processes to construct a nuclear bomb. They know how adversaries clandestinely store their weapons; how adversaries transport them, first within their own country, then across borders; and how adversaries hide a weapon's emissions so they can't be detected. Most important, first-stringers know how to stop a nuclear detonation.

To eradicate the nuclear threat, America needs to employ the world's best nuclear weaponeers. And although it seems paradoxical, the only way to do that is to maintain a nuclear stockpile—perhaps a small one, but a real one. We can't rely on models, simulations or non-nuclear substitutes to give first-stringers experience. There are too many subtleties involved with nuclear weapons to take a chance.

Zeroing out the U.S. nuclear stockpile means also zeroing out the nuclear-talent stockpile, with potentially catastrophic results.

Dr. Beason, a retired Air Force colonel, was the associate laboratory director for threat reduction at the Los Alamos National Laboratory in New Mexico and is now chief scientist of Air Force Space Command. The views expressed are his own and do not represent the U. S. Air Force.