

Dr. Bruce G. Blair, a national security scholar and global expert on nuclear weapons, died on July 19, one week after suffering a stroke. He was 72. Dr. Blair was one of the world's leading experts on nuclear command and control, and worked for decades to cast a bright light on the dangers posed by nuclear weapons and the overconfidence countries have in their control of these catastrophic arsenals.

Bruce Gentry Blair was born on November 16, 1947 in Creston, Iowa to Donald and Betty Blair (née Gentry). He received his Bachelor's degree in communications from the University of Illinois in 1970. After joining the United States Air Force, he became a Minuteman intercontinental ballistic missile (ICBM) launch control officer at Malmstrom Air Force Base in Montana and was charged with executing, along with his crewmates, a nuclear launch should the order come down from the president. He also served as a support officer for the Strategic Air Command's Airborne Command Post. It was during his service in these posts that Dr. Blair became intimately aware of the vulnerabilities of U.S. nuclear command and control systems — vulnerabilities he worked for decades to address. He spent the rest of his life working to protect humanity from the dangers posed by nuclear weapons and the flaws in their systems of control that could lead to their use by mistake, miscalculation, or madness.

During his time as an ICBM launch officer, Dr. Blair figured out how command officers could bypass the launch process and initiate a nuclear war without an authorized order from the commander-in-chief. After leaving the Air Force, Dr. Blair became a vocal advocate for changing this system, starting with his former superiors. Met with indifference and, in some cases, hostility, he later took his warnings to Congress. In 1977, the Air Force implemented unlock codes — an extra layer of security against unauthorized launch.

Dr. Blair served as project director at the former U.S. Congressional Office of Technology Assessment from 1982 to 1985, where he wrote a comprehensive study on nuclear command and control and early warning system vulnerabilities and the problems with launch on warning. His report became so highly classified that even its author lost access to it.

During this period, Dr. Blair received his Ph.D. in Operations Research from Yale University in 1984 and taught security studies as a visiting professor at Yale and Princeton universities. In 1985, his book, *Strategic Command and Control: Redefining the Nuclear Threat* (Brookings), winner of the Edgar S. Furniss Award for its contribution to the study of national security, provided a detailed look at U.S. nuclear command and control, and provided recommendations to strengthen these systems and improve stability. After investigations into Soviet, and later Russian, command and control and conversations with Soviet/Russian colleagues, Dr. Blair found similar, if not worse, vulnerabilities in their nuclear system. He detailed these dangerous weaknesses in his book, *The Logic of Accidental Nuclear War* (Brookings, 1993).

From 1987 to 2000, Dr. Blair was a senior fellow in the Foreign Policy Studies Program at the Brookings Institution, Washington D.C. His writings on nuclear command and control remain central works in the field and helped to inform an entire generation of nuclear and strategic experts, officials, academics, and activists.

In 1999, Dr. Blair was awarded a MacArthur Fellowship Prize for his work demonstrating “the instability of Cold War and post-Cold War missile command and control mechanisms, rendering them vulnerable to human and technical error, [and developing] compelling alternative proposals for ‘de-alerting’ nuclear weaponry that would substantially diminish the possibility of inadvertent nuclear strikes.”

A year later, as the world celebrated the new millennium, Dr. Blair, alongside a group of American and Russian experts at Peterson Air Force Base in Colorado Springs, monitored the two countries’ nuclear arsenals as the clock struck midnight in different time zones against any Y2K complications that could result in a false missile warning and possible subsequent nuclear launch.

In 2000, Dr. Blair founded and served as president of the World Security Institute (previously known as the Center for Defense Information), a nonprofit organization to promote independent research and journalism on global affairs. Under WSI’s International Media division, he published *Washington ProFile* (Russian), *Washington Observer* (Chinese), *Washington Prism* (Farsi), *Taqrir Washington* (Arabic) and *China Security* to educate global audiences on political, social, and cultural issues in the United States. He also created and was the executive producer of the PBS weekly television series *Superpower: Global Affairs Television* (2002-2004), and *Foreign Exchange*, first hosted by Fareed Zakaria (2005-2007) and later by Daljit Dhaliwal (2008-2009).

In 2008, Dr. Blair co-founded and launched, with Matt Brown, Global Zero, an international movement seeking the universal elimination of nuclear weapons, under WSI. The two served as executive producers of *Countdown to Zero*, a documentary film on nuclear weapons, released in 2010 at the Sundance and Cannes Film Festival and shown in theaters to critical acclaim around the world. Originally a project under the auspices of WSI, Global Zero became an independent organization in 2012, and Dr. Blair served as the principal author of groundbreaking Global Zero policy reports including the Global Zero Action Plan, a roadmap for the phased, verified elimination of all nuclear weapons globally.

Dr. Blair also served as the Founding Board Chairman of the Center on Global Interests, a nonprofit organization focusing on U.S.-Russian relations, and a member of the Supervisory Board of the International Luxembourg Forum on Preventing Nuclear Catastrophe. In 2011, Secretary of State Hillary Clinton appointed him to the U.S. Secretary of State’s International Security Advisory Board, to which he was re-appointed by Secretary John Kerry.

In May 2013, Dr. Blair joined the Program on Science and Global Security based at Princeton University as a Research Scholar where he continued his work on key technical and policy steps toward the verifiable elimination of nuclear weapons with a focus on deep bilateral nuclear arms reductions, multilateral arms negotiations, and de-alerting of nuclear arsenals.

In 2018, Dr. Blair was awarded The Simons Foundation Award for Distinguished Global Leadership in the Service of Peace and Disarmament.

Dr. Blair is survived by his wife Dr. Sally Onesti Blair, and children Carrie (Shivs), Erica (Lockney), Celia Paoro (Yin-Blair) and Thomas.