Honoring a Legacy of Service GEORGE H. Miller, the tenth director of Lawrence Livermore and a Laboratory legend, retired in December 2011 after to the Nation

BORGE H. Miller, the tenth director of Lawrence Livermore and a Laboratory legend, retired in December 2011 after 39 years of service to the nation. He also stepped down as president of Lawrence Livermore National Security, LLC (LLNS), which manages the Laboratory for the Department of Energy's National Nuclear Security Administration (NNSA).

Miller joined the Laboratory in 1972 and throughout his career was a critical force in strengthening U.S. nuclear security. As a nuclear weapons designer and project leader, he made important contributions to the development of modern nuclear weapons such as the B83 strategic bomb and the W84 warhead, which the U.S. Air Force deployed on its ground-launched cruise missiles. He rose from group leader to project manager for the W84 warhead (1978–1980), to division leader for thermonuclear design (1980–1984), to deputy associate director for nuclear design (1984–1985).

In 1985, Miller was selected as associate director for Livermore's weapons program. Anticipating that nuclear weapons testing would be limited in the future, he led the program toward a focus on high-performance computing and acquiring a more fundamental understanding of nuclear weapons performance.

From 1989 to 1990, he served in Washington, DC, as special scientific advisor on weapons activities to Admiral James Watkins, then Secretary of Energy, and Undersecretary John C. Tuck. During this time, Miller made important contributions in studying the transformation of the nuclear weapons complex, including how to dismantle weapons in a safe and secure manner.

Miller returned to Livermore to lead the Laboratory's nuclear weapons program as the Cold War was ending. He was instrumental in helping to formulate the Stockpile Stewardship Program, which was designed to sustain confidence in the safety, security, and performance of the nation's nuclear deterrence in the absence of nuclear testing. Stockpile stewardship required bold advances in computational and experimental capabilities. Under Miller's leadership, the Laboratory brought into operation the world's most powerful parallel computers, initiated the first successfully completed life-extension program (for the W87

warhead), and launched the effort to construct the National Ignition Facility (NIF). Miller also helped advance Laboratory programs in nonproliferation and arms control and in Department of Defense–related research.

Throughout his career, Miller tackled a variety of management and scientific challenges in support of national security. In 1999, when he became associate director for NIF, Miller assembled a new management team whose goal was to implement a revised project execution plan that put the facility's construction on track for completion in 2009.

Miller began his term as Laboratory director in March 2006. During his tenure, he led the institution through another significant transition when its management contract was transferred from the University of California to LLNS. Under Miller's leadership, as both Laboratory director and LLNS president, Livermore employees continued to deliver exceptional science and engineering while significantly improving the Laboratory's business and operations functions.

Miller also represented the Laboratory's national security programs to decision makers, not only in the Departments of Energy and Defense but also in other agencies of the executive branch as well as the U.S. Congress. He currently provides advice to the commander of the United States Strategic Command as a member of the USSTRATCOM Strategic Advisory Group and serves as chairman of the group's Science and Technology Panel.

Expressions of Gratitude and Thanks

On December 8, 2011, current Laboratory Director Parney Albright hosted a special tribute to honor Miller's contributions during his long and distinguished career—an event described as "celebrating a commitment to the Laboratory and to the nation." During the tribute, government officials and long-time colleagues,

Past and present directors of Lawrence Livermore and Los Alamos national laboratories attended the retirement celebration for George Miller (from left): Johnny Foster, Mike May, Miller, Mike Anastasio, John Nuckolls, Bruce Tarter, Sig Hecker, Parney Albright, and Charles MacMillan.



S&TR March 2012 Tribute to George Miller

speaking in person or as part of a videotaped presentation, offered their thanks and gratitude to Miller.

Donald Cook, deputy administrator for NNSA Defense Programs, presented Miller with the NNSA Administrator's gold medal for "distinguished service in the national security of the United States" and a glass globe representing the global importance of Miller's contributions. Cook read a message from Secretary of Energy Stephen Chu. "Our nation is safer and more secure due to your outstanding leadership," Chu wrote. Miller also received a crystal bowl from the University of California in honor of his service to the university and the nation.

University of California vice president Bruce Darling said, "George brings that E. O. Lawrence focus to the Laboratory. So everything is not about the Laboratory. It's not about George. It's not about programs at the Laboratory. It's about how the Laboratory can use outstanding scientists and engineers, the capabilities that they bring, all to put solely in the interests of the nation."

Ed Moses, principal associate director for NIF and Photon Science, said, "Everywhere he's been at the Lab, whether it was in the weapons program, or the laser program, or as the Director, the Lab has flourished. And he's always brought in when times are hard. When NIF was in trouble, who did the Lab turn to? George. And when we had to go through the contract renegotiation, who did the Lab turn to? George. And whenever there's a hard problem, George is the one we go to. And that's because of all his natural virtues and good judgment, and kindness, and I think, love he has for our Laboratory and for the country."

Former Secretary of State George Shultz said, "When George briefs you on something, what comes through is tremendous knowledge and complete credibility. You know what he is saying is true, or he wouldn't say it. And if he thinks there are question marks, he will tell you. There's that sense of total credibility."

Former Laboratory director Johnny Foster said, "I have the greatest respect for George Miller. He is an excellent scientist, engineer, and manager. And yes, he took charge of NIF, changed the management, and put that superb national facility on track for successful completion. He has dedicated his career to our national security, to this Laboratory, and to job one: the maintenance of a credible, reliable, and secure nuclear security future."

Paul Hommert, director of Sandia National Laboratories, said, "What I see from George is a really unique combination of passion, knowledge, experience . . . an approach to getting to the bottom line, to the essence of an issue."

Phil Coyle, former Livermore associate director and currently a senior advisor to the Center for Defense Information, described Miller as "a wonderful director and manager at the Lab and a fabulous colleague, but he's also, and always has been, a real scientist. In other institutions, the CEO might not know anything at all about the detailed work that scientists were doing. At Lawrence Livermore, the Lab director has always known in detail what the Lab employees were doing, and George has exemplified that like nobody else before him."



Tom Gioconda, Livermore deputy director, said, "Thanks to George's leadership, we have a really great future ahead of us. Difficult. Challenging. No question about it. But we're in a very strong position today."

Ellen Tauscher, undersecretary of state for Arms Control and International Security, noted that public service is "about moving from me to we" and commended Miller for exemplifying the humility and selflessness that comes from a career dedicated to service to the nation

California Senator Dianne Feinstein, said, "George and I may not have always shared the same viewpoint, but I always knew he would speak his mind. I always knew him as a straight shooter. And that's a quality I value tremendously. So George Miller, thank you for all you've done for our nation: four decades of public service is truly something of which to be proud. And I wish you the very best of luck in your next chapter in this great thing called life."

A Rewarding Career

In his remarks, Miller said the most rewarding aspects of his career are the accomplishments of employees and the Laboratory. "You are the soul and spirit of this Laboratory," he said, "and what has allowed it to accomplish so much in the service of our country. It's that sense of service that is in each and every one of you and that has come from our founders Ernest Lawrence, Edward Teller, and the University of California.

"This Laboratory has always embraced big ideas and big challenges. We were founded with two bold missions in mind: providing nuclear deterrence to secure the free world from a determined adversary and providing the world with a limitless source of energy—fusion. Both of these are still a work in progress in my view, and I look forward to your bringing them to fruition."

—Arnie Heller

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