



Message from Terry Wallace

Innovation in the Service of Mission

Los Alamos was formed in the crucible of national need during World War II, with a mission to produce the world's first fission weapon. Robert Oppenheimer, the Laboratory's first director, recognized that while the "mission" could define the product, the scientific path to producing the product was unpredictable. To succeed, the Laboratory would need a broad scientific base and the best and brightest people. Oppenheimer established and fostered those "capabilities," and Los Alamos built the first atomic bomb in just two and a half years. In the succeeding decades, the challenges presented to Los Alamos changed, but the Laboratory's solid scientific and engineering capabilities allowed it to be responsive to national need. In 1962 President Kennedy visited Los Alamos and expressed the rationale for the Laboratory: "It is not merely what was done during the days of the second war, but what has been done since then, not only in developing weapons of destruction which, by irony of fate, help maintain the peace and freedom, but also in medicine and space and all other related fields, which can mean so much to mankind."

Today, the Laboratory's mission is undergoing tremendous change because of major new challenges to national security. Access to energy resources is now of vital concern, and research is needed to develop and perfect alternative, renewable energy sources. Just as important is the exchange of information, which is one of the central pillars of the nation's economy and which relies on an infrastructure of databases, communication satellites, and the Internet, all built in the last 30 years. The need to protect that fragile infrastructure and maintain the command and control of our utilities poses a tremendous security challenge. Los Alamos is being asked to provide powerful solutions to these new problems, and as in Oppenheimer's time, innovation will be central to our efforts. The Laboratory's innovative spirit is much in evidence at the Trident facility, in the Milagro project's detection of high-energy gamma rays, and in the development of web-based research tools, all addressed in this issue of 1663. Our response to the nation's call is still only as good as the capabilities we have built here. Creativity and innovation are our greatest capabilities.