Sandia grew out of America’s World War II effort to develop the first atomic bombs. Today, keeping the U.S. nuclear stockpile safe, secure and effective is a major part of Sandia’s work as a multidisciplinary national security engineering laboratory. Sandia’s role has evolved to address the additional complex threats facing our country. Sandia carries out research and development in:

**Nuclear Weapons** – Supporting U.S. deterrence policy by helping sustain, modernize and secure the nuclear arsenal.

**National Security Programs** – Providing advanced defense, deterrent and intelligence technology and analysis to strengthen our nation’s defenders.

**Defense Nuclear Nonproliferation** – Developing systems to monitor emerging threats, protecting nuclear assets and materials, and addressing nuclear emergency response and nonproliferation worldwide.

**Energy & Homeland Security** – Ensuring stable energy resources, protecting the grid and physical infrastructure, and helping protect the nation against nuclear, radiological, chemical and biological threats.

**Advanced Science & Technology** – Fundamental science to promote national security, economic competitiveness and improved quality of life.

Sandia’s science, technology and engineering foundations enable our unique mission. The laboratory’s highly specialized research staff is at the forefront of innovation, collaborating with universities and companies and performing multidisciplinary science and engineering research programs with significant impact on U.S. security.

**People**

Sandia’s staff of about 12,300 includes more than 6,500 with advanced degrees.
Sandia people work at the laboratories’ headquarters in Albuquerque, New Mexico; at a second lab in Livermore, California; and at other sites including Carlsbad, New Mexico; Las Vegas and Tonopah, Nevada; Amarillo, Texas; and Kauai, Hawaii.

Budget
Sandia’s operating costs were about $3 billion in fiscal year 2017.

Capabilities
Meeting tomorrow’s national security challenges will require readiness, excellence in engineering and rapid innovation. Sandia will help the nation solve significant problems with core capabilities in:
- Systems engineering and integration
- High-performance computing, as well as modeling and simulation
- Extreme-environment testing at unique facilities
- Nanotechnologies and microsystems

Collaboration
Sandia’s customers and collaborators include many federal, state and local agencies, companies and academic institutions. Partnerships are formed through cooperative agreements, licensing, technical assistance, centers of excellence, use of unique Sandia facilities, personnel exchanges and other mutually beneficial arrangements.

Achievements
Sandia has pioneered such products as cleanrooms for microelectronics manufacturing, triggers for automobile airbags and high-resolution radars that see through clouds and darkness. Recent achievements include:
- These major NNSA nuclear weapons programs executed on time and on budget: B61-12, W88 ALT 370, Mk21 Fuze, and W80-4
- Satellite sensors that help the nation monitor worldwide nuclear activity from space
- A device known as the Air Bearing Heat Exchanger or “Sandia Cooler,” with the potential to dramatically alter the electronics chip-cooling landscape in computing
- New technology that dramatically improves the endurance of legged robots to aid in disaster response
- An adaptive zoom riflescope prototype that would be easy for soldiers to use, light-weight and extremely accurate