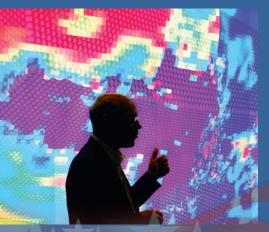
# Sandia National Laboratories

Exceptional service in the national interest







Sandia's highest goal is to become the laboratory the United States turns to first for innovative, science-based systems engineering solutions to the most challenging problems that threaten peace and freedom for our nation and the globe.

Sandia grew out of America's World War II atomic bomb development effort. Today, keeping the U.S. nuclear stockpile safe, secure, and reliable remains a major part of Sandia's work. But Sandia's role has evolved to address the more complex national security threats facing our country.

Sandia carries out research and development in:

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

**Defense Systems & Assessments** – Supplying new capabilities to our defense and national security communities.

**Energy, Resources, & Nonproliferation** – Ensuring the stable supply of energy and resources, and preventing the spread of nuclear, chemical, and biological materials worldwide.

**Homeland Security & Defense** – Securing society against high consequence terrorist threats and national incidents, and protecting our military at home and abroad.

Sandia's Science, Technology, & Engineering foundation enables Sandia's mission through a capable research staff working at the forefront of innovation, collaborative research with universities and companies, and discretionary research projects with significant impact.

## **People**

Sandia's staff of 8,400 includes more than 5,100 technical employees and 1,500 PhD engineers and scientists. Our people work at the Lab's headquarters in Albuquerque, New Mexico; at a second principal lab in Livermore, California; or at several other sites in the U.S. and abroad, including Carlsbad, New Mexico; Las Vegas and Tonopah, Nevada; Amarillo, Texas; and Kauai, Hawaii.

## **Budget**

Sandia's fiscal year 2008 budget is \$2.398 billion.

## **Capabilities**

Meeting tomorrow's national security challenges will require readiness and rapid innovation. Sandia will help the nation solve significant problems with core capabilities in:

- High-performance computing, modeling, and simulation
- Extreme-environment testing at unique facilities
- Intelligent microsystems
- Nanotechnologies

We will serve as a center for innovation and creativity – a place where science, technology, and national security intersect, where the nation's best engineers, innovators, and educators partner to solve problems and train the next generation of scientists and engineers.

#### **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:

- Arrays of micro probes that, when pressed against the skin, sample a patient's blood or tissue
- Sensors, deployed at the 2008 Super Bowl and Rose Bowl, that warn of airborne chemical agents
- Partnership in the Joint BioEnergy Institute to study the efficient production of biofuels for cars and trucks
- Satellite sensors that help the nation monitor worldwide nuclear activity from space
- Improved nuclear weapons components that will help maintain U.S. strategic deterrence far into the 21st century
- A solar machine capable of converting air pollutants to liquid fuel

For more about Sandia, visit www.sandia.gov.







