SAND2010-6484C

Sandia National Laboratories

Presentation Title

Presenter
Title

Date

Exceptional Service in the National Interest

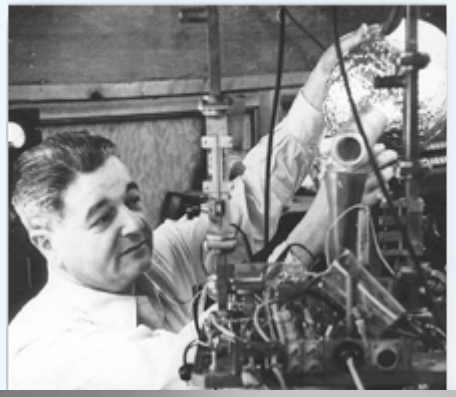
National Nuclear Security Administration

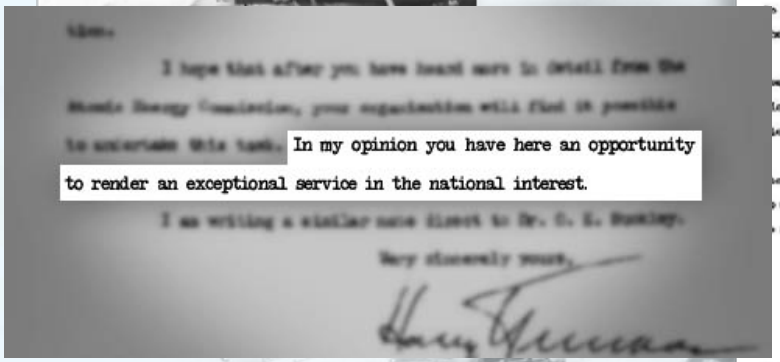
Sandia National Laboratories is a multi-program laboratory operated and managed by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. SAND2010-XXXX

Sandia National Laboratories

Sandia's History

"Exceptional service in the national interest"





THE WHITE HOUSE
WASHINGTON

May 13, 1949

Dear Mr. Wilson:

I am informed that the Atomic Energy Commission intends ... that the Bell Telephone Laboratories accept under contract ... direction of the Sandia Laboratory at Albuquerque, New Mexico.

This operation, which is a vital segment of the atomic ... program, is of extreme importance and urgency in the ... defense, and should have the best possible technical direc-...

I hope that after you have heard more in detail from the ... Energy Commission, your organization will find it possible ... undertake this task. In my opinion you have here an opportunity ... render an exceptional service in the national interest.

I am writing a similar note direct to Dr. C. E. Buckley.

Very sincerely yours,

Harry Truman

Mr. Leroy A. Wilson,
President,
American Telephone and Telegraph Company,
195 Broadway,
New York 7, N. Y.

Sandia's Governance Structure

Sandia Corporation

- AT&T: 1949–1993
- Martin Marietta: 1993–1995
- Lockheed Martin: 1995–Present
- Existing contract expires 9/30/12

Government-Owned Contractor-Operated

Federally Funded Research & Development Center

Sandia National Laboratories

Sandia's Sites

Albuquerque, New Mexico

Livermore, California

Las Vegas, Nevada

WIPP, New Mexico

Kauai, Hawaii

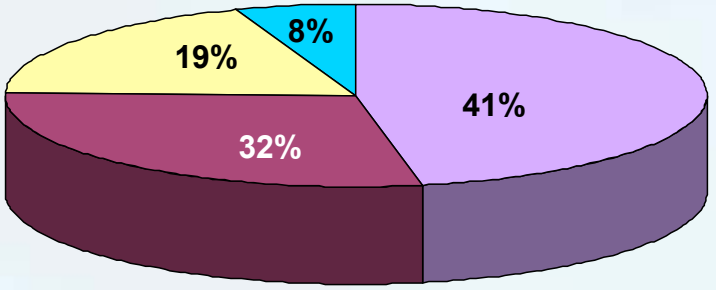
Pantex, Texas

Tonopah, Nevada

People and Budget *(According to 2009 Annual Report)*

- On-site workforce: 11,400
- Regular employees: 8,250
- Gross payroll: ~$900 million

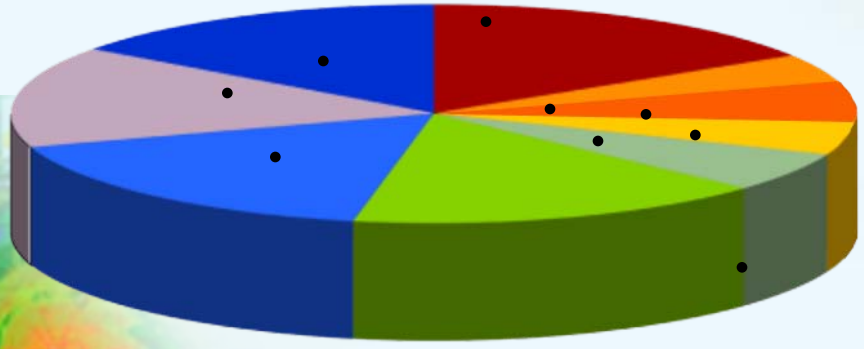
FY10 operating revenue
$2.4 billion

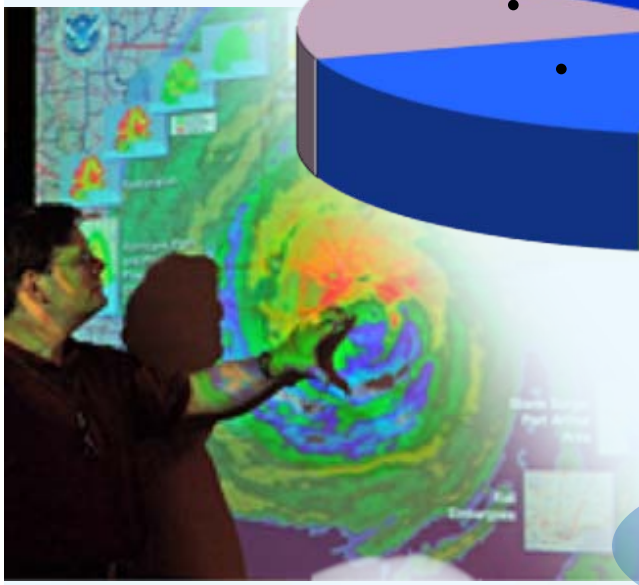


(Operating Budget)

- Nuclear Weapons
- Defense Systems & Assessments
- Energy, Climate & Infrastructure Security
- International, Homeland, and Nuclear Security

Technical staff (3,850) by discipline:



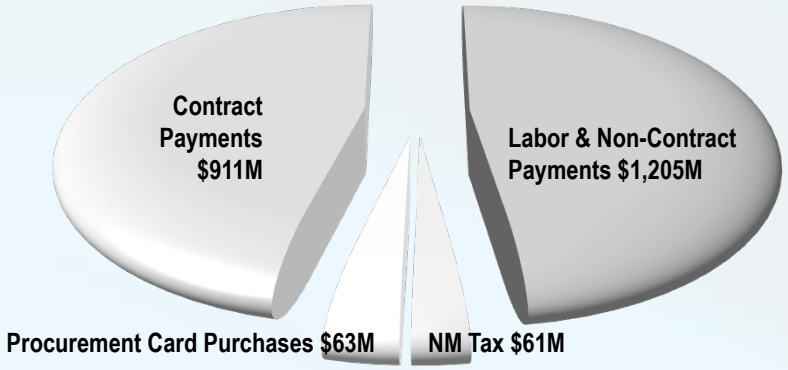


- Computing 16%
- Math 2%
- Chemistry 6%
- Physics 6%
- Other science 6%
- Other fields 12%

- Electrical engineering 21%
- Mechanical engineering 16%
- Other engineering 15%

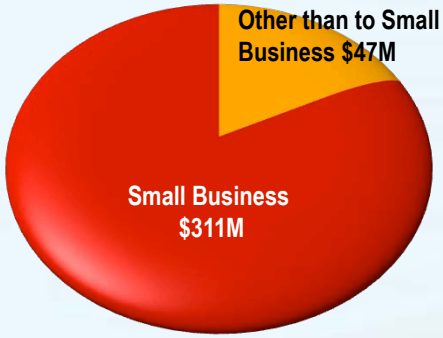
New Mexico Economic Impact (FY09)

Total Laboratory ($2,240M)



- New Mexico payroll exceeds $900,000,000
- 2,400 contractors
- 300 year-round student interns
- 3,600 retirees living in New Mexico
- New Mexico retiree pension payments approximately $150,000,000

Contract Payments to New Mexico Businesses



Sandia National Laboratories

Addressing our evolving national security environment is of the greatest importance

Traditional strategic nuclear threats

Threats from other nation states

Threats from non-nation states

Threats of tech surprise

Other threats: natural disasters, climate change, energy supply

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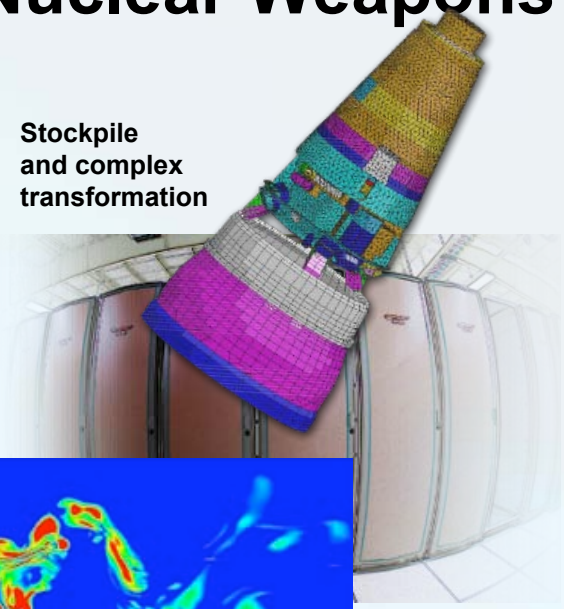
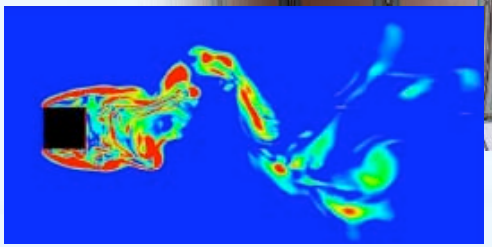
Sandia's Nuclear Weapons Program

Weapon system and component engineering

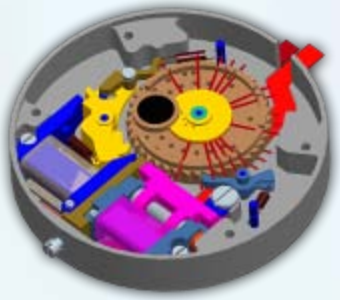
Stockpile and complex transformation



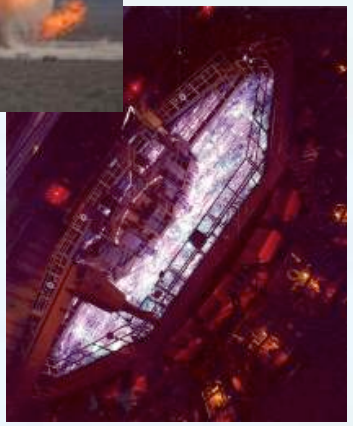


Modeling and simulation

Enhancing the safety and security of the stockpile



Testing and evaluation



Production and responsive infrastructure

Annual Stockpile Assessment

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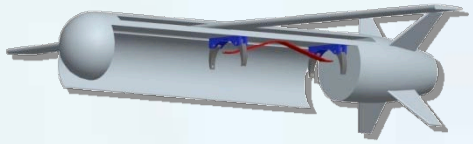
Sandia's Broad National Security Role

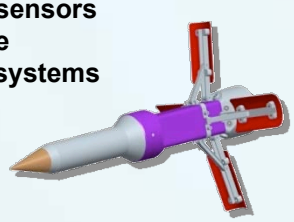
Defense Systems & Assessments

SAR imagery

Small robotic vehicle



Ground sensors for future combat systems



Missile defense

International, Homeland, and Nuclear Security

Critical Asset Protection

Homeland Security

Global Security

Homeland Defense & Force Protection

Energy, Climate, and Infrastructure Security

Nonproliferation

Infrastructure

Energy supply

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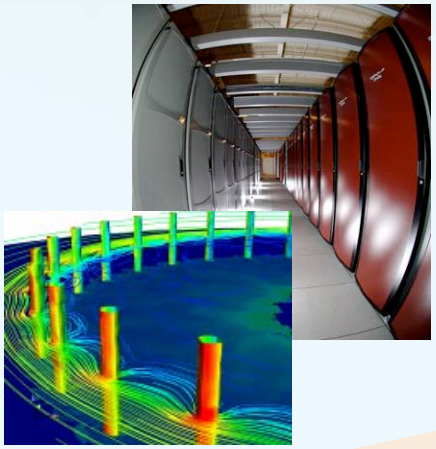
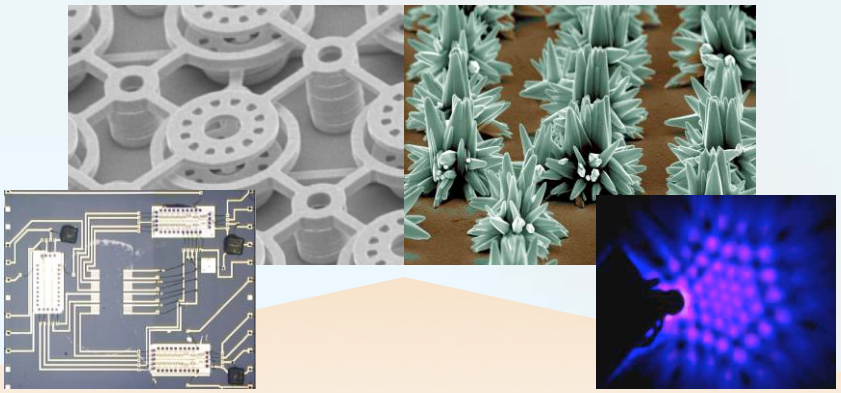
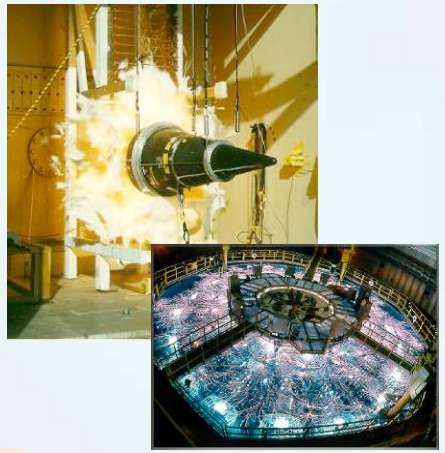
Research Disciplines Drive Capabilities



High Performance Computing

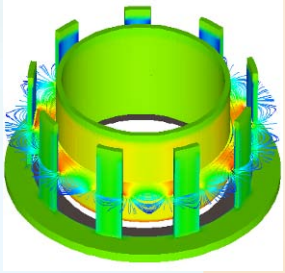


Nanotechnologies & Microsystems

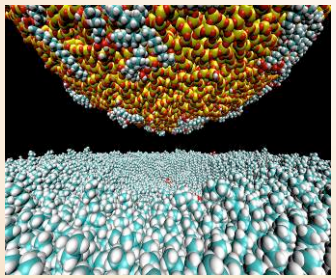


Extreme Environments

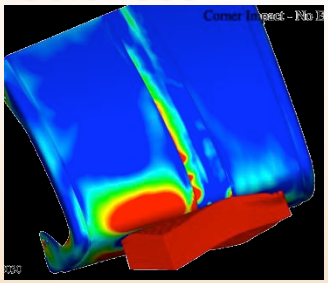
Computer Science



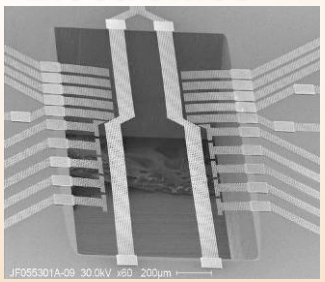
Materials



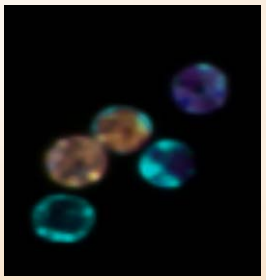
Engineering Sciences



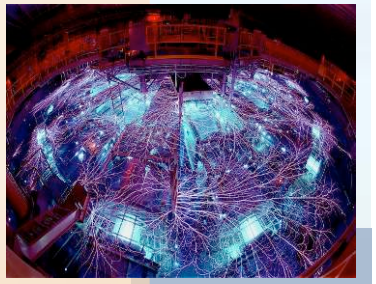
Micro Electronics



Bioscience



Pulsed Power



Research Disciplines

Emerging National Security Thrusts

Nuclear

Energy

Cyber

Science & Technology

Sandia National Laboratories

Corporate Strategic Thrust: Energy Security

Assuring Operational Energy:

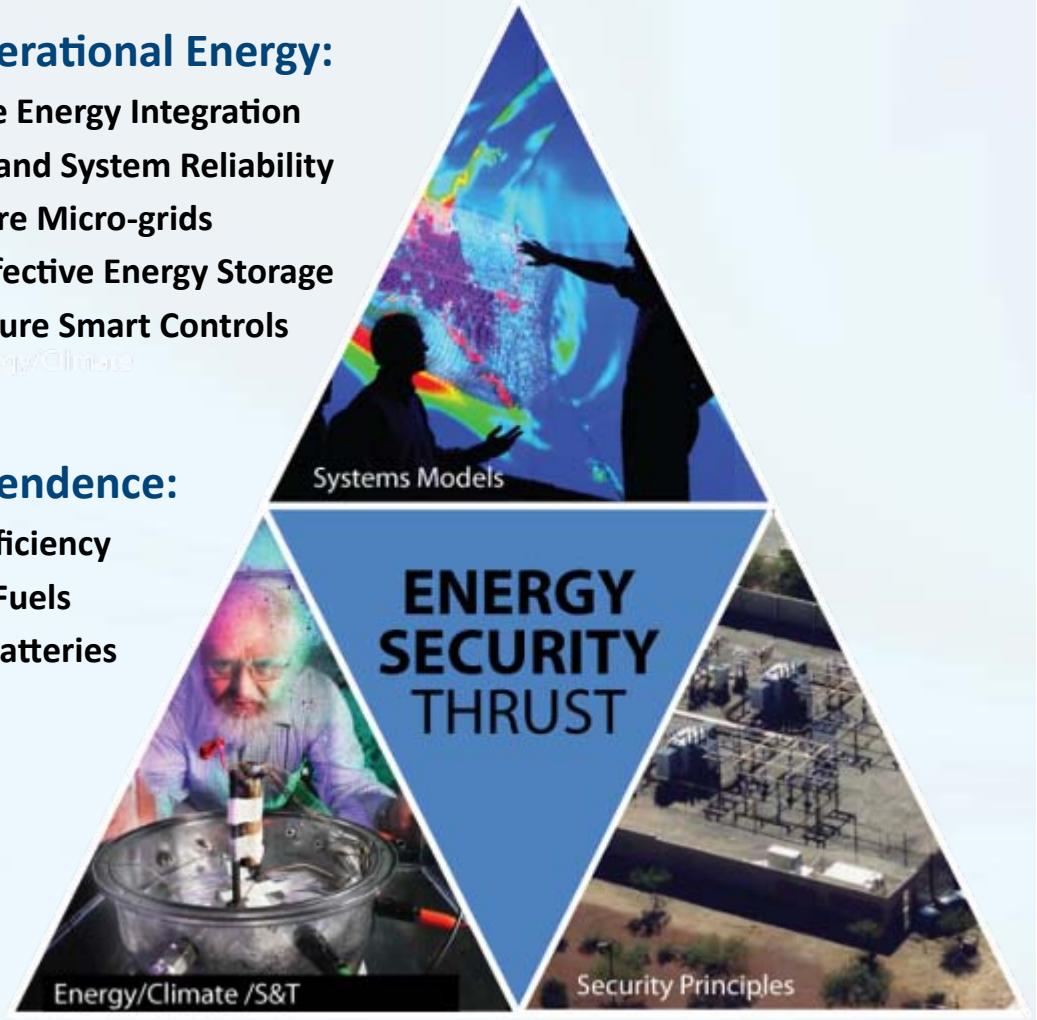
- Renewable Energy Integration
- Component and System Reliability
- Secure Micro-grids
- Safe, Cost Effective Energy Storage
- Cyber Secure Smart Controls

Reducing Oil Dependence:

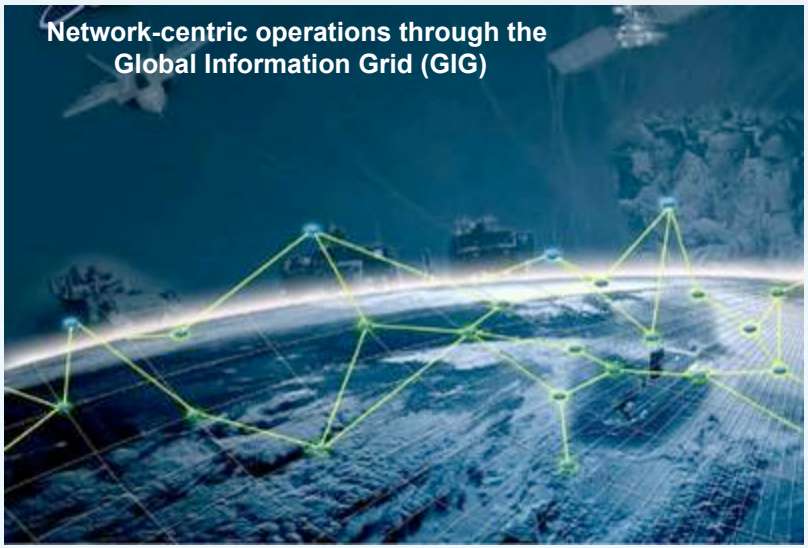
- Combustion Efficiency
- Alternative Fuels
- Safe/Reliable Batteries

Assessing Climate Change:

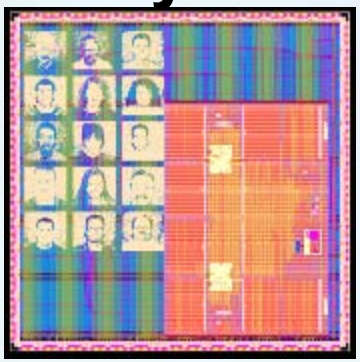
- Atmospheric Measurements
- Regional-scale Models
- Consequence Assessment



Corporate Strategic Thrust: Cyber Security



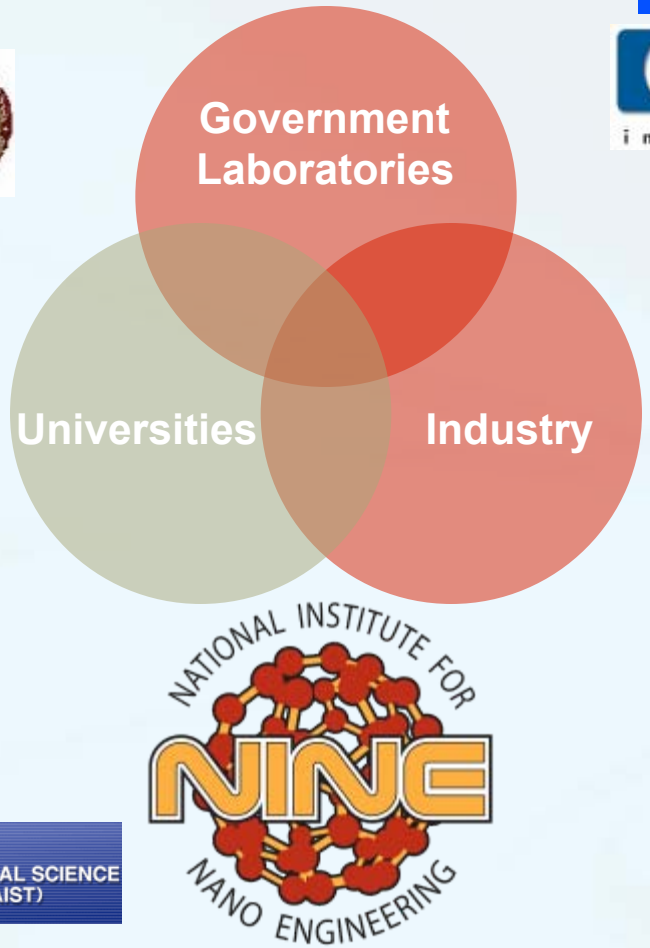
Secure microcontroller for SAASM



- Attackers rule, disasters likely
- Short-term measures essential but insufficient
- New technology can catalyze major changes
- Only a national initiative will make a real difference

Critical infrastructure management by IT and automation (SCADA) systems

Partnerships and collaboration accelerate innovation



ExxonMobil
Taking on the world's toughest energy challenges.

Fifty Years of Generous Giving

- Last year, Sandia's employees in New Mexico and California donated $4,047,3600
- 77 percent of employees participated
- 950+ registered volunteers
- 122,000 volunteer hours
- $2 million/year in volunteer services back to the community