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Safeguards and Security: An Overview

2017 Honeywell FSO Conference

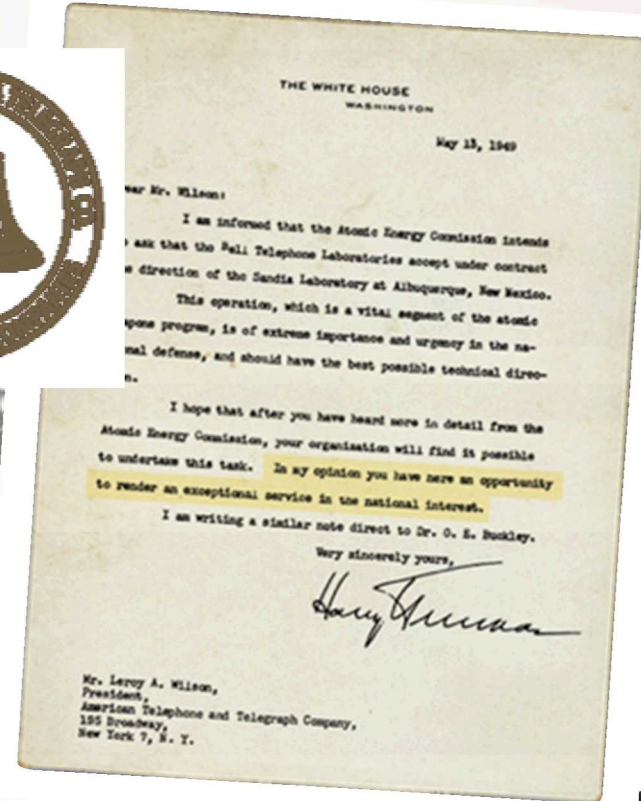
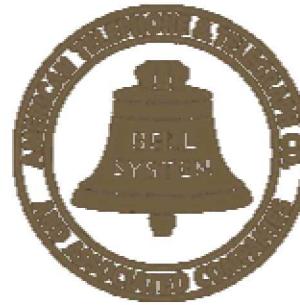
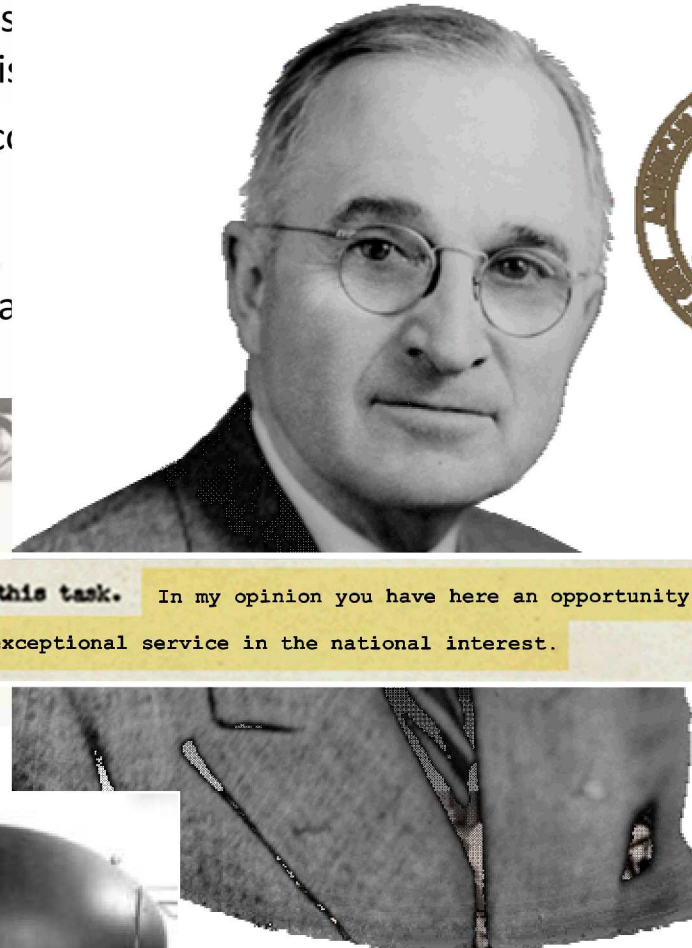
John Larson, *Director, Safeguards & Security*



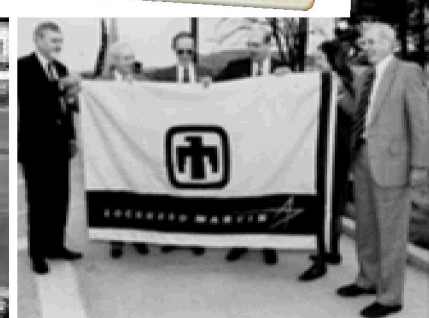
Sandia's History

Exceptional service in the national interest

- July 1945: Los Alamos creates Z Division
- Nonnuclear chemical engineering
- November 1, 1949: Sandia National Laboratories established



to undertake this task. In my opinion you have here an opportunity to render an exceptional service in the national interest.

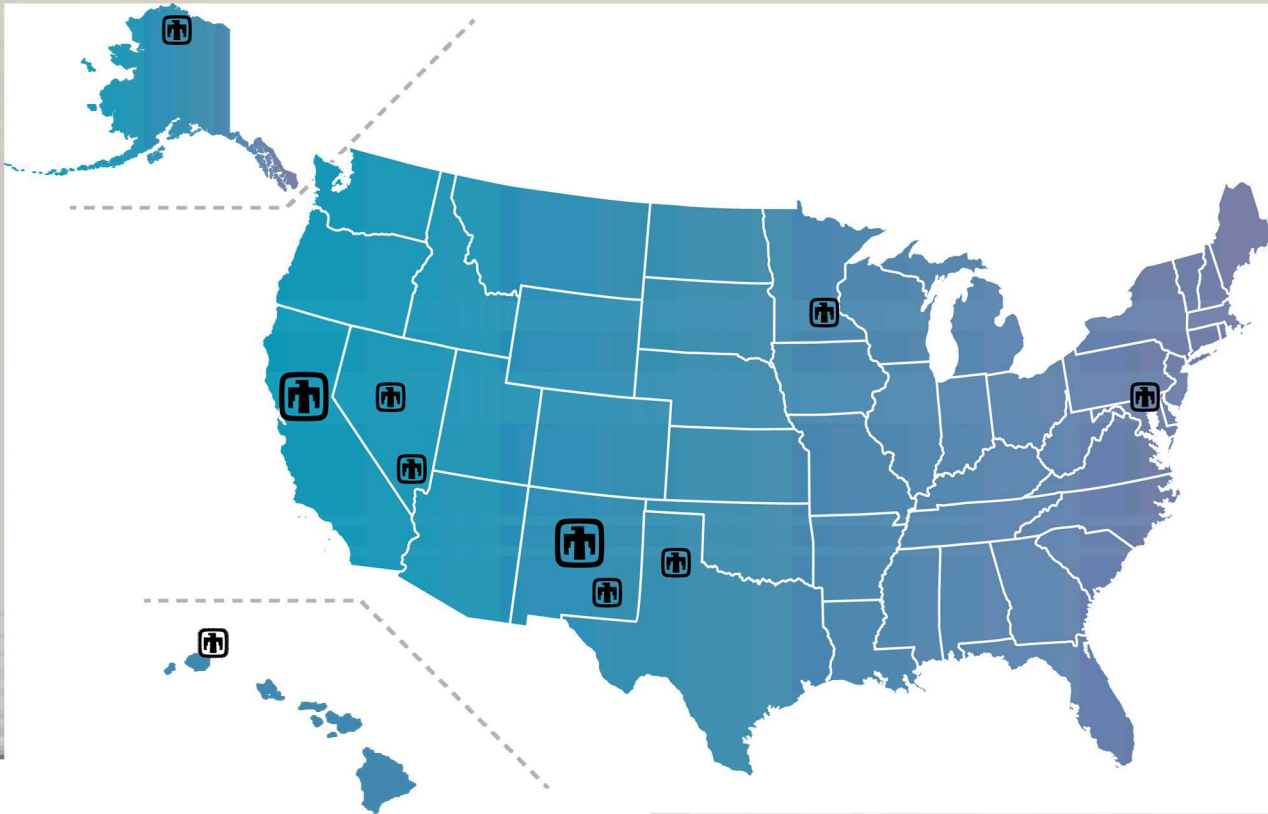


Sandia: Decades of History

- [Decades of Sandia Achievement: Video](#)

Sandia's Locations

Sandia operates laboratories, testing facilities, and offices at several sites in the United States and participates in research collaborations around the world



Main Sites

- Albuquerque, NM
- Livermore, CA

Mission Specific Locations

- Tonopah Test Range, Tonopah, Nevada
- Kauai Test Facility, Waimea, Hawaii
- Carlsbad Programs Office, Carlsbad, New Mexico
- Nevada Projects Team, Mercury, Nevada
- Weapons Evaluation Test Laboratory, Amarillo, Texas
- Sandia Washington Office, Washington D.C.
- Atmospheric Radiation Measurement Facility, Barrow, Alaska
- Computing Research Facility, Shoreview, Minnesota

Purpose Statement

Sandia develops advanced technologies to ensure global peace



Sandia Addresses National Security Challenges



1950s

Nuclear weapons

Production and
manufacturing
engineering



1960s

Development
engineering

Vietnam conflict



1970s

Multiprogram
laboratory

Energy crisis



1980s

Missile defense
work

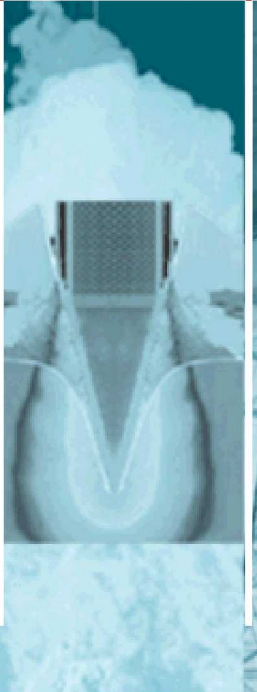
Cold War



1990s

Post-Cold War
transition

Stockpile
stewardship



2000s

START
Post 9/11

National security



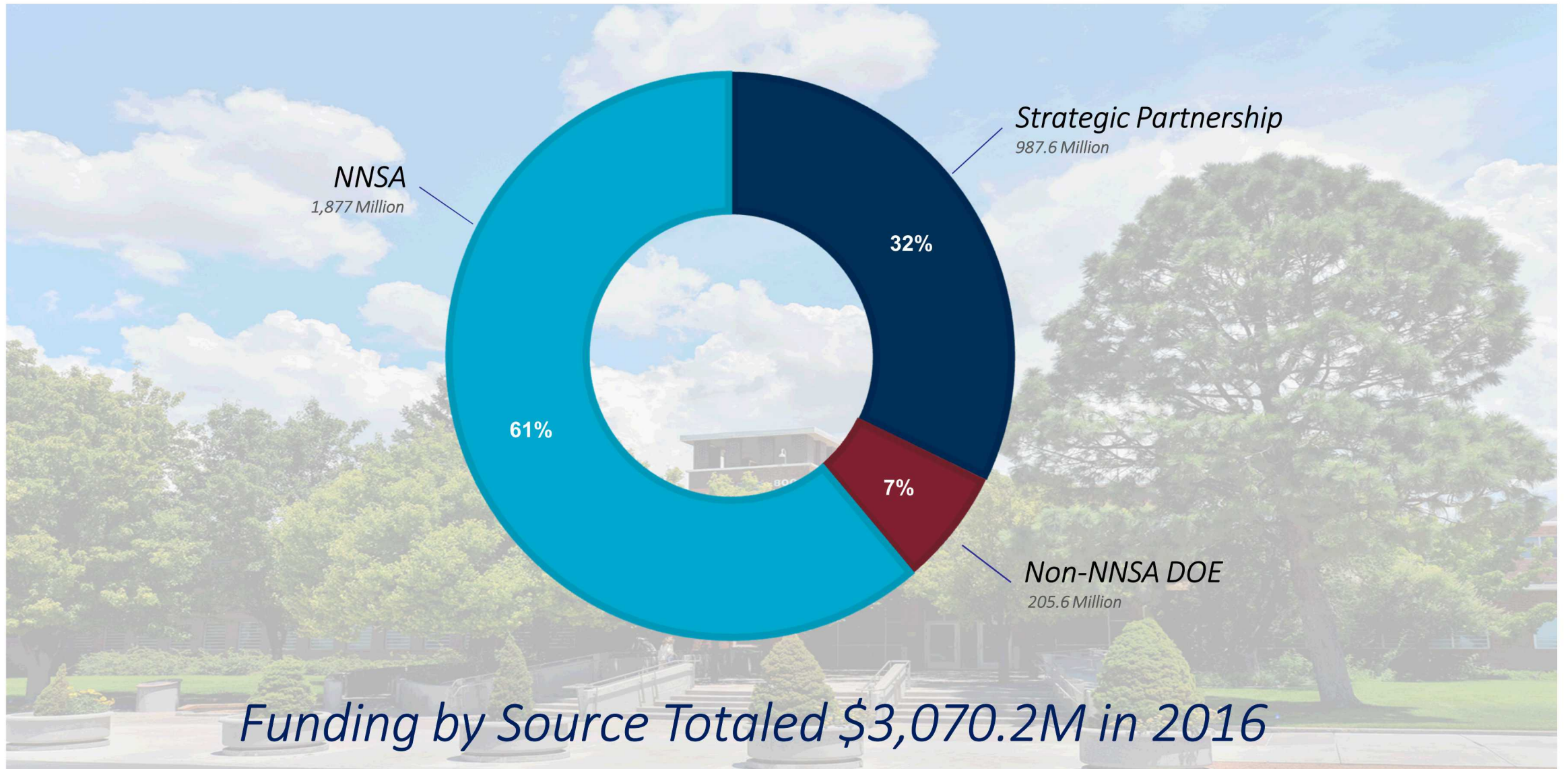
2010s

LEPs
Cyber, biosecurity
proliferation

Evolving national
security challenges

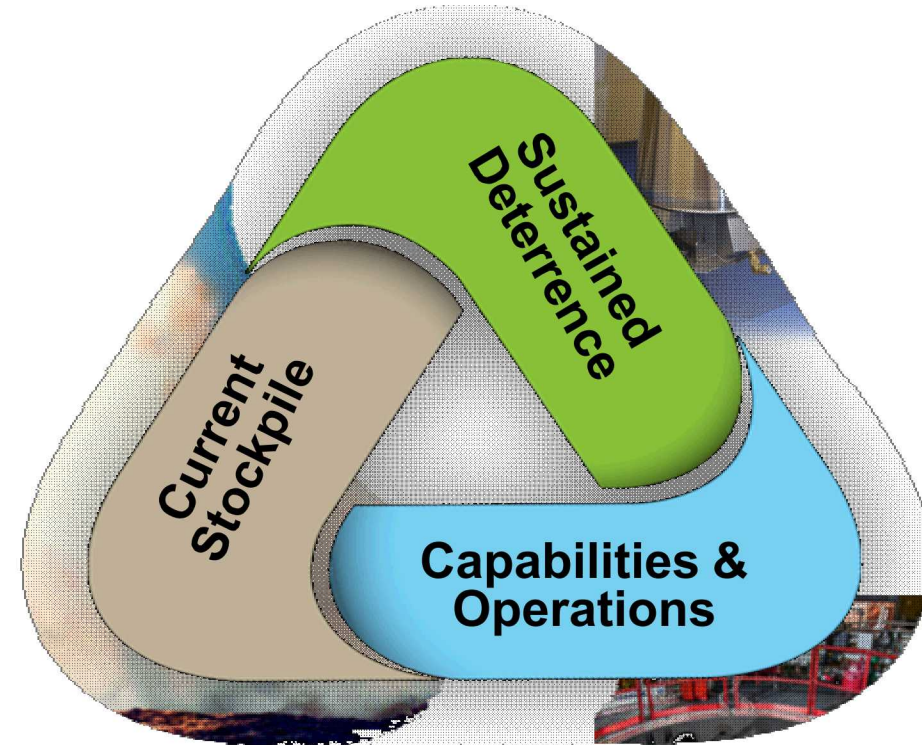


Sandia's Budget



Sandia's Nuclear Weapons Mission Imperative

- Maintain the current U.S. nuclear weapon stockpile
 - Annual Assessment, Surveillance, Life Component Exchanges, Significant Finding Investigations
- Sustain the U.S. nuclear deterrent
 - Life Extension Programs, Alterations, Technology Maturation
- Steward the long-term vitality of our capabilities, infrastructure, and operation
 - Persistent Commitment to Multi-Disciplinary Staff, State-of-the-Art Lab Equipment, Facilities, and Safe/Secure/Quality/Affordable Oper



Sandia's Non-Nuclear Weapons Programs

Global and Homeland Security



Energy



National Security and Defense Nuclear Nonproliferation Programs

SAR: Desert Storm



National Security Impact

Deepwater Horizon



Unabomber



Hurricane Katrina



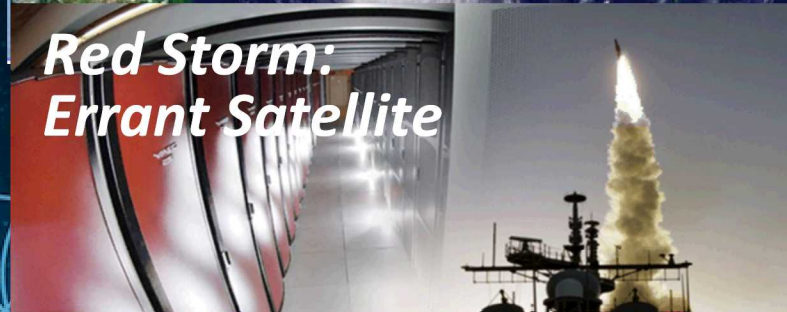
Stockpile Modernization



9/11 Attacks



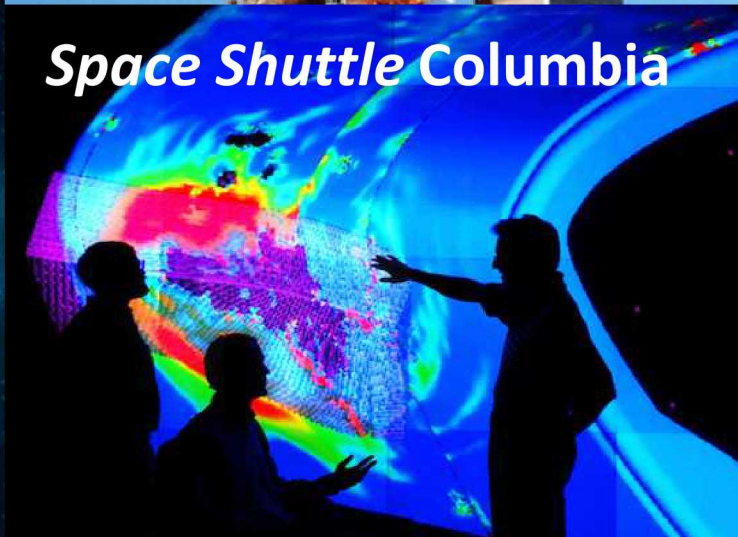
*Red Storm:
Errant Satellite*



Cyber Threat Reduction



Space Shuttle Columbia



Fukushima Accident



*Biological & Chemical
Threat Reduction*



Safeguards and Security Programs

- Information Security
- Classified Matter Protection and Control (CMPC)
- Classification
- Material Control and Accountability (MC&A)
- Nuclear Materials Management
- International Travel and Risk Management

- Protective Force
- Physical Security

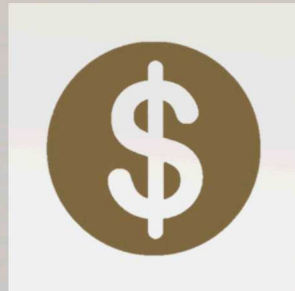
- Technical Security Systems
- Personnel Security
- Security & Incident Management Program
- Strategic Initiatives, Assurance, and Program Operations

Security &
Think. Assess. Protect. | YOU

Safeguards & Security



Safeguards and Security Total Employees: 270



Three Funding Sources for FY17:

- NNSA NA-70 Safeguards & Security (Direct) \$64,967,000
- Integrated Mission Support (Indirect) \$3,787,041
- Division Support (Indirect) \$2,582,988

Safeguards and Security

Purpose:

The Safeguards and Security program's purpose is to protect people, information, facilities, and materials to enable our national security mission.

NNSA Key Security Strategies:

- Strive for Operational Excellence
- Drive an Effective, Efficient, and Sustainable Field Nuclear Security Program
- Modernize, Revitalize, and Recapitalize the Physical Security Infrastructure
- Develop and Sustain a Highly-Capable Security Workforce

Our Greatest Concerns

- Insider Threat
- Active Shooter
- Security Incidents
- Security Clearance Processing Times
- International Travel Risks



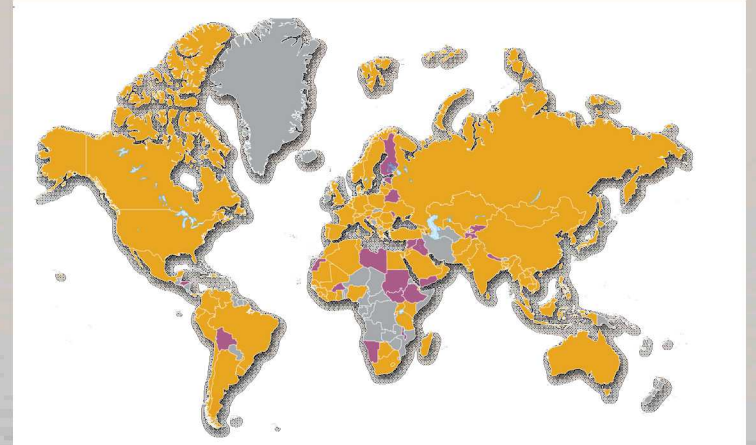
Safeguards & Security Program Highlights

- DOE Office of Enterprise Assessment (EA-22) identified Personnel Security, Contract Security Management, Operations Security (OPSEC), and Performance Assurance Programs identified as “Best in Class”
- Excellent Active Shooter program
- Benchmarking Workshop – Lawrence Livermore National Laboratories (LLNL)
- Active Shooter Forum
- Active Shooter Response (ASR) Presentation requests
- Closed Area/Vault Type Room (CA/VTR) Enhancement Project
 - 198 Closed Areas at SNL/NM
 - “3-Step Process”
 - CDX to LKM lock conversions
- Processed 3,571 international trips in FY16 for Members of the Workforce; Supported 242 International Events



Safeguards & Security Program Challenges

- Extended clearance processing time continues to negatively impact Sandia
- Impacts of new DOE requirements:
 - DOE O 470.3C, Design Basis Threat (DBT)
 - DOE O 470.6, Technical Security Program
- International Travel (***Our work has grown to include efforts in over 120 countries***)
 - Increased risk of terror attacks that threaten the safeguards of SNL personnel
- Implementation of a single-security program across SNL/CA and SNL/NM
- Jurisdictional Concerns
- Protective Force Collective Bargaining Agreement (CBA)
 - Expires on November 23, 2019



 Active Engagements, FY 15 and 16

 Past Engagements

Security Incident Trends

— Most Frequent Incident Types:

- Unauthorized Network Based Transmissions
- Improper Storage/Protection of Classified
- VTR Improperly Secured

— Top Security Incident Trends (as of October 1, 2017):

- SNL is experiencing a 23.68% decrease (overall) in FY17 security incidents over FY16 security incident rates ↓
- Incidents surrounding improperly secured VTRs have decreased 62.5% in FY17 from FY16 which is attributed to implementation of engineered controls ↓
- Incidents related to unauthorized network transmissions are on the decline as well, down 8% in FY17 from FY16 ↓
- Incidents related to improper storage/protection of classified information has decreased 9% in FY17 from FY16 ↓
- Improperly secured information systems have increased by 1% in FY17 over FY16 ↑

Security Improvement Activities

■ Leadership Engagement

Engaging Leadership in security incident management and understanding – prevention and post-incident engagement

- Creation of the Laboratories' Security Accountability Model
- Security Leadership Board
- Security Review Board

■ Embedded Security Professionals

- Leveraging security Subject Matter Experts to support high-risk line organizations

■ Engineered Controls

Helping Members of the Workforce to reduce error rates

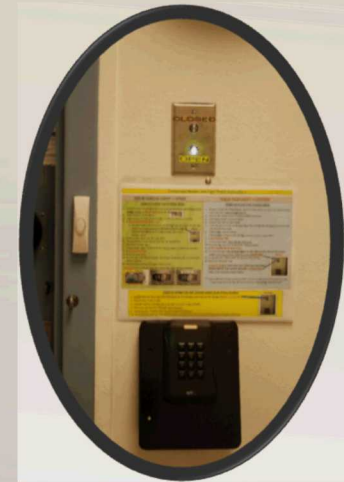
- SNL/NM VTR upgrades to simplify and reduce the number of steps involved in securing a VTR
- Cross-Domain Email Data Loss Prevention to prevent unauthorized email transmissions

■ Increased use of priority clearance process

Maximizing DOE alternative programs to increase the number of cleared Members of the Workforce

- 24 Interim Security Clearance requests submitted to DOE
- 8 have been successfully granted

■ Accountability Model



Questions?