

Sandia's Technical Capabilities for Enhancing Global Security

**Presented to Mr. Doug Bruder, Director, Research and Development
Defense Threat Reduction Agency (DTRA)**

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Rodney K. Wilson, Director
Global Security Program
rkwilso@sandia.gov
505-844-5269

Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company,
for the United States Department of Energy's National Nuclear Security Administration
under contract DE-AC04-94AL85000.

Sandia's Contributions to Global Security:

We apply a systems approach where S&T intersects with, to both inform and implement policy

National Non-Proliferation Systems



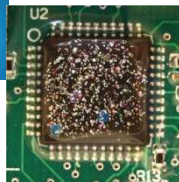
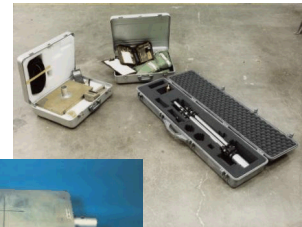
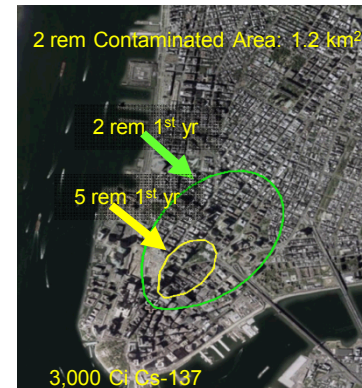
International Treaties and Negotiated Agreements

Global Engagement for Cooperative Threat Reduction



Sandia develops and utilizes state-of-the-art technical capabilities for enhancing Global Security

- **Vulnerability and Assessments / Risk Modeling**
- **Radiation Detection Equipment**
- **Remote and Unattended Monitoring**
 - *Secure communications between facilities by Internet, satellite, or telephone*
 - *Basis technologies for Remote Inspections*
- **Equipment and Information Security**
 - *Authentication, encryption, tamper indication and system design*
- **Containment and Surveillance (C&S) technologies**
 - *Technologies ensure “Continuity of Knowledge”*
- **Onsite Inspection and Managed Access**
 - *Readiness procedures and host/inspector training*



Sandia facilities are also being developed to advance the state-of-the-art in technology for Global Security

- **Cooperative Monitoring Center**
 - *Center for International Engagement*
- **Integrated Security Facility (Tech Area V)**
 - *Secure communications between facilities by Internet, satellite, or telephone*
 - *Partnering with NNSA, Department of Energy National Training Center, and Department of State*
 - *Model for Nuclear Security Centers of Excellence around the world*



Intrusion Detection and Assessment



Central Alarm Station



Entry Control Building/Point