

**Statement of Doris E. Ellis
Director, International Security Programs
Sandia National Laboratories**

**United States House of Representatives
Select Committee on Homeland Security**

**Field Hearing in Los Angeles, California
June 21, 2003**

Mr. Chairman and distinguished members of the committee, thank you for the opportunity to testify.

I am Dori Ellis, director of International Security Programs at Sandia National Laboratories. Sandia is a multi-program laboratory of the U.S. Department of Energy's National Nuclear Security Administration.

Sandia's laboratory director, Paul Robinson, regrets that he could not be here today. But with your permission, Mr. Chairman, I would like to submit a statement from him for the record.

As you know, the cities of Los Angeles and Long Beach took action on their own initiative to address the threat of maritime terrorism. They formed a working group to begin implementing Operation Safe Commerce immediately — even before the federal grant funding was available.

Last year, both ports entered into a funds-in agreement with Sandia for assistance with their Operation Safe Commerce activities.

Why Sandia? Sandia has over fifty years of experience in security systems engineering for our nation's nuclear weapons. As DOE's lead laboratory for physical protection of nuclear materials and weapons, both at fixed sites and in transit, Sandia is a major resource of expertise for security of high-consequence assets. We develop security technology; design, evaluate, and install systems; and

provide training in related subjects such as vulnerability analysis and performance testing. Many agencies have sought our counsel in security matters, including the Department of Defense, the National Institute of Justice, the Secret Service, the Federal Aviation Administration, state and federal corrections systems, public school systems, and even the 2002 Winter Olympic Games.

Sandia has leadership responsibilities in several nonproliferation and nuclear materials control programs. We are the systems integrator for “Second Line of Defense,” a cooperative threat reduction program with Russia and several other countries. The objective of this program is to deter, detect, and interdict attempts to smuggle nuclear materials or weapons through land crossings, airports, and seaports. We are also involved in an extension of the Second Line of Defense program to support the U.S. Customs Service with its Container Security Initiative at foreign mega-ports.

Our approach to the Operation Safe Commerce project at Long Beach and Los Angeles is a rigorous one. We start with an in-depth threat analysis and Security Effectiveness Assessment. This will serve as a baseline for identifying needed security improvements, both in terms of operations and systems. We will assist the Ports in their selection of appropriate technologies and procedures for recommended security upgrades. We will then help them evaluate solution prototypes and oversee implementation.

Apart from Operation Safe Commerce, Sandia is involved in several research and development efforts targeted to the threats that challenge our nation’s borders. We have developed sensor systems for chemical, biological, radiological, and explosive materials, and we are demonstrating systems for protecting against chemical or biological attacks in public facilities such as airport terminals and subways.

Sandia has had good success with the development of spectral sensor systems that can identify radioactive materials quickly and accurately as they pass through portals. We are hopeful that advanced nuclear sensor technologies currently demonstrable in the laboratory can ultimately be engineered into deployable systems that can be mass-produced by industry.

The challenge of securing our borders and ports against new threats is formidable. Operation Safe Commerce is an important component of the nation's response to this challenge. We at Sandia National Laboratories are proud to be part of the team effort with the Ports of Los Angeles and Long Beach, the Coast Guard, the Customs Service, and the marine cargo industry to meet this challenge.

Thank you, Mr. Chairman. I would be pleased to respond to any questions.

WITNESS DISCLOSURE INFORMATION

Witness name: Doris E. (Dori) Ellis

Capacity in which appearing: Representative of a non-government entity

Name of entity being represented: Sandia National Laboratories (GOCO)

Position held: Director, International Security Programs

Parent organization (managing contractor): Lockheed Martin Corporation

Federal contract: Management and operating contract between Sandia Corporation and U.S. Department of Energy, DE-AC04-94AL85000.

FY2001 cost: \$1,580,187,000; negotiated fee: \$16,300,000.

FY2002 cost: \$1,684,552,000; negotiated fee: \$17,270,000.

FY2003 estimated cost: \$2,044,174,000; negotiated fee: \$21,500,000.

Curriculum Vitae:

Dori Ellis is Director of the International Security Center at Sandia National Laboratories, Albuquerque, New Mexico. She has responsibility for Sandia's cooperative threat reduction programs in nonproliferation and nuclear materials control; collaborations with more than one hundred countries in various security upgrade, confidence building, monitoring and training activities; the Department of Energy's Cooperative Monitoring Center, located at Sandia National Laboratories; and various activities in combating terrorism.

Dori holds BS and MS degrees in Mechanical Engineering. She has been employed by Sandia National Laboratories since 1978. During her 25-year career with Sandia as a staff member and manager, she has also been responsible for non-nuclear testing of weapons; analytical structural mechanics; development of electro-mechanical devices for the military and intelligence communities; nuclear waste management using deep geologic repositories such as the Waste Isolation Pilot Plant (WIPP) and the Yucca Mountain Project (YMP); nuclear energy research and development; and transportation surety.