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DOE's Foreign Visitor Program
Has Major Weaknesses

Statement of
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Committee on Governmental Affairs
United States Senate



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Mr. Chairman and Members of the Committee:

We appreciate the opportunity to discuss the Department of Energy's (DOE) controls over foreign nationals who participate in unclassified activities at its three weapons laboratories--Lawrence Livermore National Laboratory in California and Los Alamos National Laboratory and Sandia National Laboratories in New Mexico. My testimony today is based on our report, Nuclear Nonproliferation: Major Weaknesses in Foreign Visitor Controls at Weapons Laboratories (GAO/RCED-89-31), which you requested and are releasing today, Mr. Chairman.

In summary, our work shows that DOE allows most foreign visitors access to the weapons laboratories with little oversight or approval. As a result, suspected foreign agents and individuals from facilities suspected of conducting nuclear weapons activities have obtained access to the laboratories without DOE's knowledge. We could not determine if sensitive or classified information has been lost, but because of three weaknesses in DOE's foreign visitor controls, we have little confidence that adequate protection of weapons-related information and technology is achieved. Specifically, we found that

- DOE headquarters, field offices, and the laboratories generally do not obtain required background data on foreign visitors. Further, DOE has, but does not use, other

available data to prescreen visitors from foreign facilities suspected of nuclear weapons-related activities.

-- DOE has little assurance that communist or other sensitive nations do not obtain sensitive information during the visits. DOE and the laboratories are not identifying those visits that involve the 18 subjects considered sensitive by the agency. In addition, DOE does not recognize a number of nuclear weapons research, development, and testing activities as sensitive information.

-- DOE does not have effective controls to approve, monitor, and report on foreign visits. Further, DOE has no integrated system to obtain and disseminate foreign visitor data that may be relevant to the field offices' access approval decisions.

We believe that these problems, when viewed in their totality, illustrate a dilemma that DOE has not effectively resolved. On one hand, the information and technology developed and/or used by the weapons laboratories have peaceful applications; therefore, DOE and the laboratories want to disseminate it as widely as possible. However, the information and technology also have a more sinister use--in the nuclear weapons arena. In our view, DOE does not have sufficient checks and balances in its foreign visitor controls to

ensure that nonproliferation and security concerns are appropriately considered along with the need to advance scientific developments.

Before I discuss these weaknesses in greater detail, I will briefly describe the activities conducted at the weapons laboratories, DOE's controls over foreign access to them, and DOE's organization for managing the visitor program.

ACTIVITIES CONDUCTED AT DOE'S NUCLEAR WEAPONS LABORATORIES

DOE has a number of missions in energy, defense, and scientific research. To accomplish its missions, DOE has 9 multiprogram laboratories and about 30 specialized laboratories that perform fundamental scientific and applied research activities.

Although most of these facilities conduct unclassified, nonweapons activities, Livermore, Los Alamos, and Sandia perform a unique role for DOE: they conduct research and development functions for DOE's nuclear weapons program and conduct other classified activities related to defense and energy issues. For example, Livermore conducts classified research associated with the Strategic Defense Initiative and develops lasers for the inertial confinement fusion and atomic vapor laser isotope separation processes. Los Alamos conducts inertial confinement fusion and

plutonium processing and fabrication research and supports U.S. arms control measures through foreign technology assessments and detection of nuclear explosions. Sandia develops weapons structures, aerodynamic shapes, and delivery devices and conducts engineering activities related to the design of electrical arming and firing systems.

CONTROLS OVER FOREIGN
ACCESS TO THE LABORATORIES

Activities at these laboratories must meet the requirements established by the Atomic Energy Act as amended by the Nuclear Nonproliferation Act. This act establishes U.S. policy for controlling information and technology related to the development of nuclear weapons. It requires DOE to classify and control weapons information and prohibits its dissemination to foreign countries unless authorized by the President. The act also requires strong federal oversight and controls over any U.S. assistance to foreign nations that may directly or indirectly assist in the production of special nuclear material (enriched uranium and plutonium) or nuclear weapons.

However, the act also provides for international cooperation to develop the peaceful uses of nuclear energy. Because of DOE's involvement in peaceful nuclear technology and the unclassified nature of many activities that it conducts, foreign visitors are permitted access to the weapons laboratories. Between January 1986

and September 1987, about 6,700 foreign nationals visited the laboratories. Of these, 222 were from communist countries and 675 were from nations deemed sensitive by DOE because of proliferation, security, or other concerns (app. I shows the number of these visitors to each of the 3 weapons laboratories). We selected and reviewed the files for 181 communist and 637 sensitive country visitors.

To ensure that foreign nationals do not pose a security or proliferation risk, DOE Order 1240.2 (Visits and Assignments by Foreign Nationals, Jan. 5, 1981) establishes procedures to control access for unclassified purposes. The order provides that foreign access to the laboratories may be of concern if it involves any of 3 conditions: (1) a sensitive country--68 are identified, (2) a sensitive subject--18 are listed, or (3) a secure area--a location where classified information and equipment are available. If a visit meets any of these criteria, DOE must institute additional procedures, including background checks by investigative and intelligence agencies, access approval by the responsible headquarters or field office, security plans, and reports by the sponsoring organization (called host reports).

ORGANIZATION FOR MANAGING FOREIGN VISITOR PROGRAM

To manage the foreign visitor program, DOE uses a three-tiered approach that includes DOE headquarters, field offices, and

contractors. The Assistant Secretary for International Affairs and Energy Emergencies has overall responsibility for the foreign visitor program, and the Assistant Secretary for Defense Programs is responsible for the security-related aspects such as initiating background checks and concurring in visits that involve access to secure areas. DOE headquarters has delegated significant aspects of program implementation to the field offices. These offices approve some visits, develop security plans, and ensure that the host submits the required report. In addition, the field offices have delegated certain responsibilities to the contractors that operate the laboratories. For example, contractor staff hosting a foreign visitor must provide reports to DOE.

With this background, I will now discuss the importance of controlling foreign access to the weapons laboratories and some of the problems that we found.

IMPORTANCE OF CONTROLLING FOREIGN ACCESS

It is widely believed that foreign nations try to obtain information and technology on U.S. nuclear weapons activities. DOE's nuclear weapons laboratories possess sensitive information that would be valuable to foreign nations, and valid concerns exist regarding the technology security at these facilities. DOE studies have concluded that unclassified information at the laboratories may provide foreign countries details on sensitive--and even

classified--activities that the United States conducts. Although such concerns exist, DOE permits foreign nationals--including those from communist and other sensitive countries that DOE believes conduct nuclear weapons-related activities--to participate in unclassified activities at the weapons laboratories. DOE allows these visits as part of its international cooperation and technical exchange program. As a result, DOE tries to strike a balance between security concerns and its foreign visitor policy and has instituted management controls to reduce the risks associated with these visits.

PROBLEMS GAO
IDENTIFIED

DOE's controls do not ensure that individuals who pose a security and/or proliferation risk are identified before access to the laboratories is granted. As a result, suspected foreign agents and individuals from facilities suspected of conducting nuclear weapons activities have obtained access to the laboratories without DOE's knowledge, thereby preventing DOE from taking special precautions or denying a visit. Although we could not determine if sensitive or classified information has been lost to foreign countries, we identified three weaknesses that affect DOE's ability to ensure the security of the weapons laboratories.

Little Review of Foreign Visitors

The first of these is DOE's limited review of foreign visitor backgrounds prior to the visit. DOE requires background checks for visitors from certain countries to the weapons laboratories. DOE primarily obtains these checks from the Federal Bureau of Investigation and Central Intelligence Agency. Of the 181 visitors from communist countries whose files we reviewed, 176 required background checks. However, DOE did not obtain these data for 119. DOE requested data on the remaining 57 but received the results for 51 either during the visit or after it occurred. We found several cases in which DOE allowed visitors with questionable backgrounds--including three suspected foreign agents--access to the laboratories before obtaining background data.

In addition, DOE obtained even less background information on visitors from other sensitive countries. Of the 637 visitors from proliferation-risk countries such as India, Israel, and Pakistan, DOE required background checks for only 77. DOE only received the results for 14 before the visit began. Further, DOE has developed a classified "watch" list that identifies foreign organizations suspected of conducting nuclear weapons activities. We found that about 10 percent of the 637 visitors were affiliated with these organizations, but DOE did not request background data for them.

Limited Identification of
Potentially Sensitive Subjects

The second weakness is DOE's limited identification of potentially sensitive subjects, which results in DOE's allowing foreign nationals from communist and proliferation-risk countries into the laboratories to discuss subjects that could assist their nuclear weapons programs. DOE has identified 18 sensitive subjects; DOE headquarters must approve any visit that involves them. In our sample, DOE identified only 1 of the 818 communist and other sensitive country visits as involving a sensitive subject. We found at least 37 others related to inertial confinement fusion and isotope separation, which are identified as sensitive by DOE. It may be possible that other visits involved sensitive subjects, but we could not fully assess these from available documentation.

Further, DOE has not identified other activities related to nuclear weapons research, development, and testing as sensitive subjects. These include special cameras used to record the progression of detonations, astrophysics, and high explosives, which are used in testing nuclear weapons designs as well as in the weapons themselves. In our sample, 14 foreign nationals visited the laboratories to discuss these subjects and other technologies that are not included on DOE's sensitive subject list but which have nuclear weapons applications. Because DOE has not

and determine trends in foreign information gathering activities. Without complete data, we question whether DOE can perform these functions effectively.

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In conclusion, Mr. Chairman, we believe that these problems illustrate a dilemma that DOE has not effectively resolved. As I noted earlier, the information and technology developed by the weapons laboratories have peaceful applications. Therefore, DOE and the laboratories want to disseminate it as widely as possible. However, the information and technology also have nuclear weapons applications. In our view, DOE does not have sufficient checks and balances in its foreign visitor controls to ensure that nonproliferation and security concerns are appropriately considered along with the need to advance scientific developments.

In order to prevent security breaches concerning nuclear weapons-related information, we have recommended that the Secretary of Energy take a number of actions, including requiring that background checks are completed prior to admitting a foreign national to a weapons laboratory, expanding the sensitive subjects list to include other areas that could be useful to adversary or proliferant nations, and periodically evaluating the field offices' and laboratories' compliance with DOE's requirements. We hope, Mr.

identified these as sensitive subjects, none of the 14 visits received DOE headquarters review and approval.

Numerous Internal
Control Weaknesses

Finally, DOE does not have effective internal controls over the foreign visitor program. As a result, a number of problems exist, such as improper delegation of approval authority, failure to notify DOE about some visits, and lack of required pre-visit security plans and post-visit reports. DOE headquarters officials say that security plans serve as the agency's primary foreign visitor control. However, the laboratories provided only 89 of 248 required security plans and only about 25 percent of the post-visit reports. These problems could have been identified by internal reviews. However, neither DOE headquarters nor the field offices have conducted reviews of the foreign visitor program.

In addition, DOE has no integrated system to obtain and disseminate foreign visitor information to its field offices. Consequently, these offices lack important data that may be relevant to their access approval decisions. We found, for example, that an individual denied access to one laboratory visited another without the laboratory's knowing about certain derogatory data. Further, DOE headquarters' database did not have information on over 13 percent of the communist and other sensitive country visitors. DOE uses the database to analyze visit requests

Chairman, that you and the Committee will strongly encourage the Secretary to implement our recommendations.

This concludes our testimony. We would be pleased to respond to any questions you or the members of the Committee may have.

VISITORS TO DOE WEAPONS LABORATORIES
FROM JANUARY 1986 THROUGH SEPTEMBER 1987

	<u>Lawrence</u> <u>Livermore</u>	<u>Los Alamos</u>	<u>Sandia</u>	<u>Total</u>
<u>Communist countries</u>				
Bulgaria	0	1	0	1
People's Republic of China	41	69	8	118
Czechoslovakia	0	1	0	1
East Germany	0	2	1	3
Hungary	2	9	0	11
Poland	2	10	3	15
Romania	1	0	0	1
Soviet Union	13	34	10	57
Yugoslavia	<u>1</u>	<u>14</u>	<u>0</u>	<u>15</u>
Subtotal	<u>60</u>	<u>140</u>	<u>22</u>	<u>222</u>
<u>Sensitive countries</u>				
Algeria	2	1	0	3
Argentina	2	14	2	18
Brazil	13	19	0	32
Chile	14	2	0	16
Egypt	10	5	2	17
El Salvador	1	3	51	55
Ethiopia	0	1	0	1
Guyana	0	1	0	1
India	84	56	9	149
Iran	18	5	2	25
Iraq	0	2	0	2
Israel	75	60	53	188
Lebanon	4	0	0	4
Malawi	0	1	0	1
Nicaragua	1	0	0	1
Niger	0	1	0	1
Nigeria	5	2	0	7
Pakistan	7	4	0	11
Saudi Arabia	0	2	0	2
South Africa	9	7	1	17
South Korea	40	19	8	67
Syria	0	1	0	1
Taiwan	26	14	11	51
Tanzania	1	2	0	3
Zambia	<u>1</u>	<u>1</u>	<u>0</u>	<u>2</u>
Subtotal	<u>313</u>	<u>223</u>	<u>139</u>	<u>675</u>
Total	<u>373</u>	<u>363</u>	<u>161</u>	<u>897</u>