

# SCIENCE AT ITS BEST

---

# SECURITY AT ITS WORST

A Report on Security Problems at the  
U.S. Department of Energy

## APPENDIX



---

A Special Investigative Panel  
President's Foreign Intelligence Advisory Board

JUNE 1999

SCIENCE AT ITS BEST

---

SECURITY AT ITS WORST

A Report on Security Problems at the  
U.S. Department of Energy

## APPENDIX

A Special Investigative Panel  
President's Foreign Intelligence Advisory Board



JUNE 1999

---

# TABLE OF CONTENTS

<b>Chronology of Events</b>	<b>A-1</b>
<b>Chronology of Reports on DOE</b>	<b>A-15</b>
<b>Damage Assessment of China's Acquisition of U.S. Nuclear Information</b>	<b>A-25</b>
<b>Presidential Decision Directive 61</b>	<b>A-27</b>
<b>Bibliography</b>	<b>A-29</b>
<b>Map of DOE Field Facilities</b>	<b>A-35</b>



---

## DOE COUNTERINTELLIGENCE AND SECURITY CHRONOLOGY

- 1976** U.S. Government assesses that China may step up efforts to acquire relevant nuclear technology.
- 1977** Department of Energy established, from the Energy Research and Development Administration, Federal Energy Administration, and elements of several Cabinet Departments.
- May:** Classified GAO report cites the need for an independent group to assess the adequacy of safeguards for nuclear material, and to assure the health and safety of the public from nuclear operations. In response to this and to DOE Inspector General reports, the Assistant Secretary for Defense Programs establishes an independent, inter-agency group to report to him on the adequacy of safeguards at weapons labs. The group finds that safeguards at sensitive facilities are not effective, while DOE's Office of Safeguards and Security was giving these facilities passing grades.
- August:** James R. Schlesinger becomes Secretary of Energy.
- 1979** Travel to PRC begins by U.S. persons associated with U.S. nuclear weapons program; travelers face Chinese elicitation efforts.
- January 1:** U.S. normalizes relationship with China.
- August:** DOE Secretary Schlesinger leaves office. Charles W. Duncan Jr. becomes new DOE Secretary.
- September 21:** GAO produces "DOE's Erroneous Declassification of Nuclear Weapons Design Document."
- 1980s** FBI completes espionage investigation begun in late 1970s. Case is not prosecuted because suspect and foreign agent do not confess.
- 1980** **March 18:** GAO produces, "Nuclear Fuel Reprocessing and the Problem of Safeguarding Against the Spread of Nuclear Weapons."
- October 16:** China conducts last atmospheric nuclear test.

---

**1981**            **January:** DOE Secretary Duncan leaves office. James B. Edwards becomes new DOE Secretary.

**1982**            DOE's Inspection and Evaluation program initiated. Program designed to focus on specific elements of a given protection program and consists of three distinct phases—interviews, evaluations and testing. Program results to be reported to the responsible Assistant Secretary and the Secretary.

**August 20:** GAO, in classified report, strongly recommends the reinstatement of a high-level group independently reporting to the Under Secretary on the state of safeguards at DOE.

**November:** DOE Secretary Edwards leaves office. Donald Paul Hodel appointed new Secretary of Energy.

**1983**            **January 31:** DOE issues classified policy statement characterizing potential threats to DOE facilities. DOE indicates, “this statement provides a consistent basis for the identification of vulnerabilities and the design of corrective actions at the Department’s nuclear facilities.”

**July 8:** President notifies Secretary of Defense and Secretary of Energy of his interest in strengthening the White House role in monitoring and overseeing programs concerning the security of U.S. nuclear weapons facilities. The Secretaries are instructed to provide quarterly status reports on security improvement programs, and any reports required by Congress, to the NSC.

**1984**            **April 24:** DOD publishes “Nuclear Weapon Systems in China,” which estimates that the Chinese will not try to match the two superpowers in terms of nuclear capabilities, but will continue to seek Western technology support for their underground nuclear test program.

**May:** DOE establishes Central Training Academy to provide courses for protective force personnel in “tactical response, hostage negotiations, crisis management, and protective force supervisory skills.” DOE designates Office of Safeguards and Security (OSS) as the single focal point for safeguards and security matters in DOE (residing in Defense Programs). The Office of Security and Quality Assessments is created, also reporting directly to the Assistant Secretary for Defense Programs.

**July 2:** In the Annual Report on Domestic Safeguards for 1983, DOE states that despite “improvements and initiatives” to the physical security program, “significant protection problems remain at many DOE facilities.” DOE believes that the potential threat currently posed by the insider is serious and requires the institution of additional controls and personnel reliability features at our facilities.”

---

**1985**      **February:** DOE Secretary Hodel leaves office. John S. Herrington becomes new Secretary.

**June:** DOE annual report to the President for 1984 states “Notwithstanding the progress that has been made [regarding major physical security construction projects], protection problems remain at a number of our nuclear facilities.”

**August:** DCI plans to meet with Secretary of Energy to discuss controls on foreign nationals’ access to the U.S. national laboratories.

**September 13:** DOE draft position paper on foreign visitor controls states it is clear that DOE has a “problem with foreign visitors and the control/regulation of them.”

**1986**      Unpublished U.S. Government report discusses Chinese efforts to obtain U.S. nuclear information.

**January 28:** Representative John Dingell, Chairman of the House Energy and Commerce Subcommittee on Oversight and Investigations, sends letter to President Reagan regarding security vulnerabilities at the weapons laboratories. Rep. Dingell highlights additional management problems at DOE and the labs, and a lack of confidence in the inspection and evaluation function at DOE.

**May 1:** GAO produces report, “DOE Has Insufficient Control Over Nuclear Technology Exports.”

**1987**      **March 10:** GAO produces report, “DOE’s Reinvestigations of Employees Have Not Been Timely.” (DOE was unable to eliminate the case backlog until 1993).

**May:** DOE’s Inspector General reports a defective background investigative process at DOE.

**June:** DOE’s Office of Security Evaluations finds several personnel security process errors at three DOE facilities.

**August 17:** GAO produces report, “Nuclear Nonproliferation: Department of Energy Needs Tighter Controls over Reprocessing Information.”

**December 29:** GAO produces report, “DOE Needs a More Accurate and Efficient Security Clearance Program.”

**1988**      **April:** DOE’s Inspector General finds lack of accountability and insufficient timeliness in processing security clearances.

---

**April 4:** Minutes from a counterintelligence staff meeting, chaired by FBI Director, include an observation that “a significant problem we have had is that there were no real controls or focal points for tracking scientific visitors to China. Another problem was that academicians were rather naïve in their understanding of Chinese intentions, and it became very important to ensure that they were given a defensive CI briefing.”

**June:** DOE’s annual report to the President for 1987 comments, “As stated last year, DOE continues to be concerned about the potential threats posed by an insider, a knowledgeable and trusted individual who has been granted access to classified information or sensitive facilities. The threat posed by insiders is potentially more difficult to address than that of outsiders.”

**June 27:** President signs and issues National Security Decision Directive 309, “Nuclear Weapons Safety, Security, and Control,” tasking DOE and DOD to “determine the adequacy and effectiveness of physical security measures and coordinate their efforts including exchange of technical and operating data.” DOE shall prepare an Annual Report on Nuclear Weapons Domestic Safeguards and Security ... that shall describe the current state of protection of all DOE domestic nuclear weapons facilities.” The President further directs that he should be briefed on these reports annually.

**October 1 1988 - August 8, 1989:** FBI assigns official to DOE to evaluate CI program and to provide advice to DOE. FBI official found DOE management above the Counterintelligence Division inaccessible “which prevented him from securing the approval for the direct communication of urgently needed guidance to the field for the implementation of a vibrant counterintelligence program.”

**October 11:** At a meeting, a DOE official briefs on the diverse nature of the security problems and the physical measures taken at the various Energy facilities which differ both technically and geographically. The official expresses the opinion that Energy had done “essentially all that can be done against the outsider threat.”

**October 11:** GAO produces report, “Nuclear Nonproliferation: Major Weaknesses in Foreign Visitor Controls at Weapons Laboratories.”

**November:** Senate Select Committee on Intelligence (SSCI) staff briefed on DOE’s counterintelligence activities.

**November 9:** GAO produces report, “DOE Actions to Improve the Personnel Clearance Program.”

**December 12:** Army CI officer provides a briefing to the interagency coun-



---

terintelligence group on a GAO audit, “U.S. and Foreign Participation in R&D at Federal Laboratories.” The GAO investigation concludes that most laboratories do not perceive the foreign presence as a problem.

**1989**      **January:** DOE Secretary Herrington leaves office.

**March:** James D. Watkins becomes new Secretary of Energy.

**May:** Secretary of Energy delays the annual security report to the President because he personally wants to assure himself of the adequacy of security measures.

**June:** GAO produces report, “Nuclear Nonproliferation: Better Controls Needed over Weapons-Related Information and Technology.”

**1990**      **January:** Secretary of Energy Advisory Board (SEAB) is chartered as the highest level external advisory board in DOE. The SEAB reports directly to the Secretary. SEAB members form subcommittees and task forces to report on various issues for the Secretary.

**April:** DOE provides “1989 Annual Report to the President on Safeguards and Security.” The report states that “ensuring proper and cost-effective protection of DOE domestic nuclear weapons facilities is, and will continue to be, one of the highest priority efforts in the Department.” Concurrently, the Department will continue to pursue courses of action to mitigate the “insider threat,” optimize its internal oversight function related to protection of weapon facilities, and ensure a reasonable and proper balance between safety, environmental, and safeguards and security responsibilities.”

**April:** GAO produces report, “Nuclear Security: DOE Oversight of Livermore’s Property Management System is Inadequate.” (The Annual Report to the President in 1991 refers, in part, to this report, stating that “it has been determined that the primary cause of the document control problem was the number of document control systems which operated independently at the laboratory.”)

**April 6:** DOE Secretary Watkins removes intelligence function from Office of Defense Programs (DP) and creates Office of Intelligence (IN) as a separate departmental element.

**May 13:** DOE issues supplemental policy guidance on protection against the potential insider threat.

**June:** Interagency working group prepares a study of specific threats to U.S. Government facilities from visiting foreign nationals; finds several DOE CI deficiencies.

---

**June:** DCI plans to meet with the Secretary of Energy to discuss concerns about the general lack of counterintelligence awareness at DOE facilities around the country, and the slow progress toward improving DOE's CI programs.

**October:** GAO produces report, "Nuclear Safety: Potential Security Weaknesses at Los Alamos and Other DOE Facilities."

**1991**

**February 8:** GAO produces report, "Nuclear Security: Accountability for Livermore's Secret Classified Documents is Inadequate."

**March 21:** GAO produces report, "Nuclear Nonproliferation: DOE Needs Better Controls to Identify Contractors Having Foreign Interests."

**May 16:** GAO produces report, "Nuclear Security: Property Control Problems at DOE's Livermore Laboratory Continue."

**June 1:** DOE provides 1990 Annual Report to the President which states, in part, that "significant improvements must be made immediately in safeguards and security areas involving planning and management, personnel security, and the accounting for classified parts."

**July 5:** GAO produces report, "DOE Original Classification Authority Has Been Improperly Delegated."

**July 8:** Report from Energy Secretary Watkins on Safeguards and Security at DOE Nuclear Weapons Facilities highlights previous security problems at DOE and efforts to fix the deficiencies. It also notes that the report is not on the safety of nuclear weapons but rather on the safeguarding of classified information and materials.

**December 13:** GAO produces report, "Nuclear Security: Safeguards and Security Weaknesses at DOE's Weapons Facilities."

**1992**

**April:** At request of SSCI in FY92 intelligence authorization act, a community report cites insufficient resources in CI program, understaffing of debriefing elements, and lack of current threat information.

**June:** GAO produces report, "Nuclear Security: Weak Internal Controls Hamper Oversight of DOE's Security Problem."

**October 30:** GAO produces report, "Nuclear Security: Safeguards and Security Planning at DOE Facilities Incomplete."

**October:** DOE Order on counterintelligence issued.

---

**October 7:** DOE and FBI formalize relationship for conduct of CI activities in Memorandum of Understanding. MOU's purpose is to "define procedures that are mutually acceptable to the FBI and DOE regarding the conduct and coordination of counterintelligence activities and investigations involving DOE programs, facilities, or personnel in the United States."

**November:** DOE's Office of Security Evaluations' report for FY 1992 to the Secretary states, "Management and oversight problems ... continue to be the root cause of many other deficiencies noted in Security Evaluation inspections during FY 92;" and the "Department's Protection of Information programs suffer from lack of adequate guidance and a fragmented approach for protecting information."... "As noted in the past two reports, problems in management and oversight represent the most significant weakness in the Department's safeguards and security program." ... "Security systems continue to be plagued with potential single point failures and inadequate life cycle planning."

**November 16:** GAO produces report, "Nuclear Security: Improving Correction of Security Deficiencies at DOE's Weapons Facilities."

**1993**

**January:** DOE Secretary Watkins leaves office. Hazel R. O'Leary becomes new DOE Secretary.

**February:** The Annual Report to the Secretary on Safeguards and Security for 1992 finds that "less than satisfactory ratings in the area of classified matter protection and control stem in large part from the need for site management to assume responsibility for completion of self-assessments and provide training for document control." Another security program "has suffered from a lack of management focus and inconsistent procedural execution throughout the DOE complex. The result is that personnel are seldom held responsible for their disregard, either intentional or unintentional, of security requirements."

**April:** In the Annual Report to the President for 1992, DOE states that there is "an extensive reorganization of the laboratory safeguards and security organization underway to more effectively and efficiently administer the laboratory program."

**May 10:** GAO produces report, "Efforts by DOD & DOE to Eliminate Duplicative Background Investigations."

**August 12:** GAO produces report, "DOE's Progress on Reducing Its Security Clearance Workload."

**1994**

**January:** The Annual Report to the Secretary on Safeguards and Security for 1993 states that there is "growing confusion within the Department with

---

respect to Headquarters' guidance for safeguards and security. At this time, there is no single office at Headquarters responsible for the safeguards and security program. Most recently, a number of program offices have substantially expanded their safeguards and security staff to office-size organizations. These multiple safeguards and security offices have resulted in duplication of guidance, unnecessary requests for information/clarification, and inefficient program execution. Unchecked, this counterproductive tendency threatens the success of the overall safeguards and security effort."

**March:** FBI detailees to DOE are recalled to FBI "to address internal FBI needs," because of "lack of control of the CI program by DOE Headquarters [which] resulted in futile attempts to better manage the issue of foreign visitors at the laboratories."

**April:** The DOE Safeguards and Security Annual Report to the President for 1994 states that DOE's "safeguards and security community has begun to aggressively respond to the Secretary's goal of openness and public access to government information while recognizing the need to provide appropriate and effective security policy and procedures."

**June:** Intelligence report states Chinese visitors to U.S. are attempting to acquire U.S. technology through the recruitment of experts.

## 1995

**January:** The 1994 Annual Safeguards and Security Report to the Secretary finds that information security management programs "generally reflect deficiencies in self-inspection programs, control of access to classified and caveated information, and training regarding handling of classified information." Many findings regarding information security "are directly due to a lack of organizational and administrative detail on the part of those being inspected. Overall, findings and surveys, much like last year, continue to reflect deficiencies in self-inspections and procedural requirements or inappropriate or inadequate site guidance ... In the area of classified matter protection and control, like last year, marking, accountability, protection, and storage deficiencies are most numerous."

**February:** DOE Office of Counterintelligence subordinated to Office of Intelligence.

**July:** DOE senior officials discuss possibility that China may have classified U.S. nuclear design information with CIA, FBI and White House senior officials in several meetings this summer.

**Summer:** Analytical working group meets on China's nuclear weapons program and possible access to U.S. information. Group concludes that China has obtained classified U.S. information but disagrees on impact.

---

**August 3:** GAO produces report, “Poor Management of Nuclear Material Tracking Capabilities Makes Success Unlikely.”

**1996**

**January:** DOE’s annual safeguards and security report to the Secretary notes that among the disturbing trends in 1995 are “severe budget reductions, diminished technical resources, increased responsibilities, and reduced mission training, which have undermined protection of special nuclear material and restricted data.” The report states that “continued budget cuts and diminishing resources have reduced protection program operations to a level of ‘single point failure.’” The report also reviews personnel security, and finds there are cases of “identified individuals who held security clearances for convenience only.” Problems are “symptomatic of the lack of management attention to basic information assurance concerns.”

**January 23-27:** China Arms Control Exchange (lab-to-lab) Workshops: CTBT Verification and Monitoring Technologies, and Nuclear Materials, Protection, Control and Accounting (MPC&A), in Beijing.

**March:** DOE Deputy Secretary initiates study of foreign visits and assignments to labs.

**March 25-29:** China Arms Control Exchange (lab-to-lab) Workshop: Cooperative Monitoring Technologies, in Albuquerque.

**April 13:** DOE briefs Deputy National Security Advisor and senior NSC and CIA officials on “China’s Nuclear Weapons Programs: Strategic Directions and Foreign Contributions.”

**May:** DOE Administrative Inquiry is completed.

**June 17-20:** China Arms Control Exchange (lab-to-lab) Workshop: Atmospheric Sciences (#1), in Livermore, CA.

**September:** The 1995 Annual Report to the President (not forwarded to the White House until **March 1997**) is issued. Citing declining resources, DOE states that “many program elements have been reduced to minimally effective levels,” and without “adequate investment, [and] senior level management support ... the nation’s special nuclear material stockpile could be placed at increased risk and our international leadership in nuclear nonproliferation will be diluted.” Increased use of computer systems for handling classified and sensitive unclassified information “increases the potential and probability for ‘hacking’ and for covert collection of information from unprotected or lightly protected systems.” Simply stated, “Classified and sensitive unclassified information related to special nuclear materials and weapons production is increasingly at risk.”

---

**October:** DOE Office of Counterintelligence expanded; CIA CI expert designated to run office.

**October:** Intelligence reports cite several foreign countries are actively seeking U.S. nuclear information.

**October 16:** DOE's Office of Intelligence forwards a plan to better detect espionage through training and awareness briefings.

**November 21:** DOE Deputy Secretary meets with lab directors and heads of DOE field offices to review foreign visitors and CI programs. DOE HQ, field offices, and labs directed to begin implementing new measures to strengthen foreign visitor and CI programs. Labs tasked to produce threat self-assessment.

**1997**

**January:** The 1996 Annual Report on Safeguards and Security for the Secretary states, "Important security functions are operating under conditions of 'single-point failure.'" DOE's aging safeguards and security systems are cited as nearing the end of their useful lives, and "they no longer provide the necessary level of protection required in today's security environment."

**March 12:** Federico Pena confirmed as Secretary of Energy.

**April 4:** FBI issues report (in response to the FY97 Intelligence Authorization Act) to the Community Management Staff for transmittal to Congress and DOE. Report addresses: CI program oversight, foreign visits and assignments, CI analysis, professional training/CI awareness, and investigations.

**April 7:** FBI Director Freeh meets with Secretary of Energy Pena to deliver the **April 4**, 1997 report.

**April 28:** DOE Office of Intelligence organizes a Counterintelligence Senior Advisory Group to provide recommendations for DOE's CI problems.

**June 19-29:** China Arms Control Exchange (lab-to-lab) Workshop: Atmospheric Sciences (#2), in Beijing.

**July 14:** Briefing on possible espionage provided to Secretary of Energy with options for remedies.

**July 29:** DOE briefs National Security Council staff on "China's Strategic Nuclear Modernization Program: DOE Nuclear Weapons Laboratory Contributions to Chinese Strategic Breakthroughs."

---

**August 6-8:** China Arms Control Exchange (lab-to-lab) Workshop: Control of Nuclear Technologies, in Beijing.

**August 12:** At the conclusion of a DOE briefing on China's possible possession of U.S. warhead design information, FBI Director recommends that "DOE quickly and 'furiously' develop a plan to stop erosion of 20 years."

**September 2:** NACIPB/NACOB reports that the "working group has recognized that systemic and serious CI and security problems at DOE have been well documented over at least a ten year period. Information received from CI and security professionals at DOE indicate that few of the recommendations in the past studies have been implemented."

**September 25:** GAO produces report, "Department of Energy: DOE Needs to Improve Controls Over Foreign Visitors to Weapons Laboratories."

**October 15:** DCI and FBI Director meet with Secretary of Energy and Deputy Secretary to discuss CI problems and reforms. Participants agree to develop action plan that will serve as basis for Presidential Decision Directive (PDD), acknowledging that reform from within DOE is difficult.

**November 6:** Letter to Secretary of Energy from DCI and FBI Director states "the culture and structure at DOE have consistently prevented meaningful reforms which could begin to counter the foreign intelligence threat to sensitive weapons programs and dual use technology."

**November 6:** DOE's Office of Security Affairs submits "Report on the Status of the Department of Energy's Safeguards and Security Program, **October 1997**" to the Secretary. The cover letter states, "in all candor, we have been hampered in meeting [safeguards and security] obligations by organizational obstacles and competing internal interests." The report contends that "by far, the most pressing issue is the Department's current unsatisfactory method for managing its safeguards and security program. Simply put, the current method does not work as intended."

**1998**

**February 11:** President signs PDD-61.

**March:** U.S. Nuclear Command and Control System (NCCS) Support Staff (NSS) produces assessment report on DOE Nuclear Weapons Related Security Oversight Process. The report finds that DOE's ability to "exercise comprehensive oversight, provide critical expert advice and status assessment to senior management, and identify corrective actions and monitor their implementation is problematic due to three significant issues: 1) a lack of nuclear physical security expertise at all levels of the oversight process; 2) ad hoc structuring of Safeguards and Security functions throughout the



---

Department; and 3) placement of oversight functions in positions which constrain their effectiveness.” DOE’s initial response to the above list of findings was “without references to specific examples in the body of the report, these issues cannot be validated.”

**March:** DCI and FBI Director meet with DOE lab directors to discuss the importance of the new initiatives.

**April 6-May 15:** DOE CI Director begins PDD-61-mandated 90-day study with team visits to eight DOE operations offices and nine national laboratories.

**June 30:** Secretary Pena resigns.

**July 1:** Acting Secretary receives 90-day report.

**July:** Joint Technology Demonstration (lab-to-lab Exchange), Nuclear Materials Protection, Control and Accounting (MPC&A), in Beijing.

**August 18:** Secretary Richardson sworn in.

**October 6:** GAO produces report, “Problems in DOE’s Foreign Visitor Program Persist.”

**November:** Per PDD-61, report published on the foreign collection threat to DOE, stating that DOE is being aggressively targeted for nuclear, sensitive, proprietary, and unclassified information.

**November:** During an internal inspection of a lab, DOE finds that the “underlying cause of these security breaches has been personnel who lack adequate security awareness and training, and who do not demonstrate an attitude conducive to effective security.”

**November 13:** Secretary Richardson submits CI Action Plan to NSC.

**December 9:** Secretary Richardson meets with lab CI directors, and HQ CI and Intelligence staff to discuss implementation plan.

**1999**

**January:** First phase of a Special Security Review is completed for the Secretary. The recommendations include: establishing an integrated security management system; formalizing and differentiating the roles and responsibilities of each DOE organization; optimizing safeguards and security resources; strengthening human reliability programs; and incorporating security responsibilities into safety concerns.



---

**January 3:** U.S. House of Representatives publishes “Final Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People’s Republic of China” (classified version).

**January 25-30:** Joint Technology Demonstration (lab-to-lab Exchange), Nuclear Materials Protection, Control and Accounting (MPC&A), in Beijing.

**February 3:** DOE’s CI Implementation Plan completed and delivered to Secretary Richardson.

**February 19:** GAO produces report, “Concerns with DOE Efforts to Reduce the Risks Posed by Russia’s Unemployed Weapons Scientists.”

**March:** DOE forwards the “annual” safeguards and security report from the past two years to the President, citing that there is “concern that attitudes regarding the protection of critical information are moving toward a less-attentive state of awareness.”

**March 4:** DOE Counterintelligence implementation plan (per PDD-61) issued to labs.

**April 6:** DOE temporarily shuts down all classified computers at LANL, LLNL, and SNL for security review.

**May 11:** Secretary Richardson announces new security organization at DOE, under the responsibility of a “security czar.”



---

## CHRONOLOGY OF SECURITY ANALYSIS REPORTS OF DOE, 1980-1999

### PHYSICAL PROTECTION OF SENSITIVE NUCLEAR DATA, MATERIALS, AND TECHNOLOGY

- Sep 1979 *GAO/EMD-79-109/DOE's Erroneous Declassification of Nuclear Weapons Design.* Los Alamos, sometime between 1971 and 1976 -- while under AEC, incorrectly declassified very sensitive weapons design information, which subsequently was found in publicly accessible library in Los Alamos.
- Mar 1980 *GAO/EMD-80-38/Nuclear Fuel Reprocessing and the Problems of Safe-guarding Against the Spread of Nuclear Weapons.* Improper measuring, storing, and verifying of quantities of nuclear materials.
- Sep 1982 *DOE/Office of Safeguards and Security (OSS) Inspection Report on Albuquerque Area Office, Los Alamos National Lab (LANL), Sandia National Lab (SNL), and Rocky Flats Plant.* Classified findings
- May 1984 *DOE/Office of Safeguards and Quality (OSQ) Assessment: LANL, SNL, LLNL.* Classified findings.
- Jan 1985 *DOE/OSQ Assessment: Inspection Report on Albuquerque Area Office, LANL, Mound Facility.* Classified findings.
- Feb 1985 *DOE/OSQ Assessment: Inspection Report on DOE Germantown and Forrestal Locations.* Classified findings.
- Jun 1985 *DOE/OSQ Assessment: Inspection Report on SNLL, LLNL, San Francisco Operations Office.* Classified findings.
- Jan 1986 *U.S. House of Representatives: Letter of Rep. Dingell letter to the President.* Inadequately trained guard force personnel; inadequate protection of classified information; inability to track and recover special nuclear material.
- Nov 1986 *DOE/OSQ Assessment: Inspection Report on LANL, Albuquerque Area Office.* Classified findings.
- Apr 1987 *DOE/OSE: Inspection Report on San Francisco Operations Office and SNLL.* Classified findings.
- Aug 1987 *GAO/RCED-87-150/DOE Needs Tighter Controls Over Reprocessing Information.* Transfer of sensitive nuclear technology to proliferating nations. DOE funding of research that may involve foreign nationals from countries that have not agreed to Non-Proliferation Treaty.

---

Jun 1989	<i>GAO/RCED-89-116/Nuclear Proliferation: Better Controls Needed Over Weapons-Related Information and Technology.</i> Insufficient control over weapons-related information and technology.
Dec 1990	<i>DOE Safeguards and Security Task Force/Freeze Report.</i> Lack of clear and concise physical security standards; inconsistent measurements of nuclear material.
Aug 1991	<i>DOE/IG-296/ Department-wide Audit of the Visibility Over the Status of Nuclear Materials.</i> Nuclear materials routinely reported as “in use” or “needed” when they were actually “excess” to any defined requirement.
Dec 1991	<i>GAO/RCED-92-39/Nuclear Security Safeguards and Security Weaknesses at DOE's Weapons Facilities.</i> Noncompliance with two-person rule for access to nuclear material; physical security personnel unable to demonstrate basic skills.
May 1992	<i>DOE/IG/INS-L-92-02/Control of Classified Documents at DOE Savannah River Operations Office.</i> No review of Savannah River classified document controls by DOE Headquarters Office of Security Evaluations Between 1985 and 1990.
Jan 1993	<i>DOE/IG-319/ Administration of Conflict of Interest Relating to Tech Transfer at LANL.</i> Conflict of interest by LANL employees, who made decisions, used government resources, and took privileged information to further personal financial interest in spin-off business.
Feb 1993	<i>DOE/OSS/ 1992 Annual Report to the Secretary.</i> Aging equipment; lack of adequate system performance testing.
Aug 1994	<i>DOE/IG/INS-O-94-05/Inspection of Physical Security Operations at LANL TA-18 Site.</i> LANL not in full compliance with DOE physical security requirements because of LANL's failure to meet deadline for completion of site safeguards and security plan.
Jan 1995	<i>DOE/OSS/Status of Safeguards and Security, Fiscal Year 1994.</i> Numerous deficiencies in marking, accountability, protection, and storage of classified material.
Mar 1995	<i>DOE/IG/S94IS012/ Albuquerque Vault Classification.</i> Inadequate procedures for protecting combinations to security containers/areas.
Jun 1995	<i>DOE/Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.</i> Aging security systems.
Jan 1996	<i>DOE/OSS/Status of Safeguards and Security, Fiscal Year 1995.</i> Aging security systems.
Sep 1996	<i>DOE/Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.</i> Aging safeguards and security systems and protective forces; inadequate inventory procedures for some facilities.
Jan 1997	<i>DOE/OSS/Status of Safeguards and Security for 1996.</i> Classified findings.
Nov 1997	<i>DOE/OSA/Report to Secretary on Status of DOE Safeguards and Security Program.</i> Aging physical security systems and protective force.

- Jun 1997 *SNL/Factors Contributing to Current Risk Levels in DOE Complex.* Classified finding.
- Apr 1999 *DOE/23rd Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.* Aging security systems.
- Feb 1999 *GAO/RCED-99-54/Concerns with DOE's Efforts to Reduce the Risks Posed by Russia's Unemployed Weapons Scientists.* DOE may have provided Russian scientists with dual-use, defense-related information that could negatively affect national security.

PERSONNEL SECURITY

- Jul 1984 *DOE/Ninth Annual Report on Domestic Safeguards.* Classified findings.
- Jul 1986 *DOE/IG-228/Retention of Security Clearances at DOE Headquarters.* Ineffective procedures for systematically withdrawing clearances after employee termination.
- Mar 1987 *GAO/RCED-87-72/DOE's Reinvestigation of Employees Has Not Been Timely.* Personnel security reinvestigations not conducted on timely basis (DOE unable to eliminate case backlog until 1993).
- May 1987 *DOE/IG-238/Selected Aspects of DOE's Personnel Security Program.* Employees granted clearances higher than required; majority of employees not reinvestigated in last 5 years; defective investigative process.
- Jun 1987 *DOE/OSE Inspection Report on Albuquerque Operations Office, LANL, AL and SNL.* Lack of procedure to establish eligibility requirement for SCI clearance if family member non-US citizen; lack of timely conduct and analysis of reinvestigations; Albuquerque failure to include security infraction notices in personnel security files.
- Dec 1987 *GAO/RCED-88-28/DOE Needs a More Accurate and Efficient Security Clearance Program.* Inefficient security clearance program: clearance processing delays; inaccurate clearance data bases; need-to-know problems.
- Apr 1988 *DOE/IG-255/Timeliness in Processing DOE Headquarters Security Clearances.* More than 100 days average time for processing applications after necessary forms initially completed; lack of accountability for tracking applications and ensuring timely processing; decisions based on investigative reports not made in timely manner.
- Mar 1990 *DOE/IG/WR-O-90-02/Nevada Operations Office Oversight of Management and Operating Contractor Security Clearances.* Four areas employing 928 "Q" cleared employees who had no access to classified material and no clear need to know.
- Apr 1990 *DOE/IG-281/Inspection of LLNL's Drug-Free Workplace Program.* Absence of random drug-testing program at Lawrence Livermore National Laboratory (LLNL), and no original plans to implement program without federal requirement.
- Nov 1990 *DOE/IG/WR-B-91-01/Richland Operations Office of Management and Operating Contractor Personnel Security Clearances.* Insufficient number of trained staff in Personnel Security Branch; significant backlog of personnel security clearances awaiting adjudication.
- Dec 1990 *DOE/Safeguards and Security Task Force (Freeze Report).* Security clearance processing

---

time exceeds any reasonable standard; OPM delays in investigation not challenged by DOE; resources to implement Personnel Security Assurance Program not provided.

- Sep 1991 *DOE/IG/WR-B-91-08/Review of Contractor's Personnel Security Clearances at DOE Field Office, Albuquerque.* Albuquerque Field Office granted "Q" clearances to 1,058 contractor lab and plant employees who did not need to access classified information.
- Dec 1991 *DOE/IG/WR-V-92-06/Audit of Internal Controls That Assure FY 1991 Costs Claimed by and Reimbursed to LANL Are Allowable Under DOE Contract #W-7405-ENG-36.* LANL requested "Q" clearances for more than 500 people not needing access to classified information.
- May 1992 *DOE/IG-310/General Management Inspection of the Department of Energy's Nevada Field Office.* Defense personnel allowed access to SRD without full background investigation; security clearances reinstated without conduct of required supplemental investigations; individuals designated "holders" for classified documents, without being assigned responsibility for safeguarding documents.
- Mar 1993 *DOE/IG-323/Review of DOE's Personnel Security Clearance Program.* DOE granted security clearances to individuals not specifically requiring access to classified material; processing clear cases averaged 43 working days, 174 calendar days to process derogatory cases.
- Aug 1993 *DOE/IG/S9IJS010/Personnel Security Clearance Suspensions and Revocations at the DOE Albuquerque Field Office, Based Upon Security Infractions/Violations.* Deficiencies and inconsistencies in handling of security infractions/incidents by certain national labs and processing of related personnel security actions by Albuquerque.
- Aug 1993 *GAO/RCED-93-183/Nuclear Security: DOE's Progress on Reducing Its Security Clearance Workload.* Ineffective management by DOE of personnel security cases containing unfavorable information; some DOE contractors not verifying important information on prospective employees.
- May 1995 *DOE/IG/INS-L-95-07/Inspection of LANL-Alleged TA-55 Security Violation.* LANL employees who were not personnel security assurance program cleared had been provided access to the material access area at TA-55 site.
- Jun 1998 *DOE/OCI/Mapping the Future of DOE's CI Program.* Classified findings.

#### FOREIGN VISITORS AND ASSIGNMENTS

- Dec 1986 *DOE Special Project Team/Operation Cerberus Report.* Scant data available at DOE headquarters on number and scope of foreign nationals at DOE facilities; approval authority for foreign visits and assignments not centralized.
- Oct 1988 *GAO/RCED-89-31/Major Weaknesses in Foreign Visitor Controls at Weapons Laboratories.* Failure to obtain timely and adequate information on foreign visitors before allowing them access to labs; lack of enforcement by DOE of internal control mechanisms for approving, monitoring, and reporting foreign visits; no internal review of foreign visitor program; no integrated system to obtain and disseminate foreign visitor information to DOE field offices; inattention to sensitive subjects discussed with foreigners.
- Dec 1990 *DOE Safeguards and Security Task Force/Freeze Report.* Security would suffer little if

---

records checks were to be discontinued.

- Oct 1993 *DOE/IG-337/Use of Intelligence Information to Identify the Foreign Interests of Entities Involved with DOE Programs.* Failure by DOE to take action to implement provisions of Public Law 102-484 regarding award of certain departmental national security contracts to companies owned by entity controlled by foreign government.
- Nov 1996 *Deputy Secretary of Energy/Curtis Plan.* Classified findings.
- Sep 1997 *GAO/RCED-97-229/DOE Needs to Improve Controls Over Foreign Visitors to Weapons Laboratories.* Less than fully effective procedures for obtaining indices checks on foreign visitors and controlling dissemination of sensitive information. LANL allowed unescorted after-hours access to controlled areas, to preserve “open campus atmosphere.” Lack of clear criteria for identifying visits that involve sensitive subjects. Result: sensitive subjects may have been discussed with foreign nationals without DOE knowledge and approval.
- Dec 1997 *DOE/IG/CR-L-989-02/FMFIA 1997.* Large and increasing numbers of foreign nationals visiting labs raised concern about access and potential compromises of classified, sensitive, and proprietary information.
- Oct 1998 *GAO/T-RCED-99-19/Department of Energy: Problems in DOE’s Foreign Visitors Program Persist.* As in 1988, visitors with ties to foreign intelligence services gained access to laboratories without DOE and/or laboratory officials' advance knowledge of visitors' connections. As found by GAO in 1988 and 1997, procedures for identifying sensitive subjects lack clear criteria and controls to ensure that visits potentially involving such subjects are reviewed by DOE.
- Jun 1998 *DOE/OCI/Mapping the Future of DOE’s CI Program.* Classified findings.
- Feb 1999 *DOE/IG/CR-L-99-01/FMFIA 1998.* Large and increasing numbers of foreign nationals visiting labs raised concern about access and potential compromises of classified, sensitive, and proprietary information.

INFORMATION SECURITY.

- Sep 1982 *DOE/OSS Inspection Report on Albuquerque Area Office, LANL, SNL, and Rocky Flats Plant* Classified finding.
- May 1984 *DOE/OSQ Assessment: LANL, SNL, LLNL.* Classified findings.
- Jan 1985 *DOE/OSQ Assessment: Inspection Report on Albuquerque Area Office, LANL, Mound Facility.* Classified findings.
- Feb 1985 *DOE/OSQ Assessment: Inspection Report on DOE Germantown and Forrestal locations.* Classified findings.
- Mar 1985 *DOE/OSQ Assessment: Albuquerque Operations Office, SNL.* Classified findings.
- Jun 1985 *DOE/OSQ Assessment: Inspection Report on SNL and SNLL and San Francisco Operations Office.* Classified findings.

- Nov 1986 *DOE/OSQ Assessment: Inspection Report on LANL, Albuquerque Area Office.* Classified findings.
- Jan 1987 *DOE/OSE: Inspection Report on DOE Headquarters.* Classified findings.
- Apr 1987 *DOE/OSE: Inspection Report on San Francisco Operations Office and SNLL.* Classified findings.
- Jun 1987 *DOE/OSE: Inspection Report on Albuquerque Operations Office, SNL, and LANL.* Classified findings.
- Apr 1990 *DOE/Annual Report to the President on the Status of Domestic Safeguards and Security at All Nuclear Weapons Facilities.* Classified findings.
- Dec 1990 *Safeguards and Security Task Force/Freeze Report.* Inadequate oversight and control over Secret document inventory; responsibility for classified and unclassified computer security split between two DOE organizations, thereby diluting computer security expertise; inadequate professional development programs for computer security specialists.
- Feb 1991 *GAO/RCED-91-65/Nuclear Security: Accountability for Livermore's Secret Classified Documents Is Inadequate.* Inadequate accountability for documents at Lawrence Livermore National Laboratory (LLNL) classified; 1990 GAO inventory identified 12,000 missing secret documents. As of January 1991, over 10,000 still missing.
- 1986; Jul 1991 *GAO/RCED-91-183/DOE Original Classification Authority Has Been Improperly Delegated. Untitled Information Security Oversight Office report.* Improper delegation of original classification authority to contractors, in violation of E.O. 12356, 1982.
- Jul 1991 *DOE/Annual Report to the President on the Status of Safeguards and Security at All Domestic Nuclear Weapons Facilities.* Classified findings.
- Nov 1992 *DOE/OSE Annual Report: Safeguards and Security Oversight During Fiscal Year 1992.* Lack of adequate guidance; fragmented approach for protecting information.
- Feb 1993 *DOE/OSS/1992 Annual Report to Secretary.* Less than satisfactory ratings in classified matter protection and control.
- Jan 1994 *DOE/OSS/Status of Safeguards and Security, Fiscal Year 1993.* Inability of DOE to identify its most sensitive information; failure to properly accredit systems processing classified information; lack of controls to provide access authorities and proper password management; no configuration management; improper labeling of magnetic media; failure to perform management reviews.
- Apr 1994 *DOE/Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.* At LLNL, decentralized computer security management lacked aggressive technical oversight and complete enforcement of critical program elements; computer security program application favors users at expense of security implementation. (U)
- Jun 1995 *DOE/Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.* Improper accreditation of laptops; data transferred from



---

higher classified systems to lower systems without proper review; inadequate audit trails; improper password controls.

- Jan 1996 *DOE/OSS/Status of Safeguards and Security, Fiscal Year 1995.* Lack of management attention to basic information assurance concerns at a time of “increased interconnectivity with relatively uncontrolled entities.”
- Jan 1997 *DOE/OSS/Status of Safeguards and Security, Fiscal Year 1996.* Computer system interconnectivity growing exponentially, increasing risk to DOE information assets.
- Jun 1998 *DOE/OCI/Mapping the Future of DOE’s CI Program.* Classified findings.
- 1998 *DOE/IG/198AL001 Improper Export of Software.* LANL improperly transferred particular computer software program to PRC and Russia; no criminal violations found, but LANL failed to obtain proper US Department of Commerce license approval.
- Nov 1998 *DOE/OSE/Safeguards and Security Inspection of LANL.* Classified findings.
- Apr 1999 *GAO/Key Factors Underlying Security Problems at DOE Facilities* (April 20, 1999 GAO Congressional testimony). Inadequate separation of classified and unclassified computer networks at LANL in 1988, 1992, and 1994; classified information discovered on LANL unclassified computer network in 1998.
- 1999 *DOE/23rd Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities.* Numerous incidents of classified information being placed on unclassified systems, including several since the development of a corrective action plan in July 1998.

SECURITY MANAGEMENT, PLANNING, AND OVERSIGHT.

- Jun 1985 *DOE/OSQ Assessment: Inspection Report on SNLL, LLNL, San Francisco Operations Office.* Classified findings.
- Jan 1986 *U.S. House of Representatives: Letter of Rep. Dingell to the President.* Misleading system of rating DOE inspections of safeguards and security.
- Dec 1986 *DOE/Special Project Team/Cerberus Report.* Lack of adequate short- and long-term planning in DOE’s safeguards and security program; insufficient intelligence support for DOE facility security; insufficient standardization of security methods, equipment, and strategies at DOE weapons sites.
- Jun 1988 *DOE Annual Report to the President on Domestic Safeguards and Security.* Classified findings.
- Oct 1990 *GAO/RCED-91-12/Potential Security Weaknesses at Los Alamos and Other DOE Facilities*  
Mar 1991 *and GAO/RCED-92-39/Nuclear Security: Safeguards and Security Weaknesses at DOE’s Weapons Facilities.* Inability of DOE to track, monitor, and correct security deficiencies at DOE facilities.
- Dec 1990 *Safeguards and Security Task Force/Freeze Report.* Classified findings.

Feb 1991	<i>GAO/RCED-91-65/Nuclear Security: Accountability for Livermore's Secret Classified Documents is Inadequate.</i> Inadequate DOE oversight of LLNL's document control program.
Mar 1991	<i>GAO/RCED-91-83/DOE Needs Better Controls to Identify Contractors Having Foreign Interests.</i> Inadequate controls for identifying DOE contractors having foreign interests.
Jun 1992	<i>GAO/RCED-92-146/Weak Internal Controls Hamper Oversight of DOE's Security Program.</i> Lack of system at DOE to oversee and monitor exceptions to DOE safeguards and security orders.
Oct 1992	<i>GAO/RCED-93-14/Safeguards and Security Planning at DOE Facilities Incomplete.</i> Incomplete safeguards and security planning at DOE facilities. As of fall 1992, DOE had not completed plans for 15 of its 27 sensitive facilities.
Nov 1992	<i>DOE/OSE/Annual Report: Safeguards and Security Oversight During Fiscal Year 1992.</i> Numerous overlapping and confusing safeguards and security inspections; management and oversight problems represent most significant weaknesses in DOE's security program; inadequate life cycle planning of security systems.
Nov 1992	<i>GAO/RCED-93- 10/Improving Correction of Security Deficiencies at DOE's Weapons Facilities.</i> Insufficient DOE validation of corrective actions.
Feb 1993	<i>DOE/Office of Safeguards and Security, Report to the Secretary: Status of Safeguards and Security.</i> In Violation of Laws, Losses, and Incidents of Security Concern Program, lack of management focus resulted in personnel seldom being held responsible for disregard of security requirements.
Jan 1994	<i>DOE/OSS/Status of Safeguards and Security, Fiscal Year 1993.</i> No single office at DOE Headquarters responsible for safeguards and security program; duplication of guidance, unnecessary requests for information, inefficient program execution.
Nov 1996	<i>Deputy Secretary of Energy/Curtis Plan.</i> Classified findings.
Sep 1997	<i>GAO/RCED-97-229/Department of Energy: DOE Needs to Improve Controls Over Foreign Visitors to Weapons Laboratories.</i> Failure to provide detailed oversight of the national laboratories' CI programs.
1997	<i>DOE/OSA/Report to Secretary on Status of DOE Safeguards and Security Program.</i> Fragmented and dysfunctional security management structure.
Oct 1998	<i>GAO/T-RCED-99-19/Department of Energy: Problems in DOE's Foreign Visitor Program Persist.</i> Failure to evaluate effectiveness of security controls over information in laboratory areas most frequented by foreign visitors.
1998	<i>DOD/NCCS Support Staff/DOE Nuclear Weapons -Related Security Oversight Process.</i> Classified findings.
Jan 1999	<i>Special Security Review/Internal Report to the Secretary.</i> Classified findings.

---

COUNTERINTELLIGENCE.

- Jun 1990      Classified report.
- Apr 1992      Classified report.
- Apr 1997      *GAO/RCED-97-128R/Department of Energy: Information on the Distribution of Funds for Counterintelligence Programs and the Resulting Expansion of These Programs.* Indirect and inconsistent funding for CI programs; despite additions to overall CI program funds, eight DOE facilities significantly reduced budgetary support for their CI programs.
- Apr 1997      Classified report.
- Sep 1997      *GAO/RCED-97-229/Department of Energy: DOE Needs to Improve Controls Over Foreign Visitors to Weapons Laboratories.* DOE CI programs not based on comprehensive assessment of foreign espionage threat.
- Jun 1998      *DOE/OCI/Mapping the Future of DOE's CI Program.* Classified findings.



---

## INTELLIGENCE COMMUNITY DAMAGE ASSESSMENT OF CHINA'S ACQUISITION OF U.S. NUCLEAR WEAPONS INFORMATION

Chinese strategic nuclear efforts have focused on developing and deploying a survivable long-range missile force that can hold a significant portion of the U.S. and Russian populations at risk in a retaliatory strike. By at least the late 1970s the Chinese launched an ambitious collection program focused on the U.S., including its national laboratories, to acquire nuclear weapons technologies. By the 1980s China recognized that its second strike capability might be in jeopardy unless its force became more survivable. This probably prompted the Chinese to heighten their interest in smaller and lighter nuclear weapon systems to permit a mobile force.

China obtained by espionage classified U.S. nuclear weapons information that probably accelerated its program to develop future nuclear weapons. This collection program allowed China to focus successfully down critical paths and avoid less promising approaches to nuclear weapons designs.

- China obtained at least basic design information on several modern U.S. nuclear reentry vehicles, including the Trident II (W-88).
- China also obtained information on a variety of U.S. weapon design concepts and weaponization features, including those of a neutron bomb.
- We cannot determine the full extent of weapon information obtained. For example, we do not know whether any weapon design documentation or blueprints were acquired.
- We believe it is more likely that the Chinese used U.S. design information to inform their own program than to replicate U.S. weapon designs.

China's technical advances have been made on the basis of classified and unclassified information derived from espionage, contact with U.S. and other countries' scientists, conferences and publications, unauthorized media enclosures, declassified U.S. weapons information, and Chinese indigenous development. The relative contribution of each cannot be determined.

Regardless of the source of the weapons information, it has made an important contribution to the Chinese objective to maintain a second strike capability and provided useful information for future designs.

---

Significant deficiencies remain in the Chinese weapons program. The Chinese almost certainly are using aggressive collection efforts to address deficiencies as well as to obtain manufacturing and production capabilities from both nuclear and nonnuclear sources.

To date, the aggressive Chinese collection effort has not resulted in any apparent modernization of their deployed strategic force or any new nuclear weapons deployment.

China has had the technical capability to develop a multiple independently targetable reentry vehicle (MIRV) system for its large, currently deployed ICBM for many years, but has not done so. U.S. information acquired by the Chinese could help them develop a MIRV for a future mobile missile.

We do not know if U.S. classified nuclear information acquired by the Chinese has been passed to other countries. Having obtained more modern U.S. nuclear technology, the Chinese might be less concerned about having their older technology.

---

## PRESIDENTIAL DECISION DIRECTIVE NO. 61

The Department of Energy (DOE) has stewardship of vital national security capabilities, from nuclear weapons to leading edge research and development projects. These capabilities, and related DOE programs, are important not only to the strength of our Nation, but within the framework of international cooperation, to the lessening of global threats. We must therefore ensure the security of these critical programs through the application of an effective and coordinated counterintelligence (CI) program. To enhance counterintelligence capabilities at DOE, President Clinton directed in February 1998 that the following initiatives be implemented:

The CI and foreign intelligence (FI) elements of DOE will be reconfigured into two independent offices, which will report directly to the Secretary of Energy. The Secretary may delegate regular management of these two offices to the Deputy Secretary.

The Director of the new Office of CI (OCI) will be a senior executive from the Federal Bureau of Investigation (FBI). The OCI will be staffed by DOE CI professionals, augmented by detailees from other Intelligence Community agencies as appropriate.

The Director, OCL will have direct access to the Secretary of Energy, the Director of Central Intelligence (DCI), and the Director, FBI.

All CI and FI activities at DOE and the laboratories will continue to be included in the National Foreign Intelligence Program and, as such, are subject to policy and programmatic guidance by the DCI and applicable Congressional oversight.

The laboratory directors will be directly accountable to the Secretary of Energy for the performance of the CI program at their locations. Existing DOE contracts with the labs will be amended to include CI program goals and objectives and performance measures to evaluate compliance with those contractual obligations. CI personnel assigned to the laboratories will have direct access to the laboratory directors and will concurrently report to the Director, OCI. CI oversight functions previously designated to DOE operations and field offices will revert to the OCI.

The National CI Policy Board (NACIPB) will oversee implementation of the Directive and will continue to coordinate and/or provide other CI community resources, support and oversight to the DOE CI program as needed.

---

When appropriate, the NACIPB may refer problems and concerns not resolved by the NACIPB and Director, OCI, to the Energy Security Management Board, established by the National Defense Authorization Act for Fiscal Year 1998.

The incoming Director, OCI, will prepare a report for the Secretary of Energy ninety days after his arrival, to include progress on the initiative, a strategic plan for achieving long-term goals, and recommendations on whether and to what extent other organizational changes may be necessary to strengthen CI. In preparing the report, the Director will consult with laboratory directors and other appropriate DOE personnel.

The Director, OCI, will initiate an internal inspection process to review annually DOE's CI program and provide results to the Secretary of Energy.

The Secretary of Defense, Attorney General, DCI, and Director, FBI, as involved principals, will provide support to the Secretary of Energy in the implementation of the directive and continuation of an effective CI program. Such support will include provision of personnel, investigative and analytic resources. These principals will receive copies of the initial ninety-day report of the Director, OCI, the annual inspection reports of the CI program and any reports generated by the Director, OCI, concerning significant policy or operational issues.

The new CI and FI offices will ensure that their operational and analytic efforts and results are integrated, mutually and throughout DOE and the laboratories, to provide the greatest level of protection to our national security interests.

The OCI and DOE Office of Security Affairs will, in coordination, develop and implement specific security measures to reduce the threat to classified and sensitive information at DOE, its field activities and the national laboratories. The Office of Security Affairs will provide timely notification to the OCI of any potential CI problems developed through these procedures.

The Secretary of Energy will establish an Office of Foreign Visits and Assignments at DOE Headquarters to facilitate the participation of qualified foreign nationals in DOE projects. The Secretary will develop procedures and practices for this Office which will meet the needs of DOE's vital national security programs while providing protection from possible foreign threats.

Within 120 days, the Secretary of Energy will advise the Assistant to the President for National Security Affairs on the actions taken and specific remedies designed to implement this directive.



---

## BIBLIOGRAPHY OF MAJOR UNCLASSIFIED SOURCES

*Note: The following list does not include citations for several hundred classified reports and documents provided to the PFIAB by CIA, FBI, DOE, NSA, DOD, and DOJ.*

Boyer, Paul, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age*. Chapel Hill: University of North Carolina Press, 1985.

Department of State memorandum, "China Arms Control Exchange Workshops," undated

DOE chronology, April 13, 1999

DOE Field Fact Book, May 1998

DOE, "Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities," June 1995

DOE, "Annual Report to the President on the Status of Safeguards and Security at Domestic Nuclear Weapons Facilities," September 1996

DOE, "Department of Energy First Tier Organizations, Terms of Office," undated

DOE, Office of Counterintelligence, "The Foreign Intelligence Threat to Department of Energy Personnel, Facilities and Research, Summary Report," August 1990

DOE, "Office of Safeguards and Security Inspection Report on Albuquerque Area Office, Los Alamos National Laboratory, Sandia National Laboratory, and Rocky Flats Plant," September 1982

DOE, "Office of Safeguards and Security, Report to the Secretary: Status of Safeguards and Security," February 1993

DOE, "Office of Safeguards and Security, Status of Safeguards and Security, Fiscal Year 1993," January 1994

DOE, "Office of Safeguards and Security, Status of Safeguards and Security, Fiscal Year 1994," January 1995

DOE, "Office of Safeguards and Security, Status of Safeguards and Security, Fiscal Year 1995," January 1996

DOE, "Office of Security Affairs: Report to the Secretary on the Status of the DOE Safeguards and Security Program," November 1997

---

DOE, "Office of Security Evaluations Annual Report: Safeguards and Security Oversight During Fiscal Year 1992," November 1992

DOE, "Office of Security Evaluations: Inspection Report on DOE Headquarters," January 1987

DOE, Office of Security Affairs, "Report on the Status of the Department of Energy's Safeguards and Security Program, October 1997," November 6, 1997

DOE, "Plutonium: The First 50 Years. United States Plutonium Production, Acquisition, and Utilization from 1944 Through 1994

DOE, Robert Daniel memorandum to Secretary Watkins, January 12, 1993

DOE, Special Project Team, "Operation Cerberus Report," December 1986

DOE/IG/198AL001, "Improper Export of Software," 1998

DOE/IG/CR-L-989-02, "FMFIA 1997," December 1997

DOE/IG/CR-L-99-01, "FMFIA 1998," February 1999

DOE/IG/INS-L-92-02, "Control of Classified Documents at DOE Savannah River Operations Office," May 1992

DOE/IG/INS-L-95-07, "Inspection of Los Alamos National Laboratory: Alleged TA-55 Security Violation," May 1995

DOE/IG/INS-O-94-05, "Inspection of Physical Security Operations at Los Alamos TA-18 Site," August 1994

DOE/IG/S941S012, "Albuquerque Vault Classification," March 1995

DOE/IG/S9IJS010, "Personnel Security Clearance Suspensions and Revocations at the DOE Albuquerque Field Office, Based Upon Security Infractions/Violations," August 1993

DOE/IG/WR-B-91-01, "Richland Operations Office of Management and Operating Contractor Personnel Security Clearances," November 1991

DOE/IG/WR-B-91-08, "Review of Contractor's Personnel Security Clearances at DOE Field Office, Albuquerque," September 1991

DOE/IG/WR-O-90-02, "Nevada Operations Office Oversight of Management and Operating Contractor Security Clearances," March 1990

DOE/IG/WR-V92-06, "Audit of Internal Controls That Assure FY 1991 Costs Claimed by and Reimbursed to Los Alamos National Laboratory Are Allowable Under DOE Contract #W-7405-ENG-36," December 1991

DOE/IG-228, "Retention of Security Clearances at DOE Headquarters," July 1986

DOE/IG-238, "Selected Aspects of DOE's Personnel Security Program," May 1987

---

DOE/IG-255, "Timeliness in Processing DOE Headquarters Security Clearances," April 1988

DOE/IG-281, "Inspection of Lawrence Livermore National Laboratory's Drug-Free Workplace Program," April 1990

DOE/IG-296, "Department-Wide Audit of the Visibility Over the Status of Nuclear Materials," August 1991

DOE/IG-310, "General Management Inspection of the Department of Energy's Nevada Field Office," May 1992

DOE/IG-319, "Administration of Conflict of Interest Relating to Technology Transfer at Los Alamos National Laboratory," January 1993

DOE/IG-323, "Review of DOE's Personnel Security Program," March 1993

DOE/IG-385, "Special Audit Report on the Department of Energy's Arms and Military-Type Equipment," February 1, 1996

DOE, "Response to the Cox Commission Report: The Benefits of Department of Energy International Scientific and Technical Exchange Programs," April 1999

GAO/Key Factors Underlying Security Problems at DOE Facilities," (Statement of Victor S. Rezendes, Director, Energy, Resources and Science Issues, Resources, Community, and Economic Development Division, GAO, in testimony before the Subcommittee on Oversight and Investigations, Committee on Commerce, House of Representatives), April 20, 1999

GAO/AIMD-95-165, "Department of Energy: Poor Management of Nuclear Materials Tracking Capabilities Are Limited," August 3, 1995

GAO/EMD-79-109, "DOE's Erroneous Declassification of Nuclear Weapons Design Document," September 21, 1979

GAO/EMD-80-38, "Nuclear Fuel Reprocessing and the Problems of Safeguarding Against the Spread of Nuclear Weapons," March 18, 1980

GAO/RCED-86-144, "Nuclear Nonproliferation: DOE Has Insufficient Control Over Nuclear Technology Exports," May 1, 1986

GAO/RCED-87-150, "Nuclear Nonproliferation: Department of Energy Needs Tighter Controls Over Reprocessing Information," August 17, 1987

GAO/RCED-87-72, "Nuclear Security: DOE's Reinvestigation of Employees Has Not Been Timely," March 10, 1987

GAO/RCED-88-28, "Nuclear Security: DOE Needs a More Accurate and Efficient Security Clearance Program," December 29, 1987

GAO/RCED-89-116, "Nuclear Nonproliferation: Better Controls Needed Over Weapons-Related Information and Technology," June 19, 1989

---

GAO/RCED-89-31, "Major Weaknesses in Foreign Visitor Controls at Weapons Laboratories," October 11, 1988

GAO/RCED-89-34, "Nuclear Security: DOE Actions to Improve the Personnel Clearance Program," November 9, 1988

GAO/RCED-90-122, "Nuclear Security: DOE Oversight of Livermore's Property Management System is Inadequate," April 18, 1990

GAO/RCED-91-12, "Nuclear Safety: Potential Security Weaknesses at Los Alamos and Other DOE Facilities," October 1990

GAO/RCED-91-183, "Nuclear Security: DOE Original Classification Authority Has Been Improperly Delegated," July 5, 1991

GAO/RCED-91-65, "Nuclear Security: Accountability for Livermore's Secret Classified Documents Is Inadequate," February 8, 1991

GAO/RCED-91-83, "Nuclear Nonproliferation: DOE Needs Better Controls to Identify Contractors Having Foreign Interests," March 25, 1991

GAO/RCED-91-141, "Nuclear Security: Property Control Problems at DOE's Livermore Laboratory Continue," May 16, 1991.

GAO/RCED-92-146, "Nuclear Security: Weak Internal Controls Hamper Oversight of DOE's Security Program," June 29, 1992

GAO/RCED-92-39, "Nuclear Security: Safeguards and Security Weaknesses at DOE's Weapons Facilities," December 13, 1991

GAO/RCED-93-10, "Nuclear Security: Improving Correction of Security deficiencies at DOE's Weapons Facilities," November 16, 1992

GAO/RCED-93-14, "Nuclear Security: Safeguards and Security Planning at DOE Facilities Incomplete," October 30, 1992

GAO/RCED-93-183, "Nuclear Security: DOE's Progress on Reducing Its Security Clearance Work Load," August 12, 1993

GAO/RCED-93-23, "Personnel Security: Efforts by DOD and DOE to Eliminate Duplicative Background Investigations," May 10, 1993

GAO/RCED/AIMD-95-5, "Nuclear Nonproliferation: U.S. International Nuclear Materials Tracking Capabilities are Limited," December 27, 1994

GAO/T-RCED-96-260, DOE Security: Information on Foreign Visitors to the Weapons Laboratories, undated

GAO/RCED-97-128R, "Department of Energy: Information on the Distribution of Funds for Counterintelligence Programs and the Resulting Expansion of These Programs," April 25, 1997

---

GAO/RCED-97-229, "Department of Energy: DOE Needs to Improve Controls Over Foreign Visitors to Weapons Laboratories," September 25, 1997

GAO/RCED-99-19, "Department of Energy: Problems in DOE's Foreign Visitor Program Persist, October 6, 1998

GAO/RCED-99-54, "Nuclear Nonproliferation: Concerns With DOE's Efforts to Reduce the Risks Posed by Russia's Unemployed Weapons Scientists," February 19, 1999

Hewlett, Richard G. and Francis Duncan, *Atomic Shield: A History of the United States Atomic Energy Commission*. May 1969

Los Alamos National Laboratory, "Draft Chronology," undated

*New York Times*, "Abstract," August 5, 1977

Representative John Dingell letter to the President of the United States, January 28, 1986

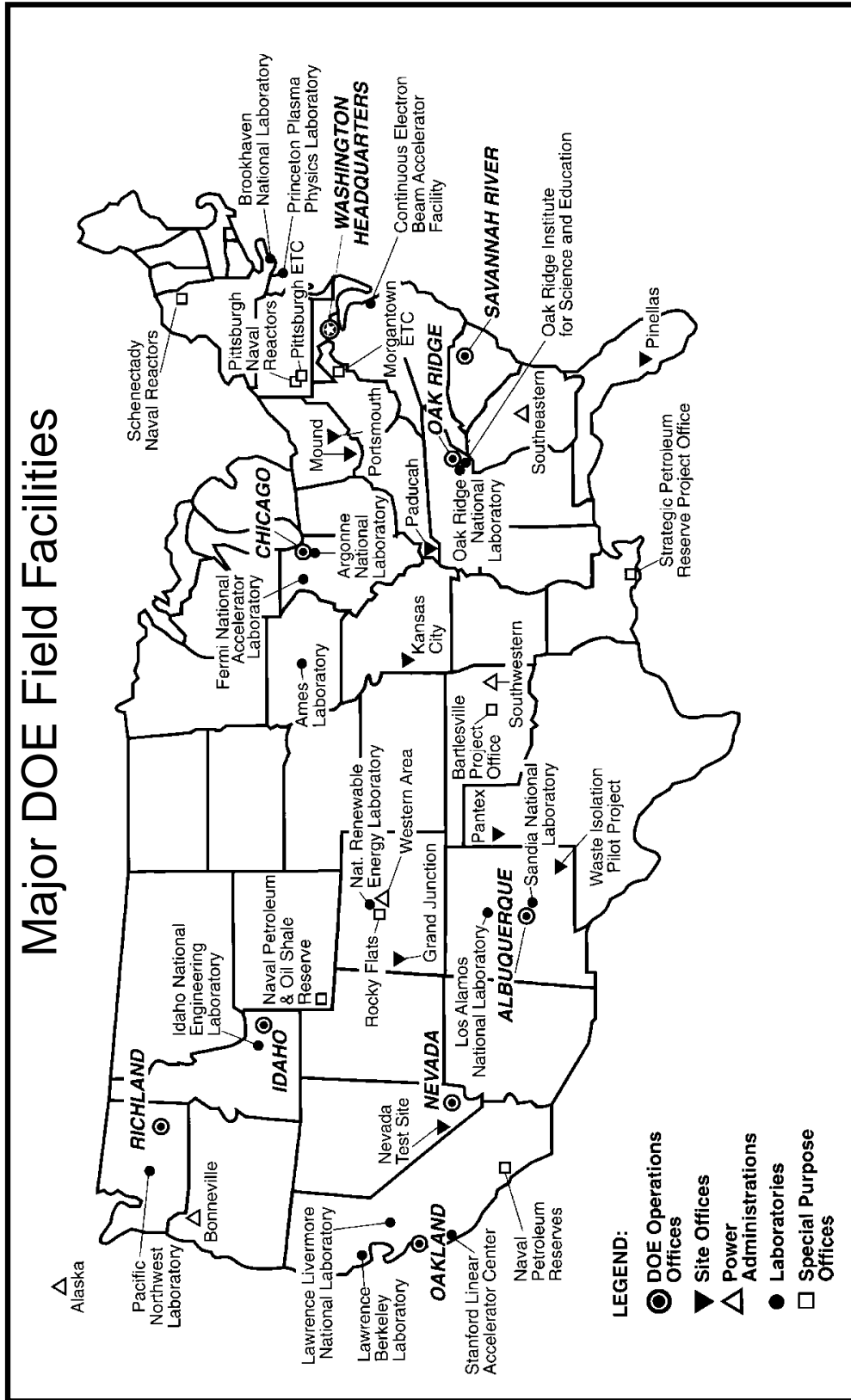
Representative John Dingell letter to Warren Rudman, March 24, 1999

Senate Armed Services Committee, Transcript of Committee Hearing, April 12, 1999

US Congress, "DOE, and Congressional Committee Jurisdiction," June 3, 1999

US Nuclear Command and Control System Support Staff, "Assessment Report: Department of Energy Nuclear Weapons-Related Security Oversight Process," March 1998 (FOUO)

# Major DOE Field Facilities



SOURCE: U.S. DEPT. OF ENERGY