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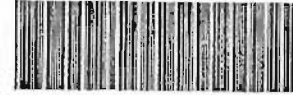
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Joint Report by the U.S. Department of Defense
and the U.S. Department of Energy

Nuclear Weapons Surety

Annual Report to the President (U)

1985



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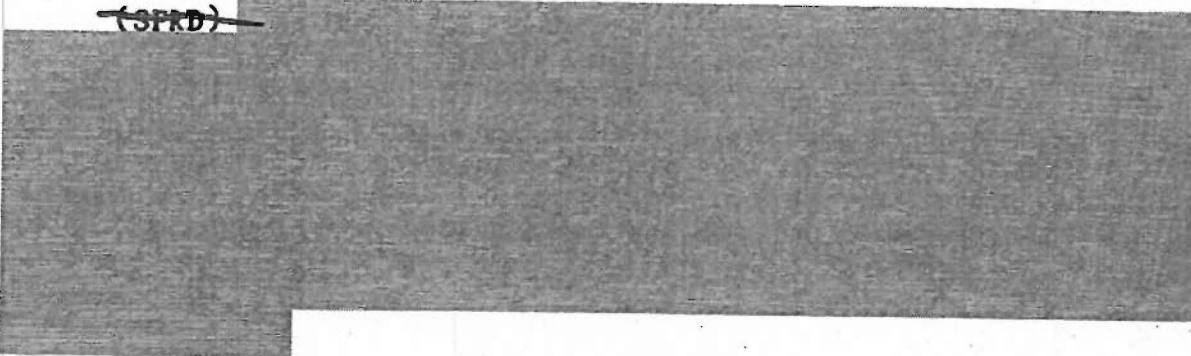
JOINT DEPARTMENT OF DEFENSE/DEPARTMENT OF ENERGY
ANNUAL REPORT TO THE PRESIDENT ON NUCLEAR WEAPONS SURETY, 1985

EXECUTIVE SUMMARY

(U) At the request of the President, the Department of Defense (DoD) and the Department of Energy (DoE) report annually on the status of the safety and security of nuclear weapon systems. This report summarizes progress made during 1985 in the areas of nuclear weapons security, nuclear weapons safety, nuclear weapons use control, personnel reliability and assurance programs, emergency response, and inspection programs.

(U) The DoD and the DoE recognize that the existence of nuclear weapon systems, required for national security, require all appropriate measures for the protection of public health and safety. Both Departments believe that the current safety and security programs keep the existing risks at an acceptable level, but that the potential consequences of accidents and incidents involving nuclear weapons could be so severe that we must, at all times, minimize risks by taking full advantage of new techniques and technologies.

~~(SFRD)~~



(U) The management of nuclear matters in Europe continues to be a high priority effort. As part of this program, nuclear protection issues are addressed by both the NATO Senior Level Weapons Protection Group and the Supreme Headquarters Allied Powers Europe/US European Command Joint Theater Surety Management Group.

(U) Both DoD and DoE have a number of programs underway to ensure improved safety, security, and positive control of nuclear weapons and special nuclear materials. These include security facility construction; installation of electronic intrusion detection systems; several safety and use control improvements; specific anti-threat security training programs; better inspection procedures; better coordinated accident response capability; and US efforts to work with our Allies to proceed with modernization of their theater nuclear systems. The DoD's long-range security program and the access delay

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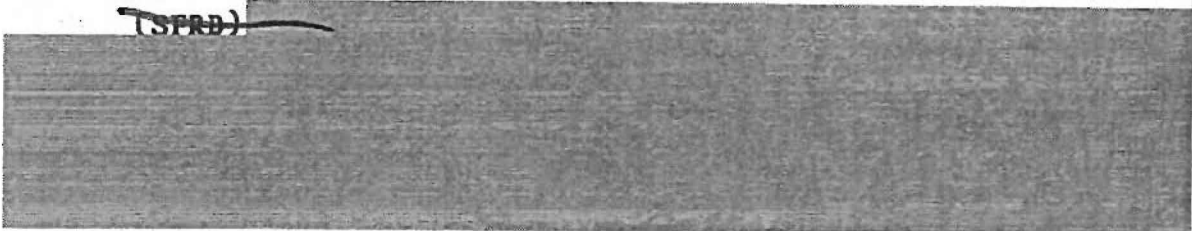
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system are progressing. Moreover, the DoD has initiated a vigorous research program for future weapon storage concepts which emphasizes survivability as well as security.

(U) The DoE's Safety, Security, and Control Committee, established in 1984, continues to provide high-level oversight of safety, security, and use control matters. In addition, the DoE believes that as suggested by the President's Blue Ribbon Task Group, a National Security Decision Directive is needed to clearly define the dual-agency-judgement role for nuclear weapons surety.

(S) The DoE has continued to make significant progress during FY 1985 to improve the safeguards posture of its facilities. This progress was reaffirmed in September 1985 when a Special Project Team reported to the Secretary of Energy that "any adversary who attempts to gain control over or steal a nuclear weapon, a critical weapon component, or special nuclear material would face high probability of failure." However, we will not be satisfied with our overall protection status until major safeguards and security construction projects are completed and until programs underway enhance protection against the insider threat. Effective executive oversight of the DoE's program to enhance the protection for special nuclear materials, nuclear weapons, and critical facilities continues to be provided by the DoE Safeguards and Security Steering Group which was established in 1983. The quarterly meetings of the Steering Group serve a major role in the Department's ongoing efforts to enhance the level of protection at its nuclear facilities.

~~(SFRB)~~



(U) Significant progress was made in all aspects of nuclear surety during the last year. Although no nuclear warheads were involved in accidents in 1985, we can never allow ourselves to become complacent. We must support improvement efforts already underway, continue to evaluate threat and technology changes, and make additional improvements to nuclear surety where required.

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I.(U) Introduction At the request of the President, the DoD and the DoE report annually on the status of the safety and security of nuclear weapon systems. The first joint report covered calendar year 1980 and provided comprehensive information for the new Administration. Subsequent reports for 1981, 1982, and 1983 updated the 1980 report. The 1984 report summarized the progress made during the years 1981-1983, as well as providing more detailed 1984 information. This report describes the progress made during 1985. The views of the DoD are primarily contained in Section II, those of the DoE are in Section III, and joint emergency response activities are provided in Section IV.

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II. (U) Department of Defense Programs

A. (U) Security.

1. (U) Progress.

a. (U) Long-Range Security Program/Intrusion Detection System.

(1) (U) The long-range security program (LRSP) was initiated in 1975 to enhance security by upgrading guard forces and storage site facilities. The LRSP provides an integrated electronic intrusion detection system (IDS) around nuclear weapon storage sites, facilities for security forces, and improved lighting and communications.

(2) (S) LRSP has been completed in the continental US (CONUS). In Europe, civil work upgrades at five locations and IDS at [redacted] locations are under construction. All upgrades are scheduled to be completed by the end of 1988.

(a) (S) [redacted]

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[redacted] These five sites should be finished in 1986.

[redacted]

(c) (S) In Europe, LRSP installation is continuing at Air Force main operating bases (MOB). Weapon storage areas (WSA) and quick reaction alert (QRA) areas are completely upgraded with exterior sensors and closed circuit television (CCTV). Full operation of interior sensors is expected in 1986.

b. (S) The Shipboard Nuclear Weapons Security Program. This program is similar to the LRSP. Budget constraints have curtailed implementation of this program because FY 86 and 87 procurement was reduced by 50% and 20% respectively. This will delay procurement commencement by at least a year until FY 89.

c. (U) The Access Delay System.

(1) (U) The access delay system is a family of mechanisms to delay unauthorized access to stored nuclear weapons until an effective response force team can be employed. Since storage sites vary in physical

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characteristics, the access delay system is tailored to specific site security needs and is additive to the LRSP.

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d. (~~S~~) PERSHING II (PII) Security

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launchers and inert training missile motor sets.

e. (U) Security Force Training. Security force training has increased in frequency and effectiveness. Force-on-force training has been conducted using the multiple integrated laser engagement system for more realistic evaluations. Penetration exercises have been conducted at many WSAs. The lessons learned have been incorporated in improved regulations and training manuals.

f. (U) Management of Security in Europe. In Europe, management of nuclear protection issues has been improved by the work of the NATO Senior Level Weapons Protection Group and the expanded role of the Supreme Headquarters Allied Powers Europe and US European Command Joint Theater Surety Management Group. Both groups are addressing present and future important nuclear issues which are vital to US and NATO interests. Allied participation and interest have expanded, and there is excellent communication among the various NATO nations with increased political sensitivity to nuclear protection matters.

2. (S) Appraisal. Security of nuclear weapons is always of great concern because of their political and military importance and the consequences of an unauthorized or accidental nuclear or high explosives detonation and because of the ever increasing terrorist threat.

New technology, storage concepts, and security systems are being explored that not only improve nuclear security, but also enhance survivability. These improvements must continue to be pursued even in an adverse budget climate.

B. (U) Safety.

1. (U) Progress.

a. (U) Nuclear Detonation Safety.

(1) (S) During 1985, the overall detonation safety of the nuclear weapons stockpile continued to improve.

Deployment of the Ground Launched Cruise Missile System and the TOMAHAWK Cruise Missile Systems continues. The US Army PERSHING II deployment was completed in 1985. These new bombs and warheads contain all the modern nuclear detonation safety

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(2) ~~(C)~~ Increased emphasis was also placed on the safety studies and unauthorized launch analyses. These are comprehensive analyses which concentrate on determining credible methods of effecting an unauthorized launch of a nuclear weapon system and then developing procedures or design changes that would prevent such unauthorized launches. The analyses are Top Secret with limited distribution and no one having access to the documents is ever allowed to serve in a position where the knowledge gained could be used for an unauthorized launch.

[REDACTED]

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[REDACTED] The resulting recommendations are being incorporated in safety rules, technical publications, and procedures.

b. (U) Radioactive Material Dispersal.

(1) ~~(C)~~ All nuclear warheads contain radioactive material. An accident or terrorist attack that caused the detonation of the high explosive in these weapons could result in radioactive contamination of the surrounding area. The traditional approach to this potential problem has been to control all nuclear weapon operations carefully to prevent accidents and to provide a secure environment that precludes attacks by adversaries. This effort has been successful as no radioactive material dispersal incidents have occurred since 1968.

(2) ~~(SFR)~~ The greatest improvement to radioactive material dispersal safety is in the use of new insensitive high explosive (IHE). IHE is designed not to detonate in credible accident environments.

[REDACTED]

(3) (U) The Joint DoD/DoE Plutonium Dispersal Study Group completed its task of establishing site specific plutonium storage limits for all weapons storage sites and continued its work on the transportation phase of the plutonium limit study. Recommendations on the amount of plutonium allowed during transportation were made by giving consideration to the risks of particular routes.

c. (U) Nuclear Safety Studies and Operational Safety Reviews.

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(1) (U) During 1985, 19 nuclear weapon safety studies (Army 12, Navy 4, Air Force 3) and 13 operational safety reviews (Army 1, Navy 7, Air Force 5) were conducted. Recommendations to improve nuclear safety were provided to the Service Headquarters. The Services have developed or are developing a reporting process to provide, to appropriate agencies within both Departments, the status of nuclear safety study and operational safety review findings on a periodic basis.

(2) (U) During 1985, the Army concluded its evaluation of a long-standing safety concern: the risk of a midair collision between a high performance aircraft and a helicopter weapon carrier during logistic movements in Europe. Operational and procedural precautions are now in effect to minimize the probability of occurrence.

(3) (U) The Army published two new regulations: one consolidated all Army safety rules into one document; the other provided tighter control of the safety rule process. The Department of the Navy directive on nuclear weapons system safety studies and reviews, revised in 1984 in response to DoD Directive 3150.2, has provided for improved procedures and has given more emphasis to nuclear weapon safety recommendations and their prompt implementation.

d. (U) Nuclear Weapon System Safety Rules.

(1) (U) Nuclear weapon system safety rules govern all operations with nuclear weapons. They provide the procedural safeguards necessary to ensure that the weapon system meets DoD nuclear weapon system safety standards. Safety rules are developed during formal safety studies or reviews conducted by safety study groups made up of specialists from the military department fielding the weapon system, the DoE, and the Defense Nuclear Agency (DNA). Safety rules, before they become effective, are approved by the cognizant military department, coordinated with DNA, approved by the Joint Chiefs of Staff (JCS), coordinated with the DoE, and finally approved by the Secretary of Defense.

(2) (U) During 1985, the Secretary of Defense approved safety rules for one new system: the F/A-18A aircraft and revisions to safety rules for nine weapons systems. A brief description of each follows:

(a) (U) The safety rules for the F/A-18A allowed operations with the B57 and B61 nuclear bomb. The F/A-18A, which replaces A-4 and A-7 aircraft that currently provide this nuclear capability, can be used for carrier or land-based missions by Navy and Fleet Marine Force operational units.

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(b) [REDACTED]

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(c) [REDACTED]

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(d) (U) B-52 safety rules were revised to allow defueling/refueling of the ALCM in the integrated maintenance facility; to allow operations with the new B61-7 nuclear bomb; to allow the use of integrated combat procedures in wartime that would reduce generation time; and to allow operations with the ALCM on the B-52 H.

[REDACTED]

(f) (U) F-111 safety rules were revised to delete all references to the B43 nuclear bomb which is no longer used with the F-111.

(g) (U) FB-111 safety rules were revised to allow use of the new B61-7 nuclear bomb.

(h) (U) Non-US NATO F-16 safety rules were revised to clarify procedures for verifying the integrity of the seals on nuclear controls.

(i) (U) The TITAN II safety Rules were revised to clarify where the two-man concept applies and to delete equipment configurations that were no longer required.

(j) (U) The PERSHING II safety rules were revised to incorporate changes designed to improve protection against unauthorized launch attempts.

e. (U) Specific Safety Problems.

(1) ~~(SFRD)~~ [REDACTED]

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(2) ~~(SFRD)~~

[REDACTED]

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Analysis
is underway to establish the best means for improvement and is expected to be completed by February 1987.

2. (U) Appraisal. Significant progress was made in nuclear safety during 1985.

a. (U) Analyses were conducted that resulted in hardware, procedural, and safety rule changes to prevent unauthorized launches.

b. (U) New plutonium storage limits were determined on a site-by-site basis which considered the operational needs and the potential environmental and public health risks.

c. (U) Army regulations on nuclear safety studies were updated and revised to provide tighter control of the safety rule process, to give more emphasis to safety recommendations, and to ensure prompt implementation of approved safety rules.

d. ~~(C)~~ The deployment of new weapons and the retirement of older weapons brought us closer to the goal of a nuclear weapon stockpile that contains only nuclear weapons with all the modern safety features. While we realize we may never fully reach this goal, since some features may not be practical in all weapons, progress is being made.

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C. (U) Use Control.

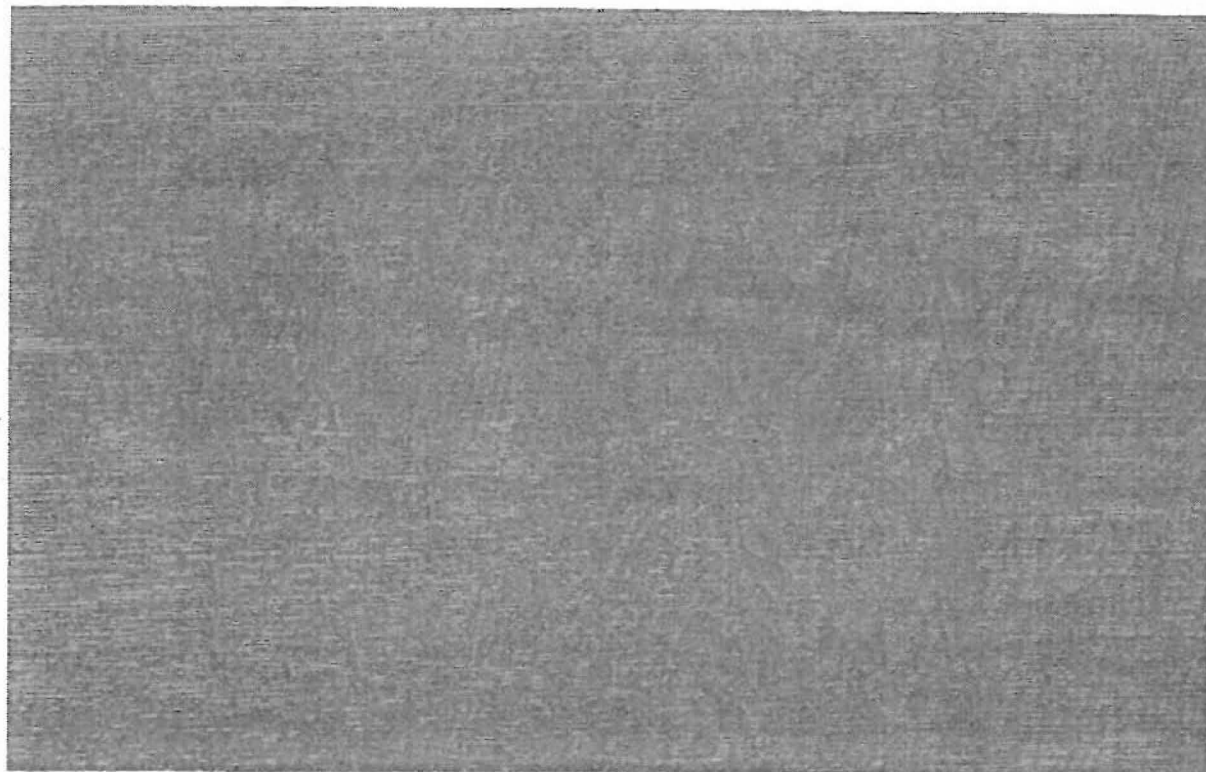
1. ~~(SFRD)~~ Progress. During 1985 unauthorized launch analyses were completed as described in the Safety Section. In addition, the unauthorized launch analysis on the Peacekeeper missile has begun.

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2. ~~(S)~~ Appraisal. Use control features improved in 1985, but there has also been a trend toward increased sophistication in the deliberate unauthorized launch threat. This trend reinforces the need for a continued attention to use control from a broad perspective. We must make sure that our new weapon systems are designed to incorporate reliable and effective use control features.

D. (U) Personnel Reliability Program (PRP).

1. (U) Progress. Prior to being placed in any nuclear duty position, every individual must be formally certified to assure that the highest human reliability standards are maintained. This certification is given only after a favorable medical evaluation, an interview by the certifying official, and completion of a required security investigation. Strict adherence to this policy continued. In 1985, the DoD had a total of 101,588 certified personnel in the program. A significant strength of the program is that the certification process is continuous. Continued observation and evaluation of each individual resulted in 3,992 or 3.24 percent being decertified in 1985. Since 1975, the number of persons decertified annually has been relatively stable, averaging about 4.43 percent per year.

2. (U) A revised DoD PRP Directive was published on 6 December 1985. It added a formal rescreening requirement

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for people previously certified in the program who move to a new location.

3. (U) Appraisal. Review of the effectiveness of the personnel reliability program through technical inspection programs and oversight visits continues to assure that the program is providing security research for new methods of enhancing the suitability and reliability of personnel who perform nuclear weapons related duties.

E. (U) DoD Nuclear Weapons Technical Inspection (NWTI) Program.

1. (U) Description.

a. (U) The DoD Nuclear Weapons Technical Inspection (NWTI) system mandates Service or Defense Nuclear Agency (DNA) inspections of nuclear-capable units. These inspections assure compliance with pertinent DoD and Joint publications and the applicable portions of Service publications. Inspections include, as a minimum, the examination of: management and administration; technical operations; tools, test, tiedown and handling equipment; storage and maintenance facilities; condition of stockpile; security; safety; supply support personnel reliability program; logistic movement; and special subjects as tasked by the Office of the Secretary of Defense and the Joint Chiefs of Staff (JCS).

b. (U) Three methods intended to provide a better assessment of nuclear-capable units and the NWTI system were continued during the 1985 period.

(1) (U) Short-Notice NWTIs.

(2) (U) DNA surveillance of Service conducted inspections.

(3) (U) DNA evaluation of security measures.

2. (U) Progress.

a. (U) The Air Force and Navy have continued their respective Minimum-Notice NWTI programs. The Army conducted Minimum-Notice Physical Security Inspections during 1985.

b. (U) An agreement between DNA and the Navy was concluded which initiates surveillance inspections of Navy shore-based units.

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c. (U) A "like unit" concept that compares units with similar functions was introduced for statistical analysis of inspection results.

3. (U) Appraisal.

Review
of the 1985 DNA inspection program shows that unit SATISFACTORY rate is remaining relatively constant. Instances of conflicting or inadequate security guidance from high headquarters continued to decline.

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III. (U) Department of Energy Programs

A. (U) Surety Responsibilities.

1. (U) The institutional arrangements between the DoD and DoE, under a concept known as dual agency judgement and responsibility for nuclear weapon activities, were reviewed by the President's Blue Ribbon Task Group on Nuclear Weapons Program Management. The conclusions of the group included the following:

"Funding responsibilities for DoE's nuclear weapon activities should not be transferred to DoD. Disadvantages of such a transfer would more than offset advantages. A transfer of funding responsibility would undermine DoE's ability to nurture a technology base and to provide independent judgements on nuclear weapon safety, security, and control matters. Other means exist to introduce more fiscal discipline without incurring risks associated with transferring responsibilities."

"The President might consider issuing a directive reaffirming DoE's responsibilities to maintain nuclear weapon technology and prudent production bases, assigning DoE executive agency responsibility for defense-related R&D at national laboratories, and reaffirming the DoD/DoE dual-agency (check-and-balances) responsibilities for nuclear weapon safety, security, and control."

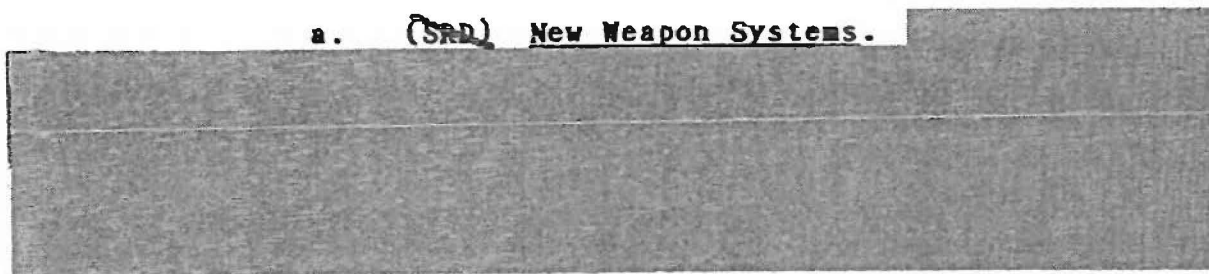
The DoE believes that until such a Presidential directive is issued, the policy of dual agency judgment and responsibility will be difficult to apply due to the various possible interpretations of that policy.

2. (U) In monitoring the Services' Nuclear Weapon Safety Program, the DoE recognized a disparity regarding responses to recommendations generated by Nuclear Weapon Safety Study Groups (NWSSG) in accordance with DoD Directive 3150.2. Action has been taken to correct this situation.

B. (U) Nuclear Detonation Safety.

1. (U) Stockpile Improvement Program (SIP). The 1985 SIP activities to address safety and use control concerns for deployed nuclear weapons follow:

a. (S&D) New Weapon Systems.



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b. (U) Older Weapon Systems.

(1) ~~(S)~~

(2) (U)

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Since it is projected to be in the stockpile until the early 1990's, it is prudent to incorporate modern technology into the warhead to improve its safety and security.

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(a) ~~(SRD)~~

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(b) ~~(SRD)~~

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Current planning calls for a total of to be produced by April 1987.

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(3) ~~(SRD)~~

Action was initiated to modify storage and transportation configurations and to install additional protective hardware.

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[REDACTED]

(8) ~~(S)~~ The service life of nuclear LANCE is being extended to 1995. Components of the missile guidance and control system, whose performances are degrading due to age, are being replaced beginning in FY88.

2. ~~(SFRD)~~ Weapon System Procedural Restrictions.
In accordance with the shared DoD/DoE responsibility for safety of nuclear weapon systems, the DoE has been actively participating in deliberate unauthorized launch (DUL) studies.

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All of these studies use the critical and comprehensive analytic methods previously developed and used by the Air Force and the Navy for long-range missile systems. The results of these studies are incorporated into system safety rules and hardware justification which effectively reduce the vulnerability of these systems to unauthorized launch.

C. (U) Radioactive Material Dispersal Safety.

1. (U) Retention of Older Nuclear Weapons in the Stockpile beyond Planned Retirement Dates.

a. ~~(SFRD)~~ [REDACTED]

b. ~~(SFRD)~~ [REDACTED]

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2. (U) Weapon Design Features. The possibility of an accidental or deliberate detonation of a nuclear weapon's chemical high explosives, with resultant dispersal of plutonium as a hazardous aerosol, can be essentially eliminated for most scenarios by the use of insensitive high explosive.

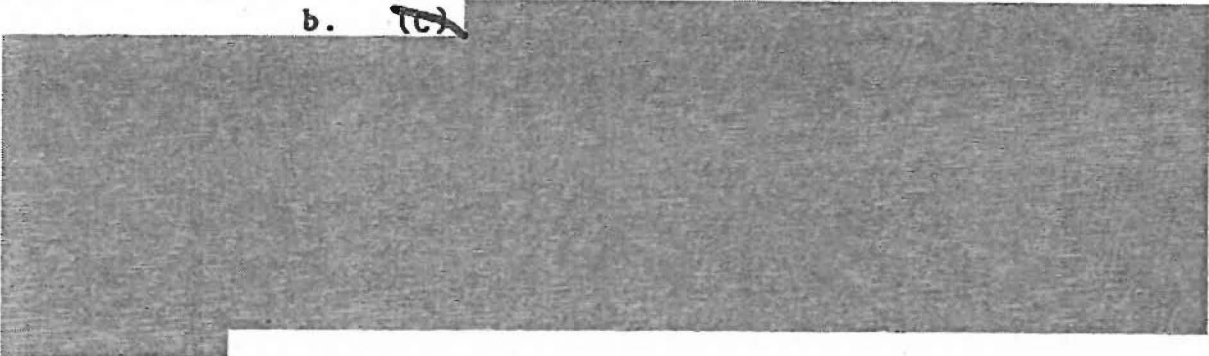


3. (U) Weapon System Procedural Restrictions.

a. (U) Several major initiatives resulted from the analysis of logistical movements of nuclear weapons that was recently completed in the Joint DoD/DoE Plutonium Dispersal Analysis Study.



b. ~~TCX~~



c. (U) The joint DoD/DoE analysis, review, and decision making process for plutonium dispersal safety issues has now been institutionalized through the creation of a permanent technical assessment group, an operational impact group, and a steering group. These groups provide high-level DoD/DoE technical and management review and approval.

D. (U) Nuclear Weapon Use Control.

1. (U) New Use Control Features.

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c. ~~(CRN)~~ DoE continues to investigate more effective command disable (CD) methods [REDACTED]

[REDACTED]

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2. (U) Explosive Ordnance Disposal. The DoD and DoE working together have developed a set of guidelines for explosive ordnance disposal procedures and training manuals that enhance the protection of sensitive use control information while still permitting safe disposal operations. These guidelines are now being implemented.

E. (U) Nuclear Weapon Safety Related Technical Developments.

1. (U) High Explosives Research.

a. (U) The DoE effort to improve insensitive high explosive (IHE) continued through 1985. It is now focused on improvement of mechanical and thermal behavior of the current IHE formulations as well as investigating new IHE compositions.

[REDACTED]

c. (U) A new explosive formulation specifically designed for boosters for TATB based IHE explosives has undergone preliminary characterization.

2. (U) Firing System and Detonator Developments.

a. ~~(SRD)~~ [REDACTED] This system will be considered in future weapons proposals and applications.

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b. ~~(SRD)~~

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c. ~~(SRD)~~

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This configuration will be simple to manufacture and test and will make a highly efficient detonator system.

[REDACTED]

3. (U) Fire-Resistant Pits.

a. ~~(SRD)~~

[REDACTED]

b. ~~(SRD)~~

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F. (U) Personnel Assurance Program (PAP).

1. (U) The DoE's PAP is very similar to DoD's PRP in both purpose and in administration. Workers who are assigned to critical duties with nuclear weapons are closely supervised.

2. (U) In June 1985, the DoE proposed the implementation of a trial program of psychological testing of

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new candidates for PAP positions. Additional improvements in the program (drug and alcohol testing, additional medical staff training, and annual local law enforcement agency checks) were recommended by a special DoE internal security review implementation plan (Operation Cerberus). All of these recommendations are being reviewed for possible implementation during 1986.

G. ~~(S)~~ Nuclear Weapon Facility Security.

1. (U) Pantex Plant.

a. (U) Description. The mission of the Pantex Plant is to fabricate chemical explosives, assemble nuclear weapons, and perform weapon operations such as modification, repair, quality testing, and disassembly operations. The manufacturing assembly and disassembly operations are located

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b. ~~(S)~~ Recent Activities at Pantex. During FY. 1985, the Pantex Plant was subjected to a routine inspection as conducted by the DoE's Office of Security Evaluations. This inspection effort included a test and evaluation of the Pantex security system used to counter adversarial acts believed possible either by outsiders or insiders acting alone or in collusion.

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c. (U) Accomplishments 1985.

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security personnel. (9) (U) Pursuit plans were developed for

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(19) (U) Security awareness material concerning the insider threat was distributed to plant employees.

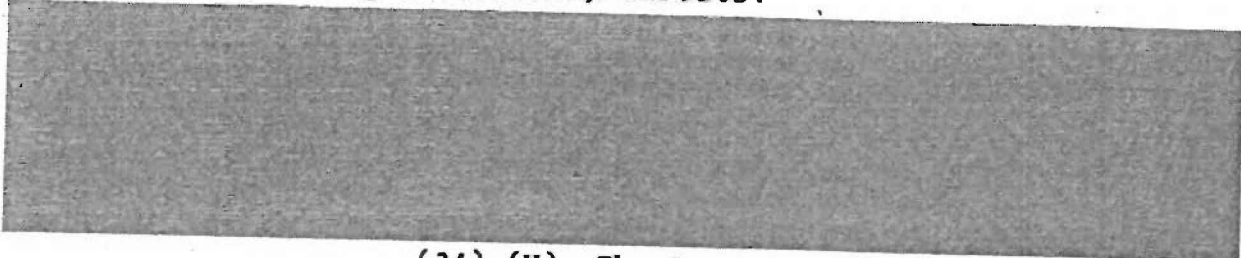
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(20) (U) An ad hoc group was formed to develop credible scenarios involving a dedicated, knowledgeable insider. A Planning and Analysis group is evaluating the effectiveness of the completed and planned security enhancements against these scenarios.

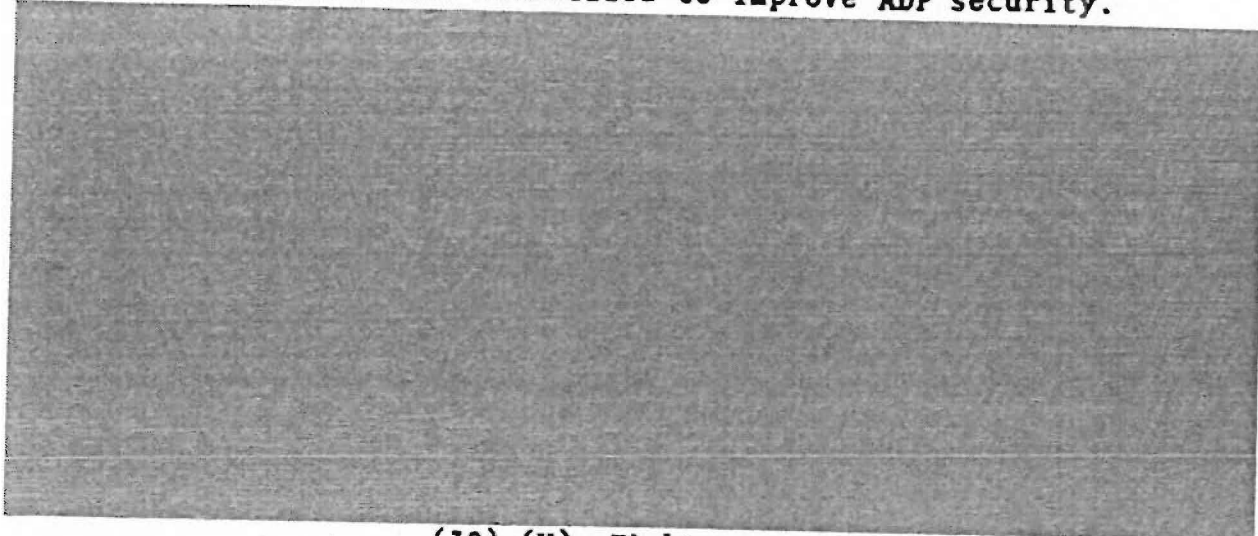
(21) (U) A security emergency telephone number was established. Plant employees were instructed to use this number to report security threats.



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(24) (U) The Lawrence Livermore National Laboratory (LLNL) Insider Threat Evaluation Group completed a short term vulnerability and SNM diversion path study of Pantex operations. Actions were identified to improve the protection and accountability of SNM, subassemblies and nuclear weapons.

(25) (U) The DoE Center for Computer Security conducted a computer security enhancement review of Pantex. Actions were identified to improve ADP security.



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(30) (U) Eighty-seven per cent of the Pantex Security force has passed the DoE mandatory physical fitness requirements. The remaining personnel have medical waivers and are being utilized in noncritical positions.

d. (U) Future Upgrades at Pantex Plant are planned as follows:

(1) (U) Expansion of the Security Command Center.

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(2) ~~(S)~~ Construction of an acceptance-inspection warehouse to minimize the consequences of accidents involving explosive devices being shipped onsite.

(3) (U) Upgrades to the security communications center and to alarm system in selected areas.

(4) ~~(S)~~ Relocation of the central shipping and receiving facility to outside the security complex.

2. (U) Nevada Test Site (NTS).

a. ~~(S)~~ Description. The Nevada Test Site serves as the United States nuclear explosive test facility. The assembly operations of both the weapons design laboratories, Los Alamos National Laboratory and the Lawrence Livermore National Laboratory, were successfully integrated into a single assembly complex during 1985. Nuclear explosive components are brought on-site via a Safe Secure Transport (SST). On NTS, nuclear devices are assembled, given final checkouts. [REDACTED]

b. (U) Accomplishments 1985.

(1) (U) Ninety-eight percent of the NTS security force have passed the DoE's mandatory physical fitness requirements.

(2) ~~(S)~~ A second dedicated security helicopter was obtained and is fully operational.

(3) ~~(S)~~ Construction continued on the new hardened Security Control Center and other improvements in the Area 6 Command Post Complex (CP-1). Completion is expected during the fourth quarter of FY 1986.

c. (U) Future Upgrades at Nevada Test Site
are planned as follows:

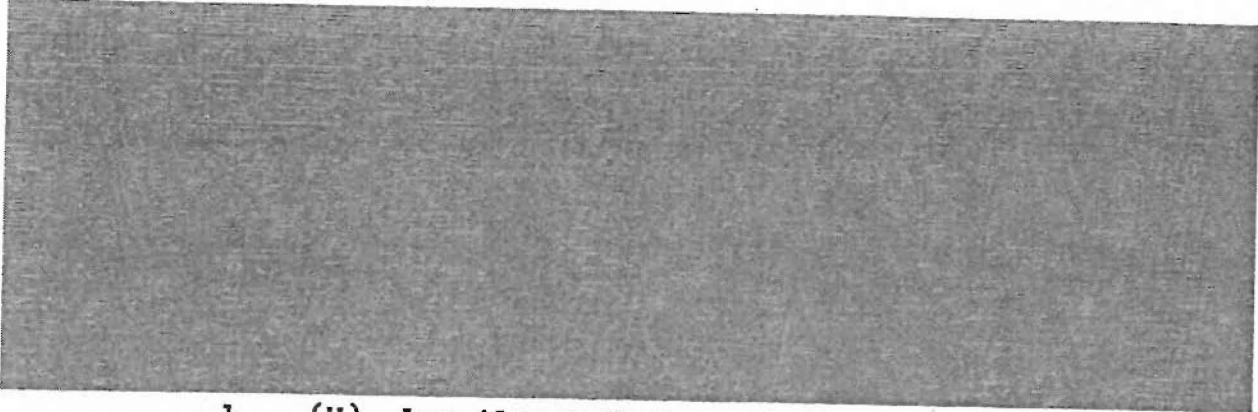
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(4) (U) Development of a master study of security operations during 1986.



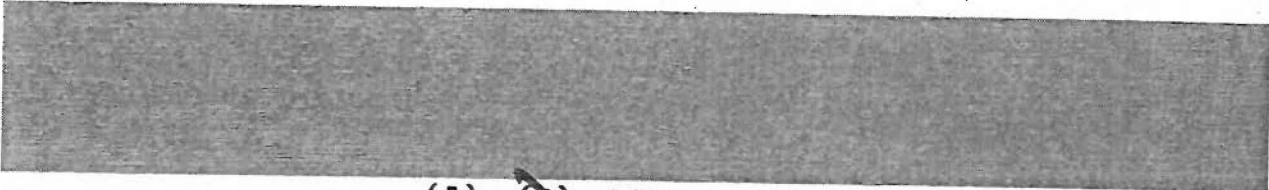
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3. (U) Los Alamos National Laboratory (LANL).

a. (U) Description. The University of California is the prime contractor that operates LANL, a multipurpose research and development laboratory for the DoE and one of two nuclear weapon design laboratories. About 85 percent of the laboratory's research is nuclear-related. LANL is located approximately 15 air miles northwest of Santa Fe, New Mexico.

b. (U) Accomplishments 1985.

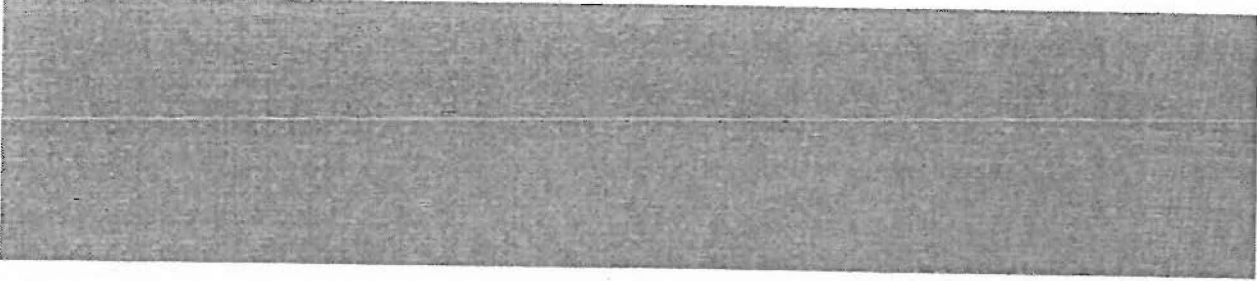
(1) (U) Ninety-four percent of the security force has passed DoE's mandatory physical fitness requirements.



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(3) (U) LANL continued to strengthen its site-wide safeguards and security posture by completing a large number of specific upgrades such as enhanced lighting, intrusion detection and assessment systems, facilities to accommodate the deployment of the LANL security response teams in a timely manner, and additional construction of elevated guard towers and hardened security stations.

c. (U) Future Upgrades at LANL are planned as follows:



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4. (U) Lawrence Livermore National Laboratory
(LLNL).

a. (U) Description.

b. (U) Accomplishments 1985.

(1) (U) Acquired an additional 126 acres of land along the western and northern boundaries of the LLNL site as a buffer zone.

(2) (U) Initiated action for the eventual acquisition of East Avenue, a public road which is adjacent to and separates the Livermore and the Sandia sites.

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(4) (U) Eighty-eight percent of the LLNL security force has successfully passed DoE's mandatory physical fitness requirements.

(5) (U) Consolidated all strategic quantities of SNM in a single location.

(6) (U) Increased the number of security inspectors in critical areas.

(7) (U) Improved security procedures and barriers at critical access points.

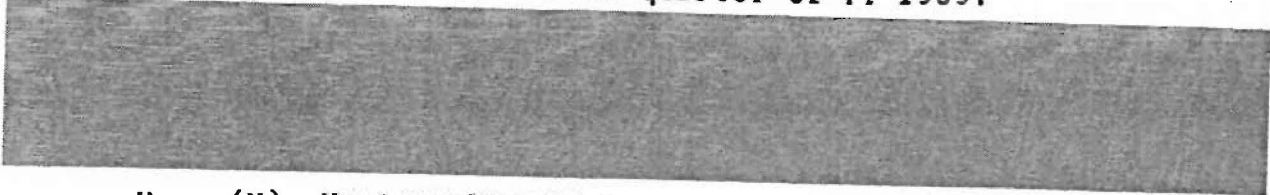
c. (U) Future Upgrades at LLNL.

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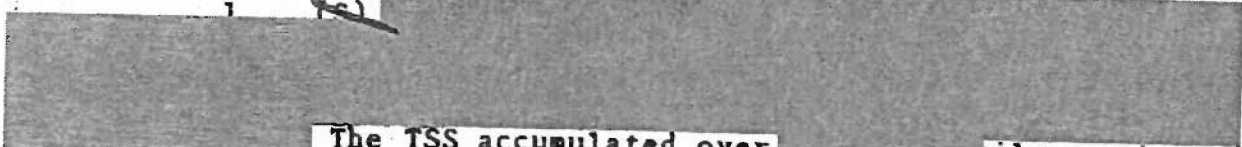
(1) ~~(S)~~ During FY 1986, LLNL will continue security planned upgrades on a site-wide basis. This project will be completed in the fourth quarter of FY 1989.



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H. (U) Nuclear Weapon Transportation Security

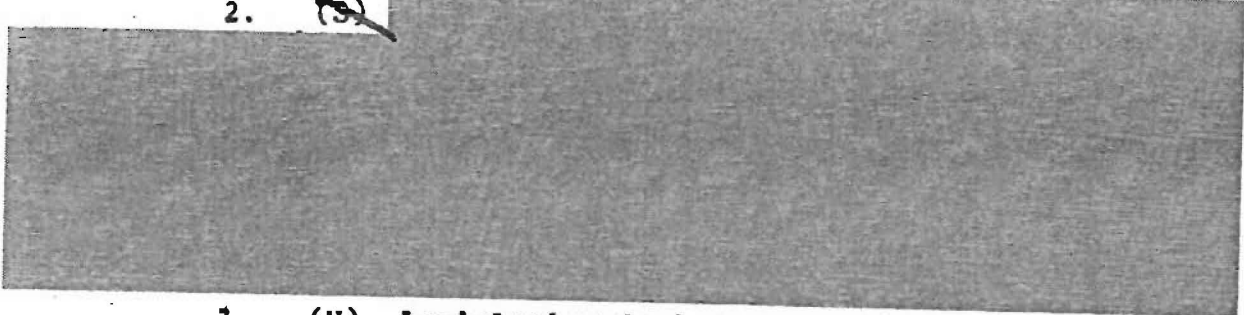
1. ~~(S)~~



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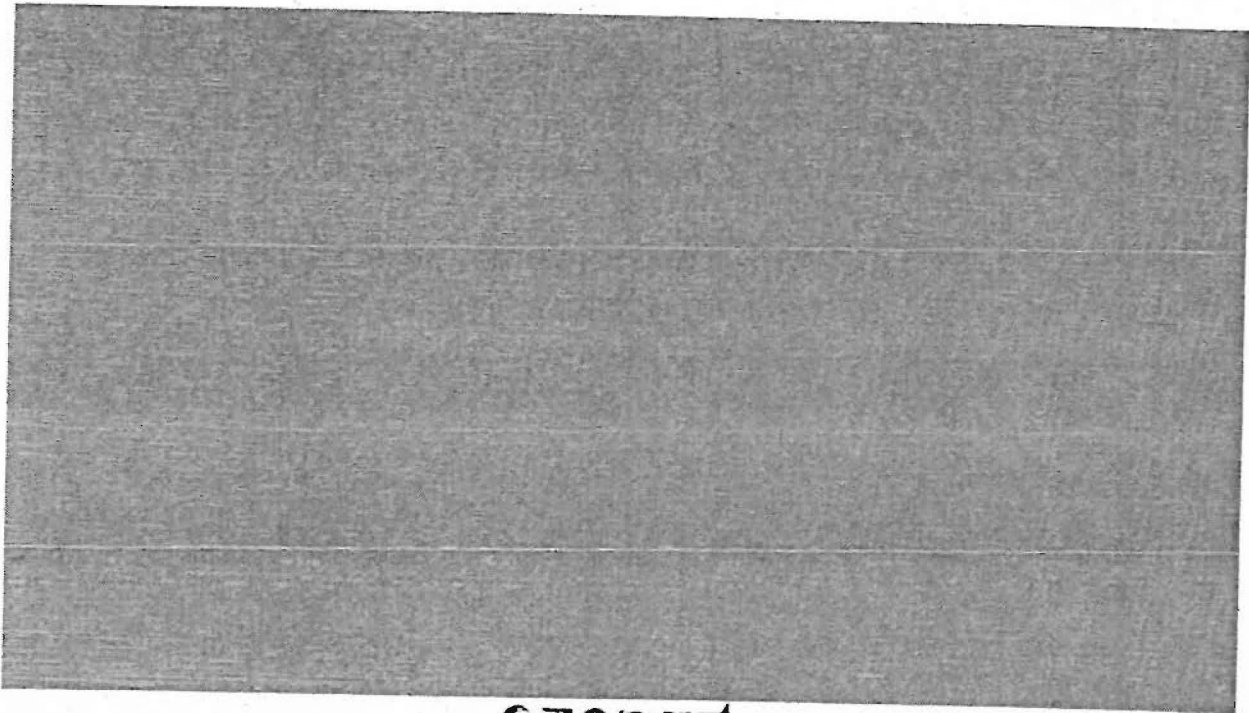
The TSS accumulated over  miles moving both nuclear weapons and special nuclear material without a serious accident or incident.

2. ~~(S)~~



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3. (U) Legislation is being considered to make it a federal offense to impede or otherwise disturb a TSS convoy or train.



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IV. (U) Joint Emergency Response

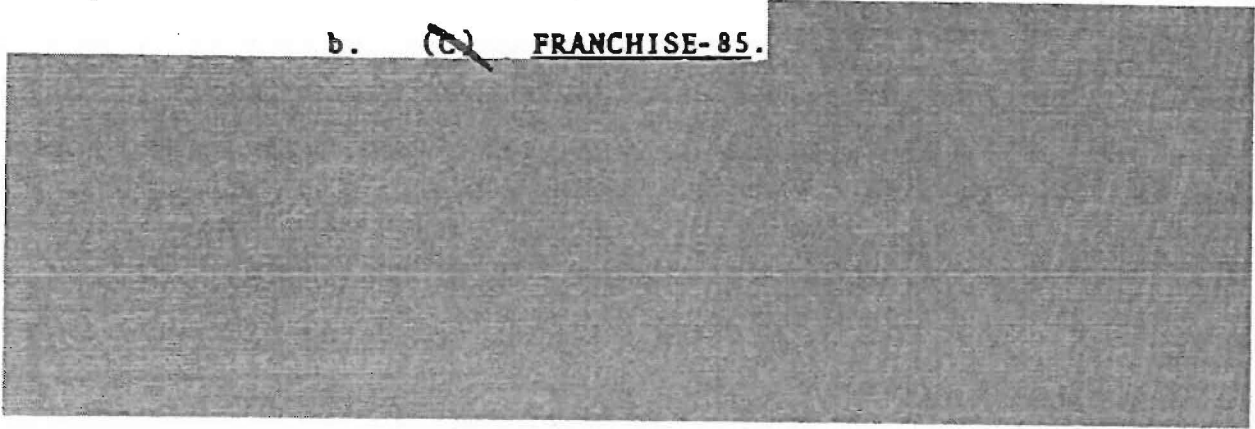
A. (U) Response to Weapons Accidents.

1. (U) General Assessment. In the event that a nuclear weapon is involved in an accident, DoD or DoE (depending on custody) will be the lead agency responding. DoD and DoE are responsible for the rendering safe of weapons and the removal of classified material from the accident scene. Federal Emergency Management Agency (FEMA) promotes the coordination of the Federal response to protect the health and safety of the civilian populace. While much progress has been made to improve DoD, DoE, and FEMA response through exercises and training, additional planning and refinement of procedures are being pursued.

2. (U) Exercises and Training. Nuclear weapons accident exercises (NUWAX and PREMIER TASK) are conducted to enhance the capability to effectively respond to an accident and to refine procedures for Federal-civil interaction. The biennial NUWAX and annual PREMIER TASK exercises test national level command and control, decision and coordination interfaces, and federal notification procedures.

a. ~~(U)~~ PREMIER TASK-85. This US only exercise tested overseas US command, control and communications; served as the precursor to FRANCHISE-85; and contributed significantly to the acknowledged success of that expanded follow-on exercise.

b. ~~(U)~~ FRANCHISE-85.



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c. (U) Training. The capabilities of the DoD and DoE for responding to a nuclear weapon or component

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accident are maintained through the effective training programs conducted individually and jointly. The training activity in 1985 consisted of classroom and field training for the response elements and service and facility training exercises that employed various response teams. In August 1985 the Army conducted their first annual service response force field exercise to provide training for the Army, DoD, DoE, and other government agencies and departments involved. Additionally, all of the Department of Navy service and regional response forces conducted major nuclear weapon accident command post exercises in 1985.

3. (U) Significant Initiatives

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4. (U) Radiological Emergency Preparedness around DoD and DoE Fixed Facilities.

a. (U) Policy and guidance are being developed that will assist state and local officials in preparing for radiological emergencies at DoD and DoE nuclear facilities. This information is structured to ensure that adequate coordination exists between the DoD/DoE and state officials so that the state can fulfill its responsibilities. The guidance provides procedures on discussing sensitive nuclear weapon information, factors that must be considered in response actions, protective actions, and notification considerations. This guidance was released for DoE facilities in 1985 and is in final coordination within the DoD for its facilities.

c. (U) Department of State (STATE) Program. DoD, DoE, and STATE initiated a program in 1985 to provide information and guidance for embassies worldwide on their contingency plans regarding response to an accident involving nuclear weapons. The DoD is providing assistance to institutionalize a training program for US Ambassadors, Deputy

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Chiefs of Mission, and Foreign Service personnel in each country involved.

d. (U) Nuclear Emergency Search Capability

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B. (U) Accidents and Significant Incidents. There have been no nuclear weapon accidents or significant incidents since the TITAN II accident at Damascus, Arkansas in 1980. No nuclear warhead was involved in the 11 January 1985 PERSHING II missile motor fire in the Federal Republic of Germany.

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