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Report to the Secretary of the Navy

February 1989

PHYSICAL SECURITY

Protection Provided Navy Ammunition at Overseas Locations

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National Security and
International Affairs Division

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February 17, 1989

The Honorable William L. Ball III
The Secretary of the Navy

Dear Mr. Secretary:

Because of congressional interest in the Department of Defense's (DOD) inventory control and protection over U.S. assets, we reviewed Navy physical security and inventory practices over sensitive Navy conventional ammunition stored at European depots. During our work, we learned of Navy improvement initiatives concerning both physical security and inventory control matters, including efforts in Europe. This report summarizes our principal observations for consideration in your improvement efforts.

In coordination with Commander-in-Chief, U.S. Naval Forces Europe (CINCUSNAVEUR) officials, we visited two depots where munitions are owned by and in the custody of U.S. naval forces and two North Atlantic Treaty Organization (NATO) depots where U.S.-owned munitions are in the custody of host nations. We concentrated on the Navy's highest security risk munitions such as ready-to-fire missiles, rockets, and high explosive grenades. We also sampled inventories of the sensitive munitions at these depots.

We found several conditions that did not meet DOD and Navy physical security standards, including

- lack of required intrusion alarms or guard force surveillance over sensitive missiles at one Navy and one NATO depot;
- bunkers, doors, or locks that did not meet U.S. specifications at one Navy depot and two NATO depots;
- no bunker lighting at one NATO depot and lack of lighting over some bunkers at two Navy depots;
- fencing deviations at one Navy depot and at two NATO depots; and
- unattended ammunition in outdoor storage areas within the perimeters of two Navy depots.

In addition, we found that one NATO depot and one Navy depot were not inventorying highly sensitive munitions semiannually as required. The NATO depot also was not conducting required annual inventories. (See app. I for a more detailed discussion of our observations.)

Because certain U.S. military munitions are portable and readily usable by others, the Navy requires their stringent protection. DOD and Navy regulations establish physical security standards for sensitive conventional ammunition and explosives owned by and in the custody of the U.S. Navy or Marine Corps. They also establish risk categories for various munition types and provide detailed protective requirements for bunkers, doors, locks, fencing, lighting, and guard force surveillance. Accordingly, when conditions do not meet the security standards, installations must obtain exceptions or temporary waivers and take compensatory measures to provide equivalent security. The regulations also require semiannual inventories of the highest security risk munitions and annual inventories of less sensitive munitions.

When the Navy places ammunition in the custody of an allied government at a NATO ammunition depot, U.S.-host nation bilateral agreements govern custodial responsibilities. U.S. agreements negotiated with several NATO allies between 1961 and 1966 stipulate that the host nation provides physical security and that host nation physical security standards apply. However, the Navy maintains and accounts for the ammunition, periodically checking the inventory and assessing ammunition safety and condition. For these inspections, it uses Navy standards.

CINCUSNAVEUR did not know and was not able to provide host nation standards and requirements for conventional ammunition physical security. Consequently, we used DOD and Navy standards to assess physical security at Navy and NATO depots. (See app. II for our objectives, scope, and methodology.) In this regard, Naval Security and Investigative Command officials advised us that they believe Navy security regulations should reflect the minimum protective standard to be used in protecting sensitive conventional munitions and that host nation security should meet or exceed Navy standards.

DOD commented on a draft of this report and generally concurred with our observations. (See app. III.) DOD stated that the Navy has taken corrective action in response to our observations at the two Navy depots. DOD stated that its goal at the two NATO depots has traditionally been "equivalency" between U.S. and host nation protective standards, recognizing that some variations will occur given the different practices and resources of U.S. allies. According to DOD, the Navy will ensure that the security provided at NATO depots meets similar standards or that appropriate compensatory measures are instituted. To accomplish this, the Chief of Naval Operations has instructed CINCUSNAVEUR to expand its ongoing physical security assessment program to include evaluations of security provided at NATO ammunition depots. In the future, according to DOD, CINCUSNAVEUR security specialists will visit NATO depots at least once every 18 months.

DOD stated that the two depots where we identified inventory practice problems have conducted the required inventories since our visit and that the Chief of Naval Operations will ensure that all depots are reminded of the Navy's inventory accountability requirements.

We are sending copies of this report to the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, and House and Senate Committees on Appropriations and on Armed Services; the Secretary of Defense; and the Director, Office of Management and Budget.

This report was prepared under the direction of Donna Heivilin, Associate Director. Other contributors are listed in appendix IV.

Sincerely yours,

Frank C Conahan

Frank C. Conahan
Assistant Comptroller General

Contents

Abbreviations

CINCUSNAVEUR	Commander-in-Chief, U.S. Naval Forces Europe
CNO	Chief of Naval Operations
DOD	Department of Defense
GAO	General Accounting Office
NATO	North Atlantic Treaty Organization

Observations on Physical Security and Inventory Practices

Department of Defense (DOD) Instruction 5100.76-M ("Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives," dated February 3, 1983) establishes DOD's physical security policy and minimum requirements for storing conventional ammunition and explosives. The instruction classifies various munition types into four risk categories and provides corresponding protective requirements.

Category I—the highest risk category—requires the most security protection. It consists of relatively portable missile and rocket systems stored either in ready-to-fire configuration or with their launchers, such as Dragon and TOW[1] missiles and light antitank weapons. Category II consists of such items as mines and high explosive grenades. Items in this category also are considered high risk but require less protection than Category I items. Categories III and IV munitions—medium-and low-risk items, respectively—also require a lesser degree of protection because they are not portable or stored in ready-to-fire configuration and because DOD does not consider them to be as dangerous or useful to a potential intruder as the higher risk items. For example, Category III includes bulk explosives, while Category IV includes smoke grenades and nonexplosive projectiles.

Navy Instruction 5530.13 ("Physical Security Instruction for Sensitive Conventional Arms, Ammunition, and Explosives," dated December 18, 1981) sets the policies, standards, and minimum protective measures for ammunition and explosives owned by and in the custody of the Navy or the Marine Corps. The instruction states that theft and unaccountable losses will likely jeopardize the safety of personnel and cause damage or destruction to DOD installations and resources, requiring commands to judiciously comply with its provisions. Among its provisions, the regulation provides detailed protective requirements for bunkers, doors, locks, fencing, lighting, and guard force surveillance, according to munitions risk category. It requires units and commands to annually request and obtain temporary waivers for conditions not meeting standards and to identify interim security measures that compensate for a deficiency. According to this instruction, exceptions may be granted if existing security measures provide protection that is equivalent to or better than Navy standards.

U.S.-host nation bilateral agreements govern custodial responsibilities at North Atlantic Treaty Organization (NATO) ammunition storage facilities storing Navy items. These agreements, negotiated with several U.S.

[1] Tube-launched, optically-tracked, wire-guided missile.

allies, stipulate that the host nation provides physical security over U.S. ammunition and that host nation physical security standards apply. The Navy, however, maintains and accounts for the ammunition, periodically checking the inventory and assessesing ammunition safety and condition. For these inspections, it uses Navy standards.

DOD and naval regulations require U.S. and NATO depots to conduct semi-annual inventories of Category I items and annual inventories for all other items and to report inventory gains and losses to the Navy inventory manager. The Navy requires the Naval Investigative Service to investigate all arms, ammunition, or explosive losses.

In recent years, the Navy has emphasized improving both physical security and inventory management procedures. Ongoing physical security initiatives include a Naval Sea Systems Command program to upgrade munitions storage facilities worldwide and a Commander-in-Chief, U.S. Naval Forces Europe (CINCUSNAVEUR) oversight review program to evaluate the security posture of subordinate commands.

To improve accountability, the Navy initiated the Non-nuclear Ammunition Inventory Accuracy program. Navy teams visit naval munitions depots and evaluate inventory control and reporting procedures. They visited three of the storage sites we visited in early 1987 and found numerous internal control problems at one of them. Officials advised us that they found no indication of lost ammunition at any sites but cautioned that the teams perform selected, rather than complete, inventories.

Our assessment at two Navy depots and two NATO depots disclosed several conditions that did not meet DOD and Navy standards in the areas of guard force surveillance, storage bunkers, lighting, fencing, open storage, and inventory control practices. Since our visit, DOD has informed us of actions it has taken or plans to take in a number of cases to correct the problems we identified.

Because identifying the depots by name is classified information, we have referred to the Navy depots as Depot A and Depot B and to the NATO depots as Depot C and Depot D. Table I.1 and the sections that follow summarize our observations.

Table I.1: Deviations From DOD and Navy Standards Observed at Navy and NATO Depots

Requirements	Navy Depot A	Navy Depot B	NATO Depot C	NATO Depot D
Guard force surveillance	X		X	
Storage bunkers		X	X	X
Lighting	X	X	X	
Fencing	X		X	X
Open storage	X	X		
Inventory practices	X		X	

Guard Force Surveillance

Navy Depot A and NATO Depot C did not meet Navy surveillance standards for Category I munitions, such as TOW and Dragon missiles. The regulations provide that these items, considered relatively portable and dangerous, be stored in bunkers with intrusion alarms or, in their absence, under constant armed guard.

Although Depot A had an intrusion alarm system, it was unreliable and often inoperative. Depot personnel advised us that the system was old and in frequent disrepair because needed spare parts were no longer available. They added that moisture in the soil caused frequent false alarms. Our review of depot records showed that over a 3-month period frequent alarms occurred at many bunkers, including those housing Category I munitions, but that depot personnel often did not respond to them. Depot and CINCUSNAVEUR officials told us that ammunition storage bunkers had to be opened each time to reset the alarm and that the depot did not have the staff to respond to each occurrence. CINCUSNAVEUR stated that it wanted to replace Depot A's intrusion alarm system and had requested funding to do so. Command officials did not know the status of the request when we visited the depot.

In the absence of an intrusion system, Navy standards require a constant armed guard over bunkers storing Category I munitions. However, we observed that guard forces operated roving patrols at the depot. Officials told us they checked Category I bunkers once every 2 hours.

NATO Depot C had no bunker intrusion alarms and did not compensate with constant armed guards. Instead, host nation forces used unarmed roving patrols that checked high security bunkers every 2 hours, according to officials. The depot manager stated that security forces stored guard force weapons in a locked armory and could issue these weapons if needed.

Agency Comments

DOD concurred that surveillance over Category I munitions at the two depots did not meet physical security standards. DOD stated that the Chief of Naval Operations (CNO) plans to fund a new intrusion alarm system for Depot A in its fiscal year 1989 budget. In February 1988, shortly after our visit, CINCUSNAVEUR requested a waiver from Category I surveillance requirements until Depot A received a new alarm system. According to DOD, the Navy approved the waiver and, in the interim, will place Category I munitions at Depot A under constant surveillance.

DOD also stated that CNO has directed CINCUSNAVEUR to evaluate the security upgrades required at all NATO sites storing naval munitions, including the need for an intrusion alarm system at Depot C. What upgrades occur at Depot C will depend on bilateral discussions between the host nation and CINCUSNAVEUR and funding, according to DOD.

Storage Bunkers

DOD and naval regulations provide minimum standards for the construction of bunkers storing Categories I and II munitions and specify the acceptable locks and door types to be used. Only one of the four depots—Depot A—fully met these requirements.

Depot B's bunkers did not fully meet Navy security standards for wall construction and door thickness. CINCUSNAVEUR agreed, but stated that the depot substantially complied with U.S. security requirements because of compensatory measures, including a 24-hour a day guard force, guard towers encircling the storage perimeter, and the illumination in the area at night. We believe this may be a reasonable conclusion. However, when we made our review, CINCUSNAVEUR had not requested concurrence with the compensatory measures through the Navy's physical security waiver and exception process.

NATO Depot D had storage facilities with heavy gauge metal mesh doors. DOD and Navy standards require that bunker doors be made of solid steel construction or wood with metal plates. While the facilities did have heavy steel outer security doors, these were not closed or locked. The depot foreman told us these doors were for wartime emergencies and were never closed because it would cause humidity problems that could damage the ammunition.

Neither of the NATO depots used Navy standard high security locks and hasps on its bunker doors. Although host nations provide physical security at NATO sites under bilateral agreements, we found that the Navy had approved a waiver for Depot C for its locking system in 1984 and had renewed it annually. This was the only instance we found where the Navy had issued a waiver to a NATO depot. According to the CINCUSNAVEUR security officer, the depot received a waiver when it received U.S. funding to upgrade its bunkers.

Agency Comments

DOD generally concurred with our findings on storage bunkers. DOD stated, however, that the heavy gauge metal mesh doors at Depot D also provide ventilation and that these doors meet U.S. physical security standards for bunker ventilation openings. In our opinion, since the structures serve as both doors and ventilation openings, the more stringent of the two standards should apply or additional compensatory measures should be enacted.

Lighting

Naval standards require storage bunkers housing Categories I and II munitions to have security lighting for exterior doors. NATO Depot C did not have exterior lighting over any bunker doors. The depot superintendent told us he opposed lighting only Categories I and II bunkers because it would highlight high-risk munitions storage areas for potential intruders. He believed the alternative, lighting all bunkers, would be too expensive.

Depots A and B did not have lighting over some Categories I and II bunker doors. Following our visit, CINCUSNAVEUR informed us it would move munitions stored in unlit bunkers at Depot A to bunkers that met the standard.

Agency Comments

DOD stated that CINCUSNAVEUR will seek an exception to the lighting requirement at Depot C, but plans no further action at Depot B because it believes the overall illumination present at the facility is adequate.

Fencing

DOD and Navy standards establish minimum requirements for fencing around bunkers storing Categories I and II munitions, including fence fabric, construction, height, and clear zones. The two Navy depots substantially met these standards. However, Depot A had a large gap at the bottom of one section of the fence line that would allow intruder access. According to CINCUSNAVEUR, the depot requested a work order to repair the fence after our visit.

The two NATO depots did not fully meet U.S. requirements. The perimeter fence at Depot D was in considerable disrepair and did not meet the U.S. six foot height standard. The depot front gate consisted of a single drop bar, where Navy standards require it to provide protection equivalent to a perimeter fence. In addition, both NATO depots did not meet clear zone requirements because of vegetation around their fence lines. However, both depots are located in mountainous terrain, and we believe clearing their fence lines would be very difficult. The Depot C superintendent stated he was aware of the U.S. clear zone requirement but that it would be prohibitively expensive to comply.

Agency Comments

DOD partly concurred with our observations. It stated that its regulations provide flexibility when natural barriers or difficult terrain provide equivalent or better security than fencing. DOD advised us that CINCUSNAVEUR will seek an exception for the Depot D drop bar on the basis that this gate is guarded 24 hours a day by two armed guards, a measure it believes provides equivalent security. DOD further advised us that Depot C has removed excess vegetation from its fence line since our visit.

Open Storage

The two Navy depots stored Categories III and IV ammunition awaiting transfer unattended in outdoor storage areas within their depot perimeters. This practice deviates from Navy standards requiring that risk categories I through IV munitions in open storage be under continuous surveillance during working hours.

Ammunition within the Depot A perimeter was in open storage for about 3 weeks when we observed it and was scheduled for shipment in 1 or 2 weeks. The items included small arms ammunition (bullets) stored in sealed boxes, banded onto pallets. Although Navy standards do not classify small arms ammunition as high risk, they are pilferable. We noted that Navy personnel and host nation contractors worked unescorted within the depot compound and had access to the open storage area. The guard force commander told us that vehicles and individuals were not routinely searched as they left the compound. According to officials, guard forces patrolled the open storage areas every 2 hours.

Depot B also did not place the storage area under continuous surveillance, although roads to the area were within sight of stationary guard forces. Host nation military forces provided roving patrols at Depot B, but depot and CINCUSNAVEUR officials did not know their frequency.

Depot officials at both sites were unaware of the continuous surveillance requirement. When informed of the requirement, Depot A officials stated they would consider using a closed-circuit television to monitor the open storage area.

Agency Comments

DOD concurred with our observations and stated that CNO had been assured by CINCUSNAVEUR that both U.S. depots now maintain constant surveillance over risk category munitions in open storage.

Inventory Practices

The Navy accounts for inventory at all locations, including NATO depots storing U.S. naval munitions. DOD and Navy standards require depots to conduct semiannual physical inventories for Category I items and annual inventories for all other risk categories. However, Navy Depot A and NATO Depot C were not performing semiannual inventories, nor was Depot C performing annual inventories. Depot managers at both locations stated they were unaware of the inventory requirements. One manager at Depot C stated that the last complete physical inventory of U.S. Navy munitions occurred in 1983.

To test the accuracy of depot records, we inventoried all Category I and some Category II items at all four depots. We balanced our inventory results against local stock records and found no discrepancies.

Agency Comments

DOD concurred with our observations. It stated that NATO Depot C conducted a serial number inventory of Category I munitions in July 1988, after our visit, and planned to do another one in January 1989. DOD further stated that Depot A had conducted two inventories since our visit and that the CNO will ensure that all munitions depots are reminded to perform inventories at required intervals.

Objectives, Scope, and Methodology

We reviewed physical security and internal inventory control practices over Navy conventional ammunition and explosives stored at European depots because of the continuing congressional interest in Department of Defense's (DOD) efforts to protect assets and facilities. Our objectives were to evaluate compliance with physical security standards at European depots and to assess Navy inventory practices over high risk ammunition and explosives.

We performed our work at several organizations, including the Naval Security and Investigative Command, the Naval Sea Systems Command, the Office of the Chief of Naval Operations, and the Defense Intelligence Agency in the Washington, D.C. area, and the Office of the Commander-in-Chief, U.S. Naval Forces Europe (CINCUSNAVEUR), London, England. We also visited four European ammunition depots—two U.S. Naval Stations and two NATO depots. We selected these depots because they held all Category I and most Category II ammunition stored in Europe and represented both Navy and NATO depots.

To evaluate physical security over conventional ammunition and explosives, we reviewed DOD and Navy threat and vulnerability assessments, site security surveys, and reports of missing, lost, stolen, or recovered items. We also reviewed relevant DOD and Navy regulations and discussed the requirements with the CINCUSNAVEUR Command Security Officer, the Fleet Marine Officer, and their staffs, as well as officials in the Naval Security and Investigations Command, the Naval Sea Systems Command, and the Office of the Chief of Naval Operations.

CINCUSNAVEUR did not know and was not able to provide host nation physical security standards and requirements. Consequently, we used DOD and Navy standards to assess physical security at Navy and NATO sites and discussed our observations with personnel at the four depots and with the CINCUSNAVEUR Security Officer and his staff. In this regard, Naval Security and Investigative Command officials advised us that they believe Navy security regulations should reflect the minimum protective standard to be used in protecting sensitive conventional munitions and that host nation security should meet or exceed Navy standards.

To evaluate inventory control practices, we sampled munitions, including all Category I and selected Category II line items, and compared our inventory counts against local stock records. Also, we confirmed serial numbers for some serial number-controlled items at one location. Our sample is not projectable since Categories I and II items comprise a small percentage of overall ammunition storage in Europe.

We conducted our review from September 1987 to March 1988. Our work was performed in accordance with generally accepted government auditing standards.

Comments From the Department of Defense

GAO Note: DOD's detailed comments are classified CONFIDENTIAL and not included in this appendix.

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THE UNDER SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-2000

POLICY

25 NOV 1988
In reply refer to:
I-88/26644

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
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U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) Draft Report, "PHYSICAL SECURITY: Protection Provided Navy Ammunition At Overseas Locations," dated September 22, 1988 (GAO Code 394215), OSD Case 7782. The DoD generally concurs with the findings contained in the GAO draft report.

The Department of the Navy has taken appropriate corrective actions at Navy installations in Europe. At North Atlantic Treaty Organization (NATO) depots, the Department has traditionally considered equivalency in protection standards to be the goal, with some regard to the practices and resources of our Allies. Some variation in the physical security measures afforded these assets will continue to be found. These variations do not, however, represent material differences in the level of protection provided. The Department of the Navy is conducting an assessment to insure that the security provided Navy ammunition at the NATO depots meets similar standards or that appropriate compensatory measures are instituted.

The detailed DoD comments on the report findings are provided in the enclosure. The Department appreciates the opportunity to comment on this draft report.

Sincerely,

Craig Alderman, Jr.
Deputy

Enclosure
As stated

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