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~~ATOMIC ENERGY ACT 1954~~

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~~S E C R E T~~

Operation of NATO Stockpile Program: Survey of Security Arrangements for United States Atomic Weapons with NATO Units (April 1962)

My principal impressions on potentially significant points, as a result of what I saw and was told about operations at various allied bases in the NATO area, during the period April 11-24, are as follows:

1. Non-United States personnel are so intimately associated with the mated weapons systems (both aircraft and missiles) that they help enforce the buddy-system or no-lone-zone rules vis-a-vis United States personnel.

2. United States custodial personnel are, at least at Air Force mated-weapon sites, not guardians of the weapons; they do not control access to the fenced areas within which such weapons are positioned; they have only accountability responsibilities and are expected to rely upon local allied personnel to deal with any and all intruders. In contrast, we defended the legality of the stockpile security arrangements in a joint State-Defense legal memorandum last August in part on the ground that United States personnel do control access and that they are responsible for "guardianship and safekeeping" of the weapons.

3. Allied forces could easily help themselves to the mated weapons whenever they felt it necessary to use them, without United States consent; there is no over-all considered or effective United States plan in being at the moment to prevent this eventuality.

4. I find it difficult, if not impossible, to reconcile such arrangements with the original impressions as to how United States forces would retain custody and control of stockpile weapons.

5. It is difficult to reconcile hesitancy about the legality or policy soundness of so-called floating stockpiles with what is in effect on land at the moment; the only possible difference is that communications to a unit afloat may somewhat more frequently be susceptible to interruption due to natural causes, but this I would not regard as a controlling difference. In fact, given a ship with the proper kind of facilities, the weapons could be much safer at sea.

6. Since it is now physically possible for allied units to launch these weapons systems over our objection, and since it is only prudent to assume that a military commander will, in time of crises for his command, throw everything available into the breach, the question arises of whether our "pause" concept is realistic.

NATO Security Inst.
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7. The entire program is pregnant with political implications, a fact readily acknowledged by the military, and, hence, if the Department means to have a voice in these matters, it would be necessary to have the opportunity to review even such matters as target assignment -- [redacted] they have been assigned to cover and this decision may not turn entirely upon purely military considerations.

DoE/ 6.2(a)

8. I had been under the impression that, pursuant to NEA's insistence, we had an understanding with Defense that special steps and precautions would be taken, including withholding of training, to assure [redacted]

JCAE had no previous info re this!

DoE/ 6.2(a)

9. Given the acceptability of the premises upon which the program is presently constructed, the program is being vigorously and seriously pursued by dedicated and capable personnel at all levels although the demands on the energies of the officer personnel in the program, particularly at the sites, may be inordinate.

Further observations and the details of the program in operation at the sites are set forth in the following resume of operations at typical installations.

Background

The core of the survey party was an ad hoc Defense-AEC committee (five from Defense and four AEC representatives) whose main purpose was to ascertain whether the security arrangements with respect to the weapons were adequate.

In that connection, it had been agreed at the White House last year that the AEC retained a responsibility for the security of weapons information with respect to weapons deployed abroad and, in particular, that the AEC was entitled to have reasonable assurance that the arrangements for the security of information at the storage sites were adequate.

AEC was already somewhat familiar with the situation at the storage sites abroad since it had representatives accompanying the Joint Committee members who visited various NATO atomic capable units late in 1960 and additional AEC personnel had visited some such units during 1961 for familiarization purposes or for weapons safety checks.

Toward the end of 1961, AEC had registered reluctance to join in some Department of Defense proposed determinations under Executive Order 10854 to provide Restricted Data to allied forces. In some instances the warhead to which the information related was already being dispersed to the allied units. 1/

Subsequently, AEC presented its view on dispersal proposals under consideration, as did State, and registered its doubts as to the adequacy of security, particularly with respect to two stage weapons. 2/

Earlier this year, therefore, arrangements for an AEC-DOD inspection of the facilities as they now stand were made. A Joint Committee staff member was added as an observer in view of the Committee's desire to learn first-hand what progress had been made since their special subcommittee report of last year. And two State observers were added so that the Department would have any opportunity to become familiar with actual operations. 3/

EUCOM Briefing

The committee of nine, plus the three observers, assembled on April 9, 1962, at EUCOM Headquarters (Paris) for a general briefing on the SHAPE-CINCEUR stockpile program.

A limited

1/ Obviously, a question arises as to the wisdom of acting on the dispersal problem as one separable from the problem of transmission of information.

2/ Upon return to EUCOM at the end of the trip, the party was informed that instructions had been received from Washington that no two-stage weapons were to be put on QRA planes, United States or allied. The speculation was that this was due to concern about radiography risks.

3/ A few Department and Embassy personnel had previously seen the IREM operations at [redacted]

A limited number of the group (including Col. Layton, Mr. Conway, Mr. Ink and the two State representatives, met first with Lt. Gen. Underhill (EUCOM Chief of Staff) and his immediate staff. The principal item emphasized was the need for the group to limit itself in any discussions with non-United States personnel at facilities to be visited. The main concern was that these non-United States military personnel not be given the impression that the group was conducting a special investigation of them.

All present seemed to appreciate the need for exercising discretion in that respect.

The formal briefing was opened by Brig. Gen. Davisson (EUCOM J-4) who again briefly treated, for the benefit of the entire group, of the foreign personnel problem.

Otherwise, the most interesting point made by Gen. Davisson was the fact that only recently the British had "come clean" to the satisfaction of the United States military on their nuclear targetting plans.

A series of briefers then ran through the various aspects of the SHAPE and CINCEUR programs for atomic weapon storage.

There seemed to be some confusion as to the significance of the R-hour (weapons release) and related messages that would initiate the steps leading to use of the weapons. If there is confusion at headquarters, the situation should be thoroughly reviewed up and down the line.

During the discussion on communications between headquarters and the field units, the need for prompt completion of the tropospheric-scatter system was emphasized. Apparently the facilities in the field can be installed very quickly once the military are given the green light upon receipt of governmental level approval.

The objective of the tropospheric system is to enable CINCEUR to have direct, rapid and reliable communications to the custodial units in the field.

Another communications project involves dispersal of the local command posts. CINCEUR wants mobile units in communication with him to be the relay points in the event units in the direct chain of communication are knocked out.

In the area of special safety problems, we were advised that the particular weapons which the Holifield Report said raised safety problems had

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been equipped with the additional devices recommended so as to eliminate the hazard previously involved.

With respect to the new program to maintain continuing vigilance for signs of clandestine radiography, we were informed that there currently existed a shortage in certain monitoring equipment. Nevertheless, the units were following recently issued JCS rules requiring that special care be taken for weapons during transit on the ground.

The briefers advised that all storage sites still did not fully meet the SHAPE criteria. The necessary construction program, however, had recently been accelerated.

The briefers called our attention to difficulties United States personnel were having in training foreign units because of seemingly unnecessary limitations on the procedures for communicating Restricted Data. The difficulty apparently stems from the fact that the authorization from JAEIG to transmit the data runs for a fixed period, usually coincident with the planned period of training -- say, ninety days.

Consequently, if, after that period, United States personnel notice allied personnel making an error in weapon handling procedures, all they can do is tell them to stop. They cannot correct them until they get a new authorization from Washington.

EUCOM has recently proposed a new approach to minimize these difficulties. The military and AEC personnel in our group recognized the need to look into the matter.

The briefers candidly informed us that evacuation procedures were being currently reviewed for improvement and, in particular, that there were not enough planes available to evacuate all the weapons from the entire theatre at the same time. Hence they were concentrating on plans for evacuating a country at a time.

There are also destruction plans and procedures but time is a big factor, especially for the Jupiter system.

To meet the various factors that have to be taken into account in providing for the immediate security of the weapons, including the communication links, principal reliance is placed on human resources -- allied and United States.

There are two categories of personnel. The first is the "custodial" (all United States) which is always responsible for "ownership" and "accountability" and also for "possession" until authorized to release that to the

supported force.

It was emphasized that the United States custodians are not "guards". (But see discussion infra re custodians in Army units.) They do carry a pistol but only for their self-protection. All of the United States personnel are required to have at least a "secret" clearance before taking up custodial duties.

The Air Force requires a "Top Secret" clearance (the military may grant this upon satisfactory completion of a specified number of years of service, formerly ten but now fifteen, as well as on the basis of a background investigation).

The entire guard or security force for the weapons is supplied by the supported allied unit. This is composed of:

A. Security guard force;
B. Sabotage alert team (S.A.T.);
C. Standby alert force; and
D. Augmentation Alert Force.

The security guard force supplies the men who are on post with the weapon or patrol the perimeter of a weapon site enclosure.

The sabotage alert team is a group (usually around five men) which is always on duty, ready to deal with intruders on a moment's notice.

The standby alert force is a group about company strength, who may be off duty but on base subject to call.

The augmentation alert force is at least a battalion size group which is supposed to be able to reach a weapon site within four hours of call. This group has other normal duties and would function as guards for the weapons only in an emergency.

In addition to United States and allied manpower, the security program involves reliance on power, alarms, dogs, fencing, floodlighting and gates.

Finally, it was pointed out that while EUCOM conducts general surveys at the operational sites at various stages, EUCOM does not run an independent IG program. EUCOM does, through the general survey approach, satisfy itself that component commanders run an adequate IG operation in this respect.

~~Field Survey~~

The morning after the EUCOM briefing the party, with six escort officers from the principal United States military headquarters in Europe (EUCOM, USAFE and USAREUR), [redacted] DoE/6.2(a)

[redacted] DoE/6.2(a)

The detailed itinerary is set out in Attachment 1.

There is no need here to review completely in detail the operations at every one of the ten facilities visited since this would entail a large measure of unnecessary repetition. There are some possibly significant variations in the standard procedures between the operations for the basic types of delivery systems -- i.e., between operations involving Air Force missiles (Jupiter IRBM); manned aircraft; and the Army missiles and guns.

Accordingly, the following analysis will focus on the variations between security arrangements for these three categories rather than on differences in detail at each of the installations surveyed.

Jupiter IRBM's.

The group visited both of the units in Allied Command Europe -- the [redacted] DoE/6.2(a)

In both cases the Jupiters are in place, standing upright with warhead attached, targetted, and all the instrumentation is manned around the clock so that at any time they can be launched within fifteen minutes.

Three missiles are deployed at a site or launch position, in most cases some distance from the main base. [redacted] DoE/6.2(a)

[redacted] DoE/6.2(a)

Each launch position (normally situated off some back-country road) is enclosed by two cyclone fences, twenty feet apart and each is topped with barbed wire. At the entrance, user country personnel are stationed to control access.

The area inside the fencing is probably close to a quarter-mile in diameter and is in effect a small base in itself. It contains not only the missiles and the electronic equipment vans but also the fueling tanks; quarters for all the personnel (United States and user force) working at the position; radio and radar antennae; etc.

[redacted] six United States air police "custodians" are assigned. 1/ Normally, it is necessary for only one of these custodians to be on duty patrolling inside the fence to keep the warheads under "surveillance" although when a missile has been lowered to the ground, it may be necessary for a second man to be on duty since one has to stand by the warhead of the lowered missile and he may not be able to watch the other two well enough from that spot. DoE/6.2(a)

Three United States officers, one of whom now functions as the maintenance officer, take turns on duty as the Launch Authentication officer inside the van containing the electronic launching console.

These six-man United States teams pull four-day tours at the launch position. Eventually the United States maintenance officer will be dropped since [redacted] will have that responsibility as soon as it has trained personnel. The United States [redacted] however, presently plans to keep three United States officers in the team since he believes there is too much for just two officers. These officers seem to be regarded as the focal point of the custody and control operation. While on duty in the van, they wear the three keys that open the three locks which permit the three missiles to be fueled and otherwise finally prepared for firing. DoE/6.2(a) DoE/6.2(a)

Moreover, there is under consideration a proposal by the Air Force to eliminate the patrolling air policemen upon installation of an electronic device which would register in the launching console van should anyone attempt to tamper with a warhead on the missile. The Air Force is now weighing the reliability of this electronic device.

[redacted] provide the personnel who man the access gate -- they are the individuals who pass on a person's credentials to enter the area where the missiles are situated. [redacted] three guards who DoE/6.2(a) DoE/6.2(a)

1/ [redacted] there are three air policemen per shift. DoE/6.2(a)

patrol on foot inside the fences and around the missiles -- one man per missile. These interior guards are supplemented by two men who patrol the exterior perimeter at night with dogs. 1/

The interior [redacted] are the men who are expected to guard the missile and warhead. The United States custodian we were again reminded is not a guard. He is a "custodial agent" whose responsibility is to keep the warhead under "surveillance". DoE/6.2(a)

It would seem, therefore, that the concept that

> "custody requires that control of access to the weapons be maintained to that extent that it would take an act of force to obtain either weapons or information concerning the weapons without proper authority," 2/

apparently is now construed to mean that something in the nature of a technical assault (without battery) is sufficient to satisfy the "act of force" criterion.

Actually, at the launch positions, it is impossible for United States personnel to gain access themselves to the warheads without affirmative action on the part [redacted] who are to have charge of and operate the equipment for lowering the missile to the ground. 3/ DoE/6.2(a)

Without [redacted] therefore, it would be impossible to evacuate or destroy the warheads. In other words, United States custody of the Jupiter warheads is essentially symbolic. The initial Justice characterization of this particular arrangement as "joint custody" seems justified. It certainly is difficult to justify characterizing it as "exclusive" as we did in our aide memoire to the Soviets about two years ago. DoE/6.2(a)

The United States [redacted] has an emergency evacuation plan. It would, however, take forty-five hours, [redacted] before all of the warheads could be demated and airborne, assuming enough cargo aircraft could be sent from other parts of the theatre. DoE/6.2(a) DoE/6.2(a)

1/ There are no dogs available yet for L.P.'s Nos. 4 and 5.
2/ See exchange of correspondence between Chairman M.L.C. and Chairman A.E.C., Feb. 24, 1958 and Apr. 4, 1958.
3/ The only warheads at the Launch Positions are only the missiles; no spares are kept there.

Destruction of warheads, in an emergency, would, with the cooperation [redacted] hours to complete. DoE/6.2(a)

With quick de-erect equipment, such as is present with the Thors in the United Kingdom, and is now being produced for the Jupiters, these evacuation and destruct times could be reduced substantially. The amount of reduction would depend on how many of these new sets are furnished each site. Apparently, the evacuation time could then be cut to around twenty-four hours, and the destruct time to about 1½ hours, provided additional trained personnel were made available.

Destruction of the warheads could be accomplished in about that same time span now by blasting the missile off its stand and then blasting the warhead. 1/ While there seems to be enough demolition equipment on the spot to permit this, there is not enough trained manpower on the spot at present to do the job that quickly. With helicopters at their disposal, however, the demolition teams could improve upon current time estimates.

There are two other quick methods to prevent launch. One is to puncture the missile with small arms fire -- this will release the fuel. The other is to damage (e.g., with a grenade) the launching equipment in the van or the van containing the bulk of the electronic equipment. While preventing an unauthorized launch, neither of these methods would prevent the warheads from falling into unauthorized hands.

Only the launching van is manned. As previously noted, the United States officer holds the launch initiation key.

[redacted] has the combination to a safe wherein is kept a launch firing key. He takes that key out only upon receipt of an authenticated firing order from SHAPE. DoE/6.2(a)

[redacted] DoE/6.2(a)

With respect to the launching keys, Defense has not rejected the possibility of using a combination lock instead of the launch key in the hands of the United States officer. While a combination system would pose one more obstacle to be overcome, a determined unauthorized user could still, once the United States officer was out of the way, eventually get at the electric circuit connection and launch this missile. This, however, would require additional time.

1/ This is not expected to produce a nuclear detonation.

It should be noted, however, that since the launching van is shielded by a blast protection bunker from the missiles, it is difficult for the United States walking custodian to keep that area under surveillance as well as the warheads. It is evident, however, that the Air Force system places more reliance on the United States officer in the van than the walking custodian since it is considering removing the latter but not the former.

In that connection, it is my understanding that the electronic device under consideration for watching the warhead would not assist in watching the targetting mechanism located at the bottom of the missile and in the other van. Both of these, however, have seals and are checked periodically.

Moreover, [redacted] it is doubtful that they could retarget. The targetting calculations are performed by a special staff of United States officers at SHAPE; so presumably no one else knows how to program into the missile different specific targets. This is a safeguard that is not present in the other two types of delivery systems. DoE/6.2(a)

The situation with respect [redacted] essentially the same. The only variations stem from the fact, as noted above, that the [redacted] were waiting for their first crews. DoE/6.2(a) DoE/6.2(a)

In summary, the security system at the launch positions seems well calculated to prevent any unauthorized access or use except pursuant to a deliberate national plan by the user forces or the local components in the event of an internal revolt. But these missiles would probably be of no value in an internal conflict since no one on the spot would know how to program in local targets.

Furthermore, [redacted] Commander is planning on having available for the indefinite future a United States Combat Support Group of some 300-400. The utility of such a group in the event of trouble [redacted] particularly since transportation to the sites is such a vital element and there did not appear to be quick air transportation for such a force available. If aircraft is always available and this force is composed of paratroops in the immediate vicinity, then it could be a potentially useful safeguard. DoE/6.2(a) DoE/6.2(a)

[redacted] situated the Command Post with communications to SHAPE; Jupiter missile training areas; and the atomic warhead storage area. DoE/6.2(a)

In the storage area are the concrete igloos and the weapons maintenance shops. The area is a special area [redacted] DOE/6.2(a) but is set off by two perimeter cyclone fences as a United States only area to which United States personnel control access.

There are [redacted] personnel DOE/6.2(a) normally inside this weapon maintenance and igloo area. [redacted] do enter the area for occasional ground-keeping work and when driving the vehicles to transport weapons. But they enter only with a United States escort.

The exterior of this fenced area is patrolled [redacted] DOE/6.2(a) who are accompanied by dogs at night.

There is no plan for back-up storage of Jupiter warheads. The storage igloos in this area are intended to be used for storing weapons for the United States aircraft units the Air Force expects to assign to [redacted] DOE/6.2(a)

When it is necessary to move a Jupiter wurhead between this storage and maintenance area and a Launch Position, (e.g., when a new warhead arrives or when maintenance is necessary), the warhead is moved [redacted] DOE/6.2(a) There is, however, a United States custodial agent with each warhead.

[redacted] DOE/6.2(a) The communication techniques are a voice hot-line with a teletype and high frequency receiver for back-up.

In addition, the United States unit at the Base has a single-side band radio to CINCEUR (to be replaced by the Tropo system) for purposes of communicating on release of the weapons.

In turn, there is both voice and radio communications from the Base Command Post to the Launch Positions. [redacted] DOE/6.2(a) This means that even if the most direct route of communications between the CP and an LP is destroyed, there is an alternate line available.

[redacted] DOE/6.2(a) There are, of course, more missiles and thus more Launch Positions. Here the distance from CP to LP's varies from three miles to fifty-two miles.

[redacted] the United States custodial responsibilities. DOE/6.2(a) The United States air policeman patrolling at the Launch Position is to monitor the external and internal security provided [redacted] who are both inside and outside the area. DOE/6.2(a) If the policeman detects something out of order, he is to use "passive" means since he is only the eyes and ears of the United States Launch Authentication Officer (in the van), the individual on the United States side who is supposed to maintain custody of the warheads for the United States. The United States air policeman may use his weapon only for his personal protection.

The United States briefing officers here explicitly acknowledged that this custodial arrangement was in marked contrast to the igloo storage and maintenance area at the main base where the United States maintains internal security -- even though warheads are rarely there and when they are, there is nothing to launch them.

In other words, the safeguards on the United States side against use are the weakest where the danger is the greatest.

[redacted] DOE/6.2(a) There are no blast revetment. But here there are no plans for back-up storage of any kind.

One United States officer here acknowledged that the United States air policemen, for the most part, regard their type of duty as an undesirable assignment. The men do not get much experience to help their careers as air policemen. They are on duty at the sites for two days and off four days. But one out of the four goes for training and the average travel time for them from home to the LP is 3½ hours each way.

[redacted] DOE/6.2(a)

[redacted] the primer cord at DOE/6.2(a) the second stage separation point detonated during an inspection and the top portion of the missile (containing the warhead) was nudged off its seating a bit. The speculation at the time was that a "short" in the wiring of that missile due to moisture was the most likely cause of the incident.

If the top portion had been budged more it could have toppled to the ground with a fair chance of the impact producing an explosion of the HE in the warhead which in turn might have had sufficient force to cause damage or further explosions in the LOX equipment or other items there containing HE.

[redacted] DOE/6.2(a)

If someone was bent on disabling a Jupiter, there seems little question that it would not be too difficult since their skins are puncturable by rifle fire. [redacted] for example, DOE/6.2(a) is in a relatively flat area and the adjacent fields and olive groves are worked regularly practically up to the LP perimeter fence.

[redacted] DOE/6.2(a)

[redacted] DOE/6.2(a)

The anticipated quick de-erect equipment will not reduce this time appreciably since the necessary demating teams can work only three of the ten sites simultaneously because there is only enough equipment for transporting nine warheads at a time back to the airbase.

[redacted] DOE/6.2(a)

[redacted] DOE/6.2(a)

In that connection, we were advised [redacted] that DOE/6.2(a) the present security arrangements reflect an evaluation of the various risks involved based on a Rand study of the subject which apparently included an assessment of all of the political factors involved.

2. Manned Aircraft.

[redacted] DOE/6.2(a)

[redacted] DOE/6.2(a)

There are over 1,000 German Air Force [redacted] DOE/6.2(a) G.A.F. base that has a nuclear capability. At present, the units here have F-84's armed with the MK-7, a gun-type weapon with a separable nuclear capsule. Their personnel will, however, begin training in F-104's which will carry the MK-28 (a sealed pit weapon) in October of this year. The actual change-over from 84's to 104's is expected to take place around March 1963.

There is also a squadron here with a conventional capability.

The United States unit has eight officers and forty-eight enlisted men, none of whom are "guards".

With few exceptions, such as the S.A.S. area, access to facilities on the Base is controlled by G.A.F. personnel, much like the arrangement at the Jupiter bases.

Comparable to the missile Launch Positions is the Quick Reaction Alert area (Q.R.A.) which contains the aircraft armed with bombs, ready to go within fifteen minutes. That this is a G.A.F. controlled, rather than a United States, area was evident from the fact that we were told that our group's authorization to enter the Q.R.A. had come through to the German Base Commander from his German superiors only the day before our arrival. Without that action we would not have been able to enter the Q.R.A.

[redacted] two planes on such an alert status. In July there DOE/6.2(a) will be four.

This area is fenced off and the entry way is guarded by G.A.F. personnel who examine credentials and decide who may go in.

Inside the fence is a small building or shack for housing the Q.R.A. personnel (pilots, guards, and other personnel).

On the United States side there is an officer on duty in the building, which also contains the communications for reaching the Command Post.

There is one United States custodian with each plane, sheltered in sort of an open ended igloo. The custodian was armed with a pistol.

Practically alongside the United States custodian is a G.A.F. guard, armed with the NATO machine pistol.

The United States custodian at the Q.R.A., we were told, is to use his pistol only to defend his life or pursuant to a request from the G.A.F.

On the pavement around each plane is painted a circle, known as the no-lone-zone, much like the free-throw circle on a basketball court.

No individual is supposed to go inside that circle alone. A buddy system must be followed whereby a person must always be accompanied by someone with a comparable level of nuclear knowledge.

This system was designed to guard against unintended errors jeopardizing safety as well as to guard against unauthorized tampering with the weapon.

Although this system as originally conceived envisaged two United States personnel keeping check on each other, it is now fulfilled in operations such as [redacted] G.A.F. guard watch the United States custodian. This gives some idea of how intimately Allied personnel have become associated with the weapons. DoE 6.2(a)

The igloo or storage area is actually located off the main base. It is about 1½ miles to the main gate and about 3/4 mile to the closest base fence.

This United States area is located within a German conventional munitions storage area. Hence it is necessary to pass through the German controlled area to get into or out of the United States storage area.

A single United States custodian controls access at the gate to this area. His "buddy" is supposed to be a German "translator" who stays with him in the gate house but it appeared that that German had not been instructed that he was responsible for assuring that even an American did not go into an igloo alone.

This storage site is situated in a very wooded and hilly area of poor visibility. All of the igloos cannot be watched from the gate house although those which had nuclear material in them at the time of our visit could be seen from that spot.

The igloo doors have two locks. One key is held by the United States custodian on duty at the gate; the other by the M & I man on duty. Each igloo has an alarm system which rings at the gate house and can be shut off there. Hence, the local United States personnel recognized the need to arrange to have the alarm ring controlled elsewhere if the present custodial system is to be maintained.

The custodian at the gate pulls an eight-hour tour. He is responsible for watching the gate. He is not a patroller. When something appears out of order, he is to call the seven-man German Sabotage Alert Team located just outside the gate. This Team must be escorted into the area by the United States flight commander and it takes seven minutes for him to get to the area.

There are both radio and telephone communications from the gate house to the main base. The custodian is required to check in every thirty minutes.

Local civilians who enter the storage for maintenance purposes are escorted by United States personnel and are required to be "cleared" by the local police.

The perimeter of this S.A.S. area is patrolled during the daytime by four German guards with NATO machine pistols. At night, there are two-man patrols plus three German civilian guards patrolling with their dogs.

About 90% of the G.A.F. guard force here is composed of draftees who are earmarked for this duty upon entering the service. These weapons guards (about 300 men) have a "Toolchest" clearance. This requires five years residence in West Germany; no close relations in the East; a police check; and good moral character. It takes about 4-6 months to complete this clearance. A USAFE representative characterized this clearance as one roughly equivalent to our National Agency check.

Originally these personnel were to obtain a stage 2 or German National Secret clearance but by agreement between the respective services the criteria were revised since it was taking about two years to clear one of these guards.

The G.A.F. pilots, staff officers and loading crew, however, are required to have a stage 1 clearance which involves a full background investigation, including a check of the United States, French, and United Kingdom central records. This takes about two years to complete. The time is expected to be shortened somewhat since the G.A.F. has recently established a central file operation.

The United States [redacted] certification on the G.A.F. personnel given a stage 1 clearance. They do not get anything on the others. DoE/6.2(a)

With respect to the radiography problem, we were advised that each convoy of weapons (about once a week) from the S.A.S. area to the Q.R.A. area is monitored and that once each month there is a sweep of all vital areas.

This work is carried out by the two E.O.D. men assigned to this unit. The results thus far have been negative.

The reason for the frequent movement of weapons is the need to switch the alert aircraft frequently so that they can be flown and the necessary maintenance performed.

Since the S.A.S. area is located off the main base, it is necessary to have a full-fledged convoy operation to move the weapons to and from the Q.R.A. area each time it is necessary to change alert aircraft.

Each jeep in the convoy has radio communications with the base. And the G.A.F. guards have been deputized with civilian police authority so that they can stop all traffic at the public road intersections between the base and the storage area.

The German guard force works on a twenty-day cycle. They have ten days on guard duty (including the time spent as part of the back-up force); six days of training; and four days on pass (two weekends or their equivalent).

This back-up [redacted] fifty men (free of other duties e.g., in barracks or eating) who must be able to respond to a call for assistance at the S.A.S. or Q.R.A. areas within twenty minutes. -- DoE/6.2(a)

The nearest Augmentation Force is of brigade strength located at [redacted] To improve this situation, the G.A.F. is thinking of training the local civilians to be reserves for emergency situations when considerable additional manpower may be necessary. DoE/6.2(a)

There has been very little evidence of any adverse political climate in the area. [redacted] The over-all level of political activity of any kind is very low and there is hardly any evidence of any Communist activity. DoE/6.2(a)

Some "ban the bomb" pamphlets were circulated about six months ago, but there has not been any such activity since. On the other hand, the general area has a number of popular weekend resort towns so on weekends these areas are full of strangers.

For evacuation, the G.A.F. must be relied on to furnish all transportation resources -- vehicles, drivers and guards. For an airborne evacuation, it would take three hours to get all the weapons to the point of loading them on aircraft. With C-130's all the warheads could be gotten airborne in another hour. This four-hour period could be reduced if the weapons were moved without taking time to put them in their shipping containers.

There are, of course, [redacted] The United States unit DoE/6.2(a)
there has no organic aircraft of its own nor does it have any pilots who could fly out the F-84's. The most expeditious procedure would be to fly out the separable nuclear capsules of the type of weapons presently stored there. This could probably be done in two hours and would not degrade the theatre's capability since USAFE has a back-up supply of the non-nuclear portion of the weapon.

All of this assumes a kind of threat for which the United States unit could expect full G.A.F. cooperation.

Again, however, some of our escorts expressed doubt about the practicality of an evacuation plan in view of the minimal airlift capacity that would be available in any real crises in the light of present USAFE resources.

Under the "destruct" plan for the weapons in storage, pre-cut primer cord and shaped charges are stored in one of the non-nuclear igloos ready for use. Based on test runs, it would take about fifty-five minutes to complete the job. This, however, could probably be done without attracting much, if any, attention.

For the weapons on the Q.R.A. aircraft, the unit envisages puncturing the aircraft gas tank and putting in a fuse train to destroy the bomb by fire.

Present thinking does not call for any G.A.F. participation in actual destruction but coordination is envisaged so that the G.A.F. personnel would have an opportunity to withdraw to a safe distance.

For the interchanging of the alert aircraft, the Germans station a seven-man alert team around the pad where the weapons are attached and detached. While that is taking place, however, the Germans look away.

The Germans also are not supposed to have any idea of what the "final adjust" on the weapon is or how it is performed. This particular action is performed by United States personnel behind a screen.

Once the plane is on the Q.R.A. pad, it is ready to go. Nothing further needs to be done on the bomb other than for the pilot to perform final arming action in the air.

Under the Air Force's Human Reliability Program, two men have had their access authorizations withdrawn. One was a cryptography man with unanticipated family problems and the other was a custodian who was regarded as a "shaky character".

[redacted] DoE/6.2(a) The principal differences are that the permanent facility has the double cyclone perimeter fences whereas the temporary has only concertina barbed wire (although very effective looking) and less desirable quarters for the alert crew at the pad.

At both of those bases the permanent S.A.S. area has been constructed although it should be noted [redacted] on DoE/6.2(a) terrain that gave poor visibility and the woods were not cleared one hundred feet from the outer fence as is normally required by the SHAPE standards governing these installations.

[redacted] DoE/6.2(a) patrolling at night outside the fence with dogs (if dogs are not available, a pair of two-man teams will patrol the exterior of the area at night). Also inside will be four United States custodians, one for each aircraft pad.

[redacted] DoE/6.2(a) The context of the discussion on this aspect gave the definite impression that the terminology had been chosen with deliberation with a view to meeting user country political sensitivity.

[redacted] DoE/6.2(a)

[redacted] DoE/6.2(a)

[redacted] DoE/6.2(a)

the weapons in the igloos. The unit was in the process of ordering more to take care of the weapons at the Q.R.A. area on a one for one basis. All those materials are to be kept at the S.A.S. area; none would be at the Q.R.A. area.

[redacted] DoE/6.2(a)

This was noted particularly because of the concern registered in the Holifield report about the language barrier problem.

Executive agency witnesses had previously taken the position before the Committee that it was sufficient to rely on giving allied units courses in English and on the fact English is becoming the international language of the air. Evidently, however, allied units are taking measures of their own to meet the language problem. And, in fact, we found that a recent Theatre directive required United States custodial units to be given training in their associates' language as part of their mandatory training program during duty hours.

[redacted] DoE/6.2(a)

a process that normally takes about fifteen minutes, the same as the alert period for the aircraft. It might not be possible to do the job in that time out on the Q.R.A. pad at night or in bad weather. The F-84, however, is not an all-weather aircraft.

In this connection, discussion before the Joint Committee early in 1958 had generated the impression that these nuclear capsules would be kept separated until the United States decision in time of crisis to release the weapons had been made. (See Attachment 2.)

3. Army weapons systems.

The survey group visited NATO units with the Honest John and eight-inch howitzer atomic weapon systems. (We did not visit any nuclear NIKE units.)

[redacted] DoE/ 6.2(a)

These weapons systems were not mated. When they are deployed on field maneuvers, training or conventional warheads accompany the delivery vehicle. Nuclear warheads have thus far remained in storage.

In the case of the Army units, therefore, our visit was limited to a survey of the storage facilities.

Of the three installations visited by the writer, [redacted] DoE/ 6.2(a) [redacted] were much like the S.A.S. area at the Air Force bases. That is, they were located within the regular base of the supported force but set off by cyclone fencing as an exclusively United States controlled area. The immediate exterior was patrolled by guards from the user country's force.

[redacted] DoE/ 6.2(a)

[redacted] DoE/ 6.2(a)

In contrast to the situation at the Air Force facilities, United States personnel at these Army facilities were regarded as responsible for guarding the weapons. [redacted] we were informed DoE/6.2(a) that the United States interior security guards were supposed to use their weapons to prevent unauthorized access to the weapons.

On the other hand, Army custodial personnel were required to have only a "Secret" clearance whereas a "Top Secret" clearance is required by the Air Force. And it was not unusual to find that it had been necessary to give interim "Secret" clearances because the man had arrived without the clearance process completed (or started, in some cases).

Timely clearances is a problem in both services. Neither one has a separate MOS or classification for custodial personnel. The establishment of one would be one way of overcoming this problem.

Another noteworthy difference is that the Army does not require E.O.D. men to be with these units as does the Air Force. The Army settles for having men trained in disarm technique. In some cases, however, E.O.D. men are near by as is the case at the SETAF site which can call on ten E.O.D. men who are eight miles (a twenty-minute drive) away.

[redacted] nuclear capability since they have not been authorized to receive the necessary Restricted Data. As long as they know how to handle the conventional warhead they could handle a nuclear warhead (including mating). The Restricted Data is significant only because the firing tables for the atomic warhead unit are different than those for the conventional warhead unit (atomic tables involve Restricted Data). DoE/ 6.2(a)

The targetting of the missiles would, therefore, be handled by the user country forces. From that standpoint, these missiles are like manned aircraft rather than fixed target systems such as the Jupiters for which the user country forces do not have a targetting capability.

With respect to deployment, the present plan is not to deploy these systems in mated form beyond the geographical point where United States personnel would have direct communications with CINCEUR until after R-hour authorization to release the warheads for use has been received from CINCEUR.

Furthermore, present plans call for retention of the firing plug in United States hands until that time. And if the warheads should be mated before that time, the allied unit would have to turn over to the United States custodial unit the closure and igniter plugs from the rocket booster (the new booster does not have a separable closure plug so the plan is to have the closure apperture locked in an open position with the key retained by United States personnel).

Since the facilities [redacted] are for the support of user country forces and thus more like the aforenoted Air Force facilities than that at SETAF, it seems worth reviewing briefly the more significant aspects of those operations. DoE/ 6.2(a)

[redacted] situated inside a World War II, large German ammunition storage area. It is camouflaged so well that it was one of the few not spotted until it was overrun. Since the facility, however, does not meet current criteria for nuclear storage units (it is too wooded, for example), several hundred thousand dollars is scheduled to be spent to build a new permanent facility. DoE/ 6.2(a)

The [redacted] was recently constructed and meets NATO criteria. DoE/6.2(a)

[redacted] United States cadre is composed of three officers and thirty-five enlisted men; at [redacted] are three officers, forty-three enlisted men and three civilian radio operators. At both installations, one of the three officers is always on duty; he is either in the orderly room or at the S.A.S. area. Usually, the officers pull three day shifts. DoE/6.2(a) DoE/6.2(a)

Both of the areas are situated within a user country base and hence it is necessary to pass through areas controlled by user country forces when going to or from the S.A.S. area. These S.A.S. areas, as elsewhere, are under United States control, with the entrance gates manned by United States personnel.

[redacted] four custodians inside the fence at all times. DoE/6.2(a) Two must always be awake and on post. They have a direct telephone line back to their orderly room and are checked every fifteen minutes. Radio communications, manned by the German force, are available outside the fence.

The Germans have six guards outside the fence. Phones run from each post to their guard house and each guard is required to report every thirty minutes, on a five-minute staggered interval so that every five minutes one guard is checking in. These guards are supplemented with dogs and trip wires at night.

Each nuclear storage bunker has two locks, one of which is a combination lock. This helps to insure the presence of two men (both United States). The bunker is not to be opened without an officer within the fenced area. Furthermore, the firing plug is kept in a special combination safe where United States custodians are always present.

[redacted] are on duty inside the fence at all times. DoE/6.2(a) These men work six-hour shifts. Outside the fence there are always at least [redacted] Four more are added at times of poor DoE/6.2(a) visibility.

All of the Dutch personnel [redacted] at least some sort of DoE/6.2(a) security check. The guard personnel must have a NATO "Confidential" clearance and the delivery unit personnel are required to have a NATO "Secret" clearance.

Evacuation [redacted] with user nation assistance, DoE/6.2(a) be accomplished in about two hours. It would take about six hours, however,

to get the weapons on their way out of the country. [redacted] DoE/6.2(a) estimate is that it would take four hours to get everything on the road to a usable airfield located about one hour away.

Destruction [redacted] via an electrical system DoE/6.2(a) already set up, could be accomplished with United States personnel only in about twenty minutes.

[redacted] was estimated at twenty-five minutes, DoE/6.2(a) but this schedule requires more personnel than the O.D. and two custodians on duty at the S.A.S. area.

As indicated earlier, the Army does not require fully-qualified E.O.D. men to be stationed with these custodial units. They settle for men qualified to disarm, backed up by E.O.M. elsewhere in the general area. [redacted] however, is six hours away. Some of DoE/6.2(a) those in the group with technical competence indicated concern about this kind of arrangement.

[redacted] the United States units regarded the DoE/6.2(a) United States custodians inside the S.A.S. area as genuine guards who had authority to use physical force, and their weapons, if necessary, in dealing with anyone who starts to take action not authorized by the United States.

At both facilities we were advised that a Human Suitability program was in effect. It did not appear, however, that it was as systematic or thorough as the one Air Force briefers described to us as being pursued in Air Force units.

Discussions at USAFE

During our stay in Weisbaden some of the group met with Lt. General Alness, Deputy CINCUSAFE. There was a discussion in general terms of our survey to that point.

General Alness indicated that in the near future we were likely to be faced with even more difficult problems concerning security of these weapons since there was a dire need to achieve greater dispersal of Air Force resources, particularly the Q.R.A. aircraft. He gave the impression that squadrons would be broken up and dispersed one or two at a time to isolated, makeshift airstrips.

The writer stated that, while it would appear that many of our units were highly vulnerable in the event of sudden, all-out strike by the Soviets, the current thinking in Washington was that the command and control over our currently dispersed nuclear resources was already too attenuated. General Alness said he was aware of this view.

Debriefing at EUCOM *

The resume of the Department of Defense-Atomic Energy Commission members initial views was handled primarily by Mr. Dak of the AEC. He indicated that those who had visited units about a year earlier were favorably impressed with the progress that had been made in improving the situation, the personnel managing the program for the services and, generally, the personnel in the field.

On the other hand, he indicated there was concern about certain aspects, such as the single custodians; individuals being assigned to custodial units uncleared; the need for better destruct techniques; and the differences between the Army and Air Force as to the need for a "Secret" vs. a "Top Secret" clearance.

Mr. Dak also stated that at least the AEC members were concerned about the philosophy underlying the custodian's role, particularly at the Air Force units.

Mr. James and the writer, the State observers, both indicated appreciation for the opportunity to have first-hand information; that we were glad to see the language training programs now in effect for the United States personnel; and that it was encouraging to see what appeared to be excellent working relationships between the various United States units and the other NATO force they were supporting.

The writer also indicated that the actual custodial arrangements in certain situations were rather different than had heretofore been understood and that this may be of some significance to the Department.

Conclusion

Aside from the points noted at the outset, the following would seem to merit consideration:

1. The need for a quick, destruct capability which United States personnel could carry out unilaterally and unobtrusively would seem vital to assure the reliability of the "pause" concept.

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* Mr. James (EUR:RPA) prepared and has circulated a detailed report on this aspect.

2. The Air Force custodial arrangements for mated systems seem to be better designed to deter attempts to obtain weapons information by the supported force, as well as other allies, than to prevent unauthorized use by such forces. Yet, unauthorized seizure or use of the weapons would pose much more dire consequences for us. The main risk, as I see it, is premature but deliberate seizure or use of the weapon by the supported force in the face of a serious East-West crisis in which there might not be complete agreement with the other ally on how to deal with the situation. If we are concerned about command and control of United States units, I should think we would be all the more concerned about these situations involving foreign units.

3. As a minimum, I would think that, at least until the various permissive links are installed, we would want the Air Force custodians to be genuine guards, not just symbols; that the aircraft should have some device, under United States exclusive control, preventing takeoff; that plans and temporary devices for quick destruction of Jupiter consoles and the aircraft be worked out urgently.

4. We might consider having all custodial units reporting on a regular schedule to another unit in much the same manner that the personnel on station report in.

5. I should think it would be a very useful adjunct to our educational program to have NATO country Foreign Ministers and Defense Ministers visit Air Force installations to see and appreciate how ready their units are to go and how little they need be concerned about whether they could effectively order those units into action, if they felt that it was necessary for them to go. This might dampen any drive for even more exotic arrangements.

6. If the Q.R.A. system for aircraft makes sense (and it would seem to if the mating of missiles is warranted), it would seem that we should so arm as many planes as possible, not just two or four per base. Of course, four planes per F-100 or F-104 squadron may be as high as we can go bearing in mind maintenance and training needs since on the average we can count on having only about sixty-five percent of the eighteen planes in an F-104 squadron (twenty-five in the case of the F-84) ready to go and some of these have to be available for flight without the weapon.

7. In order for us to argue that the mated weapons systems are deployed strictly in accord with the letter of the original understanding on custody and control, it seems necessary to have the mated aircraft and missiles set aside in a United States only area, where the United States controlled access and maintained at least an interior guard operation, as is still the case at the Army S.A.S. areas. In that connection, it should be remembered that

the Executive in 1958 justified its proposal for amendments to Section 91(c) in part on the ground that it would enable us to mate the weapons systems and only keep under United States guard the actual nuclear portion of the warhead. But the Congress did not give us all the authority we requested. So we have a situation where in a sense we seem to be going beyond what we indicated to the Congress we would do under requested authority it refused to give. (See Attachment 2.)

8. The standards which we have set for a NATO multilateral force, notably the requirement for mixed manning, could minimize and perhaps even obviate the risks present in current arrangements. The possibility of applying some form of the mixed manning concept to the existing types of deployment might, therefore, be worth considering. It would seem quite feasible, at least from a purely operational standpoint, to utilize, for example, German personnel for the Q.R.A. or Jupiter L.P. [redacted] for the German sites; etc. This reciprocal aspect of such an arrangement, which eliminated the use of a country's force guarding itself, so to speak, might make this politically as well as militarily feasible. DoE/6.2(a)

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ATTACHMENT 1

Itinerary

1962

April 9	Briefing, Headquarters EUCOM
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25	Debriefing Headquarters EUCOM

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Attachment 2

Excerpts from Transcript of Executive Session Hearing
of the
Joint Committee on Atomic Energy
January 31, 1958 (Afternoon)

At Page 24: "General Loper. That is right. We are speaking only of the old types in which the nuclear capsule is completely separable. Our purpose is to reduce the requirements .... on the numbers of United States troops that are required to maintain custody of this material and to guard it."

At Pages 24 and 25: "Mr. Quarles. .... If you did not transfer the non-nuclear 5's and 7's to, let us say, British custody, then we would have to have not only custodians for the nuclears, but we would also have to have the much greater amount of custody and maintenance for the non-nuclear elements of the 5's and 7's."

At Page 29: "General Loper. ....Our purpose in transferring the non-nuclear parts in addition to the saving of our own personnel for the custodial arrangements and for the maintenance of these weapons is to enable them to handle them and to load them into their aircraft, into their missiles, have them all ready to go, with one exception. This exception is the nuclear component which we hold in our possession and custody, and which is not delivered to them until authorized by the President under his Constitutional authority."

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Read related article:

The U.S. Nuclear Presence in Western Europe, 1954-1962, Part II

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