REPORT BY THE JOINT STRATEGIC PLANS COMMITTEE

to the

JOINT CHIEFS OF STAFF

on

CUSTODY, MANEUVER, AND EXERCISE OF SPECIAL MUNITIONS (C)

References:
a. J.C.S. 1844/227
b. J.C.S. 2012/103
c. J.C.S. 2012/113
d. J.C.S. 2019/105
e. J.C.S. 2019/130
f. J.C.S. 2019/131
G. J.C.S. 2019/134
h. J.C.S. 2019/140
i. J.C.S. 2019/161
j. J.C.S. 2019/287
k. J.C.S. 2215/1

The Assistant to the Secretary of Defense (AE), the Director of Military Applications, AEC, and the Chief, AFSWP, were consulted in the preparation of this report.

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By: Dorothy Johnson Date:
12-10-2014

See Decision on dtd 3-26-58.
See (sharply dated June 6 (downgrade app. B to Enc. A))

FOIA(b)(1) Joint Staff

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CUSTODY, MANEUVER, AND EXERCISE OF SPECIAL MUNITIONS (C).

THE PROBLEM

1. a. To determine appropriate Department of Defense (DOD)-Atomic Energy Commission (AEC) responsibilities for custody of dispersed atomic weapons.

b. In response to a request* by the Deputy Secretary of Defense, to recommend specific measures necessary to insure a general understanding between the AEC, the DOD, and the President for the maneuver and exercise of weapons.

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FACTS BEARING ON THE PROBLEM

2. On 19 June 1957, the Joint Strategic Plans Committee (JSPC) was directed** to submit for consideration by the Joint Chiefs of Staff comments and recommendations concerning DOD custody of all dispersed atomic weapons.

3. On 10 February 1958, the Deputy Secretary of Defense requested* the Joint Chiefs of Staff to recommend specific measures necessary to insure a general understanding between the AEC, the DOD, and the President for the maneuver and exercise of weapons.

4. For additional facts, see Enclosure "B".

DISCUSSION

5. For discussion, see Enclosure "C".

CONCLUSIONS

6. The current high and low yield classification of atomic weapons is no longer applicable to the division of custodial responsibility and, therefore, Presidential authority for DOD

* Dated 10 February 1958, Enclosure to J.C.S. 2012/113
** Note to Holders of J.C.S. 1844/227, dated 20 June 1957
custody of all dispersed atomic weapons should be sought. In seeking this authority, the provision should be included that exercises and maneuvers of weapons will not be conducted until appropriate safety controls for the specific weapons systems have been developed and have been mutually agreed upon, between the DOD and AEC.

7. General understanding between the AEC, the DOD, and the President for the exercise and maneuver of weapons can be best realized through the establishment of mutually acceptable controls which will insure, for weapons, a degree of safety which will be comparable to that of capsule type weapons. These controls should be based on the findings and recommendations of the respective safety boards which have been established by the Army, Navy, and Air Force. The specific controls applicable to each weapons system should be developed by the Service(s) concerned in conjunction with the AFSWP, and should have the agreement of the AEC.

8. The controls contained in Appendix "B" to Enclosure "A" hereto provide an acceptable basis for an agreement between the USAF and the AEC on the measures required to insure an acceptable degree of safety for the exercise and maneuver of weapons by the Strategic Air Command, and, as such, provides a basis for general understanding in this regard between the AEC, the DOD, and the President.

RECOMMENDATIONS

9. It is recommended that the Joint Chiefs of Staff forward the memorandum contained in Enclosure "A" hereto, together with its Appendices "A" and "B", which reflects the above conclusions, to the Secretary of Defense.

10. No recommendation is made as to the distribution of this paper to commanders of unified or specified commands.

FOIA(b)(1) Joint Staff
MEMORANDUM FOR THE SECRETARY OF DEFENSE

Subject: DOD Custody and Maneuver and Exercise of [Boxed] Weapons (S-MT)

1. Reference is made to the memorandum* by the Deputy Secretary of Defense, dated 10 February 1958, subject as above.

2. The Joint Chiefs of Staff are in full agreement that the early introduction of [Boxed] weapons to the U.S. stockpile establishes a need for a general understanding concerning the exercise and maneuver of such weapons. They are also of the opinion that, since [Boxed] weapons in all yield ranges will now incorporate advanced designs similar to those heretofore indigenous only to [Boxed] weapons, the high and low yield classification is no longer germane to the existing division of Atomic Energy Commission (AEC) - Department of Defense (DOD) custody of atomic weapons.

3. Present arrangements to implement the AEC-DOD Atomic Weapons Maneuver Agreement incorporate stipulations designed to insure mutually acceptable safety controls consistent with military readiness. Pursuant to the memorandum** by the Joint Chiefs of Staff for you, dated 25 September 1957, subject: "Advanced Weapons Designs", the Services have established safety boards to review the new family of weapons and weapons systems. The approach by these boards will be to insure for the [Boxed] weapons a degree of safety comparable to that currently being realized in the maneuver and exercise of capsule type weapons.

* Enclosure to J.C.S. 2012/113
** Enclosure to J.C.S. 2012/103
In this regard, the Air Force Special Weapons Safety Board has completed a report concerning the weapons applicable to SAC exercises and maneuvers. Since SAC exercises comprise the greater portion of the total weapons maneuvered annually aboard aircraft for readiness and training purposes, it is considered that, as a first step, the summary of the requirements for such exercises contained in Appendix "A" hereeto and safety controls of the type contained in Appendix "B" hereeto provide an acceptable basis for insuring a general understanding between the AEC-DOD and the President, and for development of a USAF-AEC agreement as indicated in paragraph 5 below.

4. In view of the above and in light of the fact that the AEC custodial responsibility for dispersed has been reduced essentially to one of accountability, which by mutual agreement is, for the greater part, accomplished by military officers who have been approved by the AEC as their representatives, the Joint Chiefs of Staff request that you seek:

a. Early agreement between AEC, the DOD, and the President of the principles for the use of weapons for maneuver, as defined in the present AEC-DOD Atomic Weapons Maneuver Agreement, for the conduct of SAC large-scale exercises and for the arming and test exercising of the SAC Alert Force in accordance with the safety controls set forth in Appendix "B" hereeto.

b. Presidential authority for the transfer of custody to the DOD of all atomic weapons approved for dispersal by the President, premised on the understanding that the exercise and maneuver of weapons will not be conducted until appropriate specific safety controls for each weapons system have been mutually agreed upon by the Services concerned, in conjunction with the AFSWP, and the AEC.

* Addendum Reports by AFSWCSB; not on file in Joint Secretariat
5. The Joint Chiefs of Staff further consider that the implementing agreements for specific weapons and weapons systems should be the subject of separate negotiations between the AEC and the Services assisted by AFSWP as required, these negotiations to be conducted within the framework of the general understanding outlined above.
1. **Maneuver.** Immediate readiness of atomic forces requires routine training in the process of removing a weapon from its normal storage location, preparing for use, delivering to employment unit, and the practice loading and delivery by the employment unit (i.e., flyaway and similar operations) not to involve expenditure.

2. **Large Scale Exercises** (Subject to Presidential Approval)

   a. Individual crew, squadron, and wing readiness training and maneuvers are continually conducted by SAC. However, periodic large scale exercises are required to mold SAC into a composite, integrated striking force and represents the only medium through which CINCSAC may test and accurately evaluate the over-all readiness of SAC and its ability to carry out emergency war plans. These large scale exercises are primarily designed to:

      (1) Saturate a selected combination of supporting ZI and overseas bases with large numbers of tankers and strike aircraft in order to realistically determine the capability and readiness of these bases to support emergency war plans.

      (2) Test and timing of bomber, reconnaissance, and tanker units during large scale deployment, strike and recovery operations to insure that this timing is in consonance with emergency war plan requirements.

      (3) Familiarize combat crews with, and test, emergency war plan tactics and procedures under conditions simulating those to be expected during actual large scale operations.
(4) Exercise and determine the adequacy of MATS wartime airlift in support of SAC.

b. During these exercises, it is essential that a complete weapon accompany each strike aircraft so that participating forces will not be caught off balance during a possible defense emergency with strike aircraft in one area and weapons in another. This combat package should be continually ready for instant diversion to actual targets in event CINCSAC is directed to execute emergency war plans during an exercise period.

c. Since [redacted] weapons will soon constitute a major portion of the CINCSAC inventory, these weapons must necessarily be used during future large scale exercises.

3. Alert Force Operations

a. A portion of SAC must be kept on continual alert status, fully armed and ready for instant implementation of emergency war plans. In view of the current USSR manned bomber threat and the early potential USSR ICBM threat, the alert force must be operated so as to be afforded maximum invulnerability against enemy destruction within probable warning times.

b. An alert force which is never tested or operated cannot be expected to react with maximum effectiveness during an actual defense emergency. Therefore, periodic test launchings and maneuvers along deployment routes of the SAC alert force are essential. Such launchings will enhance the readiness of the alert force, provide CINCSAC a means of evaluating its effectiveness and compensate for some of the combat crew training time which is necessarily forfeited through the requirement to maintain a substantial portion of the SAC force on ground alert.
4. Logistical Movement. Logistical movements which involve the normal ferrying and re-dispersal of weapons to and from National Stockpile Sites, Operational Storage Sites, and Service Storage Facilities are a continuing requirement.
APPENDIX "B" TO ENCLOSURE "A"

SAFETY CONTROLS TO BE OBSERVED DURING THE MANEUVER OF ATOMIC WEAPONS AND THE CONDUCT OF STRATEGIC AIR COMMAND LARGE SCALE EXERCISES PEACETIME ALERT FORCE OPERATIONS AND LOGISTICAL MOVEMENTS INVOLVING WEAPONS

1. General

a. Aircraft crews must activate four separate control mechanisms in order to detonate a weapon. These mechanisms are:

2. Safety Controls, to be Applied to Maneuvers and Large Scale Exercises and Alert Force Operations

NOTE: When the probability of human error, plus the probability of weapon malfunction, plus the probability of control mechanism malfunction or failure, plus the probability of intentional emergency salvo are considered, the adoption of the safety controls outlined below will reduce the probability of an inadvertent weapon nuclear detonation to a negligible factor. There would be no nuclear contribution to a one point detonation of the high explosive by fire or impact.* New weapons will have additional safety features which will reduce this risk of inadvertent detonation even further.

FOIA(b)(1) Joint Staff
3. Safety Controls to be Applied to Logistical Movement of ______________ Weapons in Combat Aircraft

FOIA(b)(1) Joint Staff
FACTS BEARING ON THE PROBLEM

1. On 6 December 1954, the Secretary of Defense in a memorandum to the Joint Chiefs of Staff stated* that the President has determined that:

   a. In the interest of national defense, atomic weapons, including thermonuclear weapons, will be dispersed overseas and within the Continental United States to the extent required by military readiness.

   b. Custody of the weapons will be transferred to the DOD in accordance with mutually acceptable arrangements between the AEC and the DOD in regard to readiness, maintenance and improvement responsibilities for weapons transferred, and in regard to dispersal of such weapons as the AEC may deem not yet ready for full release and transfer to the DOD.

2. On 29 August 1955, the President determined** that the AEC should retain custody of dispersed weapons and in so doing the AEC will insure consonance with the objective of immediate readiness for use.

3. On 9 September 1955, the Joint Chiefs of Staff reiterated*** their position**** of 11 December 1951 that the custody of all finished weapons should be in the hands of the DOD. An interim agreement, covering the exercise and maneuver of weapons was implemented## by the Joint Chiefs of Staff on 16 November 1955. At this time, the commanders were requested### to submit their comments as to what effects this agreement may have on immediate operational readiness.

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* Enclosure "A" to J.C.S. 2019/105
** Appendix "B" to J.C.S. 2019/131
*** Enclosure "A" to J.C.S. 2019/130
**** Enclosure to Decision On J.C.S. 2215/1
## Annex to Appendix "A" to J.C.S. 2019/134
### Decision On J.C.S. 2019/140
#### Enclosure "B" to J.C.S. 2019/140
4. On 24 February 1956, the Joint Chiefs of Staff in a memorandum to the Secretary of Defense stated* that they were of the opinion that too many complications are being introduced by the AEC in an attempt to secure physical custody of [ ] weapons. Furthermore, they stated that it was their belief that it was the intent of the President to provide the AEC with accountable custody only. By this same memorandum, the Joint Chiefs of Staff expressed the opinion that dispersed [ ] weapons should be under military control in order to insure maximum operational readiness and that this objective should be pursued at the earliest propitious time.

5. On 6 March 1958, the Deputy Secretary of Defense, in a memorandum to the Chairman, AEC stated,** inter alia, that, "... through the exercise of proper controls the hazard arising from the use of [ ] weapons for loading and small tactical exercises, as well as for more extensive maneuvers, can be maintained at an acceptable level. When appropriate regulations to this end have been recommended by the Joint Chiefs of Staff, I would propose to give them my personal consideration, coordinate them with the Commission and to bring the matter to the attention of the President for his recognition and approval."

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* Enclosure "A" to J.C.S. 2019/161
** Note to Holders of J.C.S. 2019/287, dated 6 March 1958
DISCUSSION

1. Under current dispersal agreements, weapons less than [redacted] are released to the custody of the Department of Defense (DOD). As such, these weapons are not subject to Atomic Energy Commission (AEC) controls and the DOD henceforth assumes the responsibility for their security, safety and readiness. For dispersed weapons [redacted] custody is retained by the AEC. This retention of custody by the AEC has been basically premised on the need to protect the advanced design of such weapons. Similar advanced designs are now being incorporated in new weapons of all yield ranges, hence the dividing line between low and high yield weapons is not considered applicable to a division of custodial responsibility.

2. Weapons [redacted] are currently deployed aboard ships at sea, to overseas locations and to service storage facilities within the United States with their custody administratively retained by the AEC with the military commanders at these locations designated by the AEC as their representative. This arrangement has resulted in an undesirable situation on two counts:

    a. Military commanders are responsible to an agency outside the DOD for custody [redacted] weapons but responsible through the normal military chain of command for all other matters concerned with these weapons namely, security, safety and readiness.

    b. The AEC, pursuant to presidential directive,* must retain responsibility for dispersed [redacted] weapons in accordance with the principles of immediate readiness for use. In actual practice, these weapons are in the hands of the military. Therefore, reliance must be placed on the DOD to perform a function for which the AEC is responsible.
3. Deployment and dispersal of atomic weapons is a basic requirement for the maintenance of a strong military posture. Of equal importance to the military is the ability to maneuver, conduct readiness exercises, and otherwise test its operational capability. This requirement is absolute and includes all types of weapons in or programmed for stockpile to include [redacted] weapons. The introduction of [redacted] weapons to the U.S. stockpile, particularly those containing plutonium, has concurrently introduced safety problems which differ from those associated with the older type capsule-bearing weapon. The basic difference between these two types is that the [redacted] weapon unlike the capsule type has all of the active material [redacted]. Accordingly, the exercise and maneuver of the [redacted] weapon will require certain additional controls in order to insure a comparable degree of safety as that previously obtained with the capsule type weapons. Consistent with this, the Joint Chiefs of Staff have taken due cognizance of the requirements for military and public safety. A number of extraordinary measures have already been taken to insure that a maximum effort is made to produce the ultimate in safety consistent with military readiness. The Army, Navy, and Air Force have established safety boards to review the new family of weapons and weapons systems. In this regard, the Air Force Special Weapons Center Safety Board recently completed* a report concerning the exercise and maneuver of [redacted] weapons which are applicable to the SAC large scale exercises and peacetime alert force operations. Analysis of this report reveals that four separate control mechanisms must be activated in order to detonate these weapons. They are:

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* Addendum Reports by APSWCSB; not on file in Joint Secretariat
4. In view of the above, and in light of the fact that for a weapon there is little or no possibility of obtaining other than a one point detonation from a crash and burning, operational and handling controls can be appropriately applied which will provide a margin of safety comparable to that currently maintained for capsule type weapons. There are four basic requirements wherein the airlift of weapons will be essential. These are:

a. The normal ferrying and re-dispersal of weapons to and from National Stockpile Sites, Operational Storage Sites, and Service Storage Facilities.

b. Maneuver. Immediate readiness of atomic forces requires routine training in the process of removing a weapon from its normal storage location, preparing for use, delivering to employment unit, and the practice loading and delivery by the employment unit (i.e., flyaway and similar operations) not to involve expenditure.

c. Large Scale Exercises

(1) Individual crew, squadron, and wing readiness training is continually conducted by SAC. However, periodic large scale exercises are required to mold SAC into a composite, integrated striking force and represents the only medium through which CINCSAC may test and accurately evaluate the over-all readiness of SAC and its ability to carry out emergency war plans. These large scale exercises are primarily designed to:
(a) Saturate a selected combination of supporting 
and overseas bases with large numbers of tankers and 
strike aircraft in order to realistically determine the 
capability and readiness of these bases to support emer-
gency war plans.

(b) Test the timing of bomber, reconnaissance, and 
tanker units during large scale deployment, strike and 
recovery operations to insure that this timing is in 
consonance with emergency war plan requirements.

(c) Familiarize combat crews with, and test, emer-
gency war plan tactics and procedures under conditions 
simulating those to be expected during actual large 
scale operations.

(d) Exercise and determine the adequacy of MATS 
wartime airlift in support of SAC.

(2) During these exercises, it is essential that a 
complete weapon accompany each strike aircraft so that 
participating forces will not be caught off balance during 
a possible defense emergency with strike aircraft in one 
area and weapons in another. This combat package should 
be continually ready for instant diversion to actual tar-
gets in event CINCSAC is directed to execute emergency 
war plans during an exercise period.

(3) Since weapons will soon constitute a 
major portion of the CINCSAC inventory, these weapons must 
necessarily be used during future large scale exercises.

d. Alert Force Operation

(1) A portion of SAC must be kept on continual alert 
status, fully armed and ready for instant implementation 
of emergency war plans. In view of the current USSR 
manned bomber threat and the early potential USSR ICBM 
threat, the reaction time of this force must approach zero.
(2) An alert force which is never tested cannot be expected to react with maximum effectiveness during an actual defense emergency. Therefore, periodic test launchings and maneuvers along deployment routes of the SAC alert force are essential. Such launchings will enhance the readiness of the alert force, provide CINCSAC a means of evaluating its effectiveness and compensate for some of the combat crew training time which is necessarily forfeited through the requirement to maintain a substantial portion of the SAC force on ground alert.

For a above, the airlift of weapons constitutes a logistic maneuver and, as such, the state of readiness of the weapons so carried need not be in an operational configuration. Accordingly, it would appear appropriate for the Joint Chiefs of Staff to stipulate that all weapons to be air transported for peacetime resupply purposes will be carried in a CAF (Ferry) configuration. For weapons, the CAF configuration will be construed as that of a normal storage configuration. As an added safeguard for the weapon during air transport in the bomb bay of a combat operational aircraft, the except for an emergency. For c and d above, it is considered that, for versions of the MK 15/39, Mark 36, the Mark 27 and the Mark 28, a degree of safety comparable to that which is currently being maintained in their capsule type counterparts can be maintained by the enforcement of the following controls:

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5. The present AEC-DOD arrangements for exercises and maneuvers deal specifically with weapons held in the custody of the AEC which, except for the Joint Chiefs of Staff reserve, are predominantly high yield. Accordingly, it can be presumed that the request* of the Deputy Secretary of Defense of 10 February 1958, is basically related to the maneuver of \_\_\_\_\_\_\_ when they enter stockpile in the \_\_\_\_\_\_ configuration. As previously pointed out, the necessity for AEC-DOD maneuver agreements has been occasioned by reason of the split DOD-AEC custodial responsibility\_\_\_\_\_\_. Furthermore, since the \_\_\_\_\_\_ weapons in all yield ranges will soon enter stockpile with advance designs similar to the currently categorized high yield weapons \_\_\_\_\_\_ there is no longer any logical basis for a split DOD-AEC custody of weapons. Accordingly, it is now believed that problems of custody are concomitant to the maneuver of \_\_\_\_\_\_ weapons and, as such any approach to one must

* Enclosure to J.C.S. 2012/113
incorporate the other. Therefore, since SAC maneuvers comprise the greater part of the total annual maneuver requirements, since tactical bomber and fighter bomber air training maneuvers are carried out with training shapes, and since naval requirements for airlift and maneuver of sealed-pit weapons, pending more definitive determination, can be met within the controls outlined in paragraph 4 above, the Joint Chiefs of Staff should at this time, seek:

a. DOD custody of all dispersed atomic weapons.

b. DOD-AEC determination on the acceptability of the safety controls as outlined above for maneuver and exercise of weapons.

FOIA(b)(1) Joint Staff