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Sandia National Laboratories

Albuquerque, New Mexico 87185

date: April 3, 1992

to: Gene Grewis, DOE/DASMA, M1163

from: C. C. Burks, 5110

OPENNET ENTRY
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subject: Nuclear Safety of B57-1/2, B61-0/1/2 During Logistics Operations (U)

Refs:
(1) Telecon Burks, 5110, to E. Grewis, 4/2/92, subject: B57 Movements
(2) Technical Working Group Subgroup Report, (TWGSG). "Joint Navy/ERDA Nuclear Safety Evaluation of NATO Antisubmarine Warfare (ASW) Weapon Systems," (U), January 1977, (NWEF-1141) (332:2SGD-7 #17)
(3) Navy/ERDA - Technical Working Subgroup Report, (TWGSG). "Joint Navy/ERDA Nuclear Safety Evaluation Air-launched Antisubmarine Warfare (ASW) Weapon Systems (B57/P-3A, B&C; S-3A;SH-3A,D,G&H)," (U), March 1976 (331:IV.935)
(4) Air Force/ERDA - Technical Working Group Subgroup Report, (TWGSG). "Joint Stockpile Nuclear Safety Evaluation of USAFE/PACAF Aircraft Weapon Systems," (U), March 9, 1976 (332:2SGD-8 #10)

I am submitting the enclosed information in support of the activity we discussed on Thursday, April 2, 1992 (Ref. 1). I believe it is useful to review the findings of the joint DoD/ERDA Technical Working Group (TWG) reports for both the B57 and B61-0,1,2 weapons (Refs. 2,3,&4). The B61-0 and 2 are also of interest when considering possible actions to improve nuclear detonation safetie during air shipment because of significant near term activity.

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Unauthorized disclosure subject to Administrative and Criminal Sanctions. Handle as Restricted Data in Foreign Dissemination Section 144.b., Atomic Energy Act, 1954.

Classified By C. C. Burks Org. 5110
Title Mgr., Advanced Wpn Development Date 4/3/92

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW
1ST REVIEW-DATE: 11 Mar 96
AUTHORITY: ☐AOC ☒ADC ☐ADD
NAME: Donald P. Seely
2ND REVIEW-DATE: 3-12-96
AUTHORITY: ADC
NAME: DRW
DETERMINATION [CIRCLE NUMBER(S)]
1. CLASSIFICATION RETAINED
2. CLASSIFICATION CHANGED TO:
3. CONTAINS NO DOE CLASSIFIED INFO
4. COORDINATE WITH:
5. CLASSIFICATION CANCELLED
6. CLASSIFIED INFO BRACKETED
7. OTHER (SPECIFY):

[redacted]

Att 2
Attachment #3

In the TWG safety study reports, weapon responses to accidents are qualitatively identified as predictable, unpredictable, or undesirable. The definitions of these terms are as follows: (Reference (3) - paragraph 6.1.1 page 37)

Predictable. A predictable response is one in which a critical component, subsystem, or system is expected to respond in a manner that is known to be safe.

Unpredictable. An unpredictable response is one in which a critical component, subsystem, or system responds in a manner that is not always repeatable and may be unsafe.

Undesirable. An undesirable response is one in which a component or subsystem is expected to respond in a manner that is known and unsafe.

DOE (b)(3)

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A detailed description of recommended actions on the B57 is enclosed including a 2 1/2 minute video of the action being recommended along with a draft of the PCP, a written description and an estimated time-line. We are studying similar actions that could be undertaken on the B61's, but are not ready to make formal proposals.

All of these actions were originally conceived with regard to weapons destined for disposal. We understand this is not the case for the Navy B57's and have modified our proposal accordingly. We are recommending these modifications be identified by an ALT and that the weapons would remain ALT'ed until such time when they are redeployed overseas. Following airlift back to the operational bases the ALT would be reversed by the services using field procedures and a special tool or by DOE teams. All of the actions proposed here for the B57 apply regardless of whether an H1501 is employed for the movement. Use of an H1501 for weapons not destined for retirement, raises questions concerning their operational reliability because H1501 transportation environments have not been evaluated. If H1501 containers are to be used for this purpose, an evaluation program will be needed.