

UNIQUE DOCUMENT

Part of IV. 1642  
SAC 200 11849 0000

UNCLASSIFIED to Bill H.

Enc. 33

For: Jack Howard

Bill -  
Therese - suggest you hang on to this  
in anticipation of our trying to cross JTF-8  
into the DoD track -  
ygl

Attached is a summary prepared by Stu Asselin regarding our experiences and observations in response to the Palomares accident. In addition to his comments I'd like to point out that we had considerable difficulty with communicating back to AEC sources since our only continuous means was through Air Force channels and they insisted on approving every message. We were occasionally able to make telephone calls from Madrid to Albuquerque. Since the personnel on the scene (with a sometime exception of DNS people) did not understand the technical aspects of the problem, they appeared at times suspicious of our messages. We could have been more effective if we (and LASL) had direct contact back to our Laboratory without each message subject to scrutiny by all concerned.

ENC. 33

In our past experience in accident response the operational personnel have been wary of the AEC team until a positive contribution was made. DNS has eased this situation when they have remained on the scene, but when they have departed the scene (e.g., the Cumberland accident) our communication with the on-scene commander has become very difficult. Since the Navy and Army do not have a DNS type of organization to respond to accidents, it is suspected that we would not be effective in assisting these services even if we were invited or somehow got to the scene of the accident.

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: 6/97	DETERMINATION (CIRCLE NUMBER(S))
AUTHORITY: <input type="checkbox"/> DC <input type="checkbox"/> DD	1. CLASSIFICATION RETAINED
NAME: Bill Lawrence	2. CLASSIFICATION CHANGED TO:
2ND REVIEW DATE: 1/6/99	3. CONTAINS NO DOE CLASSIFIED INFO
AUTHORITY: [Signature]	4. COORDINATE WITH: [Signature]
NAME: [Signature]	5. CLASSIFICATION CANCELED
	6. CLASSIFIED INFO BRACKETED
	7. OTHER (SPECIFY): USAF Ltr 5/11/99

Bill  
Bill Hoagland

P.S. Although it would probably not be admitted, the Navy EOD team did not have a copy of the appropriate EOD procedure and it was only

UNCLASSIFIED

Ad. L. Co

Jack Howard

-2-

through covert (concealed from Admiral Guest) liaison between AF and Navy EOD personnel that the appropriate information was available when #4 was brought up.

1. Plutonium problem treated too lightly at first. Capt. Pizutto of DNS fought this tendency. Arrival of Spanish JEN (AEC) officials started things rolling.
2. Security around #3 point was not the best. Access on road was barred but not access through fields. Local people were picking beans in patch very close to #3 second or third morning after accident.
3. Air Force Attitude toward AEC Team

Col. Gernert and DNS

Offered to transport AEC team (accepted).

Cooperation on all points.

Understood AEC consultant and investigative roles.

Acted as go-between with 16th AF during first days.

Very good working relationship during final days.

Col. Rhodes (SAC Hqtrs.)

Informed us of weapon condition on our arrival.

Arranged for our contact with weapon sites as soon as possible.

Maj. Gen. Wilson & Staff

No contact for first few days, all done through Col. Gernert.

After first theories of #4 fate:

We sat in on staff meetings.

We were chief theorists for search meetings.

This arrangement continued through the period of ground search.

After #4 was found, Sandia participation in finale was requested by Gen. Wilson.

EOD Teams

Here was immediate understanding of each other's roles, and good cooperation.

In summary, the Air Force relationship to the AEC team varied quite a bit at first from group to group, but became one of sustained cooperation over the whole period on the scene.

4. Air Force - Navy Liaison

The only real liaison between the two services was between the two flag officers. This suffered from the generalities imposed by such a relationship and from the infrequent meetings of the two.

A typical example is the attempt to get the working types together to help implement the Sec. Def. request for a press review of the recovered weapon. A message went from 16th AF to CTF-65 requesting that the EOD officer come ashore to discuss the crucial time at lift and thereafter. The return message read in part, "My EOD officer cannot come ashore at this time." No opening was made for any later time either.

A chance meeting with Lt. Cdr. Moody, when Lt. Col. Neal, DNS and I went out to deliver gear to the AF EOD sergeants aboard the USS Hoist, led to a lot of points being cleared up and an instant rapport when we got together again when the item came aboard.

The holding back of information by the Navy from the Air Force (like the actual find) caused friction which was ridiculous

considering the priority and pressure given to the overall operation.

5. My understanding of the unfollowed track story is as follows:

The track on the bottom was found by the Alvin crew about March 1. They thought it was promising and Sam Moore (SC) also said so after detailed discussion with Capt. Andrews (USN, ret) who was aboard Alvin. They were refused permission to return to it, day after day. As told me by Lt. Cdr. Mooney, in charge of the submersible, the day it was found was going to be an off day for the Alvin because of bench testing of some new gear. Cdr. Mooney took an hour convincing Admiral Guest, not without difficulty, that the Alvin should investigate the track. On the first try they followed the track and found the bomb. This was 14 days after the track was first discovered.

6. AEC had no word in the recovery of #4, that is, pulling it aboard ship from the bottom. An example of the situation: On April 9, on the plane from Madrid to New York, Lt. Cdr. Mooney, whom I had just met, asked me why we had not given them any word about the lift lugs and the possibility of grabbing them. I showed him the draft of a message I had prepared about March 25 requesting that further pictures be taken of the lug and rack area because of the possibility of grabbing. This message was not sent because Gen. Wilson did not want to tell the Navy how to do their job and although I was speaking for AEC, Gen. Wilson had invited me back to Spain and it would be his message.

7. CTF-65 attitude toward AEC was - don't call us, we'll call you. Most of the contact with the Navy was through the Air Force. The only direct request for AEC assistance or consultation was when W. E. Griffith AEC/ALO was called out to look at photos of the underwater object. Unfortunately, his enthusiasm was not appreciated by Admiral Guest. With all the pressure behind the recovery effort, Admiral Guest would not let the submersible crews know what they were looking for. When Griffith and AF sergeants Nowak and Grimmet talked to the Alvin crew about particular external details (pressure valve access plate, blue velocity switch cover bubbles, etc.) the resulting confirmation gave a very high probability that the object was the missing weapon and of course it was. Admiral Guest's reaction was one of apparent embarrassment and he later told Gen. Wilson (who told me) that he had been mad because the meeting violated security and he had not been consulted before. The fact of the matter was that Griffith had been called to the flagship earlier that day and the meeting with the Alvin crew and any AF representatives Gen. Wilson wished to send was arranged at that time. The pictures were to be sent to the ship where the Alvin crew was but they weren't. Thus the fruitful discussion between the knowledgeable people and those that had seen the object took place. Disclosure of unclassified external details did not violate security.

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~~PER DOC REVIEW JAN 1973~~

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THIS DOCUMENT CONSISTS OF 1 PAGE(S)

NO 1 OF 6 COPIES, SERIES A

INTER-OFFICE MEMORANDUM

5AB200238990000

~~UNCLASSIFIED~~

~~CONFIDENTIAL~~

DATE August 2, 1944

2 Aug  
W.S.P.

TO: Captain Parsons

FROM: F. Birch

SUBJECT: Test Schedule - Gun Program (u)

~~SECRET~~

Copied From Los Alamos  
National Laboratory Archives

A84-019  
65-8

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW
1. DETERMINATION (CIRCLE NUMBER(S))
2. CLASSIFICATION CHANGED TO
3. CONTAINS NO DOE CLASSIFIED INFO
4. COORDINATE WITH:
5. CLASSIFICATION CANCELLED
6. CLASSIFIED INFO BRACKETED
7. OTHER (SPECIFY)
1ST REVIEW DATE: 1/2/03
AUTHORITY: 10 USC 3504
NAME: Steven Dahn
2ND REVIEW DATE: 01/07/03
AUTHORITY: Betty L. Harrison
NAME: Betty L. Harrison

A. [Redacted] DOE  
b(3)

1. Target tests, August-September.
2. Initiator tests, August-September.

B. [Redacted] DOE  
b(3)

1. Target tests, August-September

C. [Redacted] DOE  
b(3)

1. Free recoil tests with open target, August.
2. Test of axial primers, August.
3. Evacuation tests, August.

D. [Redacted] DOE  
b(3)

1. [Redacted] DOE  
b(3)
2. Free recoil test - Type A gun - Open target, with ballistic measurements, September.
3. Type B gun and mount - blind targets - ballistic data, initiators, test of axial primers, October-November.
4. Free recoil, Type A or B, with blind target fixed to gun, November.
5. Tests with dummy gun - projectile seating, drops from crane, drops from plane, with fusing, on receipt of dummy.
6. Complete drop tests, projectile fired into blind target.

J. Birch  
F. Birch

FINAL DETERMINATION  
~~CLASSIFIED~~  
L. M. Redman  
FEB 5, 1981

222501496

Classification changed to ~~SECRET RESTRICTED DATA~~  
by authority of LA 10/2/02  
(Name and Date of Classification Guide Used)

10/2/02  
(Date)  
Daniel L. Birch  
(Signature)

cc: McMillan  
Critchfield  
Cornog  
File

~~CLASSIFICATION REMAINED LAN 55-16~~

1 Aug 6 1997

~~SECRET~~

CLASSIFICATION CORRECTION,

~~CLASSIFIED~~ ~~CONFIDENTIAL~~

~~CLASSIFICATION CANCELLED~~

~~PER DOC REVIEW JAN 1973~~

~~RESTRICTED DATA~~ L. M. Redman FEB 5 1981

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2 OF 3 COPIES, SERIES A

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CLASSIFICATION CANCELLED  
PER DOC REVIEW JAN. 1973

July 31, 1944

2 Aug

To: R. Cornog

From: F. Birch

Subject: Gun development program. (u)

~~SECRET~~ UNCLASSIFIED

- I. Target Assembly (blind target assembly at 1000 ft/sec).
  - A. Target (case, tamper, insert).
  - B. Projectile (active material, tamper, base).
  - C. Initiator.



DOE  
b(3)

II. Gun.

- A. Ballistic and strength tests.
- B. Strength of gun-target system (free recoil, with open and blind targets).
- C. Seating of projectile and target insert.
- D. Drop tests.

III. Fuse Tests.

- A. Ground.
- B. Drop tests with dummy gun.
- C. Drop tests with real gun, inactive material.

IV. Engineering of outer case and accessory parts as bomb. (Suspension, tail, antenna, safety devices, etc.)

V. Preparation and assembly of active material for projectile and insert (collaboration with Metallurgy and Experimental Physics.)

VI. Delivery (shipping, field assembly, protection in flight).

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: 12/03	EXEMPTION (CIRCLE NUMBER(S))
AUTHORITY: 10 AAC 101.1 ADD	CLASSIFICATION RETAINED
NAME: Spencer, J. J.	CLASSIFICATION CHANGED TO:
2ND REVIEW DATE:	3. CONTAINS NO DOE CLASSIFIED INFO
AUTHORITY: 10 AAC 101.1	4. COORDINATE WITH:
NAME: Birch, F.	CLASSIFICATION CANCELLED
	CLASSIFIED INFO BRACKETED
	OTHER (SPECIFY):

Classification changed to ~~SECRET RESTRICTED DATA~~  
by authority of LA 4000 Rev 8 9/02  
(Name and Date of Classification Guide Used)

~~SECRET~~

Daniel Gerth  
(Derivative Classifier)

10/2/02  
(Date)

F. Birch

~~RESTRICTED DATA~~

~~CLASSIFICATION CORRECTION~~

~~CLASSIFICATION RETAINED  
LANI 16-16  
Lang 6/26/97~~

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FEB 5 1981

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DETERMINATION  
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L. M. Redman  
FEB 5 1981

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PER DOC REVIEW JAN. 1973

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SECRET / RD

UNCLASSIFIED

MASON & HANGER-SILAS MASON CO., INC.

10 November 1970

DATE

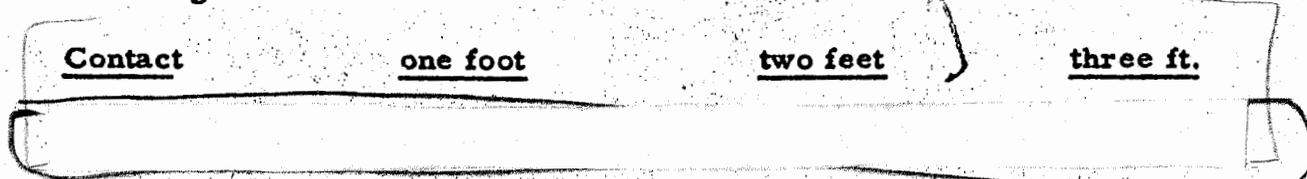
From Joe Shannan Location Safety - Line I

To Ray Taylor Location Engr. - Line I

In reference to our meeting of 9 November 1970, lead glass shielding was investigated and found to be quite expensive in comparison to plain lead. One brick of lead glass, 2" X 4" X 8", costs \$200.00 while one lead brick of the same size costs only \$10.00.

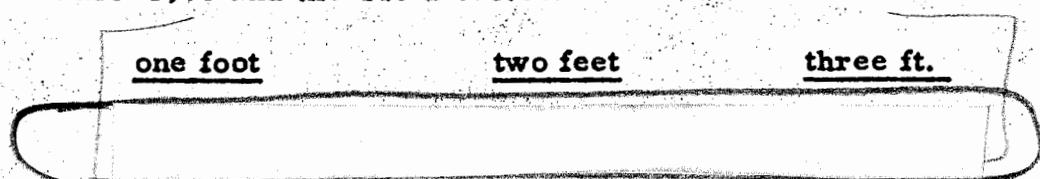
It is the writer's opinion that we are trying to shield the personnel from the exposure during many of the long curing periods and there would be no need to have visual contact with the item during these periods.

The following results were obtained using an MC-1978 with no shielding between it and the 440 detector:



DOE  
b(3)

The following results were obtained using 1/8" sheet of lead as a shield between MC-1978 and the 440 detector:



DOE  
b(3)

The results indicate a sizable reduction in radiation using the 1/8" lead as a shield.

Recommendations

1. The operations be reviewed as to the quantity and arrangement.
  - a. The quantity should be limited to that required to do the operation but no more.
  - b. When no operations are being performed the items should be shielded or moved to the exterior wall of the bay if possible.

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DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1st REVIEW DATE: 3/17/03	DETERMINATION (CIRCLE NUMBER):
AUTHORITY: 25 CFR 1.500	0 CLASSIFICATION RETAINED
NAME: M. H. H.	1 CLASSIFICATION CHANGED TO:
	2. CONTAINS NO DOE CLASSIFIED INFO
	3. COORDINATE WITH:
2nd REVIEW DATE: 8/15/04	4. CLASSIFICATION CANCELED
AUTHORITY: DD	5. CLASSIFIED INFO BRACKETED
NAME: Casey Phillips	7. OTHER (SPECIFY):

BROOK PANTER

~~CONFIDENTIAL~~

UNCLASSIFIED

10 November 1970

Joe Shannan

Safety - Line I

Ray Taylor

Engr. - Line I

- 2 -

Recommendations, cont'd

2. One-eighth (1/8") inch lead shield will reduce the exposures considerably if properly used.
  - a. Shield should be constructed with a base large enough to preclude accidental tipping.
  - b. Shield should be provided with handles for moving, also lifting eyes so the shields can be handled with the hoists.
  - c. Shield could be tubular in shape utilizing two or more sections to encompass the item in question. The sections should have clips so they can be fastened together.
3. The stands for the MC-2423 should also be shielded.

When the above recommendations are completed a sizable reduction in radiation exposures should be realized. Future film badge results will dictate if any further action will be required.

  
Joe Shannan  
Safety Engineer

JES/rm

Distr: R. Taylor (1)  
J. Jamison (1)  
O. Erickson (1)  
J. Shannan (1) ✓

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SAC 20020061 0000 2

9 November 1970

O. E. Erickson

Bldg. 1-55

R. E. Taylor

Bldg. 1-55

Information available indicates and confirms the immediate need for proper "shielding" on certain programs.

As it is our intent to accelerate the operations on the programs involved, it will be appreciated if this situation can be resolved at an early date.

O. E. Erickson, Jr.  
Production Manager  
Manufacturing "B"

OEE/jc

cc: C. R. Poole  
J. Shannon 

Met w/otto - tomorrow.  
See letter - Shannon to Taylor - (conf)  
shielding requirements

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1st REVIEW-DATE: 8/15/70	DETERMINATION (CIRCLE NUMBER(S))
AUTHORITY: DC PDD	1. CLASSIFICATION RETAINED
NAME: Phillips	2. CLASSIFICATION CHANGED TO:
POWER	3. CONTAINS NO DOE CLASSIFIED INFO
2nd REVIEW-DATE: 5/15/73	4. COORDINATE WITH:
AUTHORITY: DD	5. CLASSIFICATION CANCELED
NAME: M. Neff	6. CLASSIFIED INFO BRACKETED
	OTHER (SPECIFY): <i>unclassified</i>

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