Quarterly Report

Department of Energy

Implementation Plan for

Defense Nuclear Facilities Safety Board

Recommendation 93-6 Maintaining Access to Nuclear Weapons Expertise

Reporting Period July 1 through September 30, 1996

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2 Attachments:

Summary of 93-6 Archiving Televideo Conference conducted on July 23, 1996 Summary of 93-6 Archiving Televideo Conference conducted on September 16, 1996

Deliverable	Due Date	Status	Remarks
A.1.A	Feb 29, 1996	Complete	Deliverable provided to DNFSB on March 26, 1996.
A.1.B	May 30, 1996	Complete	 W69 provided to the DNFSB on May 7, 1996. W56 WSS provided to the DNFSB on August 12, 1996.
A.2	May 31, 1996	Complete	Deliverable provided to DNFSB on August 27, 1996.
A.3	Feb 29, 1996	Complete	Deliverable provided to DNFSB on January 24, 1996.
B.1	Jan 31, 1996	Complete	Deliverable provided to DNFSB on February 2, 1996.

1.0 Deliverable Status

B.2	Sep 30, 1996	Complete	Deliverable provided to DNFSB on October 28, 1996.
C.1	Jan 31, 1996	Complete	Deliverable provided to DNFSB on February 2, 1996.
D.1	Jan 31, 1996	Complete	Deliverable provided to DNFSB on February 2, 1996.
D.2	Four	Complete	First three televideo conferences are complete. Fourth is scheduled
	Bi-monthlies		for September 16, 1996.

2.0 Activities

This section of the report provides a brief discussion of actions being taken in the Weapons Operations, Testing, and Archiving areas.

2.1 Pantex

The W76 WSS issue A, was released September 27, 1996. The W76 WSS included archiving methodologies and results from the design agencies and Pantex. Drafts of the B53 and W62 Weapons Safety Specifications (WSS) have been completed and were distributed for comment in August 1996. The draft W62 WSS includes archiving from the design agencies, but not from Pantex. However, Pantex has committed to completing the archiving by the end of October 1996. The draft B53 WSS does not include archiving at this time; however, the design agencies and Pantex have committed to completing the archiving by the end of October 1996.

The W87, W88, and B83 WSSs will be completed in fiscal year (FY) 1997. The initial draft W87 WSS is in progress with distribution of the draft planned for December 1996, and archiving scheduled for completion by end of March 1997. Development of the draft B83 and W87 WSSs will begin later this quarter.

<u>2.2</u> <u>Y-12</u>

Oak Ridge Knowledge Preservation Program Plan status: During this reporting period Y-12 completed 27 audio interviews and transcribed 30 interviews, and Oak Ridge Operations Office (ORO) completed 1 video interview and transcribed 4 interviews. One panel interview was conducted, which consisted of three federal and three contractor personnel. The panel interview covered the evolution of ORO and Y-12 Plant from the perspectives of: strategic oversight, Y-12 Site Office establishment, weapon programs (technical and hazard) oversight, technology evolution (since 1970s), Environment, Safety and Hazard evolution in operations. An audience of invited personnel offered questions of the panel. The session was controlled through a moderator and video taped for use as a training tool and future workforce orientations.

The development of a generic Secondary Safety Specification is continuing. Preparatory to development of the document, a comparison was conducted between the Y-12 dismantlement methodology and the Seamless Safety -21 dismantlement process, to establish the extent of consistency between the two processes. The comparison indicated that the two processes are consistent and cover the same safety topic aspects.

The converted quality tear-down video tapes were requested by the Disassembly and Storage Organization for use in enhancing current dismantlement procedures and work force training. Additionally, over 280 Y-12 and ORO staff have viewed the videotapes of Dr. John Googin which cover: overview of weapon design, primary design, secondary - design, and alpha-4 history.

<u>2.3</u> <u>Nevada</u>

Nevada Operations Office (NV) continued the work on the Enhanced Test Readiness recommendations. Four recommendations are contingent upon returning to testing approval, and four require additional funding. Of the remaining 17 recommendations, 4 have been completed and progress has been made on the other recommendations.

NV initially identified ten functional areas for a test readiness program. The National Laboratories (Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL)) have identified four additional functional areas which are conducted at the National Laboratory facilities. The additional functional areas are: Nuclear Design, Experimentation Integration, Nuclear Chemistry, and Weapons Engineering.

MONARCH B, another dry run for REBOUND, was conducted on August 6-7, 1996, and was conducted in conjunction with a Test Control Center (TCC) exercise. MONARCH B exercised six functional areas: Containment, Security, Timing and Control, Arming and Fusing, Diagnostics, and TCC activities. All reviews, meetings, briefings, and actions normally accomplished for an Underground Nuclear Test were exercised or notionalized. The trainees for Key Positions were evaluated, and the results will be reported. The participation of personnel in selected Critical Positions will be documented in the NV report.

NV is preparing the Nuclear Test Readiness completion report for fiscal year (FY) 1996, which documents the various activities and accomplishments for FY 1996.

2.4 Archiving

The third Recommendation 93-6 Archiving Televideo Conference was conducted on July 23, 1996, and a summary of the televideo conference was provided to the DNFSB on August 21, 1996. (See Attachment A-1 without the vu-graph material). The fourth Recommendation 93-6 Archiving Televideo Conference was conducted on September 16, 1996, and a summary of the televideo was provided to the DNFSB on October 3, 1996. (See Attachment A-2 without vu-graph material).

Los Alamos National Laboratory continued the video archiving outlined in the plan, "Archiving the Processes of the Los Alamos National Laboratory Nuclear Test Program." The following four sessions were completed during this reporting period:

- Nuclear Explosive Safety Study, part I (eight active and four retired employees from LANL, LLNL, and NV)
- Nuclear Explosive Safety Study, part I (seven active and two retired employees from LANL and NV)
- Rack Fabrication (seven active and one retired employee from LANL and Johnson Control International)
- Health Physics (seven active and two retired employees from LANL and Bechtel)

These sessions were coordinated through NV to ensure that appropriate personnel from organizations other than LANL were represented in the video sessions. Planning for the FY 1997, video archiving is in progress. Twelve sessions are targeted for FY 1997.

Sandia National Laboratories conducted six videotaped interviews with personnel involved in SNL's testing program through the Knowledge Preservation Program. SNL completed two Project Officers Reports (POR), and four to six remain to be completed. The POR is a formalized summary of SNL participation in a Nuclear event. Physical inventory of approximately 15,000 classified documents is continuing with 25% of the project complete. Digital waveform date translation to a common format is continuing with 8% of the project complete.

Lawrence Livermore National Laboratory continued the video archiving effort with the following four sessions being completed during this period:

- Stemming operations (NV and LLNL participation)
- Two auxiliary systems engineers
- Nuclear Explosive Safety Study, Part I (LLNL, LANL, and SNL participation)
- Emplacement operations (IN'/ and LLNL participation)

LLNL completed and published "Caging the Dragon, Containment of Underground Nuclear Explosives," book.

NV continued its archiving efforts by participation in the certain activities listed above with LANL, SNL, and LLNL. Additionally, NV accomplished the following:

- Bechtel Nevada (BN) began to digitize and index all event-related construction files for the last ten Joint Test Organization (JTO) events, which will be split between LANL and LLNL. Although this is not part of the 93-6 Implementation Plan, this data will be incorporated into the videotaping sessions such as stemming, insertion and emplacement.
- BN and JTO began archiving the health physics operations during a complete Nuclear test, fielded at Nevada Test Site. This will include operations from receipt of radiological components at the assembly facilities, until rad-chem samples are sent off-site for analysis, and post-shot drill rig clean-up.
- The 207th Containment Evaluation Panel of the Mexia event was videotaped.
- The Defense Special Weapons Agency videotaped a simulated accident on mine safety which will reserved for future use.

3.0 Meetings

Meetings held during this reporting period include:

- July 3, 1996 Planning meeting for MONARCH B dry run and associated readiness exercise
 - Supports Subrecommendation 7--

July 17, 1996 93-6 Archiving Conference Call Meetings planned for the fourth quarter of calendar year 1996, are as follows:

• Supports Subrecommendation 5--

• Supports Subrecommendation 5--

	Pantex WSS Update SNL WSS Update				
Testing Operations					
	ational Laboratory ermore National Laboratory	Ed Rucker Charlie Mille Willie Coope			
	5	1	Mark Dickinson		
	Sandia National Laboratories Closing Remarks		Ray Ferry		
	Participan				
DATE: September 16 LOCATION: Variou	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites	Conference	Fax Number		
DATE: September 16 OCATION: Variou Name	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites Organization	Conference Phone Number	Fax Number (301) 903-5658		
OATE: September 16 OCATION: Variou Name Ray Ferry	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites	Conference	Fax Number (301) 903-5658 (301) 903-5658		
ATE: September 16 OCATION: Variou Name Ray Ferry David Cameron	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites Organization DOE/HQ DP-12	Conference Phone Number (301) 903-3988	(301) 903-5658		
DATE: September 16 DOCATION: Variou Name Ray Ferry David Cameron Mike Mikolanis	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites Organization DOE/HQ DP-12 DOE/HQ DP-12 (SAIC)	Conference Phone Number (301) 903-3988 (301) 903-5365	(301) 903-5658 (301) 903-5658		
DATE: September 16 LOCATION: Variou	endation 93-6 Archiving Televideo 5, 1996 TIME: 11 :00 am s Televideo sites Organization DOE/HQ DP-12 DOE/HQ DP-12 (SAIC) DOE/HQ S-3.1	Conference Phone Number (301) 903-3988 (301) 903-5365 (202) 586-3771	(301) 903-5658 (301) 903-5658 (202) 586-3472		

Agenda for 93-6 Archiving Televideo Conference

September 16, 1996, 11:00 a.m. - 1:00 p.m. (EST)

Topic

Opening Remarks Action Item Status

Weapons Operations

Oak Ridge/Y-12 Albuquerque

> LANL WSS Update LLNL WSS Update

Phil Carpenter Missy Klem

Briefer

Darrell Schmidt Jerry Dow

Ray Ferry

Dave Cameron

Richard Navarro	DOE/NV	(702) 295-1148	(702) 295-1842
Phillip Carpenter	DOE/OR/YSO	(423) 576-8238	(423) 576-8010
Charlie Miller	LANL	(505) 667-8415	(505) 665-4955
Jerry Dow	LLNL	(510) 422-1555	(510) 422-2026
Willie Cooper	LLNL	(510) 422-0974	(510) 423-5846
Holly Haines	Pantex (Mason & Hanger)	(806) 477-4064	(806) 477-4105
Mark Dickinson	SNL	(505) 844-4491	(505) 844-3377
Jan Preston	DNFSB Staff	(202) 208-6562	(202) 208-6518

[DOE LETTERHEAD]

October 3, 1996

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W. Suite 700 Washington, D.C. 20004

Dear Mr. Chairman:

On February 13, 1996, the Department of Energy (DOE) issued its Revision l of the Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6. The IP focuses on ensuring that the Department maintains the capability to conduct safe dismantlement, modification, assembly, and testing operations. This letter contains Deliverable D.2 as required by the 93-6 IP.

Deliverable D.2 is a summary of the final bimonthly televideo conference regarding the status of implementing the 93-6 IP Archiving Plan conducted on September 16, 1996.

Should you have any questions, please contact me or have your staff contact Mr. Richard C. Crowe, Director Core Technical Group, on (301) 903-6214.

Sincerely,

Victor Stello, Jr. Principal Deputy Assistant Secretary for Safety and Quality Defense Programs

Enclosure

Summary of Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6 Archiving Televideo Conference

1. The Recommendation 93-6 archiving televideo conference was conducted on September 16, 1996, from 11:00 a.m. to 12:40 p.m. The conference was chaired by Mr. Ray Ferry, DP-16. The agenda is located at Attachment 1 and the participants list is located at Attachment 2. This televideo conference was the final bimonthly televideo conference, as required by Recommendation 93-6 Implementation

Plan, Revision 1, Commitment D.2.

- 2. Action items developed during the conference:
 - 96-15 Los Alamos National Laboratory (LANL) provide the DNFSB Staff a copy of the Nuclear Explosive Safety Study (NESS) archiving videotape. (Responsibility: DOE/DP-16.1)
 - 96-16 Los Alamos National Laboratory provide an update of the Weapon Safety Specification (WSS) Work in progress during this reporting period, via the summary of this televideo conference. (Responsibility: DOE/DP- 16.1) (Note: This information is incorporated in this summary and this action item is complete).
- 3. The following closure issues were discussed during the conference
 - a. How to resolve system to system boundaries to ensure information which may cover more then one area would be promulgated. This also included cross organizational boundaries.
 - b. The schedule for completing the WSS outlined in the 93-6 Implementation Plan may have to be updated.
 - c. Institutionalization and funding of cross cutting archiving at Pantex
- 5. The following is a summary of the conference:

Opening Remarks - Ray Ferry, DP- 16.1

- a. Welcomed all participants to the final televideo conference concerning archiving for Recommendation 93-6, as required by Commitment D.2. He indicated a formal summary of the conference would be provided to the DNFSB as Deliverable D.2.
- b. Stated the objective of the conference is to provide a summary of Recommendation 93-6 Archiving activities/results since the last televideo conference conducted July 23, 1996, and to present any future activities.
- c. He indicated that Recommendation 93-6 is coming to a close and two deliverables are required to be turned in. However, follow up action may be required and this information will promulgated as it is developed.

Status of Previous Action Items - Ray Ferry, DP-16.1

Dave Cameron, DP-16.1 (SAIC) provided the following status of the action items developed during the July 23, 1996, televideo conference:

96-08 Oak Ridge Operations Office (ORO) provide the DNFSB Staff with the expected date for retirees clearance reinstatement. Response: Complete - All retirees have been reinstate

- 96-09 ORO provide Sandia National Laboratories (SNL), Lawrence Livermore National Laboratory (LLNL), and LANL POCs with a copy of Dr. Googin's videotape.
 Response: Open LANL has a copy of the tape copies, and they are being produced for SNL and LLNL, and should be delivered by end of September 1996.
- 96-10 AL provide the DNFSB Staff with how Recommendation 93-6 Archiving efforts are institutionalized at Pantex.
 Response Open Pantex fully supports the intent of SS-21, as defined in EP401110/B and Deliverable A. 1.A of DOE's Implementation Plan for DNFSB Recommendation 93-6, Revision 1, which both require incorporating archiving information from all personnel, including retired and that about to retire. Archiving has been institutionalized at Pantex in the form of a plant standard, which all Pantex program managers must ensure is performed during the development of a weapon program. No separate funding is provided to Pantex for archiving. Instead, the archiving work is funded out of the weapon development program for each weapon program:

Further discussion of this action item indicated the Pantex plant standard has not been issued. DNFSB Staff requested a copy of this standard when available.

- 96-11 Nevada Operations Office (NV) to provide more information to the DNFSB Staff regarding the archiving effort of the NESS process at the Nevada Test Site (NTS). Response: Complete NV conducted a panel discussion regarding the NESS process with participants from NV, LANL, and LLNL. DNFSB Staff asked for a copy of the NESS archiving videotape. (See Action Item 96-15)
- 96-12 LANL provide the DNFSB Staff via televideo summary the breakdown of current and retired video participants.
 Response: Complete This information was provided in the summary of the televideo conference of July 23, 1996, which was provided to the DNFSB on August 21, 1996.
- 96-13 Set up a meeting between LLNL, DNFSB Staff, and HQ in order to present the archiving approach taken at LLNL.Response: Complete Televideo conference conducted on August 23, 1996.
- 96-14 Discuss at the next televideo conference what frequency the televideo conferences should take place, after the fourth required televideo conference.
 Response: Open Conference call conducted between HQs and DNFSB Staff conducted on September 9, 1996, to discuss further actions regarding Recommendation 93-6.

Weapons operations under ORO

Oak Ridge Knowledge Preservation Program - Phillip A. Carpenter, ORO, Y-12 Site Office

Mr. Carpenter's briefing is located at Attachment 3.

Mr Carpenter indicated Y-12 plants activities included: added 7 names to list, 18 interviews (audio) completed, and 17 interviews transcribed during this reporting period.

"Y- 12 Plant Operations and Safety Information Sources" was issued to reflect new sources of key Y-12 weapons and safety documentation references.

Mr. Carpenter indicated the following information is applicable to the Federal Staff: One interview transcribed and one video interview completed. The DNFSB Staff asked if Mr. Carpenter thought that a program has been established at Y-12 and the Federal Side? Mr. Carpenter indicated that Y-12 program has been institutionalized, and the Federal program is in the process of being institutionalized.

Weapons archiving under AL

a. AL - Missy Klem, DOE/AL, Weapons Production Division

Ms. Klem indicated that the W76 and W62 Weapon Safety Specification (WSS) were issued in September 1996, and the B53 WSS will be issued in October 1996. The B53 WSS is slightly behind schedule and archiving has not started. The DNFSB Staff asked if the delay in the B53 will affect the 1997 WSS schedule? Ms. Klem indicated that this had not been discussed.

b. LANL WSS Update - Darrell Schmidt, LANL

W76 Archiving. LANL participated with Pantex and Sandia in the joint W76 Archiving interviews held at Sandia on August 5-7, 1996. A total of eight LANL members participated in the archiving sessions, three of which were retirees. LANL had their tow key weapon engineering experts regarding the W76 at these sessions. The W76 system engineer who has been working on the W76 since 1973, and the W76 surveillance engineer who has 20 years experience on the W76. The WSS is planned to be released by September 30,1996.

B53 Archiving: The B53 WSS, Issue A will be issued by September 30,1996. Issue A of the WSS does not include archiving. The B53 Project Team's preference is to conduct their interview sessions like the W76 Project Team. Thus, these interviews would be conducted jointly with Sandia and Pantex.

c. LLNL WSS Update - Jerry Dow, LLNL

Mr. Dow indicated that the W56 Issue C will be out in the November 1996, time frame. In the process, facilitating a group interview process for future issues. The DNFSB Staff indicated they had some classified comments regarding the W56 WSS and this would be provided to LANL for review. The draft W62 WSS has been reviewed and it is effectively complete. A group session will be conducted in the future. The DNFSB Staff asked if there would be a problem with completing the W87 and W83 in Fiscal Year 1997? Mr. Dow indicated some work has commenced on the two WSSs, however, the actual start date will be when FY 1997, starts. He indicated the delay in the W62 should not affect the schedule.

d. Pantex, Mason & Hanger (M&H) Update - Holly Haines, M&H

Ms. Haines' briefing is located at Attachment 4.

Ms. Haines indicated the W69,W56,W76,WSSs are complete. A group interview was conducted

for the W56 on July 19, 1996, which included retired and current employees being interviewed along with the dismantlement team being present. The DNFSB Staff asked what the make up of the interview group consisted of? Ms. Haines indicated the group consisted of production supervisor, program manager, project manager, project coordinator, process team leader, tooling task team leader, radiation safety, industrial hygiene, human factors, operations supervisor, production technician, quality inspector, inspector/assembly engineer, assembler, program engineer, and assembler/supervisor. This group consisted of 8 retired and 23 current employees. The group interview provided good detail, and a W76 group interview was conducted. The DNFSB Staff asked if it appeared to be beneficial to get different organizations together in a group? Ms. Haines indicated yes, it was beneficial; however, it was very expensive and balance must be reached. Components in the W88, W78, and W76 warheads are very similar and this could be used in the future.

Ms Haines indicated that W62, B53, and W78 archiving projects are scheduled for FY 1997. The DNFSB Staff stated that it appeared a significant effort still exists with the W62 and BS3. Ms. Klem indicated that Pantex signed to the same schedule as the National Laboratories. Ms. Haines indicated that Pantex does not start the WSS archiving effort until the WSS is out and funded.

e. Sandia National Laboratories WSS Update - Mark Dickinson, SNL

Mr. Dickinson's briefing is located on page 2 of Attachment 5.

Mr. Dickinson indicated the WSS process is institutionalized at SNL. The W76 dismantlement panel was conducted on August 5-7, 1996. The B53 WSS Issue A to be completed by the end October 1997, which will include archiving.

Testing archiving

a. NTS Archiving Status - Ed Rucker, DOE/NV

Mr. Rucker's briefing is located at Attachment 6.

Mr. Rucker indicated that the NV Joint Test Organization (JTO) does include all members which allows cross cutting to take place.

Mr. Rucker indicated the following activities were performed:

- Joint effort on NESS with the first videotaping session completed on August 28, 1996, and more sessions scheduled for completion by the end of September 1996;
- LLNL emplacement videotaping started on August 6, 1996;
- Nevada Test Organization (NTO) videotaped the MONARCH B dry-run at CP-1 on August 5-6, 1996;.
- LANL rack fabrication was videotaped on September 5, 1996, and
- Five archiving meeting were conducted.

Mr. Rucker indicated the following activities are scheduled for the future:

- JTO emplacement videotaping is scheduled.for September 19, 1996; and
- Bechtel Nevada will continue videotaping subject matter experts (SME) as identified in the SME Videotaping Schedule.

2. LANL Nuclear Weapons Test Process, Experience, and Knowledge - Charlie Miller, LANL

Mr. Miller's briefing material is located at Attachment 7.

Mr. Miller indicated that the archiving testing program is a cooperative program which crosses organizational boundaries. Three video sessions were conducted during this reporting period, which included participation of 8 retired and 29 current individuals. The video sessions conducted were Nuclear Explosive Safety Study and Operations parts I and II, and Rack Fabrication Mr. Miller indicated that it appears to be adequate funding for most of the topics scheduled for FY 1997.

3. LLNL Information Archiving Update - Willie Cooper, LLNL

Mr. Cooper indicated that cross cutting archiving is working for the testing activities.

Mr. Cooper indicated the current efforts deal with the science of containment, measurement and diagnostics. Other activities include updating the job task analysis for the key positions to include updating the training plans. The key positions are being evaluated to ensure the appropriate positions are identified.

4. SNL Knowledge Preservation Project - Mark Dickinson, SNL

Mr. Dickinson's briefing is located page 3 at Attachment S.

Mr. Dickinson indicated 3 video taped interviews dealing with underground nuclear testing program, and 1 project officers report were completed.

- 6. Mr. Ferry asked if anyone had any closing comments or remarks.
 - Mr. Ferry indicated that a number of issues still need to be resolved, and an approach will have to be developed to address the issues.
 - Dave Cameron went over the action items, which were generated during the meeting. See paragraph 2 for specific action items.
- 7. Attachments:
 - 1. Agenda
 - 2. Televideo Conference Participants List
 - 3. Oak Ridge Knowledge Preservation Briefing
 - 4. Pantex WSS Update
 - 5. SNL Knowledge Preservation Project Briefing
 - 6. Nevada Outline for third Televideo Conference
 - 7. LANL Testing Information

Agenda for of 93-6 Archiving Televideo Conference

July 23, 1996, 11:00 a.m. - 1:00 p.m. (EST)

Торіс		Briefer	
Opening Remarks		Dick Crowe	
Action Item Status		Ray Ferry	
Weapons Operations			
Oak Ridge/Y-12		Phil Carpenter	
Albuquerque		Missy Klem	
W56 WSS	LLNL Pantex SNL	Bruce Lownsbery Holly Haines Mark Dickinson	
Testing Operations			
Nevada		Ed Rucker	
Los Alamos National Laborato	ry	Charlie Miller	
Lawrence Livermore National	Laboratory	Willie Cooper	
Sandia National Laboratories		Mark Dickinson	
Closing Remarks - Determine next conference time - cover any new action items		Dick Crowe	

NOTE: Call in number is (301) 903-6013 if unable to access a televideo site.

Participants List

SUBJECT: Recommendation 93-6 Archiving Televideo Conference **DATE:** July 23, 1996 **TIME:** 11 :00 am **LOCATION:** Various televideo sites

Name	Organization	Phone Number	Fax Number
Richard Crowe	DOE/HQ DP-20.1	(301) 903-4221	(301) 903-5604
Emil Morrow	DOE/HQ DP-2	(202) 586-5530	(202) 586-1567
Marty Schoenbauer	DOE/HQ DP-24	(301) 903-3489	(301) 903-6607
Ray Ferry	DOE/HQ DP-12	(301) 903-3988	(301) 903-5658
David Cameron	DOE/HQ DP-12 (SAIC)	(301) 903-5365	(301) 903-5658

David Compton	DOE/HQ S-3.1	(202) 586-1034	(202) 586-3472
Missy Klem	DOE/AL WPD	(505) 845-5373	(505) 845-6459
Ed Rucker	DOE/NV	(702) 295-2559	(702) 295-0946
Richard Navarro	DOE/NV	(702) 295-1148	(702) 295-1842
Phillip Carpenter	DOE/OR/YSO	(423) 576-8238	(423) 576-8010
Charlie Miller	LANL	(505) 667-8415	(505) 665-4955
Jerry Dow	LLNL	(510) 422-1555	(510) 422-2026
Bruce Lownsbery	LLNL	(510) 423-4974	(510) 424-2709
Holly Haines	Pantex (Mason & Hanger)	(806) 477-4064	(806) 477-4105
Mark Dickinson	SNL	(505) 844-4491	(505) 844-3377
Jan Preston	DNFSB Staff	(202) 208-6562	(202) 208-6518
William White	DNFSB Staff	(202) 208-6654	(202) 208-6518

[DOE LETTERHEAD]

August 21, 1996

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W. Suite 700 Washington, D.C. 20004

Dear Mr. Chairman:

On February 13, 1996, the Department of Energy (DOE) issued its Revision I of the Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6. The IP focuses on ensuring that the Department maintains the capability to conduct safe dismantlement, modification, assembly, and testing operations. This letter contains Deliverable D.2 as required by the 93-6 IP.

Deliverable D. 2 is a summary of the third bimonthly televideo conference, regarding the status of implementing the 93-6 IP Archiving Plan conducted on July 23, 1996.

Should you have any questions, please contact me or have your staff contact Mr. Richard C. Crowe, Associate Deputy Assistant Secretary for Military Application and Stockpile Management, on (301) 903-4221.

Sincerely,

Victor Stello, Jr. Principal Deputy Assistant Secretary for Safety and Quality Defense Programs

Enclosure

Recommendation 93-6 Archiving Televideo Conference

- 1. The Recommendation 93-6 archiving televideo conference was conducted on July 23, 1996, from 11:00 a.m. to 12:30 p.m. The conference was chaired by Mr. Dick Crowe, DP-20.1. The agenda is located at Attachment 1 and the participants list is located at Attachment 2. This televideo conference was the third of four bimonthly conferences, as required by Recommendation 93-6 Implementation Plan, Revision 1, Commitment D.2.
- 2. Action items developed during the conference:
 - 96-8 Oak Ridge Operations Office (ORO) provide the DNFSB Staff with the expected date for retirees clearance reinstatement. (Responsibility: DOE/DP-16.1)
 - 96-9 ORO provide Sandia National Laboratories (SNL), Lawrence Livermore National Laboratory (LLNL), and Los Alamos National Laboratory (LANL) points of contact with a copy of Dr. Googin's video tape. (Responsibility: ORO)
 - 96-10 Albuquerque Operations Office (AL) provide the DNFSB Staff with how the Recommendation 93-6 Archiving efforts are institutionalized at Pantex. (Responsibility: DOE/DP-22)
 - 96-11 Nevada Operations Office (NV) provide more information to the DNFSB Staff regarding the archiving effort of the Nuclear Explosive Safety Study Process at the Nevada Test Site. (Responsibility: DOE/DP-16.1)
 - 96-12 LANL provide the DNFSB Staff via televideo summary the breakdown of current and retired video participants. (Responsibility: DOE/DP-16.1) (Note: This information is incorporated in this summary and this action item is complete.)
 - 96-13 Set up a meeting between LLNL, DNFSB Staff, and DOE HQ in order to present the archiving approach taken at LLNL. (Responsibility: DOE/DP-16.1)
 - 96-14 Discuss at the next televideo conference what frequency the televideo conferences should take place after fourth required televideo conference. (Responsibility: DOE/DP- 16.1)
- 3. The following is a summary of the conference:

Opening Remarks - Dick Crowe, DP-20.1

- a. Welcomed all participants to the third televideo conference concerning archiving for Recommendation 93-6, Commitment D.2. He indicated a formal summary of the conference would be provided to the DNFSB as Deliverable D.2.
- b. Stated the objective of the conference is to provide a summary of Recommendation 93-6 Archiving activities/results, since the last televideo conference conducted May 17, 1996, and to present any future activities.
- c. He indicated that Recommendation 93-6 is coming to a close and only a few deliverables remain open.

Status of Previous Action Items - Ray Ferry, DP-16.1

Indicated Action Items 96-1 thru 7 are complete and the conference participants agreed.

Weapons operations under Oak Ridge Operations Office responsibility

Oak Ridge Knowledge Preservation Program - Phillip A. Carpenter, Oak Ridge Operations Office (ORO), Y-12 Site Office

Mr. Carpenter's briefing is located at Attachment 3.

Mr. Carpenter indicated Y-12 plants activities included: 9 interviews (audio completed, and 13 interviews transcribed during this reporting period.

The DNFSB Staff asked what is the problem with the clearance reinstatement for the retirees? Mr. Carpenter indicated that resources are the limiting factor, due to the amount of work required for an individual clearance check. The DNFSB Staff asked when the retirees clearance reinstatement would be complete? See Action Item 96-8.

The conversion of the quality evaluation tear-down videotapes was completed. The tapes were requested by the disassembly and storage organization, and were used to enhance current dismantlement procedures and workforce training.

The Dr. Googin video tape covering: overview of weapon design, primary design, secondary design, and Alpha-4 history was viewed by over 280 Y-12 individuals and Y-12 Site Office staff. The DNFSB Staff asked if the tape had been made available to the National Laboratories? Mr. Carpenter indicated the video tape has not been offered to the National Laboratories. The representatives from the National Laboratories indicated they would like a copy of the video tape. See Action Item 96-9.

Mr. Carpenter indicated the following information is applicable for the Federal Staff: three interviews transcribed and one name was added to the list, and will be interviewed in the next reporting period. A group video interview is scheduled for July 24, 1996. The DNFSB Staff asked if the video interview would include retirees? Mr. Carpenter indicated that the panel would consist of three Federal and three contractor individuals (four current employees and two retirees). Additionally, ORO is complete on the video interviews except for the one newly identified individual. The DNFSB Staff asked if the program is institutionalized, so that it will continue after Recommendation 93-6 is closed out? Mr. Carpenter indicated that the plan has been institutionalized and funding is available.

Weapons archiving under Albuquerque Operations Office responsibility

a. Albuquerque Operations Office (AL) - Missy Klem, DOE/AL, Weapons Production Division

Ms. Klem indicated the W69 Weapon Safety Specification (WSS) was delivered to the DNFSB and the WS6 Issue B was reviewed at AL, and has been forwarded to Headquarters. The draft BS3 WSS was distributed the week of July 8, 1996, for comments with archiving scheduled to begin the first part of October 1996. The draft W62 WSS was distributed the week of July 29, 1996, which included archiving results. The draft W76 WSS was distributed in April 1996, and archiving interviews are scheduled for the week of August 5, 1996.

- b. W56 Archiving Information
 - 1. Lawrence Livermore National Laboratory (LLNL) W56 WSS update Bruce Lownsberry, LLNL

Mr. Lownsbery indicated the W56 WSS, Issue B, has an appendix expanded to be more complete on archiving, with the in fusion of the names of the interviewees and more details

on the methodology. LLNL review of Issue B was completed and was forwarded to AL for review.

2. Pantex, Mason & Hanger (M&H) W56 Update - Holly Haines, M&H Ms.

Haines' briefing is located at Attachment 4.

Ms. Haines indicated that although the W56 archiving effort continues, much effort has been completed. For the W56 WSS, 173 individuals were identified with 125 questionnaires being distributed, 51 phone contacts, and 26 individual on-plant interviews conducted. The relevant safety information has been incorporated in the W56 WSS, Issue B. Most of the information being discovered or rediscovered now is of a procedural nature and will be provided to the W56 SS-21 Task Teams. If additional safety-related information is discovered, it will be incorporated into the WSS. A group interview is scheduled for July 29, 1996, to include current and retired employees. The interviews will be recorded by video, audio, and stenographer to include the lessons learned. The DNFSB Staff asked how the process information is used if it is not appropriate for inclusion into the W56 WSS?

Ms. Haines indicated that the tape and written documentation is available for task teams working on procedures. Additionally, the engineers will be available during the interviews.

The DNFSB Staff asked the participants if they thought the video tapes were useful? Ms. Haines indicated that Pantex would like to digitize the tapes; additionally, they intend to make the video tapes available for use. Mr. Miller, LANL, indicated the response is good for the tapes which have been put together. The High Explosive Group has reviewed the tapes. Mr. Navarro, NV, indicated that the Defense Nuclear Agency has formulated a course to use the tapes in training. Mr. Dickinson, SNL, indicated that the tapes would be digitized and linked to other areas to allow greater user access.

The DNFSB Staff asked what was standing in the way of Pantex digitizing the tapes? Ms. Haines indicated no overall program for archiving exists, beyond the archiving program developed to support Recommendation 93-6. The DNFSB Staff asked what is being done to institutionalize archiving at Pantex? See Action item 96-10.

3. Sandia National Laboratories W56 WSS Update - Mark Dickinson, SNL

Mr. Dickinson's briefing is located on page 2 of Attachment 5.

Mr. Dickinson indicated the WS6 WSS Issue B was complete. The archiving efforts include identification and preservation of documents, and interviews with cognizant personnel. This information is documented in the W56 WSS reference page.

Testing archiving

a. Nevada Test Site (NTS) Archiving Status - Ed Rucker, DOE/NV

Mr. Rucker's briefing is located at Attachment 6.

Mr. Rucker indicated the REBOUND-I dry run was conducted on June 25-26, 1996, which exercised 4 functional areas. The DNFSB Staff asked what level of detail would be documented?

Mr. Rucker indicated that the lessons learned would be documented in the Rebound final report and the annual completion report.

Mr. Rucker presented the budget levels for five specific archiving activities. The DNFSB Staff requested more information regarding the archiving efforts on the Nuclear Explosive Safety Study process. See Action Item 96-11. The stemming videotapes were edited and will be formatted into a final archiving module to be used as a training tool. The DNFSB Staff asked if this included both operational aspects and design information? Mr. Navarro indicated it would include both operational and design information.

Mr. Rucker presented the future activities which include: emplacement videotaping, archive first of 10 event files, videotape the Mexia containment evaluation panel, and conduct of Monarch B. The DNFSB Staff asked about archiving funding levels in fiscal years (FY) 97? Mr. Navarro indicated that for FYs 96 and 97 the budget is \$1.5 Million for each year. This is divided up as follows: \$1 Million going to Bechtel Nevada and \$0. 5 Million going to other archiving efforts.

b. LANL Nuclear Weapons Test Process, Experience, and Knowledge - Charlie Miller, LANL

Mr. Miller's briefing material is located at Attachment 7.

Three video sessions were conducted during this reporting period which included participation of 13 retired and 13 current employees. The video sessions conducted were Alternate Test Sites; Containment; and Funding and Organization Responsibilities. The video archiving schedule was updated to incorporate financial changes.

c. LLNL Information Archiving Update - Willie Cooper, LLNL

Mr. Cooper's briefing is located at Attachment 8.

Mr. Cooper indicated that the stemming video and the video interview of two auxiliary systems engineers were completed. Posting for a test director commenced. He covered what would take place during the next reporting period. The DNFSB Staff requested a meeting be set up to allow LLNL to explain how archiving is accomplished at LLNL. See Action Item 96-13.

d. SNL Knowledge Preservation Project - Mark Dickinson, SNL

Mr. Dickinson's briefing is located on page 3 at Attachment 5.

Mr. Dickinson indicated three video taped interviews dealing with the underground nuclear testing program and one project officer report were completed. The DNFSB Staff asked if funding for weapons and Nevada Test Site archiving activities are available? Mr. Dickinson indicated that both activities are funded for next year.

- 5. Mr. Ferry asked if anyone had any closing comments or remarks.
 - The DNFSB Staff indicated a meeting should take place with Mr. Crowe and Mr. Morrow about what is in the future regarding monitoring the archiving programs after the formal televideos are complete. See Action Item 96-14.

- Dave Cameron went over the action items, which were generated during the meeting. See paragraph 2 for specific action items.
- 6. The next televideo conference call will be conducted during mid July 1996, details to be published later.

9 Attachments

- 1. Agenda
- 2. Televideo Conference Participants List
- 3. Oak Ridge Knowledge Preservation Briefing
- 4. Pantex
- 5. SNL Knowledge Preservation Project Briefing
- 6. Nevada Outline for third Televideo Conference
- 7. LLNL Nuclear Weapons Test Process, Experience, and Knowledge
- 8. LLNL Information Archiving Update Briefing