

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 1997

TO: G. W. Cunningham, Technical Director
FROM: Jim McConnell and Harry Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending February 7, 1997.

1. DNFSB Activity Summary: Jim McConnell was on site all week. Harry Waugh was on leave on Friday. Staff members Farid Bamdad, Chip Martin, and Cindy Miller were on site this week observing the W69 Dismantlement NESS.

2. New Issues:

a. B61 Dismantlement: Several B61 bombs awaiting dismantlement have an external case cleanliness problem that will require certain aspects of the dismantlement to be performed in a bay with the capability for fume exhaust. Since Building 12-64 does not have the system with this capability, called task exhaust, the operation will have to be moved to a bay in Building 12-99 which does have task exhaust. Prior to starting up B61 dismantlement operations in Building 12-99, Mason and Hanger (M&H) will have to convert the bay to the "Seamless Safety configuration." Most of these modifications, such as locking out unnecessary energy sources and installing hazard and calibration boards will not be difficult. Other aspects such as standardizing the facility layout will be more problematic because the operations planned for a single bay of Building 12-99 are currently performed in more than one bay of Building 12-64. Nevertheless, M&H still anticipates completing B61 Mod 2 dismantlement in February.

3. Issue Follow-Up:

a. B61-5 Dismantlement: With the B61 Mod 2 dismantlement approaching conclusion, the start of B61 Mod 5 dismantlement is still on hold pending resolution of the problems identified with the MC2969 Intent Strong Link Switch and the associated Nuclear Explosive Safety Rule. The B61-0/2/5 Project Team and SNL are continuing to develop and qualify a new test cable and change the Nuclear Explosive Operation Procedure to incorporate the test early in the initial dismantlement work in the bay. When the equipment, drawings, and procedures are complete, this change will require a Design Agency Engineering Qualification, a modified Safety Evaluation, and a Nuclear Explosive Safety (NES) review. Meanwhile, the issue of resolving the Nuclear Explosive Safety Rule (NESR -- a safety control similar to a TSR) is still unresolved. Since NESRs were historically reviewed and approved as the result of a Nuclear Explosive Safety Study (NESS), it is unclear if the modification of a NESR requires a NESS. While the problems with control and modification of the nuclear explosive aspects of the Pantex Authorization Basis are now fairly well recognized, this problem is a classic example of the difficulties in implementing a NES USQ process. Had this problem been identified with a TSR, the solution would be much more obvious. Also, if the problem had been with a TSR, DOE would probably have reported the event through the occurrence reporting process by now. As it stands, this issue has not been reported as an occurrence yet even though it has been two weeks since the first test failed.

b. W79 Rocket Motor Testing: ARDEC testing of W79 rocket motor propellant continues. Data from the second rocket motor was reported to be almost identical to the data from the first motor. The 2-NDPA stabilizer level was again reported to be 0.6 percent; well above the 0.2 percent level of concern.

4. Additional Information:

a. Effects of Suspended LinAc and Mass Properties Operations: With the LinAcs and mass properties test facilities non-operational, much of the War Reserve weapons work at Pantex is coming to a temporary halt. Although not all systems require x-ray or mass properties, the only campaign-level weapons work unaffected is

the B61-2 dismantlement and the B83 Quality Improvement Program. Most of the other continuing work involves joint test assemblies or operations such as the W70 keel erosion process.

5. Future Activities:

- a. February 11-21 W68 Dismantlement NESS continues
- b. February 11 - W80 NESS Revalidation begins
- c.
- d. March 5 - B83 Program Meeting
- e. March 25 - W79 MC3395 Removal begins (change)
- f. April 7 - W87 WPRR Begins
- g. April 9 - Quarterly Production Meeting
- h. May 15 - M&H AT-400A Corporate ORR begins (estimate)
- i. June ? - DOE AT-400A ORR (following conclusion of M&H ORR)

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