

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 18, 2000

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director

**FROM:** H. Waugh and W. White, Pantex Site Representatives

**SUBJECT:** Pantex Plant Activity Report for Week Ending August 18, 2000

**DNFSB Activity Summary:** W. White was on site all week. H. Waugh was on leave Monday. R. West was on site Monday through Friday to observe the DOE W76 Readiness Assessment (RA). L. McGrew was on site Monday through Friday to observe the W76 Nuclear Explosive Safety Study (NESS).

**W76 D&I Program:** The DOE W76 RA, led by the DOE Albuquerque Operations Office, ended this week. The week was spent observing the final bay and all cell operations. An initial briefing from the RA team indicated 6 pre-start findings and 15 post-start findings. Pre-start findings include the following: failure to incorporate some authorization basis requirements for combustible loading and lightning protection in implementing procedures, issuance of operating instructions with steps that conflicted with safety requirements or could not be performed as written, establishment of improper anti-contamination clothing requirements for one disassembly operation, incomplete flow down of authorization basis requirements to operating procedures, and inadequate performance of radiography interpretation for a safety step of the disassembly. The performance of the RA team was significantly improved over the performance of the W62 RA. The only significant deficiency in the performance of the W76 RA appeared to be in the area of maintenance. A review of the maintenance database, after the RA maintenance team member had left town, revealed missing baseline information on tooling and a surveillance interval for a disassembly fixture that exceeded the W76 ABCD requirement. The W76 NESS also continued this week, observing bay and cell operations with the RA team. <sup>[II.A]</sup>

**Pit Management Meeting:** DOE and MHC met on Wednesday to discuss pit management issues. Funding continues to be a concern, and, as a result, the proposed second pit repackaging line remains in jeopardy. Additional production technicians have been requested, but clearance and training requirements will prevent the second line startup until at least March 1, 2001, unless production technicians can be transferred from ongoing weapons operations (such as the W62 D&I). Bolt qualification testing continues. The spike, 6 foot drop, thermal expansion, and pull tests have been successfully completed. The first galling test was inconclusive. The 20 foot drop test occurred at LLNL on August 15, but results have not been reported. <sup>[II.A]</sup>

**Dynamic Balancer:** MHC held a critique on Tuesday to discuss surveillance of the overspeed protection on the dynamic balancer. The site wide TSRs require protection against dynamic balancer speeds above 600 rpm. Implementing this is a relay set to drop out at a certain voltage. To pass the required surveillance, the voltage on the relay is set at a level which drops out the dynamic balancer under certain operating conditions. The link between voltage and speed, in any case, is not a strict correlation. Other factors, such as temperature, load, viscosity of the lubricant, etc. also play a role. An independent safety shut-off which works by directly monitoring rpm levels has been installed. The AB change required to implement this as satisfying the TSR and BIO requirements has been in process for nearly a year, however, with little progress. Until this issue is resolved, dynamic balancer operations on WR units have been suspended. <sup>[II.A]</sup>