

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 3, 2001

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 3, 2001

DNFSB Activity Summary: H. Waugh was on site all week. W. White was on leave Monday and on site for the remainder of the week.

Unauthorized Work on W80 program: On Tuesday, a BWXT engineer and production technicians performed work on a W80 nuclear explosive assembly without a written, approved procedure. An engineer loosened a component which was subsequently removed by technicians. The removal of the component could not be accomplished per the existing procedure. According to the BWXT engineer, the technique required for removal of the component could not be fully determined in advance.

A general nuclear explosive safety rule in NNSA Albuquerque Supplemental Directive 452.2A states that "all nuclear explosive operations shall be performed in accordance with approved written procedures or released drawings." Guidance on developing the procedures for work that can not be accomplished through the normal production procedures is contained in Pantex Standard 0173, *Short Term Engineering Procedure System*. The removal of a component from a nuclear explosive assembly without an approved, written procedure is a clear violation of plant standards and the NNSA nuclear explosive safety rule. This event was reported as an unusual occurrence.

On a positive note, BWXT personnel attending a critique to discuss the occurrence appeared to understand the significance of the occurrence and took immediate corrective actions to prevent its reoccurrence. BWXT senior managers and production managers appeared cognizant of the importance of performing all work on nuclear explosives in accordance with written, approved procedures. It was also noted during the critique that, in general, BWXT program engineers are not authorized to perform work on nuclear explosives. [II.A]

Pit Repackaging Program: During the month of July, BWXT repackaged 236 pits into sealed-insert containers. This marks the fourth consecutive month in which more than 200 pits were repackaged. This also marks the fifth consecutive month of record pit repackaging performance by production personnel. Bolts made with Inconel Alloy 718 are now being used exclusively in the sealed-insert repackaging program. [II.A]

W78 Readiness Assessment: On Tuesday, BWXT released its interim report on the W78 contractor readiness assessment. The report identified pre-start findings noted to-date and discussed the path forward for resuming the readiness assessment at a later date. The path forward includes completing flow down of authorization basis requirements and closing pre-start findings already identified (including those self-identified by the project team). The report also notes several lessons learned. The technical assist process and documentation did not adequately support the W78 program; expectations and requirements for proper authorization basis flow down must be clearly understood by the project team; and the process used to declare readiness to proceed with the contractor readiness assessment has to be improved. The contractor readiness assessment is expected to resume around the end of August. [II.A]