

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 21, 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 September 21, 2001

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

Pantex Operational Status: The Pantex Plant resumed operations on Wednesday, September 19. Prior to resuming operations, plant personnel reviewed the status of facilities, verified the status of surveillance and in-service-inspection requirements for safety systems, and verified the last completed operation on any nuclear explosive. Plant personnel also verified that the physical configuration of units matched paper and computer documentation. Operations personnel completed these verifications as operations were restarted and found no significant discrepancies. Specific in-service-inspection requirements related to the electrical distribution system were not performed during the shutdown, but were performed prior to resuming operations. [II.A]

Lightning Basis for Interim Operations: Earlier this month, BWXT submitted a change to the *Lightning Basis for Interim Operations* (LBIO). The change proposal is currently under review by AAO. The change allows recently approved lightning control changes for the W87 program to be applied to all nuclear explosive operations. Specific control changes include the following:

- Allow transportation of nuclear explosive assemblies during lightning warnings if the transportation container is an approved Faraday cage. Although not explicitly discussed in the LBIO change, the analysis of the transportation container as a Faraday cage could only be used in conjunction with a weapon response analysis that concludes the maximum energy level inside the transportation container during a lightning strike is not a threat to the nuclear explosive assembly.
- Allow hoisting and lifting during lightning warnings, provided approved electrical isolation devices are in place.
- Allow manifold operations during lightning warnings in Building 12-104, Bay 16, provided adequate electrical isolation devices are in place.
- Allow task exhaust operations during lightning warnings, provided adequate electrical isolation is in place.
- Allow weighing operations during lightning warnings, provided adequate electrical isolation is in place.

Also included in the change proposal was language allowing BWXT to violate certain Faraday cage configurations for 'brief periods of time' during lightning warnings. The change proposal also updated the LBIO to reflect recent analysis work completed for Building 12-50. AAO has not yet completed its review of the proposed changes. The changes, however, were made at the request of AAO. [II.A]

W80 Command Disablement Testing: AAO approved a Justification for Continued Operations this week to allow a single W80 command disablement test to be conducted later this year. The JCO was necessary because the command disablement test equipment violated lightning protection controls in the existing authorization basis. The cover letter to the Safety Evaluation Report, however, notes that AAO expects BWXT to implement necessary controls to stay within the existing authorization basis or to modify the authorization basis prior to any future command disablement testing. [II.A]