DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 29 February 2008
SUBJECT: Pantex Plant Weekly Report

W88 SS-21 Bay Startup: W88 SS-21 nuclear explosive bay operations were authorized this week following a nuclear explosive safety study (NESS) and NNSA readiness assessment (RA). The NESS group identified no findings, but did propose three program-specific nuclear explosive safety rules (NESRs)—actions that significantly contribute to the ability of the proposed process to meet the NES standards. The NESRs require the verification of the state of certain components relied upon to maintain the nuclear safety theme during operations. The RA team identified one pre-start finding that resulted from two TSR controls that could not be implemented as written. W88 bay operations using a partial SS-21 process (Step I) had been suspended in January to provide sufficient time to transition to the full SS-21 process.

Procedure Adherence: A W76 physics package was returned to a production bay from a satellite facility with an unauthorized piece of tooling present inside the transportation cart (ETC II). The tool had been in the cart for about two weeks before being discovered but was not in direct contact with the weapon. The safety features of the ETC II were not degraded or compromised. A recovery procedure was developed to remove the tooling and executed by the quality assurance technicians in the production bay.

W80 Bay Operations: A recent tooling issue arose with the W80 workstand and its ability to rotate the unit to support operations. Although rotating operations with the stand have been suspended pending an engineered resolution, B&W Pantex continues to perform limited holding operations with the degraded workstand. Units are being transferred from the handling gear to the workstand before being loaded into a transportation cart for transferral to a satellite facility.

Procedure Inadequacy: A piece of tooling properly installed on a W78 joint test assembly in a production bay was removed in the mass properties bay to perform testing. The mass properties procedural step to reinstall the tooling prior to transferring the unit back to the production bay did not specify an orientation for the tool and it was ultimately misaligned by 90 degrees. This prevented subsequent work in the production bay from being performed until a backout procedure to remove and reinstall the tooling was implemented. This is another example where revisions were made to a process or procedure but the impact on other procedures was not recognized.

Transportation Operations Update: Last week, Manufacturing Division management declared a stand-down of transportation operations after experiencing its sixth transportation process issue in a five week span. These process issues include two custody overdue conditions, the receipt of the wrong material during an Office of Secure Transportation transfer, two delays in completing material moves because the receiving facility was not adequately prepared, and a failure to authorize a shipment in the Move Right material tracking system prior to dispatching an item. A preliminary evaluation by B&W Pantex concluded that most of these issues resulted from poor communication and a failure to strictly adhere to procedures. Manufacturing management is taking steps to raise the conduct of transportation operations to the standard of nuclear explosive operations.