

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2013

**MEMO To:** Steven Stokes, Acting Technical Director  
**FROM:** Thomas Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending June 14, 2013

**Work Stand Malfunction:** This week, Babcock & Wilcox Pantex (B&W) paused operations in one facility when a work stand supporting a nuclear explosive failed to operate as designed. The Production Technicians (PTs) were moving the top trunnions of the work stand to a specific location while the nuclear explosive was supported by the lower trunnions. After starting the move, the PTs noticed that only the trunnion on one side of the work stand was moving. The PTs paused operations and contacted the Production Section Manager (PSM), who contacted the process engineer, authorization basis, and nuclear explosive safety personnel. These personnel determined the unit was in a safe and stable configuration. The safety concern, should the top trunnion be used, is that a component or tooling could fall or be lowered onto the nuclear explosive in an unanalyzed manner. B&W process engineers wrote a nuclear explosive engineering procedure to allow tooling personnel to perform minor in-situ repairs to the work stand. The PTs will remove the unit from the stand and the stand will be from the facility to perform an engineering analysis of the failure.

**Tester Cable Malfunction:** This week, B&W paused operations in one facility due to a malfunction of a Category 1 electrical tester cable. The PTs were attempting to connect a cable for an electrical test when they noticed that a pin had broken off the cable and was still attached to the detonator cable assembly. B&W authorization basis personnel, the process engineer, nuclear explosive safety personnel, and the PSM determined that the unit was in a safe and stable configuration and paused operations. B&W is requested confirmatory weapon response information from the Design Agency to proceed with disassembly of the unit.

**Electro-Static Dissipative (ESD) Flooring:** B&W has been repairing and installing ESD flooring in nuclear explosive operating facilities as funding is available. Since 2011, two facilities have failed their in-service inspection (ISI) and have had the ESD flooring repaired. B&W discovered localized spots on the floor that were out of specification while performing the annual ISI. B&W authorization basis personnel consider the entire floor as failing when a single spot fails. B&W removed the top layer of the floor and re-poured a new top coat without affecting the grounding lug. B&W has determined that a third facility showed the possibility of failing the ISI and is being repaired. This week, the subcontractor finished the installation of the new top coat, and B&W will begin acceptance testing next week. B&W is also preparing to install new ESD flooring in two additional facilities. B&W intends to install ESD flooring in every nuclear explosive operating facility (with a couple of exceptions), as funding is available.