



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



September 30, 2008

The Honorable A. J. Eggenberger  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, N.W., Suite 700  
Washington, D.C. 20004-2901

Dear Mr. Chairman:

Thank you for your report on the adequacy of the contractor training and qualification program at the **Pantex Plant**. **B&W Pantex** and the **Pantex Site Office** are taking appropriate action in regard to the opportunities for improvement identified by your staff.


You requested a report on the measures necessary at both the site and the National Nuclear Security Administration to address the long-term fidelity of the weapon trainer units at the **Pantex Plant**. As noted in the staff report accompanying your letter, during the past few years, NNSA has taken action to improve the fidelity of weapon trainer units. Specifically, in FY 07, a trainer unit for the W80 program was completely refurbished, and in FY08 trainer units for the W78 and W87 programs (one each) are in the process of being refurbished. However, as identified in your report, there is currently no formal program to maintain the trainers in a condition that, as closely as feasible, mimics the actual weapon.

NNSA agrees with your concern and concluded the most appropriate course of action is to provision trainer units in the same manner as is currently conducted for weapons. The **Pantex Plant** contractor will identify the replacement parts required to maintain the fidelity of each trainer that supports the active stockpile and then those **components** will be included as part of the Integrated Programmatic Scheduling System (IPSS). The IPSS is used to capture provisioning information for each active war reserve weapon program and is updated annually. **B&W Pantex** is currently preparing a plan that describes the actions and schedules to accomplish this task for each applicable trainer unit. That plan should be available by the end of October for review by the NNSA and will be shared with your staff. The enclosed letter from **B&W Pantex** provides more detail on this plan of action.




Please contact me or Karl Waltzer of the Pantex Site Office at (806) 477-3148 should you have any questions regarding this matter.

Sincerely,



BRIG GEN USAF

 Robert L. Smolen  
Deputy Administrator  
for Defense Programs

Enclosure

cc: Mark Whitaker, Jr., HS-1.1



**Pantex, LLC**

▶ p.o. box 30020 ▶ amarillo, tx 79120  
▶ phone 806-477-3000 ▶ www.pantex.com

**AUG 22 2008**

Mr. Karl E. Waltzer  
Assistant Manager for  
Nuclear Engineering  
U. S. Department of Energy  
National Nuclear Security Administration  
Pantex Site Office  
P.O. Box 30030  
Amarillo, TX 79120-0030

Subject: DNFSB Review of the Adequacy of the Contractor Training and Qualification Program at Pantex Plant

Reference: Letter, Eggenberger/D'Agostino, Dated July 8, 2008

Dear Mr. Waltzer:

The DNFSB staff conducted a review of the adequacy of the contractor training and qualification program at Pantex Plant April 7-11, 2008. The review identified two deficiencies. First, lack of a formal preventive maintenance program for mock-up units used for nuclear weapon training. Second, lack of a formal program within NNSA to direct and coordinate funding and procurement of long-lead-time parts from other NNSA sites and the design agencies to ensure continued operation of the trainer units.

TBP-305, *Configuration of TYPE Weapons*, states that Pantex is responsible for procuring maintenance material for all NNSA TYPE weapons and the SNL/NM TYPE 3 by means of attrition orders. Attrition material procurement is directed by USDOE/NNSA Development and Production Manual 56XB, Chapter 5.1, Interproject Scheduling. Paragraph 5.4 requires the production agencies to identify attrition items and determine quantities of the items required by determining an attrition rate for those items throughout the program life. Production agencies budget and fund for attrition items or materials in the same way they budget and fund for war-reserve production assignments.

The NWC provisioning process is directed by USDOE/NNSA Development and Production Manual 56XB, Chapter 5.1, Interproject Scheduling. It specifies the planning and scheduling of interproject (IP) shipments between production agencies of fabricated or procured components and

ENG-08-48192-901-ENG

materials used to support ultimate user (UU) deliveries, laboratory tests, and joint flight test programs. After receipt of authorized directive schedules, the production agencies develop the IP schedules to reflect program phasing and delivery requirements. These schedules are based on all available information about weapon configurations, assigned responsibilities, product definition, attrition quantities, process time, and receiving plants. The Integrated Programmatic Scheduling System (IPSS) is used to capture this information. Weapon provisioning meetings are scheduled by the Logistics and Manufacturing Center (LMC) located at the Kansas City Plant, with the concurrence of NA-122, for all weapon programs. Multi-site provisioning for each active weapon program is currently conducted annually.

B&W Pantex will develop an overall high-level action plan and schedule to add all active War Reserve (WR) weapon trainer units to the nuclear weapons complex (NWC) provisioning process since the current process is limited to ultimate user deliveries, laboratory tests, and joint flight test programs. This plan and schedule will be completed by October 20, 2008, and will contain a detailed plan that has been created as an example and the systematic approach to creating a detailed plan for each active weapon program that includes: a) validating each weapon trainer unit against the design agency drawing definition; b) a fidelity evaluation of each trainer unit; c) an evaluation of expected usage requirements; d) evaluation of historical useable life of each part/component; e) generating a list of all parts/components with expected need dates for replacement; and f) adding active weapon trainers to the Integrated Programmatic Scheduling System (IPSS).

- A) Validating each weapon trainer unit against the design agency drawing definition – This activity will require a comparison of the Record of Assembly for each weapon trainer with the design agency specifications. The trainer unit may require disassembly to identify/verify contents. This will be completed by the Weapon Training Specialist and Process Engineer.
- B) A fidelity evaluation of each trainer unit – This activity will require a piece-by-piece evaluation of each component for conformance to quality requirements as well as fit, form and function for trainer use. This will be completed by the Weapon Training Specialist and Process Engineer.
- C) An evaluation of expected usage requirements – This activity will estimate usage requirements for the weapons trainer, including number of training classes, readiness activity requirements, process development activities, and tooling tryouts. This will be completed by the Program Manager, Production Manager, and Weapon Training Specialist.
- D) Evaluation of historical useable life of each part/component – This activity will require a piece-by-piece evaluation and estimate of useable life (fit/form/function) of each component for trainer use. This will be completed by the Weapon Training Specialist, Production Planner and Process Engineer.

- E) Generating a list of all parts/components with expected need dates for replacement – Based on information gathered during the previous four activities, a list of required components and estimated need dates will be compiled. This will be completed by the Weapon Training Specialist, Production Planner and Process Engineer.
  
- F) Adding active weapon trainers to the Integrated Programmatic Scheduling System (IPSS) – The list generated in step E will be entered into IPSS. This will be completed by Kansas City Plant personnel. Once entered into IPSS, the weapon trainer configuration will be added to the scope for provisioning for each weapon program. Multi-site provisioning for each active weapon program is currently conducted annually.
  
- G) Update and maintenance of the design agency drawing definition – Update and maintenance of the design agency drawing definition for the weapon trainer units will be required. This will be completed by the applicable design agency engineer.

The provisioning process will be expanded to include the weapon trainer units beginning with the next scheduled provisioning meeting for each program. Special-design items and long-lead items will be added to the applicable site specific Program Control Document (PCD). Funding for special-design and long lead items in the PCD will be budgeted annually at each applicable site. Funding for all other needed components will be added to the appropriate Pantex programmatic budget requirements case.

The actions listed above will be completed with the assumption that resources (facilities, personnel, tooling, etc.) are available and no impact to production activities will occur.

Very truly yours,



Steven L. Young  
Acting Engineering Division Manager