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PTAC DEDICATED AUGUST 5

Department of Energy officials visited Columbus, Ohio, on August 5, 2005, to celebrate the opening of the Performance Test and Analysis Center (PTAC). Because PTAC is an important resource for carrying out DOE's protection strategies, the inauguration of the PTAC facility has attracted broad interest throughout the DOE complex. Glenn S. Podonsky, Director of the DOE Office of Security and Safety Performance Assurance, has been the guiding force behind the vision for PTAC. Other officials who attended the opening ceremony are shown in the photo below.

In acknowledging PTAC's importance, Jerrald S. Paul noted NNSA's commitment to quality improvement in DOE protective force management and capabilities and expressed his conviction that

through a joint effort, DOE and NNSA will lead the way in producing more robust performance test methodologies.

The opening ceremony was followed by a series of briefings demonstrating the various PTAC resources and how they are used. The presentations emphasized how the unique capabilities and expertise resident in PTAC can help DOE apply appropriate technology and innovative protection methods to provide enhanced protection programs with greater effectiveness and at lower cost. The PTAC is intended to play an essential role in the Department's strategy to develop an elite protective force and improve safeguards and security programs nationwide. (See associated articles on pages 2 and 3.) ■



Left to right: Arnold E. Guevara, Director, Office of Safeguards and Security Evaluations; William J. Madia, Battelle Memorial Institute; Jerrald S. Paul, Principal Deputy Administrator, NNSA; Glenn S. Podonsky, Director, Office of Security and Safety Performance Assurance; Cheryl M. Stone, NNSA Deputy Associate Administrator for Defense Nuclear Security; and Maurice W. Daugherty, Director, Office of Safeguards & Security/Emergency Management, Office of Environmental Management.

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EXPECTATION OF EXCELLENCE: THE ELITE PROTECTIVE FORCE

To strengthen the ability to protect vital national security assets, the Department has undertaken a series of far-ranging initiatives. One of these is the development of an elite protective force—raising the standard of performance to a level of “unquestioned excellence” in all aspects of the protective force mission, and ensuring the means of sustainable, long-term support for this high level of performance.

The Department is actively moving forward to make this elite protective force a reality. At Headquarters, concrete actions are being taken within the organizations that share responsibility for implementation: the National Nuclear Security Administration (NNSA), the Office of Security and Safety Performance Assurance (SSA), and the Office of Energy, Science and Environment (ESE).

Expecting Excellence

The most important change in implementing the elite protective force is the unrelenting focus on the tactical mission of combating the armed terrorist threat. While this has always been a primary goal, especially since the issuance of the revised Design Basis Threat, the thrust of policy is now shifting to excellence in meeting this mission. At the individual level, this expectation of excellence means meeting higher fitness and performance standards. This shift in emphasis will demand that the protective force devote more time and resources to planning, training, and testing in support of the primary tactical mission. As the supporting policies evolve, the protective force will be relieved of non-essential routine duties, with assignments being reoriented to concentrate on a tactical posture that maximizes combat readiness. There will be more frequent performance tests of individual and unit tactics, and more frequent and intensive oversight of protective force performance.

The Combat Model

In addition to meeting higher standards for individual fitness and performance, the elite protective force will be organized into tactically cohesive units, or teams—on the model of military combat teams. It is envisioned that personnel who work on the same shift, many of whom already operate as teams, will receive specialized, on-shift tactical training and participate in performance tests as teams, as well as individually. Training and doctrine are also



being developed to enhance protective force supervisors’ tactical leadership skills. To support the shift to the combat model, the Department is undertaking a complex-wide effort to upgrade tactical response plans. In conjunction with the recent site assistance visits conducted by NNSA, SSA, and ESE, the Performance Test and Analysis Center (see related article on page 3) is expected to be an important resource in this effort. As tactical plans evolve, they will be integrated with current and emerging technologies to implement a “denial” strategy, with less emphasis on recapture. The protective force will then have the skills and tools, including active and passive denial systems, to identify and engage adversaries on all feasible pathways, at an earlier point in the attack than was previously envisioned.

Advancing the Mission

There are many reasons why the elite protective force is not already a reality. For example, with a shift to more frequent, intensive performance tests, the Department needs to reevaluate the application of long-mandated industrial safety standards and how they apply to the elite force, where the rigors of realistic protective force training inherently increase the potential for personal injury. Furthermore, the Department needs to consider how to address members of the current protective force who may have difficulty meeting the enhanced fitness standards. Some of these issues go right to the heart of existing protective force contracts and memoranda of understanding. A cultural change of this magnitude will require strong and resourceful leadership that involves all levels of management. To drive this change, the Force Management Advisory Team (FMAT) has been formed, composed of Headquarters and field representatives from NNSA, SSA, and ESE. The FMAT will further examine the structure of the elite force and the changes needed to adopt the “combat model,” and will support NNSA and ESE with the implementation plans that are needed to drive these changes.

These changes must be made. As the steward of some of the nation’s most dangerous assets, the Department aims to meet today’s threats in a manner that is not only fully effective, but also fully defensible—systematic, cost-effective, and worthy of Department-wide support. Secretary Bodman stated, at the All-Hands Meeting in February 2005, “Machiavelli said: ‘It must be considered that there is nothing more difficult to carry out . . . than to initiate a new order of things.’ But, working together, I believe that we will meet—and exceed—our goals and tackle any challenges ahead. In doing so, you will help to advance the key missions of this great department.” ■



PTAC: NEW HORIZONS IN SECURITY PERFORMANCE TESTING

Soon after the 9/11 terrorist attacks, the Department of Energy undertook a number of far-reaching security initiatives to bolster physical protection of the nation's nuclear weapons stockpile. Principal among those initiatives is raising protective force performance to a higher level of excellence, with an elite mission focus and advanced tactical skills (see related article on page 2). To achieve that level of performance, the Department recognized the need for higher testing standards for the Department's protective force capabilities, and for identifying new techniques to stress physical protection systems during the conduct of such testing.

August 5, 2005, marked the opening of the Performance Test and Analysis Center (PTAC) to meet these needs (see article on page 1). Developed under the guidance of the Office of Security and Safety Performance Assurance (SSA), PTAC—pronounced “P-Tack”—provides extensive state-of-the-art analytical capabilities to sharpen the Department's focus on a broadened view of security performance testing.

PTAC was designed to be *the* place where security professionals from around the DOE complex can gather to develop and test new security concepts and scenarios. Its resources include skilled staff and a wide range of information and models to support testing and analysis. For example, PTAC resources will help to develop attack scenarios based on postulated adversaries who would have several years to prepare. Testing and analyzing such scenarios will identify weak spots in protection systems, aid in the development of new ways to mitigate weaknesses, and resolve technical concerns through detailed, authoritative analysis.

A Departmental Asset

The vision for PTAC is twofold. First, PTAC will be a center for Department-wide collaboration on security issues. Field security professionals, Headquarters senior staff, and associated national security experts can share and examine intelligence, technologies, testing resources, and methodologies to help everyone work better and smarter.

In addition, PTAC resources will be applied to strengthen the Department's independent oversight of safeguards and security programs. A specialized Performance Test Group, based in the PTAC, will coordinate the development of standard protocols for all aspects of performance test planning, conduct, and safety for the Office of Independent Oversight and Performance Assurance (OA). Protocols will include formal exercise planning tools (e.g., adversary capabilities list, adversary force multipliers list, and logistics support procedures), rules of engagement, simulation methods, controller guidance, and evaluator guidance/evaluation criteria. Once fully developed, these tools will be shared in an effort to standardize performance test operations across the Department. The Performance Test Group will prepare reliable and consistent safety protocols for performance testing and will create safety files (based on controlled testing) for each piece of equipment, weapon, or pyrotechnic device used by the OA Composite Adversary Team (CAT). The goal is to develop enough authoritative safety information, in cooperation with other Departmental safety groups, to ensure the safe conduct of these major test efforts and prevent last-minute difficulties that impact the conduct of such testing during an OA inspection.

PTAC will support the Department by providing for:

- Reviewing protection program planning documentation
- Conducting target analyses in conjunction with performance test preparation
- Developing adversary attack scenarios designed to stress protective force capability
- Developing performance test protocols and tools to standardize enhanced test planning and conduct
- Developing performance test safety protocols and coordinating safety testing of performance test equipment, weapons, and pyrotechnics
- Establishing a resource capability that better replicates adversary tactics, techniques, and effects
- Tracking and trending protective force performance test results
- Conducting long-term tests and simulation designs for protection systems and technologies
- Participating in research and development efforts to advance performance testing
- Developing future performance test models.

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Inside SSA

Upcoming Activities

Bratislava Accord Workshops (in Moscow)

- Security Culture
- Nuclear Security Best Practices

Design Basis Threat Site Assistance Visit

- Hanford Site

Safeguards and Security/Cyber Security Combined Inspection

- Nevada Test Site/ Nevada Site Office

Safeguards and Security/Emergency Management Combined Inspection

- Oak Ridge National Laboratory

Safeguards and Security Inspections/Reviews

- Office of Secure Transportation
- NNSA Service Center Special Review
- Waste Isolation Pilot Plant
- Kansas City Plant

Emergency Management Inspections/Reviews

- Pantex Plant
- Radiological Assistance Program

Environment, Safety and Health Inspections/Reviews

- Y-12 National Security Complex
- Los Alamos National Laboratory



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PTAC: NEW HORIZONS IN SECURITY PERFORMANCE TESTING

On the Horizon

PTAC will provide a forum for inter-organizational collaboration in raising Departmental protective force performance to a higher level of excellence. To reach that level of performance, PTAC participants will repeatedly challenge conventional thinking. The goals are to identify new ways to tax the physical protection systems by using innovative adversary attack scenarios; these will not only stress the current response capabilities of DOE protective force, but will also help promote the elite mission focus and advanced tactical skills envisioned by the Department.

PTAC will help the Department meet today's and tomorrow's pressing security challenges by providing:

- A single location for consolidated information resources (including expertise in explosives and chemical/biological effects), including a comprehensive, accessible, and reliable knowledge base for planning performance tests
- Improved pre-test preparation for conducting tougher, realistic exercises and intensified vulnerability/risk analysis reviews
- Ready access to a variety of technical databases to keep the Department on the cutting edge of adversary capabilities and techniques
- Tracking and trending of performance test results to identify systemic needs and solutions for the at-risk Department facilities
- Formalization (and eventual standardization) of performance test protocols to

improve the quality of performance testing and strengthen assessments of the protective force's true capabilities.

In summary, the establishment of PTAC and subsequent collaboration of Department security professionals will solidify DOE's position at the forefront of performance testing and analysis for the protection of critical national security assets and homeland security infrastructures. ■



Glenn Podonsky (left) and Jerry Paul attend a briefing in the PTAC main conference room.

Solicitation of Comments, Questions, and Suggestions

SSA welcomes your thoughts about our newsletter. Please send or phone comments, questions, or suggestions to:

Glenn S. Podonsky, Director
Office of Security and Safety Performance Assurance
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1290
301-903-3777

e-mail: Glenn.Podonsky@hq.doe.gov

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