

The NAVSEA Scientist to Sea Experience

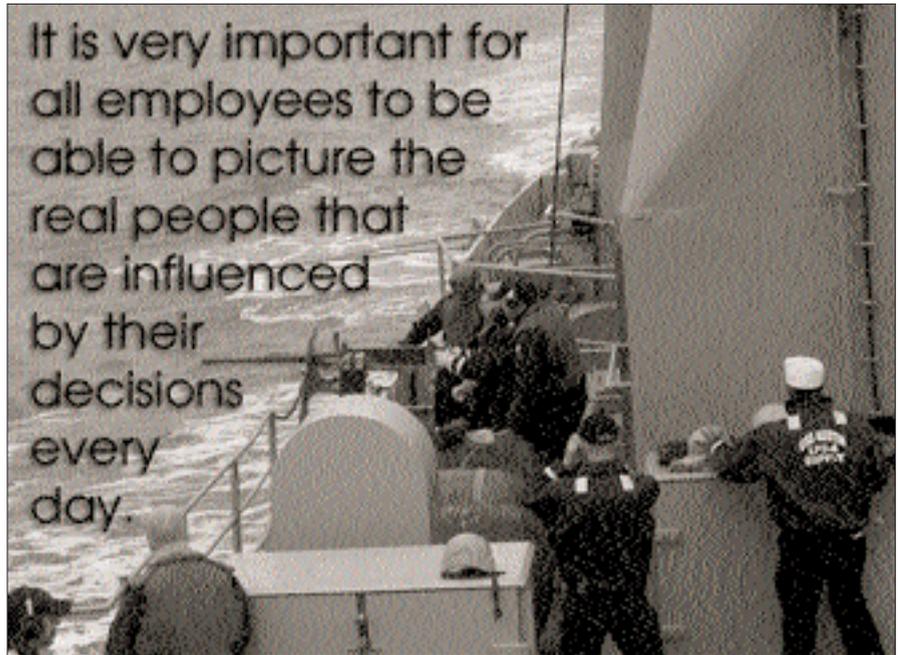
Matthew Tropiano Jr.

When I did a survey two years ago to evaluate the effectiveness of Naval Sea Systems Command (NAVSEA)'s Systems Engineering Development Program, one of the areas that emerged as profoundly influencing new engineers in the program was the chance to experience situations that gave them direct contact with the sailors. Whether it was a sea trial, a rotation at the shipyard where the engineers directly worked on the equipment, or the Scientist to Sea program, these experiences had memorable and motivating impacts on the engineers.

Engineers Go to Sea

The Scientist to Sea program has been in operation for several years and is directed out of the Office of Naval Research. The purpose is to give civilian personnel who support the Navy an opportunity to learn about life at sea for military personnel and to observe naval equipment and procedures. The scientists are informed that they are not on board to fix anything, nor are they to bring tool kits unless they are in a position to give advice. The scientists visiting the ship are mostly from the warfare centers, laboratories, and headquarters that develop systems, equipment, software, and technical documentation for the Navy. While they may have considerable experience in the Navy technical shore establishment, they are probably experiencing Navy life at sea for the very first time.

Before the experience, participating scientists are required to log onto the security awareness Web site and take the requisite training. They are also informed of what to bring and what not to bring on the trip, and they receive instruction on ship protocols, rules of order, emergency procedures, ship organization, and how to address the sailors and officers. They are also encouraged to record the names, ranks, and positions of those embarked personnel who were especially helpful during the visit.



The sailors are instructed that the Scientist to Sea ship riders are not to be treated as VIPs, but as personnel who want to learn about how the ship works and to experience the working and living environment of the people who operate and maintain the systems that they—the scientists—design. The sailors are encouraged to talk to the scientists about their experiences, the ship, its equipment, and its performance—the point being that an understanding of naval operations, the shipboard environment, and the employment of their systems will enhance the scientists' ability to produce better products for the fleet. As one Naval Surface Warfare Center, Dahlgren Division, scientist said, "We learn more from watching them than we do just testing the equipment inside a lab."

The ship maintains its rigorous schedule while the scientists are on board. The schedule may include exercises from replenishment to man overboard exercises, to full ship fire drills and flight operations. Occasionally, the scientists may have a life-impacting experience. "On our particular trip," said one, "we were on a destroyer. We had the opportunity to witness a variety of drills, including target practice, which was very interesting. We also

Tropiano, program manager for Naval Sea Systems Command's acquisition intern programs and Dashboard Project, is Scientist to Sea coordinator for NAVSEA Headquarters. He holds a bachelor's degree in electrical engineering, a master's in religious studies, and a master's in business administration.

Pentagon Procurement Chief Assumes Senior Role at GSA's New Federal Acquisition Service

Deidre Lee, the Defense Department's director of procurement, has assumed a senior role at a newly formed branch of the General Services Administration. On Aug. 8, she became the assistant commissioner for integrated technology services in the GSA's new Federal Acquisition Service.



Lee assumed her position as director of defense procurement and acquisition policy, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), on Nov. 3, 2002. Before assuming this position, she was the director of defense procurement for two years. During her tenure at the Department of Defense, Lee was responsible for all acquisition and procurement policy matters in DoD and also served as the USD(AT&L)'s principal advisor. She led the department's transformational policy initiatives in the Federal Acquisition Regulation (FAR), Defense FAR Supplement, and the DoD 5000 series acquisition regulations; and she was DoD's advisor for competition, source selection, multiyear contracting, warranties, leasing, and all international contracting matters.

Prior to joining DoD, Lee served as the administrator for the Office of Federal Procurement Policy from July 1998 to June 2000. From March 1993 until July 1998, she served as the associate administrator for procurement at the National Aeronautics and Space Administration. Prior to that, she served as the deputy associate administrator for procurement and the executive officer to the deputy administrator of NASA. She rose through the ranks to become NASA's senior acquisition official and has a distinguished record as a reformer and innovator.

During her tenure at NASA, Lee was awarded the National Aeronautics and Space Administration's Outstanding Leadership Medal and Exceptional Achievement Medal. In 1996 and 2001, she was a recipient of the Senior Executive Service Presidential Rank Award. In March 2001, she received the Honorable Elmer B. Staats Award for Accountability. In August 2004, Lee was honored with the Office of the Secretary of Defense Award for Excellence.

had the opportunity to see a few burial at sea ceremonies, an underway replenishment, and helicopter ops."

The scientists report that the crew members are always helpful and willing to explain when asked questions. After a recent experience, several scientists commented on the demonstrated teamwork and commitment of the crew. "I now have an appreciation of what it takes to man a ship while under way. These men and women do a ton of hard work 24/7. Amazing," was a typical remark. Another representative comment was, "I have realized that all these men and women are constantly surrounded by danger. They don't have to be deployed in far seas to lose a shipmate in an accident; they don't have to be far away to be missed by their family and friends. Their everyday job is difficult and not meant for a lot of people."

Stepping Into the Crew's Shoes

There is clearly no substitute for practical, hands-on experience. "I work with ship designers in order to make ship systems easier to use and better for the sailor," commented one recent participant in the Scientist to Sea program, "so stepping into their shoes for a while has improved my effectiveness as an engineer exponentially." Another scientist commented on the value of actually seeing equipment in situ, saying, "Now when I go back to work, I'll be able to recall the exact compartment where the equipment is located on the ship as opposed to just trying to imagine it."

The experience also gives the scientists a renewed and reinvigorated tangible vision of their own work and its value. "The trip helped me see the importance of my role at NAVSEA and our mission in supporting the fleet ... [and] helped me to better understand how the personnel on board a ship interact and operate and how we can apply that to our jobs at NAVSEA," commented one participant. The interaction with crew personalizes the scientist's work. A scientist sums it up: "No amount of discussion with subject matter experts or reading of documents can substitute for this experience. It is very important for all employees to be able to picture the real people that are influenced by their decisions every day. The Scientist to Sea experience has made me feel much more responsible and accountable to the fleet."

In follow-up assessments, 100 percent of the scientists recommended that others participate in the Scientist to Sea program. The experience refocuses scientists' mission and clarifies their vision, something that they are likely to pass on to their coworkers.

The author welcomes comments and questions. Contact him at matthew.tropiano@navy.mil.