NAVAL AIR SYSTEMS COMMAND, PATUXENT RIVER, Md. – Flying a C-26 Metroliner helped change Stephanie Rice’s approach to data. Rice, the Joint Precision Approach and Landing System Supportability Test and Evaluation lead, flew the plane recently during a nine-day course at the U.S. Naval Test Pilot School (TPS) located in Naval Air Station (NAS) Patuxent River, Maryland, as part of an effort to help logisticians better understand warfighter demands.

“As part of the course, I operated the systems I learned about in the classroom,” she said. “It gave me a better perspective on how pilots and aircrew differ in their deficiency reports.
when documenting issues that occur during a flight. I learned to ask questions beyond what's on my checklist as well as how to better state and define noted deficiencies which can be used in the supportability, test and evaluation (ST&E) of aircraft.”

Rice was one of seven Naval Air Systems Command (NAVAIR) Logistics and Industrial Operations (AIR 6.0) employees who attended Introduction to Aircraft and Systems Test and Evaluation Short Course at TPS in March. This course was funded by Section 219, part of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 which is one of more than 60 research funding opportunities available within the DoD. The law authorized defense laboratory directors to set aside up to three percent of their laboratory’s funds in support of high-value, potentially high-risk research and development. This was the first time Section 219 funding was used for training of this type.

AIR 6.0 is seeking to increase its number of projects receiving alternative research sustainment funding. As part of this effort, 10 representatives and technologists attended a Logistic and Industrial Workshop in February at Naval Air Warfare Center Training Systems Division (NAWCTSD) Orlando, Florida, to better align logistics science and technology efforts within and among their respective commands and organizations. This inaugural event provided an opportunity for participants to learn about Fleet Readiness Centers (FRCs), Naval Air Warfare Centers (NAWCs) and NAVAIR Research and Engineering’s (AIR 4.0) research approaches, the sustainment-related research at each site and develop a future framework for collaboration.

“When I learned that the TPS course was opened to civilians, I jumped at the chance to send seven NAWC 6.0 employees,” NAVAIR ST&E Branch Manager Billy Biggs said. “This was an excellent opportunity—not just to educate logisticians, but to establish relationships with other readiness stakeholders.”

Biggs said the benefits were immeasurable. “Engineers and logisticians need to know each other. And second, I wanted them to sample what a flight test is like. Understanding the role each of us play in how readiness is evaluated and generated creates a truly integrated team,” he said.

Doug Waddell, ST&E deputy branch manager, also attended the course. He said he now has a greater appreciation for the magnitude of factors that must be considered before and during every flight test. “With this experience and newly gained insight, I have the ability to develop T&E documents such as test plans, deficiency reports and reports of test results in a manner that is better understood by the engineering community,” he said. He anticipates applying what he learned to an upcoming ST&E review of the MH-60S's next generation Gunner Seat.

Director of Strategy and Operations (AIR 6.0T) Bruce Dinopoulos, who headed the Logistic and Industrial Workshop, said science and technology funding makes possible promising
initiatives and opportunities that would not ordinarily be resourced by traditional funding streams. “Each year, more than $300 million is available for research, technology transition and workforce development within NAVAIR,” he said. “These dollars can be used to develop training, get advanced degrees and conduct sustainment-related research within FRCs and NAWCs to include partnering with universities and private industry.”

Section 219, Small Business Innovative Research and Technology Transition are the most common. Eligible areas for research include supply forecasting, Product Life Cycle Management, analytic tools, digital thread, cyber, block chain, additive manufacturing or any pursuit that makes a logistician, maintainer or artisan more effective.

Joe Sparks, COMFRC Advanced Technology and Innovation lead, said the Small Business Innovative Research (SBIR) program provides the FRCs the opportunity to advance projects that reduce inspection time and cost avoidance by providing capability to repair parts that would have otherwise been scrapped. “We are always looking for ways to continue improving and are re-examining our core capabilities to ensure we are focusing our efforts where they are needed,” he said.

AIR 6.0 and COMFRC are evaluating opportunities to jointly pursue research funds that will be used to increase productivity through the development of resources and tools. AIR 6.0 is also seeking applications in the areas of data analytics (to include deep learning, artificial intelligence/intelligent agents (forms of machine learning)), additive manufacturing, augmented and virtual reality, data-driven prognostics and digital thread.

Rice encouraged others to grow by proactively pursuing experiences beyond their areas of expertise. “Look for opportunities outside of your field and don’t be afraid to try those that seem unrelated,” she said. “You will be surprised at what you already know and what you can learn to enhance your current job.”
Ten technologists and representatives met Feb. 13-15 at the inaugural Logistics and Industrial Workshop to discuss current sustainment-related research. Pictured are (from left to right, first row): Gabriel Draguicevich, 6.0T, FRC Southwest, San Diego, California; William “Bill” Leach, 6.0T, NAWCAD, Lakehurst, New Jersey; Joseph Sparks, Advanced Technology and Innovation lead, Commander, Fleet Readiness Centers, Patuxent River, Maryland; Don Snyder, 6.0T, NAWCTSD, Orlando, Florida; Ernest Sylivant, 6.0T, FRC East, Cherry Point, North Carolina; Mike Breckon, 6.0T, NAWCAD, Patuxent River, Maryland; (second row, from left to right) Brad Ehrhardt, 6.0T, NAWCTSD, Orlando, Florida; Kent Bartels, 6.0T, NAWCWD, China Lake, California; Bruce Dinopoulos, AIR 6.0T, Patuxent River, Maryland; and Tom Kersey, 6.0T, FRC Southeast, Jacksonville, Florida.