




Kathy Erlick

Kathy Erlick has what some might consider a daunting goal – to keep a Boeing promise to make engineering more efficient within Global Mobility Systems at Integrated Defense Systems in Long Beach, Calif. To help streamline processes and tools within the 10 engineering functions, she needs every ounce of her education and training in systems engineering and project management – not to mention a doctorate in organizational leadership. She inherited her dad’s engineering spirit. “It was born in me,” she says. But she discovered her most important talent as a child – relating to people who have differing views. “Building a winning team means drawing out the best in people,” she says. “It’s about involvement. Everybody wants to feel that they are contributing to the solution.”



Across Boeing, engineers, technologists and manufacturing people are helping the company to meet its commitments to customers.

Promises

Kept

By WILLIAM COLE

When Boeing promised airlines a next-generation jetliner that would reduce fuel costs by 20 percent, its design engineers came up with the 787 Dreamliner. When the company promised the U.S. Navy a new electronic aircraft that could suppress enemy defenses, designers created the EA-18G Growler. When Boeing promised the U.S. Air Force increased communications and bandwidth capabilities, engineers created the Wideband Gapfiller Satellites program.

“Delivering results shows that promises made are promises kept,” says John Tracy, senior vice president of Boeing Engineering, Operations & Technology. “Who stands behind us when we make a commitment to our customers in the Pentagon, to the airlines or to our space agencies? It’s our employees – people of every background, experience, talent and skill – who work in our factories, our labs and our offices. They have set high expectations for themselves. They’re proud of their work. They care about Boeing and its customers. They get the job done. They keep their word.”

Meet a few of Boeing’s 156,000 teammates who explain how proud they are about helping Boeing to meet its commitments to customers and beating the competition.

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Alex Velicki

How does Boeing produce advanced structures that can better withstand battle damage in, say, a C-17? Or create a lighter, less-expensive commercial airframe for the future? It calls on advanced structures experts like Phantom Works' Alex Velicki in Huntington Beach, Calif., who is working on second-generation composite designs. "We borrowed an approach from the recreation industry, which builds tents and boats," says Velicki. "Using similar techniques, we developed a one-piece composite panel design with highly efficient load paths and stitched interfaces to arrest damage. We can infuse it with resin and cure in an oven, all without the use of interior moldline tooling. We took some existing ideas, applied them to aerospace-grade materials, and then moved it forward."



Olga Sevostianova

She was once a stress analyst for the renowned Russian Tupolev Design Bureau in Moscow. Now Olga Sevostianova is among the 1,200 Moscow-based Boeing Design Center engineers helping the company to deliver on its commitments to Commercial Airplane customers across the world. She was named Engineer of the Year at the center in 2005. A Boeing employee for six years, Sevostianova sometimes travels to Puget Sound in connection with her job as stress lead engineer working with the assembly team on the 787. She enjoys teaching, and learning in Russia and the United States. "We have so many young engineers so eager to learn," she says. "The range of talent at Boeing is extraordinary. I'm learning new things every day. This is an exciting company to work for. We have a great future."



Amy Helvey

Mention metallic processes to Amy Helvey and her eyes light up. "It's at the heart of our aircraft and other products," she says. A consistent winner of her grade school math competitions, Helvey knew that engineering was for her at an early age. "I watched airplanes take off and land when I was a child," she says. "Being fascinated by flight led to my being fascinated by the complexity of the internal structures of aircraft." Now, as manager of the metallics additive process at Phantom Works' advanced manufacturing facility in St. Louis she is helping the business units by figuring out better ways to produce metal parts. "New ways of building up titanium is the big push in our industry now," she says. "I love R&D work, and R&D people. This is a great place."



Candice Smith


As a key member of the Combat Systems team at IDS, Candice Smith is helping to keep a Boeing promise to provide the world's best capabilities to the U.S. Army. After high school, she was planning to join the U.S. Air Force. Then she received help from a guidance counselor who introduced her to a minority engineering program at Southern Illinois University. She joined the Army National Guard as a military policeman, won a scholarship from SIU, and now is working in St. Louis as a systems engineer. "I'm so glad that I took that opportunity," she says. "I'm the first college student in my family. My parents were so proud and happy for me." Now, she's trying to help other youngsters. "I want to help them achieve their dreams just as others have helped me."





Eusebio Gomez

By leading a major efficiency effort on the C-17, Eusebio Gomez is helping to keep a Boeing pledge to the U.S. Air Force to bring down costs. Gomez thrives on the challenge. But Boeing's drive for diversity – in products and people – has also played a big role in his enthusiasm for the job as director of Technology Integration and Lean Manufacturing at the C-17 plant in Long Beach, Calif. "There is an immense variety in our products, and they are being created and produced by a remarkable blend of people," says Gomez who began working on the program 17 years ago as an industrial engineer. "It all starts and ends with our employees," he says. "Without them we can do nothing. Working with the people on the shop floor to affect change offers the greatest reward. I am proud of them and proud to work on this program."



Gary Wright

Boeing customers look to Gary Wright to make sure that the wing structures for the 747-8 intercontinental and freighter aircraft can be built to meet performance goals. “This is somewhat similar to building a home. I have to let the customer know what’s possible, in engineering terms,” says Wright, chief wing structures design architect for the 747-8 in Everett, Wash. “And that sometimes means inventing new processes and building new tools, materials and facilities to get the work done. There are many different things we are doing inside the wings and in the way we build them to make them more efficient.” Wright grew up in an airplane family – “my dad was a mechanic and pilot” – and was intrigued by aerospace at an early age. “This is more than a job,” he says. “It’s a passion.”



Melissa Lorenzen

Boeing promises to provide space satellites of the highest quality to government and commercial customers. Melissa Lorenzen, an electromagnetic compatibility engineer in El Segundo, Calif., is in a pivotal position to help. She supports the design teams who create the “brains” of the satellites – radio frequency, digital and processor units. “I work closely with the designers to make sure the unit will pass EMC testing in the lab once it is built,” she says. Her love for mathematics and physics led her to major in engineering at the University of Southern California and to her Boeing career. But she’d like to take a leadership role working with people. “You can learn far more from the people around you than from reading a book,” she says. “People, not theories, provide solutions.”

Gary and Mike Renieri

They've led parallel lives and careers, and it's hard to tell them apart. But identical twins Gary (left) and Mike Renieri of St. Louis are making individual efforts to help Boeing keep its pledge to customers. Gary works on systems design reviews for Combat Systems at IDS; Mike works on structural composites development for Phantom Works. They joined Boeing in 1976 and each became Technical Fellows. "We didn't plan it this way," says Gary. "We grew up interested in the same things." Mike says, "When we're working on technical issues we can help each other fill in the gaps through the strong synergy between us." Both are proud to be helping Boeing "give customers the best products they can lay their hands on."

