

Seeing is believing

Three employees share what it's been like to watch the C-17 program progress from prototype to success

By Cindy Anderson

Millions of hands have touched the C-17 Globemaster III during the airlifter's history from prototype development to the recent 200th delivery. And there are scores of stories to tell along the journey.

No better to share a few of those stories than Gary Beckum, Greg Gaskin and Randolph Masada, who are part of the second-shift crew at the Long Beach, Calif., C-17 factory and who have dedicated their careers to perfecting the aircraft.

The journey for Beckum, a senior manager of the frontline Integrated Product Team, began before the first C-17 rolled out of Boeing's final assembly facility in Long Beach and took its first flight on Sept. 15, 1991. Beckum, like his father before him, toiled over the pre-construction plans that were to become the C-17 Globemaster III. After a tour of duty in Vietnam, Beckum worked on commercial jets and then in the early '70s he helped develop the prototype (YC-15) that would evolve into the C-17. "We built those first planes by hand," said Beckum. "No tooling, no computers. We did everything the old fashioned way."

When Air Force requirements shifted toward longer-range operations for strategic airlift, the YC-15, with its innovative high-wing concept, was doubled in size and was given stronger engines and more cargo area—effectively turning it into the C-17 of today. Three C-17s were built before production began (S-1 for static testing, D-1 for durability testing and T-1 as the first test plane).

Beckum spent the better part of the '80s transforming an engineering concept into a fully functioning production line. Every piece of the aircraft, down to the last rivet, had to be identified and sourced to an intricate network of internal and external suppliers. There were wing panels to develop, parts to order and people to hire and train.

"When I worked in Advanced Planning in 1985, it felt like we were working in slow motion getting drawings from engineering and planning how and where it was all going to be assembled," Beckum said.

There were other challenges to overcome in those early days. Beckum had started on DC-8s and Gaskin (now team leader of



interior installation cargo for the C-17) on DC-9s, so they both knew how to assemble an airplane. But the commercial line couldn't spare employees, and they had to look outside the company to find staff to build the C-17.

While the team was coming together, so was the process. Gaskin remembered that they were still building tooling for each step of the process while the production line was building the airplane.

The process wasn't fast enough, and the Air Force put C-17 production on a short lease. "The Air Force basically told us to get our act together, or they were not ordering more airplanes," Beckum said. "I wore sunglasses on the way in to work the second shift and wore sunglasses home as the sun was coming up. Twelve-plus hours a day, seven days a week. But it didn't matter. We were behind schedule; we did whatever we needed to do to deliver the aircraft."

Masada, a manufacturing engineer in installation cargo, remembered the tenuous production start. "The fear of stopping

the line after 40 planes pulled everyone together,” Masada said. “Then, the Air Force said OK you made it, let’s go for 60. Then we got to 100 and celebrated.”

Production of the next 100 jets focused on productivity improvements. Gaskin remembered how tedious and time consuming it was to sort through open bins to assemble and install each detail. His team evaluated the process through a Lean event and recommended a kitting process. “Each mechanic now has a kit with whatever parts they need at the point of use, meaning there are no extra parts and no waste,” he said.

The final product has become the world’s leading advanced airlifter and has set more world records than any other mobility aircraft in history. The C-17 Globemaster III fleet has logged more than 1.5 million flying hours, and the program has won the prestigious Collier Trophy in 1994 and the Malcolm Baldrige National Quality Award for quality and performance in 1998.

“This 200th plane is symbolic of all of the hard work and dedi-

cation by our team in Long Beach, Macon (Ga.), St. Louis and across Boeing, as well as our hundreds of suppliers around the world,” said Jean Chamberlin, vice president and general manager of Global Mobility Systems. “The C-17 is the absolute best military transport flying today, and American forces tell us day-in and day-out they are proud to have it deployed wherever they are around the world.”

With the latest airlifter delivery, there are now 183 U.S. Air Force C-17s flying missions around the world. Another 14 C-17s fly missions for international customers including the Royal Air Force, the Royal Australian Air Force and the Canadian Forces. Rounding out the 200 advanced airlifters are the three prototypes (S-1, D-1 and T-1) that played an integral role in development.

“I like the idea that I can see changes happen, and employees really can make a difference,” Gaskin said. “I’m also really proud when I see the C-17 in the news and hear about all the good that it’s doing.” ■

cindy.a.anderson@boeing.com



PHOTOS:

LEFT: Gary Beckum (from left), Randolph Masada and Greg Gaskin have dedicated their careers to building and improving the C-17 Globemaster III for the U.S. Air Force and international customers. **ROBERT SCHNEIDER/BOEING**

TOP: The 200th C-17 Globemaster III heads for the paint shop. It recently was delivered to Charleston Air Force Base, S.C. **BOEING**

C-17 GETS BOOST FROM DOD, UAE

The C-17 program last month got a boost from two customers.

The U.S. Department of Defense announced a \$2.95 billion contract to supply 15 additional C-17s for the U.S. Air Force. The contract is part of the government’s 2008 fiscal year supplemental defense spending bill. Jean Chamberlin, Boeing vice president and general manager of Global Mobility Systems, noted that this order will keep the C-17 production line moving well into 2010.

In addition, the United Arab Emirates said it plans to purchase four C-17 Globemaster III advanced airlifters. A UAE spokesman made the announcement at a news conference at the IDEX defense exhibition and conference in Abu Dhabi.

“We remain vigilant in our efforts to provide an affordable option to meet the needs of the Air Force and international customers,” Chamberlin said.