

Struttin' their stuff

Here's how Employee Involvement helped a small team excel and win new work

By Forrest Gossett

Jim Bryant has seen improvement initiatives come—and he's seen them go—in his 30-plus years working in Boeing's KC-135 aerial refueling tanker program.

But mention employee involvement and Bryant gets passionate about the Employee Involvement (EI) team that supports the KC-135 strut program in Wichita, Kan. "It works. EI is very effective because management allows the teams doing the work to solve problems and create solutions," he said.

EI played a big part in saving the KC-135 strut program in Wichita—and quite possibly Bryant's job. In 2005, Boeing Wichita completed a program that placed new CFM56 engines on most of the nation's KC-135 fleet, with the new planes designated KC-135R models. Adding new engines to the aircraft required construction of new engine struts, the structure that attaches them to the wing.

When that contract ended, the KC-135 strut team looked for and found new work. The Air Force needed 72 engine struts for its older, Eisenhower-era KC-135E models. However, to be affordable for the Air Force, the strut program needed to streamline processes and cut production costs. Otherwise, the work would likely not stay in Wichita.

That's when Boeing Wichita implemented the EI process to make the program more efficient and economical. Terry Laird, a safety monitor, said the team dissected every aspect and step of the strut manufacturing process in order to offer the most cost-effective solution.

"In this case, we discussed our processes, how we do things, and eventually came up with a plan that worked and that met our customer's cost requirements," Bryant said. The team even designed new tooling to handle the job.

Because of the team's efforts, Boeing Wichita received the contract for the 72 struts. The team went on to start producing them ahead of schedule.

Then, in January 2007, the Air Force informed Boeing that the E-strut program order would likely be reduced from 72 struts to fewer than 30 because of budget constraints and the retirement of KC-135E-based tankers.

"The program was de-scoped, but every team member understood the importance of completing the job no matter what," said Fran Veldman, strut program manager.

"We understood the only way to get more work was to excel on our current work, so that's exactly what we did," Laird added.

Their persistence paid off when the Air Force awarded Boeing a contract to produce 12 struts of a unique configuration for special-mission KC-135s.

The strut team's commitment to on-time delivery has not wavered. In January, the team delivered a set of struts for the special-mission KC-135E a full 41 days ahead of schedule, meeting an urgent Air Force requirement. Dale Devlin, shop manager for the strut program, said accelerating the schedule was possible because of EI enhancements including improved tooling, drilling and assembly sequencing.

"I'm convinced this team can build anything," Devlin said. "It's a great group of workers." He added that the team is on the verge of progressing from an EI rating of Level 3 to the highest: Level 4.

And there's more work in the pipeline. The team will build new spare struts and engine fan ducts for the KC-135R. That aircraft is scheduled to be in service until at least 2040, providing ample opportunities to help the Air Force upgrade and maintain the fleet.

Bryant says he and his teammates are eager and ready to help keep the aircraft mission-ready. "The improvements," he said, "are all about pride. When you realize that people flying at 35,000 feet depend upon you to stay alive ... it becomes personal." ■

forrest.s.gossett@boeing.com



PHOTO: Jim Bryant, a modification mechanic, assembles an engine strut for a special-mission Boeing KC-135. BEVERLY NOWAK/BOEING