

Intent to prevent

Designing safety into Boeing products and processes helps reduce workplace injuries—a key Boeing goal

By Kathrine Beck and photo by Paul Pinner



Missy Brost works with engineers to prevent workplace injuries through well-conceived product and process design. In this *Frontiers* series, which profiles employees talking about their jobs and the way their work fits into Boeing's overall goals, Brost explains how this approach can help the company keep its people healthy and reduce lost work time.

When I was a shop floor manager, I saw the effect of physically demanding work on the crew. They had been doing tough jobs for a long time and it was a strain.

Now, as the program manager of Design for Ergonomics and Workplace Safety, a new position, my job is to figure out how to address safety as we're designing our products and processes. This way, we can help employees avoid injuries as they assemble our products. To develop and deploy tools, capabilities and processes to create products that are easier and safer to produce and maintain—that's the goal of ergonomic design.

One example would be an assembly that typically comes from a supplier in a single, very large piece that is heavy and awkward to move into installation position. What if the design stipulated that the assembly arrive in three pieces to make it easier to move? And what if the design ensured that mechanics could install it on the airplane without ergonomic stress, to minimize the potential for related injuries?

I work in Seal Beach, Calif., as part of Boeing Defense, Space & Security, but this is a companywide initiative. Because I'm still setting up the program and have an engineering background and not an Environment, Health and Safety background, I spend a lot of time on the phone talking to folks who have that know-how. I also work to get leaders on board with this new approach to designing safety into our processes rather than fixing problems as they come up.

I'm looking at developing an ergonomics risk checklist for engineers—to be used when parts and processes are being designed—and exploring ideas like a “reverse” safety fair that brings ergonomic issues to engineers. I'm pursuing that with Boeing/IAM Joint Programs. It was one of their ideas and would give engineers the opportunity to be hands on—something they really enjoy but don't often get to do.

It's rewarding to use engineering to help make people's lives easier and safer by making a few changes upfront. The ultimate outcome—keeping our employees safe—is awesome. ■

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To learn about other employee efforts to improve safety throughout Boeing, see Page 28 in this issue of Frontiers.