

# SAFE

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Creating the right culture is key to reducing workplace injuries

By Marcy Woodhull



“Management and employees are working together, sharing the value of safety, listening to each other and caring about each other’s welfare.”

– David Renteria, production flight-test technical inspector, Boeing Defense, Space & Security

**PHOTOS:** (Far left) David Renteria, left, and Oscar Mortera inspect a machine that loads seats into the AH-64D Apache Longbow attack helicopter. BOB FERGUSON/BOEING (Left) In Auburn, Wash., machined-parts finisher Geri Marquardt uses a tool with a fitting that swivels as her wrist moves, so she can comfortably guide the tool around small parts used on Boeing commercial jetliners. JESSICA OYANAGI/BOEING

An Apache Longbow team in Mesa, Ariz., was on a mission: how to install 140-pound (64-kilogram) seats in the AH-64D model while reducing the risk of potential injury or pain from back, shoulder, arm and leg strain ... or worse.

But when a seat-loading machine arrived at the Apache helicopter production site in Mesa, it didn’t solve the problem.

Not only was it “tremendously heavy,” but the machine lacked sufficient clearance for the helicopter’s rotor blades, said David Renteria, a production flight-test technical inspector.

“We tried to make it work,” he said, “but ended up not using it and it just sat there collecting dust.”

Challenged to make the seat loader usable, Renteria and his Employee Involvement team worked with Oscar Mortera of Boeing Research & Technology and conducted an ergonomic assessment and analysis.

“With each person’s input, we sent our improvements to have the seat loader right-sized,” Renteria said.

The result: “Any individual of any size can now load a seat into the helicopter,” he said.

The experience not only made life better for the seat-loading team, but it went a long way in changing the organization’s culture.

“We learned the value of early employee engagement,” Renteria said. “Management and employees are working together, sharing the value of safety, listening to each other and caring about each other’s welfare.”

Open communication, leaders who set the example and employee recognition are critical to a culture that promotes safety, according to Stephen Boone, leader of Environment, Health and Safety at the Boeing site in San Antonio, which provides maintenance and modification services for large aircraft.

“Safety and well-being are about more than ergonomics and processes,” Boone said. “They are based in people and their relationships with one another. ... The motivation extends far beyond injuries. We truly care about employees not only staying safe and injury-free at work but also that they enjoy their personal time without pain or injury.”

There are many examples around Boeing where the culture has significantly contributed to improved workplace safety.

When Geri Marquardt arrived at the Commercial Airplanes Fabrication site in Auburn, Wash., in 1997 as a machined-parts finisher, employees were expected to work with the tools they were given.

“The company emphasized safety, but there wasn’t much focus on ergonomics,” she said.

Then Boeing began offering Move Smart training, which includes techniques to help prevent injuries and trauma both on and off the job.

“We began paying more attention to body mechanics and how our work environment is set up,” said Marquardt, who works in the Auburn Machining and Emergent Operations organization. “We adjusted our work-in-process shelves for

each person, to minimize reaching and bending instead of having all of them at the same height.”

The local Moonshine Shop (a Lean+ activity that focuses on how processes can be improved) helped employees come up with a hydraulic system for adjusting worktables to an employee’s height.

Workers began asking for more ergonomic tools and the company responded.

“I used to use air-powered tools with fittings that didn’t flex,” Marquardt said. “Now they move with my wrist.”

Marquardt said management’s commitment to safety and well-being has created an environment in the Auburn Machining and Emergent Operations organization where employees are engaged, their input is valued, and they are listened to by management.

“Our processes are constantly being revisited and tweaked,” she said. “People understand and believe that our organization and Boeing care about our health and well-being.” ■

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To learn more about Boeing efforts to improve workplace safety and to find improvement resources, visit the Safety Now website at <http://safetynow.web.boeing.com> on the Boeing intranet.