

DoD Ergonomics Working Group NEWS



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Spotlight on Robins AFB: Wheel and Tire Shop Ergonomics Success

Workers in the C-5 Wheel and Tire Shop at Robins Air Force Base (AFB) performed most of their work from a kneeling or squatting position and were required to maneuver the heavy wheels/tires. It was very strenuous work and work-related musculoskeletal disorders (WMSDs) were prevalent. Prior to the recent ergonomics intervention, the solution to this injury-causing work was to set up job rotations: 2 workers worked in the shop for 2 weeks and then rotated out; 14 different workers were cycled through the Wheel and Tire Shop.

To improve this process, Robins implemented a robotic lift and wheel/tire transportation cart. Workers maneuver the wheels/tires using the transport cart. When workers need to work on a wheel/tire, they attach it to the lift and adjust it to an ergonomic height and angle.

As a result of this ergonomics intervention, only 2 workers are required to man the shop. They are able to work 8-hour days and have not experienced the WMSDs that presented themselves in the past. In fact, the intervention has been so successful Robins is considering modifying the lift so that it can handle additional wheels/tires at the base—the F-15 and C-130, not just the C-5.

**The photographs on the following pages
tell the story far better than words.**

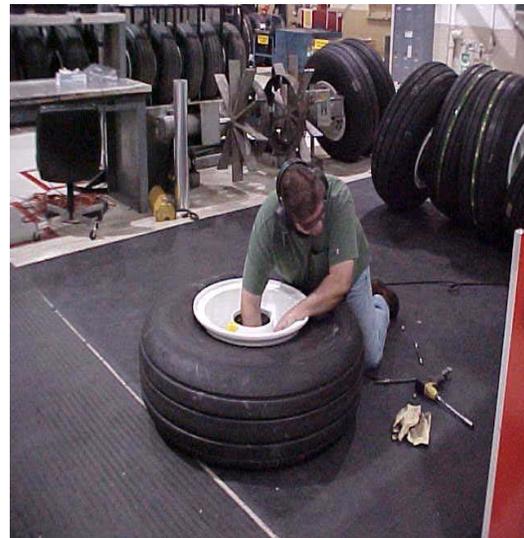
Take a look at Robins AFB successful ergonomic intervention.

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BEFORE the Intervention



Shop worker, Mr. Darren Rew, lowers 5 lb wheel into tire.



Mr. Rew fastens wheel to tire from a kneeling position.



Mr. Rew fastens wheel to tire from a kneeling position.



Mr. Rew works on wheel/tire from a seated, but not neutral, posture. His head and arms are positioned downward.

AFTER the Intervention



Tire sits in transport cart.



Mr. Rew places 195lb tire on Ergo Tech Robot using the transport cart.



Mr. Rew adjusts controls on Ergo Tech Robot to maneuver tire to an ergonomic work position.



Final tire position where work will be performed.