

# Directorate of Logistics, Division of Materiel

## "TUMBLE BEE" Container Rotator Increases Safety and Speed In Conex Maintenance

Fort Hood is home to more than 10,000 shipping containers that consistently require maintenance and repair. A new device, created at the installation by those who work on the containers, has helped speed the maintenance process as well as increased the safety for the workers. The maintenance mission of these CONEX containers falls largely on the backs of a 10-man crew at Fort Hood's Directorate of Logistics Division of Materiel, Maintenance Branch. Using ingenuity, materials on hand and some hard labor, the crew built a device that rotates these massive shipping containers. Using the device eliminates several steps in the maintenance process and creates a safer work environment by removing many previous hazards. Container Supervisor Jim Cantrell saw a similar rotator in use at Sierra Army Depot in California. He brought the idea back to his crew, and they ran with it. "We fabricated it and made it unique to fit our needs," Cantrell said. Among the modifications made at Fort Hood, a different locking system and platform, a hydraulic system with an electric motor, a mirror on the back for an extra safety measure, and a new name. "We gave ours a nickname," Cantrell said. "This is the Tumble Bee."

*Before*



*After*



The Tumble Bee is a device that lifts and turns a container from 45-90 degrees, allowing workers to access all parts of the containers without having to climb on top or stand under them to work. Before the Tumble Bee, crews had to move 1,200-1,500-pound steel sawhorses into a bay. Using a crane, they would lift and position a CONEX onto the sawhorses, Cantrell said. Container maintenance at Fort Hood includes replacing door hardware, repairing body damage and changing serial numbers to government numbers. Many of those repairs involve welding, which was previously done while the worker stood under the container and worked. "We were putting the containers up on sawhorses for the work," he said. "We had men up 14-15 feet in the air to work on the tops and welding going on underneath." The 10-man crew repairs 1,000-1,200 containers each year at Fort Hood, Cantrell said. This rotator has reduced the length of time it takes a crew to complete repairs because they have better access to the cross-members. "The majority of repairs involve the cross-members

A key lock on the power to the rotator provides an added element of safety. "It will not work without the key," Trent Rueter, a welder in the section, said. The machine also has increased efficiency in the maintenance process by giving workers better access to the entire CONEX. It takes about 14 hours to complete the maintenance on one container, Cantrell said. Two-man crews work 10-hour days, and the shop completes at least two containers each day, he added. The Tumble Bee was built in about 300 man-hours, and many of the parts used to build it were recycled from items around the work yard. At a cost of less than \$20,000 to build, the device was cost-effective as well. "The similar device in California cost about \$45,000," Cantrell said. Workers expressed excitement over the new system and pride in their role in developing the Tumble Bee. "It's much safer," Zack Wilson, a welder, said. "We don't have to get under the container and work." The crew hopes to build three more, so there is one for each of the division's four bays. Future Tumble Bees will include modifications on the original prototype, Cantrell said. "The next one will be a little different," he said. "We want to make the next one collapsible so we can send it anywhere." Cantrell said he hopes the next Tumble Bee will be completed in March 2012.

# **Fort Hood Group Donates Toys to Children's Hospital**

By Kim Steele  
Killeen Daily Herald

**TEMPLE** — Workers from Fort Hood's civilian-based Division of Materiel delivered a truckload of new toys Wednesday to the front entrance of the Children's Hospital at Scott & White. Using a forklift, workers unloaded 4-by-4-foot hand-constructed and painted boxes of toys that will brighten the eyes of young patients staying in the new hospital for a variety of illnesses, accidents and surgeries. The Division of Materiel collected 1,200 toys, crafts, books and games. Kelcie Phillips, administrative assistant for the Division of Materiel, said the outfit typically organizes two annual community service projects. This year, the children's hospital was chosen, with 550 civilian government employees and 600 contractors pitching in to gather toys. "We hope our donation will bring happy holidays for these children and make their stay here more bearable," said Phillips. "We're excited about this. We do a lot geared toward children, because they can't help themselves. All our workers are happy to have jobs in this economy and they want to give back." Harker Heights resident Taylor Smith, 10, colored a picture of Santa during a break from his room. Smith has been a patient at the hospital for about four weeks and will be going home this week. He also has been the happy recipient of a variety of donated toys. "I have 10 or 12 stuffed animals that the hospital has given me since I came here," said Smith. "I have a bear with a banana that says 'I love you' and a tiger with big eyes. When they give me toys here, it makes me feel cared for."

The Division of Materiel is composed of maintenance, aviation, supply and business management branches. The maintenance branch maintains equipment at the post, while the aviation branch repairs aircraft. The supply branch receives and distributes supplies, and the business management branch handles data, human resources and information technology. "Every year, we try to do something for charity," said Martin Roberts, a worker in the maintenance branch. "We all try to give or build something. In fact, we put together and painted the toy boxes. It makes us feel good to help the children in the hospital. Anything that brightens their day is a good thing." The hospital, which opened Oct. 4, has 64 pediatric beds, 48 neonatal intensive care unit beds and 14 emergency department beds. A total of 400 staff serve the needs of the children. Jan Upchurch, director of patient and family support services, said some of the toys will be available free for parents needing Christmas presents for their sick children. But most of the donations will be used for other therapeutic purposes at the hospital, she added. "This toy drop is the most important single event every year," she said. "We use some of the toys to restock the playroom, some toys are good for distracting children during procedures, some are rewards after a child does well in treatment, and others just make the children feel like normal kids."

