

Towering achievement

Wichita renovation project saves energy and improves operational performance

By Bill Seil and
photos by Beverly Nowak



This is another in a series of articles focusing on how Boeing employees across the enterprise are making a difference in Boeing's wide-ranging commitment to environmental stewardship.

When the legendary B-47 bomber completed its flight-test program at Boeing's Wichita, Kan., site more than 60 years ago, today's techniques for improving the energy efficiency of buildings weren't even on the radar.

The flight tower used in testing the bomber was mounted atop one corner of a large hangar and had single-pane glass windows and a modest environmental control system. Over time, the tower's flight-test technology was upgraded, but the environmental control system remained essentially the same.

With the support of Boeing Site Services and a group of environmentally engaged Boeing employees at Wichita, the tower has been given a full environmental upgrade, complete with a new heating, ventilating and air-conditioning (HVAC) system and energy-efficient windows. During its first full year in operation the renovated tower has saved thousands of dollars in energy costs. Personnel are more comfortable, and testing conditions have been greatly improved.

The project won a Boeing Site Services 2010 Conservation Award for operational excellence.

"When the tower was built ... all of the electronic equipment used vacuum tubes, which generated a lot of heat. That was fine during the winter, but it was extremely uncomfortable during the summer," said Ken Peoples, who handles energy-related issues at the Wichita site for Boeing Site Services.

"We were having a lot of problems functioning up there with all the temperature swings," said Peoples, a member of the Wichita Green Team.

He worked with Site Services colleagues to complete the project. They included Kevin Davis, who coordinated the window replacement, and Ralph Stout, who coordinated the replacement of HVAC equipment with a digitally controlled system.

Today, the hangar (the 4-056G building) is used to support Wichita's heavy modification programs. It contains three bays, each large enough to accommodate a 747.

The Wichita Green Team, led by Pam Reiz of Environment, Health and Safety, became involved in the project as a result of its regular interaction with project administrators and the site's EHS team, Peoples said.

In addition to the tower renovation, the Wichita Green Team has been involved in many other environmental projects. ■

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For more information on how to support environmental activities at Boeing, visit the Environment Information Center at: <http://environment.web.boeing.com>



PHOTOS: (From left) The control tower at Boeing's facility in Wichita, Kan., features renovations that have improved operations and reduced energy costs; controller Frank Woodson monitors flight patterns through the tower's energy-efficient windows; and Ken Peoples of Boeing Site Services inspects a new air duct.