



**For Immediate Release**

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## Carrier Corp. Cooling Systems Generate Significant Energy Cost Savings for Largest Marriott Resort in the World

ORLANDO, Fla., July 9, 2008 — Carrier Corp.'s commercial cooling towers and variable speed drives could potentially save the Orlando World Center Marriott, the largest hotel in the Marriott worldwide chain, an estimated \$900,000 annually in energy costs. Carrier's Building Systems and Services business unit was awarded the hotel's \$1.9 million chiller plant renovation contract, which includes replacing three cooling towers and variable speed drives, in February 2007. Carrier Corp. is a unit of United Technologies Corp. (NYSE:UTX).

While initial energy savings estimates were for \$310,000 annually, the hotel is currently achieving significantly higher savings. According to Jeffrey Plutz, FMA, RPA, director of engineering and resort facilities at the Orlando World Center Marriott, the hotel saved approximately \$225,000 in the first quarter of 2008.

"Carrier has a longstanding tradition of providing high-quality engineering and installation services that help reduce operating costs and increase the efficiency of our customers' facilities," said Dan Smytka, president of Carrier North America BSS. "We are pleased to partner with the Marriott to achieve remarkable energy-saving results."



The Orlando World Center Marriott selected Carrier after a thorough assessment of its 23-year-old chiller plant. “We recognized that our existing forced draft cooling towers were inefficient, deteriorating and undersized for the humid Orlando conditions,” said Plutz. “The condenser water pumps previously required manual priming at startup and the chillers were candidates for an energy-savings retrofit with variable speed drives.”

The three new stainless steel cooling towers have increased the facility’s cooling capacity by approximately 300 nominal tons. And replacing the old cooling towers with new induced-draft style cooling towers reduced the connected electrical load to the cooling tower fans by more than 400 horsepower. The cooling towers and steel support structures were replaced individually to keep two of the three towers in service at all times, ensuring uninterrupted service.

Variable speed drives were installed on each of the nine cooling tower fans and the two main 1200-ton chillers. The chillers were rebuilt and converted to environmentally sound chlorine-free HFC-134a refrigerant, and the impellers were upgraded to a larger size to increase the mass flow of refrigerant and restore the original chiller capacity.

A new Carrier Comfort Network (CCN) direct digital control automation system will monitor and control the new chillers, cooling towers and tower fan drives. A CCN WebII Web browser will provide intranet and internet access.

The operating cost savings have primarily come from the variable speed drives on the two main chillers and the cooling tower fans, condenser water temperature relief,



reduced horsepower on the cooling tower fans and the chiller plant optimization through the CCN controls system.

*About Carrier Corp.*

Carrier Corp., headquartered in Farmington, Conn., is the world's largest provider of heating, air-conditioning and refrigeration solutions. With 2007 revenues of \$14.6 billion, Carrier has approximately 43,000 employees worldwide and operations in more than 170 countries. Carrier is part of United Technologies Corp., a Hartford, Connecticut-based provider of products and services to the aerospace and building systems industries worldwide. Visit [www.carrier.com](http://www.carrier.com) for more information.

*About the Orlando World Center Marriott*

Orlando World Center Marriott, in Orlando, is the largest of its chain in the world, with 230-acres centered around a 28-story tower with descending tiers on either side. With hundreds of thousands of square feet of meeting space, a considerable number of guests are business travelers. However, the resort is home to world-renowned recreation facilities, including the Hawk's Landing Golf Course, eight tennis courts, six pools, a 4,000-square-foot fitness center and is a major spa destination, attracting affluent vacationers as well. Visit [www.marriottworldcenter.com](http://www.marriottworldcenter.com) for more information.

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