Flight Crews Get Comfy on Boeing 777 Long-Haul Routes

For most of us, going to work and reclining on a bunk to take a nap between shifts wouldn't be a typical day, particularly while flying at 35,000 feet. But for flight crews on some Boeing 777 long-haul routes ranging between 14 and 18 hours, this schedule may become routine.

The challenge on long-haul commercial jetliner flights is to find areas in the airplane for flight crews to rest that don't take up space intended for revenue-generating seats or cargo. Engineers at The Boeing Company recently undertook this challenge, finding innovative solutions that provide notable results: well-rested crews and increased profits for airlines.

Putting the crew rest area in the crown of the airplane frees up space for more revenue-generating seats.

.

"Boeing worked closely with airlines, pilots and flight attendants to create crew-rest stations that lie within the overhead area - the area located between the top of the stow bins and the crown of the airplane," said Doug Ackerman, deputy engineering leader for Boeing's space utilization project. "Space in the airplane crown was opened up by relocating systems such as wires, tubes and ducts from the center to the sides of the crown and creating a novel structure to support the crew rests, overhead systems and other optional features. Other systems were redesigned to accommodate the change."

Locating crew-rest stations in the overhead areas of the airplane permits the main and lower decks to be available for additional revenue generation.

"By utilizing the overhead space for crew rests, the 777-200ER (extended range) and 777-200LR (longer-range) can save up to four passenger seats and four cargo containers, and the 777-300ER saves up to seven seats and six cargo containers," said Ackerman. "This frees up the seat and cargo space and results in additional revenue potential for our customers."

Boeing estimates that the crew rests could generate between $4.9 and $11.25 million over 20 years for an airline.

Overhead Space Utilization Lead Virginia Geddis checks the door hinge on a 777 bunk for proper fit and alignment.

Overhead crew-rest options include a two-member flight-crew rest compartment for off-duty pilots; a six or seven-bunk attendant rest for the 777-200ER and 777-200LR; and a six- to 10-bunk attendant rest station for the 777-300ER.

"In today's unprecedented business climate, customers are compelled to maximize the earning potential of all their flights," said Lars Anderson, 777 Longer Range program manager. "Unlike our competitor's twin-aisle jet, the 777 has a larger diameter, so its cross section is ample enough to accommodate other options for space. This extra space in the airplane provides room on the design floor for innovative solutions that our customers want."

Currently, flight crews rest in crew rests just behind the flight deck or in business class seats, taking up valuable, revenue-generating seating. Often two flight crews are used on long flights, so that while one crew is working, the other is resting. The new rest areas on the 777s offer unmatched comfort and privacy to the crews, since the bunks are not one on top of another.

"The Boeing solution ensures customer satisfaction, quality and comfort," Anderson said.

The Boeing 777 has the spacious cross section required to incorporate roomy berths and business-class-comfort seats into overhead rest quarters.

The flight-crew rest has two business-class seats and two bunks that are 81 inches (205 cm) long and more than 40 inches (102 cm) wide. The flight-crew rest also features a three-zone temperature-control system, an innovative meal-transfer system and optional galley-cart stowage, plus available options for a lavatory, a kitchenette and video entertainment.

"We considered all of the factors that contribute toward getting a good rest when we designed the crew rests," Ackerman said. "Flight crews will awaken refreshed and rejuvenated, which passengers appreciate."

Boeing has received considerable interest from a number of airlines for the crew rests and other optional overhead features. To date, Boeing has 61 orders for its 777-300ER and 777-200LR, and all customers want crew-rest modules. Two customers have ordered 777-200ERs with the overhead crew-rest option.

Since its inception, the 777 program has been celebrated for its innovation, technology and high passenger preference ratings.

###

For more information about the 777, visit the 777 Web site.

Images are available for editorial use by news media on boeingmedia.com

For further information:
Kathleen Spicer

206-766-1345
Debbie Heathers
777 Overhead Space Utilization Program
425-342-2902