

OSU accessibility research innovations included in Boeing 787

March 26, 2007

When Boeing's 787 Dreamliner enters service next year, it will offer enhanced accessibility features developed at Oregon State University's National Center for Accessible Transportation (NCAT).

Boeing partnered with NCAT to research the accessibility improvements. As part of the research, Boeing engineers who design interiors were placed in simulated environments to better understand accessibility issues faced by persons with mobility, sensory and cognitive disabilities. The team also worked with people with those disabilities to verify the improvements.



Restroom in Boeing 787 designed for greater accessibility.

In response to the research, all restrooms on the plane will feature universally designed door handles that enable easier access by passengers with limited hand agility.

“Touchless” features, including faucets, toilet flushing and waste flaps, can be activated by sensors in addition to their traditional mechanical operation, making them easier to use.

NCAT director Katharine Hunter-Zaworski was invited to Seattle March 26 for Boeing's unveiling of the new accessibility features.

NCAT conducts basic research on accessibility issues and development of practical, cost-effective improvements in transportation technologies with the goal of making transportation more accessible for everyone.

The center is involved with research and development on all primary modes of public transportation: intra-city bus, over-the-road buses, trains and commercial aircraft. Current research activities include the biomechanics of boarding and travel in confined spaces such as aircraft, the psychology of existing and proposed accessibility solutions, and rear-facing securement for bus rapid transit vehicles.

Development activities include vehicle boarding technologies, open-caption communications systems, single-aisle vehicle-accessible restrooms and passenger assistance training tools and techniques.