ANA and Toyota Boshoku Jointly Develop New Seats for Economy Class on Domestic Flights

The Toyota Group's Components Subsidiary Makes First Foray into Airline Seating

TOKYO, April 21, 2015 - All Nippon Airways Co., Ltd. (ANA), Japan's leading and only 5-star airline, and Toyota Boshoku Corporation (Toyota Boshoku) have teamed up to develop new economy class seats in line with the airline's continued commitment to quality and comfort. The seats will appear on ANA's domestic service beginning June 2015, and the collaboration marks the first time for Toyota Boshoku to be involved in the development and manufacturing of aircraft seats.

The project brought together ANA's experience and expertise in the aviation sector, with Toyota Boshoku's high-quality craftsmanship and manufacturing capabilities, which have been refined over decades of experience providing seats for a variety of Toyota's automobile lines. The result is a passenger aircraft seat that will leave customers a lasting impression of ANA's commitment to quality, value and comfort.

The new seats will be introduced on domestic flights this summer, and by fiscal 2016, ANA plans to have installed a total of 1,560 seats across six Boeing 767-300 aircraft. This is in line with the airline's recent initiative to provide more comfortable seating in economy class.

New Seat Specifications (B767-300):

- Seat width: 17.5 inches (44.45 cm)
- Seat pitch: 31 inches (78.74 cm)
- Abreast: 7 (2-3-2)

Design Characteristics:

The new seat was ergonomically developed for comfort across a wide range of body sizes and types, based on Toyota Boshoku's experience designing seats for customers around the world, which included compact, luxury and racing cars.

(1) Devotion to comfort

- Based on the idea that support is key to a passenger's comfort, the seat is structured to limit muscle fatigue around the hip and maintain a relaxing posture by firmly supporting the pelvis (*Figure 1*).
- The height, length and angle of the seat and backrest were designed to evenly distribute pressure on the body and accommodate any body structure.

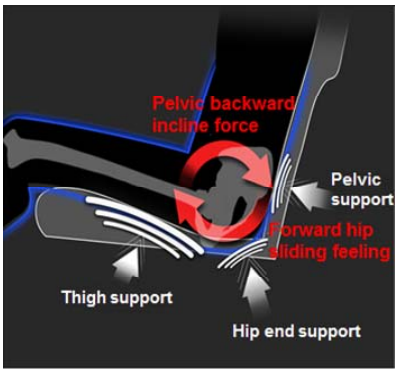

Figure 1: Concept of pelvic support

(2) Maximum user-friendliness

- The design and position of the tray tables and armrests were achieved through a range of tests accounting for multiple angles to determine ideal height and natural contour to accommodate for a variety of body types (*Figure 2*).

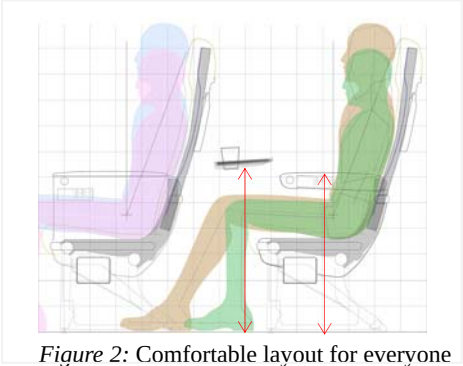

Figure 2: Comfortable layout for everyone

(3) Creating a sense of space

- The rounded edges of the headrest provide a sense of openness that widens the passenger's field of view.
- Fabric is used at the passenger eye-level to contribute a soft and welcoming atmosphere.