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Milestone enables most direct, fuel-efficient aviation routes in China

BEIJING, Jan. 7, 2012 – Boeing [NYSE: BA] recently developed new flight procedures for Xiamen Airlines, an all-Boeing operator, which enables the airline to fly some of the most precise, fuel efficient, satellite based routes available.

In coordination with the Xiamen Airport Group, Xiamen Airlines is the first Chinese airline to use the advanced navigation capability of its Boeing 737 fleet to conduct Required Navigational Performance – Authorization Required (RNP AR) flight operations using flight corridors narrower than a third of a mile across, or what is known in the industry as RNP 0.3. RNP measurements indicate a level of accuracy to which an airplane can fly while navigating using certain instruments, normally satellite-based avionics. A lower RNP value allows greater precision which can reduce flight miles, saving fuel and reducing costs for an airline.

Xiamen Airlines worked in close partnership with Boeing Flight Services and Boeing subsidiary Jeppesen, both part of Boeing Commercial Aviation Services, along with Wuyishan Airport Authority and the Civil Aviation Administration of China (CAAC) to develop the new instrument flight procedures. The airline successfully performed demonstration flights Dec. 18, 2012 to test these highly tailored RNP AR procedures at the Wuyishan Airport, Fujian Province, China.

RNP AR is the most capable form of Required Navigation Performance - enabling airplanes to use Global Navigation Satellite Systems (GNSS) and onboard avionics to fly precisely predefined flight paths without reliance on ground-based navigation stations. It enables curved approach paths that can avoid terrain or noise-sensitive areas.

"Technology such as RNP has the benefits of improving safety and efficiency, lowering operating costs and being more environmentally friendly," said Wan Xiangdong, Director General, Flight Standards Department, CAAC. "RNP really benefits everyone – the airport authorities, air operators and air traffic control by increasing safety and efficiency and reducing workload."

"We are thrilled to help make this breakthrough in our work with the Civil Aviation Administration of China," said Chuck Steigerwald, head of Boeing Air Traffic Management Navigation Services. "Providing this service and helping airlines use the advanced capabilities of their airplanes to enhance safety and improve their bottom line efficiency is a great opportunity to demonstrate what the Boeing Edge is all about."

"Prior to RNP, most airports around the world, including Wuyishan Airport, relied on conventional ground-based navigation stations which require more separation between airplanes, less efficient flight paths and often less stabilized approaches," said Shawn Bailey, program manager, Boeing ATM Navigation Services.

## About the Boeing Edge

Boeing offers a comprehensive portfolio of commercial aviation services, collectively known as the <u>Boeing Edge</u>, bringing value and advantages to customers and the industry. Boeing Flight Services provides integrated offerings to drive optimized performance, efficiency and safety through advanced flight and maintenance training as well as improved air traffic management and 24/7 flight operations support. Flight Services provides digital tools and data to enhance overall operations, airport infrastructure, fuel efficiency, flight planning, navigation and scheduling.

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