## Boeing, COMAC Expand Collaboration on Environmental Efficiency and Sustainable Growth

Boeing-COMAC Sustainable Aviation Technology Center to pursue mutually beneficial research in materials recycling, air travel for aging populations, workplace safety

ZHUHAI, China, Nov. 1, 2016 /PRNewswire/ -- Boeing [NYSE:BA] and Commercial Aircraft Corp. of China (COMAC) today signed a new agreement to expand their joint research collaboration in support of the long-term sustainable growth of commercial aviation.

The two companies, which signed an initial collaboration agreement inMarch 2012, have been researching ways to improve aviation's fuel efficiency and greenhouse-gas emissions reduction, including sustainable aviation biofuel and air traffic management (ATM) efficiency.

Through this new agreement, signed at the Zhuhai Airshow, the companies will explore six areas of mutually beneficial research through the renamed Boeing-COMAC Sustainable Aviation Technology Center. They will also continue to exchange commercial aviation market forecasts.

"As we approach the 45<sup>th</sup> year of collaboration between Boeing and China's aviation industry, Boeing and COMAC are expanding our efforts to ensure commercial aviation's long-term sustainable growth, improve its efficiency and reduce environmental impact," said Ian Chang, vice president, Supplier Management China Operations & Business Development, Boeing Commercial Airplanes. "Our mutually beneficial research with COMAC supports Boeing's global effort to enable growth and partner to address challenges for our industry."

"The two companies have enhanced mutual trust and understanding during five years of working together," said/Wu Guanghui, Vice President of COMAC. "The agreement signed today extends and will bring our cooperation to a new level, enabling the two companies to leverage their own advantages for win-win results that can benefit not only China, but also the rest of world."

Research areas for the Sustainable Aviation Technology Center will include:

- Technologies supporting sustainable aviation fuel development and assessing the benefit to aviation of using these technologies;
- · ATM technologies and applications;
- Environmentally sustainable manufacturing, including enhanced recycling of materials;
- Technologies to enhance the airplane cabin environment related to environmental stewardship and air travel by aging populations;
- New industry or international standards in aviation energy conservation and emissions reduction;
- Improvements in workplace safety during cabin and ground operations.

As they have since 2012, Boeing and COMAC will jointly select and fund research by China-based universities and research institutions. Their initial agreement created the Boeing-COMAC Aviation Energy Conservation and Emissions Reductions (AECER) Technology Center. Since then, the Boeing-COMAC AECER Center conducted 17 research projects, leading to an aviation biofuel demonstration facility that turns waste "gutter oil" into jet fuel and three ATM software prototype systems. The Center has attracted participation of 12 domestic and international research partners.

In addition, Boeing and COMAC plan to open a joint venture facility in Zhoushan, China, that will install interiors and paint 737s before Boeing delivers these airplanes to Chinese customers.

China is one of the world's fastest-growing aviation markets. The Civil Aviation Administration of China has forecast that passenger traffic in China will reach 485 million this year and will reach 1.5 billion passengers in 2030. Boeing has estimated that Chinese airlines will need to purchase more than 6,800 new airplanes through 2035 to meet fast-growing demand for domestic and international air travel.

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