

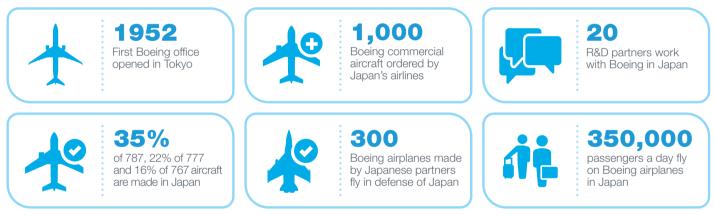


BUILDING THE FUTURE TOGETHER Boeing in Japan

For more than 65 years, Boeing has been the top provider of commercial jetliners to Japanese airlines and a major supplier of defense equipment, aircraft and services to Japan's Ministry of Defense. In that time, Japanese airlines have ordered around 1,000 mostly large, widebody commercial airplanes, and Japan's Self Defense Forces have built and operate the largest fleets of F-15 fighters and CH-47 Chinook helicopters outside the United States.

Today, Japan occupies a unique position as the biggest supplier to Boeing outside the United States. And Boeing retains deep and enduring customer and partner relationships across Japan's government, industry and society.

OUR COMMITMENT AND PARTNERSHIP



INVESTMENTS

Boeing investments in Japan have helped grow the local aerospace sector, creating jobs and driving innovation. And in turn, the contribution of Japan's industry has helped Boeing win in the global marketplace.









150 suppliers

COMMUNITY ENGAGEMENT

Boeing is proud to support important causes such as the recovery from the Tohoku earthquake, Solaputi hospice camp for children and elementary school STEM education in Japan through work with community partners.











BOEING IN JAPAN

Boeing's history in Japan began when Japan's first airline, Japan Airlines Ltd., started domestic service Oct. 25, 1951 with a Boeing heritage-company Douglas DC-3. Boeing opened an office in Tokyo in 1953 to better support the growth of the country's aviation industry. Today, Boeing has approximately 200 employees at more than 20 sites across the country, and 150 Japanese companies are suppliers to Boeing across its commercial and defense product lines. Boeing procures around \$5 billion worth of goods and services from Japan every year, and Boeing-related work supports around 64,000 jobs in Japan, including tens of thousands in aerospace.

Boeing Commercial Airplanes

Japan has long stood as one of the largest international markets for Boeing Commercial Airplanes, especially for large twin-aisle airplanes. Since the 1950s, Japanese carriers have ordered nearly 1,000 Boeing jetliners.

Boeing is privileged to have an approximately **80% market share** of Japan's current commercial jet fleet, and every day more than 350,000 passengers fly on Boeing airplanes in Japan. In addition to being a major customer for the **747**, **767** and **777**, Japan is the single biggest country customer for the **787 Dreamliner**.

Both of Japan's largest commercial airlines, ANA and Japan Airlines, collaborated with Boeing in the development of the Dreamliner, sharing their expertise in passenger amenity, airplane performance and aircraft maintenance—an effort that helped the 787 become the fastest-selling widebody airplane in history.

Boeing Defense, Space & Security

Boeing Defense, Space & Security has a long history of supporting the Ministry of Defense (MoD) to meet Japan's defense needs. This cooperation dates back to 1956, when Boeing heritage company North American Aviation licensed Mitsubishi Heavy Industries (MHI) to build the **F-86 Sabre** fighter jet. In 1981, the first non-U.S. delivery of 10 **F-15 Eagles** began under the Peace Eagle program, after which MHI built nearly 200 F-15J/DJ Eagles under license. Today, Japan operates the largest fleet of F-15s outside the United States. Together, Boeing and MHI are upgrading the F-15J/DJ aircraft to fulfill Japan's desired mission effectiveness well into the 21st century.

Boeing began delivering **CH-47 Chinook** helicopters to the Japan Air and Ground Self-Defense Forces (JASDF and JGSDF) in 1984. Since then, KHI, under license by Boeing, has manufactured and delivered 100 CH-47s to Japanese forces — providing Japan with the largest operational Chinook fleet outside the United States.

Boeing delivered the first of 13 **AH-64D Apache Longbows** to JGSDF in March 2006 through a license agreement with Subaru. Boeing has also delivered four **KC-767 tankers** and four **Airborne Warning and Control System** (AWACS) aircraft to JASDF, and continues to provide ongoing support and upgrades for these platforms.

Japan became the first international customer for the **KC-46A Pegasus tanker** in October 2015. In the same year, MoD also became the first international customer for the **V-22 Osprey**.

Defense, Space & Security's partnership with Japan extends beyond Earth into outer space. In 1964, the **Tokyo Summer Olympics** were broadcast live by three Boeing heritage companies: The broadcast went out worldwide by Hughes Syncom 3 satellites that were sent into orbit by Douglas-built Delta rockets and Rocketdyne engines. Today, Boeing continues to provide communications solutions for customers such as JSAT.

As the main contractor on the International Space Station, Boeing worked closely with NASA, the Japan Aerospace Exploration Agency and MHI on the integration of the Kibo module, which has been an inspirational symbol of innovation and international collaboration to the people of Japan and others around the world.

Partnerships

Boeing has more than 30 meaningful collaborations in the technology and environmental areas with Japanese universities, research institutions and government agencies. These include the Center for Manufacturing Innovation, whose remit is to explore diverse industrial capabilities relevant to the supply chain. Recently Boeing announced a research and development framework that, with the support of the Ministry of Economy, Trade and Industry, will allow Boeing to seek out new partnerships in the "disruptive mobility" arena of personal flying vehicles, exploring electric propulsion, high rate-low cost composites and factory automation.

Boeing Global Engagement

Boeing and its Japan-based employees are deeply involved in their communities, through investments in 30 nonprofit organization-led projects that align with the company's charitable guidelines. These include the reforestation of a black pine forest devastated by the March 11, 2011, tsunami in the Tohoku region — a project which was recognized by the Japanese emperor — and support for an outdoor camp for children with terminal illnesses.

FLEET AND SERVICES

Commercial



- 737: 172
- 747: 8767: 86
- 777:93
- 787: 102
- Total: 461

Defense



- F-15 Eagle: 201
- CH-47 Chinook: 70AH-64 Apache: 12
- KC-767: 4
- 767 AWACS: 4
- ScanEagle UAS: 2

Commercial Services



- 787 landing gear exchange
- Optimized maintenance program
- Electronic flight bag and digital navigation chart services
- Data analytics
- Cabin interior modifications
- Airplane avionics and systems upgrades
- Consumable and expendable services