The Boeing 747 jet transformed air travel and outsold all its competitors

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The Jumbo Jet transformed an industry, bringing luxurious amenities and lengthy nonstop flights to the masses, all in a design that was both enormous and elegant. But the reign of the mighty "Queen" 747 has ended, the last plane left its assembly line this week, after 54 years of production.

"For more than half a century, tens of thousands of dedicated Boeing employees have designed and built this magnificent airplane that has truly changed the world," Kim Smith, Boeing's vice president and general manager of the 747 and 767 programs, said as the company announced the end of production.



The last Boeing 747 left the company's widebody factory in advance of its delivery to Atlas Air in early 2023. (Photo: Boeing/Paul Weatherman)

The 747 was launched with an order from Pan Am for 25 Boeing 747-100 aircraft and in late 1966, for \$25 million each, about \$229 million each in 2022. On September 30, 1968, the first 747 was rolled out of the custom-built Boeing's Everett Plant. The first flight took place on February 9, 1969, and the 747 was certified in December of that year.

Since production of the 747 began in 1967, Boeing says, 1,574 of the airplanes were built. It started carrying commercial passengers on January 22, 1970., when Pan Am used a 747 for a flight from New York to London.

Following its debut, the 747 rapidly achieved iconic status. The aircraft entered the cultural lexicon as the original *Jumbo Jet*, a term coined by the aviation media to describe its size, and was also nicknamed *Queen of the Skies*. Test pilot David P. Davies described it as "a most impressive aeroplane with a number of exceptionally fine qualities", and praised its flight control system as "truly outstanding" because of its redundancy.

The 747 was produced in many versions, including many sub-versions such as Extended Range, Freighters, Convertible and Combi passenger/freighter, private VIP, and military: 747-100, 747SP, 747-200 (sold as 747B early on), 747-300 with the stretched upper deck, the 747-400 an advanced version of the 747-300 with more range and a two man cockpit, 747 Large Cargo Freighter (LCF) Deamlifter, and the final version the 747-8.

Manufacture of the 747 ended in December 2022 after a 54-year production run. Initial competition came from

the smaller trijet widebodies: the Lockheed L-1011 (introduced in 1972), McDonnell Douglas DC-10 (1971) and later MD-11 (1990). Airbus competed with later variants with the heaviest versions of the A340 until surpassing the 747 in size with the A380, delivered between 2007 and 2021.

Here is a look at the 747's competition and sales over its very long career:



The huge jet that shrank the world

The 747 was a hit at the Paris Air Show in 1969, and more than two dozen airlines raced to put the airliner into service, luring travelers with the 747's promise of comfort and unprecedented range.

People in the U.S. suddenly had an appealing option to visit Hawaii — which was then a very young state. And cities around the world became more interconnected by direct flights.

By the end of 1971, international airlines including Air Canada, Air India and Japan Airlines were using the aircraft.

The huge plane was touted as a win for middle-class travelers, under the idea that airline prices would become more affordable if carriers could fit more people onto a single flight. But that dynamic changed in later years, as the aviation industry saw a growing preference for smaller, more fuel-efficient planes and less focus on crowded, hub-to-hub flights.

The 747's star has been dimming — U.S. carriers phased it out in 2017 — but it had another moment in 2020, when a British Airways 747, aided by strong winds, traveled from New York to London in 4 hours, 56 minutes, setting a new record for the fastest subsonic commercial flight across the Atlantic.

Boeing 747 Records

There were three significant commercial around-the-world record-setting flights flown by 747s:

- 747SP Liberty Bell Express Flown from New York/JFK May 1-3, 1976. 2 stopovers at Indira Gandhi
 International Airport, New Delhi and Tokyo-Haneda Airport. The round-the-world flight took 46 hours and
 26 minutes over 23,137 miles.
- 747SP Pan Am Flight 50 To celebrate the 50th anniversary of Pan Am. Flown October 28–30, 1977 from San Francisco/SFO, with a time duration of 54 hours, 7 minutes, 12 seconds. 3 stopovers at Heathrow Airport, Cape Town and Auckland. Flight 50 flew over both the North Pole and the South Pole.
- 747SP Friendship One Flown January 29–31, 1988 from Seattle/SEA, to raise funds for Friendship
 Foundation. Two stopovers were made, at Athens and Taipei. The record lasted less than a month, as it
 was beaten by a Gulfstream IV. The round-the-world flight took 35 hours and 54 minutes over 23,125
 miles.

• A Qantas 747-400 delivery flight on Aug. 16-17, 1989 from London Heathrow Airport to Sydney International Airport, 18,000 km/11,112 mi distance, in 20 hours and 9 minutes.

The plane included movie screens and a lounge

The 747's expansive interior has repeatedly been compared to a living room, complete with large easy chairs and space to stretch one's legs.

A spiral staircase led to the upstairs lounge, with space for a bar. The lounge was originally intended to be a place where flight crews could take a break. But Pan Am's Juan Trippe — who made a \$500 million deal with Boeing that set the 747 in motion — recommended a first-class passenger area instead, according to Northwestern University's Transportation Library.

Airlines put their own spin on the lounge, with names such as the Penthouse Lounge (TWA) and the Tea House in the Sky (Japan Airlines), according to the library.

Pan Am's advertising from that early era shows the plane's economy section comprised three spaces appointed like living rooms, each with its own movie system. Being on the 747, the airline said, was like being on a cruise ship.

Appearing in over 300 film productions, the 747 is one of the most widely depicted civilian aircraft and is considered by many as one of the most iconic in film history.

It was designed to carry either passengers or cargo

The final 747 that rolled out of Boeing's assembly plant in Everett, Wash., is a cargo freighter, the 747-8 variant, destined for Atlas Air. That might seem like an odd end for a fabled airliner. But in many ways, the 747 sprang from plans for a massive military transport jet — a contract Boeing didn't win. Still, the company kept cargo in mind as it designed the new jet, including the ability to receive freight by hinging its cone-shaped nose.



'Nose Door' loading capability of B747-400ERF aircraft

Importantly, the Boeing used the advanced high-bypass engine technology considered for the military plane to lift the immense new airliner into the skies with hundreds of people aboard.

"One of the decisions we made was to be a good freighter as well as a good passenger plane," the 747's lead designer, the late Joe Sutter, told Smithsonian magazine in 2007. "That was probably one of the most important decisions we made, because it influenced [the size of the] fuselage. It's how the wide-body concept came into being."

The plane is entrenched in U.S. lore, providing the basis for Air Force One, the official presidential aircraft. Another modified version carried the space shuttle.

As lasting as the 747's legacy is, Boeing says it was first produced in only around 16 months, reflecting the

combined work of thousands of employees.

The 747 was the first "jumbo jet"

And we mean jumbo: the 747's tail towers as tall as a six-story building. When it was introduced, the plane's 225-foot length dwarfed existing airliners.

"Pressurized, it carried a ton of air," Boeing says. The jet had four engines and was the first to have two aisles running down a spacious passenger cabin.

It was so enormous that to construct it, Boeing had to build a new 200 million-cubic-foot assembly plant in Everett.

And Sutter was intent on the aircraft being extraordinarily safe, giving the 747 four sets of vital equipment like hydraulic systems and landing gear.

"You know things are going to happen, and sometimes it's going to be severe," Sutter told Smithsonian. "You still should be able to come home."

"We are proud that this plane will continue to fly across the globe for years to come," Boeing's Smith said.



Pan Am cabin crew on the 747 upper deck in the 1970s

Boeing 747 Facts

Here are facts that help you understand why this plane has ruled the skies for so long.

- During its service the 747 has flown more than 3.5 billion people.
- With capacity for 350-660 people the 747 once carried 1,087 people at once.
- The movie star, the 747 has appeared in film productions such as Airport 1975 and Airport '77 disaster films, Air Force One, Die Hard 2, and Executive Decision.
- Due to the double-decker layout some passengers are closer to the front than the pilots, sitting below in First Class.
- There are 14 stairs to the upper deck. The first version, the 747-100, could seat a dozen passengers, and
 was used as lounge. The 747-8 can seat up to 70 passengers on its uppder deck.
- The Wright brothers could have fit their historic first flight inside a 747.
- \circ The Boeing 747 first flew in February 1969, five months before Apollo 11 landed on the moon.
- Boeing didn't have a facility large enough to build the 747, so they had to construct a new assembly plant

in Everett, WA.

- \circ The 747 has a wing sweep of 37.5 degrees more than any other commercial aircraft in the world.
- It takes 90 gallons of paint to paint a 747.

No more 747s are being made, but Boeing notes that they're still taking flight. The 1970s version even inspired one man to build a ground-based replica.

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