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Role: Wide-body jet airliner
National Origin: United States
First Commercial Flight:
January 22, 1970
Manufacturer: Boeing
Commercial Airplanes
Status: In service (mostly
European and Asian
companies)
Current Primary Users: British
Airways, Lufthansa, Korean Air,
Atlas Air
Retirement: Officially retired
by all U.S. commercial carriers
in January 2018, after Delta
grounded the last of their fleet

The Queen of the Skies: How the Boeing 747 Revolutionized Air Travel as We Know It



Virgin Atlantic is known for giving each of its 747's a name, such as Jersey Girl, Tinker Bell, and Lady Penelope (pictured).

39,000 feet in the air, with only a handful of passengers to spectate, the Boeing 747 made one last historical achievement. Holly Rick and Gene Peterson, who met on a 747 several years before as passengers, officially said "I do" on Delta's final flight of its 747 fleet. The plane had departed from Atlanta, heading toward Pinal Airpark in Arizona for its final resting place.

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The iconic Boeing 747 has been adored for decades, with its striking silhouette and four, massive Rolls-Royce engines. The 747 has taken people from the Americas to Europe, Africa to Asia, down to Australia, and just about everywhere else in between. With a flight range unlike any other plane before 1970 (8,350 miles, to be exact), this plane ultimately revolutionized air travel for all by making the planet just a little bit smaller. Now that the 747 era is slowly coming to a graceful end, I find it necessary to outline its importance to us as humans and the impact its existence will have on the future of air travel.

The Boeing 747 was a plane with many firsts. It was the first wide-body passenger plane to ever be developed (with a 3 by 4 by 3 seat configuration, from left to right). It is coined as the first ever "Jumbo Jet" (Wikipedia.com). It was the first passenger plane to have an upper deck. And it was the first, and still remains the only, plane to carry United States presidents across the globe. With all these firsts, it is easy to see why the 747 was such a huge hit among pilots, passengers, and airlines when it took to the skies for its maiden voyage on February 9, 1969. And to add to these many firsts, the aircraft has left its mark on aviation, with an influence that still resonates in modern technology and air travel.

The Proposal

During the technology boom that followed World War II, many airplane engineers began to turn their attention away from fighter planes toward a new and modern feat: mass passenger travel. For years, plane design stood at a deadlock when it came to moving large amounts of people, safely, from one side of the world to the other. It wasn't until the early 1960's that "the United States Air Force started a series of study projects on a very large strategic transport aircraft." (Wikipedia.com). In 1964, the first ever proposal for the 747 came into play, thanks to the brilliant minds at Boeing Commercial Airplanes, who were seeking a contract with the USAF. However, not only was the company vying for a contract, it also was being pressured by the passenger airline company Pan American World Airways president Juan Trippe to build a newer and larger plane that could ultimately replace the widely used 707 and help cut down on airport congestion. Although the initial goal of the 747 was intended only for passenger transportation, many airplane designers believed that supersonic jets would eventually rule the skies. If this was true, the 747 could possibly lose its relevance before it even took to the skies. "Boeing responded to this by designing the 747 so that it could be adapted easily to carry freight and remain in production even if sales of the passenger version declined. In the freighter role, the clear need was to support the containerized shipping methodologies that were being widely introduced at about the same time" (Wikipedia.com).

Although supersonic jets eventually did take to the skies (the first and most famous being the Concorde Jet) in 1976, they never truly rivaled the 747. For one, the 747 was much cheaper to build and maintain, and it could carry more passengers. True, its flight time was much slower than that of the Concorde, with the Concorde reaching up to 1,354 mph (Mach

2.04, 2 times the speed of sound) in comparison to the 747's 570 mph. However, the 747 could be utilized all over the world, while the Concorde could only be used to cross oceans due to the disturbances it caused with its sonic boom (Wikipedia.com). Furthermore, the Concorde was way too expensive for most airlines (with an average cost per unit at around \$33 million in 1972), so it was only used by Air France and British Airways. Even though the Boeing 747 couldn't cross the Atlantic in under four hours, it still had everything that airlines needed and more (with its capability of being either a passenger or cargo jet), all at a much more affordable cost.



The first Boeing 747. The jumbo jet outlived the company of its maiden voyage, Pan Am, which went bankrupt in 1991.

A Revolutionary Piece of Machinery

The Boeing 747 officially took to the skies as a passenger jet in 1970, a year marking the beginning of perhaps the greatest career of any civilian airplane ever made. Right off the bat,

the jumbo jet was a massive success for Pan Am (the first airline to use it), and it didn't take long for many more airlines to jump on board as well. Soon, the 747 was seen as a luxury flight experience, with its spiraling staircase leading to the second story and its modern 70's décor. Quite simply, it was as much a fashion icon as it was a modern engineering marvel. When Boeing began designing the jet, the main focus (besides being the largest passenger plane in the world) was comfort and ease of flying. Pilots found the plane to be one of the easiest they had ever flown, in part because of the highly advanced wing and flight control mechanics that are still in use today. Basically, the jet was designed to be so advanced, it could ultimately fly itself.



The iconic spiral staircase leading to the upper deck and first class.

The 747 really began to earn her title as Queen of the Skies when she quickly emerged as THE intercontinental jet. With a very impressive flight range of around 8,350 miles and a cruising speed just below 600 mph, the 747 was making flights from America to Europe more and more enjoyable for passengers. Passengers now reached their destinations much faster and

with greater comfort. After making the transatlantic flight experience more desirable and ultimately making the world a smaller place, the Queen of the Skies settled in for a long and historic reign, up above the clouds.

Keeping Up with Changing Times

Considering the 747 has been in service for upwards of 48 years, it is very impressive (to me at least) how something so old can still stay relevant in today's modern world. Of course, Boeing debuted a few newer versions, with minor variations from the original, up until 1989, but since that point the manufacturing of newer models has ceased. Having flown on a 747 myself a couple of times, I can say from firsthand experience that the plane seems to fit just right in today's society. I was struck by the modern appeal and updated features each plane has to offer. In fact, it is nearly impossible to tell that the plane is even close to 20-30 years old (commercial 747s are usually retired after 25-30 years, when their components begin to wear down). In regards to Virgin Atlantic's 747 fleet, each seat has its own media center with movies, games, TV shows, and music. It is hard to tell that you are even on an old plane to begin with, which is another reason why I admire the jet's versatility. Boeing's extraordinary attention to detail and planning for the future has helped create a passenger jet that has stood strong through decades of modern changes, and although many have already entered retirement, many others will still be the forefront for some airlines for at least a few more years to come, as many are nearing the end of their commercial years as well.

50 Years of Nonstop Service, Coming to an End

The days of the 747 have come to an end for all American airlines, but worldwide, the Queen keeps on taking to the skies. With more modern aerodynamics and better fuel-efficient

planes, the Delta and United Airways 747 fleets have officially been retired and replaced with the brand new Airbus A350. However, the jumbo jet may have several more years of service abroad, with airlines like British Airways, Virgin Atlantic, Lufthansa, and Korean Air still using it with no set date of retirement in mind as of yet (or, rather, I couldn't find any dates after extensive research). But it isn't time to mourn the loss of America's 747s quite yet, for "even if an airplane has outlived its useful flying life, its components and metal from the fuselage can almost always find another application" (nytimes.com). In other words, although the 747 may not be taking to the skies as a whole, bits and pieces of her will be used to create the next generation of jumbo jets. And you still might see a 747 next time you're at the airport, because most global shipping companies, such as UPS and AirCargo Global, still use these jets to ship packages all around the world. So, after a long and honorable career as the world's first wide-body passenger jet, the legacy of the Boeing 747 lives on to see another day and another part of the world, all from 39,000 feet above the Earth.



The last Delta 747 fleet member arrives at Pinal Airpark in Arizona for retirement (January 3, 2018).

Bibliography

“Boeing 747.” *Wikipedia.org*, Wikimedia Foundation, accessed on 11 March 2018,

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Most of the information that I did not already know came from here. I used it for several in-text citations and reference points.

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I used this webpage to find some of the information involving the Concorde supersonic jet and its specifications.

Wichter, Zach and Dustin Chambers. “The 747 Had a Great Run. But Farewell Doesn’t Mean the End.” *The New York Times*, 19 January 2018,

<https://www.nytimes.com/2018/01/19/business/747-airlines-final-flight.html>

I used this article to talk about the end of the Delta 747 and what will happen to the planes now.

Both my uncle and grandfather have spent the majority of their working lives working on aircraft (mainly the 747) as airplane mechanics, so I have an extensive knowledge of the history and workings of the plane. I have also flown on 747s as well.