

The Boeing 747 Jumbo Jet: A Story in Leadership

It was one of the most memorable flights of my life. I was returning from the Canary Islands in a Pan Am Boeing 747 chartered by the professional group who had arranged an international conference in the Spanish islands off the coast of North-West Africa. I was invited into the flight deck with the pilot and co-pilot just as we approached Cape Cod at an altitude of 11,000 metres. It was a breathtaking sight on a cloudless day.

Two details from the paragraph above will immediately date this memory for you. Since 9/11, flight decks on commercial aircraft have been securely locked and are inaccessible to passengers and Pan Am went out of business in 1991. What also made the experience memorable was the plane itself. After its first flight, in 1969, the 747 quickly became the “Queen of the Skies”, the biggest passenger plane ever to fly, until the arrival many years later of the Airbus A380.

But the “Queen of the Skies” almost never made it off the drawing board and it only owes its existence to a handful of people who showed vision, persistence and managerial courage at a critical time.

The initial vision came not from inside Boeing, but from Juan Trippe, CEO of Pan Am, one of Boeing’s key customers. Trippe was quick to notice that the new faster jet liners were making airports much more crowded because long trips were now possible and accessible to more people. He approached Boeing with a request to design a plane capable of carrying more than double the number of passengers than the models then flying, such as Boeing’s own 707. It just so happened that Boeing had an interesting design on its drawing boards, a military project for a heavy cargo carrier. It had lost the military contract to Lockheed’s C5 Galaxy and had not considered other possibilities for its design. Then came Trippe’s request to design a super-large passenger plane.

That’s where the persistence came in, in the shape of Boeing engineer Joe Sutter and his team. Boeing’s President, Bill Allen, took Sutter off his work on the 737, another highly successful passenger aircraft, and asked him to head up this new project. It was a constant fight on many fronts. First of all, financial. When you decide to build a new aircraft, you literally gamble with the future of the company, even a company as big as Boeing. It took the backing of seven banks to finance the project. Then there was the internal competition for the highly qualified engineering personnel necessary to carry the project through all of its phases, from design to final certification and delivery. At the time, Boeing was also working, not only on the 737, but also on a supersonic aircraft, a competitor to the European Concorde. Its plane, called the SST, was finally abandoned when the company realized that the SST would never become financially viable. But in

the early days, internal competition for qualified personnel was fierce and Sutter needed dogged persistence to obtain and keep his key staff. And this is where managerial courage came in. At one key meeting, Sutter was told he was going to have to give up many of his key staff to other programs. In front of Bill Allen, the President, he said that, in that case, he could not build the 747 and left the meeting, pretty sure he would lose his job as a result of his words and action. Instead, Allen recognized the courage Sutter was displaying in opposing his colleagues and peers and told him the 747 project was still on.

But even then, the 747 still had a lot of milestones to overcome. This needed a long-term financial commitment from the company and its banks. This was made possible by another far-reaching visionary insight by Sutter: the plane's long-term production would be greatly ensured if it stayed based closely on the original military aircraft that had failed to win the government contract for a large cargo freighter. He foresaw that, long after the 747 passenger version would become obsolete, it would have an even longer future as a cargo freighter. This was possible because the pilots' control flight deck was positioned high above the nose, enabling a wide nose door, as well as a rear cargo door. And indeed, over 50 years later, Boeing is still producing updated versions of the 747, more and more in its cargo-carrying configuration.

Everything points to this plane being with us for decades to come, all thanks to a combination of leadership vision, courage and persistence by a team of talented and determined individuals.

If you would like to know the full story behind the genesis of the Boeing 747, Boeing official historian, Michael Lombardi recently gave his insights to Stephen Dowling of the BBC: <https://www.bbc.com/future/article/20180927-the-boeing-747-the-plane-that-shrank-the-world>

If you would like to know how we test for these key leadership qualities, contact us at leader@colinnewhouse.com.