



The Boeing Stratocruiser: KC-97

The KC-97 was a military version of the Boeing Stratocruiser aircraft that was used extensively by the United States military for in-flight refueling during the 1950's and 1960's. I was first introduced to the KC-97 Tanker when I reenlisted in the US Air Force in 1957 and was assigned to the 321st Air Refueling Squadron at Lockbourne Air Force Base, Columbus, Ohio.

Having already served four years of active duty as an aircraft mechanic on the B-36 Bomber aircraft at Limestone, Maine, I was not totally unfamiliar with the KC-97 because it had essentially the same piston engine as the B-36, the Pratt and Whitney R-4360 engines. Due to the fact that we had an air refueling squadron while I was stationed at Limestone, I had an opportunity to see KC-97's.

The Boeing Stratocruiser was originally developed as a civilian Airliner with a cargo version, which was designated the Boeing-377. Having been produced by Boeing Aircraft manufacturers, it had adopted much of the advanced technology that was previously developed to produce the B-29 and B-50 with some added features of its own.

During their reign, flying was considered a mode of travel reserved for the rich and a luxury to have the privilege to be aboard the Boeing-377. They carried passengers across the Pacific, Atlantic and domestically with the colors of Pan American, BOAC, American, Northwest and United Air Lines.

Only 56 of the Stratocruisers were ever built; nevertheless, they left an impressive record for passenger comfort and luxury that is unmatched even to the present. Their passenger comfort included a passenger's lounge, deluxe cabin seats, and overnight sleeper service. It had a lower galley with a fully equipped flying kitchen fitted with electric oven and refrigerator. While at its normal cruising altitude, its Pratt and Whitney R-4360 engines could reach 2,700 horsepower with its turbo superchargers engaged.

Although the Stratocruiser's tenure as a civilian passenger Airliner was its Tanker version, the KC-97 continued its useful service life as an in-flight refueler on active military duty and in the National Guard for several states well into the seventies. As a part of this life extension, late models of the KC-97 were equipped with two additional turbo jet engines which added extra power to its engine combination. This added power gave it increased speed in order for it to refuel turbo jet powered airplanes.

Several factors responsible for the untimely demise of the Boeing-377 airline service life included the fact that the DC-7 did not have any of the luxury items of the Stratocruiser; however, it was much faster and cheaper to operate. By 1959, the DC-7 had taken over most of the domestic routes at Northwest Airlines while the Boeing-377 still continued to fly some routes such as Washington to Cleveland to Detroit, New York to Minneapolis, New York to Milwaukee and Chicago at 450 miles per hour air-speed.

The final issue that rendered the Boeing-377 at Northwest as untenable was the arrival of a turbo propeller airplane in its inventory, the "Lockheed Electra" and immediately behind it came the Douglas DC-8, a pure Jet in the 450-plus mile per hour range. The Boeing-377 was on its way out. By September 1960, it was no longer in the Northwest inventory.

Other operators followed Northwest's lead and began to replace their Boeing-377 with turbo propeller airplanes and turbo Jet airplanes. A few years thereafter, the piston powered airplanes were no longer flying for any of the major air carriers.



United Air lines became one of the first operators to remove the Boeing-377 from its inventory. In September 1954, United Airlines decided to sell its entire fleet of 6 airplanes to BOAC and on January 2, 1955 it flew the last Boeing-377 flight from Los Angeles to Newark.

In its role as a Tanker, the K-97 had the capacity to carry personnel on temporary duty sites with equipment, tooling and spare parts to operate at a temporary duty assignment for periods as long as 90 days. A typical assignment would consist of a deployment to a base in the Azores Islands and operate there for 90 days. At this location, the KC-97's could make contact with aircraft en route to Europe and refuel them in flight.

During my assignment with the 321st air refueling Squadron at Lockbourne Air Force Base, I had the opportunity to deploy on several 14 and 90 day assignments. My first 90 day assignment was in 1957 to an Air Force Base in Morocco, North Africa. During that tour, we lost two airplanes before we returned back to the states. After operating for 90 days in North Africa, we stopped at Lajes Field in the Azores Islands and operated there for five days. On the day of the first mission out, one of the Squadron's Tankers was hooked up to a B-47 – refueling it with jet fuel, when the engine manifold lines of the piston engines on the Tanker became contaminated with jet fuel. As a consequence, all four engines stopped operating. An immediate disconnect was made from the Bomber and the airplane was ditched at sea, approximately three hundred miles off the Island of Santa Maria in the Azores Islands. All crew members successfully survived the ditching procedure and after a few hours in the water were rescued.

Two days later, tragedy struck the Squadron again. During take-off, another airplane crashed just after lift-off from the runway. Just as the airplane started to climb, it lost an engine. The aircraft Commander did not follow established emergency procedures and attempted to put the airplane back on the runway. As the main wheels touched the runway, one of the main gears collapsed and the airplane spun out of control and veered off the runway. In a matter of seconds, a fire was started and shortly thereafter the airplane exploded. Fortunately, all crew members were off the airplane and had become observers by the time it exploded.

While all of the trips that I made on temporary duty assignment were not quite as exciting as the North Africa trip, each trip had its own incidents that one will always remember. What I remember most about the KC-97, was its ability to grow on you the more you associated with it and flew on it. It was a good flying airplane and I had the opportunity to fly many hours in it domestically and internationally.



Picture from www.aerospaceweb.org