

FEATURE

Wong Tsu - Pioneer in Aviation

The First Engineer of the Boeing Airplane Company

By Key Donn and C. C. Tien

Wong Tsu and the Boeing Airplane Company

In the twilight of world aviation history, a young engineer from China, Wong Tsu, had made a great contribution in the founding of a legendary company of the 20th century named the Boeing Airplane Co. In 1916, after graduated from Massachusetts Institute of Technology (MIT) with a Master's Degree in Aeronautical Engineering, Mr. Wong joined a fledgling aircraft company in Seattle, the Pacific Aero Product Co., which later became the Boeing Airplane Company in 1917.

In 1915, Mr. William E. Boeing, a young successful businessman in the Pacific Northwest and aircraft enthusiast, Mr. Conrad Westervelt, a naval officer, and Mr. Herb Munter, a plane builder, planned to build two seaplanes to be called B&W's for Boeing and Westervelt. It was the time of WWI. Before the first B&W was finished, Westervelt was ordered to return to navy in the East Coast. Before Westervelt left Seattle, he asked Prof Hunsaker of MIT for an aeronautical graduate to work at Boeing and a letter from the professor dated May 1916 indicated that Mr. Wong Tsu was recommended.

One month after the first flight of the airplane on June 15, 1916, it was time for Boeing to incorporate a company called the Pacific Aero Product Company which had a crew of twenty-one people. But the B&W flunked its naval trials, which did not discourage Boeing to continue his dream of building airplanes. He probably realized at that time that building an airplane with good performance is much more than just building an airplane that flies. (The two B&Ws was later sold to New Zealand for airmail service.)

He hired a graduate of aeronautical engineering from Massachusetts Institute of

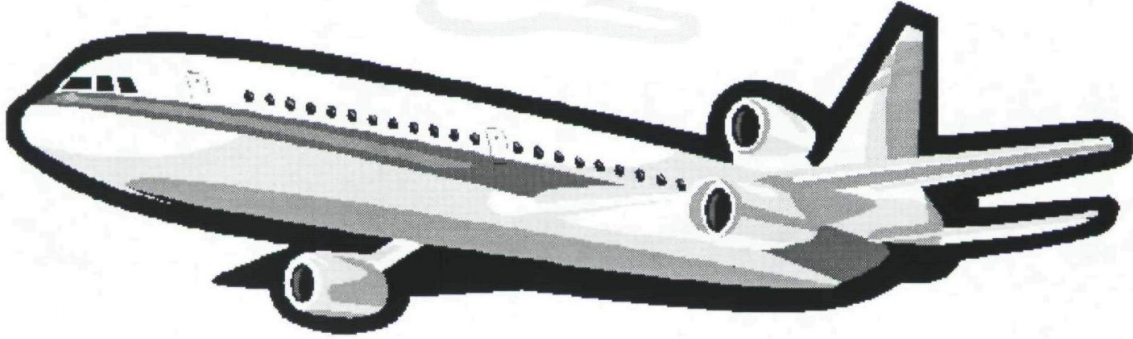
Technology (MIT) named Wong Tsu to improve on the design of B&W with a monthly salary of \$80. Boeing was quite serious about making his airplane business work.

Wong Tsu was born 1893 in Beijing, China. At the age of 12, he was admitted to the navy academy established by the Qing government. When he was 16, he was sent to Armstrong Academy, England for advanced naval studies majoring in shipbuilding. This was the first group of young Chinese cadets sent overseas to study modern technology. After graduation he went to MIT to study aeronautical engineering on a grant from the Chinese. He received his Master's degree in 1915. His graduating class of seven had five Chinese students.

When he joined the company in Seattle, he was the only college-trained engineer in the company. His assignment was to improve the performance of the B&W. Wong's new version of the plane, which was called the Model C, was a smaller two-seater with two-floats, incorporated with the latest aeronautical know-how at that time. Preparing for possible entry into World War I, U.S. navy tested two Model C's and then ordered 50 as trainers, which was a \$575,000 contract that put Boeing into business for good.

This piece of aviation history was overlooked for over 70 years until the booming Boeing-Asia relationship in the late 1980's reminded many people at Boeing of Wong's importance in the survival of the Boeing Airplane Company at its infancy.

Wong Tsu stayed in Seattle as chief engineer until after World War I, when he returned to China. From 1920 to 1949, he held a



number of responsible positions in the Chinese aviation industry. In 1949, Wong Tsu moved to Taiwan and spent the last eight years of his life from 1957 to 1965, teaching as a distinguished professor of Aeronautics at Cheng Kung University in Tainan.

In 1991, Boeing was celebrating its 75th anniversary, making it the oldest continually operating airframe manufacturer in the United States. In that year, Boeing established a Boeing Guest Lecture Series at Cheng Kung University to recognize Wong Tsu's significant contribution in the early years of the Boeing Airplane Company.

It is interesting to note that Wong Tsu did come back to visit the Boeing Airplane Company in Seattle. A news clip under 'From The Observer's Cockpit' in The Boeing News of March, 1931 reported that, "Sixteen years ago.

Lieutenant Colonel Tsu Wong was connected with the Boeing Company's Engineering Department. Two weeks ago, he arrived in Seattle as an official of the Chinese Bureau of Aeronautics. The colonel is touring the country, visiting aircraft factories and studying aviation methods generally."

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