## FEATURE The Legacy of Wong Tsu

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Pearl S. Buck, the famed author once said, "If you want to understand today, you have to search yesterday."

Ever since coming to NCKU, I want to understand it "today" by seeking "yesterday."

One of its "yesterdays" emerged very recently.

Eight years ago, when Boeing Corporation was considering streamlining its facilities across United States, one such facility that was being considered for closure was its Philadelphia plant. One of the expertise of the plant was to manufacture military helicopters fuselage.

The closure of this plant would have serious economic impact to the region. Hence, not surprisingly, led by two powerful individuals, Congressman Jack Murtha, a Democrat, and then-Congressman Curt Weldon, a Republican, a delegation from Pennsylvania was assembled and made a visit to Boeing's Corporate Headquarters in Seattle. I was fortunate to be a member of that delegation. The host at Boeing was its CEO at the time, Phil Condit.



Among many intense discussions that afternoon, one phrase seared in my mind, and it was "*Boeing has its genesis with Chinese*," said Mr. Condit. Presumably this was said because Mr. Condit saw I was among the delegation. Since there were many people at the meeting, and we only had two hours with the leadership of Boeing, I never had the opportunity to clear it with Mr. Condit as to what he meant by that.

Although I would not say I lose sleep over this, this comment by Mr. Condit often reverberated in my head.

There is an old Chinese saying which is roughly "You cannot find what you are looking for even if you have broken the iron shoes, and yet when you do find it, it requires no effort at all!"

Well, the answer Mr. Condit comment came, entirely serendipitously, after recently I had the opportunity to visit the History Chamber of NCKU's Department of Mechanical Engineering. In one of the displays, there is a picture of a former professor of the Department, a Mr. Tsu Wong. The byline of the display said that in 1916, Mr. Wong, who just graduated from MIT's Department of Aeronautics that year, was the FIRST chief engineer hired by Mr. Bill Boeing. The reason why Mr. Wong's picture is at the chamber became he was also NCKU's faculty after he came to Tainan in the 50's and taught aeronautical engineering principles in the Department of Mechanical Engineering.

Suddenly, what Mr. Condit said, was crystal clear to me.

Also, all of a sudden, my adrenalin was running fast because it became obvious to me that in my new home, National Cheng Kung University, has the legacy of an intellectual giant such as Mr. Wong.

I have always felt that a great university is akin to a well lit and well decorated beautiful Christmas tree. While it must have core excellence and core values, namely the Tree, it must also have great ornaments as well as multicolored blinking lights. The ornaments must be the truly outstanding individuals associated with the university, now or in the past, whose work, reputation and legacies could or can withstand test of time.

Hence I became fascinated by Mr. Tsu Wong which prompted me to discover more about him:

1. In his two years with Boeing Corporation (to be more precise, working for Bill Boeing,) Mr. Wong made the Model-C, which is a seaplane trainer launched by Boeing. According to http://www.u-s-history.com/pages/h1832.html, "Boeing built 56 Model Cs with 55 going to the Navy and one to Bill Boeing, who called his private aircraft the C-700." Model-C was Boeing Company's<sup>TM</sup> first financial success! In fact, in an article written by Carol N. Vu of Northwest Asian Weekly recently, "If not for Wong Tsu, Boeing might never have become the industry giant we know it as today" Wong is also considered the father of Chinese aviation, having built a distinguished career in China after leaving America."

## (http://www.nwasianweekly.com/20052448/avia tion20052448.htm)

2. In a speech delivered by Boeing CEO Phil Condit to the National Academy of Engineers in 1997 (two years before I met him), he said that "The Boeing Company was founded in 1916 by aviation pioneer Bill Boeing. He hired Tsu Wong as the company's first aeronautical engineer to replace Boeing's original business partner, Conrad Westerveldt. An engineering graduate from the Massachusetts Institute of Technology, Tsu Wong became the first chief engineer at Boeing. During those early days of the company, employees such as Tsu Wong sat together at the Red Barn, the company's first building in Seattle. Engineers upstairs; builders downstairs working together side by side - solving problems." Mr. Condit went on the say that "working together" should and must be the modus operandi of modern corporations, megasize or small. The fact that Mr. Wong was not only a pioneer of aeronautics, but also a way to work, was indeed impressive.

3. Last but not least, after Mr. Wong returned to China, he became a faculty member at Tsinghua University's engineering college. Among many students he taught at this great university was a young student who was destined to go to Mr. Wong's alma mater MIT to study aeronautical engineering. This student completed his education in Shanghai's Chiaotong University and wanted an extra year of technical training before embarking on his study at MIT. That student was Xue-Shen Qian, now commonly known as father of China's rocket science.

In the ten or so years Mr. Wong taught at NCKU, many students also went through his education baptism, and benefited enormously from his knowledge as well as real life experience in aircraft design. In my conversation with NCKU's former Dean of Engineering and Provost, Professor Lee Ke-Yang, he mentioned with great fondness, and a little tears in his eyes, the legacy Mr. Wong bestowed on this institution. While no single person can entirely be responsible to build a great university, a single person can be an important ornament blinking brightly on a beautiful Christmas tree. It is not difficult to imagine that Mr. Wong would be one such ornament. Thinking about NCKU now, and thinking about Mr. Wong in NCKU and Boeing's history, it made the words of Pearl S. Buck palpable!

(To NCKU worldwide 120,000 alumni, if you have taken courses from Professor Wong, please drop me a line and let me hear your story!)

## A small subset of websites about Mr. Wong are as follows:

http://www.cnac.org/wongtsu01.htm

http://en.wikipedia.org/wiki/Wong\_Tsu

http://www.nwasianweekly.com/20052448/aviation20052448.htm

http://www.promotex.ca/articles/cawthon/2004/2004-08-23\_article.html

http://www.u-s-history.com/pages/h1832.html