## **HISTORIAN'S CORNER –**

## December, 2003 – Glenn L. Martin and the Wright Brothers

by Matt Grogan

December 17th is the 100th anniversary of the world's first manned, powered and controlled flight by Orville and Wilbur Wright. I wanted to commemorate their feat in this column by exploring the relationship between the Wrights and Glenn L. Martin (GLM). I am indebted to Stan Piet, the historian for the Baltimore Retirees, and Professor Jack Breihan of Loyola University for their guidance.

The paths of the Wrights and GLM crossed several times in the period from 1907 through 1918, primarily at the beginning and at the end of this period. After the Wrights' first history-making flight on December 17, 1903, their fame eventually grew throughout the world as they gave demonstrations of their Wright flyers. However, the Wrights were determined to protect their inventions, and to that end obtained a patent in 1906 (No. 821,393) for their control of flying machines and formed the Wright Company in November 1909 with Wilbur as president. Their company produced and sold about 100 aircraft between 1910 and 1915, at which point Orville sold his interest in the company. Wilbur died in 1912, partially due to the stress of his efforts in protecting their patent in the US and Europe and in collecting royalties.

GLM had followed the Wrights' exploits from the beginning and, in 1907, he saw a flying machine which had been forced down in a pasture near Santa Ana, CA, where the 21-year-old GLM owned and operated an automobile repair garage and new car agency (Ref. 1, page 33). The flying machine was probably a version of the Curtiss June Bug, although that is not clear from the references I found. After an unsuccessful attempt to fly a monoplane design that he built, he decided to build a biplane similar to the one he had seen in the Santa Ana pasture and wrote to the Wrights asking if his concept infringed on their work. Orville responded that they had "no objection to your building a plane according to the design you have outlined to us" (Ref 1, page 37). GLM then built the biplane and first flew it successfully on August 1, 1909 (Ref 5, page 47)\*. GLM entered into the aircraft business formally when he incorporated his Glenn L. Martin Company on August 24, 1912, in California at the age of 26 and started to build aircraft in his small factory in Santa Ana. Sometime during this period, GLM wrote to the Wrights saying he was using their invention, but was not able to

pay their license fee, and asked what amount they would be willing to accept. The Wrights wrote back telling him not to worry about the fee (Ref. 5, page 52) and GLM apparently maintained a friendly relationship with them over the years.

The Wrights' relationship with another pioneer aviator and businessman of the era, Glenn H. Curtiss, was not so amicable. In a letter written by Orville to Curtiss in July 1908, Curtiss was warned that his aircraft building activities potentially infringed on the Wright's patent (Ref. 4, Page 286 & Ref. 6, Page 17). Indeed, in 1909, Curtiss formed a company with A. M. Herring to make or exhibit airplanes (Ref. 3, page 288). In August 1909, Wilbur filed a patent infringement lawsuit against him (Ref. 2, page 185). Wilbur contended that their patented concept of lateral control of flying machines by "wing warping" also covered the Curtiss separate aileron concept (Ref. 6, Page 17). After the US Court of Appeals finally adjudicated this suit in favor of the Wrights in January 1914, Curtiss again tried to circumvent the patent by using just one aileron at a time vs. two (Ref. 4, Page 401). The Wright Company filed suit again against Curtiss and in 1915, Orville sold his interest in the Company, but not before all the evidence had been taken for the second infringement suit. This second case never came to trial because Curtiss was able to drag out the proceedings with proposals of settlement. These negotiations continued until the US entered WWI, and, in April 1917, an Association was formed for the cross-licensing of manufacturers building flying machines for the US government. The Wright Company received royalties on all planes manufactured for the US Government (Ref. 4, Page 402, 403), but the their airplanes only accounted for about 34 of the 5206 airplanes ordered (Ref. 3, Page 288).

In August 1916, GLM was persuaded to merge part of his company with the Wright Company (Ref 5, Page 88) to form the anticipated war effort. Orville was no longer active in the Company, having sold his interest in 1915. GLM's role with the new Wright Martin Aircraft Company lasted only until 1918. It became clear to him that he would have little control over the fortunes of the new company, and in fact had been relegated to manufacture a French aircraft engine (the Hispano-Suiza) rather than aircraft, which were his overwhelming interest. He then formed the Glenn L. Martin Company, based in Cleveland, Ohio, with the support of well-heeled investors (Ref. 1, Page 83), to design and manufacture aircraft. Thus ended the business relationship between the Wrights and GLM although in 1943, Orville made his last flight in a Lockheeed Constellation!

In addition to the above commemoration, I wanted to let everyone know that there is a company-supported project beginning to create a History of the Titan Program under the leadership of Paul Jones and Dick Yoshida. They have established a web site (www.ast.lmcotitanhistory) [Editor Note: Inactive] which volunteers can access to provide data on the Titan, and they especially need help on the history of launch sites. They plan to publish a DVD data base and a DVD with flight footage, historical data, personal videos, etc. Please contact them on this web site.

\* This account by Harwood may be in error. According to Stan Piet, the first documented GLM flight was in 1910.

## References:

- 1. Harwood, William P., "Raise Heaven and Earth", 1993
- 2. Crouch, Tom & Jakab, Peter, "The Wright Brothers", 1989
- 3. Hallion, Richard P., "Taking Flight", 2003
- 4. "Miracle at Kitty Hawk", The Letters of Wilbur and Orville Wright, edited by Fred C. Kelly, 1951
- 5. Biddle, Wayne, "Barons of the Sky", 1991
- 6. Portillo, Donald, "Pushing the Envelope", 1998