

Notable Influences in the Marketing of Early Fixed Wing Aviation

by Lorne Bohn

THE RAPID GROWTH IN AVIATION has been staggering. There are many branches of science which have made rapid progress but few have advanced in such a short time. It is amazing to realize that Orville Wright, the first man credited with achieving controlled, powered, heavier-than-air flight in 1903, and the first man to walk on the Moon in 1969, Neil Armstrong, were alive at the same time. Neil Armstrong was seventeen years old when Orville Wright died.

This rapid advancement was brought about by the curiosity of individuals who sought to defy the unnatural act of flying. Soon, the potential of aircraft was realized as nations found it necessary to have air superiority in order to gain strategic advantage in times of war. The driving force in this pursuit was the series of Twentieth Century wars. What is often overlooked, however, is the atmosphere and climate which was created along the way and was fostered by individuals who could visualise the future and realize the potential in the development of aircraft. Some of this was very deliberate but much of it was the result of circumstance.

A great deal has been written about the accomplishments of the daring young men who risked their lives to advance early aviation. It did not take long for them to use the technological advancements that were being made to perform new feats and to establish records.

IN THE UNITED STATES OF AMERICA

The Wright brothers got off to a slow start after they first flew but they quickly had others who followed close behind. The Wrights spent considerable time perfecting their invention and, in 1906, the American government finally granted them a patent on their method of flight control for the aeroplane which involved 'wing warping'. It was primarily the fear of not obtaining this patent that was responsible for them not making any flights at all in 1906 and 1907. For several years after their first flight the Wrights became embroiled in law suits over what they believed was theft of their creative genius over the patent on the aileron. Their patent was vague enough that it could be construed to cover any form of lateral control. The Wrights were further disappointed by not receiving the reception they expected when they approached the military to buy their invention. The U.S. government was particularly hesitant to make any further investment in experimentation with flight because they had already spent \$50000 on the development of the Langley Aerodrome, which was a product of the nation's leading scientist in the field, Samuel Pierpont Langley. Langley's aeroplane proved to be a disaster which plunged into the Potomac River; not once, but twice.

In 1907, the Canadian-American research group Aerial Experiment Association (AEA), was formed under the leadership of Alexander Graham Bell and with notable members, such as Glenn Curtiss. They developed several significant technological advancements to aircraft design, including tricycle landing gear and wingtip ailerons. Even though the AEA registered their own patent on the aileron for controlled flight, the courts concluded that the Wright patent superseded that of Curtiss and ruled in favour of the Wrights. Orville immediately began demanding a 20% royalty for any aeroplane with any form of lateral control built by any manufacturer, retroactive to the first plane produced. Curtiss challenged the Wright ruling in 1913 but the Curtiss and

Wright patent dispute on controlled flight effectively blocked any aircraft development in the United States. This placed the United States at a severe disadvantage in further development of the aeroplane, to the point where the U.S fell from being a leader in the field of aviation to last placed, with the countries who were its competitors; France, the U.K. and Germany. By the end of WWI, neither Wright nor Curtiss pursued the controversy any further, mainly because the issue was resolved by a shrewd move on the part of the US Government, which stepped in and required the industry form a cross-licensing organization in the form of the Manufacturer's Aircraft Association, which all aircraft manufacturers were required to join. By the end of WWI, Curtiss and Wright even went on to form a partnership.

In 1908, Orville Wright, armed with the patent he sought, pursued a military contract with the United States Army while Wilbur went to demonstrate their invention in France, hoping for a military contract for which the brothers wanted \$200,000. The French became quite enthusiastic about the Wright Brothers' experiments. This was mainly because the Wright wing warping technique made their aircraft more manoeuvrable than the French counterparts which relied on rudder control to make turns. When Wilbur Wright demonstrated their machine at Le Mans in 1908, the Wrights received the acknowledgement they had been seeking. The world had confirmed the superiority of their aircraft and they secured a contract with a French company to have their machines built in France.

Gaining courage? This daring young man was Maurice Tabeteau. He came from a wealthy family and initially became interested in automobile racing, like many other early aviators. He soon established a name for himself in aviation and went on to hold at least six records for speed and distance. The caption on the reverse of the picture states that his satchel contained his breakfast. :M. Branger

