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Affidavit in the Case of *Orville and Wilbur Wright vs. Glenn H. Curtiss*

The legal fight after first flight Kahlil G. Chism and Lee Ann Potter

On November 27, 1909, in the U. S. Circuit Court, Western District of New York, Orville and Wilbur Wright submitted an affidavit in the case of *Orville and Wilbur Wright vs. The Herring-Curtiss Company and Glenn H. Curtiss*.[1] In the 54-page document (partially featured in this article), the Wright brothers challenged both Glenn H. Curtiss's claim to having designed original mechanisms for controlling the lateral movements of an airplane and his right to profit from his innovations. Curtiss claimed to have invented controls that resulted in drastic improvements over the Wrights' planes. While the Herring-Curtiss Company planes did achieve greater maneuverability than Wright planes, the Wrights claimed in their affidavit that they "were the first in the history of the world to embody in an actual machine the idea of adjusting the right and left wings to different angles of incidence to regulate lateral balance."

Six years earlier, on a windy beach in Kitty Hawk, North Carolina, the Wright brothers had made history. On December 17, 1903, Orville Wright became the first man to achieve prolonged flight in a mechanically powered plane, when he flew for 12 seconds over a distance of 120 feet. As the brothers asserted in their 1909 affidavit, that feat "won for them the medals of the Congress of the United States, the State of Ohio, the City of Dayton, the Legion of Honor of the French Republic," and many other awards and accolades. Their accomplishment, however, occurred in the midst of a storm of creative ideas and energy in aviation.

Concurrently, Glenn H. Curtiss was also making aviation history. Depending on the source, Curtiss was either "the first American after the Wright brothers to build and fly an airplane,"[2] or the man whom history should rightfully credit with "the first public flight in the United States."[3] According to Seth Shulman, author of *Unlocking the Sky: Glenn Hammond Curtiss and the Race to Invent the Airplane*, Curtiss can also be credited with "the first commercially sold airplane, the remarkable first flight from one American city to another, the issuance of the first U.S. pilot license," and airplane design elements still in use today, such as wing flaps, retractable landing gear, and the enclosed cockpit.

The Wright brothers and Curtiss, who first met at a flying exhibition in Ohio in 1906, had much in common. All were businessmen and inventors who initially manufactured and sold bicycles, and grew up in the era when other daring scientists such as Otto Lilienthal, Octave Chanute, and Samuel P. Langley were attempting to invent the world's first flying machine. Just days before the historic Wright brothers' flight at Kitty Hawk, Langley, who was at the time secretary of the Smithsonian Institution, made a valiant, but failed attempt at achieving the first public flight using a flying machine, paid for with money from the U.S. military.

Both the Wright brothers and Curtiss anticipated that the aviation business would become lucrative. However, one difference between the two was that Curtiss was a mechanic and engineer, and was seemingly more comfortable than the Wrights with sharing his advancements and ideas with others in aircraft design. The Wright brothers, who were primarily entrepreneurs, were keenly aware of how profitable their patent rights were, and they were zealous about protecting their business interests. Curtiss's fear was that if the courts decided to interpret the Wright brothers' patent in its broadest sense, the result would be a *de jure* Wright monopoly on controlled flight in the United States. The Wright brothers, on the other hand, were not about to allow Curtiss, or anyone else in the field, to benefit from their inventions and patents without recompense.

Some of the issues addressed in the Second Circuit Court of Appeals case number 3869 were patent infringement, the concept of invention versus innovation, and the establishment of a monopoly versus free and fair trade practices. The two pages of the affadavit featured in this article illustrates an early battle in what would become a six-year litigation war that eventually retarded the growth of the U.S. aviation industry. In July of 1910, after approximately thirty motions and filings supporting claims and counter claims between the two parties, the U. S. Circuit Court of Appeals, Second Circuit, issued an opinion on case number 3869, *Orville and Wilbur Wright vs. The Herring-Curtiss*

IN THE UNITED STATES CIRCUIT COURT,

WESTERN DISTRICT OF NEW YORK.

Orville and Wilbur Wright	)	
	)	
vs.	)	IN EQUITY
	)	
The Herring-Curtiss Company and	)	NO. 400.
	)	
Glenn H. Curtiss.	)	

AFFIDAVIT OF WILBUR and ORVILLE WRIGHT IN REBUTTAL.

State of New York,)
) ss:
County of New York.)

We, Wilbur and Orville Wright, being duly sworn, depose and say that we are the complainants herein and that we have read the affidavits of Messrs. Curtiss, Herring, Hill and Newell filed herein, in connection with the several prior patents, photographs, drawings and book exhibits referred to therein.

We state to the court that every one of the prior patents and experiments cited by the defendants as instances of priority in the art were either mere visionary projects never embodied in material form, or abortive experiments which, having failed of accomplishing successful human flight, were discontinued long before the plaintiffs produced the machine which finally opened the era of human flight and won for them the medals of the Congress of the United States, the State of Ohio, the City of Dayton, the Legion of Honor of the French Republic, gold medals

construct it, or how to use it. And finally it fails to disclose in any way whatever the combination of lateral portions adjustable to different angles of incidence and an adjustable vertical rear rudder which is caused to present to the wind that side which is toward the side of the aeroplane having the smaller angle of incidence and least resistance.

In conclusion, we show the court that complainants were the first in the history of the world to embody in an actual machine the idea of adjusting the right and left wings to different angles of incidence to regulate lateral balance. When they built their first machine in 1900 they were not aware that a similar idea had ever suggested itself to the mind of any other person. They were the first to perfect the invention by providing means for overcoming the difference in resistance of the two sides when adjusted to different angles. They were the first to demonstrate its value to the world, and we affirm that the world owes to them and to no one else this invention which conquered the "rock of Gibraltar" that had theretofore withstood man's efforts to fly.

Wilbur Wright

Orville Wright

Subscribed and sworn to before me this 27th day of November, 1909.

Jonathan H Holmes
Notary Public.
New York County

Company and Glenn H. Curtiss, reversing the original injunction that prohibited Curtiss from flying his planes without a license from the Wrights. However, lawsuits between them continued until the U. S. government intervened because of the conflict in Europe which would become World War I.

While a 1909 purchase from the Wrights had made the U.S. War Department the proud owner of "one flying machine," by the beginning of World War I, the United States had fallen far behind other nations in airplane design and production. By August of 1914, the United States had fewer than 12 fighter planes, while the militaries of Germany, France, and England had 180, 136, and 48 aircraft, respectively.[4] The Wright patent had blocked Curtiss and other would-be American airplane manufacturers, and the U.S. government considered the Wrights' $1,000 per plane royalty fee too costly to permit the mass production of warplanes.[5] As a result, then-Assistant Secretary of the Navy Franklin D. Roosevelt headed up a government advisory committee that eventually recommended a cross-licensing agreement between the Wright-Martin Aircraft Corporation, the Curtiss Aeroplane & Motor Corporation, and all other aircraft manufacturers tied up by the Wright and Curtiss patents and lawsuits. By March of 1917, all involved parties were sharing patent rights, technological expertise, and much reduced royalties as part of an umbrella organization titled the Manufacturers' Aircraft Association.[6]

Whether they were attempting to maximize profits on the sale of their planes, or simply trying to protect their patent, the Wright brothers were well aware of just how much their December 17, 1903, flight benefited posterity. According to the last page of the featured affidavit—one of the few documents containing the signatures of both men—the Wright brothers boldly asserted, "We affirm that the world owes to them and to no one else this invention which conquered the 'rock of Gibraltar' that had theretofore withstood man's efforts to fly."

Note

The affadavit featured in this article comes from the Records of the District Courts of the United States, Record Group 21, and is housed in the National Archives-Northeast Region in New York, N.Y.

Teaching Activities

1. Focus Activity

Remind students that in December 1903, the Wright brothers successfully achieved prolonged flight in a mechanically powered airplane. Then tell them that at the start of World War I, the United States military had 12 airplanes, but that Germany had 180, France had 136, and England had 48. Ask students to consider why the U. S. had so few and record the students' answers on the board.

2. Vocabulary Development

Ask students to define each of the following terms: affidavit, rebuttal, defendants, plaintiff, circuit court, visionary, lateral, affirm, posterity, monopoly, infringe, invention, innovation, notary public.

3. Analyzing the Documents

Provide students with a copy of the two-page featured document (inform students that they are the first and last pages of a fifty-four-page document) and lead a class discussion using the following questions:

A. What type of document is it? (letter, newspaper, memorandum, affidavit, report, press release, etc.)
B. What are some of the unique physical qualities of the document? (interesting letterhead, handwritten, typed, seals, stamps, notations, signatures, etc.)
C. What is the date of the document?
D. Who was the author/creator of the document?
E. For what audience was the document written? How do you know?
F. What important information is conveyed in the document?
G. In whose "voice" is the affidavit written? Who literally did the writing? Why do you think so?
H. Who is/are the plaintiff(s)?
I. Who is/are the defendant(s)?
J. What is the tone of the document (defensive, hostile, stoic, indignant, arrogant)?

4. Position Paper

Refer students to the list that they generated during the Focus Activity and ask them whether they see a connection between their list and the affadavit. Share information from the background essay and explain that one of the main reasons for the disparity between the number of U.S. military airplanes in comparison to the countries of Europe at the start of World War I was the court case between the Wright brothers and Glenn Curtiss. Because "ownership" of certain ideas was being argued in American courts, the domestic aviation industry was effectively placed on hold. Next, remind students that Article 1, Section 8, Clause 8 of the Constitution states that Congress shall have the power "To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." Ask students to assume the role of either the Wright brothers, Glenn Curtiss, or the U.S. government and write a one-page explanation of how they believed this clause in the Constitution supported their case. Invite student volunteers to share their position papers with the class.

5. Group Research Activity

Divide students into small groups and direct them to conduct an Internet search using the terms "Patent Infringement." It is likely that many of the thousands of hits that they retrieve will refer to court cases currently in the news. Ask the students to choose one case that is of particular interest to them, and write a one-page brief about it. The brief should include the following information:

- the title of the case
- the facts and litigants
- the issues at stake
- the plaintiff's argument
- the defendant's argument
- the student's "opinion" on the case

6. Independent Research

Remind students that the affadavit related to a court case involving a particular patent. Direct students to record the patent numbers from five items in their home. Tell them that the numbers are often

found on labels mounted to computers, radios, compact disc players, video game machines, televisions, etc. Inform them that the Wright brothers patent application and millions of others are available online and demonstrate for them a patent case file search on the U. S. Patent and Trademark Office's website (patft.uspto.gov/netahtml/srchnum.htm), by searching on patent number 821,393. Next, ask the students to conduct a patent case file search on one of their household items using the U.S. Patent and Trademark Office's website. Encourage students to record when their item was patented, by whom, and three additional facts about it. Invite student volunteers to share their information with the class.

Notes

1. Affidavit of Wilbur and Orville Wright in Rebuttal, In Equity No. 400, Case Number 3869, Court of Appeals for the Second Circuit; *Orville and Wilbur Wright vs. The Herring-Curtiss Company and Glenn H. Curtiss*; United States District Court for the Western District of New York, Records of the District Courts of the United States, Record Group 21; National Archives and Records Administration - Northeast Region (New York).
2. Roger E. Bilstein, *Flight in America: From the Wrights to the Astronauts* (Baltimore, Md: Johns Hopkins University Press, 2001).
3. Seth Shulman, *Unlocking the Sky: Glenn Hammond Curtiss and the Race to Invent the Airplane* (New York: HarperCollins, 2002).
4. Information courtesy of the U.S. Air Force Museum, available online at www.wpafb.af.mil/museum/history/preww1/pw24.htm.
5. Joel I. Klein, "Cross-Licensing and Antitrust Law" (An address delivered by Klein, acting assistant attorney general, Antitrust Division, U.S. Department of Justice, before the American Intellectual Property Law Association, San Antonio, Texas, May 2, 1997.) From the Consumer Project on Technology website. Available online at www.apeccp.org.tw/doc/USA/Policy/speech/1123.htm.
6. For a detailed summary of the events leading to the establishment of the Manufacturers' Aircraft Association, and the terms set between the Association and the U. S. government, see *Manufacturers Aircraft Association, Inc., v. The United States*, No. J-569, United States Court of Claims, 77 Ct. Cl. 481; 1933 U.S. Ct. Cl. LEXIS 277, May 8, 1933, Decided Case Summary. Available online at www.cptech.org/cm/maa-v-us.html.

Kahlil G. Chism *is an education specialist and* **Lee Ann Potter** *is the head of Education and Volunteer Programs at the National Archives and Records Administration, Washington, D.C. Potter serves as the editor for "Teaching With Documents," a regular department of* Social Education. *You may reproduce the documents shown here in any quantity.* *The authors would like to extend special thanks to archivist* **John Celardo** *in the National Archives and Records Administration's Northeast Regional Facility, New York, NY, for his assistance with the research for this article.*