Faded Memories: The Wright Brothers and Germany, 1909-1913

Guillaume de Syon
Albright College

Follow this and additional works at: http://corescholar.libraries.wright.edu/following

Part of the History of Science, Technology, and Medicine Commons

Repository Citation
http://corescholar.libraries.wright.edu/following/symposium/program/1

This Event is brought to you for free and open access by the Special Collections and Archives at CORE Scholar. It has been accepted for inclusion in Following in the Footsteps of the Wright Brothers: Their Sites and Stories by an authorized administrator of CORE Scholar. For more information, please contact corescholar@www.libraries.wright.edu.
An Enigma

European aviation literature is filled with acknowledgements of the Wright brothers' achievements. Indeed, as historian Charles Gibbs Smith once noted, the Wright flights in Europe in 1908 "fully amounted to the precipitation and rebirth of European aviation." That after 1909 Europeans turned to their own devices and caught up with American designs is also widely acknowledged, for not only did Europe slowly move towards war, but the brothers became embroiled in multiple lawsuits against aircraft constructors which, as other chroniclers have noted, sapped their creative energies.

Strangely, however, "Europe" in most European accounts amounts to France and Great Britain, and either ignores or subsumes Germany: The Wright experiments at Pau are often mentioned, but even German studies only briefly remind readers that indeed, the Wright brothers did spend time in Germany selling airplanes. That the Wright endeavor disappeared from the German scene and German memory by World War I is assumed under the heading of subsequent German historical events. This article seeks to correct the general explanation by placing the German perception of the Wright brothers in the context of German aviation development and to show how the general Nationalism and technology factors (which played their role in France and Great Britain), while obviously present in Germany, played out in an entirely different way.

Announcing the Wrights

The story of the Wright's interaction with German authorities goes back to early contacts the Wrights established in 1906 and 1907 with the intent of selling aircraft to European governments. Germany was on the list, and because the Prussia was the most powerful of the German states newly unified into the German Empire, its army was high on the list of the Wright's potential clients. The Wrights had also obtained a German patent to protect their wing warping principle.

Knowledge of the Wright Brothers' achievements had made its way to Germany through the reports of such early aviation journalists as Hermann Moedebeck, who published pictures of the Wright gliding tests in Illustrierte Aeronautische Mitteilungen in 1902. Two years later, journalist Carl Dienstbach informed his readers of the December 1903 successes. The admiration for the Wrights' achievement was marred, however, by an unfortunate translation and publication of a Wright letter to the French government in 1905, in which the advantage of an airplane in case of a conflict with Germany and other powers was mentioned. All of a sudden, the German public mood came to resemble the sarcastic French one, which demanded proof that the Wrights were as successful as they claimed to be. Official attitudes, however, remained open to the Americans, and the somewhat distant reception the Wrights got in Berlin in 1907 appears to have been the result of the high price Wilbur Wright demanded for the production license (some 1 million marks): the War Ministry rejected the offer.

Off to Germany

The Wright brothers' true success came when they accepted the European challenge to show
their mettle, which they did by breaking every record in the books in summer 1908, in particular during meetings in France. Several Germans traveled their to observe the flights, and some, like Paul Ehrhardt (later an World War I ace and aircraft engineer), had even hitched their very first ride up with Orville. Others approached the brothers with a proposition.

One of the Germans present in France was aviation journalist Alfred Hildebrandt, who reported on behalf of the Scherl publishing group and one of its newspapers, the Berliner Lokal Anzeiger, and extended a special invitation to the Wrights. Scherl was eager to sponsor aviation events (an earlier association with Count Zeppelin had failed), and had earlier attempted to bring the French Voisin brothers for a series of demonstration flights to Berlin. Under special newspaper sponsorship (a common practice at the time), the brothers agreed to conduct as series of demonstration flights in Berlin in September 1909.

That same month, the first German International Aviation Exhibition (ILA) opened in Frankfurt. There, a German-built version of the Wright machine that had stunned onlookers the previous year stood on display. However, the machine stayed on the ground and did not participate in the endurance competition. The machine's owner was the newly created German Wright license holder, the Flugmaschine Wright GmbH, which took advantage of Orville Wright's presence in Berlin (he was on the company's board of directors) to extend the demonstration flights in the German capital: They lasted from 4 to 20 September 1909.

Scherl Publishing had heavily advertised the flights. These came in the wake of Count Zeppelin's triumphant airship flight over Berlin the previous month, and a true media blitz was required to draw urbanites away from "their" Count and "their" airships. Two books appeared, including an authorized translation of The Wright Brothers' Aeroplane, and Scherl's Die Woche brought out a special issue on aviation. The Berlin flight demonstrations delighted thousands of Berliners and allowed the company to begin forming pilots and selling machines. Not only did thousands of Berliners come to see the demonstration flights, but so did members of the imperial family. Crown Prince Wilhelm, fascinated with new technologies, bummed a ride up with Orville, earning himself a house arrest from his father, Kaiser Wilhelm II, who did not appreciate his son's "Dumheiten." The presence of royalty suggested indeed a well-deserved consecration for the Wrights (Orville reported Crown Prince Wilhelm removed his W-shaped diamond tie pin and gave it to the aviator in gratitude). The brothers had already earned an honorary doctorate from the university of Munich years earlier, and on a yearly basis in December, German newspapers reminded their readers of the Wrights' accomplishment at Kitty Hawk.

When Orville Wright was about to give flight demonstrations in Berlin, he wrote in his correspondence that had the Berliners not been so eager, he would have rushed to compete in a French race at the Reims meeting and taken all the prizes. He was probably right, but he did take some time off to travel to Frankfurt, where the ILA was taking place and, at the invitation
of Count Zeppelin (whom he'd met in Berlin a few days earlier), flew aboard an airship. He
did not, however, demonstrate the Wright machine on static display at the airshow, as his
50,000 Mark contract with Scherl forbade it. This was a missed opportunity in a country that
had come to aviation late.

Germany in the Air

"Our future lies on water" once said Kaiser Wilhelm II while discoursing on the German naval
armament program. This alone summarizes the early German attitude towards aviation. As John
Morrow has explained, German heavier-than-air aviation lagged behind that of other nations.
What this means, though, is that the opportunity to purchase and use Wright flyers should have,
in all logic, been an ideal solution that would have placed Germany on par with the French
army's designs. However, the French at the time were considering a dual path that involved
using both airships and airplanes, with the latter still considered, to quote a future Marshall
Foch "an interesting toy with no military value." Airships thus seemed to have an advantage,
and this placed a retired General, Count Ferdinand von Zeppelin, in a good position to market
his interpretation of dirigibles, namely the rigid airship. By 1908, the Count had become the
hero of the day when, despite his failure to accomplish a twenty-four hour endurance flight in
an airship, Germans of all social ranks and cultural backgrounds came to identify in the Count
the traits of a new German hero. This identification of aviators as heralds of a new age is
nothing of surprise, but it may have, ironically, contributed to diminishing the image of the
Wright brothers at a time when image did matter in aviation.

Only once Count Zeppelin gained public attention in 1908 did the Imperial quote get revised
into "our future lies in the air." The summer of 1909, like the preceding one, turned out to be
an aeronautical one for many Germans. Count Zeppelin, recovered from the loss of an airship a
year earlier, now basked in fame and cruised his machines to various cities around the German
empire. Germany also opened up its skies to aviation competition and exhibits. In fact until
1913, the media punctually noted the anniversary of the Wright Brothers' first flight, and
mentioned the names of Brazilian Santos-Dumont and even Frenchmen Blériot, Bellamy and
Pégoud. Only the late Otto Lilienthal, a brilliant pioneer whose death in a gliding crash in 1896
gone relatively unnoticed, began to register in German media memory. Even as German
and foreign aviators attained new airplane records, Count Zeppelin personified Icarus. The
occasion of Orville Wright's visit to Berlin in 1909 and later flight in an airship over Frankfurt
offered grounds for poetic celebration of heavier and lighter-than-air flights, rather than
mistrust between the two flying methods: "Zeppelin and Wright are the kings of the sky"
waxed Alfred Hildebrandt, who nonetheless emphasized that "...Zeppelin's name hold a special
resonance everywhere." Although he clearly was a friend of the Wrights, Hildebrandt's kept a
special spot in his heart for Count Zeppelin, who had agreed to become godfather to his son.

At the ILA in Frankfurt most of the attention had been focused on airships of all kinds. The
airplane section contained but twelve entries, one of which was German (built by August Euler,
holder of German pilot's license #1). Even so, press coverage of aviators emphasized foreign
 flyers and Count Zeppelin, going so far as to denigrate Euler's efforts as "dangerless jumps.".

The prizes awarded at the ILA all went to French machines, and while Orville would have
likely won several, by maintaining his full commitment to the Berlin operation he missed
scoring points with a non-Berlin public. Imperial Germany was newly united under Prussian
domination, and matters that enthused Berliners were often viewed with suspicion by Germans
from other states. This factor had already become clear in 1908 when Count Zeppelin's sudden
popularity throughout the empire had caused a considerable wave of anti-Prussian feeling, and
shown how public opinion in matters of aviation could play a role, even in an authoritarian
nation.
Thus, what became a sensation in Berlin at the instigation of a local newspaper did not have as much of an impact on people around Germany. The contrast with the Wrights' French experience is important here, for Orville acted logically in Germany based on his and his brother's experiences in France. To appear at Pau and Le Mans in France was to have a national impact on aviation there. Yet in Germany, to fly in Berlin was to impress the Prussians and a few German enthusiasts, but not necessarily the German public as a whole, despite the general perception of flight as a wonderful -and magical- thing. Thus, the popularity of the Wrights remained a regional matter, while most Germans celebrated Count Zeppelin and a few French and German flyers in Frankfurt. However, Wright's presence in Berlin did have a good effect on Wright GmbH's business.

**Wright GmbH**

When it was incorporated, Wright GmbH became the second aircraft manufacturing company to open in Germany (behind August Euler's). It was the result of intensive negotiations with the Motorluftschiff Studiengesellschaft ("Society for Airship Studies"), a governmental board studying airship and airplane options towards the establishment of an aeronautical industry) and its chair, Walter Rathenau (who had dealt with the Wrights back in 1907), Capital participation involved several industrial leaders such as Krup and AEG (whose chair happened to be Rathenau). Such financial backing along with the good name of Wright would, or so all hoped, sell machines as fast as these could be built. At first, projections seemed confirmed.

The results of the German Wright company's first year were quite positive: some 22 machines were built and delivered. The average sale price was 22,000 Marks, which helped balance the heavy license fee the Wrights demanded of Wright GmbH (400,000 out of the 600,000 Marks capitalized for the company's creation). However, added fees such as royalties, salaries, maintenance and factory building continued to cost the business. Wright GmbH did not just build machines, it also trained aviators to represent it in Germany and neighboring nations, compete in races, and sell German-built Wright flyers. The practice had some success: a pilot would journey to, say, St. Moritz in Switzerland and place an announcement in a newspaper that passenger flights were available, along with the possibility of acquiring and learning to fly such machines. By the end of the six weeks, representatives hoped that, in addition to being feted, they would net a few orders from the well-to-do who spent time at the resort.

Thus, in 1910, a full 1/3 of all German-licensed pilots had trained on Wright flyers, and several went on to become aviation pioneers in their own right, including Paul Engelhard, Wright's chief pilot in Germany, Samoilowitsch, and even future designer Josef Sablatnig. Yet clouds already loomed in the financial skies. As was the practice, pilots who competed in air meetings received prizes which, they hoped, would help cover the costs associated with their trade. Pilots associated with Wright GmbH won many awards, but the cash amount was often too little to actually cover all costs, which included further installments towards paying for the plane. Robert Thelen, for example, whom Orville described as "by far the best [pilot] they have here" made 40,000 marks in cash awards in 1910, an impressive amount, yet "not enough to pay for the machines" he had bought.

In addition, to his great dismay, Orville discovered that the German manager, Klose, was inclined to discounts, did not pay royalties on machines until they had been completely paid for, and was having trouble meeting deadlines. This left him fuming over the lack of income, a situation made all the more troubling by the decision of AEG to initiate license manufacturing of its own. Arguments over contractual terms prompted angry missives from Wilbur threatening legal action, further straining relations with German industrial circles. Orville concluded: "Our business is so tangled up with other concerns which are also manufacturing aeroplanes that I have but little hope of its being ever successful." Orville was not alone in feeling this way.
All aircraft manufacturers in Germany faced difficult circumstances before World War I. The careful evaluation process of any model the German government considered tended to be initiated suddenly, then took months to come to a conclusion. Wright GmbH thus missed two aircraft delivery dates to the German army in 1911 and 1912 (so-called "acceptance trials.") Furthermore, although the War Ministry had steadily increased funding for both the airplane and airship industries over the period 1910-1913, by the latter date the seventeen German airplane constructors had a combined capital of 3.2 million marks, compared with the Zeppelin Company's 3.5 million. In that time period some twenty-four airships had been contracted for. This was partly the result of strong lobbying on the part of the Zeppelin Company itself, which waved the risk of bankruptcy in the face of government officials. True, the German government, aware of the need to catch up to France, had initiated a national aviation fundraising effort whose monies would be reserved for heavier-than-air flight, but there were no military contracts to be had, leaving all manufacturers scrambling to find the few civilian buyers willing to risk buying an airplane and flying it. Wright GmbH, which also functioned as a flying school, was one of twenty to receive funding for the training of German pilots, but few came forward for training after 1912. In parallel, desperate calls for help on the manufacturing arm of the company fell on deaf ears, even though several aircraft constructors, such as a young engineer named Hugo Junkers, were able to secure the necessary subsidies for prototype design.
Thus, the need for good airplanes, which should have helped the German Wright company, did not lead to success. By 1912, the numbers of aircraft sold were extremely low, despite some publicity. The dire situation can be ascribed to the technological realm.

Technological genius made the Wrights' success, but public perception arguably broke it. The matter of patent protection had already proved troubling in Europe, but the Wrights had been successful in defending their invention.

A German engineer named Vorreiter had published in 1910 a "critique of the airplane," in which he described the Wright flyer warping principle as the most important construction for it had inspired all other designs. The Wrights sought to maintain that advantage, but although they won their fights in court, by most accounts these struggles also sapped their creative energies. The final blow in German court in 1912 was to recognize the Wright patent only as far as it involved the coupling of the rudder and wing warping in simultaneous movement. Separate wing warping was deemed common knowledge. At the time, news of this decision combined with the death of Wilbur no doubt prompted Orville to give up on the German fight. It seems, however, that the fight had already been lost due to two other technological factors.

Orville Wright commented sarcastically on several occasions about the ways in which Europeans seemed to persist in trying to improve a good formula, only to ruin it. As pilots acquired Wright machines, they obesityly toyed with making them better. Such amateur "souping up" process was common in early automobiles, but in aviation it often proved disastrous, including on Wright machines. Many pilots thus met their end. In Germany, where several accidents had occurred, such a tragedy befell the chief pilot of the German Wright company, Paul Engelhard (owner of German pilot's license #3). The Wright machines often experienced problems with the chain that linked the engine to the two propellers. As a result of extreme speeds, metal fatigue set in and the chain would break. Attempts at replacing the chain with a stronger version had little effect, however. On 29 Sept. 1911, Engelhard fell to his death when a modified chain failed. Despite the efforts of his successor, Robert Thelen, to restore confidence by proving where the fault had occurred, the damage had been done. Consequently, many pilots preferred training on other machines, even some as difficult to handle as the Blériot (in comparison with the Wright flyers).

Whereas improvements were sometimes dangerous, so was the complete lack of innovation. During its existence, Wright GmbH built four different types of Wright machines with various engines, including a 1913 variant of the flyer C, capable of lifting some 4 people. But performance, although improved, could not compete with new maneuvers.

The proverbial nail in the technological coffin came from a Frenchman, Adolphe Pégoud. Whereas in 1909 Berliners had been content to watch Orville Wright demonstrate the maneuverability of his machine, four years later the public wanted to see more. Faster machines, sharper maneuvers, were all part of early airshowmanship, and Pégoud stunned onlookers by performing loops with his machine. That these were not perfect, nor the first time such had occurred (a Russian, Nesterov, appears to have pioneered the maneuver) did not matter: to watch Pégoud perform "what no bird can do" was a new thrill, and the pilot's character and youth made Germans who saw him forget for a moment the slowly rising storm
with their Western neighbors. Wright's calm, proper attitude was charming and dull. By contrast, Pégoud's brash attitude, demanding the Germans address him en Français (which they did!) offered an thrilling edge, and reflected the beginning of the pilot's evolution into a new knight. Last but not least, that Pégoud fell in combat in 1916 when fliers still honored their fallen enemies actually inscribed him in the annals of German military aviation. As an early German aviation historian, Peter Supf, put it, the Wrights had taught the world to take-off, but Pégoud had taught Germany aerobatics. Ease and daring had replaced patience and endeavor.

Conclusion

By 1913, the Manufacturing arm of Wright GmbH had been absorbed into the LFG company (later known as Roland). The flying school carried on piecemeal activities until summer 1914, when Europe rushed into war. On September 26, the company announced its remaining assets would be sold. Thus ended the Wright presence in Germany. The German Wright episode reflects a facet of the cultural difference between the Wrights as inventors of flight and the uses of aviation before World War I. The brothers' approach to business and invention was methodical and focused, yet in the anarchical setup that characterized early European aeronautics, where everybody was an inventor, constructor, flyer, and even con artists, it required a level of charisma and flexibility which the Wrights did not achieve in the German case. The result was a mix of success and frustration for the Wrights, some of which was due to circumstance (regionalist attitudes) and timing (the need for greater showmanship).

The result of these factors (and nationalism is of course influenced by events beyond the scope of this paper) is that by the 1920s the Wrights were largely forgotten in Germany. Whereas even the French continued to remember how stunned they were at the Americans' prowess in 1908, after the war, Germans reserved for the Wrights the kind of respect they had for another pioneer, Otto Lilienthal: Each had mattered in his own time, but was no longer relevant. For example, Swiss-German pioneer Robert Gsell, writing his memoirs in 1936, did not mention them. Even when discussing one of the first machines he worked on with professors Reissner and Junkers, he suggested the canard configuration of the machine was unusual, but that, true, "some early types also had the stabilizers at the front." Occasional visitors to the German air museum in Johannisthal would have seen a Wright flyer type C, with a notice that the Wrights had flown something a bit like it at Kitty Hawk, but there was no mention (as far as can be confirmed) of the Berlin flight demonstrations (the machine was destroyed in WWII bombings).

It would take the revival of interest in German aviation history in the 1950s, and the placement of a Wright flyer type A, the first series Wright flyer, in the Deutsches Museum in Munich to record the catalyst effort the Wrights played on German soil. The reunification of Germany in 1990 further cleared the way for new historical investigation, and, with the involvement of German aviation enthusiasts, the mending of almost eight decades of faded memories.