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Deutsche Luftschifffahrts-Aktiengesellschaft: Rediscovering the World’s First Airline

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Deutsche Luftshiffahrts-Aktiengesellschaft: Rediscovering the World’s First Airline

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On the eastern shore of the Bodensee, in the picturesque German town of Friedrichshafen, there is a time portal—a window onto the history of science and technology and onto a society that existed more than a century ago. Viewed through this portal—one that extends in its unlikely origin, back to the American Civil War—visitors can witness the creation and development of an idea that altered existing notions of time, space, and travel. This portal is called the Zeppelin Museum, named to honor the man who created the world’s first airplane.

Frederick Adolf Heinrich August von Zeppelin (better known simply as Frederick Graf [Count] von Zeppelin) first experienced lighter-than-air flight in St. Paul, Minnesota. He was visiting the United States in 1863 as an official military observer with the Union Army during the Civil War. That balloon ride became a defining moment in his life and it inspired his own creation. Within a few years, von Zeppelin had sketched out plans for a ridged-framed airship, an improvement of the flexible, balloon-like boxes he rode in. As a result, lighter-than-air flight fragmented into two distinct groupings: hard-structured dirigibles and soft-skinned blimps.

A trip to the Museum provides visitors with a pathway through all that history, from the beginnings of an idea that pioneered intercontinental air travel through the creation of the largest aircraft ever to fly, ultimately leading “back to the future.” Today, dirigibles still evoke in us curiosity and excitement.

Access to Friedrichshafen to take this time-traveler’s journey is simple, as the museum is situated at a modern transportation hub. The Deutsche Bahn (German Rail) harbor rail station is across the street; an inter-city bus depot is next to that station; a multi-story parking garage stands at the far end of the depot; and a ferry from Switzerland docks just steps away from the depot. Appropriately, it’s housed in the former factory headquarters of the Zeppelin Company, with the refurbished exterior restored to a 1930s Bauhaus style, reflecting a time when the company was at the zenith of its success.

Through the Portal

The first piece of evidence that visitors have stepped through a time portal inside the museum’s revolving glass doors is the sight of a Zeppelin Saloon Car. The car gleams, light reflecting from its elegant, classic lines; a vintage styleblished the blueprint for the German Airship Travel Corporation, the world’s first airline. Also profiled at the Museum is Wilhelm Maybach, automotive and mechanical expert—which helped him to develop the engines for the Zeppelins—and gained as co-worker with German automotive pioneer Gottlieb Daimler. Carl Dornier—who built the largest, most powerful flying boats of his day, and whose name is still linked to aircraft flying in the twenty-first century—became Count von Zeppelin’s scientific advisor in 1910. Dornier researched and perfected lightweight metal alloys for dirigibles. Dr. Hugo Eckener, aeronautical engineer and exceptional pilot, was von Zeppelin’s “heir apparent,” and flew the dirigible Graf Zeppelin on its historic around-the-world flight in the summer of 1929.

Graf Zeppelin was the most successful dirigible in history. It flew more than one million miles, visiting the U.S., South America, the Middle East, Japan, and the Arctic. It safely completed 590 flights, including 43 ocean crossings, and carried a total of more than 13,110 passengers. William Randolph Hearst chartered it for the globe-straddling 1929 flight, eastbound from New Jersey to New York, so the flight could begin and end on American soil.

Climb Aboard

Visitors stroll through the art-deco passenger lounge and dining areas, authentically furnished with table settings, wall coverings, upholstered chairs, and gondola windows that opened as the Zeppelin spanned continents and oceans at a pace of 80 miles an hour. Ornamentation and style are readily evident. Above the lounge deck, visitors see a grouping of passenger cabins that look very much like those on cruise ships and long-distance trains in the two-way first century. Back in the 1930s, a new sense of professional class marked the officers of these impressive skyscrapers. Not for them the dare-devil reputation that leather helmeted and begoggled barnstorming pilots earned and flaunted; captains of the sky like Eckener, Max Pruss, Albert Samnit, Ernst Lehmann, were clad in crisp, dark uniforms emblazoned with gold stripes upon the sleeves. Both officers and crew modeled a new, respectable formality that drew its culture from airline makes its first test flight from the Zeppelin dockyards at Friedrichshafen, Germany, on March 4, 1936. (Photograph by Archive Photos).

Zeppelin Museum from the Bahnbruecke, Friedrichshafen, Germany (©Zeppelin Museum).

Zeppelin Museum visitors travel deeper into the past and glimpse life aboard a Zeppelin dirigible (experienced by a total of only 43,000 passengers). Complimentary sets of baggage tags and tickets are available—authentic reproductions of those issued by the Deutsche Zeppelin-Reederei, GmbH (German Zeppelin Transportation Company, Inc). Then they climb the gangway into a 1:1 model of a small part of the Hindenburg.

When the Hindenburg flew by, it would have been like the entire US Capitol building floating 1,000 feet overhead.
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Through the Portal
The first piece of evidence that visitors have stepped through a time portal inside the museum’s revolving glass doors is the sight of a Zeppelin Saloon Car. The car gleams, light reflecting from its elegant, classic lines; a vintage style that reveals it is clearly not of the twenty-first century. The Zeppelin Car was built by Maybach Manufacturing, originally a wholly owned subsidiary of the Zeppelin Company. Maybach was tasked with the creation of various propulsion systems for the dirigibles manufactured here. The Maybach Company is now owned by Daimler-Benz, which has announced that 2013 will bring an end to this venerable brand of automobiles. Half a million dollars for a single car, apparently, is too high a price.

A display case shows Zeppelin’s LZ-129, the Hindenburg. The museum’s main gallery showing Zeppelin Saloon Car and, at upper left, exterior windows of the 1:1 Hindenburg model (Photo by the author)

The Hindenburg airship makes its first test flight from the Zeppelin dockyards at Friedrichshafen, Germany, on March 4, 1936. (Photograph by Archive Photos)

Zeppelin Museum from the Bahnwres, Friedrichshafen, Germany (Courtesy of Zeppelin Museum)

The Hindenburg model (Photo by the author)

The Hindenburg could have been like the entire US Capitol building floating 1,000 feet overhead.

Zeppelin Museum, from the Rathaus, Friedrichshafen, Germany (Courtesy of Zeppelin Museum)

The Hindenburg, Germany (Photograph by Archive Photos)
**Graf Zeppelin was the most successful dirigible in history. It flew more than one million miles.**

The reproduction gives a sense of just the structure of ribs, girders and braces. Hindenburg's inspection is a full-scale portion of the passengers never saw. exposed for a remarkable sight, one that airborne tors have the chance to view a truly glimpses of life on board the dirigibles.

The Hindenburg disaster took place on Thursday, May 6, 1937, as the Hindenburg caught fire and was destroyed during its attempt to dock with its mooring mast at the Lakehurst Naval Air Station. (Photograph by U.S. Navy)

Return to the Twenty-first Century

Wandering through the age of the dirigible, this museum provides a fantastic glimpse of a world we have lost. It is a pathway back to the present and an ideal place where questions crystallize and answers to them are hazardous. Among these questions, the biggest, perhaps, is: “why?” Why would a system of transportation that had proven itself for more than a third of a century—one characterized by ingenious technology coupled with passenger luxury—come to an end so abruptly?

The famous 1937 explosion of the Hindenburg at Lakehurst, NJ was appalling. It took only 35 seconds for the massive Zeppelin to ignite and explode. This was the first spectacular accident in the relatively new commercial aviation industry. Accounts of the disaster on radio and in newsreels and newspapers, stunned the world. “Oh, the humanity!”—uttered by a shocked eyewitness reporter—is still a catchphrase in our language. This event marked, in many people’s minds, an exclamatory lesson that dirigible flight was irreparably flawed.

Of course, the explosion of the Hindenburg was not singular. Horrific aviation accidents happen more often than we care to acknowledge. The fiery 1977 collision of two fuel-laden Boeing 747s at Tenerife—the deadliest accident in aviation history—killed more than 580 people, an order of magnitude far beyond the 36 deaths at Lakehurst. Yet the era of the jet plane did not end with the Tenerife accident, and 747s are flown today by every major airline in the world. Today, given the bias toward catastrophe that characterizes 24/7 newscasting on cable TV and the Internet, we are inundated by an almost constant stream of disasters, so much so that we have become inured to them. Such pervasive negativity by electronic media was simply not possible in 1937, which helps to explain the popular reaction to this single tragedy.

So again, why did all commercial operations of Zeppelins immediately cease after the Lakehurst accident? There is another answer to the “why?” question. The truth is that at the time of the Hindenburg tragedy, the days of the zeppelin were already numbered. Even if the Hindenburg had not exploded, the age of the dirigible would soon have been over. Not as dramatically or as abruptly, of course, but just as certainly. Airplane safety and reliability had made great strides since Charles Lindbergh’s solo Atlantic crossing aboard the Spirit of St. Louis only a decade before Lakehurst. By 1937, giant six-motor Dornier flying boats regularly carried passengers on scheduled flights, as did Pan Am’s Boeing 314 Clipper fleet.

Airplanes were the future of aviation, just as Zeppelins once had been.

Invention, improvement, public awareness, then regular operational use, and finally obsolescence: the cycle of progress. We see it in every technology of the twenty-first century, where today’s innovation becomes outmoded tomorrow. For a deeper, more profound understanding of the dynamics of change in our world, we gain a greater perspective by examining those same forces at work in other eras. In the largest sense, if we look closely into these time portals, we will see on the other side of that doorway is a mirror to a world where these questions were asked and answered in ways we cannot possibly imagine.
skin was kept ridged, and how a network of catwalks permitted inflight inspection of the 19 individual gas cells. When viewing this giant erector-set-like maze, the significance of Dornier’s critical research to develop the lightweight aluminum alloy, duralumin, is revealed. Without it, these dirigibles could not have flown.

### Motive Power

In two other wings of the Museum, guests learn about airship propulsion systems, navigational techniques, and a bit more about the airship’s journeys. The most striking object in the propulsion gallery is an original nacelle from the airship Graf Zeppelin. Prominently situated in the center of the room, this large aluminum “sidecar” once housed a motor weighing over a ton. Connecting rods, springs, rocker arms, and other internal components.

In 1929, the Graf Zeppelin made the very first non-stop flight across the United States, from Los Angeles to Lakehurst, NJ. In 1936, the Hindenburg was fastened with sets of five interlocking rings, and pulled an enormous Olympic flag behind it, as the airship made an appearance over the opening ceremonies of the summer games in Berlin. Postage stamps were issued celebrating these events—as well as other historic firsts—and franked envelopes are displayed in exhibit cases. For instance, during LZ-129’s first Atlantic crossing, it carried over 2,000 pounds of mail; these envelopes and cards were affixed with commemorative stamps issued in advance of the flight and postmarked aloft while enroute to America.

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Of course, the explosion of the Hindenburg was not singular. Horrific aviation accidents happen more often than we care to acknowledge. The fiery 1977 collision of two fuel-laden Boeing 747s at Tenerife—the deadliest accident in aviation history—killed more than 580 people, an order of magnitude far beyond the 36 deaths at Lakehurst. Yet the era of the jet plane did not end with the Tenerife accident, and 747s are flown today by every major airline in the world. Today, given the bias toward catastrophe that characterizes 24/7 newscasting on cable TV and the Internet, we are inundated by an almost constant stream of disasters, so much so that we have become inured to them. Such pervasive negativity by electronic media was simply not possible in 1937, which helps to explain the popular reaction to this single tragedy.

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### GRAF ZEPPELIN: SUCCESSOR OF THE DIRIGIBLES?

Graf Zepplin was the most successful dirigible in history. It flew more than one million miles, crossed the Atlantic 38 times, and was involved in many historic firsts, including the very first transatlantic air mail delivery. The Hindenburg disaster took place on Thursday, May 6, 1937, as the Hindenburg caught fire and was destroyed during its attempt to dock with its mooring mast at the Lakehurst Naval Air Station. (Photograph by U.S. Navy)