

# **Zeppelin History**

**Lou Glasgow | The Philatelic Gathering | CCHC | October 21, 2023**

**Zeppelins as Propaganda Vehicles**

# **Zeppelin: the Beginning**

- **Ferdinand von Zeppelin**
  - **Early Years (b. 1838 Konstanz,**
  - **Military Career-Army of Wuertemburg**
  - **Experiences in US Civil War-Observer Union Army in Virginia (1863)**
  - **Forced retirement at rank of Lt. General (1891)**
  - **Conception of the Steerable rigid airship (dirigible)**
    - **First mention in his diary 1874. Over the next 20 years he laid out his ideas of a rigid frame, Separate gas compartments (bags), a gondola and a gas powered propeller.**
  - **Proposal to the Prussian airship service 1894**
  - **Patent granted on the concept 1895**
  - **First flight of LZ-1 over Lake Konstanz 1900**

# Count von Zeppelin with the Union Army

## Near Fairfax Courthouse 1863

- Military observer from King of Wuerttemberg
- Observed a balloon ascent in Minnesota and began to consider the possibility of flight for military applications



# Early Zeppelin Passenger travel

**People and mail carried in quantity starting in 1910**

- By 1914 DELAG Zeppelins had carried over ten thousand passengers and completed over 1500 flights
- Zeppelin construction was advancing at a rapid clip and looked like the future of passenger air travel
- Regular Zeppelin travel and mail was started in 1908 and by 1912 a Rhineland mail service was in operation
- But WWI would change everything

# First Zeppelin Mail

- First mail carried LZ-4 in June 1908: no special markings
- Luftschiff Schwaben carried mail on regular flights between Rhein cities Frankfurt am Main, Offenbach Darmstadt, Mainz, and Worms. Image from Smithsonian Postal Museum
- Some mail carried by airplane "Gelber Hund" June 10, 1912. An experimental biplane developed in 1910 by Jacob Geiges. Considered one of the earliest successful German designs
- Contemporary with the first experimental US airmail flight, Sept. 25, 1911



# Zeppelins in WWI

- Zeppelin had always conceived of the rigid airship as a weapon of war
- Bombing raids were conducted on England (1.19.1915), Belgium, and France killing 500 people
- Very little military advantage; these were weapons of terror
- Years of terror until the Brits developed exploding bullets which could ignite the hydrogen gas bags
- Nevertheless the Zeppelins proved to have a propaganda value far above the actual damage inflicted as now the Brits felt threatened in their own homes

# Lt William Robinson

- First person to destroy a Zeppelin, Sept. 3, 1916
- Became a National Hero
- Celebrated as having the “Robinson touch”
- Captured by Manfred von Richthofen
- Spent tough years in German camps
- Died of Spanish flu in 1918



# Beyond Military Applications

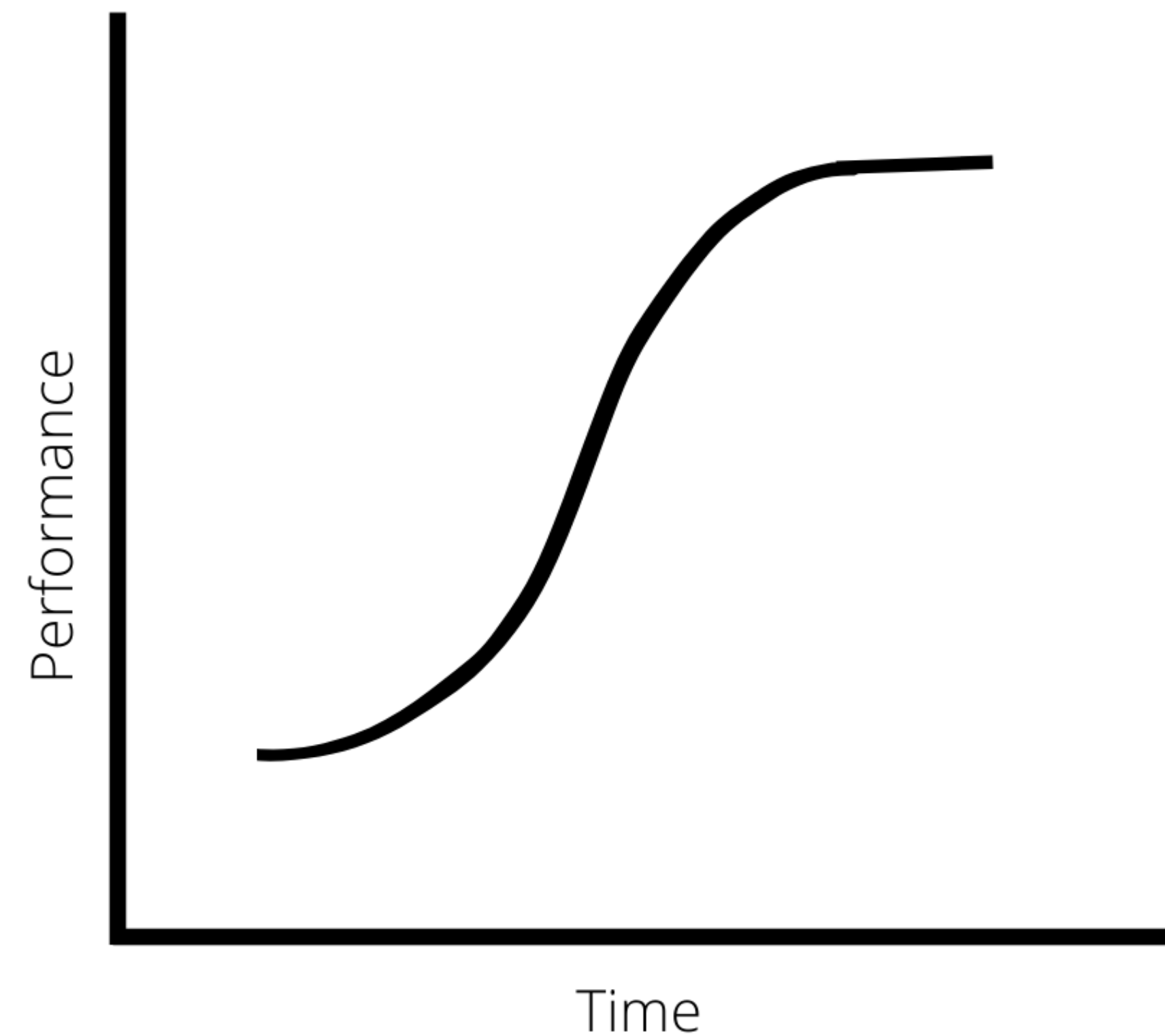
## The rise of commercial air travel

- Count von Zeppelin dies in 1917. Hugo Eckener becomes head of the Luftschiffbau Zeppelin and devoted the company to commercial aviation
- Eckener was masterful in creating the “buzz” about zeppelin through his bold flights: Transatlantic to North America(1928), Round the World flight (1929) travel and Zeppelins became the darlings of the jazz age.
- WWI and Versailles halted German Zeppelin development and at the same time the development of airplanes was spurred by the war
- Hugo Eckener was determined to show that Zeppelins were the way to go for intercontinental travel in comfort and relative speed

# Technology Development

## The “S” Curve

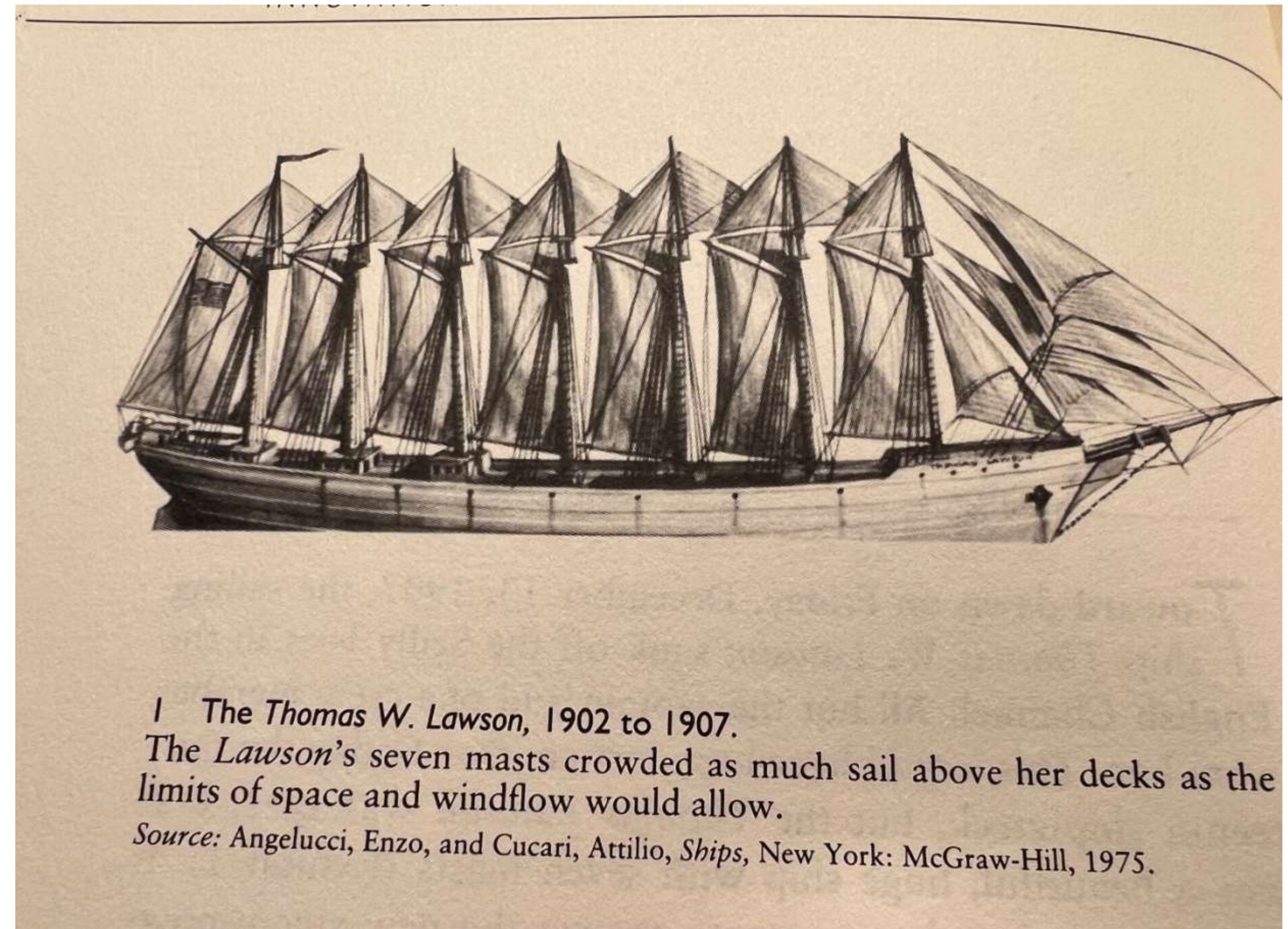
- All technology developments adhere to a sigmoidal curve
- As efforts to improve a technology increase, gains eventually slow down as you approach the “technology limit”
- With manned flight, progress in lighter than air (LTA) ships was at first rapid compared to heavier than air (HTA); 1910-1930
- As the limitations of LTA craft became apparent, increasing effort produced less improvement in the figure of merit related to carrying capacity and speed
- Eventually HTA won out with improvements in engine technology and airplane design



# Technology Limit example

## Limit to the number of masts on a sailing ship

- Largest sailing ship ever built without an auxiliary engine (1902)
- Unsuccessful bid to stay competitive with steamships
- Broke apart in heavy seas and nearly all crew were lost in 1907 off Cornwall.



# Zeppelin ZR-3, aka LZ-126, aka Los Angeles

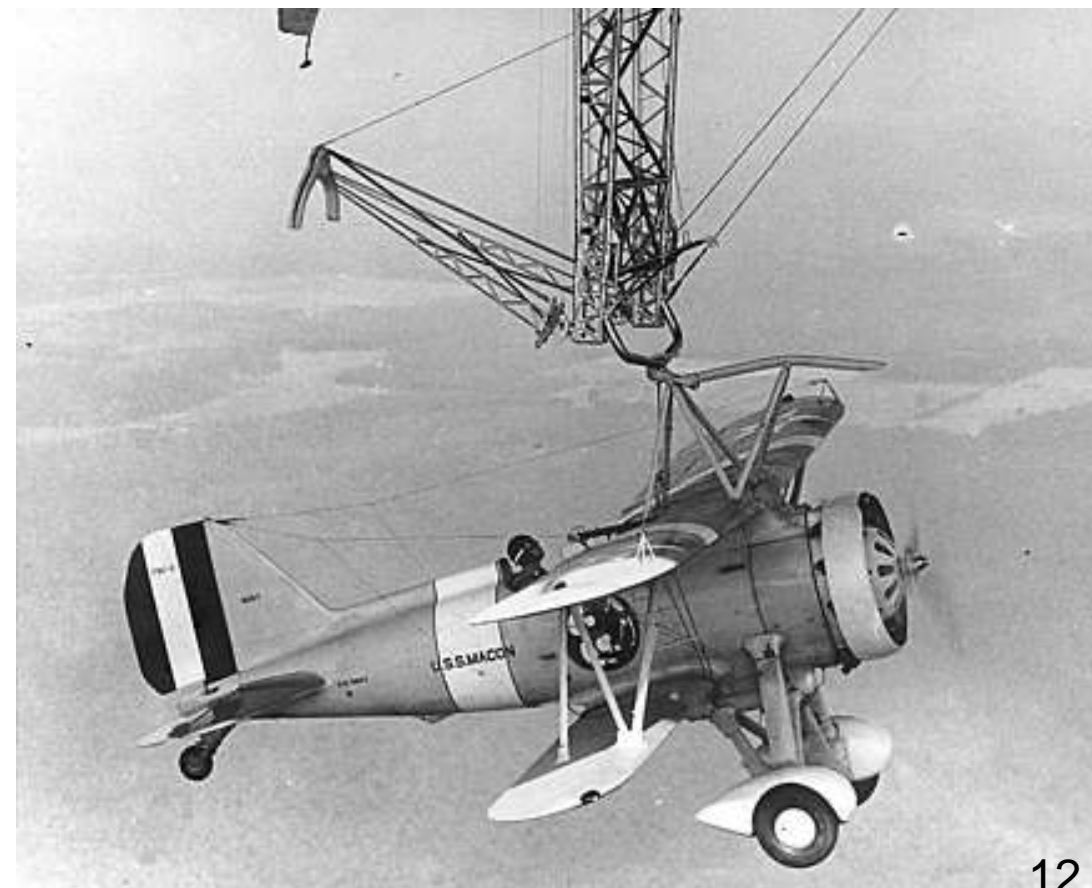
A lifeline for the struggling Zeppelin Company

- Airship construction still banned by Versailles. LZ-126 Built 1923-24
- Delivered to US Navy as “war reparation” and renamed Los Angeles
- First Zeppelin transatlantic flight
- Ticker tape parade in NYC
- First Air Mail service to Bermuda Feb.-April, 1925



# ZR-3 Friedrichshafen to Lakehurst

- US Navy tested the feasibility of using the ZR-3 as an aircraft carrier.
- Up to 5 Curtiss Sparrowhawk aircraft could be accommodated
- Tests were successful but the technology never deployed
- Los Angeles Retired in 1939



# A Revolution in Travel

- The Zeppelin Company offered travel to South America in three days as opposed to Ocean travel taking 7- 10 days
- Like luxury liners, passengers traveled in comfort with fine dining
- The Graf Zeppelin arguably the most successful Zeppelin, made 590 flights and travelled 1.7 million kilometers carrying a crew of 36 and 24 passengers



# Hugo Eckener

## A remarkable man

- Eckener was passionately devoted to the development and exploitation of the Zeppelin. Engineer, Pilot, Adventurer, and Promoter:
  - Zeppelin Company Publicist 1908
  - Zeppelin Pilot, 1911
  - WWI Zeppelin Pilot trainer
  - CEO of Zeppelin Company 1918
  - Graf Zeppelin Captain-First trans-continental flight 1928, Around the World flight 1929, Arctic flight 1931, Chicago flight 1933
  - Formation of the DZR and removal from power
  - LZ-129 and Hindenburg Disaster

# Hugo Eckener

most famous German after “you know who”

- Eckener was encouraged to run as a moderate by the SPD in 1933
- A planned arrest of Eckener was blocked by Hindenburg.
- 1936 Goebbels declared Eckener a non-person and was not to appear in any news
- Nazis nationalized the Zeppelin Operations and formed the Deutsche Zeppelin Reederei (DZR) in 1935. Eckener was sidelined but still continued to play a role in the Zeppelin company
- Goebbels and Goering now ran the DZR for maximum propaganda value



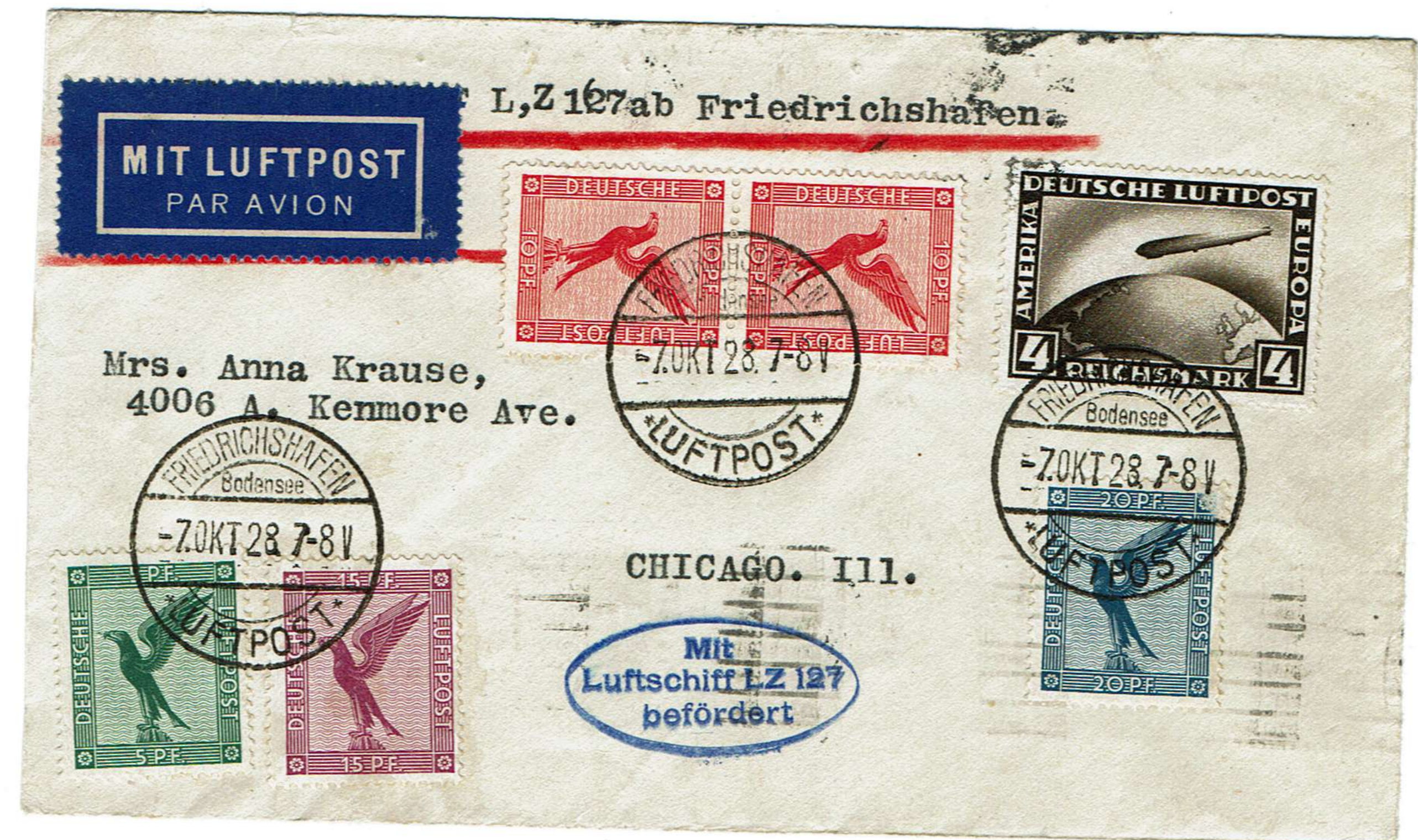
# Eckener - WW II and beyond

- Although not necessarily a Nazi, Eckener was super patriotic.
- Eckener's company manufactured war goods in WWII including parts for the V-1 and V-2 weapons used against England and employed slave labor during the war
- His plan to continue Zeppelin development with the Goodyear company, post WWII never materialized
- Charged with collaboration with the Nazis in 1945 and fined 100000 reichsmarks, the judgement was set aside and Eckener "rehabilitated"
- Eckener died in 1954 (86 years old)

# Amerika Flight of Graf Zeppelin 1928

## A perilous flight

- Construction completed in 1928
- First commercial passenger flight across the Atlantic; left F'hafen 10-11-28
- Landed in Lakehurst 10-15-28
- 40 crew and 20 passengers including Lady Drummond Hay and Cmdr. Charles Rosendahl
- Near disaster-lower covering of port fin torn away but heroically repaired in flight
- Ticker tape parade NYC; greeted by president Coolidge



# Interrupted American Flight 1929

## German Dispatch: Delayed due to engine trouble

- Graf Zeppelin completed 1928
- First flight was actually 11-15 October 1928
- Interrupted flight, May 14, departed F'hafen for Lakehurst. Forced landing in France.
- Mail stamped "Delayed due to cancellation of the flight"
- Mail held in F'hafen until Aug. 1, 1929
- Card cancelled May 15, 1929 and backstamped NYC August 5, 1929



# Round the World Flight Graf Zeppelin

- US dispatch: Lakehurst to Lakehurst. Cover posted with \$3.55 for the roundtrip. August 8 to August 29, 1929
- German Dispatch: Post card:Friedrichshafen to Friedrichshafen: 7RM roundtrip, 15 August to September 4, 1929. Stops in Tokyo, Los Angeles, and Lakehurst.
- German Dispatch Letter: 14 RM, 15 Aug., 1929 to 4 September, 1929, commercial mail of Neumeyer, AG.

Via Airship "G R A F Z E P P E L I N"

Lakehurst N.J.

Mr. Overdrews.

c/o Skandia Importing Company, inc.

32 Union Square,

New York City N. Y.

U. S. A.



# Round the World

## German Dispatches 15-8-1929

- Postcard: 7RM
- Letter: 14 RM
- Commercial mail of Neumeyer AG
- Armaments Mfg.



# Zeppelin Mania: Clara Adams/Lady Grace Drummond-Hay

## The first aviation groupies?

- Flight enthusiasts who did much to popularize Zeppelin ins and air travel
- Lady Grace was a paid Hearst correspondent who reported on some of the perilous journeys
- Adams set a record for commercial air travel in 1939 with 24,609 miles
- Known as the maiden of maiden flights



# “Liberation” of the Rheinland

## Graf Zeppelin Flight upon the end of French Occupation

- Versailles treaty specified occupation of the Rheinland through 1930
- Cover to Fort Worth but flown on the Friedrichshafen to Cologne flight July 5-7, 1930
- Franked with the 2 Mark S. America Zeppelin



# Chicago Century of Progress World's Fair

**celebrating 100 years of Chicago 1933-34**

- The Graf Zeppelin visited Chicago in 1933 using the “triangle” route via Pernambuco Brazil
- Additional visits were made to Akron (Goodyear) and Miami
- Special Zeppelin stamps (US C37, and “Chicago 1933” overprints of the original Zeppelin Stamps became Germany C43-47)
- Revenues from philatelists subsidized the Chicago visit
- My family attended the fair several times and this led to a lifelong fascination with Fair memorabilia

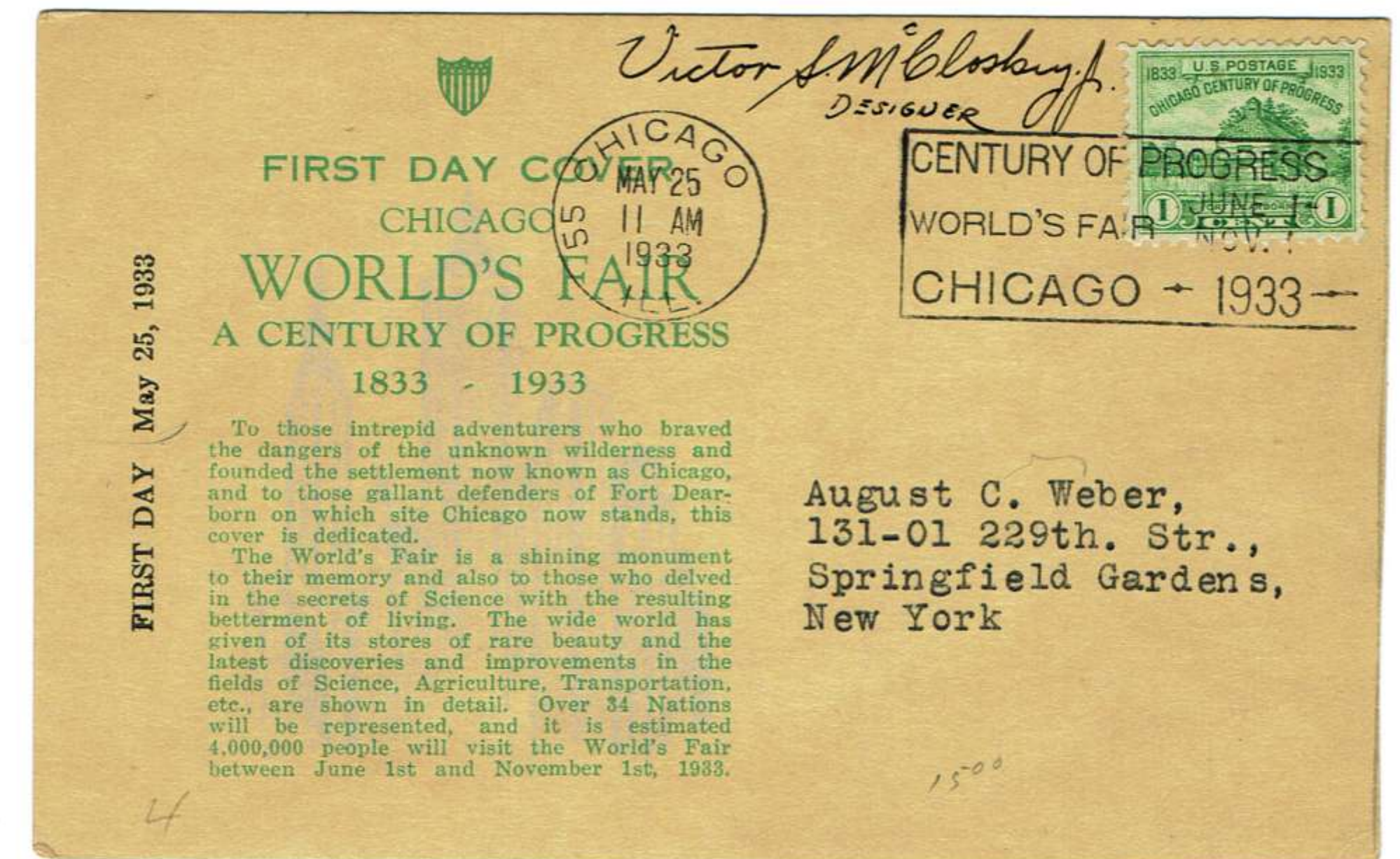
# The “Triangle” Route

- Starting in Friedrichshafen and flying SW to Pernambuco then NW to Miami, Akron, and ultimately Chicago
- Return flight was from Lakehurst, NJ to Friedrichshafen with an intermediate stop in Seville, Spain
- Philatelists central to funding the flight



# US C 18-the “Baby Zepp”

- Designed by Viktor McCloskey who also designed the Century of Progress commemorative stamps
- Sales of the \$.50 Zepp stamps helped fund the cost of the Graf Zeppelin visit to Chicago
- Postmaster Farley wrote that he hoped the Zeppelin stamp and the flight would ‘serve to strengthen the bond between the two nations”



# Century of Progress Akron Dispatch

- Akron leg recognized the JV with Goodyear in 1924.
- Goodyear and Zeppelin exchanged key personnel including Captain Ernst Lehman as VP of engineering.
- Following the Chicago visit the airship returned to Akron for two days, visited Canada, overflew the White House then returned home via Seville.
- Covers sent from the US for inclusion in the SA flight went by ship to Germany and had to be mailed well in advance of the Friedrichshafen dispatch date of October 14, 1933.



# COP Chicago dispatch

- Backstamped Friedrichshafen  
Nov 2, 1933
- FDC Chicago cancel 10-7-33



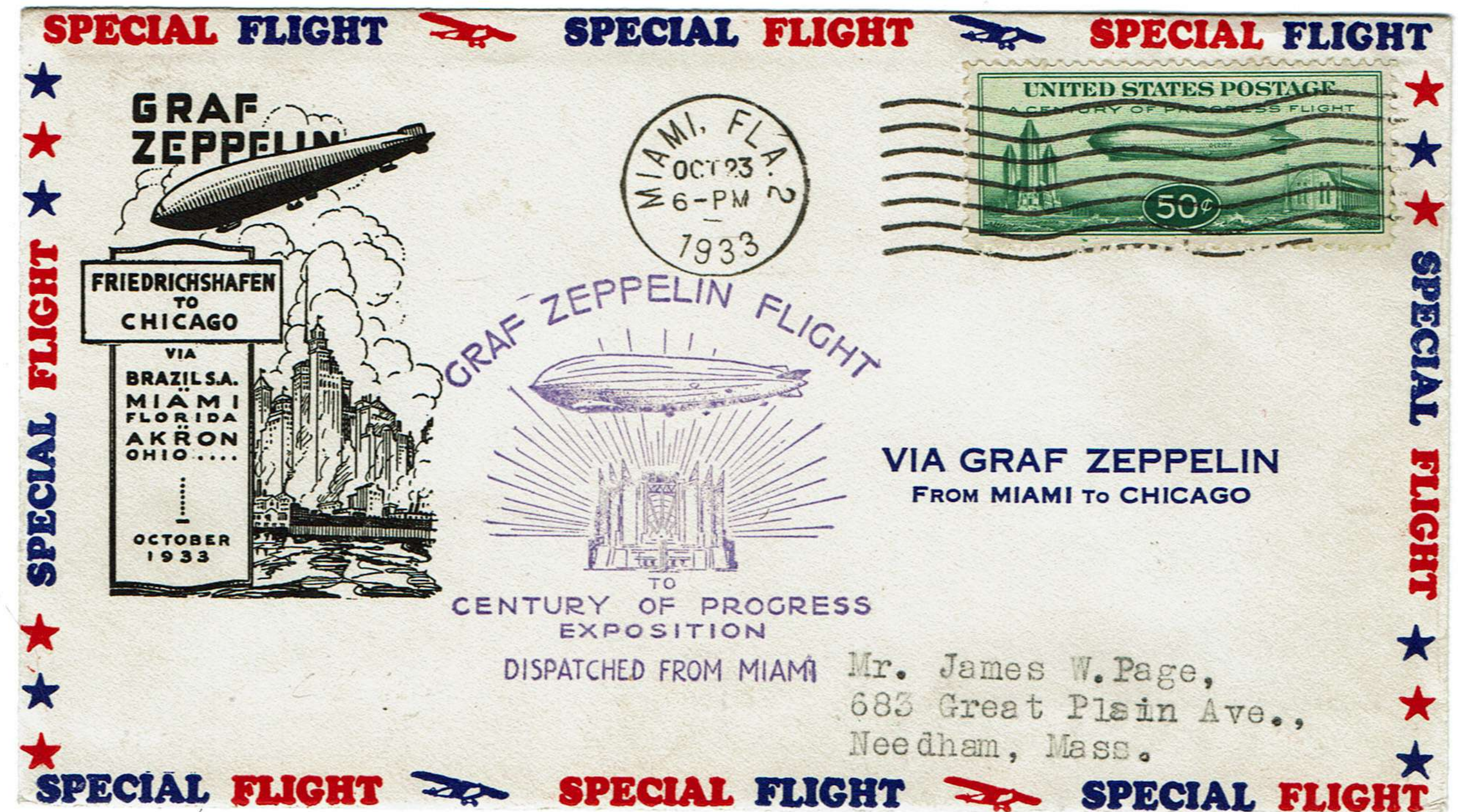
# COP Friedrichshafen Dispatches

- Fifty-cent rate to Rio
- \$1.00 rate to Miami
- \$1.50 rate to Chicago
- Not shown \$2 rate round trip



# COP Miami Dispatch

- The Graf Zeppelin stopped at Opa Locka, Fla which had a mooring mast courtesy of the US Navy



# COP Eckener Souvenir Cover

## Friedrichshafen Dispatch

- Souvenir Covers celebrating Dr. Eckener and German American Day at the Century of Progress
- The Swastika emblem on the Graf Zeppelin fins was a subject of great concern. How would Americans receive it? Jewish Americans and others protested
- Allegedly, Eckener sought to reduce the visibility of the Swastika by flying with the emblem on the reverse side of the viewing stands.



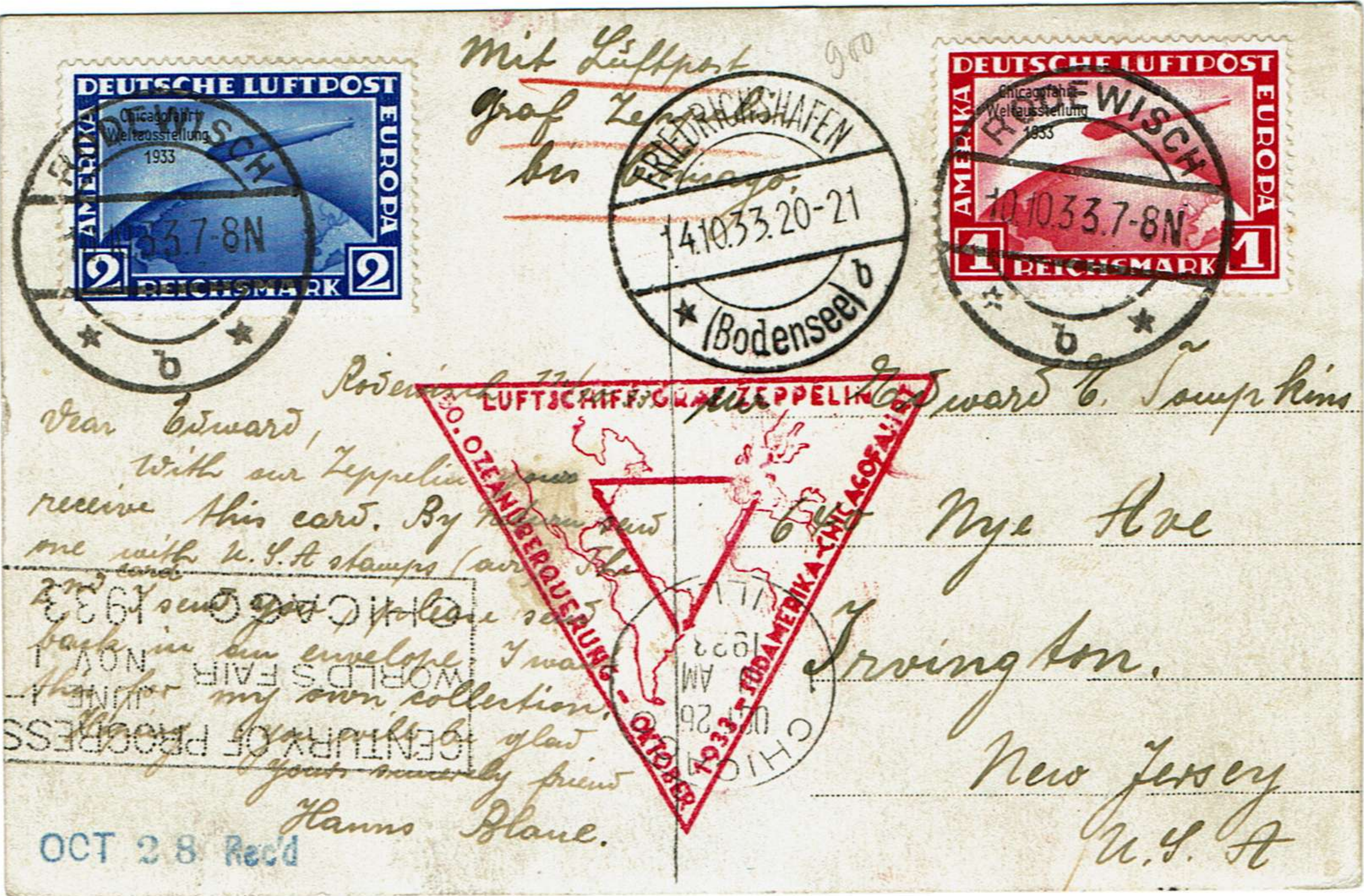
# Italian Fascists at the 1933 Fair

- Italo Balbo led a flight of sea planes from Rome and landed on Lake Michigan at the Chicago Fair



German Dispatches to Century of Progress Fair

Germany C43-4 on card flown on LZ-127



# Paraguay to Chicago 1933

Many Countries issued special stamps to cash in on the Zeppelin Mania

- Cancelled Asuncion 10-14-1933
- Special Zeppelin stamps Paraguay C79 (2) AND C81 issued May 5, 1933
- Two cachets: Graf Zeppelin flight 14-31 Oktober, and "Extraordinario Transatlantic Service via Condor-Zeppelin, 2nd flight October 1933
- Registered mail from Asuncion. Back cancels from Chicago 10-26-33 and NY 10-27-33



# Postcard to COP with propaganda label

## Hitler Label inscribed “Unsere Hoffnung” or “Our Hope”

- The Hitler label expressed the point of view of perhaps 35% of the population who viewed Hitler as the best hope to reestablish German pride and lead them out of the great depression
- Zeppelins as symbols of German superior technology played an increasing role in propaganda for the Nazi party.
- Hitler did not like Zeppelins or Eckener but saw the propaganda value of using them



# Propaganda and Zeppelins

## Formation of the DZR

- Even the Weimar German Republic had recognized the propaganda value of Zeppelins to provide evidence of superior German technology
- Eckener had been clever in creating propaganda for his company, but the use of Zeppelins as propaganda vehicles hit high gear after the Nazi takeover in 1933.
- Control of the Zeppelin company was taken over with the 1935 formation of the Deutsches Zeppelinluftschiff Reederei (DZR). Now Goebbels and Goehring were calling the shots as to when and how to use the airships
- Eckener was relegated to construction and engineering but not flight decisions

# The Berlin Olympics

## The propaganda bonanza for the Nazi regime

- Special issue postcard for the olympics
- Over flight by both the Graf Zeppelin and the Hindenberg.
- Special Issue Olympic stamps



# The Hindenburg: LZ-129

## Hindenburg at the Olympic stadium

- Completed in 1936
- Manufactured by Deutsches Luftschiffbau Zeppelin GmbH.
- Operated by Deutsche Zeppelin Reederei (DZR)
- 803 feet long and carrying 7 million cubic feet of hydrogen in 16 cotton gas bags covered in gelatinized latex. Helium was not available.
- Amenities included a piano and a smoking lounge.
- Crew 40-61, passengers 50-70
- 4 Daimler V-16 diesel engines, 1200 hp each



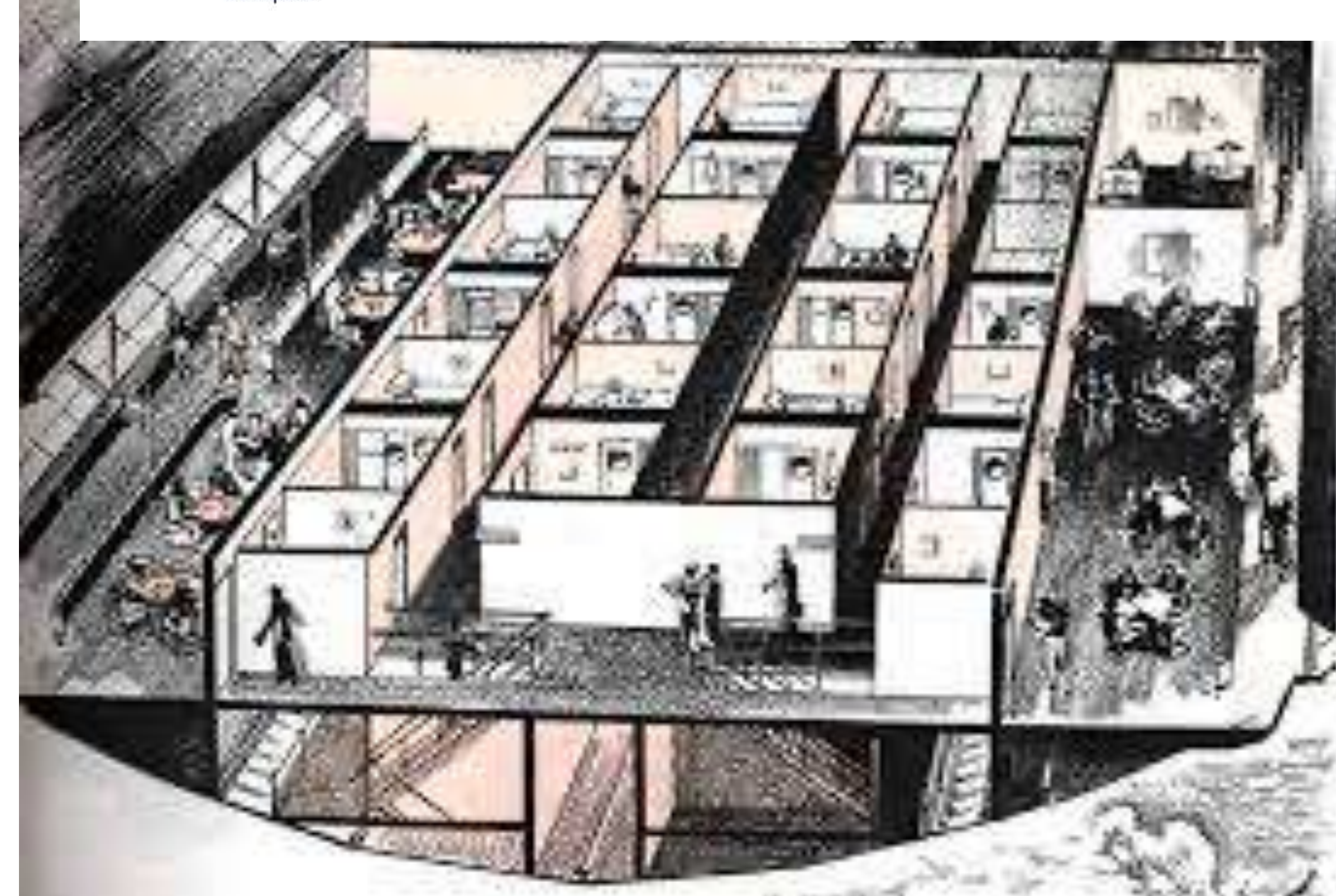
# Hindenburg cutaway view

## Travel like a luxury ocean liner

- Upper deck: 25 two person cabins, flanked by large public rooms and observation windows.
- Lower deck: washrooms, mess hall for the crew, smoking lounge.
- Cruising Speed 76 mph.
- Largest flying airship



LZ-129 Hindenburg: 245 m / 803.8 ft  
Boeing 747-400: 70.6 m / 231.8 ft  
Airships.net



# Berlin Olympics

## Propaganda covers

- Carried by Hindenberg (LZ-129) to the US
- Poor quality of the covers is due to the highly acidic gum use on the stamps in addition to “foxing” from poor storage



# Reincorporation of Saarland 1935

Saar plebiscite 13 January, 1935

- First DZR flight
- On Board cancel on Graf Zeppelin
- Highly Contentious election but the Nazis won overwhelming support



# Rheinland referendum

- March 1936 Hitler reelection and Plebiscite in Rheinland
- Overwhelming support for Hitler partly due to the Nazi intimidation at the polls
- Leaflets distributed by both the Graf Zeppelin and the Hindenberg

**Adolf Hitler**

**in seiner historischen Rede im Reichstag:**

**„Ich habe um die innere Zustimmung des deutschen Volkes zu meinen Idealen einst 14 Jahre gerungen und bin dann dank seines Vertrauens von dem ehrwürdigen Generalfeldmarschall berufen worden. Ich habe aber auch seitdem all meine Kraft nur aus dem glücklichen Bewußtsein geschöpft, mit meinem Volk unlösbar verbunden zu sein als Mann und als Führer.“**

**Darum am  
29. März**



**Deine Stimme  
dem Führer!**

# Hindenberg First North American Flight

Posted from Liechtenstein May 2, 1936

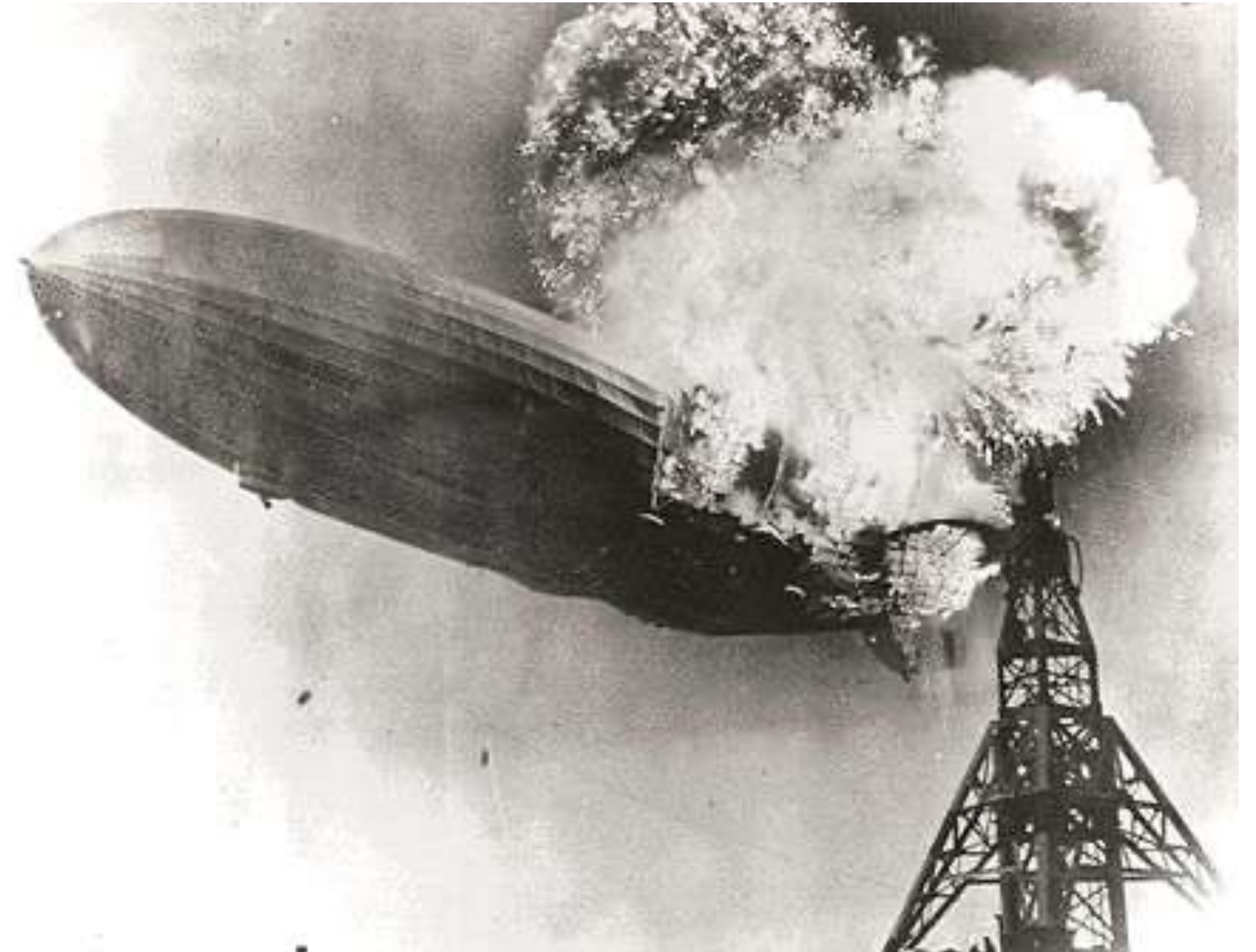
- LZ-129, significantly larger than the Graf Zeppelin, was to be the flagship of the transcontinental air service offered by the DZR
- Liechtenstein issued two special stamps featuring LZ-129
- Second day cancel



# Hindenburg Disaster

## The end of an era

- The destruction of the Hindenburg brought a swift end to Zeppelin Passenger travel.
- Many theories were advanced to explain the accident, but the preponderance of evidence (IMO) points to a design flaw that allowed hydrogen leakage that was ignited by an electric spark.
- Eckener and Rosendahl both contributed to covering up the real story.
- The Third Reich and Zeppelins were dealt a devastating blow that damaged the propaganda value of Zeppelins



# Austrian “Anschluss”

## Plebiscite scheduled April 10, 1938

- Fullfillment of the German Peoples destiny
- Austrian Chancellor Dollfuss assassinated by Nazis 1934
- Constant pressure from Nazis forced a plebiscite vote to be held 13 March, the day before the planned referendum, German troops crossed the border. Hitler forced Schussnig to resign
- Vote on April 10, no secret ballot, threats and coercion resulted in a 99.7% approval
- Austria went down without a shot fired



# Hitler visit to Sudetenland

Weisskirchen October 6, 1938

- “Last” territorial claim in Europe
- Munich Agreement permitted Germany to annex the Sudetenland
- Sham Plebiscite gave Nazis control
- Once German Troops were in the Sudetenland, all of Bohemia, Moravia and Slovakia were taken as “German Protectorates



# Sudetenland Annexation

## Czechoslovakia sacrificed on the altar of appeasement

- Germany allowed to enter without firing a shot
- Czechs had excellent military and border defenses
- A great failure of diplomacy that opened the door to WWII



# Sudetenland Flight

## LZ-130 drops political propaganda

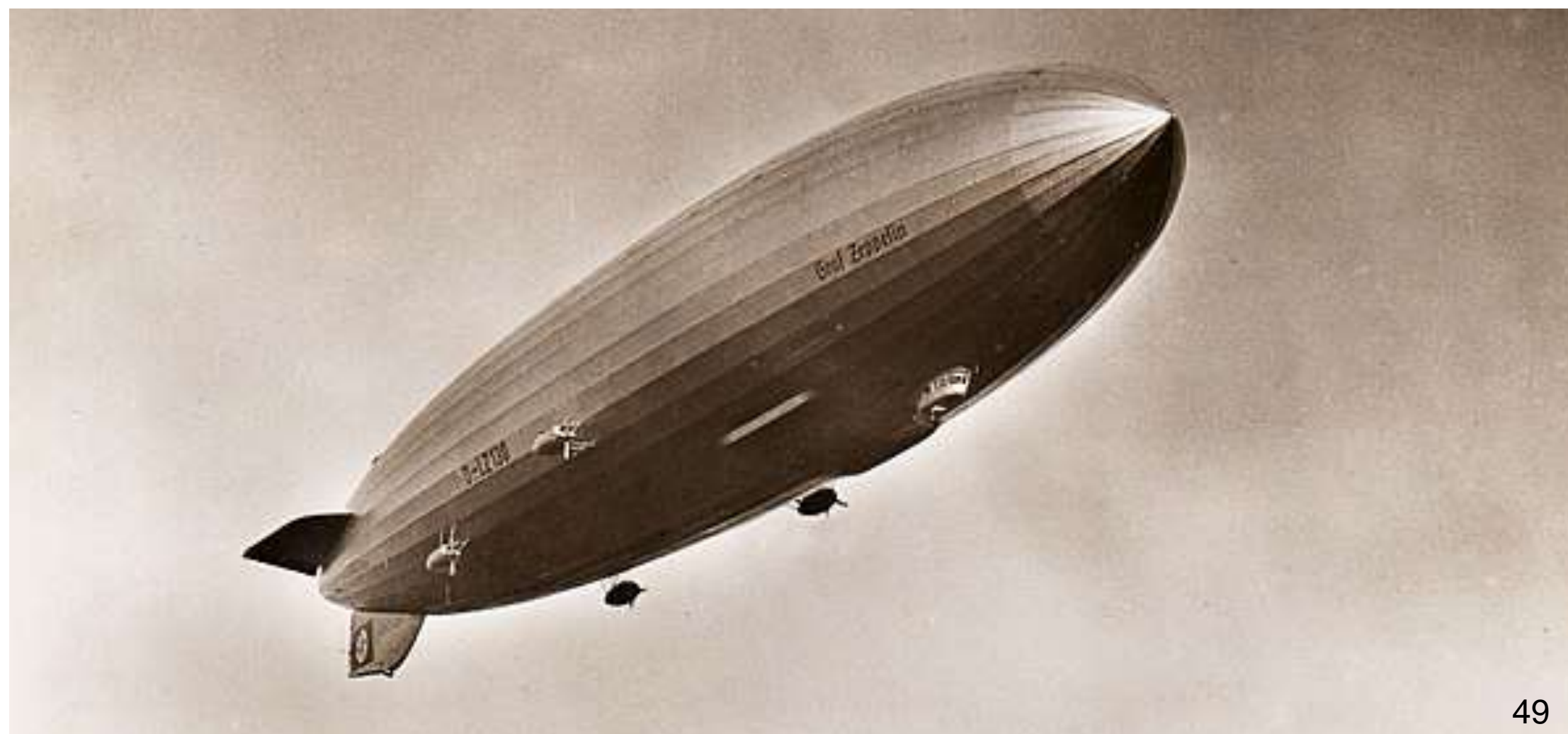
- December 1, 1938 flight to Reichenberg
- Election propaganda: ‘Over this great German Empire lies the German Shield and shielding the German sword’
- Your thanks is your “YES” (to Hitler) on December 4.



# Sudetenland flight

## Graf Zeppelin II (LZ130)

- First Zeppelin flight to Sudetenland
- 62 crew members and 7 passengers
- Reichenberg fly over dropped 663 kg of cacheted souvenir mail



# Sudetenland Flight cover

# Philatelically inspired cover details in consolidation of ethnic Germans within Hitler's Reich

- Austria
- Saar
- Sudetenland
- Breslau



# Eger landing in Sudetenland; Muelheim/Essen Zeppelin Day

- Echt Bromsilber  
Schwarz auf Weiss glänzend
- ESSEN/MÜLHEIM  
Flughafen  
1939  
20.8  
Zeppelin
- Luftschiff Graf Zeppelin  
ESSEN  
Deutschlandfahrten 1939
- Deutsche Luftpost  
Hundert Jahre  
Graf Zeppelin  
25  
11. 20.8.39 - 6 39
- FRANKFURT  
(MAIN)  
RHEIN-MAIN
- Herrn  
Franz R i c h t e r  
M ü h l h e i m/Ruhr  
Dortmunderstr.4/I



# Zeppelins - The End?

**from awe-inspiring invention to disaster**

- The incredible achievements of Zeppelin and Eckener were ultimately doomed by Nazi mismanagement and exploitation AND technology limits
- Philatelists played an important role in the rise of the Zeppelins and the subject provides rich and varied collecting area. Collector interest is still high today, but forgeries abound
- Zeppelin technology development still continues but Zeppelin mail is probably over.

# Zeppelins in our Future

Luftschiffbau Zeppelin becomes ZLT



- In 1997 Zeppelin introduced a new series of Zeppelins NT suitable for observation and local transport uses, especially sports events. Three were built in collaboration with Goodyear; Wingfoot 3 launched in 2018

# Future Zeppelins?

## Solar powered Airship

- European manufacture under the name Airlander
- Planned launch 2025
- Uses no fossil fuels and stores solar energy as hydrogen for fuel cells
- Airlander Hybrid Vehicles, planned completion 2025; will haul 7 tons of cargo, 2400miles.
- [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj3-a2Og\\_mBAxWEF1kFHRpKBCoQtwJ6BAgSEAI&url=https://www.youtube.com/watch?v=9lBjSJmkG\\_c&usg=AOvVaw3auA9wajKvLYmjbtwC5HNF&opi=89978449](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj3-a2Og_mBAxWEF1kFHRpKBCoQtwJ6BAgSEAI&url=https://www.youtube.com/watch?v=9lBjSJmkG_c&usg=AOvVaw3auA9wajKvLYmjbtwC5HNF&opi=89978449)



# For Further Reading

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# Thank You!