Flight Line

The Official Publication of the CAF
Southern California Wing
455 Aviation Drive, Camarillo, CA 93010
(805) 482-0064

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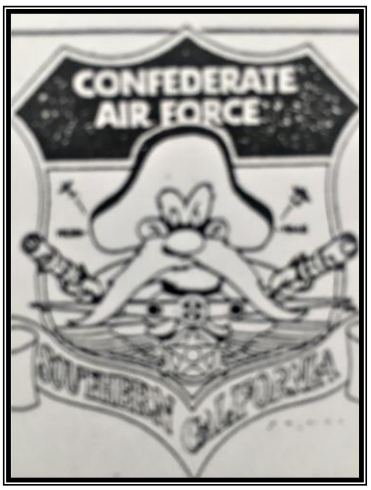

Our Wing's early "Yosemite Sam" logo

Photo by Paul Koskela
Our Curtiss C-46 Commando attracting fans at an air show in the early 1980s. These people are lined up to take a tour in "China Doll."

To Educate, Inspire and Honor Through Flight and Living History Experiences

April 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
MUSEUM WILL BE CLOSED UNTIL FURTHER NOTICE DUE TO COVID19 EPIDEMIC				1 Work Day April Fool's Day	2	3 Work Day
4 Easter	5 Museum Closed	6 Work Day	7	8 Work Day	9	10 Work Day
11	12 Museum Closed	13 Work Day	14	15 Work Day	16	17 Work Day
18	19 Museum Closed	20 Work Day	21	22 Work Day	23	24 Work Day
25	26 Museum Closed	27 Work Day	28	29 Work Day	30	

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Southern California Wing
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CAF – So. Cal. Wing Early History – Major Events

Compiled by Pat Brown, Wing Pub. Info. Officer

March 20, 1981

First Squadron Meeting – Van Nuys Airport

June 26, 1981

4th General Meeting. C-46 (then called "Humpty Dumpty") became the official responsibility of The new California Squadron.

September 5-6, 1981

Our unit's first air show – held at Van Nuys Airport – with booth selling first unit patches and tee shirts.

October 8-11, 1981

CAF Airshow '81 at Headquarters, Harlingen, Texas. Check rides were completed by our Squadron pilots Clay Lacy, Bob Van Ausdell and John Bell in our C-46 transport.

October 12, 1981

Clay Lacy donated the fuel so that pilots Bob Van Ausdell and John Bell could fly our C-46 for 7 ½ hours to Van Nuys Airport, its new home for the winter.

June 11, 1982

Our C-46 is moved to its new home at Camarillo Airport.

September 24, 1982

Ceremony held at Van Nuys Condor Squadron, when our Squadron officially became a Wing, and at a special commissioning, seven women and four men members were welcomed. Special guests included actor Robert Stack, who was named an Honorary Colonel. L.A. Mayor Tom Bradley proclaimed this date "Confederate Air Force Day" in Los Angeles.

May 14, 1983

Our C-46 Commando flew over the Grand Opening Ceremony of the "Spruce Goose" exhibit next to the "Queen Mary" liner in Long Beach.

February, 1984

The SNJ Texan "290" was donated to the CAF by nine members of the So. Cal. Wing – requesting that it be kept at and flown by our Wing.

April, 1985

The So Cal Wing repainted the C-46 at Van Nuys Airport. It took a large crew three Weeks to strip the many layers of paint and repaint it ourselves with some help from Mike Pupich, the owner of the B-25 "Heavenly Body."

Summer, 1985

Northwest Tour with a group of WWII aircraft. Our first tour.

October, 1985

Our C-46 renamed "China Doll," in honor of all the C-46s which had flown "Over The Hump" to China in WWII. Her nose art was done by Tony Starcer, who had painted nose art on B-17s in WWII – notably on "Memphis Belle." It was his last nose art job before his death.

June, 1986

Moved our C-46 from east end of CMA to the nose hangar on our current property.

December, 1986

C-46 "China Doll" was used for a "camera ship" on the James Bond movie "Living Daylights," filmed out at Bermuda Dunes.

March 29, 1982

F8F-2 Bearcat arrived at Camarillo to its new Home – flown by Lefty Gardner from Texas.

May, 1993

The B-25 / PBJ (then called "Big Old Brew") arrived at its new home in Camarillo from Midland, Texas – accompanied by "China Doll."

CAF Memories of the 1980s

By Pat Brown, Wing Public Information Officer

Back about 1983, and we were still new at the air show booth situations. We were all excited with our first silk-screened tee shirts and our Unit patches, etc.

I think it was one of the first air shows of the year, and the C-46 was there. We were competing with everyone else in their booths, and they had all the experience with a lot more items for sale.

The prettiest and youngest girl in our group decided to put up a tarp and make a sign for a "Kissing Booth" to make money for our Unit. We all tried to stop her, but she just laughed at us. Her husband was about fifty-five years old or more, and a medical doctor. We thought that he would stop her – but he didn't.

She started smiling and kissing – and the line formed with the bills out in the customers' hands. She did very well! In fact, a lot better than we did.

In fact, it was the hit of the whole booth area! It was obvious that she was the hit of the show! Needless to say, the competition was not happy!

When she went on break for lunch, they waited for her to return. The "word" had gotten around at the air show. She was about twenty-five years old, a "trophy wife," and…..she had gotten away with it.

Of course, there was no Covid-19 back then. Our Southern California Wing came home with all the profits. By the time we went to the next air show, her husband had had a "heart-to-heart" talk with her, and the "Kissing Booth" never happened again. Oh, well…..!!!

Confederate Air Force

June, 1981

Dear Colonel,

The next general meeting for So. Calif. Colonels, wives, and future colonel guests will be held on June 26, 1981 at the Skytrails Restaurant on the Van Nuys Airport at 7:30 p.m. SHARP.

This meeting will be one filled with LOADS OF GOOD NEWS to report to you. We will also be reporting on the Wing Staff Officers Conference which was held at Headquarters in Harlingen on June 12, 13, and 14, 1981.

I would like to take this opportunity to again thank all our C-46 sponsors and contributors. Those Colonels who have pledged money toward the C-46 and have not yet sent it in – please bring your checks to the meeting or send them to me as soon as possible.

I speak for all of us when we thank Col. Bob Sterr for his great display and explanation of the bomb-sight, .50 caliber machine gun and flack suits. It was a lot of work to bring it, but Bob, it was worth it. We thank you and your wife. Any Colonel having something interesting he or she would like to share with all of us should contact me and we will schedule them for a meeting.

I personally can't wait for this meeting, to share all the GREAT NEWS we have for you. See you at the Meeting – 7:30 p.m. SHARP.

Sincerely,

(signed)

Ralph Grasso
Colonel, CAF
Adjutant / Finance Officer

Confederate Air Force

Nwsletter, March 20, 1982
Pat Brown, Editor

Happy Birthday Southern California Squadron

The Southern California Squadron is one year old this month. In early 1980, Col. Ralph Grasso obtained information from the CAF on how to start a squadron. He didn't give up on the idea, and finally got some interested people together. On December 6, 1980, Col. Grasso, Col. Stan Daniels, Col. Vince Carbone, Col. Dick Griffith, nd Col. Bill Gillespie met to discuss the formation of the Southern California Squadron. Open House type meetings were held on January 9 and February 6, 1981 at the Great Atlantic and Pacific Aeroplane Company to organize a squadron. Col. Grasso collected names from Headquarters and put together a mailing list of CAF members in California.

The first official meeting was held in March, 1981, and we have had a monthly meeting ever since. A few of our members agreed to become sponsors of an aircraft, and in May, 1981 we took possession of a C-46 with two blown engines, sitting on a field in Conroe, Texas. Through more aircraft sponsor-ships and a loan from Col. Bob Van Ausdell, two zero-time R-2800 engines were purchased. Col. Ron Fleishman and members of the East Texas Wing of the CAF spent the next eleven weekends, a total of 27 days, installing the new engines.

The Squadron had a booth at the Van Nuys Air Show on September 5-6, 1981 – without an aircraft. Due to an aborted take-off attempt, the C-46 ran off the end of the runway in Conroe, Texas, and ended up to the wheel hubs in mud. It was a disappointing and embarrassing situation, but we managed to live through it.

Eventually, the C-46 was pulled out of the mud, and was ferried to Harlingen, Texas for the CAF's Airsho 81. A large contingency from the Squadron traveled to Harlingen on their own and worked at the air show, from October 8 – 11. Col. Clay Lacy, Col. Bob Van Ausdell, and Col. John Bell were checked out in the C-46. The aircraft was officially turned over to the Southern California Squadron during the Airsho 81 opening ceremony on October 10, 1981.

On the 12th of October, Col. Van Ausdell and Col. John Bell, with Col. Ron Fleishman and Col. Joe Tidwell as "crew," flew the C-46 to the Van Nuys Airport in California in 7 ½ hours flying time, missing their ETA by only 15 minutes.

The C-46 has been at Van Nuys Airport since its arrival in October, 1981. Many hundreds of hours have been expended - scrubbing the airplane inside and out. Wheel wells have been steam-cleaned; all flap actuators have been overhauled; and all of the instruments have been pulled and overhauled. The four cockpit seats have been stripped, repainted, and the seat cushions have been "remanufactured." The instrument panels were removed, stripped, painted – and the cockpit area has been totally gutted and refurbished to almost like-new condition. By the end of March the aircraft wil be back in service.

Staff Update

Squadron Leader.....	Col. Dick Griffith
Executive & Personnel Officer...	Col. Ralph Grasso
Operations Officer.....	Col. Bob Van Ausdell
Asst. Operations Officer.....	Col. Bill Main
Asst. Flight Safety Officer.....	Col. Vince Carbone
Medical Officer.....	Col. Stan Daniels, MD
Maintenance Officer.....	Col. Ron Fleishman
Procurement Officer.....	Col. Mike Walsh
Flight Trainig Officer.....	Col. Clay Lacy
PX Officer.....	Col. Janet Main
Finance Officer.....	Col. Cliff Brown
Information Officer.....	Col. Harvey Victor
Fund Raising.....	Col. Bob Hawky

Wing Photo Page I: Battle of Britain/Warbird Appreciation Day – Spitfire

Photo by Dave Flood

An estimated 400 plus people attended our special event held in our Aviation Museum on Saturday, March 5, 2011 to commemorate the Battle of Britain and to show appreciation to our Spitfire Mk XIV.

Photo by Avery Willis

The RAF flag flew proudly with our Old Glory at the entrance of our Aviation Museum – welcoming all to celebrate with us the bond we have had with the UK since WWII.

Photo by Gene O'Neal

Clyde East, WWII Spitfire pilot, was a featured speaker.
Clyde first flew for the RAF, then for the Army Air Corps – switching to P-51 Mustangs.

Photo by Gene O'Neal

Here is our Warbird of Honor for the day!
The Spitfire Mk XIV did some flybys with the P-51 Mustang "Man O' War" after the speaking presentations.

Photo by Sharon Dwyer

Walt Metcalf gave a presentation on RAF's Squadron 242. His dad, P/O N.N. Campbell, was a Hawker Hurricane pilot with the 242, and was killed on October 17, 1940, near the end of the Battle of Britain.

Photo by Sharon Dwyer

Another presenter was Ron Fleishman, our Historian, who enumerated the aircraft involved in the Battle of Britain.

This page from the "Flight Line" of April, 2011

Confederate Air Force

FLIGHT LINE

THE OFFICIAL PUBLICATION OF THE
SOUTHERN CALIFORNIA WING OF THE
CONFEDERATE AIR FORCE

Flight Line, April 15, 1982

Editor, Pat Brown

NEWSLETTER CHANGES

As you may have noticed, the newsletter is numbered, and will be from now on. We thought you might want to save them for future reference. Since the first newsletter was written in March of 1981, our second volume began with last month's issue. Soon we will have a stationery with our own Wing patch, P.O. Box number and a 'phone number on the heading for our newsletter and for Squadron business. As you can see, the name of FLIGHT LINE has been selected for the newsletter.

HALOS' COLUMN

We, the womens' auxillary group, will be planning the sale of our tee-shirts and blue books and anything else we can sell at future air shows. We have lots of fun at the same time. There are only a few of us, and we need more members to help us. Any woman who is a wife, girlfriend, daughter or friend of a Colonel may join if she is 18 years of age. All we ask is $15.00 a year membership dues and to help us at air shows. The Halos need you!

MAINTENANCE REPORT by Col. Ron Fleishman

Work continues on the instrument panel. The major electrical connections are complete. Col. Horst Wallasch is installing the small lights in the glare shield, then he will install the three sections to the panel and finish the final panel and electrical hook-ups. The pitot/static check has been completed and the airspeed and altimeter are functioning normally. The right prop control problem has been corrected.

On March 27th, the longest work part yet was held (slightly over eight hours), and the engines were pre-oiled and run, but only for less than a minute. Due to an oil pressure indicator problem, they were shut down. We have had weather and equipment problems this month. On April 1st we rained out, and the battery was still on charge. On April 3rd the work stand that we had been borrowing was not available. The work party on April 8th was one of the most productive days we have had so far. The oil pressure lines were checked and serviced, the prop controls were checked and rerigged and saftied. The battery was connected, and a success-ful 20-minute engine run was accomplished. The oil pressure problem was corrected, the flaps were lowered and raised with engine pump pressure, and the brakes were bled.

DESERT SPORTMANS AIRSHOW by Col. Cliff Brown

On April 4th, we attended the Desert Sportsman Pilots' Association Air Show at Falcon Field, Mesa, Arizona. This is an annual event, with the proceeds going to the United States Aerobatic Team. Need-less to say, it was heavy with Pitts doing all sorts of crazy things. Our Squadron was represented by Cols. Paul Odeum, Rudi Wallasch, and Cliff Brown; and Halo Pat Brown.

The star of the show was to be the CAF's B-17 "Sentimental Journey." To our disappointment, it was not in flying condition. The cowling and props from both left engines, the tail-gunner's station, and the upper portion of the flight deck had been all removed as part of their on-going restoration.

There was a flying demonstration by the P-51 "Ho-Hum" from the Champlin Museum, a P-51B "Shan-gri-La" from Van Nuys, and a 2nd P-51B with British markings.

Painting by Don Gentile
North American P-51B "Shangri-La"

On Final To Santa Paula

by Ron Fleishman

When I retired from the airlines and returned to Camarillo from Kansas City, I set upon a task that had been put on hold for almost four years…that of unpacking my books and other items of a lifetime of aviation collecting and putting my den/library in order. This project is both a joy and a giant pain.

It's a great delight to find a photo or book you had forgotten about. A sense of bewilderment arises when you come across something in a box that, for the life of you, you can't remember why you saved it in the first place.

One photo that falls into the delight department is the one below of our C-46 (then known as *Humpty Dumpty,* later to be named *China Doll),* still painted in its white and blue pseudo Chinese paint scheme on final approach for the Santa Paula Airport. No, the landing wasn't to a full stop… it was more of a bouncing of the tires on the runway. But it was enough for the pilot to say that he had "touched down" there and cause the locals to run for cover and talk about what might have happened if that "big ole thing" had really landed there.

Here is the story as it was told to me. I don't vouch for the total truthfulness of it, but it was the first of the stories that introduced the C-46 to the area and into the local aviation legends.

Back in the "eighties," when we first brought the plane to California, Bob Van Ausdell was one of the few pilots who flew the plane for the newly-formed Southern California Squadron of the CAF (we were not yet a Wing). Bob was a retired TWA pilot, and had a hangar at the Santa Paula Airport.

Santa Paula is a great airport, with some of the finest aircraft of the "Golden Age" all in one spot. It, however, is not a field where you can land a plane the size of a C-46, and, if you could, you might have to leave it there, unless you wanted to disassemble it to get it out. There was no way you were going to fly it out. There was also talk of how many hangars the wing span might relocate.

Now those who remember Bob will remember that he had both a fine sense of humor and a penchant for liking a challenge, especially when airplanes were involved. During some "hangar flying" with his buddies at his hangar, the topic of *Humpty Dumpty* landing at Santa Paula came up.

When told that it would never happen, Bob was said to reply that he would, while flying the C-46, sometime touch down at Santa Paula. That time came when Bob was flying the airplane back from one of our early air shows. He told the crew he was going to make a little side trip before landing at Camarillo.

A few people on the ground, so the story goes, knew beforehand what was going to happen. An unsuspecting line boy was told to get ready to flag in a twin-engine plane and "take care of it." Well, out he went, looked up, and saw this big roaring twin-engine behemoth heading straight in for the tiny Santa Paula airstrip.

Now I wasn't on the ground, but the popular legend is that the startled boy took one look at the approaching C-46 and took off in the opposite direction, not wanting any part of the disaster he was sure was about to take place.

Van Ausdell continued to fly *Humpty Dumpty* on final, dropped the gear, and flared out. True to what he had told his buddies, he bounced the tires on the runway, then gunned the engines. The plane regained altitude, he retracted the landing gear, and continued on to the Camarillo Airport.

Bob had lived up to his promise of "touching down" at Santa Paula. A few months later I was given this photo.

Bob is gone now, and no one seems to know where the surprised line boy ran to…or even if that part of the story is real. However, I still have the photo – proof that once, many years ago, a Curtiss C-46 Commando named *Humpty Dumpty* did indeed "touch down" at the Santa Paula Airport.

Photo Courtesy of Ron Fleishman

The CAF – SoCAWing's C-46 *Humpty Dumpty* (now *China Doll*) on final approach to the Santa Paula Airport. Luckily, someone on the ground had the presence of mind to record this momentous occasion for posterity – just before he ran for his life.

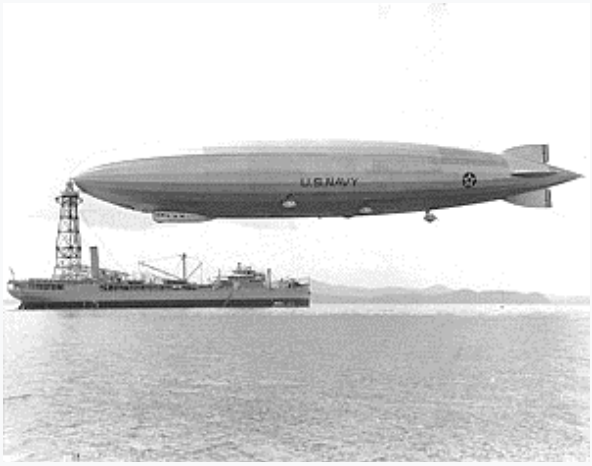
From "Flight Line," April 2007

USS *Los Angeles* (ZR-3)

Thanks to *Wikipedia*

USS *Los Angeles* was a rigid airship, designated ZR-3, which was built in 1923–1924 by the Zeppelin company in Friedrichshafen, Germany, as war reparation. It was delivered to the United States Navy in October 1924 and after being used mainly for experimental work, particularly in the development of the American parasite fighter program, was decommissioned in 1932.

USS *Los Angeles* (ZR-3)



Los Angeles* tied up to the mooring mast aboard the tender USS *Patoka

Manufacturer	Luftschiffbau Zeppelin, Friedrichshafen
Construction number	LZ-126
Manufactured	July 1922 (Commenced) August 1924 (Launched)
Serial	ZR-3
In service	25 November 1924 (Comm'ed) 30 June 1932 (Decommissioned) 24 October 1939 (Struck from Naval register)
Fate	Broken up for scrap in 1939

General characteristics

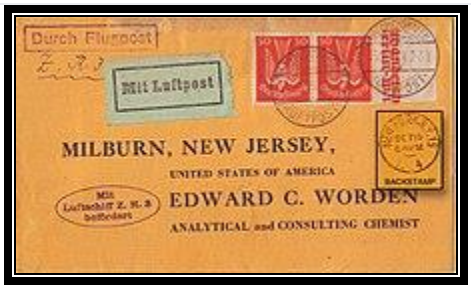
Class and type:	*Los Angeles* class rigid airship
Displacement:	2,764,460 cu ft (78,280.8 m^3)
Length:	658 ft 4 in (200.7 m)
Beam:	90 ft 8 in (27.6 m) (hull diameter)
Draft:	104 ft 5 in (31.8 m) (height)
Installed power:	400hp per engine
Propulsion:	•Five Maybach VL I 12-cyl water-cooled V-12 engines •Two-bladed fixed-pitch, rotable wooden propellers
Speed:	•48 knots (89 km/h; 55 mph) (cruising) •65 knots (120 km/h; 75 mph) (maximum)
Range:	5,770 nmi (10,690 km; 6,640 mi) at 10 knots (19 km/h; 12 mph)
Complement:	40

The second of four vessels to carry the name USS *Los Angeles*, the airship was built for the United States Navy as a replacement for the Zeppelins that had been assigned to the United States as war reparations following World War I, and had been sabotaged by their crews in 1919. Under the terms of the Treaty of Versailles Luftschiffbau Zeppelin were not permitted to build military airships. In consequence *Los Angeles*, which had the Zeppelin works number LZ 126, was built as a passenger airship, although the treaty limitation on the permissible volume was waived, it being agreed that a craft of a size equal to the largest Zeppelin constructed during World War I was permissible.

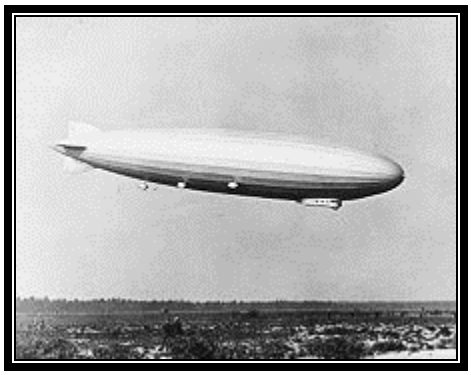
The airship's hull had 24-sided transverse ring frames for most of its length, changing to an octagonal section at the tail surfaces, and the hull had an internal keel which provided an internal walkway and also contained the accommodation for the crew when off duty. For most of the ship's length the main frames were 32 feet 10 inches (10.01 m) apart, with two secondary frames in each bay. Following the precedent set by LZ 120 *Bodensee*, crew and passenger accommodation was in a compartment near the front of the airship that was integrated into the hull structure. Each of the five Maybach VL I V12 engines occupied a separate engine car, arranged

as four wing cars with the fifth aft on the centerline of the ship. All drove two-bladed pusher propellers and were capable of running in reverse. Auxiliary power was provided by wind-driven dynamos.[2]

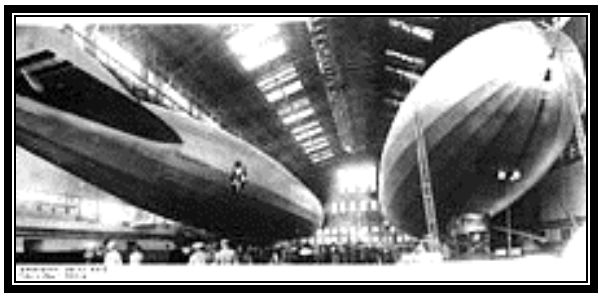
Operational History



Cover carried on the delivery flight from Germany to Lakehurst, New Jersey, 12–15 October 1924



Airship LZ-126 arriving at Lakehurst, 15 October 1924



***Los Angeles* (right) and *Shenandoah* moored in Hangar No. 1 in 1924 – at Lakehurst NAS**

Los Angeles was first flown on 27 August 1924, and after completing flight trials began the transatlantic delivery flight on 12 October under the command of Hugo Eckener, arriving at the US Naval Air Station at Lakehurst, New Jersey, after an 81-hour flight of 4,229 nautical miles (7,832 km; 4,867 mi). The airship was commissioned into the US Navy on 25 November 1924 at Anacostia, D.C. with Lieutenant Commander Maurice R. Pierce in command. On its arrival in the United States, its lifting gas was changed from hydrogen to helium, which reduced payload but improved safety. At the same time the airship was fitted with equipment to recover water from the exhaust gases for use as ballast to compensate for the loss of weight as fuel was consumed, so avoiding the necessity to vent scarce helium to maintain neutral buoyancy.

The airship went on to log a total of 4,398 hours of flight, covering a distance of 172,400 nautical miles (319,300 km; 198,400 mi). Long-distance flights included return flights to Panama, Costa Rica and Bermuda. It served as an observatory and experimental platform, as well as a training ship for other airships.

On 25 August 1927, while *Los Angeles* was tethered at the Lakehurst high mast, a gust of wind caught her tail and lifted it into colder, denser air that was just above the airship. This caused the tail to lift higher. The crew on board tried to compensate by climbing up the keel toward the rising tail, but could not stop the ship from reaching an angle of 85 degrees, before it descended. The ship suffered only slight damage and was able to fly the next day.

In 1929, *Los Angeles* was used to test the trapeze system developed by the US Navy to launch and recover fixed wing aircraft from rigid airships. The tests were a success and the later purpose-built *Akron*-class airships were fitted with this system. The temporary system was removed from *Los Angeles*, which never carried any aircraft on operational flights. On 31 January 1930, *Los Angeles* also tested the launching of a glider over Lakehurst, New Jersey.

On 25 May 1932, *Los Angeles* participated in a demonstration of photophone technology. Floating over the General Electric plant in Schenectady, New York, the crew of the ship engaged in an on-air conversation with a WGY radio announcer using a beam of light.

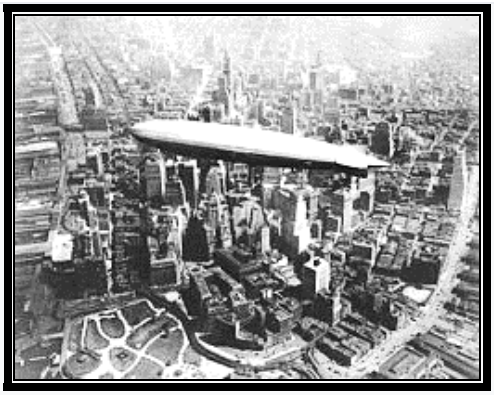
As the terms under which the Allies permitted the United States to have *Los Angeles* restricted its use to commercial and experimental purposes only, when the U.S. Navy wanted to use the airship in a fleet problem in 1931 permission had to be obtained from the Allied Control Commission. *Los Angeles* took part in Fleet Problems XII (1931) and XIII (1932), although as was the case with all U.S. Navy rigid airships, demonstrated no particular benefit to the fleet.

Los Angeles was decommissioned in 1932 as an economy measure, but was recommissioned after the crash of USS *Akron* in April 1933. She flew for a few more years and then retired to her Lakehurst hangar where she remained until 1939, when the airship was struck off the Navy list and was dismantled in her hangar. *Los Angeles* was the Navy's longest serving

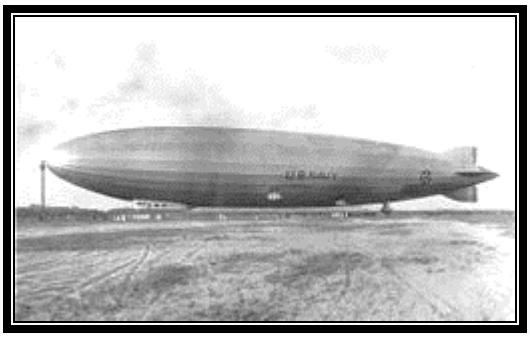
rigid airship. Unlike *Shenandoah*, *Akron*, and *Macon*, the German-built *Los Angeles* was the only Navy rigid airship which did not meet a disastrous end.

***USS Los Angeles* at Lakehurst NAS hangar**

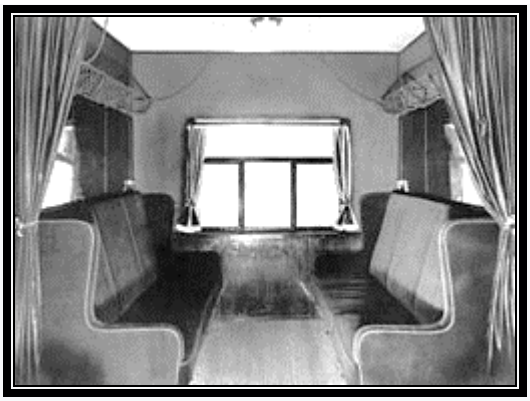
Gallery



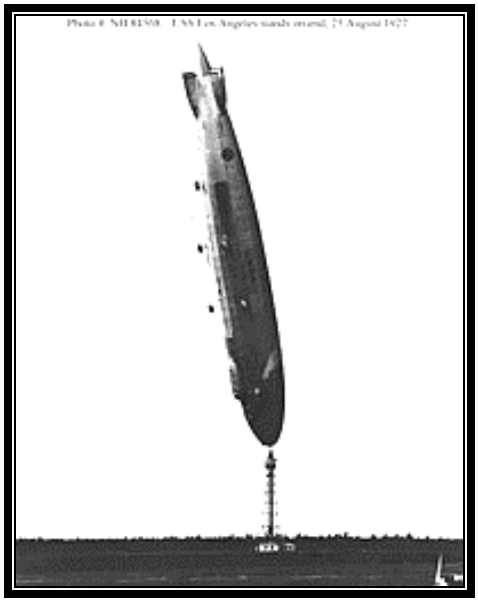
- ***USS Los Angeles* over New York City, 1930**



- **USS *Los Angeles* in Panama, 1929**

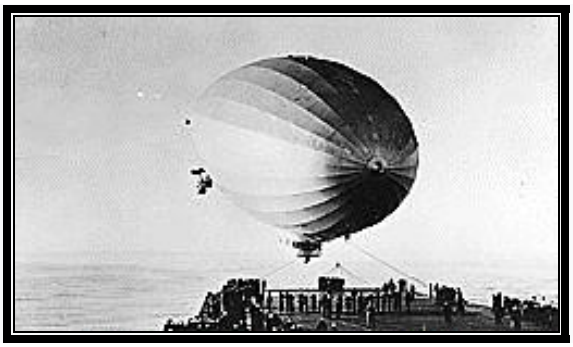


- **Passenger cabin of the airship, 1924**



- **USS *Los Angeles* lofted nearly vertical in the 1927 weather-related docking-mast mishap.**

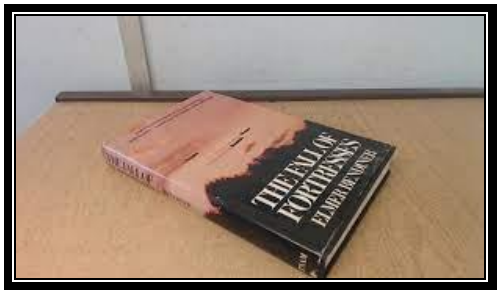
- **An RRG Prüfling glider attached to USS *Los Angeles* for carriage and drop tests.**



- **USS *Los Angeles* anchored to USS *Saratoga*.**

"That's All We Can Do For You Now"

This story is confirmed in Elmer Bendiner's book, *The Fall of Fortresses*.
Sometimes, it's not really just luck.



"The Fall of Fortresses" by Elmer Bendiner

Elmer Bendiner was a navigator in a B-17 during WW II. He tells this story of a World War II bombing run over Kassel, Germany , and the unexpected result of a direct hit on their gas tanks.

"Our B-17, the Tondelayo, was barraged by flak from Nazi antiaircraft guns. That was not unusual, but on this particular occasion our gas tanks were hit.

A B-17 taking flak on its bombing run over Germany

Later, as I reflected on the miracle of a 20- millimeter shell piercing the fuel tank without touching off an explosion, our pilot, Bohn Fawkes, told me it was not quite that simple. On the morning following the raid, Bohn had gone down to ask our crew chief for that shell as a souvenir of unbelievable luck.

The crew chief told Bohn that not just one shell but 11 had been found in the gas tanks. 11 unexploded shells where only one was sufficient to blast us out of the sky. It was as if the sea had been parted for us. A near-miracle, I thought.

Even after 35 years, so awesome an event leaves me shaken, especially after I heard the rest of the story from Bohn.

He was told that the shells had been sent to the armorers to be defused. The armorers told him that Intelligence had picked them up. They could not say why at the time, but Bohn eventually sought out the answer.

Apparently when the armorers opened each of those shells, they found no explosive charge. They were as clean as a whistle and just as harmless.

Empty? Not all of them! One contained a carefully rolled piece of paper. On it was a scrawl in Czech. The Intelligence people scoured our base for a man who could read Czech. Eventually they found one to decipher the note. It set us marveling. Translated, the note read:

'This is all we can do for you now. Slave labor is never a good idea.'"

A B-17 Flying Fortress returning to its British base.

B-17 "Tondelayo" and her crew

Thanks to Butch Alandy for this story,.

Photo Page II

Photo by |Dave Flood

Col. Ceci Stratford tightening the last bolt on the PBJ's left wing on March 8. Dick Russell had remembered that Ceci was the one to take the last bolt off the wing when it was removed many years ago.

U.S. Marine Corps Photo

Chris Birdt, Jeff's son (left), standing guard over his fellow Marine who is scanning for I.E.D.s in Afghanistan. Keep Chris in your prayers.

Photo by Dave Flood

Aviation Museum's new Tuskegee Airmen Exhibit. This material was in a display in the theater lobby when the movie "Red Tails" was playing.

Photo by Dave Flood

Col. Thomas Van Stein creating a painting of the PBJ's left wing "hanging". Thomas is a very accomplished painter, and is also a member of our PBJ Restoration Team.

Thomas's painting of AVG pilots shooting down a Zero over Kweilin, China in WWII. This painting hangs in our Aviation Museum.

Thomas's "fantasy" painting of our C-46 Commando "China Doll" flying "Over The Hump" (Himalayas) carrying needed war materials to Chinese troops in Kunming, China from a base in India. You can also find this painting in our Aviation Museum.

This page is from "Flight Line" of April, 2012

The zeppelin returns to L.A. skies, after 80 years

By Bob Pool
From *L.A. NOW* – November 24, 2009

The Zeppelin NT "Eureka" – with Farmers Insurance branding.

The last time something like this was seen in Los Angeles was 1929, when the Graf Zeppelin dropped in on Westchester's Mines Field before starting its nonstop Pacific crossing during its record-setting around-the-world flight.

The era of the rigid-framed zeppelin came crashing to an end in 1937, when the hydrogen-filled Hindenburg exploded spectacularly as it attempted to land at Lakehurst Naval Air Station in New Jersey. Thirty-six people were killed.

But now the zeppelin is back and filled with non-explosive helium gas. A privately run company based at the San Francisco-area Moffett Field has returned the German-made craft to California skies. Although airships such as the Goodyear blimp are a common sight in the Los Angeles area, blimps are smaller than zeppelins and carry only six passengers.

The 246-foot zeppelin, called the Eureka, can carry 13 passengers and a crew of two. Those on board have views of landmarks through giant plexiglass windows that line all sides of its cabin. So far, the Eureka has made four trips to Los Angeles, and its operators plan more for next year, starting with a two-week visit in mid-January.

They offer public flights over the coast and the city and hope to add excursions over Palm Springs and San Diego. Sightseeing rides are spectacular but pricey.

A half-hour trip costs $199; a two-hour flight, $950. A daylong excursion between Los Angeles and San Francisco runs $1,500. The craft also can be chartered for events such as birthdays or weddings for $5,500. So far, 5,500 paying passengers have climbed aboard the Eureka, using rolling steps to enter, two at a time, while the huge craft is held to the ground by two hull-mounted engines.

A third engine on the zeppelin's tail provides forward thrust at a speed of about 30 miles per hour. As steep as it is, the fare's a good deal for a ride in one of only three zeppelins in existence, say the Eureka's owners, a husband-and-wife team.

Brian and Alexandra Hall recruited investors to create the company they call Airship Ventures. They've spent about $18 million on the zeppelin and ground support, which includes two special mast trucks for mooring the craft and a 36-person staff.

"A German zeppelin company has been a profitable business since 2001 and they only fly part of the year because of the weather, and they fly over a rural area where there's nothing to see at night," said Alexandra Hall, who serves as the company's chief executive officer. "Here we can fly year-round, there's plenty to see at night, and there are plenty of people."

She said the pair anticipate reaching the break-even point in 2010. So far, revenue from the sale of advertising space on the sides of the zeppelin has been disappointing, but that could change as the economy improves and the zeppelin's manufacturer perfects a lightweight LED electronic billboard for the airship, she said. The airship's third revenue stream comes from its use as a platform for scientific research, photography and filmmaking, Hall said.

But it's the passenger service that is creating the most buzz. Those who sign up for Eureka rides undergo airline-type screening before being allowed to board. The zeppelin's designers calculate that its helium and three Lycoming engines can lift 4,310 pounds.

Propellers in the two engines attached to the zeppelin's lightweight triangular carbon-fiber

interior framework rotate to blow downward when the zeppelin takes off and rises almost straight up. Cruising altitude is about 1,200 feet. Once off the

Showing close-ups of the "Eureka's" engines

ground, passengers are encouraged to move about the cabin, which is equipped with a small lavatory.

They can chat with the pilot and co-pilot, who invite them to open two of the windows and stick their heads – or camera lenses – out into the rushing air. The craft normally moves about 35 miles per hour, although it can reach 77 mph.

The slower the better, say those who have been aboard the Eureka. "You could see everything – people working in the fields, running with their dogs on the beach, animals and scenery," said Marlene Wait, a Somis resident who took a nine-hour flight between Long Beach Airport and Moffett Field on Sept. 8 with her husband, retired psychiatric technician William Wait.

Eureka crew members say people are often startled when the zeppelin appears overhead. Its engines are quiet, and most don't notice the huge airship approaching.

The "Eureka" hovers quietly above.

Airship Ventures Shuts Down

By Dan Grossman, from "AIRSHPS.NET"
November 15, 2012

Airship Ventures has ceased operations and grounded the airship Eureka — a Zeppelin NT — effective immediately.

The company operated Eureka since 2008, giving passenger rides in the San Francisco Bay area and carrying advertising for companies including Farmers Insurance, Disney, and genetics-testing company 23andme. The company has struggled financially and was apparently unable to find a new corporate sponsor.

To Airship Ventures co-founders Brian and Alexandra Hall we offer both condolences and congratulations; we are sad to see Eureka grounded, but we congratulate you on four safe and inspiring years in the air. Thank you for bringing a zeppelin back to American skies for the first time in 75 years. We wish you and your team the very best.

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Airships, Dirigibles, Zeppelins, & Blimps: What's the Difference?

What is an Airship?

An airship is any powered, steerable aircraft that it is inflated with a gas that is lighter than air.

What is a Dirigible?

"Airship" and "dirigible" are synonyms; a dirigible is any lighter-than-air craft that is powered and steerable, as opposed to free floating like a balloon.

The word "dirigible" is often associated with rigid airships but the term does not come from the word "rigid" but from the French verb diriger ("to steer").

Dirigibles include rigid airships (like the Hindenburg), semi-rigid airships (like the Zeppelin NT), and blimps (like the Goodyear blimp).

What is a Blimp?

A blimp (technically a "pressure airship") is a powered, steerable, lighter-than-air vehicle whose shape is maintained by the pressure of the gases within its envelope.

A blimp has no rigid internal structure: If a blimp deflates, it loses its shape.

Photo by JB-MDL Public Affairs
Airships.net author Dan Grossman with the U.S. Navy blimp MZ-3A.

Today, blimps are best known as advertising vehicles — Goodyear began using blimps to advertise their brand in 1925 — but blimps have also played an important role in the armed forces of many countries; the U.S. Navy's lighter-than-air program made extensive use of blimps, primarily in anti-submarine and reconnaissance roles, from the 1920s through the 1950s.

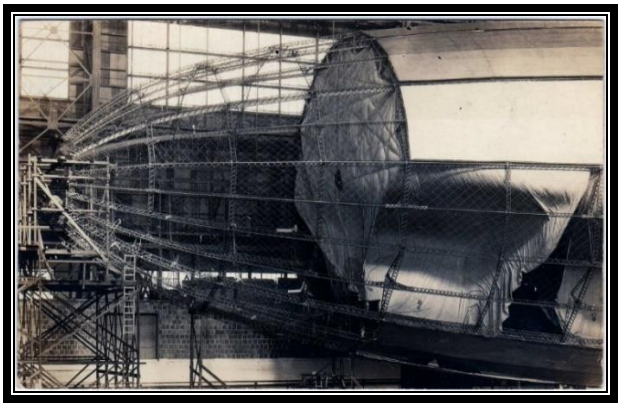
Was the Hindenburg a Blimp?

No, the Hindenburg is often called "blimp" but that is not correct; Hindenburg was a rigid airship that maintained its shape by means of a metal framework.

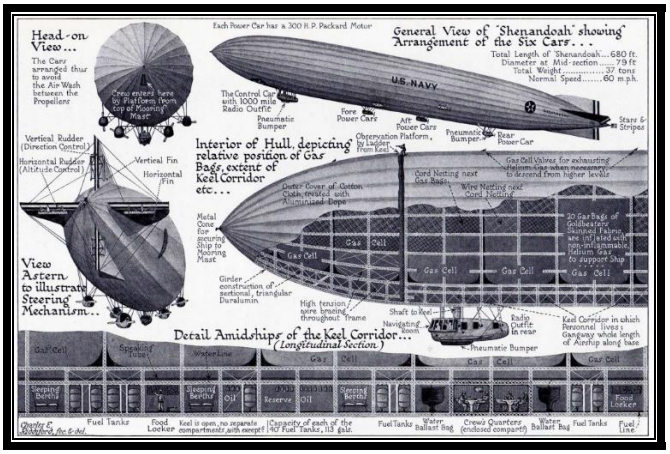
What is a Rigid Airship?

A rigid airship has a framework surrounding one or more individual gas cells, and maintains its shape by virtue of the framework and not from the pressure of its lifting gas.

This photograph of the U.S. Navy airship **Shenandoah** under construction illustrates the ship's metal framework, a partially inflated gas cell, and the fabric outer covering that protected the gas cells and provided aerodynamic streamlining:



USS Shenandoah under construction, showing rigid framework, individual gas cells, and fabric covering



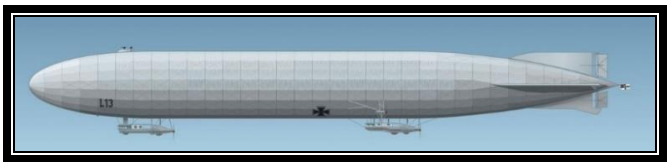
Drawing of U.S.S. Shenandoah from the January 1925 issue of The National Geographic Magazine.
This drawing of U.S.S. Shenandoah illustrates the various parts of a rigid airship.

What is a Zeppelin?

A zeppelin is a rigid airship manufactured by a particular company, the Luftschiffbau Zeppelin of Germany (the "Zeppelin Airship Construction Company"), founded by Count Ferdinand von Zeppelin.

Ferdinand von Zeppelin is considered the father of the rigid airship, but not all rigid

airships are “zeppelins,” just as not all photocopiers are “Xerox” machines.



Drawing by Norbert Andrup
German Navy Zeppelin L-13 (LZ-45).

The term zeppelin is often associated with the German airships that conducted bombing raids during World War I, but while most of these ships were built by the Zeppelin Company, not all German WWI airships were zeppelins; the German military also used rigid airships of very different design built by the Schutte-Lanz and Parseval companies.

One of history’s most famous zeppelins was LZ-129 Hindenburg. (“LZ” stands for “Luftschiff Zeppelin” and “129” indicates that Hindenburg was the 129th airship designed by the Zeppelin Company.) Because the American naval ships USS Akron and USS Macon were built by a Goodyear-Zeppelin joint venture, they are sometimes referred to as zeppelins as well.

Zeppelins still fly today; in fact the new Goodyear airship is a not a blimp but a zeppelin, built by a descendant of the same company that built Graf Zeppelin and Hindenburg.

What is a Semi-Rigid Airship?

Photo by Goodyear Tire & Rubber Company
A semi-rigid airship, like a blimp, maintains its aerodynamic shape from internal gas pressure, but it has a partial rigid frame, usually in the form of a keel, which supports and distributes loads and provides structural integrity during maneuvering. The new Goodyear blimp is an example – a zeppelin NT.

Photo by Carol Bachman
The zeppelin *Eureka* at Camarillo Airport when she stopped here to give rides. Ceci Stratford took a ride in the airship around Ventura County.

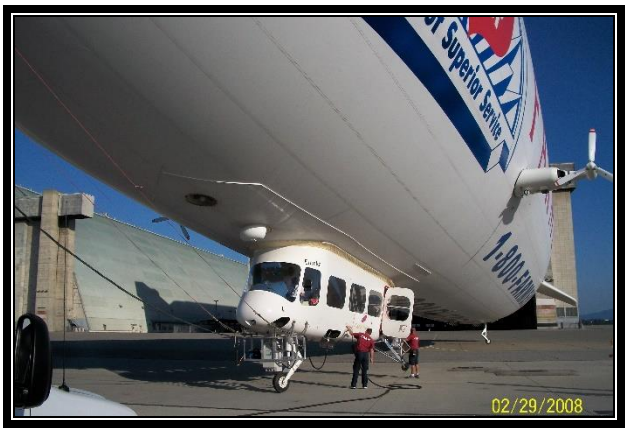


Photo by Chuck Kamphausen
Chuck Kamphausen took a trip in *Eureka* from Long Beach to Moffett Field, including soaring over Monterey Bay.

Photo by Chuck Kamphausen
A large blue whale spotted by Chuck off Point Dume from *Eureka.*

Our Wing Cadets At Work

Text & photos by Charlie Carr

For the past couple of years, I have been working with several of our Cadets on museum display projects and the historical aspect of same.

Wing Cadets working in our hangars on their models to go into display "The Cold War." From left: Chris, Nabi, Gabe and Cole.

The Covid situation has made it quite difficult. However, due to the dedication of both the Cadets and their parents, we have been able to continue with these endeavors.

Working with these Cadets has been invaluable for both me and the Cadets and I hope to assist in this area whenever possible.

Chris and Nabi with the new display they and the other Cadets have designed and put together – on "The Cold War."

Cadets include: Keith Warner (Thousand Oaks High School); Gabe Fernandez (Camarillo High School); Brenden Hokom, Cole Ysais, Chris Villasenor, and Dustin Douglas (Rancho Campana High School, Camarillo); and Nabi Hemmatyar (Graduate).

Wing Cadet Alumni

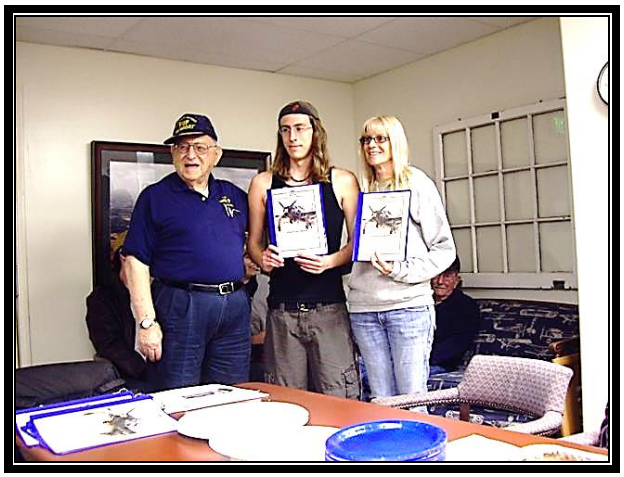


Photo by Jim Stirone

This photo was taken in May, 2012 of Eric Fischler and his mom Gail, with Joe Peppito, after receiving certificates for the Cadet Radial Engine Training Program.

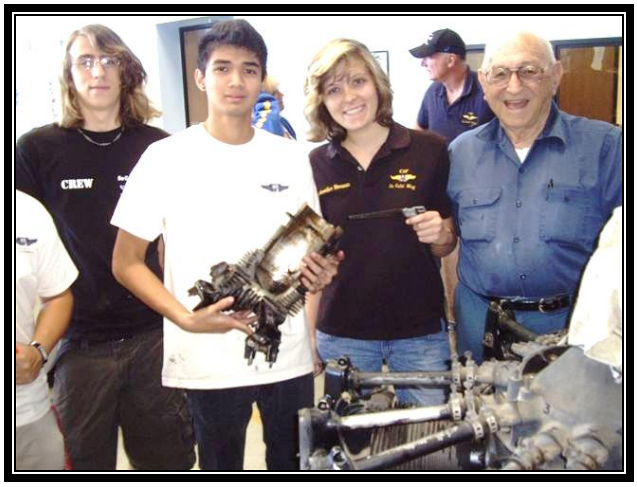


Photo by Jim Stirone

Cadets Eric Fischler, Shan Tabat and Jennifer Bauman with Joe Peppito. They were in the process of dismantling a borrowed 3350 aircraft engine in order to put it back together as a training exercise. This photo was from the November 2011 "Flight Line." The engine was later displayed in our Aviation Museum.

The So Cal Wing offers a Cadet Program which introduces teens to the CAF. The program attempts to demonstrate the many ways that members young and old can contribute in a meaningful way to the success of the Wing's mission. The program also provides contact and limited networking with others who are involved in the many facets of the aviation community. The program takes place primarily on Saturdays. Please call Kathy Newhard at 805-482-0064 for more information.

Friends of the Museum Newsletter

Commemorative Air Force

455 Aviation Drive, Camarillo, CA 93010

(805) 482-0064

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Photo by Ron Plante

The German dirigible *Hindenburg* being escorted to the Lakehurst Naval Air Station, New Jersey, in 1936 by a US Coast Guard Douglas RD-4 Dolphin "Spica"

Dear Friends,

Thank you for your support during these difficult times!! The So Cal Wing is working hard to maintain several airplanes - the Spitfire, the Bearcat, the SNJ "Bluebird", and secure and store various parts and memorabilia which we had to move from the "annex" across the street. Unfortunately, the Museum is closed and we cannot offer rides right now.

As we proceed through Covid-19 and its challenges, there are webinars and seminars and great videos of the So Cal Wing CAF and CAF Headquarters and other wings' warbirds. I suggest you go to these links to see what's going on:

Website: https://www.cafsocal.com
Facebook: https://www.facebook.com/officialcafsocal
Instagram: https://www.instagram.com/cafsocal/
Twitter: https://twitter.com/cafsocal
YouTube Channel: https://www.youtube.com/channel/UCWa09ZhgKIVLmL_SVGovg
CAF Headquarters website: https://commemorativeairforce.org/events

The Friends Newsletter story of the Hindenburg is amazing. Our own Dave Flood saw the mighty zeppelin when he was 5 years old, the same day of the tragic accident!

Ceci Stratford
Frends of the Museum Program
CAF So Cal Wing
(805) 630-3696

The Mystery Airship of the 1930s/ Flight of the Hindenburg – May, 1937

By Dave Flood, with help from *Wikipedia*

I've remembered for approximately 85 years seeing some large airship passing over my hometown in Massachusetts.

In doing research over the years since, I have not been able to pin down if a dirigible actually passed over Norwood, Massachusetts in the 1930s.

But when I posed the question to my CAF colleague, Anne Birge, she had the answer for me in about two minutes! So much for my prowess in aviation research! Anne found an article on the site "Norwood Now & Then" that mentions that the famous German airship *Hindenburg* had landed at a small grass-runway airport in Canton, a town next to Norwood on August 19, 1936. This unexpected arrival was probably because weather conditions in Boston, fifteen miles away, were not conducive to the airship landing there. There was also a mention of a subsequent fly-over of the Norwood area on May 6, 1937 by the *Hindenburg* – noting that it was at the low altitude of 300 feet, so low that people on the ground could see the passengers inside the airship. It was this fly-over that I believe I saw at my young age. On this flight, the *Hindenburg* was on her way to a fateful docking at the Naval Air Station, Lakehurst, New Jersey. Following is the story of *Hindenburg* and her tragic end.

++++++++++++++++++++++++++++

The German Airship *Hindenburg*

The German dirigible *Hindenburg* docked at Lakehurst NAS, New Jersey, 1936

LZ 129 *Hindenburg* (*Luftschiff Zeppelin #129*; Registration: **D-LZ 129**) was a German commercial passenger-carrying rigid airship, the lead ship of the *Hindenburg* class, the longest class of flying machine and the largest airship by envelope volume. She was designed and built by the Zeppelin Company (*Luftschiffbau Zeppelin GmbH*) on the shores of Lake Constance in Friedrichshafen, Germany, and was operated by the German Zeppelin Airline Company (*Deutsche Zeppelin-Reederei*). The airship flew from March 1936 until she was destroyed by fire 14 months later on May 6, 1937 while attempting to land at Lakehurst Naval Air Station in Manchester Township, New Jersey, at the end of the first North American transatlantic journey of her second season of service with the loss of 36 lives. This was the last of the great airship disasters.

Hindenburg was named after Field Marshal Paul von Hindenburg, President of Germany from 1925 until his death in 1934.

The airship made 17 round trips across the Atlantic Ocean in 1936, transporting 2,600 passengers in comfort at speeds up to 135 km/h (85 mph). The Zeppelin Company began constructing the Hindenburg in 1931, several years before Adolf Hitler's appointment as German Chancellor. For the 14 months it operated, the airship flew under the newly-changed German national flag, the swastika flag of the Nazi Party.

After opening its 1937 season by completing a single round-trip passage to Rio de Janeiro, Brazil, in late March, the *Hindenburg* departed from Frankfurt, Germany, on the evening of May 3, on the first of 10 round trips between Europe and the United States that were scheduled for its second year of commercial service. American Airlines had contracted with the operators of the *Hindenburg* to shuttle the passengers from Lakehurst to Newark for connections to airplane flights.

Except for strong headwinds that slowed its progress, the Atlantic crossing of the *Hindenburg* was otherwise unremarkable until the airship attempted an early-evening landing at Lakehurst three days later on May 6. Although carrying only half its full capacity of passengers (36 of 70) and crewmen (61, including 21 crewman trainees) during the flight accident, the *Hindenburg* was fully booked for its return flight. Many of the passengers with tickets to Germany were planning to attend the

coronation of King George VI and Queen Elizabeth in London the following week.

Photo by anthonyluke photography
***Hindenburg* over Boston, Mass.**

The airship was hours behind schedule when it passed over Boston on the morning of May 6, and its landing at Lakehurst was expected to be further delayed because of afternoon thunderstorms. Advised of the poor weather conditions at Lakehurst, Captain Max Pruss charted a course over Manhattan Island, causing a public spectacle as people rushed out into the street to catch sight of the airship. After passing over the field at 4:00 p.m., Captain Pruss took passengers on a tour

Photo by jamesbguthrie. blogspot.com
The *Hindenburg* over New York City, May 6, 1937

over the seasides of New Jersey while waiting for the weather to clear. After finally being notified at 6:22 p.m. that the storms had passed, Pruss directed the airship back to Lakehurst to make its landing almost half a day late. As this would leave much less time than anticipated to service and prepare the airship for its scheduled departure back to Europe, the public was informed that they would not be permitted at the mooring location or be able to visit aboard the *Hindenburg* during its stay in port.

Landing timeline

Around 7:00 p.m. local time, at an altitude of 650 feet (200 m), the *Hindenburg* made its final approach to the Lakehurst Naval Air Station. This was to be a high landing, known as a *flying moor*, because the airship would drop its landing ropes and mooring cable at a high altitude, and then be winched down to the mooring mast. This type of landing maneuver would reduce the number of ground crewmen, but would require more time. Although the high landing was a common procedure for American airships, the *Hindenburg* had only performed this maneuver a few times in 1936 while landing in Lakehurst.

At 7:09 p.m., the airship made a sharp full-speed left turn to the west around the landing field because the ground crew was not ready. At 7:11 p.m., it turned back toward the landing field and valved gas. All engines idled ahead and the airship began to slow. Captain Pruss ordered aft engines full astern at 7:14 p.m. while at an altitude of 394 ft (120 m), to try to brake the airship.

At 7:17 p.m., the wind shifted direction from east to southwest, and Captain Pruss ordered a second sharp turn starboard, making an s-shaped flightpath towards the mooring mast. At 7:18 p.m., as the final turn progressed, Pruss ordered 300, 300 and 500 kg (660, 660 and 1100 lb) of water ballast in successive drops because the airship was stern-heavy. The forward gas cells were also valved. As these measures failed to bring the ship in trim, six men (three of whom were killed in the accident) were then sent to the bow to trim the airship.

Photo by jamesbguthrie.blogspot.com
***Hindenburg* dropping water ballast before arriving at Lakehurst NAS, New Jersey**

At 7:21 p.m, while the *Hindenburg* was at an altitude of 295 ft (90 m), the mooring lines were

dropped from the bow; the starboard line was dropped first, followed by the port line. The port line was overtightened as it was connected to the post of the ground winch. The starboard line had still not been connected. A light rain began to fall as the ground crew grabbed the mooring lines.

At 7:25 p.m., a few witnesses saw the fabric ahead of the upper fin fluttered as if gas was leaking. Others reported seeing a dim blue flame – possibly static electricity, or St Elmo's Fire – moments before the fire on top and in the back of the ship near the point where the flames first appeared. Several other eyewitness testimonies suggest that the first flame appeared on the port side just ahead of the port fin, and was followed by flames which burned on top. Commander Rosendahl testified to the flames in front of the upper fin being "mushroom-shaped". One witness on the starboard side reported a fire beginning lower and behind the rudder on that side. On board, people heard a muffled detonation and those in the front of the ship felt a shock as the port trail rope overtightened; the officers in the control car initially thought the shock was caused by a broken rope.

Disaster

At 7:25 p.m. local time, the *Hindenburg* caught fire and quickly became engulfed in flames. Eyewitness statements disagree as to where the fire initially broke out; several witnesses on the port side saw yellow-red flames first jump forward of the top fin

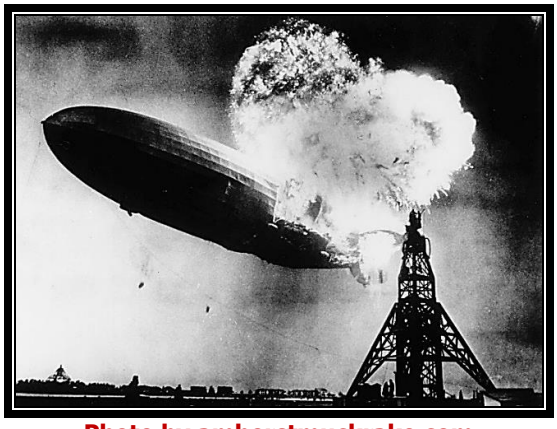


Photo by amherstmuckrake.com
The aft end of *Hindenburg* bursts into flame

beginning lower and farther aft, near cell 1 behind the rudders. Inside the airship, helmsman Helmut Lau, who was stationed in the lower fin, testified hearing a muffled detonation and looked up to see a bright reflection on the front bulkhead of gas cell 4, which "suddenly disappeared by the heat". As other gas cells started to catch fire, the fire spread more to the starboard side and the ship dropped rapidly. Although cameramen from four newsreel teams and at least one spectator are known filming the landing, with numerous photographers also being at the scene, no footage or photographs are known to exist of the moment the fire started. near the ventilation shaft of cells 4 and 5. Other witnesses on the port side noted the fire actually began just ahead of the horizontal port fin, only then followed by flames in front of the upper fin. One, with views of the starboard side, saw flames

Wherever the flames started, they quickly spread forward first consuming cells 1 to 9, and the rear end of the structure imploded. Almost instantly, two tanks (it is disputed whether they contained water or fuel) burst out of the hull as a result of the shock of the blast. Buoyancy was lost on the stern of the ship, and the bow lurched upwards while the ship's back broke; the falling stern stayed in trim.

As the tail of the *Hindenburg* crashed into the ground, a burst of flame came out of the nose, killing 9 of the 12 crew members in the bow. There was still gas in the bow section of the ship, so it continued to point upward as the stern collapsed down. The cell behind the passenger decks ignited as the side collapsed inward, and the scarlet lettering reading "Hindenburg" was erased by flames as the bow descended. The airship's gondola wheel touched the ground, causing the bow to bounce up slightly as one final gas cell burned away. At this point, most of the fabric on the hull had also burned away and the bow finally crashed to the ground.

Photo by Murray Becker
The fire bursts out of the nose of the *Hindenburg*

Although the hydrogen had finished burning, the *Hindenburg*'s diesel fuel burned for several more hours.

The time that it took from the first signs of disaster to the bow crashing to the ground is often reported as 32, 34 or 37 seconds. Since none of the newsreel cameras were filming the airship when the fire first started, the time of the start can only be estimated from various eyewitness accounts and the duration of the longest footage of the crash.

One careful analysis by NASA's Addison Bain gives the flame front spread rate across the fabric skin as about 49 ft/s (15 m/s) at some points during the crash, which would have resulted in a total destruction time of about 16 seconds (245m/15 m/s=16.3 s).

Some of the duralumin framework of the airship was salvaged and shipped back to Germany, where it was recycled and used in the construction of military aircraft for the *Luftwaffe*, as were the frames of the LZ 127 *Graf Zeppelin* and LZ 130 *Graf Zeppelin II* when both were scrapped in 1940.

***Hindenburg* class airship compared to largest fixed-wing aircraft – Boeing 747**

Specifications

Data from Airships: A Hindenburg and Zeppelin History site

General characteristics

- **Crew:** 40 to 61
- **Capacity:** 50–70 passengers
- **Length:** 245 m (803 ft 10 in)
- **Diameter:** 41.2 m (135 ft 1 in)
- **Volume:** 200,000 m^3 (7,062,000 cu ft)
- **Powerplant:** 4 × Daimler-Benz DB 602 (LOF-6) V-16 diesel engines, 890 kW (1,200 hp) each

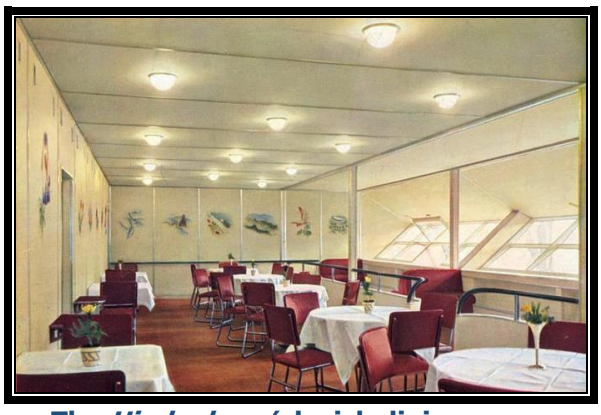
Performance

- **Maximum speed:** 135 km/h (85 mph, 74 kn)

***Hindenburg* totally in flames – note the survivor (right) running from the airship.**

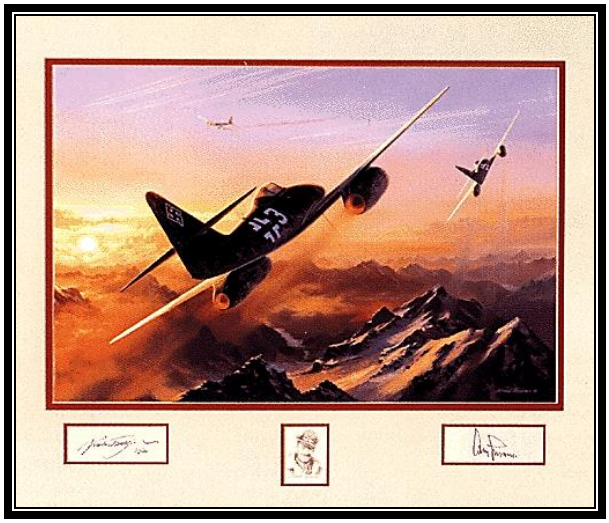
The remnants of *Hindenburg* left at Lakehurst NAS after the fire had subsided.

***Hindenburg* just before the crash.**



The *Hindenburg's* lavish dining room.

Aviation Art



"Jet Strike" by Nicolas Trudgian
Adolf Galland, CO of the Luftwaffe, flying a revolutionary Me-262 jet fighter.

"The Sundowners" by Anthony Saunders
VF-111 F-4 Phantoms off the USS Coral Sea – flying to intercept Mig-17s over Quang Lang airfield, March, 1972.

"Midwinter Dawn" by Robert Taylor
RAF ace Johnnie Johnson, CO of 127 Wing, leads Mk IX Spitfires of 421 Squadron RCAF on patrol – December, 1944.

"Chance Encounter" by Robert Taylor
Royal Netherlands Navy Dornier 24 flying boat alerts a Dutch submarine of a Japanese invasion fleet coming its way.

"Ramrod Outward Bound" by John Shaw
Long range bomber strikes with fighter escort. P-51 "Old Crow" piloted by Bud Anderson, covering the 100th Bomber Group during final days of WWII.

"Among the Columns of Thor" by William Phillips
B-24 bombers of 409th Squadron, 93rd Bomb Group, returning from targets deep in Germany – escorted by P-51s of 3361st Fighter Squadron, 356th Fighter Group.