

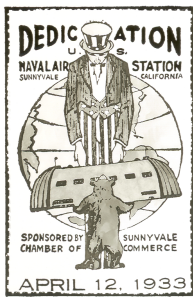
## USS Macon ERA

Development of rigid airships as an instrument of warfare was initiated by the Germans, whose embryonic Zeppelin airships of World War I were a qualified success as long-range bombers, naval scouts, and in one spectacular instance as a long-range, heavy payload carrier. Having observed the success of Germany's Naval Air Force against the British Fleet during WW-I, the United States Navy's General Board determined that the performances of German Zeppelins were so remarkable that it was most necessary for the U.S. Navy to develop dirigibles of this type as soon as possible. Admiral Henry Mayo, Commander in Chief, US Atlantic Fleet informed the Board:

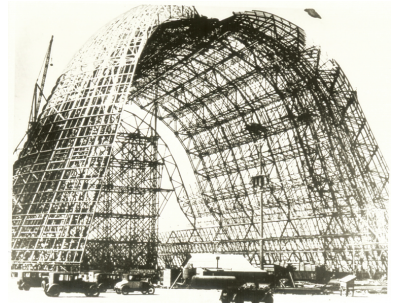
"For reconnaissance and scouting purposes, I think you will get to the point where the rigid dirigible will be self-protecting. It will be large enough to carry fighting machines (i.e., aircraft) for protection, which with the use of non-flammable helium will make it pretty reliable. It can go long distances, can cover large areas; it will be in the air what large and fast scout cruisers would be on the sea."

Given the political climate in the 1920's, the United States determined that it needed a means to scout both the Atlantic and Pacific approaches. Furthermore, the United States looked askance at the imperial designs of Japan, and an uneasy situation prevailed. With this in mind, the U. S. Navy began its rigid airship program, carrying it to the highest state of military development, which was realized in the airships *USS Akron* and *USS Macon*. The concept would be to base several of these airships along both the east and west coasts as well as in Pearl Harbor, Hawaii.

The San Francisco Peninsula became the west coast home of *USS Macon* due to a grass-roots



effort led by Ms. Laura Whipple to convince the U. S. Government to locate here rather than in San Diego. Over \$476,000.00 was collected to purchase more than 1,000 acres of farm land at the south end of San Francisco Bay. This plot was then sold to the U. S. Navy for the princely sum of \$1.00 on July 31, 1931, and construction for the new hangar began in October, 1931.



Naval Air Station Sunnyvale was commissioned on April 12, 1933, under command of Captain Harry Shoemaker. To honor the memory of Rear Admiral Moffett, the operational airfield was named Moffett Field, NAS Sunnyvale on September 1, 1933.

On April 21, 1933, the *USS Macon (ZRS-5)*, \$2.5 million in the making, left its production facility in Akron, Ohio on its maiden voyage. The entire craft, 785 feet long, was approximately ten feet longer than the German airship *Graf Zeppelin*, and just a little less than 20 feet shorter than the German airship *Hindenburg*.

The *USS Macon* was more modern and slightly faster than its sister ship, the *USS Akron (ZRS-4)*, with a top speed of about 69.4 knots or 80 miles per hour. Regrettably, the *Akron* crashed in the Atlantic Ocean during a storm on April 3, 1933, with the loss of 73 lives, including RADM Moffett.

To the bewilderment of some, the craft was named the *Macon*, after the largest city in the Georgia district of Rep. Carl Vinson, chairman of the House committee on Naval Affairs. To those on the East Coast, the naming was considered a politically prudent move.

The rigid airship was the product of the Goodyear-Zeppelin Co., a business jointly owned by the Zeppelin Company of Germany and the Goodyear Tire and Rubber Company.

Unlike the blimps made by Goodyear today, *Macon* had a structured duralumin frame with three interior keels. The intent of the strong spine was to prevent a hull collapse that occurred with the *USS Shenandoah* when it was in a massive storm in the central United States. From the outside it looked and functioned much like a large blimp. But on the inside, the ship was an open cavern of girders, cables and catwalks with few places where the crewmen could not go.

Before 1925, many lighter-than-air craft operated on hydrogen. But the flammability of the gas proved to be very dangerous, as would be demonstrated on May 6, 1937, at Lakehurst, NJ, when fire killed 36 people aboard the *Hindenburg*.

The *USS Akron* and *USS Macon* were kept aloft by non-flammable helium contained in 12 large gelatin-latex cells inside the craft. The crew was able to set the aircraft's altitude by releasing the gas or ballast, as well as dynamic lift from forward movement due to the airfoil shape of the aircraft.

Inside the hull, the ship had eight large 560-horsepower gasoline powered Maybach reversible engines driving outside propellers, one of the craft's few noisy operations. The propellers could be rotated down to help control the ship during take-off and landings.

*Macon* had accommodations for 100 officers and men, including sleeping berths, a large mess room, a galley, and observation platforms at the nose and tail.

With nearly as much fanfare as marked the arrival of the *Akron*, *Macon* cruised into the skies over Mountain View and Sunnyvale on October 15, 1933, under command of Commander Alger H. Dressler, and docked without difficulty at its new home.



During the next 16 months, *Macon* became a familiar and popular sight on the Peninsula, and never failed to draw large crowds whenever it took off or landed.

But there was much to be expected of this airship. A considerable amount had been spent on the construction of *Akron* and *Macon*, and the country was in the middle of the Great Depression. People in and out of the military wanted results.

Almost immediately after arriving in Mountain View, *Macon* was sent on maneuvers in the Pacific, but it was an inauspicious debut. During a mock battle, the ship was "shot down" twice in the first eight hours.

On July 11, 1934, LCDR Herbert Wiley, the former Executive Officer of *USS Akron* and one of its three survivors, took command of *Macon*. Determined to prove *Macon's* value, he quickly developed and improved the ship's long-range detection and scouting system.

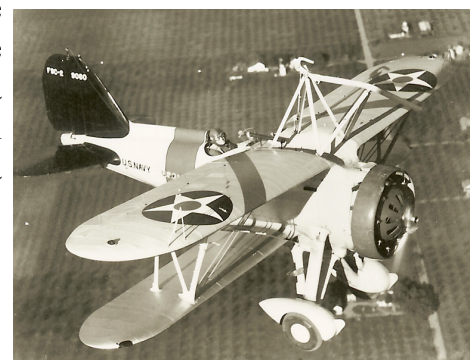
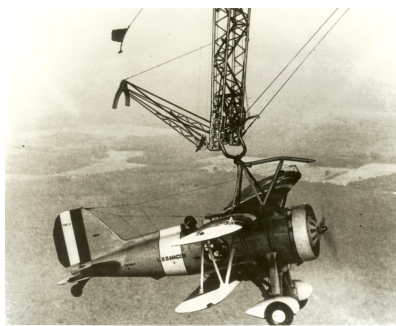
To put the system to the test, *Macon* left Moffett Field in July 1934 in an attempt to locate the cruiser *USS Houston*, carrying President Roosevelt through the Panama Canal en route to Honolulu. Using only newspaper accounts of the president's departure time as a guide, *Macon* raced 3,500 miles in 3½ days to a spot in the vast Pacific Ocean where LCDR Wiley had determined they could find the *Houston*. They did!

Aboard the cruiser, crewmen were shocked to see two *F9C-2 Sparrowhawk* scouting airplanes come out of nowhere and circle the ship. Minutes later *Macon* dramatically descended from the clouded sky and dispatched a plane that dropped bundles of the previous day's newspaper from San Francisco, as well as postage stamps for the President's collection, (almost) onto the *Houston*. The Fleet's admirals were not amused. Said Admiral Stanley, Chief of Naval Operations, "We considered it a publicity stunt and that he (Wiley) had no business doing it." The president, however, was tickled. The stunt showed that *Macon* was capable of the kind of scouting for which it was intended.

### **Men on the Flying Trapeze**

Unlike other dirigibles of the time, the *Macon* was so massive that it also carried its own aircraft - four *F9C-2 Sparrowhawk* planes which were stored in the

aircraft's hangar deck. The airplanes were released via a trapeze and a harness which lowered the planes through a



T-shaped hangar opening in *Macon's* underside. Retrieving the planes however, was a much more difficult process. Like a performing air stunt, the pilots had to equal their speed to that of the ship and "catch" the trapeze with a hook at the top of the plane. The harness would then be attached to the fuselage, and the aircraft would be raised into the hangar deck. Despite the difficulty of the maneuver, the pilots, known as the "Men on the Flying Trapeze", had a flawless record on both *Akron* and *Macon*.

*Macon* was built to be the chief scout of the Pacific Fleet, providing long-range reconnaissance. In addition to providing protection for the "airship of the sky," the *Sparrowhawks* were the ships' main eyes.

### **Crash**

*USS Macon* scouted for the Pacific Fleet eight times in all. But when the airship left Moffett Field on February 11, 1935 to go on maneuvers off the coast of Southern California, repairs had not been completed to strengthen the attachment of the fins, damaged during a trans-continental flight while supporting Fleet operations in the Caribbean. Because of the need for the ship and the pressure to prove its value, Navy officials had decided to do the repair work piecemeal. Largely because of that decision, this would be the ship's 54th and final flight.

The next day, as the ship was returning from its successful mission, it encountered storm winds off Point Sur, south of Monterey. Suddenly, a crosswind struck the ship with such force that the upper fin was completely severed, sending shards of metal into the rear gas cells.

In the control car, the steering wheel went slack and the navigators felt the tail drop. CDR Wiley ordered the dumping of ballast and fuel. Crewmen hurried about the ship discharging everything they could to lighten the tail. Off-duty personnel were ordered to the nose to help bring that end down. But the ship was doomed. After rising to nearly 5,000 feet, the *Macon* began to fall because of the loss of helium through the safety relief valves.

Moments later the ship settled gently into the water, and the crew, clad in life jackets and equipped with life rafts - features that had not been available to many of those aboard the *Akron* - jumped into the water safely. Ships were quickly on the scene to pull the men out. A radioman was killed when he jumped from the falling ship, and a mess attendant was lost when he apparently tried to retrieve his belongings. But in all, 81 of the 83 aboard *Macon* survived the crash, including "lucky" Wiley.

A commission set up to determine the cause of the ship's demise concluded that the blame belonged not to the crew, but to the Navy's refusal to repair *Macon's* tail damage before it was sent on its ill-fated mission.

The disastrous record of airships put the pressure on President Roosevelt to abandon the costly lighter-than-air program. The president responded by setting up a second commission, this one headed by Stanford Professor William F. Durand, to look into the future of airships. The panel

found that dirigibles had been used for purposes for which they were not intended and that they had not been given a fair opportunity to prove their value to the military. The commission concluded that these lighter-than-air craft should be given another chance.

They were not.

The *USS Macon* was the nation's last rigid airship.

## Discovery

While much attention was on NAS Moffett Field's future at the turn of the decade, a small team of explorers was interested only in its past. Within days of the 1935 crash of the *Macon* off the California Coast near Point Sur, efforts were made to find the wreckage, but to no avail. In 1989, the *Macon* Expeditionary Group headed by Richard Sands of San Francisco, a former Navy pilot, renewed efforts to find the remains. Among those involved was David Packard, founder of the Monterey Bay Aquarium Research Institute (MBARI), Chris Grech of MBARI, and Gordon Wiley, son of *Macon's* skipper, CDR Herbert V Wiley.

Early efforts were unsuccessful. Their break came when Wiley's daughter, Marie Wiley Ross, found a restaurant in Moss Landing north of Monterey that displayed a piece of metal the owners claimed came from the *Macon*. Ross immediately recognized its unique shape as having come from her father's ship. After some difficulty, the group was able to find the fisherman who had pulled up the two-foot piece of metal in his nets. Fortunately, he had kept meticulous fishing records.

"He told us that he had lost a whole lot of rigging at the one spot," Sands told the Peninsula Times Tribune in 1990. "He knew something was down there. He knew it was the *Macon*." Armed with the new coordinates, a three-man crew of the Navy deep submersible, *Sea Cliff*, went in search of the *Macon* on June 24, 1990. Within 15 minutes, the search was over.

The explorers found the twisted remains of the *USS Macon* on a sandy perch about 1,450 feet deep and about two miles south of the site of previous searches. Among the twisted girders and gangways that comprised the skeleton-like interior of the rigid airship, the crew also found the remains of three of the *Macon's* Sparrowhawk fighter airplanes, their insignias still clearly visible. The final resting place of *Macon* was no longer in doubt.

But, in the days ahead, the future of its home base would be. As a prelude for things to come decades later, the Air Groups from USS Lexington and USS Saratoga, VB-2 (Bombing Squadron 2), VF-6 (Fighter Squadron 6), VT-2 (Torpedo Squadron 2) and VS-2 (Scouting Squadron 2) began operations from NAS Sunnyvale on a trial basis in July, 1935. This lasted for only a few months, when the US Army was directed to take ownership of Moffett Field.

