

## Gold Coast Railroad Museum – Naval Air Station Richmond WWII L.T.A. Facility



### In the Beginning

The origin of blimps or lighter-than-air (L.T.A.) vehicles probably had its start with hot-air balloons. The French Montgolfier brothers, Jacques Etienne and Joseph Michel invented ballooning in 1783. The significant difference between balloons and blimps was the obvious, you can only travel at the behest of the wind and its shape depended on the pressure of the air or gas. <science.howstuffworks.com>

It was not until 1852 when Henri Giffard, a French engineer, invented the first powered air ship. His airship was called a dirigible (French word meaning 'to steer'). "It was a cigar-shaped, non-rigid bag that was 143 feet (44 meters) long and had a capacity of 113,000 cubic feet (3,200 cubic meters). He also built a small 3-horsepower (2.2-kilowatt) steam engine to power a three-bladed propeller. The engine weighed 250 pounds (113 kilograms) and needed a 100-pound (45.4 kilograms) boiler to fire it." <edudilla.com>

### Technical Notation

"Dirigibles include rigid and semi-rigid air ships. The Hindenburg was a rigid air ship with metal framework. The Zeppelin NT was semi-rigid (partial framework). 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, such as the Goodyear blimp. However, "Zeppelins still fly today; in fact, the new Goodyear airship (2014) is not a blimp but a zeppelin, built by a descendant of the same company that built Graf Zeppelin and Hindenburg." The Goodyear Tire & Rubber Company 70 years ago was part of the Goodyear-Zeppelin Corporation. The partnership has been rekindled. <airships.net>

## U.S. Navy: Airships & Dirigibles

The U.S. Navy began using L.T.A.s in 1915. The DN-1 was built by the Connecticut Aircraft Company. The D stood for dirigible, the N for non-rigid and "1", the Navy's first airship. The Navy's first hangar was in Pensacola, Florida. The military used the early airships on the U.S. east coast. The early years of airships were froth with problems and even deaths of crewmen, but the airships that were used in Europe were given a thumbs up because they were able to deter German submarines during World War I.

"During World War II, there were five different airship classes/types in the Navy's inventory. Airship operations and expansion was unprecedented. The airship fleet conducted operations in the Pacific, Mediterranean, the north Atlantic, and south Atlantic. When the war was over and the military drew down, the Navy kept two squadrons that conducted mostly training, search and rescue, observation, and photography missions. On 21 June 1961, the Secretary of the Navy announced he was going to terminate the Navy's lighter-than-air program. The last flight of a naval airship occurred on 31 August 1962." <history.navy.mil>

The final class of "N" blimps produced a massive craft. It was able to carry a bank of radar equipment that could compete with aircraft and could stay on station for up to ten days, compared to aircraft which was limited to hours on station. The cost of keeping a blimp in service was also cheaper. "The demise of the blimp was probably because it was the 'Jet Age' and the real money and career advancement went with high speed, high-performance aircraft. Airships were an embarrassment, a slow-moving throwback to the age of biplanes." <defensemedianetwork.com>

## History of NAS Richmond

"In 1942, as World War II heated up and the U.S. became more involved, the U.S. government ordered a massive buildup in military facilities. One of these facilities was Naval Air Station, Richmond. Richmond is located on about 2,500 acres of land in the then near wilderness, 20 miles south of the city of Miami, FL and 19 miles southwest of Miami's central business district. The Navy started construction of a major airship or LTA (Lighter Than Air) Air Station to patrol Florida waters for German U-boats, which threatened Allied merchant marine shipping. To provide anti-submarine patrol, rescue, escort and utility services in this area, Blimp Patrol Squadron ZP-21 arrived in October 1942. Naval Air Station, Richmond, takes its name from the "Richmond Lumber Company" which had built a sawmill on the property around the turn of the century, to harvest and process the large stands of 'Dade County pine'." <stationhypo.com>

The facility was massive. The hangers were 16.5 stories tall and over 1,000 feet in length. Each hanger covered nearly 7 acres. The doors had six panels, on railroad tracks imbedded in concrete and stood 120 feet tall and 3.5 feet thick. The design of the door panels was considered the largest ever built. The cost of hanger was 2.5 million dollars each in 1942 dollars (\$42,421,625 in 2021). <stationhypo.com> <in2013dollars.com>

"NAS Richmond was the home of the 25 airships (blimps) of Patrol Airship Squadron 21 (ZP-21) and Airship Wing 2. As Fleet Airship Wing Two, NAS Richmond-based ZP-21 combined with ZP-22 patrolling Texas and Louisiana, and ZP-23 covering Jamaica and Panama. ZP-21 Detachments flew from Key West and Banana River (Daytona Beach) on the Florida coast, San Juan, Puerto Rico, and four NAFs in Cuba. ZP-51, ZP-41, and ZP-42, stationed from Trinidad to Rio all looked to NAS Richmond for support. Its 16 story-high hangers looked down on acres of tarmac launch pads. Nestled in the pine forest left standing for camouflage were barracks, warehouses, BOQ, fire station, hospital, and even a bowling alley for the thousands of airdales assigned to NAS or passing through. PBV's, fighters, and other fixed wing aircraft routinely landed at NAS Richmond's airstrip. During WWII, Airship Wing Two alone logged 114,649 hours flying in 7750 missions, suffering six blimps lost during operations and one blimp lost in combat." <stationhypo.com>

A 1945 hurricane devastated the area. Twenty-five blimps, 365 fixed wing aircraft and 150 cars were destroyed in three 'hurricane-proof' hangers. The damage was assessed at 30 million dollars in 1945 (\$460,981,666 in 2021). It was the largest peacetime loss of federal property. NAS Richmond ceased operations in November 1945 and the land was leased to the University of Miami for non-profit educational and research purposes. <stationhypo.com>

In 1966, during the Cuban missile crisis, the CIA determined the land the GSA (Government Services Administration) turned over to UMiami would be needed as a listening post. The Gold Coast Railroad was removed from its location and relocated in Fort Lauderdale, Broward County. <stationhypo.com>

"During the period 1962-1968, the CIA leased a few buildings from the University of Miami under the "front" name of Zenith Technological Services. This "front" company was in fact the intelligence gathering headquarters for the war on Cuba, known as JM/WAVE, aka JM WAVE aka WAVE Station. Over 400 CIA operatives operated out of this facility. The CIA facility later moved from its Richmond site to North Dade County." <stationhypo.com>

The Gold Coast Railroad Museum returned to the Richmond site in 1982. The Fort Lauderdale site was closed due to construction of an interstate highway.



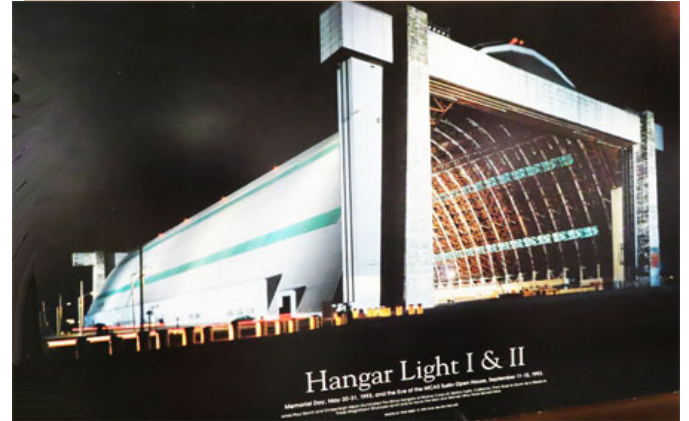
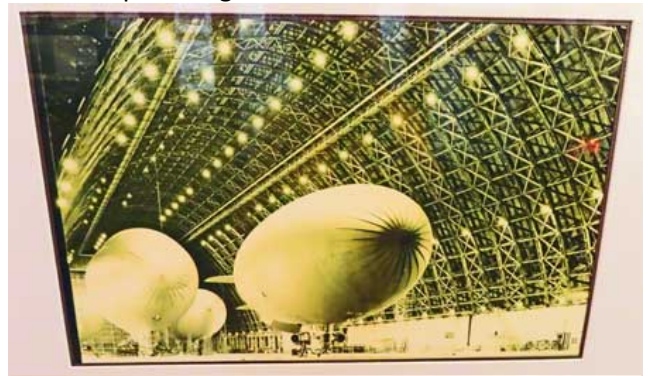


Below is a map of the Richmond area as of 2000 and the various uses of that 2,000-acre parcel of land. **The NSA Richmond L.T.A facility was located where the Gold Coast Railroad Museum appears on the map.**





Photos from GCRM section on L.T.A. – Blimps – Dirigibles





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7-part series on the [Gold Coast Railroad is at acuri.net-florida](http://acuri.net-florida)

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