

History in Frame

A Century Ago, New Orleans Got Its First Aerial Portrait

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Published in the *New Orleans Times-Picayune*, December 4, 2022, page 1 of the Living section.



New Orleans in 1922; see text for details.

This year marks one hundred years since New Orleans got its first aerial portrait.

Artists had sketched “bird’s eye” impressions of the city since the late 1800s, and in the 1910s, photographers took cameras up in low-flying biplanes to shoot never-before-seen oblique perspectives of certain neighborhoods. But to create a map-like photographic compilation of the city—think Google Satellite images—special cameras had to be designed, and a new field of engineering had to be invented.

Those breakthroughs came during World War I, when military commanders desperately needed maps of dynamic battlefield conditions.

Engineers developed large-format cameras, film with fiducial marks to enable exact measurements, special mounts allowing for nadir-view (straight down) shots, and rapid-fire shutters and winding mechanisms to take overlapping frames along extended flight paths. Once the film was developed, the overlapping sections could be analyzed stereographically, enabling precise measurements of features, distances and topographic elevations. The prints could then be “mosaicked” into a seamless portrait to make accurate maps—all without dispatching a surveying crew.

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A new engineering field called photogrammetry soon replaced traditional cartographic methods, and after the war ended, civilian applications beckoned in areas such as real estate and urban planning.

One of the biggest, boldest aerial mapping projects happened right here in New Orleans.

The man behind it was architect Charles Allen Favrot, who chaired the City Planning Committee of the Association of Commerce. Favrot understood that a photo map of the expanding city would aid professional planning efforts and inform countless economic development projects. Reaching into his own pocket, Favrot paid for a team of fliers from the Naval Air Station in Pensacola to carry out what the *Times-Picayune* described as “one of the greatest...photographic projects...ever attempted outside the battlefields of France.”

The plan was for Lieutenant A. Morley Darby to pilot a Navy R-6-L twin-pontoon biplane along a series of flight paths 8000 feet above the city, while photographer Daniel Culp operated “a specially built camera of huge size and intricate construction” capable of capturing photos of “remarkable detail” at a pace of one frame every 35 seconds.

Scores of the seven-inch-by-nine-inch photographs would then be mosaicked together, creating a unique photo map that Ann Robertson, who served on the City Planning Committee, said would help create land-use zones, regulate traffic, route garbage pickup, and plan parks and other amenities. “No city in the United States,” reported the *Times-Picayune*, “has yet attempted the photographic map work on so large a scale.”

The project got off to a rough start. The first two flights, in 1920 and 1921, were thwarted by persistent cloud cover. The next attempt began with a preliminary flight to photograph the jetties at the mouth of Mississippi—whereupon the plane ran out of gas, forcing Darby and Culp to land in the Gulf of Mexico and suffer two days of exposure before being rescued. The fourth attempt never got off the ground because a Lake Pontchartrain storm wrenched the seaplane “from its moorings off the Southern Yacht Club,” reported the *Times-Picayune*, and “ground [it] to bits against the sea wall.”

Finally, in June 1922, with a new plane and perfect weather conditions, Ensign Campbell Keene and photographer Culp took to the skies over New Orleans and snapped their overlapping photographs along carefully planned flight paths. The film was spirited back to Pensacola, developed, printed on paper and mosaicked into a photo map. According to one source, the final compilation covered forty square feet on a wall, and that may have just been for coverage of the urban core, lakeside areas having been photographed separately.

“Members of the city planning committee consider the map indispensable in their work,” wrote the *Times-Picayune*, “showing as it does the beauty spots of the city which need no improvements, in direct contrast with those eyesores which cry out for attention. It also is suggested that the map will be of material assistance to the Sewerage and Water Board and the Dock Board in projecting and carrying out their work.”

In the years ahead, aerial cameras improved; photogrammetry became more sophisticated; aerial photography missions became routine; and starting in the 1970s, the “remote sensing” of the earth moved to spaceborne platforms, leading to the high-resolution satellite images now viewable online.

The Association for Commerce, meanwhile, morphed into other business-promotion organizations, namely the New Orleans Chamber of Commerce and today’s Greater New Orleans, Inc.

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Amid all the changes, the original negatives from that historic flight a century ago seem to have gotten lost, though the information they captured endures in at least one derivative product.

In the late 1990s, while perusing some discarded documents from the Port of New Orleans, I came across a secondary photograph of what is almost certainly that original forty-square-foot mosaic from 1922. While it lacks the rich detail of the originals, it is nonetheless a valuable historical record, being the only comprehensive nadir view of long-gone urban features. Among them are the last expansive open lands in Fontainebleau, Broadmoor and Gerttown; the sugar cane experiment station near present-day Audubon Zoo; segments of the Old and New Basin Canals, dug in the 1790s and 1830s and now filled in; historic neighborhoods such as former Storyville and St. Thomas (the original Irish Channel) before their demolition for federal housing projects; and the West Bank when it still largely rural.

I have since used this photomosaic byproduct in countless analyses of our historical geography, much as Charles Allen Favrot and Ann Robertson had hoped for a hundred years ago. Finding those original photos has become my Holy Grail; perhaps they are somewhere in town, or in naval archives.

To get an idea of their level of detail, we have one nadir-view frame of Gentilly that was taken probably for real estate purposes later in the 1920s. Stored in Tulane's Southeastern Architecture Archive and provided to me by Keli Rylance, the photograph shows the Fairgrounds, Gentilly Boulevard and DeSaix Circle at a time when the dominant surrounding land use was truck farms—intensive gardens supplying regional markets with fresh vegetables.

Compare that to the same area today on Google Satellite Image, and you'll see wholesale urban transformation affecting thousands of lives over three generations, all recorded in two synoptical scenes. That's the historic value those aviators and planners created a century ago, when New Orleans got its first aerial portrait.



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