U.S. NAVAL AIR STATION, LAUNDRY (Building No. 636)
110 Center Avenue
Pensacola
Escambia County
Florida

HABS No. FL-495

HABS
FL-495

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Southeast Region
Department of the Interior
Atlanta, Georgia 30303

HISTORIC AMERICAN BUILDINGS SURVEY

U.S. NAVAL AIR STATION, LAUNDRY (Building No. 636) HABS No. FL-495

Location: 110 Center Avenue
Pensacola
Escambia County
Florida

USGS Fort Barrancas Quadrant, Universal Transverse Mercator Coordinates: Zone 16, 474209E, 3357316N

Present Owner: United States of America
Department of the Navy
Commander, Naval Installations (CNI)
2713 Mitsler Rd. SW
Suite 300 Ancostia Annex
Washington, D.C. 20373-5802

Present Occupant: Vacant

Present Use: Vacant; however, the building is currently slated for demolition.

Significance: Constructed in 1940 as the laundry, Building No. 636 served in a supportive role to Naval Air Station (NAS) Pensacola's mission to train large numbers of Navy pilots during World War II. One of few installation buildings not constructed with Works Progress Administration (WPA) and Public Works Administration (PWA) funding and labor between 1936 and 1940, Building No. 636 was designed by W. F. Jackson Company, Inc. of Atlanta, Georgia, and built by the Hardaway Contracting Company of Columbus, Georgia. The construction of Building No. 636 was part of an ambitious building program that took place at NAS Pensacola during the late 1930s and early 1940s. The building's red brick exterior, cast stone trim, and corner quoins complement contemporaneous Georgian Revival training and dormitory facilities, constructed just west of the old navy yard.

The most notable modification, a small addition, was constructed in 1942. Building No. 636 continued as a laundry facility through World War II and much of the Cold War. The laundry building was eventually converted for use as a warehouse and storage building in the 1980s and now sits unoccupied. The building retains its original windows and many of its original doors. With only minor alterations to its exterior, Building No. 636 remains compatible in form, scale, and materials to its original design.

Building No. 636 is located in the southeastern portion of NAS Pensacola, within the boundaries of the Pensacola Naval Air Station Historic District. The historic district was listed in the National Register of Historic Places (NRHP) and designated as a National Historic Landmark (NHL) in 1976. The historic district's period of significance is not clearly defined, but the nomination text

only discusses buildings constructed prior to 1919; therefore, Building No. 636 was not mentioned in the nomination, due to its 1940 construction date.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date(s) of erection: 1940
2. Architect(s): W. F. Jackson Company, Inc., Engineers, Atlanta, Georgia
3. Original and subsequent owners, occupants, uses: United States of America, Department of the Navy; originally designed and used as a laundry and dry cleaning plant; the facility changed from a laundry to a retail warehouse and storage building at the end of the Cold War.
4. Builder, contractor, suppliers: The Florida Master Site Files, maintained by the Florida State Historic Preservation Office, indicate the contractor for Building No. 636 is Hardaway Contracting Company of Columbus, Georgia.
5. Original plans and construction: The original architectural drawings by the W. F. Jackson Company are dated March 23, 1940, and are included in this report. Hardaway Contracting Company of Columbus, Georgia, was awarded the contract to construct the building for $73,086.00. Except for a west facade addition in 1942, the building retains its original irregular plan. Original plans for the building are on file with contractors, Hill-Griffin, at NAS Pensacola (Building No. 458), Pensacola, Florida.
6. Alterations and additions: A major 2,100 square foot extension to the west side of Building No. 636 was constructed in 1942. The addition, designed by noted Fort Worth architect Wyatt C. Hedrick and built by the Hardaway Contracting Company of Columbus, Georgia, measured approximately 35' x 60', and cost $13,095.00, according to the Bureau of Yards and Docks (BuDocks) Contract NOy-4130. The same year, minor interior alterations were carried out, including the installation of partitions, laundry bins, tables, and clothing racks. After the 1940s, the building received only minor improvements. In 1975, the building was re-roofed, and several of the smaller roof vents removed. In 1981 a fire alarm system was installed; the following year the entire building received new electrical wiring. Around the same time, improvements were made to the receiving dock on the south side of Building No. 636, possibly in conjunction with its conversion to a storage facility.

B. Historical Context:

INTRODUCTION

The U.S. Navy established NAS Pensacola (then called Naval Aeronautic Station Pensacola) in 1914, choosing as its site the old Pensacola Navy Yard, already steeped in its own long military history dating back to early Spanish occupation in 1698. Although European nations fought for control of the region because of the strategic value of the Pensacola Bay, and the U.S. Naval Yard stood on the site for eighty-six years, the naval station's most profound legacy is associated not with maritime traditions, but with

aviation. The naval aeronautic station that eventually became NAS Pensacola was tasked with creating the Navy's first aviation program at a time when manned flight was scarcely a decade old. At first, the fledgling program vied with the Army's early aviators in logging spectacular (and sometimes fatal) flight records, training a select handful of military pilots, and improving on the simple mechanisms of the earliest airplanes. When, during the first months of the new station's existence, pilots demonstrated that they could take off and land from the deck of a ship, a unit was dispatched to the United States' intervention in Mexican Revolutionary activities at Veracruz. After successfully operating reconnaissance missions from the USS *Mississippi* and sustaining the first mark of rifle fire from combat experienced by military aviators, the future of naval aviation was assured. The flight school at Pensacola became the premier training ground for naval pilots in the United States. Additional training courses at NAS Pensacola multiplied rapidly, and the program provided hundreds of pilots and thousands of trained technicians for World War I. The arrival of the first aircraft carriers in the 1920s further enhanced the possibilities for aviation at sea, and training programs at NAS Pensacola evolved rapidly to keep pace with new developments. The station, improved and augmented through increased defense spending and New Deal public works programs in the late 1930s, was able to provide the Navy with a steady stream of pilots and other trained personnel to meet the demands of World War II. Today, NAS Pensacola continues to lead the Navy's flight training program, and it anchors the Pensacola community.

NAS Pensacola's physical plant has changed constantly to reflect its evolving mission. The current station incorporates remnants of the early Spanish forts, as well as the core of the old Pensacola Navy Yard complex, now listed as an NHL. In addition, the station retains structures from every major building period, all reflecting NAS Pensacola's important role in military history. One factor governing development at the station has always been the damaging hurricanes and windstorms that rise from the Gulf of Mexico and periodically strike the base, damaging buildings and infrastructure, and necessitating extensive repairs or rebuilding. The phases of construction related to storm damage are also evident in the structures present at the station today. This historic overview provides the background for placing Building No. 636 within a national, regional, and local context.

Building No. 636 was erected in 1940 to serve as the base's primary laundry facility. Its construction is associated with the mobilization for World War II occurring at NAS Pensacola between 1936 and 1940. Although workers employed by federal work-relief programs including the WPA and the PWA built many of the new structures at NAS Pensacola during this period, Building No. 636 was designed by the W. F. Jackson Company, Inc. of Atlanta, Georgia, and built by the Hardaway Contracting Company of Columbus, Georgia. The building, staffed entirely by women, was probably needed to process laundry for the thousands of new recruits arriving at the station and for the air station's new, expanded Navy hospital.

European Settlement and Fortification in the Pensacola Bay Area

NAS Pensacola occupies a peninsular spit of land projecting eastward into the broad Pensacola Bay in Escambia County, Florida. Entry to the bay from the Gulf of Mexico is protected by Santa Rosa Island and Perdido Key, forming an ideal defensive arrangement exploited as early as the seventeenth century by the Spanish, followed by French, British, and American forces. The first permanent settlement and military fortification in the immediate area was Fort San Carlos de Austria, built in 1698 by Spanish troops under the direction of Andrés de Arriola. Arriola maintained that the Gulf of Mexico—a vital link in the trade routes between Europe and Spanish colonies in Peru and Mexico—would be controlled by the nation that held the Bay of Pensacola.[1] The simple, wood-and-earth fort stood until 1719, when it fell to invading French forces.

Domination of the Pensacola Bay alternated between Spanish and French forces during the following decades, during which the Spanish also built a small fort on Santa Rosa Island. After winning control of Florida following the French and Indian War, the British arrived at Pensacola Bay in 1763 and completed a new palisade fortification in 1771 to protect the growing town of Pensacola, just north of the military site, then called the Royal Navy Redoubt. A decade later, in 1781, the Spanish again regained control of the site, renaming the British palisade Fort San Carlos de Barrancas. This time, they fortified the entrance to the bay more securely, constructing Batería San Antonio (San Antonio Battery) in 1797—a solid brick water battery of semicircular shape designed as a gun emplacement facing the bay.[2] The Spanish remained in control of the Pensacola Bay area, despite skirmishes with the British and with American forces led by Andrew Jackson in 1814, until 1821, when Spain finally ceded Florida to the United States via the Adams-Onis Treaty (*Figure 1*). Andrew Jackson presided over ceremonies in the Plaza of Pensacola on July 17, 1821, celebrating the surrender of the territory by the Spaniards. Jackson then dispatched four army infantry companies to Fort San Carlos and the San Antonio Battery, marking the first occupation of the site by U.S. military forces.[3]

THE U.S. NAVY YARD AT PENSACOLA

The creation of the Territory of Florida by act of Congress on March 30, 1822, with Pensacola as the seat of government, replaced the interim government created by Jackson.[4] A Florida Legislative Council, formed to promote the interests of the new territory, quickly moved to petition the U.S. Senate and President James Monroe for new fortifications on the Pensacola Bay, to include a naval station at Pensacola. Both the president and Secretary of the Navy Samuel Southard approved the plan, agreeing with the recommendation of the Senate Committee on Naval Affairs that the coast of Florida was the ideal site for a new naval depot. Southard commented that such an installation was "indispensable for the economical and efficient management of that portion of our navy which is employed in the West Indies and Gulf of Mexico."[5] Despite recommendations by the Board of Naval Commissioners to await the results of engineering studies on potential Gulf Coast sites, by March 3, 1825, both the House and Senate approved a bill authorizing construction of a navy yard at Pensacola. Objections to the Pensacola Bay site voiced by some military authorities included the shallowness of its channel, which precluded passage by some larger vessels, and its vulnerability to attack from the mainland. Notwithstanding these arguments, a party of three officers, including Commodore Lewis Warrington, Captain James Biddle, and Captain William Bainbridge, embarked for Pensacola in autumn 1825 to select the best location for the new navy yard. After surveying the bay and surrounding area, the three officers confirmed the depth of the channel at a consistent 21'-0", and identified a point near Fort Barrancas, already owned by the U.S. government, as the ideal location.[6]

President John Quincy Adams approved the site selected a day after the report was delivered to him on December 2, 1825, and assigned Commodore Warrington as the first commandant of the Pensacola Navy Yard. Warrington arrived back at Pensacola in April 1826, and construction was soon underway. Construction materials, however, were difficult and expensive to acquire, as was skilled labor. Both had to be brought from the east at inflated prices, although southern slaves apparently provided menial labor at a lesser charge. Due to the high cost and delay in acquiring men and materials, as well as the onset of yellow fever epidemics in summer 1826 and 1827, construction proceeded slowly, and most facilities were left in a primitive state for some time.[7]

The most urgent need was for a fully equipped hospital. A contractor from Boston charged with building the new wharf, Samuel Keep, complained that yellow fever patients were being cared for in "...a little house called by that inappropriate name, hospital...If the yellow fever comes to the Yard I shall not

remain here unless I am absolutely obliged to do so." Although the old Fort Barrancas hospital had been pressed into service, it was rapidly disintegrating, and the new commandant arriving in September 1826, Melancthon T. Woolsey, was forced to rent a two-story wood house near Fort Barrancas to serve the sick of the depot and of the West India Squadron.[8] The yard's surgeon, Dr. Isaac Hulse, also worked to pressure lawmakers to provide a better facility for the squadron's increasing number of sick seamen. Although a hospital was under construction by November 1828, lack of funding kept the work from proceeding. In a letter to Florida Congressman Joseph White, Hulse admonished that "...it is impolitic, as well as inhuman in a government to neglect [the needs] of its servants."[9] By summer 1828, construction had almost ceased at the yard, due primarily to a halt in funding engendered by new hopes of peace with the European forces that had so long beleaguered the Gulf.

Lacking even the most basic facilities needed for the comfort and health of the squadron, the navy yard was even less equipped to address its shipbuilding and repair needs. By the 1840s, the yard still had no permanent wharf, no dry dock, few workshops and even fewer skilled workers. Construction of the yard's infrastructure continued on a piecemeal basis, without any general plan of development, halting every summer when workmen returned to the east to avoid yellow fever, and whenever the scarce funds allocated by Congress were used up. "The decline in piracy and slave running had largely removed the need for a fleet to suppress such operations and had undoubtedly influenced congressional decisions on appropriations for Pensacola. Moreover, the West India Squadron was renamed the Home Squadron in 1841, and its cruising ground was extended farther into the Caribbean Sea and Atlantic Ocean. Consequently, ships of the Home Squadron could make the larger and more adequate navy yards on the East Coast as easily as Pensacola."[10]

While the Pensacola Navy Yard stagnated, it was at least well defended. Between 1829 and 1859, the Army completed four defensive forts to protect Pensacola Bay. Fort Pickens stood on the extreme western tip of Santa Rosa Island, with Fort McRae on the western shore directly opposite. Fort Barrancas was built to the north, on the site of the old Fort San Carlos de Barrancas and next to the San Antonio Battery. The Advanced Redoubt to the north occupied the highland site that dominated Fort Barrancas. Most of the construction was supervised by Major William Chase, a U.S. Army engineer, who persevered in his task despite suffering the same scarcity of materials, manpower, and funding experienced at the navy yard. It would appear that the defensive forts benefited from a comprehensive design by the U.S. Corps of Engineers.[11]

Annual Reports from BuDocks to the secretary of the Navy reveal the slow struggle waged by the station's commandants against weather, yellow fever, contractors, and financial deficits. On November 19, 1844, the BuDocks Report took an optimistic tone on the progress of the navy yard:

> At Pensacola, the sum of $166,708 was granted at the last session of Congress for the commencement of works of importance, and for the purpose of gradually enabling that establishment to afford repairs and supplies to the vessels standing in need of them and to place it, as rapidly as circumstances permit, in a situation to become the secure resource of the navy in that quarter....A plan of the yard has been prepared and approved; and, as soon as materials can be procured in a sufficient quantity, the works will be commenced, and the yard have an organization corresponding with that of the others, by the employment of additional master mechanics, with the necessary workmen and laborers.[12]

An act of Congress dated July 1, 1844, authorized construction of the permanent wharf, although little action seems to have been taken afterward.[13] Additional requests between 1842 and 1845 included such

basic conveniences as officers' quarters, a permanent wharf, and a system of supplying fresh drinking water.

When the Mexican-American War broke out on May 11, 1846, Pensacola was the closest naval establishment to the blockading Home Squadron at Veracruz, 900 miles away. Without a dry dock, the yard was unable to provide more than minor repairs to vessels, and had little food, water, or other goods on hand to supply the ships. A yellow fever epidemic in the squadron sent hundreds of diseased sailors to the Pensacola Naval Hospital, which struggled to support such a burden.[14] The deplorable condition of the only Gulf Coast naval station finally caught the attention of the public and, more importantly, the legislators who could act to fund its improvement.

Construction and Destruction in the Late Nineteenth Century at the Pensacola Navy Yard

From 1847 through the 1850s, the Pensacola Navy Yard was abuzz with new activity. BuDocks requested funds for vital infrastructure, such as paving of roads, grading and leveling the yard, adding rail tracks to ease the movement of machinery, and finishing the permanent wharf. The station's commandant was also forced to ask for funds to repair the buildings that were already disintegrating because of the humid climate or poor maintenance.[15] By 1853, a dry dock, a basin for loading and unloading ships, and a railway were in place; in 1856, dredging and the construction of a deep basin for larger ships was accomplished, although the permanent granite wharf was still unfinished. In 1858, shipbuilding finally began at the Pensacola Navy Yard, despite the lack of some important resources, such as a wet basin and fully functional foundry. Two sloops of war, the *Pensacola* and *Seminole*, were launched from the yard in 1859, marking the depot's coming of age after twenty-five years of struggle.[16]

Just as the Pensacola yard was attaining the status of a truly functioning maritime facility, the Civil War put an end to its progress. When Florida seceded from the Union in January 1861, the seventy-man federal garrison at the naval installation was faced with defending itself using only a few operable guns. Therefore, when more than 600 Alabama and Florida troops arrived at the Pensacola Navy Yard on January 12, 1861, Commandant James Armstrong surrendered the yard to the Confederates. The company garrisoned at Fort Barrancas was able to quickly move all men and supplies across the bay to Fort Pickens, which they defended throughout the war, even bombarding the Confederate forces at the navy yard and causing considerable damage in winter 1862. When the Confederates evacuated the area on May 9, 1862, they burned the navy yard to the ground.[17] The BuDocks report to the secretary of the Navy on November 4, 1862, states:

> The yard at this place has also been repossessed by the government, but, like that of Norfolk, was found a mass of ruins, the buildings having been burnt and every effort made to destroy all the government property....A statement of the bids received and contracts entered into by this bureau, for the fiscal year ending June 30, 1863, will be presented at as early a day as practicable.[18]

In fact, little progress was made in rebuilding the navy yard in the following years. The BuDocks Report to the secretary of the Navy for 1864 reads in part:

> This yard was also almost entirely destroyed by the rebels, and thus far but little has been done to restore it to its former condition. Some small amount of machinery has been erected to meet the most pressing want of the Gulf Squadron, and it is now proposed to repair a few of the buildings for the accommodation of the officers, stores, &c. . . ."[19]

After the termination of the conflict, BuDocks encouraged the secretary of the Navy to fully repair the station, which was needed by the Gulf Squadron. However, by 1869, the chief of BuDocks advised the secretary of the Navy that he found the location of the Pensacola Navy Yard "objectionable" due to its exposure to long-range guns from outside the harbor. "The great importance of having a well-equipped yard on the Gulf of Mexico suggests that, before heavy expenditures are made toward reconstructing the yard, it is worth while to institute an examination to ascertain if some more favorable location cannot be found."[20]

Although the Pensacola installation was not abandoned, work to repair the damage of the Civil War was again slowed by poor funding and an ambiguous status within the Navy. Appropriations were too small to permit large-scale building, although work on the commandant's quarters did continue. Commandant Woolsey was even permitted a trip to New York accompanied by the architect of BuDocks to choose prefabricated windows, doors, and other accessories for his new home. The other officers' quarters, however, consisted of the brick kitchens of the old quarters destroyed during the war, with makeshift second-story additions and galleries added. One visitor to the yard in 1881 called the lower floors of those quarters "uninhabitable."[21] Although deemed important as the only Gulf Coast naval base, its poor equipment and isolation from East Coast materials and workers, added to its various faults of location, endangered the very existence of the yard. An act of Congress closed it on March 3, 1883, pending further investigation by the Navy. Basic maintenance on the public property was performed during its 17-year hiatus from active service.[22] Although no new work was performed at the yard in 1898, the Spanish-American War of that year once again focused attention on Pensacola, and by 1900 the navy yard re-opened with new energy.

The BuDocks Report of October 1, 1901, provides a summary of the Pensacola Navy Yard's status at the time:

> Very few works of improvement have been made at this navy-yard since the civil war. At the time of the Spanish war, when it seemed probable that considerable service might be required of this yard, several appropriations by way of repairing and improving the buildings, wharves, dredging, and construction of better coaling facilities were made. The improvement of navigation from the Gulf to the yard has bettered the situation at this yard considerably, and the meager accommodations upon the Gulf coast have appeared to require better facilities for work at this station in case of emergency. Also, the board upon storing torpedo vessels has recommended that the yard be availed of as a site for one of the plants for housing such vessels....This is the only station of this kind recommended by the Board for the Gulf coast, and it is believed that provision should be made for storing a portion of those vessels in these waters.[23]

In 1902 a new floating dry dock was purchased from Spain and hauled to the navy yard, and in 1905 the base served as a rendezvous point for all U.S. squadrons participating in training in the Gulf of Mexico.[24] Despite the positive outlook, unforeseen circumstances once again took their toll on the Pensacola Navy Yard. A massive hurricane struck the Florida Panhandle on September 26, 1906, severely damaging the yard's infrastructure and most buildings. The new dry dock was damaged, and the older, smaller dry dock was completely destroyed, incapacitating the yard's repair functions. Worse still, very limited funds were made available for the rebuilding of the yard due to the financial obligations associated with the brand new Navy base at Guantanamo Bay, Cuba. Although some new structures were built in the years following the hurricane, the Pensacola Navy Yard was officially closed on October 20, 1911 (*Figures 2* and *3*).[25]

THE CRADLE OF NAVAL AVIATION: NAVAL AERONAUTIC STATION PENSACOLA, 1914-18

The closure of the Pensacola Navy Yard provoked consternation in the town of Pensacola, whose residents still valued the yard for the jobs it provided and the income gathered from its activities, as well as for the sense of pride they felt at hosting a U.S. naval installation. Furthermore, the impending completion of the new Panama Canal held the promise of increased military and commercial activity in the Gulf of Mexico. In fact, while it was officially closed, the yard continued to host U.S. Marines performing experimental testing with torpedoes in the Pensacola Bay in 1913.[26]

But while Pensacola's citizens fretted over the fate of the old navy yard, Navy officials looked toward a growing field of expertise that would soon revitalize the old base—naval aviation. Although wary of the experimental new technology, the Navy made tentative steps toward investigating the military applications of aviation by sending Annapolis graduate Lieutenant T. G. Ellyson to learn to fly with airplane manufacturer Glenn Curtiss at his Aviation Camp in San Diego, California, in December 1910. While at the camp, Ellyson assisted Curtiss in outfitting the first "hydroaeroplane," designed to take off and land from the water's surface. The Navy participated in these tests by providing the armored cruiser *Pennsylvania* to hoist the plane aboard after landing. The same month, civilian Eugene Ely was able to successfully take off from the deck of the *Pennsylvania*, proving that airplanes could easily be adapted to serve the Navy in conjunction with maritime vessels. In March 1911, a preliminary appropriation of $25,000.00 was made for the establishment of the Navy's first aviation installation at Annapolis, Maryland.[27]

With just a handful of planes and trained pilots in 1912 and 1913, plus a few enlisted mechanics, the aviation camp bounced between Annapolis and training locations including San Diego, California, and Guantanamo Bay, Cuba. Aviators took advantage of Curtiss' offer to train one pilot for each airplane sold to the Navy, thus increasing the ranks of aviators until an official training program could be started. The experimental and record-breaking flights accomplished by the Annapolis pilots impressed Secretary of the Navy Josephus Daniels enough to appoint a board to create plans for the first Naval Aeronautic Service in 1913. Within weeks the board of officers responded with a recommendation of the old Pensacola Navy Yard as the site for a new naval aeronautic station, and suggested an appropriation of $1,297,700.00 to implement the program. Once approved by Secretary Daniels, the Annapolis aviation group once more packed up their camp to move to Pensacola, arriving on January 20, 1914. The unit, consisting of "nine officers, twenty-three enlisted men, seven aircraft, and portable hangars and other gear...arrived at Pensacola on board the battleship *Mississippi* and the collier *Orion* to establish a flying school. Lieutenant John Towers was in charge of the unit, and Lieutenant Commander Henry C. Mustin commanded both the *Mississippi* and the aeronautic station."[28]

Although the Pensacola Navy Yard had officially been closed since 1911, it had not been totally abandoned as previously mentioned. Less than two months before the arrival of the *Mississippi* with her cargo of aviators, 856 Marines had temporarily occupied the yard while performing torpedo exercises in the Pensacola Bay, and "...a considerable amount of work was done adapting buildings and quarters for their use." Several hundred Marines stayed on at the new aviation camp for training until at least 1915.[29] Nonetheless, upon his arrival, Lieutenant Commander Mustin reported that the beach was littered with stones, driftwood, and piling, and needed extensive work to clear it for the use of flying boats. In addition, he reported that, "the buildings in general are dilapidated and disreputable in appearance inside and outside."[30] Lacking adequate housing on base, the aviation unit made their home aboard the *Mississippi* and turned their attention to the work at hand. After clearing the beach, the men erected ten temporary canvas hangars along the beach, each with an individual wood runway extending down to the water to

ease the planes over the thick sand. In less than two weeks, aviators made the first flight at the new aeronautic station.[31]

The first months at the station were fraught with excitement and novelty, especially for Pensacolians who witnessed the first flights over the Pensacola Bay. Within weeks, they also witnessed the base's first aviation fatality when Lieutenant J. M. Murray crashed into the bay in a Burgess D-1 flying boat on February 15, 1914. The following month, five submarines and two transport ships from the Atlantic Fleet arrived in the bay for extended operations with the aviation unit to determine visibility of the submarines from the air. Later in the spring, nineteen destroyers converged on the former navy yard in response to rising tension with Mexico, which was suffering revolutionary upheaval. On April 21, 1914, a detachment from the Pensacola station, commanded by Lieutenant P. N. L. Bellinger, was sent aboard the *Mississippi* to assist American forces in seizing the Customs House at Veracruz, Mexico. Another detachment was dispatched to Tampico. At Veracruz, Pilot Bellinger, with three students and two airplanes, formed a unit that proved useful, flying observation missions daily over the city and attempting to locate the camps of enemy attackers. Bellinger even came under fire while flying low, and his plane bore the first marks of naval aviation combat.[32] Soon after the detachment's return to Pensacola, the handful of officers and students settled into their new home, and the base was officially designated as the Pensacola Naval Aeronautic Station (NAS) on July 1, 1914.[33]

As Pensacola NAS's officers worked to develop a more extensive pilot training program, they also labored to improve the base and its equipment, constructing permanent facilities to replace early temporary ones. With a complement of nine officer-pilots and almost fifty enlisted men, the aviation school had a limited number of aircraft for use in training pilots and mechanics. According to a Navy historian in 1930, "The equipment of the Aviation School, at this time, consisted of 3 old Curtiss flying boats, 3 new Curtiss flying boats, 2 Curtiss pontoon-type planes, and 1 Burgess flying boat."[34] In the Annual Report to BuDocks for 1915, Commandant Mustin reported:

> During the year, the establishment and operation of the Station as an Aeronautic School were carried forward. The quarters were occupied by Naval Officers and a start was made at placing the shops in operation....There is no space on the reservation suitable for operation or practice with land aircraft. It is proposed to clear, grade, and surface the area North of the Navy Yard wall, and East of the electric railway; clearing out such residences and buildings [in the nearby town of Woolsey] as may be necessary, and extending on the water front so far as is practicable.[35]

Major hurricanes were reported on July 5, 1916, and October 18, 1916, both reaching wind speeds of over 100 miles per hour and causing extensive damage totaling $420,000.00 for repair or replacement of government property.[36] America's declaration of war on Germany on April 6, 1917, however, ensured that the station received full funding for damage repair, new construction, and the enhancement of its training programs. At the advent of direct U.S. participation in World War I, the Pensacola station was the only naval aviation facility in the country. In 1921 Navy historian Earle Corliss wrote a detailed inventory of the early station: "Its facilities, though efficient, were limited, consisting of three seaplane hangars of steel construction, a brick structure used as a hangar, an airship shed mounted on a barge (capable of accommodating a small type of nonrigid craft), and a few service buildings."[37] In addition to the hangars and shops needed for aviation training, new structures were built for the new "lighter-than-air" dirigible program, and to accommodate maritime supply vessels and other ships visiting the port.[38] By the end of the war in November 1918, over 100 new buildings had been erected and four temporary camps established outside the bounds of the station to serve the needs of the growing training programs. A major

extension to the original navy yard was made to the north, in compliance with Commandant Mustin's recommendation. In addition, Camp Bennett to the west, Camp Mustin to the south, Camp Saufley on Santa Rosa Island, and Camp Bronson north of Pensacola, were all established either to house and process incoming recruits or to serve as training grounds.[39] A 200'-0" observation tower was erected, and most of the hangars on the beach were painted in camouflage patterns to avoid detection by the enemy. Including a completely new 300-bed hospital unit with independent water and sewerage system, expenditures for building and maintenance for Fiscal Year 1918 amounted to the staggering sum of $2.6 million.[40]

With the war effort came ever increasing demands for more naval pilots and mechanics, necessitating changes in the training programs offered at NAS Pensacola (the aeronautical station was officially designated as Naval Air Station Pensacola in December 1917). Both elementary and advanced flight training were provided to officers until May 1918, when NAS Pensacola switched to providing only advanced flight training. "The mission of the station had changed from teaching beginners how to fly to teaching flyers how to fight in the air."[41] In fact, most naval aviators serving in Europe spent their missions patrolling coastlines for mines and submarines, and bombing submarine bases.[42] Training had changed for enlisted men, too. A historian commented in 1930:

> In the early era of the Station each enlisted man was expected to be a jack-of-all-trades. He was expected to know something about such diversified things as motors, rigging, blacksmithing, balloons, and beach work. Naturally, with the widening of the scope of the Station's mission, schools were established to teach the men to be specialists in one given occupation.[43]

To meet the demands of war, NAS Pensacola established new schools for carpenter's mates, radio operators, instrument men, machinist's mates, and specialized mechanics. Between April 1917 and November 1918, the station churned out 5,382 air "mechanicians." During the same period, 921 naval aviators trained at the station, plus sixty-three dirigible pilots and fifteen free balloon pilots.[44] The pace of training accelerated even more rapidly in the final months of the war, when pilots were urgently needed in Europe. In the final frenzied nine months before peace was declared in Europe, NAS Pensacola witnessed eighteen student deaths from crashes and twenty-four serious injuries.[45] Despite the losses, naval aviation had made enormous strides in an incredibly short amount of time, proving itself effective in both combat and observation duties. The station itself reflected the new specialization taking place in naval aviation, with many new shops, hangars, and classrooms to meet the needs of the more varied training programs (*Figure 4*).

DEMOBILIZATION: 1919-35

The population at NAS Pensacola plummeted quickly after the end of World War I. Within months, approximately 5,000 Pensacola servicemen were discharged, leaving much of the station vacant. The Annual Report to BuDocks in June 1920 stated that Camp Bennett had been closed; buildings at Camp Mustin were being used for storage of equipment from other stations; and the buildings at Camp Saufley were deteriorating from disuse. Some structures built especially for the war effort were allowed to disintegrate, since reduced funding limited maintenance capabilities.[46] Many legislators were reluctant to fund naval activities in the post-war climate of disarmament and demilitarization. Furthermore, factions within the Navy, itself, argued over the role of aviation in naval warfare, which depended upon the success of aircraft carriers over traditional battleships. When the USS *Langley* was converted to an aircraft carrier and sent to Pensacola for testing in 1922, the station's future looked bright. Nonetheless, the 1920s were characterized by a lack of direction within the Navy, perhaps characteristic of the United

States' own confusion over its role in the world. Throughout the decade, the aviation school at NAS Pensacola dealt with low reenlistment and few new applicants, and even allowed enlisted men to train as pilots (the term Naval Aviator remained reserved for officers). The Navy tinkered constantly with the program to try to increase the number of aviators graduated annually, with disappointing results. Although 100 students completed the course each year by 1925, only half that number actually passed their flight qualification tests.[47] Officials were reluctant to simplify the tests, however, for fear that the already excessive accident rate would increase as a result.

In the 1920s, the concept of dedicated aircraft carriers began to revolutionize naval aviation. Instead of taking off and landing in water, aircraft could begin to rely on carriers as a home base, with more extensive runways than earlier battleships had provided for planes. Furthermore, new landplanes with increased flying range enabled pilots to make extended forays over land to carry out a variety of missions. Therefore, landplane training was added to NAS Pensacola's curriculum in 1922. With the landplanes came a new system of outlying fields radiating from the naval air station. These fields provided the extra space for take-off and landing required by conventional landplanes, and relieved congestion in the air caused by growing numbers of student pilots in training. Since the dirigible program had been cancelled, the former dirigible and balloon field, Station Field (later called Chevalier Field), was enlarged and re-sodded in 1923 to accommodate landplanes. It was enlarged again in 1926. [48] Another landing field was carved out of the town of Woolsey to the north of the station and named Corry Field. Problems with the lease on Corry Field, however, caused the Woolsey airfield to be abandoned, and a new 250-acre Corry Field, donated by the residents of Escambia County, was located approximately three and one-half miles northwest of NAS Pensacola.[49]

The geographical problems that had plagued the old navy yard for almost a century did not present a problem for the workings of the air station, but the base once again suffered from the effects of violent weather in the Gulf. The Annual Report for 1927 described the most recent devastation:

> On September 20, 1926 a tropical hurricane of great intensity struck this station. This storm involved wind velocities of 110 miles per hour from the northeast with gusts much higher than this and it was accompanied by a rise in tide of 8 feet 4 inches above mean high tide, resulting in complete inundation of practically the entire station, and great damage to Public Works and Public Utilities.[50]

Repair and rebuilding began once again, and in 1929 Assistant Secretary of the Navy for Aeronautics David Ingalls testified before the House Appropriations Committee, recommending a $5 million "re-organization and re-modernization" of NAS Pensacola.[51] Although the onset of the Depression prevented the immediate implementation of the planned project, steps were taken to prepare the base for expansion. In 1930, the town of Warrington, established just west of the old navy yard in the nineteenth century, was razed to make room for a planned airfield, and to allow the station to continue growing to meet its training goal.[52]

MOBILIZATION AND WORLD WAR II

After suffering budget cuts that effectively crippled the aviation training program from 1932 to 1933, NAS Pensacola effectively sprang back to life in mid-decade. Legislators passed the Vinson-Trammell Act in 1934, authorizing the maximum buildup of naval forces allowed under the Washington and London treaties made following World War I. Although the government still had little funding for military projects, the act help set the stage for future growth at U.S. naval stations. Then, in 1935, the

Aviation Cadet Act of April 15 created the grade of Aviation Cadet in the Navy, opening up recruitment to a wider range of applicants. The Annual Report of 1936 stated,

> The cadets are selected from graduates of various colleges and universities throughout the country. Classes of about 75 were received monthly, the first arriving July 20, 1935. They undertook an intensive twelve months' course in aviation training, including ground school work and rudimentary naval training. The graduates are assigned to fill aviation cadet quotas in the Fleet.[53]

In addition to augmenting the training program, legislators also granted the station $3,081,500.00 for a new building program in the Authorization Bill approved April 15, 1935.[54] The principal items included in the program anticipated an expanded role for the station in the coming years and included two 500-man barracks, eleven individual married officers' quarters, two steel-and-brick hangars for Station Field, and new roads. All the major contracts were granted to a single firm, the Virginia Engineering Company of Newport News, Virginia. Commandant G. S. Burrell noted in 1936 that the selection of one firm for the whole program "...has greatly simplified the co-ordination of the work and minimized interferences, questions of junctures of work items, [and] duplication of submission of samples and drawings for approval. The Company's performance has been on the whole very satisfactory."[55] Most of the buildings also featured similar massing and details, typified by Building 604 with its massive brick pylons and inset glass panels, providing a uniformity and sense of cohesiveness to the growing base. The construction program, which eventually included "26 modern brick buildings," was completed in 1937, "making it an outstanding year in the history of the Station."[56]

A valuable construction program at NAS Pensacola was obtained by BuDocks through the WPA—a Depression-Era work relief program—in 1936 and 1937. The work, eventually valued at $243,626.00, included the repair and improvement of buildings and the rail system at the station, in addition to "modernization of plumbing and improvement of sanitation and ventilation [at the] Naval Hospital."[57] In addition, the 457 workers employed on the job helped to prepare the new Corry Field on leased property northwest of the station.[58] Another WPA project completed in 1938 and employing 513 men provided for "a) the construction of an arch type magazine and barricade; b) concrete taxiway...; c) revamping and relocation of railroad tracks; d) slag-asphalt road-paving and parking areas; e) rehabilitation and painting of buildings; and f) miscellaneous items of grading and planting."[59] In 1938 and 1939, the WPA and PWA constructed a new marine barracks, new dispensary, steel and brick hangars at Corry Field and Chevalier Field (formerly called Station Field) (with structural steelwork provided by a non-WPA contractor), and two sets of cadet quarters. Part of the same WPA/PWA project included the construction of "a modern 3-story, 3-wing hospital of concrete, brick hollow tile and stone construction...provided to replace the inadequate war-time structure now serving that important activity."[60] Thus, the great public works programs initiated to relieve the economic catastrophe of the Depression also played an important role in preparing the nation's largest naval aviation center for the coming conflict in Europe.

In 1938 the Vinson Navy Bill gave an additional boost to naval aviation, and to NAS Pensacola in particular, by increasing the authorized number of planes to be maintained by the Navy to 3,000—up from only 1,000 aircraft. The bill also established a board of officers to report on the current readiness of naval stations to meet the national defense needs, and to advise on development plans where needed. The board, called the Hepburn Board after its senior member, Rear Admiral Arthur J. Hepburn, recommended a fifty percent increase in pilot training facilities at NAS Pensacola to meet defense needs. A new construction program beginning in 1939 and continuing throughout the war eventually left the station with eleven hangars and personnel facilities for 15,000.[61]

As the United States entered World War II in 1941, NAS Pensacola stepped up training activities to meet the demand for new pilots, while still busily erecting both makeshift and permanent buildings. Although aviation in the First World War was still in a fledgling state, by 1941, technological advances and the development of combat flying techniques created the bombers and fighter planes that soon became familiar sights over European and Pacific skies. Four new training fields were opened between 1940 and 1942, including Saufley Field in 1940, Ellyson Field in 1941, and Bronson and Barin Fields in 1942.[62] With its six auxiliary training fields now in operation, the station qualified 28,562 fliers between 1941 and 1945. Pilots were trained in one of various schools operating at the base. There was a Naval Photography School, an aerial gunnery school, a flight instructor's school and the Navy's only School of Aviation Medicine to qualify flight surgeons. In addition, patrol maneuvers and scouting and observation from seaplanes were both important areas of instruction. In 1943, NAS Pensacola became the headquarters of Naval Air Training Command. By the end of the war, thousands of metalsmiths, machinists' mates and other technical crew were also trained at NAS Pensacola.

THE COLD WAR: 1946-89

At war's end, rapid demobilization again took its toll at NAS Pensacola. Barin and Ellyson fields were deactivated, while the other training fields were reassigned to new purposes. Naval Air Training Command was reorganized with a number of different subcommands including Naval Air Advanced Training, Naval Air Basic Training, Naval Air Reserve Training, and Naval Air Technical Training Command, which moved to NAS Memphis in 1946. NAS Corpus Christi took charge of basic training duties, while NAS Whiting Field also took on training responsibilities. Within a few years, however, naval organization changed again, and Naval Air Basic Training Command headquarters relocated to NAS Pensacola, where it stayed throughout the Korean War. In 1947, the old Fort Barrancas cantonment, operated by the U.S. Army since the nineteenth century, was officially deactivated and transferred to NAS Pensacola, marking the station's continued westward expansion.

During the following decades, military conflicts in Korea and Vietnam ensured that naval aviators remained in demand. Between 1950 and 1953, NAS Pensacola produced 6,000 aviators at a cost of almost $70,000.00 each.[63] NAS Pensacola's auxiliary fields were reopened in 1951, and helicopters made their first appearance at Pensacola the same year. The first class of helicopter pilots was trained at Ellyson Field beginning in January. The most dramatic development in naval aviation training was the introduction of jet aircraft to the advanced training syllabus in 1955. Sherman Field was built in 1954 on over 900 acres near the old Fort Barrancas cantonment west of NAS Pensacola to accommodate the new jet requirements. In 1955, the Blue Angels jet fighter demonstration team, originally formed in 1946 to demonstrate the capability of naval aviators, relocated from NAS Corpus Christi to NAS Pensacola, where their air shows are still a popular attraction.

During the Cold War period, the U.S. military raced to develop new technologies to maintain heightened strategic advantages over the Soviets. Naval aircraft achieved supersonic flight, adopted complex computerized navigational systems and missile systems, and took off from nuclear-powered aircraft carriers. Aerospace medicine became part of the studies undertaken at the Naval Aviation Medical Center, originally commissioned in 1957. In addition to studying the effects of gravity forces and disorientation on pilots in combat, scientists worked to understand the potential effects of space travel on humans. In the early 1960s, astronauts from the Mercury and Gemini programs all underwent physical testing and training for water landings at NAS Pensacola.[64]

After the conflict in Vietnam escalated in 1964, pilot training again increased in response. "Pilot production had been as low as 1,413 [annually] in 1962, and as high as 2,552 in 1968, increasing and decreasing with the heat of battle involving carrier deployments in the Far East."[65] Despite financial limitations instituted as the Vietnam War dragged on, NAS Pensacola grew in both size and responsibility as more training and study were needed for highly specialized systems (*Figure 5*). Major damage incurred during Hurricane Camille in August 1969, was quickly repaired and some buildings rebuilt. By 1971, the station covered over 5,500 acres. New training centers were commissioned in the early 1970s, including the Naval Technical Training Center (formerly Naval Communication Center), which was the Navy's locus for electronic warfare and photography training, and the Naval Education and Training Program Development Center, established at Saufley Field in 1974.[66]

Following the Vietnam conflict, Navy budgets fell victim to a large-scale demilitarization campaign in the U.S. government. Nonetheless, NAS Pensacola persevered in its training mission, instructing 1,697 officers and 2,188 enlisted men in 1982. The station also continued as a major contributor to the local and regional economies, with a military payroll of $144,352,908.00, a civilian payroll of $187,635,344.00, and almost $10 million in supply purchases in the same year.[67]

In 1988, the Defense Secretary's Commission on Base Realignment and Closure (BRAC) was formed to recommend base closures in order to streamline the military base structure worldwide. BRAC reflected the general trend toward military downsizing in the 1980s, when long-range nuclear missiles and subsequent arms control talks were the focus of many military leaders. In the 1990s, the end of the Cold War caused further financial cutbacks for the U.S. military, resulting in a greater rate of base closures. NAS Pensacola successfully avoided closure due to its vital position in the Navy's aviation program and its important tenant commands.

Today, NAS Pensacola occupies 8,423 acres, including Corry Station, Saufley Field, Bronson Field, and Sherman Field. The station hosts over ninety defense-related tenant commands, including the Chief of Naval Education and Training, Training Air Wing Six, Naval Aviation Schools Command, the Naval Aerospace Medical Research Lab, and the Naval Air Technical Training Center. The military population consists of over 16,000 people, in addition to 6,000 civilian employees. The station continues to provide top qualified naval aviators and other personnel; over 25,000 Navy and Marine students passed through the various training programs housed at NAS Pensacola, in addition to 1,300 officer candidates.[68]

The considerable history of military occupation in the Pensacola Bay remains evident at NAS Pensacola in structures such as the Fort Barrancas cantonment and the NHL Pensacola Naval Air Station Historic District at the heart of the station. The presence of these early buildings has exerted a significant force in shaping the modern base, as have external factors including periodic destructive hurricanes and legislative favor. Most importantly, the change from a traditional naval shipyard to a modern naval aviation installation with associated technological advances and demands produced a gradual metamorphosis that has resulted in the modern NAS Pensacola. The shift from maritime vessels to aircraft likely saved the Pensacola base from abandonment and led to the development of an active installation vital to the regional economy and to the Navy's aviation program.

DETAILED BUILDING HISTORY

According to plans maintained by the NAS Pensacola Engineering Office, Building No. 636 remained in use as a laundry building for several decades after its construction in 1940 (*Figure 6*). Just two years after it was built, an exterior addition, along with interior partitions, laundry bins, tables, and clothes racks

were added. In 1975, several small roof vents were removed from Building No. 636 during a re-roofing project. Changes made to the laundry building in the early 1980s, including new electrical wiring, a new fire alarm, and alterations to a receiving dock, may have served a change in use from laundry to storage area. By 2001 the building was unoccupied.

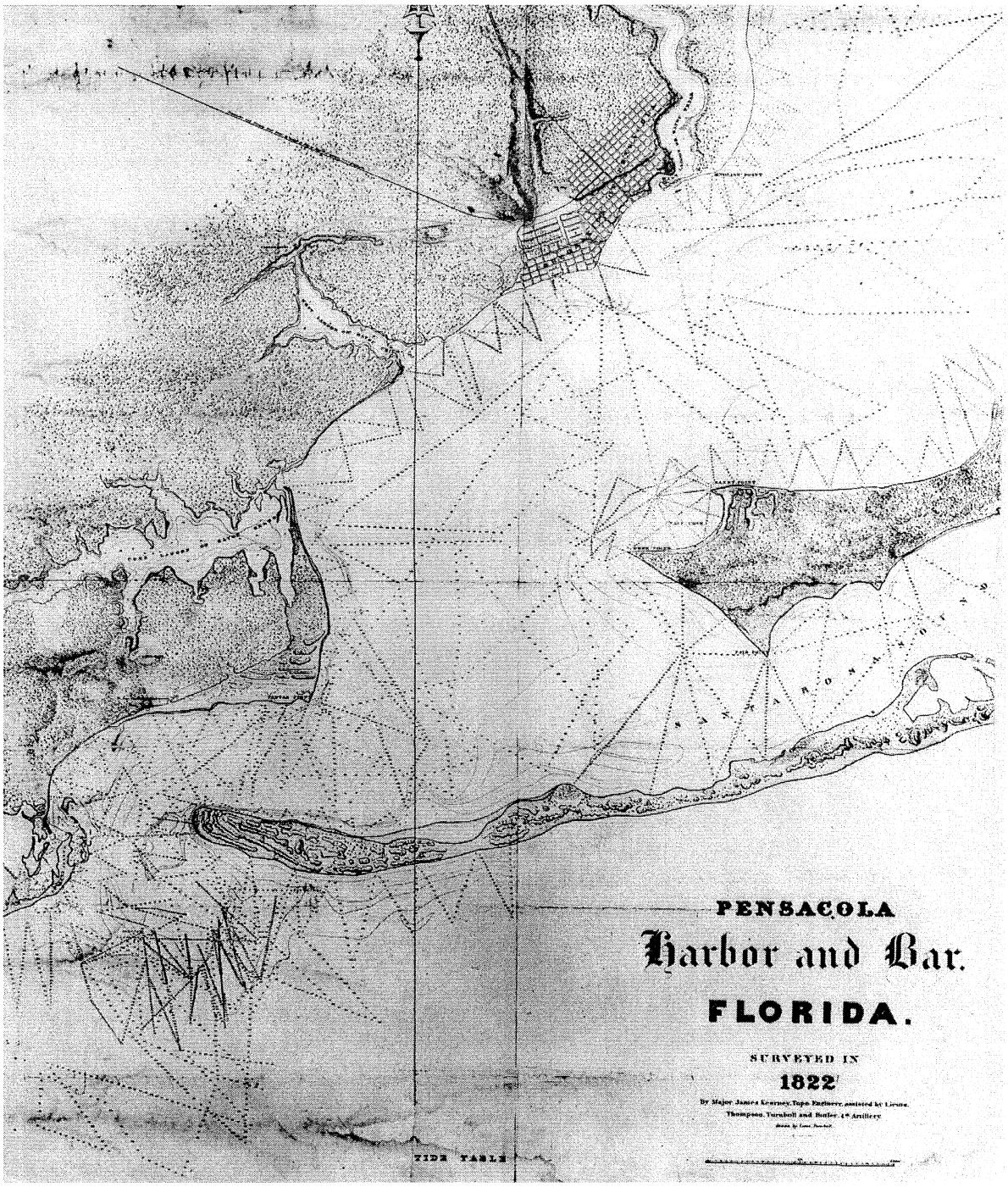
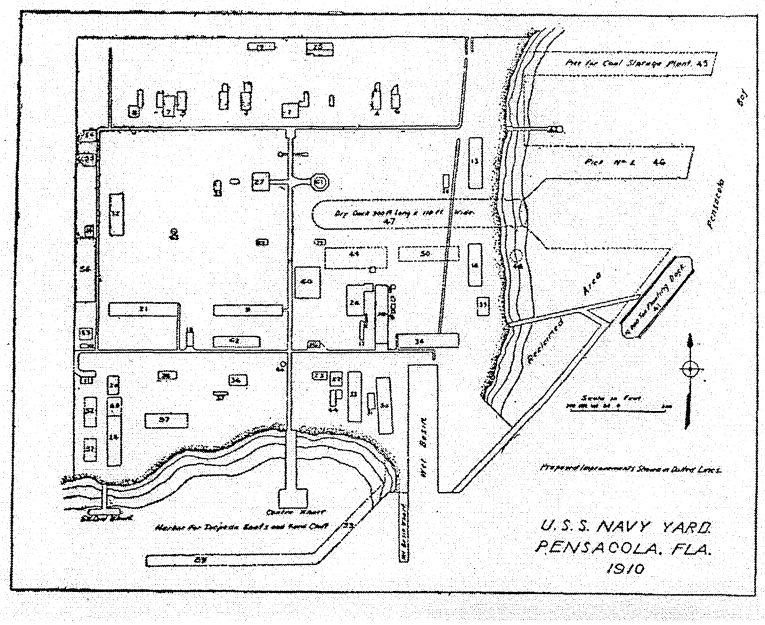


Figure 1. Map and Tide Table of the Pensacola Bay surveyed by the U.S. Army 4th Artillery in 1822, a year after Spain's transfer of Florida to the United States (Map courtesy of the Public Affairs Office, NAS Pensacola, Florida).

Figures 2 and 3. Hand-drawn plan and index showing the state of the Pensacola Navy Yard in 1910, one year before it was officially closed. (Map and index courtesy of the Public Works Center, NAS Pensacola, Florida).



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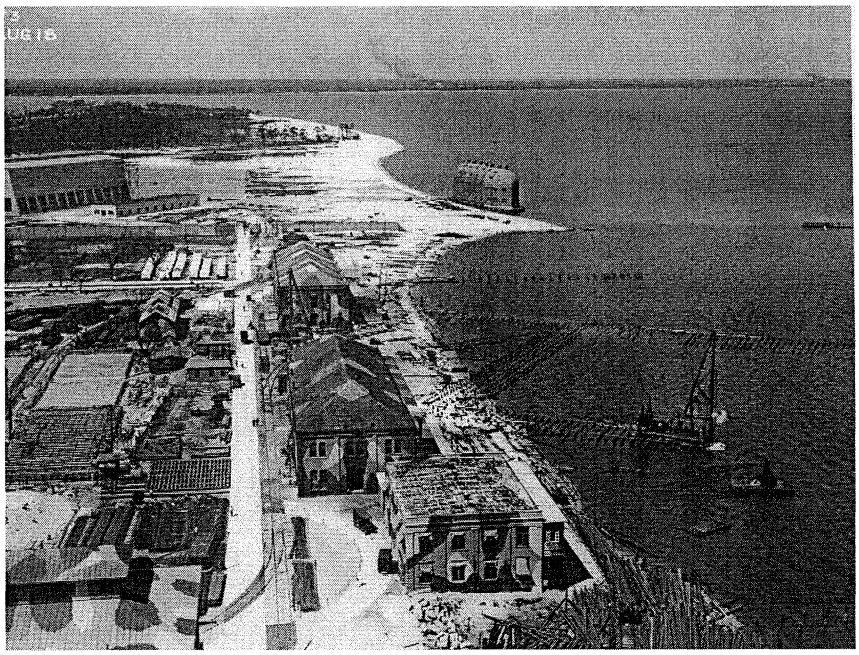

Figure 4. Bird's-eye view of NAS Pensacola in 1918 (facing northeast), with buildings painted in camouflage patterns to avoid aerial detection by enemies during World War I. The large building moored at the shoreline is a floating dirigible hangar (Photo courtesy of the Public Affairs Office, NAS Pensacola, Florida).

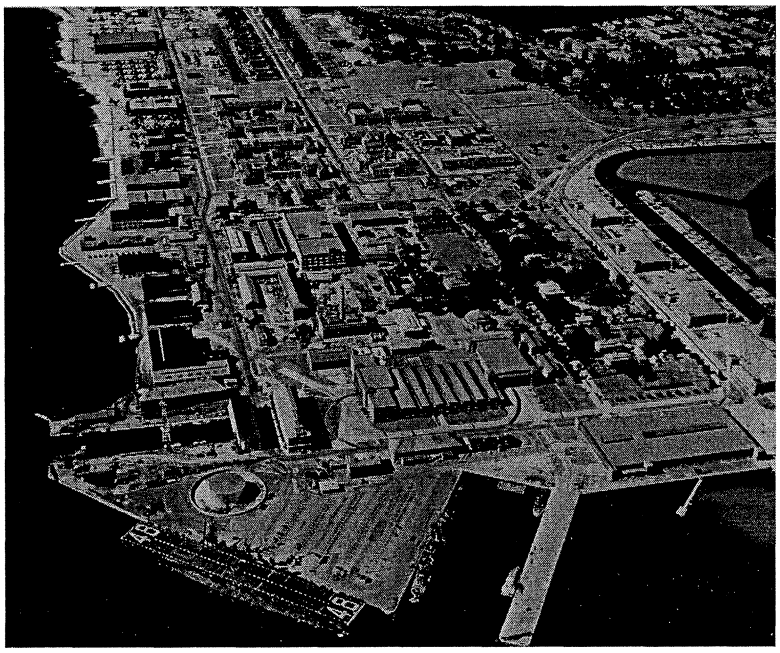

Figure 5. View of NAS Pensacola ca. 1967, facing west. Note Chevalier Field (originally called Station Field) to the right (Photo courtesy of the Public Affairs Office, NAS Pensacola).

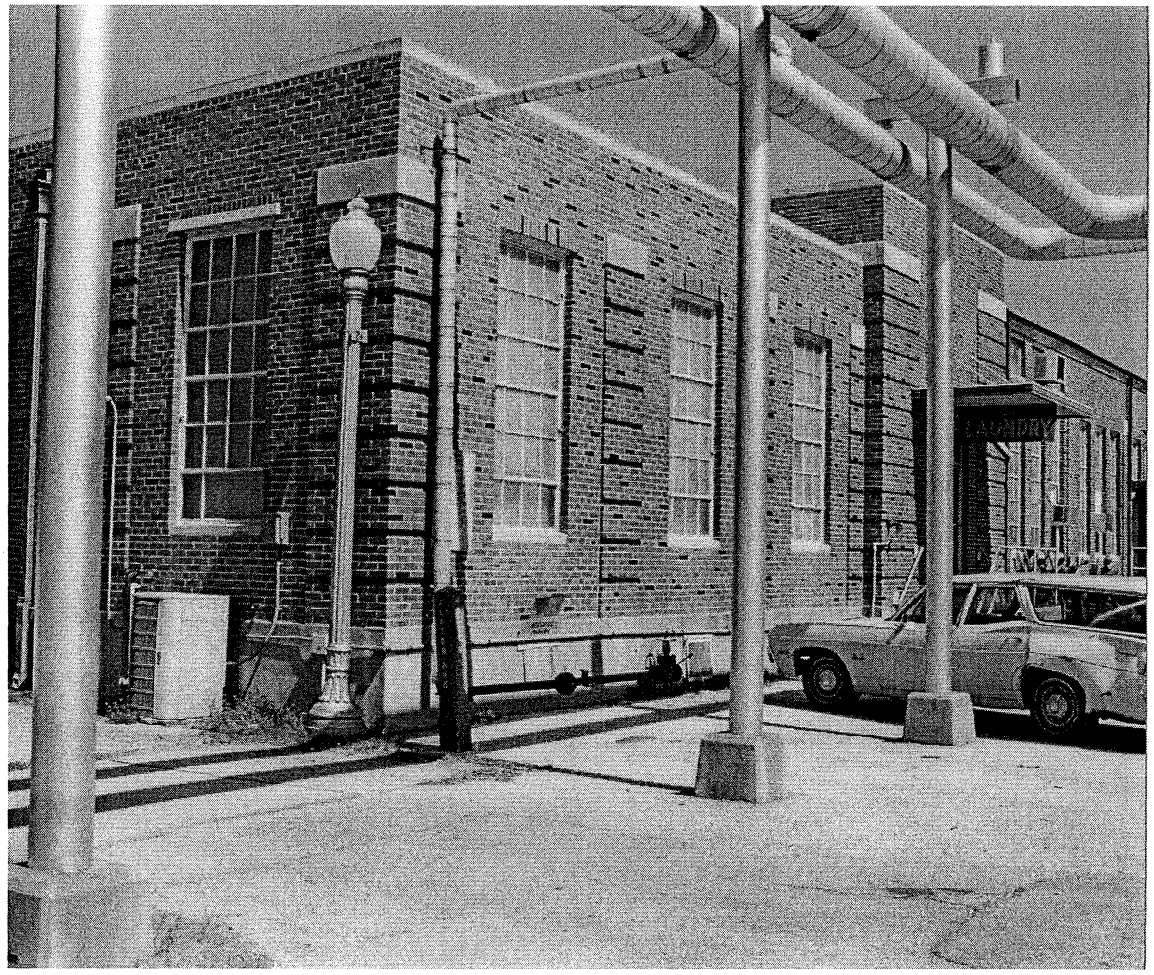

Figure 6. Photo of Building No. 636 in 1967 (Photo Courtesy of the Public Works Center, NAS Pensacola, Florida).

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Building No. 636, constructed in 1940, is a one-story, irregular-plan resource constructed of load-bearing hollow clay tile and brick veneer. The building's utilitarian function is reflected in its open interior plan and exposed steel-frame structural system. The building's red brick exterior, cast stone trim, and corner quoins compliment the late 1930s/early 1940s Georgian Revival training and dormitory facilities at NAS Pensacola. Building No. 636 exhibits few alterations from its original construction. The small 1942 addition—designed by Wyatt C. Hedrick of Fort Worth, Texas—matches the building's original design and materials.

2. Condition of fabric: The overall condition of the building is fair. The building envelope has suffered damage as a result of Hurricane Ivan. Cracks appear in the concrete foundation walls and the exterior brick and mortar. The concrete foundation, cast stone details, and brick are discolored and stained in various locations. The corrugated metal walls on the roof monitor were damaged during the hurricane and now appear to be structurally unstable. The central entrance on the south facade is missing two doors, and the overhead concrete canopy appears to be structurally unsound. A large crack runs from the support rod to the concrete floor of the loading dock. Paint at windows is peeling; frames are corroded and rusting; and numerous lights are broken or missing. A significant number of windows are covered with plywood and louvered vent inserts have been installed. Gutters, downspouts ventilation stacks are bent and detached. Limited access to the interior revealed cracks in the concrete floor, water damage at floor, wall, and ceiling surfaces, and scattered debris.

B. Description of Exterior:

1. Overall dimensions: Building No. 636 is a one-story resource, measuring approximately 124'-10" x 62'-4" with a 51'-0" x 23'-0" north wing centered on the original north facade and a 35'-0" x 60'-2" west addition. The front facade is characterized by two equal bays on either side of the central loading dock, for a total of five bays. These bays are flanked by two corner entrances with quoins and a raised parapet roof. The 1942 addition has three equal bays, each featuring a single window unit.

2. Foundations: The load-bearing walls of Building No. 636 rest on a continuous concrete perimeter wall with interior concrete piers spaced 17'-6" apart east/west and about 15'-0" apart north/south. In the west addition, this spacing changes to 16'-8-1/2" and 18'-4" east/west and 10'-5-1/2" and 9'-9" north/south. Intermediate concrete pan joists span between concrete floor beams. The raised reinforced concrete-slab floor is integral to the foundation system. The system was site-cast as a monolithic unit.

3. Walls: Exterior walls consist of a red brick veneer with a common bond pattern and header course every sixth row. Cast stone sills, pilaster caps, and a parapet wall coping accent the exterior facades. Additional exterior wall cladding includes corrugated metal siding on the building's roof monitor.

4. Structural system: The foundation supports a steel-frame structural system consisting of steel columns concealed within the north and south exterior masonry walls. The building's floor system is an integral, reinforced, raised concrete slab. The 1942 addition utilizes load-

bearing masonry construction with 12" x 12" concrete interior columns faced in glazed brick tile. The roof structure of Building No. 636's original portion consists of eight-panel, closed, flat Howe trusses. These trusses span north/south with a timber roof deck instead of the pre-cast, concrete-slab cited in the original drawings. The roof structure also features a central gable monitor. The roof structure of the 1942 addition consists of a combination of concrete spandrel beams at exterior walls and a central reinforced concrete beam spanning north/south over the 12" x 12" interior columns. Timber purlins of 4" x 12" dimensional lumber span east/west from the top of the concrete spandrel to the top of the central concrete beam. A 2" wood roof deck completes the system.

5. Porches, stoops: Building No. 636 has two raised, concrete-slab stoops with stairs on the south facade. The stoop at the south side, east corner has steps on either side of the concrete porch; the east side has three steps and the west side has four. Metal pipe handrails for each stair run are located on the exterior wall. The southwest stoop on the south facade has four steps on either side leading to the concrete porch. A single metal pipe handrail is located along the exterior wall for each stair. An additional guardrail and handrails are located along the south edge of the porch and stairs. A concrete loading dock, covered with a suspended concrete canopy and painted metal guardrails, is located near the center of the south facade. Concrete steps lead to the loading dock. A loading dock, constructed of concrete-block foundation walls and concrete-topping slab, is located at the northeast corner of the north facade. A raised, concrete-slab porch with concrete stairs is located at the west end of the north side. This porch is sheltered by a built-up, shed roof on timber posts.

6. Openings:

   a. Doorways and doors: One of the entrances located on the south facade at the west end features a pair of aluminum-frame storefront doors with a single-light fixed transom. One door has been fixed in-place and currently functions as a sidelight to the primary door. Other entrances on the south facade include a pair of flush, metal doors with a six-light transom at the southeast corner; a metal overhead door that was destroyed during Hurricane Ivan; and a single flush metal door at the central loading dock. Along the north facade on the north wing are two door openings that have been covered with a plywood panel. One door features a six-light transom; the other has a ten-light transom. A wood-frame overhead door with sixteen lights is located at the northeast loading dock along the north facade.

   b. Windows: Fenestration for Building No. 636 includes five bays of three steel-sash window units along the north and south facades, each consisting of two, six-light, pivoting sashes and two, three-light, fixed sashes. Additional windows on the south facade include a twelve-light, fixed, steel window flanked by two, six-light, fixed, steel windows above the central loading dock canopy. A steel-sash window unit with the six-light pivoting sash removed is located adjacent to the overhead door at the central loading dock. Three awning windows have been installed above the western bay of windows at the original block. Two, six-over-six, wood-sash window units are located at the north wing. Six, twelve-over-twelve, double-hung, wood-sash units are located at the west facade of the 1942 addition. The building's roof monitor contains forty steel-sash pivoting and ten louvered windows.

7. Roof:

a. Shape, covering: The main roof is a shallow, gabled built-up roof with brick parapet walls at the east facade and corner towers. The north wing has a sloping built-up roof surrounded by a brick parapet wall. The roof on the addition consists of a sloping built-up roof.

b. Cornice, eaves: The roof drainage system includes both scuppers and hung, half-round, roof gutters. The main roof and the monitor are sloped to gutters on the north and south facades, while the north wing and the west addition drain to scuppers on the north and west facades, respectively. Both systems use copper downspouts with cast-iron boots.

c. Dormers, cupolas, towers: A gabled roof monitor is located along the central east/west axis of the original building block.

C. Description of Interior:

1. Floor plans:

a. Basement: The raised concrete floor system creates a shallow crawlspace accessed by metal access panels located along the north, south, and east facades.

b. First floor: The original construction drawings for the 1940 main building and the 1942 addition are included in this report. Although the interior was not accessible during the field survey due to structural damage incurred by Hurricane Ivan, previous survey documentation conducted by Hardy•Heck•Moore, Inc. (HHM) in 2002 provided information regarding the configuration of interior spaces. Building No. 636's primary interior space is a large, un-partitioned room. A doorway on the north wall leads to the north wing, which contains a suite of rooms that include four administrative offices and two restrooms. A freestanding, two-story, enclosed administrative area is adjacent to the south wall.

2. Stairways: The second-story office is accessed by an enclosed wood staircase with thirteen risers and twelve treads. A 1/2" diameter wood handrail is mounted on one side with aluminum brackets. A 180-degree return stair with landing connects the two floors of the office area.

3. Flooring: The floors generally consist of smooth-troweled concrete. Other floor finishes include ceramic tile in both restrooms and carpet in interior office spaces.

4. Wall and ceiling finish: Interior wall finishes are typically glazed, hollow-clay tile, while the walls in the north wing consist of painted gypsum board. Some interior offices and one restroom have painted plaster ceilings. The remaining restroom and both levels of the two-story office space feature suspended acoustical tile ceilings. The remaining ceilings of the interior spaces are exposed to the roof structure.

5. Openings:

a. Doorways and doors: Building No. 636 has four interior doors. Two wood, six-panel, stile-and-rail doors are located in the restrooms. A single Dutch door and single wood flush door are located in one office space. All doors have wood frames. Interior door hardware includes metal knobs and non-template butt hinges.

b. Windows: Eight, aluminum-frame, awning windows are located in the second-floor

office space.

6. Mechanical equipment:

   a. Heating, air-conditioning, ventilation: Four, electric-unit heaters and two, steam-unit heaters heat the building. Air-conditioning equipment includes three window air conditioning units and a 90,000 BTU split air-conditioning system. Building No. 636's ventilation system consists of six, wall-mounted, exhaust fans and ten fans located in the roof monitor.

   b. Lighting: Lighting for the building includes high-intensity discharge (H.I.D.) fixtures—24" x 48", two-lamp, lay-in fixtures with acrylic lenses and 24" x 48" surface-mounted fluorescent fixtures with acrylic lenses.

   c. Plumbing: Limited access to the interior prevented a thorough investigation of plumbing systems. Data collected during a 2002 HHM survey provided information on current conditions. Water is supplied to Building No. 636 by artesian wells on the base. The water is distributed to plumbing fixtures by pipes located beneath the floor and in walls. Cast-iron pipes carry wastewater to the base sewer system. Plumbing fixtures include water closets and lavatories. Water closets are floor-mounted, floor outlet, with flush valves. Lavatories are wall-hung with varying types of faucets. The building has two restrooms, each containing one urinal and one lavatory.

D. Site:

1. General setting and orientation: Building No. 636 is located in the southeastern section of NAS Pensacola, within a complex of industrial buildings. The site is bounded by Rockwell Street on the east, Mustin Street on the south, Center Avenue on the west, and a parking lot to the north. Large overhead steam pipes are adjacent to the building's southwest corner. Building No. 636A, a small masonry support facility, is located to the northwest of Building No. 636. It once contained electrical panels for Building No. 636's laundry equipment.

2. Historic landscape design: Original construction drawings did not include a landscape design for the surrounding site. Building No. 636 is located within an industrial context and is bordered by paved concrete on all sides, with areas of grass along the immediate perimeter.

NOTES

[1] Coleman, James C. and Irene S. *Guardians on the Gulf: Pensacola Fortifications, 1698-1980* (Pensacola: Pensacola Historical Society, 1982), 7; Pearce, George F. *The U.S. Navy in Pensacola: From Sailing Ships to Naval Aviation (1825-1930)* (Pensacola: University of West Florida Press, 1980), 1.
[2] Coleman, *Guardians on the Gulf*, 26-28.
[3] Ibid., 31.
[4] Pearce, *U.S. Navy in Pensacola*, 3.
[5] Coleman, *Guardians on the Gulf*, 5.
[6] Pearce, *U.S. Navy in Pensacola*, 5-10.
[7] Ibid., 11-13.
[8] Ibid., 13, 18.
[9] Ibid., 19.
[10] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 465-466, ed. Paolo Coletta, 466 (Westport: Greenwood Press, 1985).
[11] Coleman, *Guardians on the Gulf*, 33-37.
[12] Annual Report, Bureau of Yards and Docks (BuDocks) to Secretary of the Navy, November 19, 1844, NAVFAC Archive, Port Hueneme.
[13] Annual Report, BuDocks to Secretary of the Navy, October 17, 1849, NAVFAC Archive, Port Hueneme.
[14] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 466.
[15] Annual Report, BuDocks to Secretary of the Navy, October 25, 1847, NAVFAC Archive, Port Hueneme.
[16] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 466.
[17] Ibid., 466-467.
[18] Annual Report, BuDocks to Secretary of the Navy, November 4, 1862, NAVFAC Archive, Port Hueneme.
[19] Annual Report, BuDocks to Secretary of the Navy, October 15, 1864, NAVFAC Archive, Port Hueneme.
[20] Annual Report, BuDocks to Secretary of the Navy, October 1, 1869, NAVFAC Archive, Port Hueneme.
[21] Pearce, *U.S. Navy in Pensacola*, 95; 98.
[22] Annual Report, BuDocks to Secretary of the Navy, October 26, 1883, NAVFAC Archive, Port Hueneme.
[23] Annual Report, BuDocks to Secretary of the Navy, October 1, 1901, NAVFAC Archive, Port Hueneme.
[24] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 468.
[25] Ibid. 468-469.
[26] Pearce, *U.S. Navy in Pensacola*, 123-125.
[27] Ibid., 128-129.
[28] Ibid., 132.
[29] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola Fla., June 30, 1914, NAVFAC Archive, Port Hueneme.
[30] Pearce, *U.S. Navy in Pensacola*, 134.
[31] Ibid.
[32] Ibid., 135.
[33] Ibid., 136.
[34] *Air Station News, Pensacola, Florida*. 1930. "An Historical Note," November 20, 4.
[35] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Fla., June 30, 1915, 40, 18, NAVFAC Archive, Port Hueneme.
[36] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Fla., June 30, 1917, NAVFAC Archive, Port Hueneme.
[37] Corliss, Earle. *Activities of the Bureau of Yards and Docks, Navy Department, World War: 1917-1918* (Washington: U.S. Government Printing Office, 1921), 395.
[38] Ibid., 153.
[39] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 470.
[40] Annual Report to BuDocks, from the U.S. Naval Air Station Pensacola, Florida, June 30, 1918, NAVFAC

Archive, Port Hueneme.
[41] *Air Station News, Pensacola, Florida.* 1930. "An Historical Note," November 20, 4.
[42] Pearce, *U.S. Navy in Pensacola*, 159.
[43] *Air Station News, Pensacola, Florida.* 1930. "An Historical Note," November 20, 4.
[44] Pearce, *U.S. Navy in Pensacola*, 158.
[45] Ibid., 157.
[46] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1920, 33-34, NAVFAC Archive, Port Hueneme.
[47] Pearce, *U.S. Navy in Pensacola*, 165.
[48] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1923, NAVFAC Archive, Port Hueneme; Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1927, NAVFAC Archive, Port Hueneme.
[49] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1927, n.p. , NAVFAC Archive, Port Hueneme.
[50] Ibid.
[51] Pearce, *U.S. Navy in Pensacola*, 177-178.
[52] Ibid., 178-179.
[53] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1936, 32, NAVFAC Archive, Port Hueneme.
[54] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1936, 32, NAVFAC Archive, Port Hueneme. In the report, NAS Pensacola's commandant attributes funding of the new building program to the "Authorization Bill approved April 15, 1935." He also notes that "Two million dollars of funds were carried in the Deficiency Act, approved August 12, 1935, while $1,081,500 was made available from the continuing appropriation 'Public Works, Bureau of Yards and Docks.'" The Annual Report contradicts the authoritative U.S. Government Printing Office publication *Building the Navy's Bases in World War II of 1947*, which states that in 1935 "the Congress made no appropriation for naval public works, and such work as could be done was financed out of the ends of appropriations made in earlier years and by allocation from the funds provided by the 1935 Emergency Relief Appropriation Act" (p. 25).
[55] Ibid, 33.
[56] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1937, 47, NAVFAC Archive, Port Hueneme.
[57] Ibid., 48.
[58] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1936, 34, NAVFAC Archive, Port Hueneme.
[59] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1938, 54, NAVFAC Archive, Port Hueneme.
[60] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1939, 19, NAVFAC Archive, Port Hueneme.
[61] U.S. Government Printing Office, *Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946, Volume I* (Washington: U.S. Government Printing Office, 1947), 229.
[62] Shettle, 177.
[63] Delaney, Michelle M., ed. *The Cradle: Naval Air Station, Pensacola,* (Pensacola: Pensacola Engraving Company, 1989), 127.
[64] Ibid., 136.
[65] Ibid., 149.
[66] Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, ed. Paolo Coletta, 474 (Westport: Greenwood Press, 1985).
[67] Ibid.
[68] Pensacola Bay Area Chamber of Commerce, "NAS Pensacola: The Cradle of Naval Aviation," electronic document, www.pensacolachamber.com. Accessed February 18, 2005.

PART III. SOURCES OF INFORMATION

A. Early views: Archived at the NAS Pensacola Public Affairs Office and Public Works Center, the National Museum of Naval Aviation at NAS Pensacola, and the University of West Florida Library, Special Collections, the NAS Pensacola Photograph Collection and the navy yard at Pensacola Photograph Collection, Pensacola, Florida.

B. Current Views: The HHM team took all 4" x 5" photos between January and February 2005.

C. Maps: From the NAS Pensacola Real Property Management Office and modified by HHM staff.

D. Original architectural drawings: All original and subsequent architectural drawings are on file with Hill-Griffin at NAS Pensacola (Building No. 458), Pensacola, Florida.

E. Bibliography:

1. Primary and unpublished sources:

Naval Facilities Engineering Command (NAVFAC) Archive, Port Hueneme, California.

Annual Reports of the Bureau of Yards and Docks, NAS Pensacola, Florida, 1842-1939.

Construction Contracts, NAS Pensacola, Florida, various dates, Record Group 2.

Detailed Inventory of Naval Shore Facilities, NAS Pensacola, Florida, various dates, Record Group 2.

General Development Maps, NAS Pensacola, Florida, various dates.

Property Record Cards, NAS Pensacola, Florida, various dates, Record Group 2.

NAS Pensacola Public Works Center, Pensacola, Florida.

Facilities Files, General.

Facilities Files, Photographs.

Photograph Collection. NAS Pensacola Public Affairs Office, Pensacola, Florida.

Photograph Collection. National Museum of Naval Aviation, Pensacola, Florida.

University of West Florida Special Collections Department, Pensacola, Florida.

Manuscript and Archival Collections.

Rare Books and West Florida regional Publications.

Map Collection.

Photograph Collections.

Young, Rear Admiral Lucien. *A Brief History of the United States Navy Yard and Station, Pensacola, Florida and its Possibilities.* Pensacola, Florida: privately printed, no date, copy available at the Rare Books Collection, University of West Florida.

2. Secondary and published sources:

Air Station News, Pensacola, Florida, "An Historical Note," November 20, 1930.

Coleman, James C. and Irene S. *Guardians on the Gulf: Pensacola Fortifications, 1698-1980.* Pensacola: Pensacola Historical Society, 1982.

Corliss, Earle. *Activities of the Bureau of Yards and Docks, Navy Department, World War: 1917-1918.* Washington: U.S. Government Printing Office, 1921.

Delaney, Michelle M., ed. *The Cradle: Naval Air Station, Pensacola.* Pensacola: Pensacola Engraving Company, Inc., 1989.

Manuel, Dale. *Pensacola Bay: A Military History.* Charleston, South Carolina: Arcadia Publishing, 2004.

Pearce, George F. *The U.S. Navy in Pensacola: From Sailing Ships to Naval Aviation (1825-1930).* Pensacola: University of West Florida Press, 1980.

Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, ed. Paolo Coletta, 464-471. Westport: Greenwood Press, 1985.

Pensacola Bay Area Chamber of Commerce, "NAS Pensacola: The Cradle of Naval Aviation," electronic document, www.pensacolachamber.com. Accessed February 18, 2005.

Shettle, M.L., Jr. *United States Naval Air Stations of World War II, Volume One.* Bowersville, Georgia: Schaertel Publishing Company, 1995.

E. Likely sources not yet investigated:

Correspondence and other records from the Pensacola Navy Yard and NAS Pensacola are located at the National Archives and Records Administration, Washington D.C. in the following Record Groups:

Record Group 45, "Naval Records Collection of the Office of Naval Records and Library" (1776-1927).

Record Group 72, "Records of the Bureau of Aeronautics" (1911-46).

Record Group 80, "General Records of the Department of the Navy" (1804-1958).

These records have been thoroughly explored and published by George F. Pearce (see above) for the period 1825-1930, but not for later periods.

PART IV. PROJECT INFORMATION

The mitigative documentation of Building No. 636 at U.S. Naval Air Station Pensacola, Florida, was undertaken from January to February 2005 by HHM Inc, of Austin, Texas, in accordance with a Memorandum of Agreement among the Department of the Navy (DON), NAS Pensacola, and the Florida State Historic Preservation Officer. The project was sponsored by DON, Naval Facilities Engineering Command, Engineering Field Division South (NAVFAC EFD SOUTH), Charleston, South Carolina, and managed by Ron N. Johnson, Registered Preservation Architect, Head of Cultural Resources Branch, and Historic Preservation Officer for NAVFAC EFD SOUTH. The principals involved in managing the documentation included David Moore (HHM), Project Director; Laurie A. Gotcher (HHM), Project Manager; and Anna Madrona (HHM), Quality Assurance Manager. The field project was developed and executed under the direction of Karen Hughes (HHM), Architectural Historian and Field Director and Beth Valenzuela (HHM), Intern Architect. The fieldwork was conducted by Eve Trester-Wilson (HHM), Architectural Historian; Kristen von Minden (HHM), Architectural Historian; C. Lynn Smith (HHM), Architectural Historian; and Leah Roberson (HHM), Field Technician. Olivia Chacón (HHM), Architectural Historian prepared the historic documentation sections, and Justin Edgington, Historian (HHM) conducted technical reviews. Editing, report layout, and graphics were managed by Lori Smith (HHM), Copy Editor and Production Manager; Julio Chacón (HHM), Graphic Artist; and Sara Sabzevari (HHM), Production Assistant. Large-format photography was undertaken by HHM Architectural Historian, Karen Hughes.