U.S. NAVAL AIR STATION, BLACKSMITH SHOP
(U.S. Naval Air Station, Building No. 38-A)
South Avenue
Pensacola
Escambia County
Florida

HABS No. FL-497

HABS
FL-497

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, BLACKSMITH SHOP HABS No. FL-497
(U.S. Naval Air Station, Building No. 38-A)

Location: South Avenue
Pensacola
Escambia County
Florida

USGS Fort Barrancas Quadrant, Universal Transverse Mercator Coordinates: Zone 16, 474421E, 3357190N

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

Present Occupant: Naval Air Station (NAS) Pensacola

Present Use: Administrative Offices for Waterfront Operation/Port Services; however, the building is slated for demolition.

Significance: Constructed between 1901 and 1907 to house the boiler and engine rooms for Building No. 38, Building No. 38-A served in a support role to the Pensacola Navy Yard until its closure in 1911, and later for NAS Pensacola when it opened in 1914. The design and plans came from the Bureau of Yards and Docks (BuDocks), and were likely standardized plans modified to meet local conditions. The contractor is unknown. The Pensacola Navy Yard experienced a small resurgence in activity and funding following the Spanish-American War in 1898. Building No. 38-A resembles several other small structures at the installation, including Building No. 26, the Foundry, built in 1882. The Navy converted Building No. 38-A into a blacksmith shop by 1916 and to a plant maintenance shop by the 1960s. By the 1990s, the building supported waterfront operations at the base. The one-story, rectangular, load-bearing masonry building features a pedimented gable roof with a cast-stone circular vent on either gable end. Exterior decorative elements also include an arched, double-entry door, and windows featuring cast-stone sills and arched lintels with keystones.

Alterations to the building have been moderate. The original smokestack and gabled monitors were removed prior to 1919. Original doors and windows have been replaced, modified, or boarded over. Interior modifications include the addition of metal-frame partition walls. Despite these alterations, Building No. 38-A remains compatible in form, massing, and scale to its original design.

Building No. 38-A is located in the southeastern section of NAS Pensacola, within the boundaries of the Pensacola Naval Air Station Historic District, which is listed in the National Register of Historic Places. The National Park Service designated this district as a National Historic Landmark in 1976.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date(s) of erection: An entry in P-164s that date from 1945 lists 1901 as the date of construction for Building No. 38-A.
2. Architect(s): BuDocks, DON
3. Original and subsequent owners, occupants, uses: DON; originally housed the boiler and engine rooms for the adjacent Building No. 38 (1901 to ca. 1916); blacksmith shop (1916 to ca. 1963); plant maintenance building (1963 to ca. 1993); administrative offices for Waterfront Operations (1993 to 2004); the resource is currently vacant.
4. Builder, contractor, suppliers: Unknown.
5. Original plans and construction: An entry in the June 1969 edition of the *Detailed Inventory of Naval Shore Facilities* lists the original construction cost for Building No. 38-A as $6,663.00. As originally constructed, Building No. 38-A was rectangular in plan with a smokestack that was housed by a small, projecting, shed-roof wing on the west facade. The smokestack and shed-roof wing were removed by 1948. Two gabled-roof monitors have also been removed, original north, east, south, and west facade doorways have been modified, and window openings on the west facade have been infilled. The building's interior space originally contained two rooms—a 28'-9" x 27'-0" boiler room in its southern portion and a 28'-6" x 38'-9" "dynamo" room in its northern portion. A 13"-thick masonry wall separated these spaces. Sometime before 1919, this wall was removed. Wood- and metal-frame walls now partition the building's interior space. Despite alterations, the building retains its original one-story height, front-gabled roofline, and much of its original exterior decorative detailing. Original copies of the building's construction drawings are held at the National Archives, Cartographic and Architectural Unit, College Park, Maryland. All renovation drawings for Building No. 38-A are on file with Hill-Griffin at NAS Pensacola (Building No. 458), Pensacola, Florida.
6. Alterations and additions: The building's original architectural plan indicates that the building's interior space was originally partitioned into two rooms by a 13"-thick masonry wall. Sometime before 1919, likely when the building was converted from a powerhouse to a blacksmith shop, the interior wall was removed, leaving a single open space. It appears that a smokestack, which was housed in a small, shed-roof extension adjacent to the building's original "boiler room," was removed during this period.

Three metal vents replaced the roof's two original gabled monitors sometime between 1919 and 1948. In addition, a small shed-roof wing on the building's east facade that originally housed the boiler room's smokestack was removed during this period.

In 1938 Building No. 38-A was completely rewired with the addition of new interior light fixtures, switches, and electrical outlets/receptacles.

An architectural plan dated 1948 indicates that the building's ventilation system was modified with the removal of three metal vents from the roof. A new eighteen-gage rotary ventilator with a 16,500 CFM propeller fan was installed in the southern portion of the roof ridge and a new 48" x 48", twenty-two-gage duct was added to the existing south facade fan.

Sometime between 1948 and 1968, the building underwent alterations to its exterior doorways. Originally, the building's south facade had three doorways, each with a set of paired wood doors. The south facade had a central entrance that consisted of a set of wood bi-fold doors. This doorway was topped with a twenty-light transom. The east facade had two entrances—a single wood door topped by a single-light transom and a set of paired, wood horizontal sliding doors. Finally, the west facade originally had a set of paired, wood horizontal sliding doors. Architectural drawings and photos indicate that by 1968, the west facade doors had been removed and the doorway enclosed with wood siding. The south facade's three doorways had been replaced with a single central wood door flanked by two six-over-six wood-sash windows. A new window opening replaced the west facade's single doorway, leaving only a set of paired wood doors. The building's original primary entrance, located on the north facade, had been altered with the removal of the original doors and transom, replaced by a pair of full-height, hinged, wood stile-and-rail doors.

In 1968 a suspended acoustical tile ceiling system and new recessed fluorescent light fixtures were installed in Building No. 38-A's interior space. It is likely that the rooms in the southeastern and northwestern corners were added and tile flooring installed ca. 1968.

In 1993 the building underwent extensive interior renovations. The building's open central space was partitioned with the installation of a metal-stud frame wall. In addition, new 24" x 48", four-tube recessed fluorescent light fixtures, 42"-diameter suspended ceiling fans, and acoustical ceiling tiles were added to the building's northern space. The building's northeastern room also received a new Dutch door, and two package air-conditioning/heating window units were installed on the east facade. A year later, Building No. 38-A's roof underwent extensive repairs.

A new gas-fired heating unit was installed in 1996.

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. 38-A within a national, regional, and local context.

According to facilities records, Building No. 38-A was built in 1901 near the waterfront at the Pensacola Navy Yard. Associated with nearby machine shops and seaplane erecting shops, the building's construction marks a brief period of renewed activity at the yard following the Spanish-American War in 1898. The building served the navy yard as a powerhouse, and later served NAS Pensacola as a blacksmith shop through at least 1954, after which it was used as a plant maintenance shop.

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 the Bureau of Yards and Docks (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] International developments in the Gulf region kept hope alive for Pensacola. French attempts to finance the construction of the Panama Canal during the 1880s and 1890s finally ended when the United States took over the project in 1904. Progress on the project, which did not end until 1914, elicited much anticipation for increased commercial trade from the Gulf to the Pacific, to be accompanied by more Naval activity to protect American interests at sea. At NAS Pensacola, the closest U.S. naval facility to the canal, plans for development included the construction of several buildings. 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 Works Progress Administration (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 the Public Works Administration (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

Official property records list Building No. 38-A's construction date as 1901. However, annual reports of BuDocks do not directly support that date. It is likely that Building 38-A was constructed sometime

between 1901 and 1907 for the Construction and Repair Department at the Pensacola Navy Yard.[69] Building No. 38-A originally housed the boiler and engine rooms for Building No. 38, a machine shop built in 1882. The architectural plans originated with BuDocks, and were likely standard designs modified to fit local conditions. The contractor is not known. The building bears a resemblance to several other structures built at the Pensacola Navy Yard, including Building No. 26, a foundry built in 1882.

After 1916, Building No. 38-A is consistently labeled on installation maps as a Blacksmith Shop. At some point prior to 1919, likely when the building's use changed, the interior wall separating the original boiler room from the "dynamo" room was removed, creating an uninterrupted interior bay. The smokestack sitting next to the boiler room in a small shed-roof wing was removed during this time, as well. The building's original gabled monitors were removed during the period between 1919 and 1948. The building also underwent alterations to exterior doorways and windows during this period (*Figures 6* and *7*).

Official property records indicate that Building No. 38-A had been converted to a plant maintenance shop by 1963. It later served waterfront operations functions in the 1990s. Interior modifications that took place in the 1990s included the partitioning of the building's open interior space. Unsightly electrical equipment has encroached on several of the building's exterior facades.

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April to May 2005

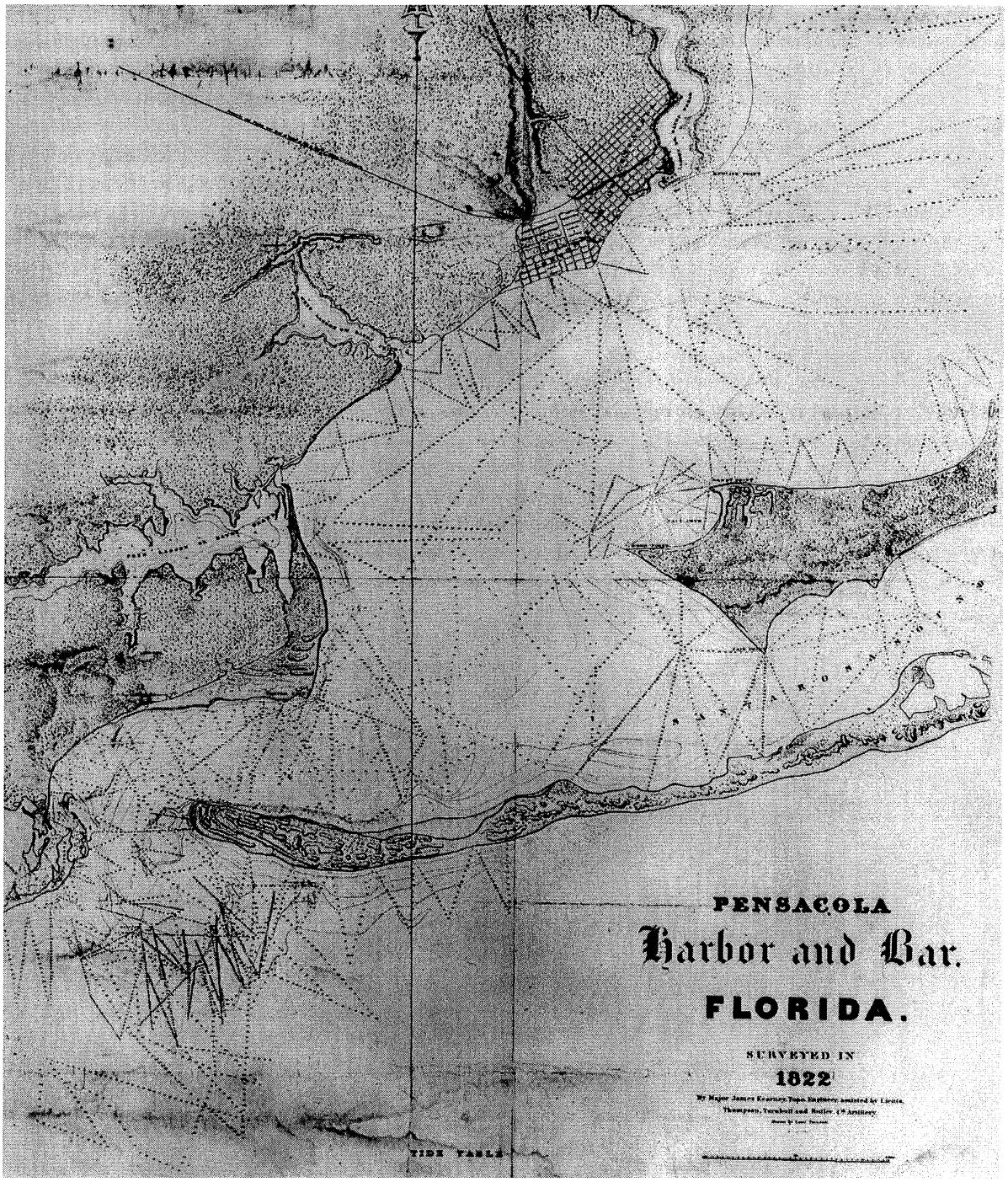
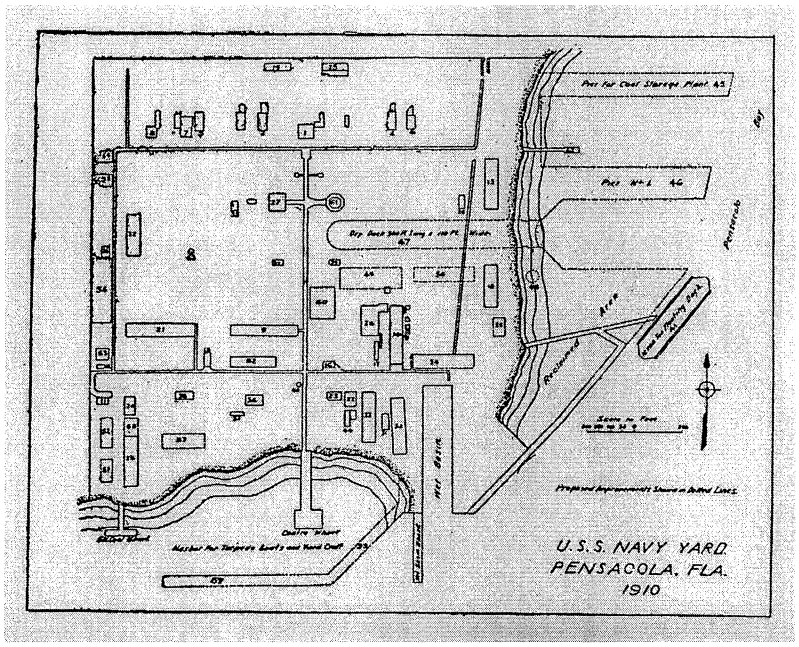


Figure 1. Map and Tide Table of the Pensacola Bay surveyed by the U.S. Army 4th Artillery in 1822, a year after Spain's transfer of Florida to the United States (Map courtesy of the Public Affairs Office, NAS Pensacola, Florida).

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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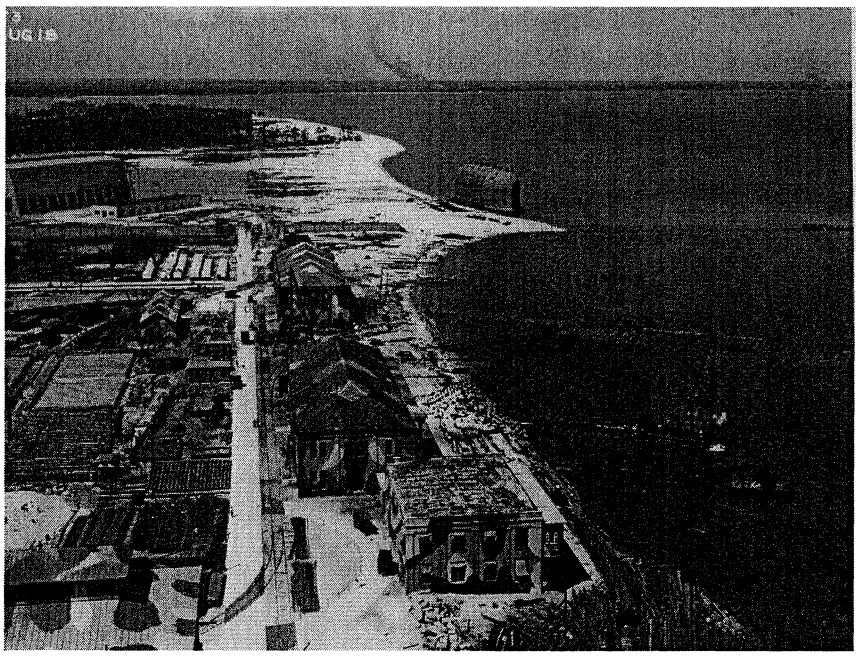

Figure 4. Bird's-eye view of NAS Pensacola in 1918 (facing northeast), with buildings painted in camouflage patterns to avoid aerial detection by enemies during World War I. The large building moored at the shoreline is a floating dirigible hangar (Photo courtesy of the Public Affairs Office, NAS Pensacola, 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. View of Building No. 38-A from the north in 1919, with Pensacola Bay in the background and Building No. 38, a machine shop, to the left. The building was painted in camouflage patterns as a precaution during World War I (Photograph Collection, Public Affairs Office, NAS Pensacola).

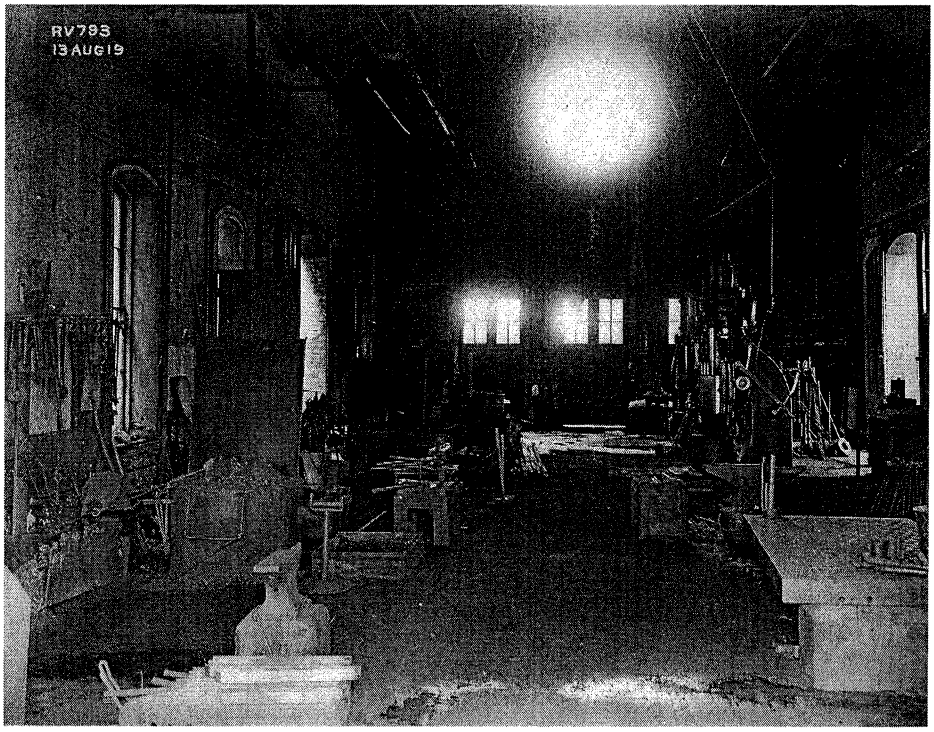

Figure 7. Interior view of the Blacksmith Shop, Building No. 38-A in 1919 (Photograph Collection, Public Affairs Office, NAS Pensacola).

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Building No. 38-A is a one-story, front-gabled, rectangular-plan building. The resource utilizes load-bearing masonry construction and has a granite, continuous-perimeter foundation wall. Exterior decorative detailing includes segmental-arched limestone window and door lentils, limestone window sills, a galvanized metal cornice at the building's north and south facade gable ends and along the roof/wall junction on the east and west facades, and circular windows with limestone surrounds on the building's north and south facades.

2. Condition of fabric: The overall condition of the building is fair. Bricks on all facades are spalling and broken, and mortar is deteriorating throughout. Much of the southern half of the roof is missing as a result of damage sustained during Hurricane Ivan. Windows and doors on all facades also suffered damage during the hurricane. Interior damage consists of missing flooring, ceiling, and wall finishes. Remaining wall and ceiling finishes exhibit mildew and staining as a result of flooding and moisture retention. All but one interior door is gone, and interior wall framing has been damaged.

B. Description of Exterior:

1. Overall dimensions: Building No. 38-A is a one-story, rectangular-plan resource that measures 70'-1" x 31'-3". The building has a symmetrical, three-bay primary (north) facade.

2. Foundations: The resource sits atop a granite, continuous-perimeter foundation wall with interior granite and concrete footings.

3. Walls: The building's exterior walls are load-bearing brick masonry. The face brick are set in a common bond pattern with a header course every sixth course. The north, south, and east facades are unpainted, while the west facade is painted white. A prominent metal cornice is located along the north and south facade's gable ends and along the roof/wall junction on the east and west facades. Below the cornice is a single brick belt course. Metal pipes and electrical equipment are located on the north, south, and east facades.

4. Structural system: Building No. 38-A features 17"-thick, load-bearing masonry walls. The gabled roof is constructed of a steel truss system. Steel C5x9 members replaced existing 5" x 9" roof purlins during roof repairs in 1976. The foundation is a granite, continuous-perimeter foundation wall with interior granite and concrete footings. An independent concrete slab forms the building's interior floor.

5. Chimneys: Building No. 38-A has two roof vents that were installed in 1997. These vents are 16" double-wall, metal, boiler ventilation stack, each topped with a ventilated roof thimble and a weatherproof cap.

6. Openings:

   a. Doorways and doors: Building No. 38A has three exterior doorways. Each of the building's doorways is topped by a decorative segmental arched limestone lintel. The building's primary entrance is located on the north facade. The doorway measures 7'-11"

x 11'-4". Prior to Hurricane Ivan, this doorway consisted of a set of paired wood doors. Each door had a single 2'-5-3/4" x 7'-3" wood pilot door with three-light vision panels. Currently, only one of the doors remains. A second entrance, located on the building's east facade measures 5'-11" x 10'-6". This doorway consists of a set of paired, wood, rail-and-stile doors and is topped by a five-light, wood-frame transom. Each door is 1-3/4" thick and has four lights. Extant door hardware includes metal hinges (three per door), knob locks, and bolts. Due to damage sustained by Hurricane Ivan, most lights are missing from this doorway. Additionally, one door is missing a wood panel. A third entrance, located on the building's south facade, measures 3'-10" x 10'-0". This doorway has a single 43-1/2" x 95" wood, rail-and-stile door that is topped by a three-light, wood-frame transom. The doorway's transom is missing one light due to Hurricane Ivan. The door is also missing several of its panels. Extant hardware includes metal hinges, knob, lockset, and closer.

b. Windows: Windows are 3'-11" x 6'-0", six-over-six-light, wood-sash units. Windows on the building's north, east, and west facades are 1'-9-1/2" above finished floor while those on the south facade are 3'-10" above finished floor. All windows are topped with decorative limestone segmental arched lentils and have limestone sills. Concrete masonry units enclose one window opening on the building's west facade. One window on this facade has also been covered with a plywood panel. Additionally, decorative circular windows with limestone surrounds on the north and south facades have had their openings enclosed. Hurricane Ivan caused damage to many of the building's windows. For example, one window on the north facade has a missing bottom sash; windows on west and east facades are missing lights.

7. Roof:

a. Shape, covering: Building No. 38-A features a front-gabled roof. The roof is covered with composition shingles on felt and a 3/4" plywood deck. The southern edge of the roof has been severely damaged by the hurricane. The cornice, eaves, shingles, and decking are gone in this portion leaving the purlins exposed.

b. Cornice, eaves: The building's roof has closed eaves with a prominent galvanized metal, painted cornice at the north and south facade gable ends and along the roof/wall junction on the east and west facades. The cornice forms a pediment at the building's north facade. A portion of the cornice and eaves is no longer extant on the south facade, leaving the roof's purlins exposed. In addition, small portions of the eaves on the west facade are gone as a result of Hurricane Ivan.

C. Description of Interior:

1. Floor plans: Building No. 38-A houses a total of 2,183 square feet and is partitioned into four rooms. Wood-frame partition walls enclose a 14'-4" x 9'-6" office in the building's northeast corner. A larger office, located in the building's southwest corner, measures 16-0"x 12'-0". This room is also enclosed by a wood-frame partition wall. A single metal-frame partition wall that is constructed of three 5/8" studs placed 16" on center divides the building's central space into two additional rooms.

2. Flooring: At the time of the field survey, all flooring had been removed due to damage sustained by Hurricane Ivan, leaving the building's concrete subfloor exposed. However, the presence of adhesive indicates that, prior to Hurricane Ivan, vinyl composition tile covered Building No. 38-A's floors.

3. Wall and ceiling finish: The building's partition walls are finished with gypsum board, while the brick walls are covered with plaster applied to wire lath. All walls are painted white. The building has a suspended acoustical tile ceiling system with 24" x 24" tiles. The building's walls and ceiling have sustained significant damage due to Hurricane Ivan. Portions of the building's roof are gone, leaving insulation and ceiling materials directly exposed to the elements. Large portions of ceiling are missing acoustical tiles and insulation. Portions of gypsum board on the building's partition walls are also missing. Additionally, studs on the western half of the building's metal-frame partition wall are bent.

4. Openings:

   a. Doorways and doors: The only interior door that remains is located in the northeast office. The door is a single, hollow-metal Dutch door that is set in a metal frame. This door, which measures 3'-0" x 7'-0", has two metal hinges, a metal knob, and metal lockset deadbolt.

6. Decorative interior features: No interior decorative features observed during the field survey.

7. Mechanical equipment:

   a. Heating, air-conditioning, ventilation: Prior to Hurricane Ivan, the building was cooled by five-package air-conditioning units. Currently only three of these units remain. Two, 42"-diameter three-speed pendant ceiling fans also remain. The building is heated by two gas-fired units that are suspended from roof structure by metal threaded rods. Each has a metal double-wall ventilation stack.

   b. Lighting: Fluorescent light fixtures with acrylic lenses are located within the ceiling grid in all rooms.

   c. Plumbing: Current floor plans do not note any plumbing fixtures located within Building No. 38-A.

D. Site:

1. General setting and orientation: Building No. 38-A is situated in the southeast corner of the Naval Air Station within the Pensacola Naval Air Station Historic District, on the south side of South Avenue. The resource, which is oriented on a north/south axis, is directly east of Building No. 38. A chain-link fence encloses the rear or south portion of the building, while an electrical substation is directly north of the building. Paved parking lots are directly to the building's north and west.

2. Historic landscape design: Building No. 38-A is located within a grouping of industrial buildings, and original construction drawings did not provide a landscape design for the surrounding site.

U.S. NAVAL AIR STATION, BLACKSMITH SHOP
(U.S. Naval Air Station, Building No. 38-A)
HABS No. FL-497 (Page 25)

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HHM
April to May 2005

NOTES

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[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.
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[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.
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(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.
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[42] Pearce, *U.S. Navy in Pensacola*, 159.
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[44] Pearce, *U.S. Navy in Pensacola*, 158.
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[46] Annual Reports of Expenditures and Operations, Commandant to BuDocks, Pensacola, Florida, June 30, 1920, 33-34, NAVFAC Archive, Port Hueneme.
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[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.
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[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.
[69] Bureau of Yards and Docks Annual Report, Navy Yard, Pensacola, Florida, October 1, 1901, NAVFAC Archives, Port Hueneme.

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 March and April 2005.

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

D. Original architectural drawings: All original architectural drawings are held at the National Archives (NARA), Cartographic and Architectural Unit, at College Park, Maryland. All alteration and renovation drawings for Building No. 38-A 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.

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

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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:

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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. 38-A at U.S. Naval Air Station Pensacola, Florida, was undertaken from March to April 2005 by HHM of Austin, Texas, in accordance with a Memorandum of Agreement among the Department of the Navy (DON), NAS Pensacola, the Florida State Historic Preservation Officer, and the National Park Service. DON, Naval Facilities Engineering Command, Engineering Field Division South (NAVFAC EFD SOUTH), Charleston, South Carolina, sponsored the project. Ron N. Johnson, Registered Preservation Architect, Head of Cultural Resources Branch, and Historic Preservation Officer for NAVFAC EFD SOUTH managed it. 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 executed under the direction of Karen Hughes (HHM), Senior Architectural Historian and Jennifer Ross (HHM), Architectural Historian. Jennifer Ross (HHM) and C. Lynn Smith (HHM), Architectural Historian; conducted the fieldwork. Olivia Chacón (HHM), Architectural Historian prepared the historic context, and Justin Edgington, Historian (HHM) conducted technical reviews. Jennifer Ross (HHM) prepared the architectural component, and Beth Valenzuela (HHM), Architectural Intern, conducted technical reviews. Anna Madrona (HHM) authored the statement of significance. Lori Smith (HHM), Copy Editor and Production Manager; Julio Chacón (HHM), Graphic Artist; Sara Sabzevari (HHM), Production Assistant; and Tara Dudley (HHM) Architectural Historian completed editing, report layout, and graphics for the project. Large-format photography was undertaken by Karen Hughes (HHM).