

U.S. NAVAL AIR STATION, EQUIPMENT SHOPS & OFFICES
(Administration & General Offices)
(Building No. 45)
206 South Avenue
Pensacola
Escambia County
Florida

HABS FL-512
FL-512

HABS
FL-512

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
SOUTHEAST REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
100 Alabama St. NW
Atlanta, GA 30303

HISTORIC AMERICAN BUILDINGS SURVEY

U.S. NAVAL AIR STATION, EQUIPMENT SHOPS & OFFICES

(U.S. Naval Air Station, Administration & General Offices)

(U.S. Naval Air Station, Building No. 45)

HABS No. FL-512

- Location: 206 South Avenue
Pensacola
Escambia County
Florida
- USGS Fort Barrancas Quadrant, Universal Transverse Mercator Coordinates:
Zone 16, 474328E 3357158N
- Present Owner: United States of America
Department of the Navy (DON)
2713 Mitscher Rd. SW
Suite 300 Anacostia Annex (Building No. 168)
Washington, D.C. 20373-5802
- Present Occupant: Naval Recruiting Orientation Unit (NORU) and Navy Legal Services occupied the facility prior to Hurricane Ivan (September 2004). The building is currently vacant.
- Present Use: Administrative offices and classroom space for NORU and Navy Legal Services prior to Hurricane Ivan, but the building is not currently used.
- Significance: Building No. 45 was constructed as the Equipment Shop and Offices in 1905-06 and, for only a brief period of time, was directly related to the mission of the Pensacola Navy Yard. The Bureau of Yards and Docks (BuDocks) provided architectural plans for Building No. 45, and Algernon Blair, a Montgomery, Alabama-based firm, served as contractor. Located in the southeastern corner of the historic navy yard on South Avenue just north of the Wet Basin, Building No. 45 was constructed at a time when the Navy was also erecting other large, industrial buildings, such as Building No. 47 (the Power Plant, HABS No. FL-249). The placement of Building No. 45 near the Wet Basin was critical to its mission-related function, which was to repair sails, flags, and riggings on naval vessels. Maritime tracks led from the Wet Basin to Building No. 45's east facade to facilitate repairs. Like the nearby and contemporaneous Power Plant, Building No. 45 featured a steel framing system with brick infill, which was an early application of fire-proofing design technologies in industrial buildings. Other noteworthy original architectural details of Building No. 45 included detailed exterior brickwork that contrasted with limestone, granite, and terra-cotta ornamentation on all three floors, and a monitor, which originally ran the length of the building.
- Following its completion, Building No. 45 served a vital mission-related function, but after a brief closure of the yard from 1911 to 1914, its function changed to accommodate the re-designation of the yard as Naval Aeronautical

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Station Pensacola. After the 1917 hurricane that struck the Gulf Coast, Building No. 45 moved into a mission-support role as administrative offices, storage, and operational support. NAS Pensacola frequently rotated tenants in and out of Building No. 45 as the need arose. Tenants ranged from radio and telephone operators, to Public Works, the Department of Aerology, Disbursing Office, and the Commandant, Executive Officer, and associated headquarters-related administrative operations. In the late 1980s, Naval Air Station (NAS) Pensacola Legal Services and NORU became the last major tenants of Building No. 45.

Building No. 45 is noteworthy primarily for its classically inspired architectural design and features, but also because it possesses important historical associations that reflect the installation's operation as a navy yard and later as a naval air station. Despite major alterations to the exterior, such as removal of the monitor in 1960 and the original windows in 1971, Building No. 45 is a good example of the Classical Revival style. It provides a tangible link to the resurgence of the yard and maritime service at the turn-of-the-century and to naval aviation training through both World Wars and the Cold War. Building No. 45 is located in the southeastern section of NAS Pensacola, within the boundaries of the Pensacola Naval Air Station Historic District, which was designated a National Historic Landmark (NHL) in 1976.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date(s) of erection: Building No. 45 was constructed from 1905 to 1906, according to a Property Record Card on file at NAS Pensacola and Annual Reports to BuDocks from this period.
2. Architect(s): The architect for Building No. 45 is not known. However, the original architectural plans indicate that BuDocks supplied the drawings.
3. Original and subsequent owners, occupants, uses: DON; original use as shops and offices for the Bureau of Equipment, Department of Construction and Repair (1906-11); administrative offices, classrooms, storage, barracks, and operational support (ca. 1914-2004); the resource is currently vacant.
4. Builder, contractor, suppliers: The contractor for Building No. 45 was Algernon Blair of Montgomery, Alabama. Suppliers for the construction project are not known.¹
5. Original plans and construction: Architectural plans dated April 1904 indicate that the resource, erected as a 287'-4" x 61'-6" rectangular-plan building, originally housed shops and office spaces for the Bureau of Equipment. As built, Building No. 45 was a full three stories in height with a mezzanine level. The ground floor consisted of a central unpartitioned electrical machine shop that was flanked to the north and south by smaller partitioned shops and a restroom on the north side. Two staircases and two elevators in the building's east end and a single staircase in the southwestern corner provided access to the building's upper two-

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and-one-half stories. The mezzanine floor, located in the building's eastern portion between the first and second stories, contained a series of partitioned storage rooms, linearly aligned along the north and south walls, while the second floor contained an open rigging loft and a joiner shop in the western portion and a suite of offices, a vault, and a restroom in the east end. The third floor's open plan, free of interior columns, housed a sail loft with three partitioned rooms (a restroom, storeroom, and office) in the northeastern corner. The building's primary entrance, originally located on the east facade, was a set of paired, full-height, wood rail-and-stile doors with wood panels and four-light vision panels. Entrances were on the building's north and south facades and featured wood lintels with dentil detailing and round-arched multi-light wood sash transoms. Original windows were paired wood sash casement windows on the second and third stories. The first floor had paired wood sash casement windows that were flanked on either side with fixed multi-light windows. The first floor openings featured decorative wood lintels and round-arched wood sash transoms. Second-floor casement windows were topped by pivoting, eight-light transom windows. Exterior walls were clad in brick with granite, limestone, and terra-cotta decorative detailing. The building's hipped roof was covered with unglazed red terra-cotta tiles and was originally topped with a hipped-roof monitor that extended the full length of the ridge. The roof also featured deep overhanging eaves with decorative triangular brackets and copper gutters with downspouts that arched from the gutter at the end of the deep overhanging eave to become flush with the building facade.

Architectural drawings for later additions and alterations are on file with Hill-Griffin at NAS Pensacola (Building No. 458), Pensacola, Florida. An early renovation drawing, as well as specifications associated with the building's original architectural drawings, is held at the National Archives Records Administration (NARA), College Park, Maryland.

An entry in the July 1, 1939, edition of the *Detailed Inventory of Naval Shore Facilities* indicates that the original construction cost for Building No. 45 was \$162,618.00. Building No. 45 currently exhibits a rectangular plan and remains similar in form to its original appearance. Over time, however, the building has undergone numerous alterations including the replacement of original exterior doors and windows and the removal of its hipped-roof monitor. Building No. 45's interior space has also been extensively modified, and a small one-story mechanical enclosure has been added to the building's south facade.

6. Alterations and additions: According to drawings dated 1916, the building's primary function had been changed from vessel repair shops to warehouse/storage space and associated offices. In support of its new use, two sets of paired horizontal-sliding doors on the north facade were removed and replaced with overhead doors. Loading platforms leading to each of these doorways were added. Also, former shops on the first floor were used as offices for the shipping and receiving clerk and for the head storekeeper. It appears that the original elevators were removed by 1916.

Between 1918 and 1920, the building underwent further alteration to its interior space to support its new functions. Large racks were added to the first story to facilitate storage uses. Also, the eastern portion of the first floor was left open for auto storage. Wood-frame partition walls were constructed to enclose a post office in the northeastern corner on the first story, directly east of the main staircase. Additionally, the original south-central elevator was removed and replaced with a staircase to the mezzanine from the first floor. A second

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staircase that led from the mezzanine to the first floor was added to the mezzanine's west end. On the second story, new wood-frame and hollow-clay tile partition walls were added throughout to provide new office spaces. New wood-frame partition walls were also added to the formerly open third-story space to provide a new administrative office for the Supply and Accounting Department, a meteorological lab, and a blueprint room along the southern wall. Along the north wall new rooms included a paint shop, a shower room, a ladies dressing room, and a file room. A central corridor extending the length of the floor was also added during this renovation.

According to plans dating from 1933, a suite of rooms on the third story, in the northeastern corner, was converted for use as office space for radio communications. New rooms added to this suite include a communications officer's office, an associated private bathroom, and a radio room. This drawing also indicates that sometime between 1918 and 1933, rooms along the north walls on the third story were converted for use as a women's restroom, a women's toilet, a janitor's room, and a women's lunch room.

Architectural plans from 1938 indicate that a new Disbursement Office was added to the southwestern portion of the first floor. The space included a counter, behind which were a safety cage, a vault, and an open workspace. The vault measured 11'-4" x 9'-10" and was constructed of reinforced concrete. The vault featured two steel doors—a "day screen" opened into the vault and a separate hinged door opened out into the workspace. On the building's third story, in the southwestern corner, a suite of rooms enclosed by wood-frame partitions was added to house a telephone exchange during this period. The new rooms included an operator's workspace, an equipment room, and a battery room. Also added to this suite were two closets and a telephone booth.

Architectural plans indicate that in 1939 a new staircase that connected the mezzanine to the second story was added to the building's east end. The staircase was composed of two parts—a 5'-6"-wide straight-run stair from the first floor to the mezzanine, and a 4'-3"-wide doglegged stair from the mezzanine to the second floor. The straight-run stairs had fifteen treads and sixteen risers. The doglegged stairs had eight treads and nine risers on the first run; six treads and seven risers for the second run. The two runs were separated by two, 4'-1" x 8'-4" intermediate landing. Landings were constructed of concrete slabs supported by steel channels. The steel staircase featured a steel stringer covered with plaster at the straight-run stair only (exposed at the doglegged stair) and a 2'-9"-high metal balustrade with decorative metal paneled newel posts. Treads were metal pan filled with concrete. A catwalk was also added to the mezzanine during this year.

In 1941-42, according to architectural plans, rooms were added to the eastern portion of the attic/monitor space to accommodate aerological functions. Rooms included an instrument room, a main office, a workshop, a strikers bunkroom, a storeroom, a bathroom, and a petty officer bunk room. This space also had two staircases that led to the third story below. A third staircase led to an exterior porch that was on the easternmost building's roof. An additional renovation from this period included the replacement of a 17'-0" x 52'-6" portion of the mezzanine's flooring. In addition to depicting the new aerology rooms and alterations to the mezzanine, the plans indicate that by 1942 the building's first floor housed print shops and a disbursing office on its west end and an office for a yard officer, a large open garage space, a police office, and a defense stamps office in the east portion. The mezzanine had been

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converted from storehouses to offices for the base intelligence officer and support staff. The building's second story housed the commandant's office and associated operations offices and training rooms. Third-story rooms during this period included a telephone switchboard room, a clerical office, a Public Works officer's office, and an office for the senior assistant to the Public Works Officers in the western portion and the communications suite in the eastern portion.

Architectural plans from 1946 indicate that a 6'-9-3/4"-high storm warning antenna was added to the roof.

In 1951 and 1952, according to architectural plans from these dates, between 1945 and 1952, all war-related operations and administrative functions were removed. During this period, the first floor retained its garage to the east end and disbursing offices and personnel offices in the west end. However, new spaces, located in the north-central portion of the first story and west of the garage, included offices for the Red Cross field directors and legal officers, as well as a restroom and a lounge. The mezzanine now housed a Public Works file room to the east that was flanked by an aviation safety room; and yard mail and duplicating branch offices, a conference room with a vault, to the south; and an NAS file room, credit union office, basic special services office, bunk room, and storeroom to the north. The second floor primary housed offices and training rooms for Naval Air Basic Training (NABT) and NAS. The third-floor space was composed of a central corridor with communications suites in the eastern portion. West of these offices, along the north wall, were restrooms and a suite of administrative offices for NABT Public Works. Along the south walls were a telephone exchange, battery room, blueprint room, storage/photostat room, Public Works real estate and property room, and a Public Works engineering and contractor file room. Aerological offices remained in the attic space.

Architectural plans from 1954 indicate that an electrical room that housed four new electrical transformers was added to the building's south facade. The wing, which measured 22'-8" x 8'-5", was constructed of load-bearing masonry and sat on a reinforced concrete perimeter beam. The interior floor was a concrete slab, and the roof was a 4" reinforced concrete slab that was covered with a built-up roof system. The primary entrance, located on the south facade, was a set of paired hollow metal doors.

In 1957, a new electric elevator was installed at the northeastern portion of the building, in the same location as the elevator noted in the original drawings. The structure, which measured 6'-1" x 8'-2", was enclosed in a shaft constructed of 8"-thick, plastered hollow-clay tile walls. The structure also included a flat-roof mechanical penthouse. A below-grade concrete slab on concrete footing served as the structure's foundation. The installation of this elevator necessitated the removal and rebuilding of a portion of the building's original northeastern corner staircase and the 1939 staircase from the mezzanine to the second and third floors.

In 1960, according to architectural plans from this date, the building's original roof monitor was removed and a new low-slope gabled roof deck that was covered with four-ply, built-up roofing and a gravel surface was added. Six plastic dome skylights and four attic ventilators were installed during this renovation. Also, added to the east end of the new roof deck was a 3'-6"-high wood walkway and a plastic dome hatch that opened to an existing staircase

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leading to the attic space below. The existing metal roofing that covered the roof was removed and replaced with composition shingles. The storm-warning antenna was also relocated during this renovation as well.

Architectural plans indicate that in 1962 the communications suite, located in the eastern end of the third story, was renovated by the removal of partition walls in order to support five new office spaces.

From 1967 to 1969, according to architectural plans, the first-floor disbursing office was renovated with the addition of new counters and the removal of some partitions to create an open workspace. The first story was also renovated with the addition of a galley/concession in the eastern portion of the first floor. The renovation included the installation of an aluminum-frame storefront entry and vinyl tile flooring. The area was also rewired. The western portion of the second floor was renovated to include offices for training officers, operations, academics officers, and plans storage. Additionally, the Public Works offices, formerly located in the southwestern corner of the third story, were renovated with the replacement of wood-frame partitions with new metal units. New offices included a reception area, telephone equipment room, Assistant Chief of Staff (A.C. of S.) office, and nine additional partitioned offices. During this period, the HVAC system was upgraded in the renovated areas on the first, second, and third floors as part of the same construction project. Work included the installation of new ductwork and condensing units. Old air-conditioning units were removed to accommodate the new exhaust fans. Portions of the original sashes were removed from exterior windows and door transoms and their openings were enclosed with louvered vents or plywood panels.

In 1970, new metal-frame partitions were added to the central portion of the second story to accommodate new office space for the A.C. of S. The first-story space was also altered with the addition of a new duty office in the southeastern portion of the space, directly west of the main lobby. Also added in 1970, the 1939 straight-run stair was removed and a new staircase at the east end of the mezzanine was installed to provide access between the mezzanine and the first-floor lobby. The straight-run staircase was composed of two flights of stairs separated by a single landing. The 4'-0" x 4'-0" landing was constructed of a concrete slab, while the treads were constructed of concrete-filled metal pans. The stairway's steel stringer had a plaster finish. The lobby's north wall, in addition to the walls of the mezzanine-level foyer, was refinished with new plywood paneling. A second staircase added during this period connected the mezzanine to the second, third, and fourth stories. The staircase, located in the building's east end, was enclosed in a concrete-block stairwell. This doglegged staircase featured four flights of stairs extending in opposite directions and two full landings. The landings were constructed of 3"-thick concrete slabs, and treads were concrete-filled metal pan treads. The 2'-9"-high balustrade was constructed of 1-1/2" aluminum pipe rails and balusters.

Architectural plans from 1972 detail alterations to existing restrooms. The alterations represent the current configuration of the second- and third-floor restrooms for Building No. 45. As part of the renovations, new metal toilet partitions were installed, as well as new vinyl floor tile and a suspended acoustical ceiling. An 8'-6" x 12'-2" partitioned lounge was constructed in the third-floor women's restroom.

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According to architectural plans that date from ca. 1971-73, all of the building's original exterior windows were removed and replaced with the current aluminum-sash, single-hung, one-over-one units. Additionally, on the first story, all original door and window transoms were removed and replaced with combination fixed and single-hung, aluminum-sash units and all original window and door lintels were replaced with 1/4"-thick cement asbestos boxed panels. Transoms on the second and third story were removed and their openings enclosed with 1/4"-thick cement asbestos boxed panels. In addition to the removal of all windows, the building's exterior doors were replaced with the current aluminum-frame storefront entries.

In 1977, new exterior overhead doors and associated single hinged doors leading to the garage area in the east end of the first story were added. Specifically, two 8'-0" wide x 7'-0" high sectioned metal doors—one on the south facade and one on the north facade—were installed. A single hinged metal flush-panel door was installed to the east of each entrance.

Architectural plans indicate that in 1984 new offices for Navy Legal Services were created in the western portion of the third floor.

In 1989, according to architectural plans from that year, the building underwent yet another alteration to its interior space. In the western half of the first story, partitions were installed to accommodate new classrooms and offices. New lighting, electrical wiring, carpeting, ceiling tiles, and doors were added in this area, and walls were painted. New HVAC ductwork was also added to the first-story space. The plans indicate that by this period the first-story space had taken on its current room configuration, with a central corridor stretching the full length of the space. Partitioned offices flanked the corridor to the north and south. The garage area that had formerly encompassed much of the first floor's east end had been replaced by a canteen/galley area, USO offices, and lobby/quarterdeck. Additionally, the drawings indicate that the mezzanine primarily housed offices for NORU by 1989. On the building's third story, in the south-central portion, metal-frame partitions were added to create a number of new offices for Navy Legal Services including a research room, a conference room, a library, a storage room, a reception/room waiting area, a command/master chief's office, four trial council offices, and a head command service office. Most finishes on the third story were also replaced during this renovation and new lighting, electrical wiring, and HVAC ductwork was installed.

In 2000, a new elevator was added to the building's east end. The structure included a single hydraulic elevator in the northeastern portion of the building replacing the 1957 elevator. The elevator's paired hollow metal doors opened to a cab that featured brushed stainless-steel wall panels and handrails, a luminous ceiling with black frame, and vinyl composition-tile flooring.

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

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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. 45 within a national, regional, and local context.

Building No. 45 was originally constructed in 1905-06 as the Equipment Shop and Offices for the Pensacola Navy Yard. The Classical Revival-styled building had three-floors, a mezzanine level, and a monitor. Upon its completion, Building No. 45 supported critical mission-related functions and shops for electrical and mechanical repairs, sails, flags, riggings, and plumbing, as well as fifteen naval stores and a set of marine tracks linking the building to the Wet Basin. The Pensacola Navy Yard closed in 1911, but reopened three years later as the Navy's first naval aeronautical station to train aviators. Following the mission change, Building No. 45 was converted to house administrative office, storage, and operational support facilities. Over the next eighty years, Building No. 45 functioned in a support role, and its ability to house multiple, unrelated operations contributed to the building's diverse tenant history. Sometime in the 1920s, Public Works and NAS Pensacola's commandant and executive officer became major tenants. In 1941, Building No. 45 became home to additional functions, some of which were mission-related, like the Department of Aerology, located in the monitor. After the war, a Code Center opened and linked NAS Pensacola to vessels at sea. During the Cold War period, NAS Pensacola undertook renovations of Building No. 45, including removal of the monitor in 1960 and replacement of original windows in 1971. The last major tenant change occurred in 1989, when headquarters-related functions moved to Building No. 624 and NORU and Navy Legal Services moved into the building. They were the major tenants when

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Hurricane Ivan struck in September 2004, which flooded Building No. 45 and caused wind damage. As a result of the hurricane, Building No. 45 is currently vacant.

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.² 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 Bateria San Antonio (San Antonio Battery) in 1797—a solid brick water battery of semicircular shape designed as a gun emplacement facing the bay.³ 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-Onís 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.⁴

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.⁵ 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.”⁶ 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

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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.⁷

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.⁸

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.⁹ 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."¹⁰ 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."¹¹

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

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yard. It would appear that the defensive forts benefited from a comprehensive design by the U.S. Corps of Engineers.¹²

Annual Reports from the 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.¹³

An act of Congress dated July 1, 1844, authorized construction of the permanent wharf, although little action seems to have been taken afterward.¹⁴ 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.¹⁵ 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.¹⁶ 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.¹⁷

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

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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.¹⁸ 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.¹⁹

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....²⁰

Accommodation of the officers was in fact one of the most pressing needs at the navy yard in the late war years. When Commandant Ulysses Smith arrived at the destroyed navy yard in spring 1863, he was forced to find lodging in one of the ships docked at the wharf for repairs, for lack of shelter on land. In a letter to the Chief of BuDocks, he makes the first mention of repairing the kitchens, which later developed into the existing officers' quarters:

I shall endeavor before [ten days'] time to fit up for myself a residence in a kitchen, and for some of the officers a residence in a stable; these being the only two buildings which can at a reasonable cost and in a short time be made available for our use. All the dwelling houses have been destroyed."²¹

A request to BuDocks sixteen months later by Smith's replacement, Commandant James Armstrong, revealed that previous requests for repairs had never been approved by the Navy. He asks for authority to make repairs to several kitchens, which "can be made to answer temporarily by roofing and flooring and closing them against the weather."²² The terse reply of Chief of BuDocks James Smith indicates the Navy's general attitude towards the yard:

As yet, the Pensacola Yard is temporary, and therefore, the improvements [to officers' quarters] are to be made for temporary work only. You are authorized to make such accommodations as are *absolutely necessary for the officers, on the most economical plan* (emphasis in the original).²³

The struggle for funding to upgrade the temporary status of the yard is reflected during the subsequent years by ongoing requests for better officers' housing. In the meantime, officers assigned to the yard dealt with their poor housing by improvising small improvements to the surviving kitchens and stables of the destroyed quarters.

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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.”²⁴ 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, still consisted of the brick kitchens of the old quarters with makeshift porches and sheds added for increased living space. In 1874 and 1875, BuDocks approved funding for permanent improvements to the quarters consisting of second-story additions and galleries, plus re-roofing, repainting and general repairs as needed to make comfortable family residences for the officers. Despite the improvements, one visitor to the yard in 1881 called the lower floors of the improved quarters “uninhabitable.”²⁵

Despite Pensacola’s status 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 seventeen-year hiatus from active service.²⁶ 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.²⁷

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.²⁸ 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

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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*).²⁹

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 1913.³⁰

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.³¹

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.³²

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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 1915.³³ 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."³⁴ 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.³⁵

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.³⁶ 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, 1914.³⁷

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."³⁸ 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.³⁹

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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.⁴⁰ 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."⁴¹ 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.⁴² 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.⁴³ 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.⁴⁴

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."⁴⁵ In fact, most naval aviators serving in Europe spent their missions patrolling coastlines for mines and submarines, and bombing submarine bases.⁴⁶ 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.⁴⁷

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.⁴⁸ 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.⁴⁹ 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

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(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.⁵⁰ 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.⁵¹ 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 resodded in 1923 to accommodate landplanes. It was enlarged again in 1926.⁵² 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.⁵³

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.⁵⁴

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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.⁵⁵ 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.⁵⁶

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 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 helped 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.⁵⁷

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, 1935.⁵⁸ 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.”⁵⁹ 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.”⁶⁰

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.”⁶¹ In addition, the 457 workers employed on the job helped to prepare the new Corry Field on leased property northwest of the station.⁶² 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.”⁶³ In 1938

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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.”⁶⁴ 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 15,000.⁶⁵

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 1942.⁶⁶ 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

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\$70,000.00 each.⁶⁷ 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.⁶⁸

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."⁶⁹ 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 1974.⁷⁰

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.⁷¹

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

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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.⁷²

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

Planning for Building No. 45, the Equipment Shop and Offices, was conceived at a time when expectations of future naval activity in the Gulf of Mexico were high. The Pensacola Navy Yard had just been reopened after seventeen years in caretaker status, soon after the conclusion of the Spanish-American War. The conflict, along with construction of the Panama Canal in 1904, demonstrated the strategic importance of a naval presence in the Gulf Region. BuDocks generated conceptual drawings for Building No. 45 in 1903, followed by more detailed plans the next year. Although Algernon Blair, of Montgomery, Alabama, was awarded the contract to construct the building, work was delayed by fourteen months on the \$120,000.00 building due to a yellow fever epidemic according to BuDocks Annual Reports. By 1905, construction was underway.⁷³ A hurricane hit the Pensacola Navy Yard in October 1906, causing flooding and wind damage throughout the yard.⁷⁴ A historic photo of Building No. 45 following the hurricane showed the building was largely, if not completely finished. The photo did not reveal any significant damage to the building, and it is not known if construction was complete at that time. When it opened, Building No. 45 contained a combination sail-rigging loft, storehouse, offices, and workshops for use by the Bureau of Equipment, which included the Department of Construction and Repair at the yard. Since the sail-rigging shop was destroyed during the 1906 hurricane, NAS Pensacola incorporated those functions into Building No. 45.⁷⁵

The Equipment Shops and Offices were constructed simultaneously to work on other large, mission-related industrial buildings, such as renovations for Building No. 27, the Coal House (HABS No. FL-247), and Building No. 47, the new Power Plant (HABS No. FL-249). Building No. 45 utilized a structural system that was relatively new at the time of its construction. Like the nearby Power Plant, Building No. 45 featured a steel-framing system with brick infill, and detailed exterior brickwork contrasted with limestone, granite, and terra-cotta. Interior riveted columns were encased in 2" of cinder concrete. The components of this structural system were an early form of fireproofing for steel-framed buildings, a technology developed in the late 1800s. Its usage at the turn of the century on Pensacola industrial properties was an early application of this technology. Originally, Building No. 45 featured a monitor that ran the length of the building and served as an attic space. The hipped roof and attic were framed with steel roof trusses and purlins, which further aided the fire-proofing qualities of Building No. 45.⁷⁶

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Building No. 45 originally served as an industrial facility for the repair and drying of sails from naval vessels seeking repair at the Pensacola Navy Yard. It contained shops for sails, flags, and riggings as well as fifteen rooms for naval stores on the mezzanine level. The three-story, Classical Revival-styled, industrial building was located in the southeastern corner of the navy yard on South Avenue just north of the Wet Basin. A set of marine tracks, which were likely used to tow vessels to the interior workshops for repair services, led from the Wet Basin to Building No. 45's east facade. In addition to the marine tracks, Building No. 45's first floor housed the electrical mechanical shop and plumbing offices. Building No. 45's second floor contained the rigging loft, and the third floor housed the sail loft.⁷⁷

When the Pensacola Navy Yard officially closed in 1911 and reopened three years later as Naval Aeronautical Station Pensacola, the Navy made use of the existing buildings for new uses. As the Navy modernized its fleet, the Gulf Squadrons no longer depended on the repair services and shops found in Building No. 45. In 1916, NAS Pensacola was hit by another hurricane, which damaged many buildings at the station, including Building No. 45 (*Figure 6*). In the months following the hurricane and through 1917, the Navy funded renovations and new construction. During this period, NAS Pensacola renovated Building No. 45 and converted it from industrial use to office and administrative space.⁷⁸ By 1917, the building was known as "Central Offices and Storage House," and by 1918 the demands of World War I (*Figure 7*) dictated that part of the building serve as a Marine barracks to accommodate the influx of personnel arriving at the station for training.⁷⁹ In the same year, the post office was temporarily housed on the first floor until station labor completed construction of Building No. 223, the permanent base Post Office (HABS No. FL-514). Sometime in the 1920s, Building No. 45 was used primarily for administrative and Public Works functions; however, due to its large size, the building still housed additional operations as training needs arose.

In the 1930s, part of the third floor functioned as a communication room, with space designated for radio and telephone operators that assisted aviators and training operations from NAS Pensacola. As the United States entered World War II, the number of naval aviators training at NAS Pensacola rapidly increased, and the base needed every available building to accommodate heightened training requirements (*Figure 8*). NAS Pensacola renovated the first floor for use by the Disbursing Office, which had to move due to lack of space in Building No. 14.⁸⁰ NAS Pensacola also installed workshops and offices in the uppermost monitor of Building No. 45 for the Department of Aerology, the Navy's department for meteorological tracking and study. The first and second floors contained the disbursing office and two print shops, as well as offices for the Commandant and at least one police officer.⁸¹

After World War II, Building No. 45 served a variety of functions related to administration, storage, and operational support. The first floor had general NAS Pensacola administrative functions, such as a disbursing office, print shop, yard officer space, police office, and garage area that contained the original maritime tracks. The second floor served as administrative headquarters for NAS Pensacola with offices for the Commandant, Executive Officer, aides, a central office space, log room, and Public Works clerical offices. A code center, operational in 1951, linked to ships at sea, and occupied the third floor of Building No. 45. The Department of Aerology was located on the monitor level.⁸² In 1959, NAS Pensacola decided to remove Building No. 45's monitor because it lacked air conditioning. The work was completed the following year. The removal of the monitor left the building with a flat-topped, shallow hipped roof. Other notable alterations to Building No. 45 include the replacement of the original windows in 1971. In order to accomplish this alteration, NAS Pensacola inserted aggregate panels to make the original openings smaller for standard windows.⁸³ For the next twenty years, Building No. 45's diverse tenant

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history continued. The duty office occupied the first floor and the second floor tenants were the Public Affairs Office, safety office, the flag conference room, and personnel workstations filled the remainder of the floor. Other spaces were periodically unoccupied. The last major tenant change occurred in 1989, when NORU and Navy Legal Services took over Building No. 45 and NAS Pensacola administrative headquarters moved to Building No. 624 (*Figure 9*).

In September 2004, Hurricane Ivan struck NAS Pensacola and the old navy yard portion was flooded leaving most buildings, including Building No. 45, damaged. As a result of damage sustained during the hurricane, Building No. 45 is slated for demolition.

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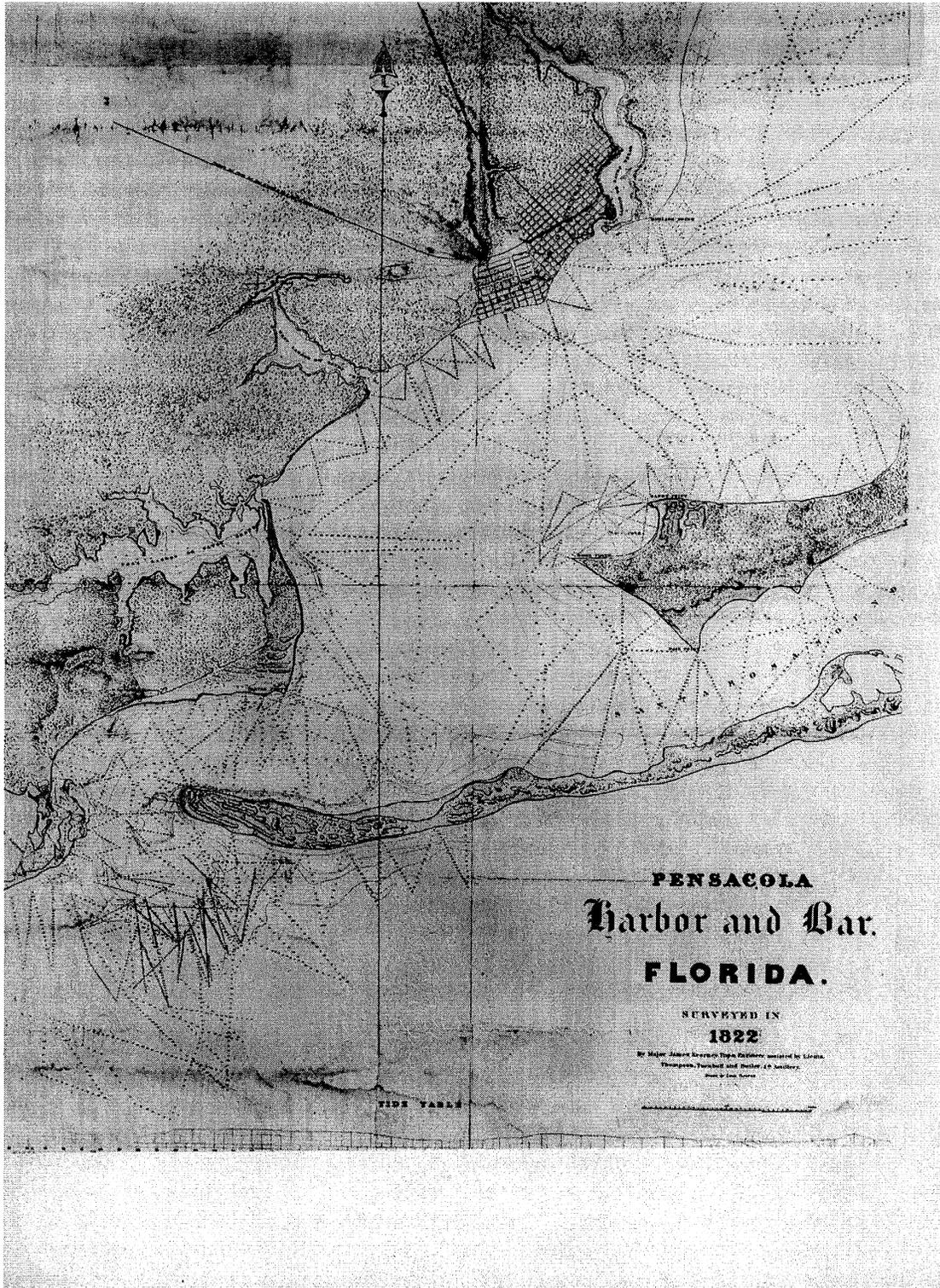
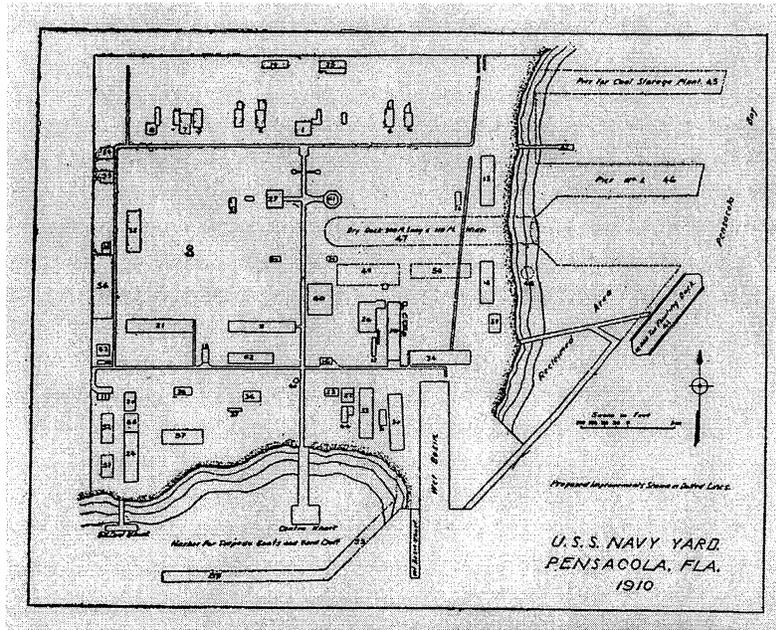


Figure 1. Map and Tide Table of the Pensacola Bay surveyed by the U.S. Army 4th Artillery in 1822, a year after Spain's transfer of Florida to the United States (Map courtesy of the Public Affairs Office, NAS Pensacola, Florida).

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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).



INDEX TO BUILDINGS

U. S. NAVY YARD, 1910

- | | |
|--|--|
| 1. Commandant's Quarters | 36. Sawmill |
| 2. Captain's of Yard Quarters | 37. Dry Kiln |
| 3. Doctor's Quarters | 38. Locomotive shed |
| 4. Naval Constructor's Quarters | 39. Paint Shop |
| 5. Civil Engineer's Quarters | 40. Pump house for cess pool of sewer system |
| 6. Paymaster's Quarters | 41. Floating steel dry dock, 10,000 tons capacity |
| 7. Engineer Officer's Quarters | 42. Bath House |
| 8. Pay Clerk's Quarters | 43. 100,000-gallon water tank, 150 feet elevation |
| 9. Joiners, Boatshop and Shipwrights | 44. Coal and coke storage |
| 10. Foundry and Boilershop | 45. Proposed Pier for coal storage plant |
| 11. Prison | 46. Proposed Pier No. 1 |
| 12. Guardhouse | 47. Graving Dry Dock |
| 13. Now used as storage | 48. Proposed Pump Pit for Dry Dock |
| 14. S. & A. Paint and Oil Room | 49. Proposed building, machine shop |
| 15. Fire Engine House | 50. Proposed building, plumbers and allied trades |
| 16. Not used | 51. Proposed building, storage of combustible material |
| 17. Not used | 52. Proposed building, storage cement |
| 18. Marine Barracks | 53. Proposed building, guardhouse |
| 19. Carriage House | 54. Proposed building, Marine Officers' quarters |
| 20. Cement Storage | 55. Proposed building, Marine Officers' quarters |
| 21. Seamen's Barracks and general storekeeper's storehouse | 56. Proposed building, Marine Barracks |
| 22. Foundry, not used | 57. Proposed building, Sailors' Barracks |
| 23. Copper shop | 58. Proposed extension of timber shed |
| 24. S. & A. lumber shed | 59. Proposed extension of Sea Walls. |
| 25. Stables | 60. Central Power House |
| 26. To be used as Foundry | 61. Dispensary |
| 27. Administration Building | 62. Boat Storage Shed |
| 28. Not used | |
| 29. Cisterns Nos. 1 and 2 | |
| 30. Machine shop | |
| 31. Power House | |
| 32. General storekeeper's storehouse and offices | |
| 33. Shipfitter and blacksmith shop | |
| 34. Electrical, plumbers, ordnance stores, rigging loft; offices and sail loft | |
| 35. Wireless Station | |

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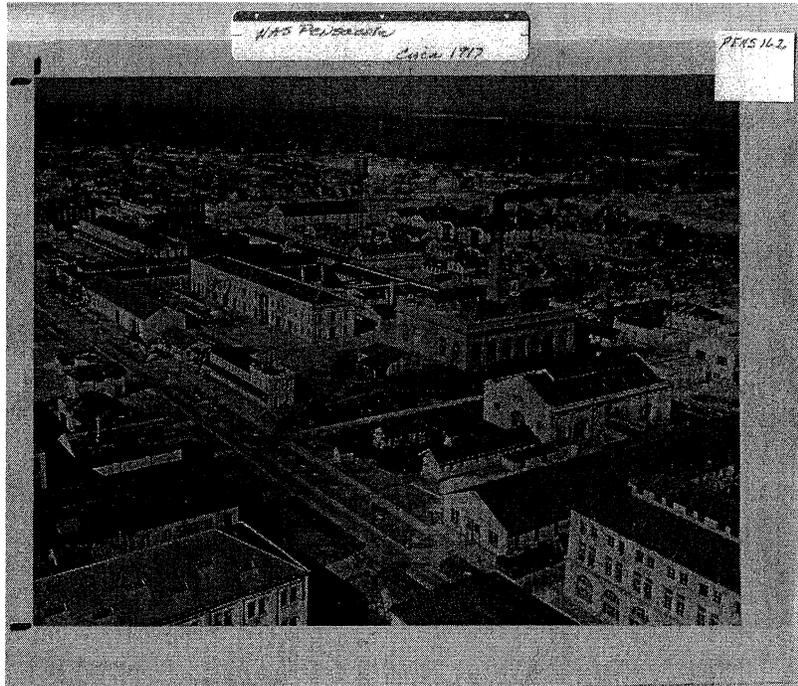


Figure 4. Bird's-eye view of NAS Pensacola ca.1917 (Photo courtesy of the Naval Aviation Museum, NAS Pensacola, Florida).



Figure 5. View of NAS Pensacola ca. 1967 facing east into the National Historic Landmark District. Chevalier Field is to the north (Photo courtesy of the Public Affairs Office, NAS Pensacola).

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Figure 6. Photograph of Building No. 45 following the hurricane of 1916. (Photograph courtesy of NAS Pensacola Public Works Office, Building No. 3560).



Figure 7. Photograph dated July 1918 of NAS Pensacola, when the entire base was painted in camouflage patterns to render buildings invisible to enemy aircraft (Photograph courtesy of NAS Pensacola Public Affairs Office, Building No. 624).

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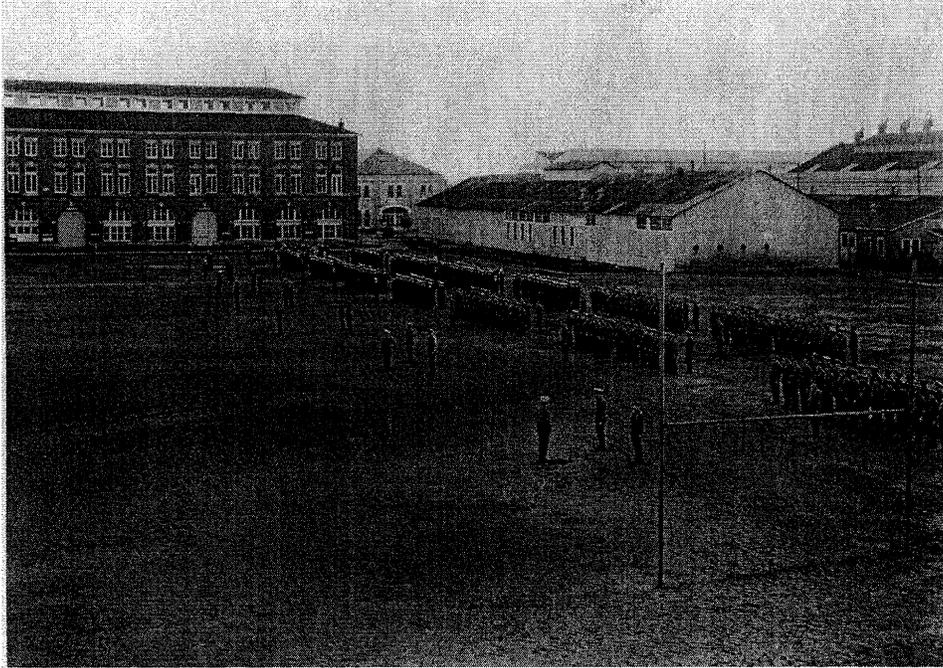


Figure 8. Photograph dated August 1936 during naval cadets drilling outside Building No. 45 (Photo Courtesy of the Naval Aviation Museum, NAS Pensacola, Florida).

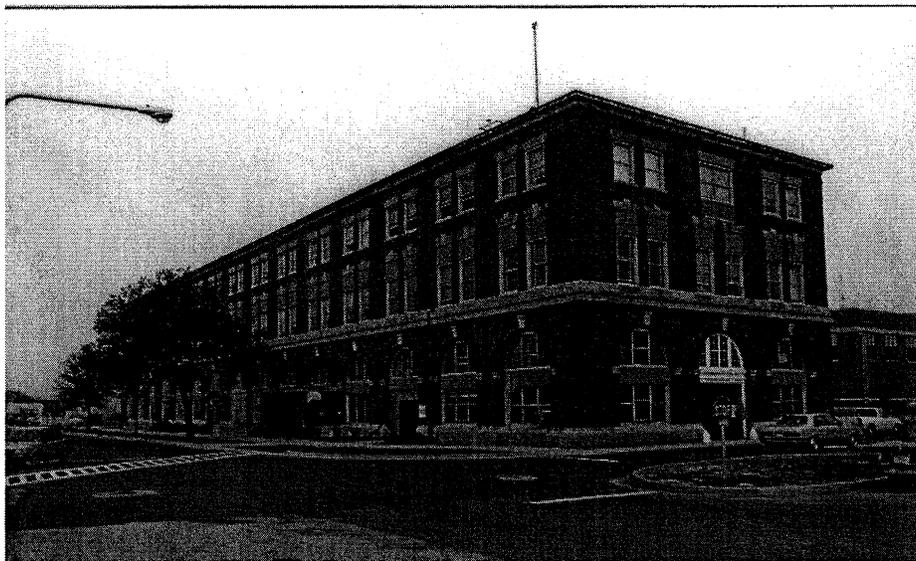


Figure 9. Photograph of Building No. 45 in 1985. (Photograph courtesy of NAS Pensacola Public Works Office, Building No. 3560).

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PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The original portion of Building No. 45, constructed 1905-06, is a three-story, rectangular-plan building with a mezzanine level between the first and second floor. The building's steel-frame structure supports its roof and interior floors, while the masonry (brick) exterior walls are self-supporting. A small electrical room, added to the building's south facade in 1954, is constructed of load-bearing masonry. Exterior walls are clad with brick and have limestone, terra-cotta, and granite decorative detailing. Additional exterior ornamentation includes round-arched window openings and decorative brickwork at the building's first story and flat-arched windows on the second and third-story exterior walls. A hipped roof that is covered with composition shingles tops the building. The building's windows are non-historic, single-hung, fixed aluminum-sash units. Doors are aluminum-frame storefront entries, both single and paired. An original wood-frame transom unit is located above the primary entrance to the east facade.
2. Condition of fabric: Overall, Building No. 45 is in good condition. However, the building's exterior walls exhibit vertical hairline cracks and evidence of brick replacement where structural steel columns are embedded into its perimeter brick walls. Also, efflorescence and deteriorated mortar joints are visible on the interior faces of the building's perimeter walls. In addition, the building sustained minor damage due to Hurricane Ivan, which hit the Gulf Coast region in September 2004. A temporary waterproof protective membrane covers the southeastern portion of the roof where the hurricane's winds damaged fascia boards and roof sheathing. A small number of exterior windows and the west facade doors were also damaged by the hurricane and have been covered with plywood panels. The interior, up to approximately 3' above finished floor of the building's first-floor finishes, suffered significant water damage as a result of hurricane-related flooding. These finishes were subsequently removed. Portions of the flooring on all three levels have also been removed due to water damage sustained as a result of the hurricane.

B. Description of Exterior:

1. Overall dimensions: The original portion of Building No. 45 is three stories in height with a mezzanine level located between the first and second stories. The resource is composed of a rectangular-plan main block that measures 287'-4" x 61'-6" and a small one-story shed-roof addition on the south facade that measures 22'-8" x 8'-5". In total, the building houses 59,913 square feet (s.f.) of usable interior space. Building No. 45's primary (east) facade displays three bays of fenestration.
2. Foundation(s): Architectural drawings that were used to construct the building indicate that exterior walls rest on a foundation that consists of a series of regularly spaced belled concrete piers. Each pier measures 9'-0" x 5'-0" at the base, bearing on multiple driven yellow-pine piles. Arched reinforced concrete grade beams connect the piers and provide additional support to the building's perimeter walls. Interior column bases and floors are supported by 5'-6" x 5'-6" interior concrete piers bearing on multiple driven yellow-pine piles. A small 14' 0" x 14'-0" portion of the first floor that originally functioned as a machine testing area has a

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concrete-slab foundation approximately 7' deep on multiple driven yellow-pine piles. The resource's south facade electrical room addition sits atop a continuous-perimeter concrete beam foundation.

3. Walls: Building No. 45's exterior walls are clad with red-face brick, set in a common bond, with a header course every sixth row. A 3'-2"-high water table, composed of a rusticated granite base and a limestone cap defines the building's base. Brickwork at the first level of the building is expressed in rows of eight stretcher courses followed by a single recessed header course, creating a rusticated first story. The building's first story is further distinguished by round-arched windows accented by brick archivolt, limestone keystones, and limestone impost blocks. Directly above the first-story windows is a terra-cotta cornice that is topped with a belt course of cast limestone. The building's second-story windows feature flat-arched terra-cotta lintels with limestone keystones, while the third-story windows have terra-cotta flat-arch lintels and limestone sills.
4. Structural system: Building No. 45 utilizes fireproof construction of riveted, built-up steel columns encased in unreinforced 1'-7" and 1'3/4"-thick brick walls. The columns support the roof and interior floors, while the brick walls are self-supporting, independent of the steel columns. The south facade electrical room addition is constructed of load-bearing masonry. The building's primary roof is constructed of steel Warren trusses, 17'-6" on center (o.c.), with horizontal and vertical bracing at every third bay. The timber roof deck over wood rafters is bolted to steel purlins. A reinforced concrete slab functions as the roof for the south facade addition. On the building's first and second stories, two rows of fourteen riveted built-up steel columns aligned longitudinally east/west through the center of its interior space provide support to the interior floors. Cement plaster, 2"-thick, encases these columns as a fireproofing measure. The interior floor on each story is a monolithic, slab-and-beam system of cast-in-place cinder concrete that is reinforced with expanded metal mesh. The reinforced concrete floor system consists of a one-way joist slab and encases 20" I-beam girders and 12" I-beam joists. Original interior wall partitions are constructed of structural hollow-clay tile, while later partitions are constructed of conventional wood or metal framing.
5. Porches, stoops: None.
6. Chimneys: None.
7. Openings:
 - a. Doorways and doors: Originally, the building's exterior entrances were paired, hinged and horizontal-sliding wood rail-and-stile doors with wood panels and multi-light vision panels. Round-arched multi-light wood sash transoms topped all first-story doorways, except the primary entrance on the east façade; this entrance featured full-height doors. A second-story exterior doorway, located on the west facade, had a rectangular wood-sash transom and limestone and terra-cotta flat-arched lintel. A third-story doorway, originally located on the building's east and west facades, had a terra-cotta lintel. Over time, all original exterior doors have been removed and replaced with the current aluminum-frame storefront entries. Additionally, all but one of the original wood-frame sashes in the building's transoms has been removed. An original wood transom was relocated above the east entry (it did not exist there originally). Specifically, the building currently has four exterior door types. The primary exterior entry type, located on the first story of the

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south and east facades, includes paired, aluminum-frame, narrow-stile doors with full-length vision panels, fixed aluminum-frame transoms, and full-length, aluminum-frame sidelights. These doorways are typically topped with 1/4"-thick cement-asbestos boxed panels and round-arched transoms composed of combination single-hung and fixed aluminum-frame sashes. A small number have had their transom openings completely enclosed with louvered metal vents and/or 1/4"-thick cement asbestos boxed panels. Secondary entrances include a single, aluminum-frame, wide-stile storefront door with fixed aluminum-frame transom and operable sidelights on the building's north facade and paired aluminum-frame storefront doors with cement-asbestos boxed panels and glazed panels on the second and third stories of the building's west facade. Extant hardware for the building's exterior doors includes exterior pulls, interior panic bars, cylinder locks, and top and bottom hinges. A doorway on the building's east facade, which retains an original round-arched wood-sash transom, was damaged by Hurricane Ivan and subsequently removed. The opening has been covered with plywood panels. Access to the interior space of the electrical room addition is through a set of paired metal grate doors set in a metal frame on its south facade.

- b. Windows and shutters: Windows on Building No. 45 are primarily single-hung, one-over-one, aluminum-sash units, found on the second and third story on all facades. The second-story windows feature flat-arched limestone and terra-cotta lintels. Additionally, all original second-story window transoms have been removed and the openings enclosed with 1/4"-thick cement asbestos boxed panel. The third-story windows have both flat-arched terra-cotta lintels and limestone sills. Window openings on the building's first story contain three-part, one-over-one, single-hung, aluminum-sash units that are topped with flat-arched transoms. Each transom is composed of combination aluminum-sash fixed and single-hung windows. Operable sashes have metal sash locks and lift bars. Each window opening's original wood lintel has been removed and replaced with a 1/4"-thick cement-asbestos boxed panel. Hurricane Ivan damaged a number of the building's windows. The damaged windows were removed and their openings covered with plywood panels.

8. Roof:

- a. Shape, covering: Building No. 45 has a hipped primary roof that is composed of a timber deck sheathed with composition shingles. Portions of the roof sheathing were damaged by Hurricane Ivan and subsequently covered with a temporary waterproof protective membrane. The building's south facade addition has a shed roof that is covered with a built-up roof system.
- b. Cornice, eaves: The building features decorative open wood eaves that project slightly from the exterior walls. As a result of Hurricane Ivan, ninety percent of the building's gutter system and downspouts are missing. Remaining gutters, appended to the east and west facade's eaves are copper with half-round profiles. Two round copper downspouts remain on the building's west facade.
- c. Dormers, cupolas, towers: None.

C. Description of Interior:

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1. Floor plans: Significant alterations to Building No. 45's interior space have been undertaken since its original construction. Refer to Part I, Section A-6 for a description of specific interior alterations and additions. Although Building No. 45's interior space originally featured few partitioned spaces, each floor's interior space configuration currently consists of a central corridor that stretches east/west through the length of the building. Partitioned offices along the north and south walls flank the corridor on all floors. A stairway is located in the northeast corner and the southwest corner on each floor and a single elevator in the building's northeast corner serves all stories. Due to damage sustained during Hurricane Ivan, the building was vacated. The following description is, therefore, based on ca. 2004 drawings provided by the Facilities Management Division (FMD) at NAS Pensacola.
 - a. First floor: Prior to Hurricane Ivan, the building's ground-floor interior space was primarily occupied by NORU. Specifically, the space contains a block of partitioned rooms in the eastern portion of the first story that was dedicated primarily for NORU administrative offices. Directly west of these offices is a former Naval Exchange Galley. A central corridor divides the remaining space in the western portion of the building. Partitioned rooms, formerly used for NORU administrative offices, training, computer support, and storage, flank the corridor to the north and south. Two restrooms are located along the north wall, in the central portion of the first-floor space.
 - b. Mezzanine: The mezzanine level was also primarily dedicated for use by NORU prior to Hurricane Ivan. Similar to the first story, the space contains a suite of offices in its eastern portion with a central corridor that stretches west towards a large mechanical room in the floor's west end.
 - c. Second floor: The second-story space consists primarily of offices and classrooms along the north and south walls that were used by NORU prior to Hurricane Ivan. A central hallway divides these spaces. Two restrooms are located in the north-central portion of this floor.
 - d. Third floor: Similar to the building's lower stories, the third-story space contains a central corridor with partitioned rooms along the north and south walls. Prior to Hurricane Ivan, the western third of the building was used as office, administrative, and training space for NORU. Much of the remaining two-thirds of the third-story space were used as office space and storage by Navy Legal Services. This portion also contained a courtroom. Two bathrooms are located in the north-central portion of this floor.
2. Stairways: Building No. 45 has five interior stairways. The building's main interior stairway, which is located in its southwestern corner, serves the first, second, and third stories. This stairway is a 9'-3-3/4"-wide, cast-iron, dog-legged staircase that features four successive flights of stairs extending in opposite directions. The first- and second-story flights are each separated by a landing that measures 4'0" x 9'-3-3/4". Each landing is constructed of a 3"-thick concrete slab that is reinforced with expanded metal mesh. The stairwell features 7-1/2"-high cast-iron risers, 4'-0"-long cast-iron treads with 1" nosings on closed cast-iron stringers. Treads and risers are covered with texturized rubber. The staircase's 2'-8"-high balustrade is constructed of 1-1/2" galvanized cast-iron pipe handrails and 2" galvanized cast-iron pipe balusters. Cast-iron newel posts with inset panels and decorative egg-and-dart detailing at the newel caps are at each landing. All cast-iron members are painted dark grey. A second staircase, located at the west end of the mezzanine, is the same as the main

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staircase, except that it features a single straight-run flight of stairs that connects the mezzanine to the first floor. These staircases date from the building's original construction.

A third staircase, located in the building's east end near the elevator, is oriented north/south. The structure, which was added to the building in 1970 to connect the mezzanine with the second and third stories, is enclosed in a concrete-block stairwell. This 8'-8"-wide doglegged staircase features four flights of stairs extending in opposite directions and two full landings—one between the mezzanine level and second story and one between the second and third stories. The landings, which measure 8'-8" x 3'-8", are constructed of 3"-thick concrete slabs. Additional elements include 10-1/2" x 4'-1"-long concrete-filled metal pan treads. Treads and risers are covered with texturized rubber. The 2'-9"-high balustrade is constructed of 1-1/2" aluminum pipe rails and balusters.

A fourth staircase, added to the building in 1970, is located on the east end of the mezzanine. The straight-run staircase, which connects the mezzanine to the first-floor quarterdeck below, is oriented east/west. The structure has two flights of stairs, each with seven treads and eight risers that are separated by a single landing. The 4'-0" x 4'-0" landing is constructed of a 3" concrete slab, while the treads, which measure 10-1/2" x 4'-0" and have 1-1/2" nosings, are constructed of concrete-filled metal pans. Risers are 6" high. A single step on the first floor leads to a second concrete-slab landing that measures 4'-0" x 4'-2". Texturized rubber covers the structure's treads and risers. The stairway's stringer is steel with a plaster finish. The staircase also features a balustrade with 3/4" metal pipe balusters and 2-1/2" metal-pipe railing. A second 2-1/2" metal-pipe handrail is bolted to the wall with metal brackets.

The building's fifth staircase, located in the central portion of the third-story corridor, is a straight run that leads from the third story to the building's attic space. The wood-frame staircase has wood stringers, treads, and risers. The staircase also has a single balustrade with wood rails, balusters, and newel posts. This staircase was likely added in 1941, when the Aeorology offices were installed in the building's attic story.

3. **Flooring:** The building's floors are primarily finished with 12" x 12" and 9" x 9" vinyl composition tiles or low-pile, glued-down carpet. On the first story, vinyl tiles are present in the main corridor, as well as in the western partitioned rooms. On the mezzanine level, second story, and third story, floors are typically finished with vinyl tiles in the corridors, while carpeting is found in offices and classrooms. Vinyl tiles are also present in the third-story bathrooms. However, on all floor, large portions of the vinyl tile flooring and carpeting were damaged due to flooding related to Hurricane Ivan, and have been removed. Additional floor finishes include 1" x 1" glazed ceramic tiles in the first- and second-story bathrooms, brick-paver tiles and terra-cotta tiles in the former east end galley space on the first story, and plastic laminate on the third story in a break room. Additionally, there are 6" x 6" ceramic tiles in the first-story quarterdeck, painted concrete in the first-story vault, and wood decking, both painted and unpainted, in the attic.
4. **Wall and ceiling finish:** Walls are typically finished with painted gypsum board. In the second- and third-story corridors and in the main stair hall, the walls are typically painted gypsum board with pre-finished plywood-panel wainscotings. Throughout the first story and in rooms along the south wall of the mezzanine, second-story, and third-story levels, much of the gypsum board has been removed due to damage caused by Hurricane Ivan, thereby

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exposing wood- and metal-stud framing. Historic wood beaded board, hollow-clay-tile, brick, and painted plaster on metal lath have also been exposed on portions where gypsum board has been removed. Additional wall finishes include painted wood beaded board in the attic and in utility closets on all floors, painted concrete in the first-story vault, brick in a second-story bathroom, painted plaster in third-floor bathrooms, and painted gypsum board with 6" x 6" glazed ceramic tile wainscoting in first- and second-story restrooms. The majority of ceilings in Building No. 45 are suspended metal grids with lay-in acoustical tiles. Painted plaster, gypsum board, concrete, concrete-block, and wood beaded board ceilings are also present. Attic ceilings are unfinished, with wood decking and steel rafters exposed.

5. Openings:
 - a. Doorways and doors: Building No. 45's interior doors are typically wood solid-core doors, some with wire-glass vision panels and/or louvered metal vents. These doors are set within metal frames and have metal passage locksets with knobs, panic hardware, kickplates, and closers. Secondary door types include wood solid-core Dutch doors; single flush metal doors; bi-fold wood louvered doors; and a single steel vault door. The building also has three sets of paired, aluminum-frame storefront doors with fixed, aluminum-frame sidelights on the first and second floors.
 - b. Windows: Interior windows are limited to wood-sash, four-light casement units, each with two metal hinges, located in the building's attic and fixed, aluminum-frame sidelights within storefront doorways on the first and second floors.
6. Decorative features and trim: None.
7. Hardware: None.
8. Mechanical equipment:
 - a. Heating, air-conditioning, ventilation: A hot/chilled pipe system with remote chiller and boiler units in addition to two split package units with remote condenser units provide heating and air-conditioning to the building. The hot/chilled pipe system's remote chiller and boiler units are located on the exterior of the building, along the south facade. Remote condensers for the split package units are also along the building's south facade, while the air handlers are located in the attic and mezzanine level, and the chiller and boilers are in a mechanical room in the northeast corner of the first floor. A single-package, air-conditioning unit has also been inserted into a north-facade window opening on the first story.
 - b. Elevators: Building No. 45 was originally built with one elevator in the south-central portion of the building and one in the northeastern corner. These elevators have been removed and replaced with a single hydraulic elevator in the northeastern portion of the building. The elevator's paired hollow-metal doors open to a cab that features brushed, stainless-steel wall panels and handrails, a luminous ceiling with black frame, and vinyl composition-tile flooring.
 - c. Lighting: Lighting for Building No. 45 primarily consists of fluorescent fixtures, both surface-mounted and installed within lay-in acoustical ceiling grids. The building also has two remaining historic incandescent light fixtures, located within the primary staircase, in the northwestern corner.

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- d. Plumbing: Six bathrooms are located in Building No. 45. A men's restroom and women's restroom are in the north-central portion of the building's first floor. The men's restroom contains three water ceramic closets, enclosed in metal toilet partitions, two wall-mounted ceramic urinals, and a single wood cabinet lavatory with ceramic counters and three ceramic bowls. Within the women's first-floor restroom, metal toilet partitions enclose two ceramic water closets. This restroom also contains a single wood cabinet lavatory with ceramic counters and three ceramic bowls. A mechanical room on this floor also contains a single porcelain glazed cast-iron utility sink.

On the second floor, in the north-central portion of the building, is one women's restroom and one men's restroom. Within the women's restroom are three metal toilet partitions, each with one ceramic water closet, and a single lavatory with molded fiberglass countertops and two fiberglass bowls. The men's second-story restroom has three ceramic water closets, enclosed by metal toilet partitions, and a single lavatory with molded-fiberglass countertops and two fiberglass bowls. This bathroom also has two wall-mounted ceramic urinals. The second story has a single ceramic-glazed cast-iron utility sink as well.

The third story has three bathrooms, including a private bathroom in the southwestern portion of the building and a women's bathroom and a men's bathroom in the north-central portion. The private bathroom has a single ceramic water closet and a single lavatory. The third-story women's bathroom has three metal toilet partitions and four ceramic water closets; a single wood cabinet lavatory with a molded-fiberglass countertop and two fiberglass bowls; and a single fiberglass shower. Four metal toilet partitions each enclose a ceramic toilet within the third-story men's bathroom. The bathroom contains four wall-mounted ceramic sinks and a single fiberglass shower. The third floor has a single porcelain-glazed, cast-iron utility sink.

D. Site:

1. General setting and orientation: Building No. 45 is oriented on an east/west axis. It is located in the southeastern section of NAS Pensacola, at the northwestern corner of the intersection of South and East Avenues. The resource, which sits within a complex of primarily administrative buildings, is bounded by a parking lot to the west and north, East Avenue to the east, and South Avenue to the south.
2. Historic landscape design: Historic maps indicate that Building No. 45 was originally sited within an industrial setting. Early drawings did not provide a landscape design for the surrounding site. Currently, small grass yards directly abut the building's north and south facades. A large paved concrete and asphalt parking lot borders the building's west and north facades.
3. Outbuildings: None.

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Date: November 2005

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- ² 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.
- ³ Coleman, *Guardians on the Gulf*, 26-28.
- ⁴ *Ibid.*, 31.
- ⁵ Pearce, *U.S. Navy in Pensacola*, 3.
- ⁶ Coleman, *Guardians on the Gulf*, 5.
- ⁷ Pearce, *U.S. Navy in Pensacola*, 5-10.
- ⁸ *Ibid.*, 11-13.
- ⁹ *Ibid.*, 13, 18.
- ¹⁰ *Ibid.*, 19.
- ¹¹ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 465-466, ed. Paolo Coletta, 466 (Westport: Greenwood Press, 1985).
- ¹² Coleman, *Guardians on the Gulf*, 33-37.
- ¹³ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, November 19, 1844. NAVFAC Archive, Port Hueneme.
- ¹⁴ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 17, 1849. NAVFAC Archive, Port Hueneme.
- ¹⁵ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 466.
- ¹⁶ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 25, 1847. NAVFAC Archive, Port Hueneme.
- ¹⁷ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 466.
- ¹⁸ *Ibid.*, 466-467.
- ¹⁹ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, November 4, 1862, NAVFAC Archive, Port Hueneme.
- ²⁰ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 15, 1864, NAVFAC Archive, Port Hueneme.
- ²¹ Commandant Smith to Chief of the Bureau of Yards and Docks, May 15, 1863, Record Group 71, Entry 5, Records of the Bureau of Yards and Docks, Correspondence with Commandants of Pensacola Navy Yard. NARA, Washington, D.C.
- ²² Commandant Armstrong to Chief of BuDocks, November 23, 1864, Record Group 71, Entry 5. NARA, Washington, D.C.
- ²³ Chief of BuDocks Smith to Commandant Armstrong, December 10, 1864, Record Group 45, Collection of the Office of Naval Records, Subject File U.S. Navy 1775-1910, Navy Yards, NARA, Washington, D.C.
- ²⁴ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1869. NAVFAC Archive, Port Hueneme.
- ²⁵ Pearce, *U.S. Navy in Pensacola*, 95; 98.
- ²⁶ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 26, 1883. NAVFAC Archive, Port Hueneme.
- ²⁷ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1901. NAVFAC Archive, Port Hueneme.
- ²⁸ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 468.
- ²⁹ *Ibid.* 468-469.
- ³⁰ Pearce, *U.S. Navy in Pensacola*, 123-125.
- ³¹ *Ibid.*, 128-129.

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³² Ibid., 132.

³³ Annual Report to the Bureau of Yards and Docks from U.S. Naval Air Station Pensacola, Florida, June 30, 1914. NAVFAC Archive, Port Hueneme.

³⁴ Pearce, *U.S. Navy in Pensacola*, 134.

³⁵ Ibid.

³⁶ Ibid., 135.

³⁷ Ibid., 136.

³⁸ *Air Station News, Pensacola, Florida*. 1930. "An Historical Note," November 20, 4.

³⁹ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1915, 40, 18. NAVFAC Archive, Port Hueneme.

⁴⁰ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1917, NAVFAC Archive, Port Hueneme.

⁴¹ Corliss, Earle. *Activities of the Bureau of Yards and Docks, Navy Department, World War: 1917-1918* (Washington: U.S. Government Printing Office, 1921), 395.

⁴² Ibid., 153.

⁴³ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, 470.

⁴⁴ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1918, NAVFAC Archive, Port Hueneme.

⁴⁵ *Air Station News, Pensacola, Florida*. 1930. "An Historical Note," November 20, 4.

⁴⁶ Pearce, *U.S. Navy in Pensacola*, 159.

⁴⁷ *Air Station News, Pensacola, Florida*. 1930. "An Historical Note," November 20, 4.

⁴⁸ Pearce, *U.S. Navy in Pensacola*, 158.

⁴⁹ Ibid., 157.

⁵⁰ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1920. NAVFAC Archive, Port Hueneme.

⁵¹ Pearce, *U.S. Navy in Pensacola*, 165.

⁵² Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1923. NAVFAC Archive, Port Hueneme; Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1927. NAVFAC Archive, Port Hueneme.

⁵³ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1927. NAVFAC Archive, Port Hueneme.

⁵⁴ Ibid.

⁵⁵ Pearce, *U.S. Navy in Pensacola*, 177-178.

⁵⁶ Ibid., 178-179.

⁵⁷ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1936, 32. NAVFAC Archive, Port Hueneme.

⁵⁸ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1936. 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).

⁵⁹ Ibid., 33.

⁶⁰ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1937. NAVFAC Archive, Port Hueneme.

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⁶² Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1936. NAVFAC Archive, Port Hueneme.

⁶³ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1938, 54. NAVFAC Archive, Port Hueneme.

⁶⁴ Annual Report to the Bureau of Yards and Docks from NAS Pensacola, Florida, June 30, 1939, 19. NAVFAC Archive, Port Hueneme.

⁶⁵ 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.

⁶⁶ Shettle, 177.

⁶⁷ Delaney, Michelle M., ed. *The Cradle: Naval Air Station, Pensacola*, (Pensacola: Pensacola Engraving Company, 1989), 127.

⁶⁸ *Ibid.*, 136.

⁶⁹ *Ibid.*, 149.

⁷⁰ Pearce, George F. "NAS Pensacola, Florida," in *U.S. Naval and Marine Corps Bases*, ed. Paolo Coletta, 474 (Westport: Greenwood Press, 1985).

⁷¹ *Ibid.*

⁷² Pensacola Bay Area Chamber of Commerce, "NAS Pensacola: The Cradle of Naval Aviation," electronic document, www.pensacolachamber.com. Accessed February 18, 2005.

⁷³ *Ibid.*; Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1901; NAVFAC Archive, Port Hueneme. Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1905. NAVFAC Archive, Port Hueneme.

⁷⁴ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1906. NAVFAC Archive, Port Hueneme. Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1907. NAVFAC Archive, Port Hueneme.

⁷⁵ Annual Report of Chief of the Bureau of Yards and Docks to the Secretary of the Navy, Pensacola Navy Yard, October 1, 1901.

⁷⁶ Sparks Engineering, Inc. *Structural Evaluation of Building 45-NAV RCRT ORNT (Sail Repair Shop)*, (Austin: Sparks Engineering Inc., April 28, 2005), pg. 1.

⁷⁷ All tenant usage and space allocation was gleaned from architectural plans on file at Hill-Griffin at NAS Pensacola (Building No. 458).

⁷⁸ Annual Reports to the Bureau of Yards and Docks, NAS Pensacola June 30, 1916. NAVFAC Archive, Port Hueneme; Annual Reports to the Bureau of Yards and Docks, NAS Pensacola June 30, 1917. NAVFAC Archive, Port Hueneme.

⁷⁹ Drawing No. 164, U.S. Navy Aeronautic Station, Pensacola, Florida, June 30, 1917," Map Collection, NAVFAC Archives, Port Hueneme; "Drawing No. 1454, U.S. Naval Air Station, Pensacola, Florida, July 1, 1918," Map Collection, NAVFAC Archives, Port Hueneme).

⁸⁰ Annual Reports to the Bureau of Yards and Docks, NAS Pensacola June 30, 1938. NAVFAC Archive, Port Hueneme.

⁸¹ Ann Annual Reports to the Bureau of Yards and Docks, NAS Pensacola June 30, 1933. NAVFAC Archive, Port Hueneme.

⁸² Building No. 45, Florida Master Site File Form, NAS Pensacola January 31, 1956. Public Works Office (Building No. 3560), NAS Pensacola.

⁸³ Building No. 45, Florida Master Site File Form, NAS Pensacola January 31, 1956. Public Works Office (Building No. 3560), NAS Pensacola.

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PART III. SOURCES OF INFORMATION

A. Architectural Drawings: [Original and/or early architectural] drawings are held at the National Archives and Records Administration Cartographic and Architectural Unit, College Park, Maryland. They are found within Record Group (RG) 71, Records of the Bureau of Yards and Docks. Plans used for this documentation effort include the following:

1. Drawing Nos. 800-29-18 and 800-29-2 -19 to 37, "Sketch Plan of Shops and Offices for Equipment, Building No. 45, at the U.S. Navy Yard, Pensacola, Fla.," July, 1903, and "Building No. 45, Shops and Offices for Equipment at the U.S. Navy Yard, Pensacola, Fla.," April, 1904. The first drawing seems to be a preliminary sketch, while the second, more detailed series of drawings represent the architectural plans on which the building's construction was based. The initial sketch conveys an approach to the use of interior space that was modified in the final plans. The final plans allowed for greater expanses of interior space uninhibited by structural columns or partitions, which was more suited to the repair work on sails and rigging. The first drawing includes the signature of the chief of Bureau of Yards and Docks, and bears Bureau of Yards and Docks No. 2816. The second drawing series includes the signature of the chief of Bureau of Yards and Docks, and bears Bureau of Yards and Docks Nos. 2817 to 2835.

Alteration and renovation drawings for Building No. 45 are on file with contractors Hill-Griffin (Building No. 458) at NAS Pensacola, Pensacola, Florida. Plans for major alterations include the following:

1. Drawings for the 1960 removal of the roof monitor are dated March 7, 1960, with a record drawing date of October 19, 1960, and include Bureau of Yards and Docks Drawing Nos. 874955 to 87495.
2. Drawings for character-altering window replacements and asbestos-panel infills are dated May 6, 1971, with a record drawing date of February 13, 1973, and include NAVFAC Drawing Nos. 5010261 to 5010263.
3. Drawings for the replacement of modern windows and asbestos panels with windows more sympathetic to the original windows are dated May 2, 1991, and include NAVFAC Drawing Nos. 5223360 to 5223361.

B. Historic Views: Photographs are 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, and Record Group 71, Records of the Bureau of Yards and Docks, Still Pictures Unit.

C. Interviews: None conducted.

D. Bibliography:

1. Primary and unpublished sources:

National Archives and Records Administration, Washington, D.C.

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Library. Series 464, Subject Files 1775-1910: Bases, Pensacola, Construction, etc., 1860-1910. National Archives and Records Administration, Washington, D.C.

Record Group 71, Records of the Bureau of Yards and Docks. Entry 5, Letters Received 1842-1885. National Archives and Records Administration, Washington, D.C.

Record Group 71, Records of the Bureau of Yards and Docks. Entry 42, Contracts 1842-1896. National Archives and Records Administration, Washington, D.C.

Record Group 71, Records of the Bureau of Yards and Docks. Records relating to the design and construction of shore establishment facilities, 1824-1963: Drawings 800-3-15 to 800-45-18. Cartographic and Architectural Unit, National Archives and Records Administration, College Park, Maryland.

Record Group 71, Records of the Bureau of Yards and Docks. Still Pictures (General) 1876-1955: Still Pictures Unit, National Archives and Records Administration (NARA), College Park, Maryland.

Naval Facilities Engineering Command 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.

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

NAS Pensacola Public Works Center (Building No. 3560), Pensacola, Florida.

Facilities Files, General.

Facilities Files, Photographs.

Installation Maps, NAS Pensacola, Florida, various dates.

NAS Pensacola Public Works Center (Building No. 3560), Pensacola, Florida.

Photograph Collection.

National Museum of Naval Aviation, Pensacola, Florida.

Photograph Collection.

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

Manuscript and Archival Collections. Rare Books and West Florida Regional Publications.

Map Collection.

Photograph Collections.

U.S. NAVAL AIR STATION, EQUIPMENT SHOPS & OFFICES
(U.S. Naval Air Station, Administration & General Offices)
(U.S. Naval Air Station, Building No. 45)
HABS No. FL-512 (Page 41)

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.

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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.

Sparks Engineering Inc. *Structural Evaluation of Building 45-NAV RCRT ORNT (Sail Repair Shop)*, Austin, Texas: Sparks Engineering Inc., April 28, 2005.

E. Likely sources not yet investigated:

Additional records for the history of the Pensacola Navy Yard and NAS Pensacola may yet be found in other series and subgroups within Record Group 71, in Record Group 72, "Records of the Bureau of Aeronautics" (1911-46), and for later periods, Record Group 181, "Records of Naval Districts and Shore Establishments."

F. Supplemental material:

U.S. NAVAL AIR STATION, EQUIPMENT SHOPS & OFFICES
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None provided.

PART IV. PROJECT INFORMATION

The mitigative documentation of Building No. 45 at NAS Pensacola, Florida, was undertaken from July to October 2005 by HHM Inc, of Austin, Texas, in accordance with a Memorandum of Agreement among 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 Rick Mitchell (HHM), Project Director; Laurie A. Gotcher (HHM), Project Manager; and David Moore (HHM), Quality Assurance Manager. The fieldwork was conducted by Jennifer Ross (HHM), Senior Architectural Historian, and Leah Roberson (HHM), Field Technician. Mrs. Gotcher, Senior Historian, prepared the significance and building history documentation sections, and Ms. Ross, completed the architectural portions. Olivia Chacón (HHM), Architectural Historian, prepared the general historic context. Mr. Mitchell, Ms. Chacón, S. Elizabeth Valenzuela (HHM), Intern Architect, and Anna Madrona (HHM), Senior Historian, conducted technical reviews. Editing, report layout, and graphics were managed by Lori Smith (HHM), Copy Editor and Production Manager, and Julio Chacón (HHM), Graphic Artist. Large-format photography was undertaken by Karen Hughes (HHM), Senior Architectural Historian, and Justin Edgington (HHM), Historian.