

U.S. NAVAL AIR STATION, SEAPLANE HANGAR
(Building No. 71)
Pensacola
Escambia County
Florida

HABS FL-372
FL-372

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FL-372

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

FIELD RECORDS

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, (BUILDING NO. 71)

HABS No. FL-372

Location: National Historic Landmark District
U.S. Naval Air Station, Pensacola Complex
Escambia County, Pensacola, Florida

USGS Fort Barrancas Quadrangle,
Universal Transverse Mercator Coordinates:
474,100 E 3,356,890N

Present Owner: U.S. Navy, Department of Defense
The Pentagon
Washington, D. C.

Present Occupant: Public Works - Hazardous Waste Control.
(North Bay Only - South Bay Abandoned)

Present Use: Hazardous Waste Handling and Storage In
North Hangar Bay - South Bay Abandoned due
to hazardous friable asbestos emitted by
steam pipe lagging.

Statement of
Significance: Building 71, Seaplane Hangar, is a double-
gabled seaplane hangar built in 1916-1918
and located on the waterfront in the old
Navy Yard. Although of no architectural
significance, along with Buildings 72 and 73,
it was the first permanent seaplane hangar
constructed at the first Naval Aeronautic
Station established January 20, 1914.
Until these hangars were built the Navy
relied on tent hangars spread along the
beach from Building 44, Seaplane Erecting
Shop toward the western edge of the Station.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of erection: Building 71 was built in 1916 and doubled in size in 1918. After severe hurricane damage in 1926, hangar door and storm wall modifications were made in 1927, but no other significant alterations were made until the 1940s during World War II.
2. Architect/Builder: Not known.
3. Original and subsequent owners: U.S. Department of the Navy.
4. Builder, contractor, suppliers: Lacawanna was the steel fabricator.
5. Original plans and construction: The original drawings consisted of two sheets titled "HANGARS", Y & D No's 64684 and 64685 respectively, dated September 21, 1915. HABS Field Survey and Measurements indicate that the building was constructed according to the original plans.
6. Alterations and additions: Toilet facilities probably were installed during the period 1916-1917. The 1917 Site Plan (Dwg 68363) shows 4" T.C., Terra Cotta, pipe extending from buildings 71, 72, and 73 to the timber bulkhead (seawall). It is not clear that mezzanine storage and office facilities had been installed in Buildings 71, 72 and 73 before the 1917 drawings for the additional bay were prepared.

1918 The 1918 an addition, which doubled the size, was constructed, extending the hangar to the north. (April 20, 1917 Dwgs 683634 through 68368) It duplicated the original construction with a few exceptions, which included:

Galvalnized steel ventilators were used on the roof instead of copper ventilators.

New concrete pavement was provided to the east and west of the new extension.

The accordion door half-panels at each side jamb, which were previously not fenestrated, were designed with two windows, one above the other, similar to the windows in

the full-door panels.

- 1927 In 1927 two major changes occurred. (December 29, 1926, Dwg 3315, and April 18, 1927 Dwg 103752 thru 103754) The original accordion doors were replaced with sliding leaf doors on the north half of the east side and for the full width of the west side. The south half of the east side in which accordion doors were originally located was permanently closed, and the bottom 7'-2" of the doors sealed inside a 12" thick concrete storm wall leaving the top portion of doors as a permanent wall. A 7'-2" reinforced concrete storm wall was also installed on the south side of the structure.
- 1940 In 1940 small lean-to was added to house toilet facilities at the north side of the hangar (October 24, 1940 Dwg 6763).
- 1941 An addition to the 1940 lean-to was constructed in 1941, for shower room, locker room, workshop and gear locker. (May 21, 1941, Dwg 8496).
- 1942 Automatic sprinkler system added (October 1942, Dwg 20378)
- 1949 Alteration to the cleaning area by addition of ramps, wood elevated floor and drainage. (March 23, 1949, Dwg 26407).
- c. 1964 Heating and ventilation revisions and lean-to alterations (Drawings not located).
- c. 1986 Building repainted (June 17, 1985 Dwg 5134534)

B. Historical Context:

Building 71 is located in the National Historic Landmark District along the waterfront area at the southeast corner within the Pensacola Naval Air Station, which is situated at the western entrance to Pensacola Bay, on the Gulf of Mexico, in the Florida Panhandle. The waterfront area faces south, toward the western end of Santa Rosa Island and the Gulf; it sits on a peninsula which juts into the southernmost portion of the bay. Fort Pickens, a National Historic Landmark, stands across Pensacola Bay, at the western end of Santa Rosa Island, and another National

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Historic Landmark District, Fort San Carlos de Barrancas, is located at the western edge of the Air Station.

Building 71 is one of several hangar buildings and other structures comprising the eight-two acres in the District; there are forty-nine designated historic buildings and structures and seventeen additional non-designated buildings and structures within the District.

Owing to the location's strategic importance, French, British, and Spanish governments each established a military presence in the vicinity. The U. S. Navy maintained the Pensacola Navy Yard there from 1825 to 1911, although the military role of the base was relatively insignificant throughout the nineteenth century. A small installation before World War I, the Navy Yard was enclosed by a high brick wall, constructed in 1837, and surrounded on its inland sides by the villages of Woolsey and Warrington. The Navy Yard closed in 1911, but reopened in 1914 as the Pensacola Naval Aeronautic Station. Renamed the Naval Air Station in 1917, it served as a training center for naval aviators and earned a reputation as the "Cradle of Naval Aviation." The station leaped beyond the walls of the original Navy Yard after the war to incorporate its neighboring villages, which were removed in 1922 and 1931. Amid international tensions in the late 1930s, the station experienced dramatic physical expansion. Graduates of its aviation training program participated in all of the nation's major naval engagements during World War II. The Naval Air Station Pensacola continues to emphasize naval aviation training and currently serves as the headquarters for the Naval Education Training Command.

PART II. ARCHTECTORAL INFORMATION

A. General Statement:

Building 71 was one of the three first permanently seaplane hangars constructed at the first Naval Aeronautic Station which was established January 20, 1914, at Pensacola. These single gable steel framed buildings replaced tent hangars with wood ramps down to the water located along the beach west of Seaplane Erecting Shop Building 44. This construction was part of a \$3.5 million congressional appropriation on August 29, 1915. When war was declared against Germany on April 6, 1917, immediate feverish construction began and by 1918 these hangars were doubled in size, and three more hangars were built including 48, 800 square

yards of concrete pavement along the waterfront. During this period the Navy experimented in using aircraft to locate mines, submarines, drop bank and land on water and on ships. These Hangars remained in use thru the 30's and early 40's when preparation for and involvement in World War II resulted in an enormous expansion and use changes at Naval Air Station Pensacola. Exact date when aircraft cleaning process plant was constructed in south bay is unknown. This building has had industrial uses since becoming obsolete as a hangar.

1. Architectural Character: Building 71 is a plain rectangular double-gabled roof metal framed industrial building. Although of no architectural significance, one of the original government designed and built steel structures of the early nineteen hundreds, initially used to accommodate seaplane development just prior to World War I.
2. Condition of fabric: While the structural systems are in good condition, the exterior asbestos siding and roll roofing is in fair to poor condition. The doors are in fair condition, windows are covered and painted over to match building, or non-operable and in poor condition.

B. Description of Exterior:

1. Overall dimensions: Building 71 is has a rectangular configuration, and is one story (21' 7-1/2" clear height) with the following dimensions: Width: 100' (E-W) Length: 144' (N-S) at centers of columns; Eave height: Approximately 28' 10"; Ridge height: Approximately 31' 10".

The building fronts west. Historically either east or west side opened completely for entry. There are two 72' bays on the front and six 16'-8" bays on the side. Centered on the north side is a lean-to addition 14'-6"x61'-6".

2. Foundations: The steel columns are supported by pyramidal piers connected by foundation walls at perimeter of the building and across the interior line of columns (September 21, 1915 Dwg 64685). Pier: base 4'-6" x 4'-6", top 2'-6" x 2'-6", depth 4'-6". Steel column bears on pier 1'-0" below finish floor and fasten with 4"x 1" diameter x 2'-6" anchor bolts and 4"x4"x 3/8" embedded plate washers. Concrete floor pours around column and down wall 1'-0" to top of 4'-6" deep 1'-0" wide continuous foundation wall. This design causes

column to be rigid on base and transfer overturning loads into the foundation. The floor slab is 5.3 above sea level.

3. Walls: The exterior wall is 1/4" thick corrugated asbestos siding attached to 4" channels 5-1/4#/Ft, set horizontal at 4' centers and attached to columns with 3-1/2 x 3 x 5/16" angle clips. In some locations asbestos siding is replaced with corrugated galvanized steel siding.
4. Structural systems, framing: The building has a quadrangular Pratt- type rivetted steel roof trusses; nominal depth is 7'-2 1/2" at bearing; top chord sloped 1:12 up to the centerline; two nominal 72' clear spans; spacing 16' -8" o.c.; top chord 2 angles 6" x 4" x 7/16" , bottom chord 2 channels 9" x 13.75# and webs 2 angles 2-1/2 x 2 x 5/16". There are six bays with seven trusses forming rigid frames between columns. Roof purlins are 8" channels x 11-1/4" set at 9' centers, the panel points of roof trusses.

Outermost bays on east and west are "X" braced at the lower truss chord with 2 angles 2-1/2"x 2"x 5/16" and cross braced at panel points with angles 5"x 3"x 5/16". At quarter points bottom chords of all trusses are laterally braced with 2 angle 5"x 3"x 5/16". The exterior perimeter walls are not laterally braced. The row of columns across the center of the building are horizontally braced at 10'-10" centers with 2 angles 3-1/2"x 3"x 5/16" and "X" braced with 2 angles 5"x 3-1/2 x 3/16" at end bays and interior bays except lower 10'-10" is open.

5. Porches, stoops, balconies, bulkheads: A lean-to of wood construction is attached to north wall. Exterior finish is corrugated asbestos roof and walls painted to match hangar.
6. Chimneys: None.
7. Openings:
 - a. Doorways and doors: Original accordion hangar doors were removed, except the doors in the south half of the east bay which are fixed in place as a permanent exterior wall above the 7'-2" concrete storm wall. Sliding leaf doors are on the north half of the east side and for the full width of the west side. Access is also provided by main door thru one hangar door each bay - Door on North

full width of the west side. Access is also provided by main door thru one hangar door each bay - Door on North lean-to is framed paneled 1/2 glass - 3'-0" x 6' x 6" flat plate steel and 2 x 2 angles, hinges and padlocks.

- b. Windows and shutters: All windows were removed & covered with corrugated fiberglass panels on the hangar building. Not evident from outside - panels painted to match building siding; however, panels translucent inside. Lean-to windows on north side are wood framed single-hung 12 light.

8. Roof:

- a. Shape, covering: The roof is two-gabled; granular surfaced asphalt roll roofing on double layer 7/8" tongue and groove sheathing laid diagonally and nailed to 4 x 4 timber bolted to purlins. (Original plans indicated asbestos roofing.) At connection of two main bays east-west runs a copper interior roof gutter sloped from center to two large headers (presently galvanized steel) at east and west sides of the hangar.
- b. Cornice, eaves: Eaves extend approximately 11" on north and south ends and 4" on east and west sides.
- c. Dormers, cupolas, towers: Various type large roof vents 5' to 6'-6" high and 4' square at bases are connected by metal duct to ventilating fans and hoods over chemical vants used for cleaning airplane parts. Some vents have fins on rotating hoods which are turned by the wind assuring exhaust opening to face down wind, and no down drafts. Some vents are covered over and some missing hoods. Several are fixed goose neck type.

C. Description of Interior:

- 1. Floor plans: Open areas with no obstructions in north and south bays. The north bay is divided from the south bay by a clay tile partition wall with one access door near east end. A mezzanine office and storage space is located in the south bay at the southeast corner set between the top & lower truss chords, occupying the south 1/2 of one 16'-8" bay of the north and south bays have drainage ditches (trenches) covered

with metal grates, and the concrete floor slopes to these drains. The north bay has 7 curb and chain link fences divided open end spaces along its south wall used to segregate various hazardous materials. There are other curbs along the floor to contain spills, and a concrete block partitioned 1/2 wall area at the north east corner for special chemical handling. The south bay has an abandoned process plant for cleaning aircraft parts. This area was closed off because of the hazard of friable asbestos emitted from deteriorated steam pipe lagging. HABS surveyor and photographer Victor Glazner wore protective breathing apparatus (provided by the Navy) while in this area. There are three processing lines two served by overhead rail and hoist to raise and lower parts into vats and from one vat to another. The processing line on the north side has small 4'x 7' vats and the larger processing line on the south has large 7'x 27' vats. Parallel and centered between the larger processing line is a second large line of tanks not served by the hoist. Attached to the north wall of the building is a lean-to addition which contains restrooms and abandoned dressing rooms being used for storage.

2. Stairways: One set of stairs near south wall that extend from a mechanical equipment platform up approximately 3 1/2' to mezzanine office and storage rooms. The mechanical platform is only accessible by wood ladder near steps.
3. Flooring: Concrete slab smooth finish with metal grate drainage ditches (trenches) in north & south bays - south bay includes sloped concrete ramp up 9-1/2" to wood floor. Elevated (up to 2'-3-1/2") wood and metal grated walkways that extend to and along front of various sizes of cleaning vats, with tops up 3'-1" above wood walkways.
4. Wall and ceiling finish: No ceiling and no wall finishes, exposed structure.
5. Openings:
 - a. Doorways and doors: Mezzanine and doors to lean-to wood framed, wood horizontal panel Colonial type.
 - b. Windows: No interior windows.

Signature Hanger

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6. Decorative features and trim: none
7. Hardware: Standard steel hinges, brass oval knob locksets - P&F Corbin No. CU29 New Britain, Conn.
8. Mechanical equipment:
 - a. Heating, air conditioning, ventilation: Large forced air steam heating units in both bays: North bay, 4 units along North wall; South bay, 3 units along east wall. Also large exhaust vents and ducts to vats to exhaust cleaning solution fumes - discussed also with roof vents.
 - b. Lighting - incandescent fixtures suspended from structure - minimal lighting. Two added explosion proof fixtures in East end of North bay used for hazardous chemical handling.
 - c. Plumbing: original plumbing not evident, except toilets and showers in lean-to at north side

9. Original furnishings: None

D. Site:

1. General setting and orientation: Large doors are orientated east and west, building sets 25' north of seawall. Site all sides of building paved with concrete, except small patches of grass each end of north lean-to.
2. Historic landscape design: None.
3. Outbuildings: none

PART III. SOURCES OF INFORMATION

- A. HABS 1988-89 Measured Drawings, photos, field notebook prepared by Victor W. Glazner, Architect, for U.S. Navy.
- B. Original and/or subsequent drawings held at the Public Works Building No. 3560, Naval Air Station, Pensacola, Florida.

Seaplane Hangars

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September 21, 1915, DWG #64684 Hangars Site Plan, Floor Plan with Upper & Lower Truss Framing & Elevation/Section.

September 21, 1915, DWG #64685 Hangars Framing, Foundation and Door Details.

April 20, 1917, DWG #68363 Aeroplane Hangars Site Plan Locating Additions and New Hangars.

April 20, 1915, DWG #68364 Aeroplane Hangars Elevations, Sections, Foundation & Framing Plans.

April 20, 1917, DWG #68365 Aeroplane Hangars Floor Plans, Section, Mezzanine, Elevation and Framing.

April 20, 1917, DWG #68366 Aeroplane Hangars Section, Foundation, Framing, and Details.

April 20, 1917, DWG #68367 Aeroplane Hangars Door Elevation & Details.

April 20, 1917, DWG #68368 Aeroplane Hangars Floor Plan & Mezzanine Floor Plan of Existing & New Hangars.

December 29, 1926, DWG #3315 Seaplane Hangars Construction Details of Stormwalls.

April 18, 1927, DWG #103752 Hangars 71, 71, 73 General Plan Location of New Steel Rolling Replacement Doors.

April 18, 1927, DWG #103753 Hangars 71, 72, 73, 75 & 76 Details of Door Guides for New Steel Rolling Doors.

April 18, 1927, DWG #103754 Hangars 71, 72, 73, 75 & 76 Details of Door Guides and Door Braces for New Steel Rolling Doors.

October 24, 1940, DWG #6763, Proposed Toilet Addition to North End of Seaplane Hangars No. 71, 72, 73, 75 & 76, Elevations, Floor Plan, Section & Foundation.

May 21, 1941, DWG #8496, Lean-To Additions to North Ends of Seaplane Hangars Buildings 71, 72, 73, 75 76, Floor Plan, Elevations, Sections, Foundation, Electrical, and Existing Toilet Room.

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October 19, 1942, DWG #20378, Seaplane Hangars No. 71 72 & 73
Automatic Sprinkler System, Plan & Section

March 23, 1949, DWG 326407, Building No. 71, Alterations To
Cleaning Area Plan & Details, Floor Plan, Sections, & Details

June 17, 1985, Dwg #5134534 Exterior Repairs and Painting Hangars, Bldgs. 71, 72, 73, 74, 75, 76, 44 and 104, Elevations.

C. Historic views: None.

D. Interviews:

E. Bibliography:

1. Primary and unpublished sources:

Preliminary Case Report, for proposed Demolition and Rehabilitation of Buildings in the National Historic Landmark District, Naval Air Station Pensacola Complex, Pensacola, Florida, Historic Property Associates, St. Augustine, Florida, June 16, 1986, available at Public Works Building, 3560, Naval Air Station, Pensacola, Florida.

2. Secondary and published sources:

The U.S. Navy in Pensacola, From Sailing Ships to Naval Aviation (1825-1930), George F. Pierce, a University of West Florida Book, Pensacola 1980, Library of Congress.

F. Likely sources not yet investigated: None.

PART IV. PROJECT INFORMATION

Documentation prepared by Victor W. Glazner, Architect, Glazner Associates, Inc., for Department of the Navy, Southern Division, Naval Facilities Engineering Command, prior to demolition of the building so that there would be a permanent record of its existence. Recorded under the direction of the National Park Service, Regional Office, Atlanta, Georgia, the project was completed during the Summer of 1989 at the offices of Glazner Associates, Inc., Pensacola, Florida. The project supervisor was Victor Glazner (architect); intern architect was Wayne M. Allen (Auburn University); project historian was Sandra S. Glazner (principal Glazner Associates, Inc.).

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7.5 MINUTE SERIES (10)

