



General Edwin D. Patrick

(originally commissioned as Admiral C.F. Hughes)



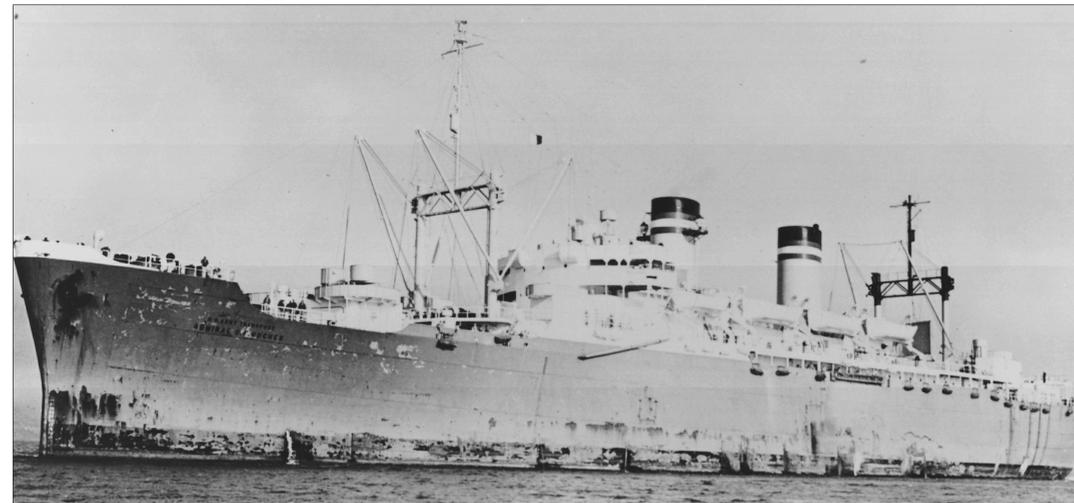
Design Type: P2-SE2-R1

Official Number: AP-124

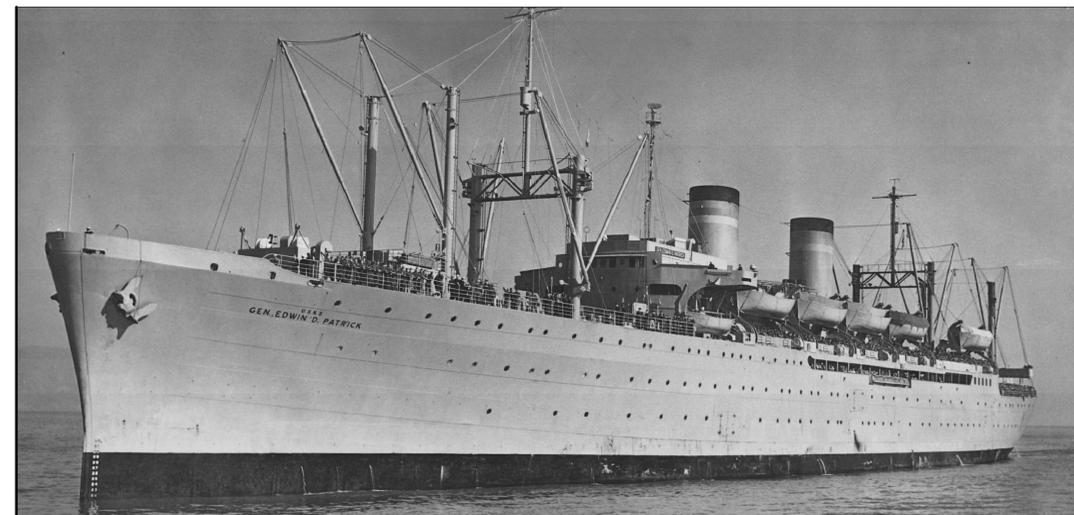
MC-682

PRINCIPLE CHARACTERISTICS

BUILDER: BETHLEHEM-ALAMEDA SHIPYARD, INC.
BUILT: 1943
LOA: 608'-11"
BEAM: 75'-6"
DRAFT: 26'-6"
SPEED: 19 KNOTS
PROPULSION: TWO GENERAL ELECTRIC TURBO-ELECTRIC ENGINE, 18,00-SHAFT HORSEPOWER TWIN PROPELLER
TONNAGE: 15,969 TONS (GROSS)
 12,637 TONS (NET)
DISPLACEMENT: 20,120 TONS (FULL LOAD)
 10,000 TONS (LIGHTWEIGHT)
COMPLEMENT: 32 OFFICERS
 324 ENLISTED
ARMAMENT: 4 SINGLE 5"/38 DUAL PURPOSE GUNS
 4 TWIN 40MM ANTI-AIRCRAFT GUNS
 16 TWIN 20MM ANTI-AIRCRAFT GUNS



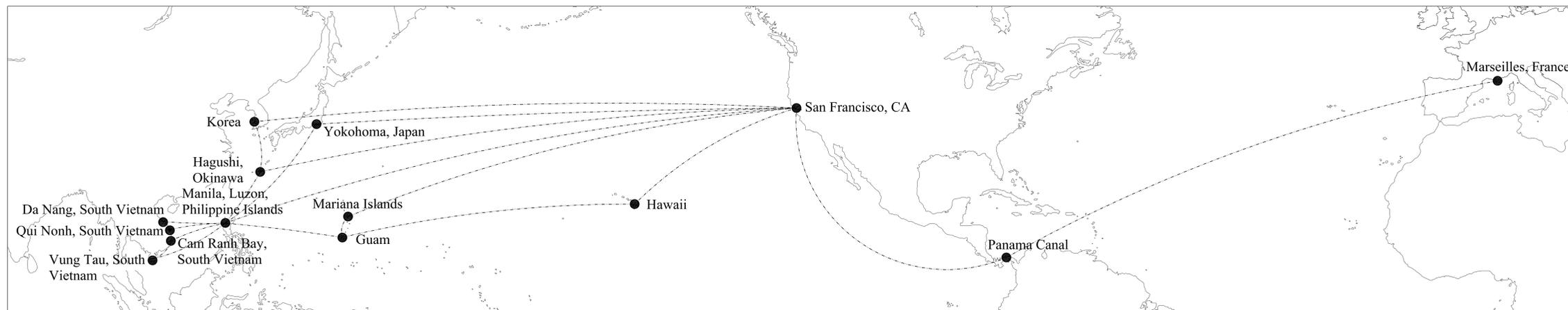
U.S. ARMY TRANSPORT ADMIRAL C.F. HUGHES - CA.1946



U.S.N.S. "GENERAL EDWIN D. PATRICK" - CA.1950

WHEN THE UNITED STATES ENTERED WORLD WAR II, THE U.S. MARITIME COMMISSION GAVE TOP PRIORITY TOWARDS BUILDING TRANSPORTS. LATE IN 1941, VICE ADMIRAL HOWARD L. VICKERY DECIDED THAT TWO YARDS SHOULD BUILD 20 LARGE TRANSPORTS. BETHLEHEM-ALAMEDA WOULD BUILD TEN P2-SE2-R1 SHIPS AND FEDERAL SHIPBUILDING AND DRY DOCK WOULD BUILD TEN P2-S2-R2 SHIPS, BUT BETHLEHEM-ALAMEDA ONLY COMPLETED EIGHT TRANSPORTS. THESE TWO TYPES OF TRANSPORTS WOULD BE THE LARGEST SHIPS PRODUCED BY THE MARITIME COMMISSION DURING THE WAR. GENERAL EDWIN D. PATRICK IS THE SOLE REMAINING SHIP AFLOAT IN ITS CLASS AND REMAINS NOTABLE FOR HER LONGEVITY AS A TROOPSHIP, PARTICIPATING IN BOTH THE KOREAN AND VIETNAM WAR.

THE PROJECT WAS PREPARED UNDER THE DIRECTION OF TODD CROTEAU (HAER MARITIME PROGRAM COORDINATOR). JONATHAN DOWSETT & ASHLEY T. WALKER (HAER CONTRACT ARCHITECTS) GENERATED VESSEL DRAWINGS. BRIAN GROGAN (HAER CONTRACT PHOTOGRAPHER) CREATED LARGE FORMAT PHOTOGRAPHS. A SPECIAL THANKS TO ERHARD KOEHLER (U.S. MARITIME ADMINISTRATION) WHOSE HELP AND ASSISTANCE GREATLY BENEFITED OUR PROJECT



NOTE: COURSES DEPICTED ON MAP ARE ABSTRACTED TO CONNECT LOCATIONS. THEY DO NOT REPRESENT THE EXACT COURSES TRAVELED.

HISTORIC AMERICAN ENGINEERING RECORD

GENERAL EDWIN D. PATRICK
(Admiral C.F. Hughes)
(AP-124)

HAER No. CA-344

Location: Suisun Bay Reserve Fleet, Benicia vicinity, Solano County, California

Type of Craft: P2-SE2-R1/Auxiliary

Trade: Troopship

Class: *Admiral*

Hull No.: AP-124/T-AP-124—MSTS and later MSC

Principal Dimensions: Length (oa): 608'-11"
Beam: 75'-6"
Draft: 26'-6"
Displacement: 20,120 long tons
Gross registered tonnage: 15,969
Net registered tonnage: 12,637
Maximum continuous shaft horsepower: 18,000
Service speed: 19 knots
(The listed dimensions are as built, but it should be noted that draft, displacement, and tonnages were subject to alteration over time as well as variations in measurement.)

Propulsion: Two General Electric turbo-electric engines

Dates of Construction: Keel laying: 29 November 1943
Launching: 27 August 1944
Delivery: 31 January 1945

Designer: U.S. Maritime Commission

Builder: Bethlehem-Alameda Shipyard, Inc., Alameda, California

Present Owner: U.S. Maritime Administration

Disposition: Inactive—National Defense Reserve Fleet

- Significance:** The *General Edwin D. Patrick* is the sole remaining ship afloat in the *Admiral* class and remains notable for its longevity as a troopship participating in World War II as the *Admiral C.F. Hughes* and the Korean and Vietnam wars as the *General Edwin D. Patrick*.
- Historian:** Brian Clayton, winter 2007
- Project Information:** This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The Heritage Documentation Programs of the National Park Service, U.S. Department of the Interior, administers the HAER program.
- The documentation was prepared under the direction of Todd Croteau (HAER Maritime Program Coordinator). Ashley T. Walker (HAER) scanned and reformatted the vessel drawings. Brian Grogan (Photography + Preservation Associates) produced the large-format photographs. Special thanks to Erhard Koehler (U.S. Maritime Administration) whose help and assistance greatly benefitted this project.

BACKGROUND

One of the first priorities of the United States upon entering World War II was the construction of ships. The global experience and ferocity of World War I taught the United States that World War II would be on a grander scale, in more places, involve more people, and require more equipment—total war.¹ During World War II, the U.S. Maritime Commission became a pivotal force in the development and construction of ships, much like the U.S. Shipping Board had been in World War I. Created in 1936, the Maritime Commission succeeded the Shipping Board, but generally followed the same directive: the promotion of U.S. shipping interests. After the United States entered World War II, the Maritime Commission established the “Emergency Program,” a massive ship-construction plan utilizing new and existing shipyards across the United States.²

Under the direction of vice-chairman Adm. Howard L. Vickery, the Maritime Commission developed two classes of transports, the *Admiral* (P2-SE2-R1) and the *General* (P2-S2-R2) classes, and awarded two contracts for the construction of twenty ships in January 1942.³ The commission awarded the first contract to Federal Shipbuilding and Company in Kearny, New Jersey, for ten ships, while the second contract for the remaining ten ships went to Alameda-Bethlehem Shipyard in Alameda, California. The transports were to be used as troopships, but at the conclusion of World War II, they could be converted to combination passenger/cargo liners. Alameda-Bethlehem built the *Admiral* class for American President Lines for operations in the Far East, while Federal built the *General* class for Grace Line or Moore-McCormack for use in South America.⁴

DESIGN OF THE P2 TROOPSHIP

The P2 design was based on two factors: a speed of 19 knots and a light displacement around 10,000 tons. There were differences between the two classes. The ships of the *Admiral* class measured 608'-11" long overall and 75'-6" amidships, with a limiting draft of 26'-6". The *General* class ships, on the other hand, were 622'-7" in overall length and 75'-6" amidships and had a limiting draft of 25'-6". The former carried between 4,650 and 5,000 troops, while the latter carried approximately 5,500 troops. The *General* class had more cargo capacity than the *Admiral* class at 100,000 cubic feet versus 36,000-48,000 cubic feet. The steaming radiuses differed as well at 12,000 for the former and

¹ Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York, NY: Macmillan Publishing Co., Inc., 1973), pp. xxi-xxiii.

² René De La Pedraja, *A Historical Dictionary of the U.S. Merchant Marine and Shipping Industry since the Introduction of Steam* (Westport, CT: Greenwood Press, 1994), pp. 563-566, 629-631. During World War II, the Maritime Commission received 5,777 ships. The commission had issued contracts for 5,601 vessels; private firms built 111 ships while foreign firms built sixty-five.

³ See HAER No. CA-343, *General John Pope* for an example of the *General* class.

⁴ Frederic C. Lane, *Ships for Victory: A History of Shipbuilding under the U.S. Maritime Commission in World War II* (Baltimore, MD: Johns Hopkins Press, 1951), p. 624.

15,000 for the latter. The design characteristics of each ship were based on the proposed routes intended in the post-war period.⁵

DESCRIPTION

To achieve the designed speed of 19 knots, the ship needed two power plants rated at 18,000-shaft horsepower (shp) to drive two shafts. The Maritime Commission decided that the *Admiral* class would have turbo-electric propulsion while the *General* class would have geared turbines at a slightly lower horsepower (17,000 shp). There were two machinery spaces, one forward of the fuel tanks (amidships) and the other aft. Inside the machinery spaces were four boilers—two for each shaft—manufactured by Combustion Engineering. The forced draft boilers used oil to heat steam to 840 degrees Fahrenheit, creating 600 pounds per square inch (psi). The steam pipes fed into two General Electric turbine generators powering the two massive General Electric electric-drives at the stern of the vessel that were rated at 9,000-hp each. There was a CO₂ fire suppression system in the machinery space in the event of fire. The machinery spaces also contained two generator flats and two evaporator flats. Steam powered the eight service generators, and the redundant systems were on the port and starboard sides of the ship. Four were A.C. and rated at 450 volts. The other four were DC, two of which were rated at 120 volts and two at 240 volts. The other two flats supported evaporators for the ship's air conditioning units (which were also redundant) opposite the generator flats.⁶

The bridge deck housed a number of spaces related to the navigation and safety of the vessel. The wheelhouse was located forward and contained an engine-order telegraph, gyro repeater, and helm, which sent electric signals to the steering room where an electric-hydraulic ram turned the rudder. Two bridge wings extended off each side and contained engine-order telegraphs and peloruses. Aft of the wheelhouse were the fire control room on the port side and the chartroom on the starboard side. The radio and radar rooms were in separate rooms, the former port and latter starboard. The battery room was behind the radio and radar rooms.

A majority of space onboard the ships was dedicated to troop berthing, with enough space for 5,217 troops (comprised of sixty-seven officers and 5,150 enlisted personnel) and a crew of 356 (thirty-two officers and 324 enlisted). The ship's officers and engineers resided on the boat deck and below on the promenade deck within the ship's

⁵ L.A. Sawyer and W.H. Mitchell, *From America to United States: The History of the Merchant Ship Types Built in the United States of America Under the Long-Range Programme of the Maritime Commission* (Kendal, UK: World Ship Society, 1979), p. 107.

⁶ Description section based on U.S. Navy, *Ships' Data U.S. Navy Vessels: Auxiliaries, District Craft, and Unclassified Vessels*, Vol. III (Washington, DC: Government Printing Office, 1946), pp. 208-209; Plan Nos. MA21-1 – MA21-12, "The Maritime Administration Collection of Ship Plans (1939-1970)," National Museum of American History, Washington, DC. The designers were concerned with troop safety and compartmentalized the ship to counter flooding, even though it was not economical to split the machinery spaces in commercial ships since it required two engineering crews.

superstructure. Troop officers stayed in cabins on the promenade deck while the troops were allocated space on the “C” deck and the upper portions of the No. 1 hold. Crew accommodations could be found on the “A” and “B” decks in spaces forward of the No. 2 hold. The enlisted troops had “standee bunks,” also called “pipe racks,” that were stacked three or four high and covered with canvas. The bunks were connected by pipes extending from the ceiling to the floor, which strengthened the rows.⁷ To provide adequate ventilation for troops since portholes could not be installed due to security considerations, there was an air conditioning system with 29 miles of ductwork and 106 vents. This was a unique feature for a World War II troopship. The air conditioning units circulated 34 million cubic feet of air an hour, providing adequate ventilation to passengers.⁸

Other crew and troop accommodations included a sizable galley and three separate dining areas designated for the crew, enlisted, and officers. The main galley was located amidships on the “B” deck, along with accompanying preparation spaces. The troop’s main mess hall on the “B” deck contained seating for 316 soldiers, who were served cafeteria style by the cooks. Three smaller mess rooms were located amidships on the “B” deck and used by the ship’s crew; these included the Chief Petty Officer (CPO) mess and two enlisted messes. The ship and troop officers had their meals on the promenade deck in the main dining saloon, which accommodated 204 persons. The men received their meals cafeteria style here as well. Located off the dining facilities were sculleries for the men to deposit their plates and utensils.

Space was allocated in the No. 3 and No. 4 holds for dry and refrigerated stores. The No. 4 hold contained two refrigerated stores on the port and starboard sides with a potato locker in the center. There was also a CO2 room containing bottles of gas to smother an engine room fire, a pump room, and a machinery room housing the refrigeration equipment for the storerooms. Atop the hold were more storerooms: off the port side were the fish, meat, and poultry freezers, and off the starboard side were chilled dairy and milk rooms and a small ice cream freezer. A butcher shop and an ice room were located in the center. Forward of this space were four dry storerooms on the “D” deck in the No. 3 hold, and in the stern section were more compartments for dry stores, Ship’s Service Store goods, and medical supplies, as well as locked cargo spaces. Crewmembers transported food from the storerooms to the galley via an electric elevator forward of hatch No. 4.

⁷ Plan Nos. MA21-1 – MA21-12 indicate the divisions within the ship for crew, passengers, and troops. A description of similar berthing arrangements on U.S. Army ships can be found in Charles Gibson with E. Kay Gibson, *Overseas: U.S. Army Maritime Operations, 1898 through the Fall of the Philippines* (Camden, ME: Ensign Press, 2002), p. 187, footnote 23.

⁸ See also Sawyer and White, *From America to United States*, p. 107. The sides of the ships had to remain enclosed since portholes emitted light and thus could allow the enemy to detect the ship. Portholes could be added as part of the post-war conversion.

Sanitation and health were important considerations when transporting troops to the battlefield. There were sufficient showers, toilets, and washrooms on the ship's five decks, as well as a generous supply of fresh water in holding tanks coupled to a water treatment plant. Four communal toilets and showers were located in the bow and stern on both the "A" and "B" decks. There were additional communal showers, toilets, and washrooms located around the ship in areas where there would be third-class accommodations and where the ship's crew resided. First-class passengers enjoyed private lavatories and showers within their cabins, while the ship's officers and second-class passengers shared the same amenities through adjoining doors. Laundry facilities consisted of a large linen washing facility on the "D" deck behind the motor room at the vessel's stern and another large laundry room was located on the "B" deck at the stern for use by the troops. Two small laundry compartments were located on the upper promenade deck and the "B" deck for passenger use, while two additional facilities were available for the crew on the promenade and "B" decks. There were also two barbershops on the "A" and "C" decks for use by anyone on board. The "A" deck included a hospital. To treat patients for minor or major maladies and to stop the spread of an epidemic (a major fear due to the proximity and number of people onboard the enclosed ship), there were recovery and treatment rooms on the port side. These included a clinic, doctor's office, nurse's station, and pharmacy. Recovery rooms accommodated different groups and cases in separate rooms, such as crew and troops, and infants, children, men, and women passengers. Opposite the clinic on the starboard side was a nursery. For serious injuries or illnesses requiring immediate surgery, an operating room was available behind the aft machinery casing.

Troop and passenger recreation was on the "C" deck and included two large spaces boasting a movie projector and library. On the same deck, troops had access to a Ship's Service Store to purchase personal items. Two day rooms on the "D" deck forward of the galley and an entertainment room with a movie projector in the auditorium on the "A" deck were also available. The promenade deck contained two relaxation areas including a smoking room on the fantail and a lounge connected to the main dining saloon. The ship's officers had their own day room on the boat deck, and there was a children's playroom on the same level in the upper first-class section. The weather deck also offered generous space for outdoor recreation. If necessary, there were two brigs in the bow above cargo hold No. 1 with a fifty-nine-person capacity. A smaller brig in the bosun store area could accommodate six people.

The large size and complexity of the design required adequate onboard repair facilities and storerooms. In the upper sides of both machinery spaces were machine shops for fabricating parts onboard, as well as an electric shop and engineering storerooms. More storage space for the maintenance of the ship was located in the forepeak area of the ship in the bosun's stores.

The ship's eight cargo holds were outfitted with cargo-handling equipment. Eight king posts supported fourteen booms of two sizes that could lift between 5 and 10 tons. The

king posts forward and aft of the superstructure were of A-frame construction with masts extending up from them. Seven of the holds had external hatches and extended down to the "D" deck, while the eighth, the No. 2 hold, extended down an additional deck. Electric winches topside provided the means to lift and lower cargo, while the booms extending off each king post positioned the cargo.

There were numerous tanks in the inner bottom, the bow, and the stern to carry the fuel oil or water that served as ballast. The ship held 25,600 barrels of fuel to allow the maximum cruising radius of 15,000 nautical miles. As the ship consumed fuel, pumps within the holds transferred ballast water into the empty tanks to maintain the correct stability and trim except for the No. 5 hold, which held concrete ballast. The remainder of the tanks had fluctuating fluid levels through the voyages.

Military safety concerns resulted in the placement of numerous life rafts on the bridge and boat decks of the transport ships to accommodate the crew and troops. After World War II, the military upgraded the safety equipment to include lifeboats. There were fourteen lifeboats on the bridge deck beside the officers' berthing quarters. Some measured 30'-8" long and carried seventy-seven people while others were 35' long and carried 135 people. The exceptions were the two forward boats, nos. 3 and 4, which did not have boats stacked on them. They were 35' long with a 135-person capacity. On the boat deck, there were six lifeboats: two located forward of the superstructure (port and starboard) and four aft (port and starboard). The two forward boats were 26' long and carried forty-one people apiece, while the four aft boats were stacked atop one another. These were the same size and had the same capacity as those on the bridge deck.

During World War II, the Maritime Commission had each ship armed with three types of guns (light, medium, and heavy), which were positioned to cover the four angles of attack. On the navigation bridge were four light 20-millimeter Oerlikon anti-aircraft guns beside the first exhaust stack (two port and two starboard) and the same arrangement was found on the aft stack. On the promenade deck were four medium 40-millimeter anti-aircraft guns aft of the main dining saloon (port and starboard). On the bow, there were two 5"/38 dual-purpose guns (port and starboard), and two more were center lined on the fantail as anti-aircraft and anti-ship guns. Ammunition trunks were located in the bottom of the ship for protection, and a basic elevator transported the powder and shells to the guns. After World War II, these wartime features were removed.

As designed, the general arrangement of the ship allowed the Maritime Commission the flexibility to convert the transport into a passenger liner at the end of the war. The ship was designed with three distinct passenger levels, first, second, and third-class, with each section offering passengers varying degrees of comfort. The original troop spaces and corresponding holds could be converted into cargo holds to carry goods to peacetime destinations.

CONSTRUCTION

The Maritime Commission awarded Bethlehem-Alameda Shipyard the contract to build ten P2-SE2-R1 troop transports in 1941. United Engineering Company had established the shipyard in the early 1900s. From 1916-1923, it was called Alameda Works and operated by the Union Iron Works.⁹ The yard originally encompassed 7 acres on the south side of Alameda, near Oakland's inner harbor. Shipbuilding operations ceased in 1923, but the yard continued to repair ships and serve as a dry dock. It was re-established as the Bethlehem-Alameda Shipyard in World War II and expanded to 75 acres with six slips. During the war, the Bethlehem-Alameda Shipyard built eight P2 troop transports, repaired over 1,000 ships, and produced structural steel.¹⁰

The Bethlehem-Alameda Shipyard laid the keel of the ship down on 29 November 1943 under a Maritime Commission contract (MC Hull 682). The ship was launched on 27 August 1944 and sponsored by Mrs. Louise Nimitz, wife of Capt. Otto Nimitz. The shipyard transferred the ship, then known as the *Admiral C.F. Hughes*, to the U.S. Navy on 31 January 1945, and commissioning took place the same day with Capt. John Trebes (USCG) in command. Since the ship was part of the *Admiral* class, it was named after Adm. Charles Frederick Hughes (1866-1934). After graduating from the Naval Academy, Hughes fought in the Spanish-American War and held positions in the Bureau of Equipment and the Board of Inspection and Survey. He commanded the *Birmingham* and the *Des Moines* before serving as the Chief of Staff to the Commander of the Atlantic Fleet. He was made a captain in 1916 and rear admiral in 1918. Hughes served in World War I as the commander of the *New York*; he later became Chief of Naval Operations.¹¹

OPERATIONAL HISTORY

After the shakedown cruise, the ship was put into service transporting troops from San Diego to Pearl Harbor and other Pacific Islands and back again during March and April 1945. On one trip to Guam, the *Admiral Hughes* picked up 221 Japanese prisoners and boarded American troops bound for Pearl Harbor. After several more Pacific crossings, the ship departed San Francisco for Western Europe via the Panama Canal to pick up American servicemen slated to serve in an invasion force to attack the Japanese home islands. While in transit from New Guinea to America, the war ended, and the ship arrived in San Francisco on 17 August 1945.¹²

After the war, the *Admiral Hughes* supported American bases in the western Pacific by supplying troops and shuttling personnel to and from the West Coast. On 3 May 1946,

⁹ United Iron Works eventually became Bethlehem Shipbuilding Corporation, a subsidiary of Bethlehem Steel.

¹⁰ "Todd San Francisco Division, Alameda, California," available at <http://www.globalsecurity.org/military/facility/alameda-todd.htm>, accessed 27 November 2007.

¹¹ Information on Hughes from U.S. Navy, *Dictionary of American Naval Fighting Ships*, Vol. I (Washington, DC: Naval Historical Center, 1991), pp. 62-63.

¹² U.S. Navy, *Dictionary*, Vol. I, pp. 62-63.

the U.S. Navy struck the ship from the register, and the U.S. Army acquired the vessel. The following month, the ship was renamed the *General Edwin D. Patrick* after the general of that name who served in World War I in France in the 14th Machine Gun Battalion and then from 1926-1929 in the 115th Infantry in China. Patrick held numerous positions in the U.S. Army, including Chief of Staff of the 6th Army in 1943, Commander of Regimental Combat Team in 1944, and Commander of the 6th Infantry in 1945. He was killed in Luzon on 14 March 1945.¹³ The Army Transport Service used the *General Patrick* until 1 March 1950 when the U.S. Navy reacquired the ship for the newly-formed Military Sea Transportation Service (MSTS). The ship retained its name but operated with a civilian crew.¹⁴

Under MSTS, the *General Patrick* shuttled troops and equipment out of San Francisco to various bases in the Pacific. In 1950, the Korean War erupted, and the MSTS utilized the *General Patrick* to transport soldiers and supplies to stations in Japan, Korea, the Marianas, Okinawa, and the Philippines. During the Korean War, the *General Patrick* received three battle stars for its service. After the war, the ship resumed its duties as a transport. From 1953-1956, the ship made over 110 trips transporting men and their gear to American bases in the Pacific.¹⁵

During the Vietnam War, the *General Patrick* continued to be used as a transport vehicle, moving troops and material to bases in the western Pacific. The ship's first deployment to Vietnam took place on 16 August 1965 when it left San Francisco for Cam Ranh Bay, South Vietnam. Over the course of a year, the *General Patrick* deployed six more times to Vietnam before undergoing an overhaul in early 1967. Afterwards, the U.S. Navy placed in the ship in "ready reserve status."¹⁶

CONCLUSION

While the Maritime Commission's role continued through the Maritime Administration, the era of troopships ended when the military transitioned to jet aircraft as a means of

¹³ Information on Edwin D. Patrick from U.S. Navy, *Dictionary of American Naval Fighting Ships*, Vol. III (Washington, DC: Naval Historical Center, 1991), p. 41; Robert McLaren, "From Admirals to Generals," *Sea Classics* (April 2004).

¹⁴ U.S. Navy, *Dictionary*, Vol. III, p. 41; Roland W. Charles, *Troopships of World War II* (Washington, DC: The Army Transportation Association, 1947), p. 70. Under a restructuring of the U.S. military in 1949, the U.S. Navy sought to manage all military shipping. The Pentagon awarded the contract to the U.S. Navy, and it created a new agency (the Military Sea Transportation Service) within its department to administer the shipping fleet. In 1970, the navy changed MSTS to Military Sealift Command (MSC), and it continues to be the sole administrator of shipping for the Department of Defense. A summarization of the MSTS and the MSC is in Charles Gibson with E. Kay Gibson, *Overseas: U.S. Army Maritime Operations, 1898 through the Fall of the Philippines* (Camden, ME: Ensign Press, 2002), p. 169, footnote 15.

¹⁵ U.S. Navy, *Dictionary*, Vol. III, p. 41.

¹⁶ U.S. Navy, *Dictionary*, Vol. III, p. 41.

transporting soldiers to American bases overseas.¹⁷ The construction of the P2 transports was a small component of the Maritime Commission's vision and direction that helped contribute to the successful outcome of World War II. The construction of the *Admiral* class exemplified the scope and capability of America's industrial might as the P2 transports were the largest ships constructed by the Maritime Commission. Although the P2 transports were, in fact, never sold to commercial firms, they were useful to the U.S. military. The service life of both classes continued through the mid-1960s, and the ships transported thousands of service members across the globe. In 1973, the military fully shifted from ships to aircraft as the principal means of deploying troops overseas, but the Maritime Administration preserved the transports in mothball status for future needs. The *General Edwin D. Patrick* is the sole remaining ship afloat in its class and currently lies in Suisun Bay, California, in the National Defense Reserve Fleet (NDRF). The World War II-era ships are slowly disappearing from the NDRF, and those that remain are a floating testament to history as they await disposal.¹⁸

¹⁷ Like the U.S. Shipping Board before it, the U.S. Maritime Commission fell into disrepute, and Congress supplanted the Shipping Board with the U.S. Maritime Commission and the Federal Maritime Board under the Department of Commerce on 24 May 1950. See De La Pedraja, pp. 369, 629.

¹⁸ Winn B. Frank, "Farewell to the Troopship," *Naval History* 2, no. 1 (1997): pp. 41-44.

APPENDIX A: The *Admiral* Class and Subsequent *Generals*

“Based on US Maritime Administration classification of ship designs the P2-SE2-R1 stands for: P-Passenger; 2 – 500-600-ft water line in feet; SE – Steam Turbine with electric Motors - 2 shafts; and R1 – design number and alteration.”

Admiral W. S. Benson (AP-120) – General Daniel I. Sultan
Admiral W.L. Capps (AP-121) – General Hugh J. Gaffey
Admiral R.E. Coontz (AP-122) – General Alexander M. Patch
Admiral E.W. Eberly (AP-123) – General Simon B. Buckner
Admiral C.F. Hughes (AP-124) – General Edwin D. Patrick
Admiral H.T. Mayo (AP-125) – General Nelson M. Walker
Admiral Hugh Rodman (AP-126) – General Maurice Rose
Admiral W. S. Simms (AP-127) – General William O. Darby

APPENDIX B: Historic Photographs



Figure 1: *Admiral C.F. Hughes* underway, n.d.
Naval Historical Center Photographic Section, MSC Files, Washington, DC.

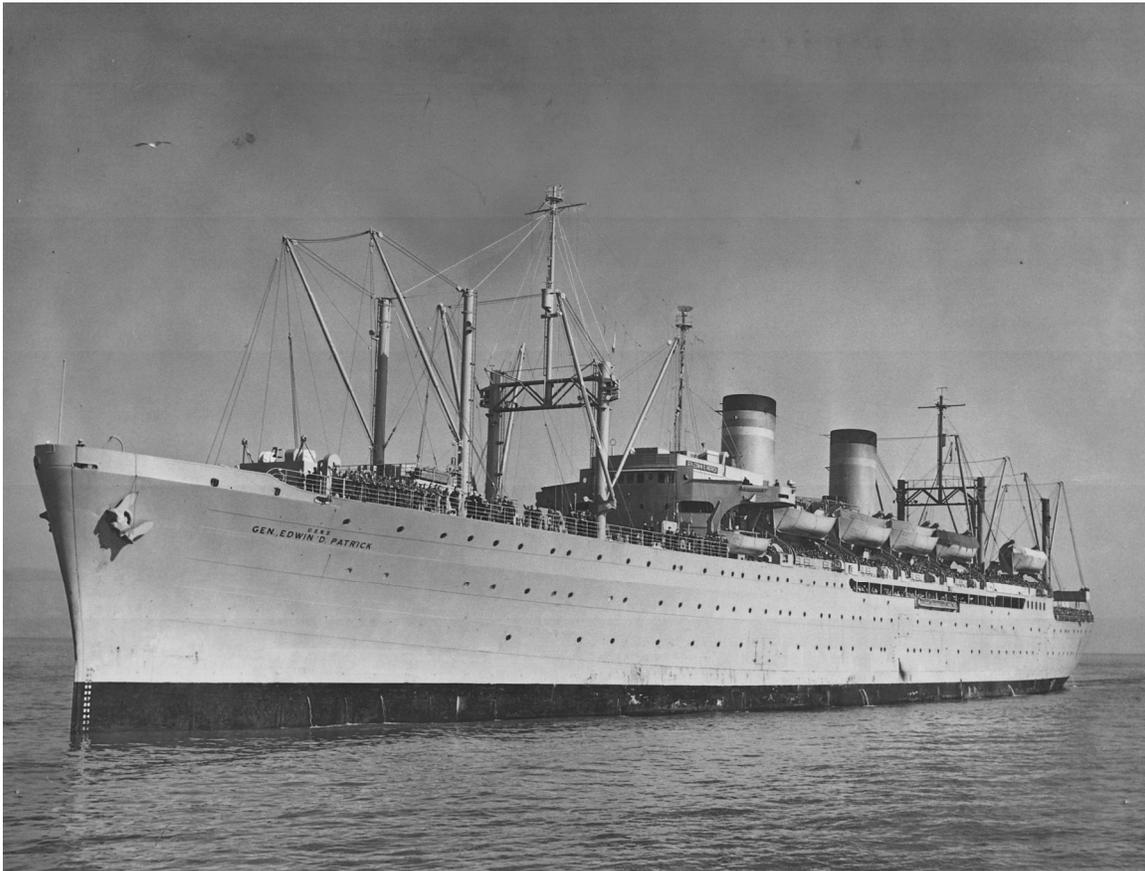


Figure 2: *General Edwin D. Patrick* underway, n.d.
Naval Historical Center Photographic Section, MSC Files, Washington, DC.

BIBLIOGRAPHY**Books**

De La Pedraja, René. *A Historical Dictionary of the U.S. Merchant Marine and Shipping Industry since the Introduction of Steam*. Westport, CT: Greenwood Press, 1994.

Charles, Roland W. *Troopships of World War II*. Washington, DC: The Army Transportation Association, 1947.

Gibson, Charles with E. Kay Gibson. *Overseas: U.S. Army Maritime Operations, 1898 through the Fall of the Philippines*. Camden, ME: Ensign Press, 2002.

Lane, Frederic C. *Ships for Victory: A History of Shipbuilding under the U.S. Maritime Commission in World War II*. Baltimore, MD: John Hopkins Press, 1951.

Sawyer, L.A. and W.H. Mitchell. *From America to United States: The History of the Merchant Ship Types built in the United States of America under the Long-Range Programme of the Maritime Commission*. Kendal, UK: World Ship Society, 1979.

U.S. Navy. *Dictionary of American Naval Fighting Ships*. Vol. I and Vol. III. Washington, DC: Naval Historical Center, 1991.

_____. *Ships' Data U.S. Naval Vessels: Auxiliary, District Craft, and Unclassified Vessels*. Washington, DC: Government Printing Office, 1946.

Weigley, Russell F. *The American Way of War: A History of United States Military Strategy and Policy*. New York, NY: Macmillan Publishing Co., Inc., 1973.

Articles

Frank, Winn B. "Farewell to the Troopship." *Naval History* 2, no. 1 (1997): pp. 41-45.

Plans

Plan Nos. MA21-1 – MA21-9. "The Maritime Administration Collection of Ship Plans (1939-1970)." National Museum of American History, Washington, DC.

Internet Material

McLaren, Robert. "From Admirals to Generals." *Sea Classics* (April 2004). Available at http://findarticles.com/p/articles/mi_qa4442/is_200404/ai_n16056377, accessed November 2007.

"Todd San Francisco Division." <http://www.globalsecurity.org/military/facility/alameda-todd.htm>, accessed 27 November 2007.

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

GENERAL EDWIN D. PATRICK

HAER CA-344

(Admiral C.F. Hughes)

(AP-124)

Suisun Bay Reserve Fleet

Benicia vicinity

Solano County

California

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Brian Grogan, photographer, 2007

CA-344-1	Starboard side bow view.
CA-344-2	Starboard side bow.
CA-344-3	Starboard side forward hull detail.
CA-344-4	Bow deck detail showing anchor chains and winches.
CA-344-5	Bridge and superstructure, looking aft.
CA-344-6	Forward mast and bow deck.
CA-344-7	Aft funnel and top deck.
CA-344-8	Aft funnel and top deck.
CA-344-9	Starboard side upper deck detail showing boat davits and aft funnel.
CA-344-10	Starboard side, view of midship.
CA-344-11	View of aft mast and stern.
CA-344-12	View of aft mast and stern.
CA-344-13	Stern, starboard side.
CA-344-14	Aft deck.
CA-344-15	Auditorium and chapel.
CA-344-16	Aft dining saloon.
CA-344-17	Saloon pantry.

GENERAL EDWIN D. PATRICK
HAER CA-344
INDEX TO PHOTOGRAPHS

CA-344-18	Saloon pantry.
CA-344-19	Starboard side, passenger lounge.
CA-344-20	Main deck door in starboard passenger lounge.
CA-344-21	Main deck passenger passages and elevator.
CA-344-22	Men's washroom, weather deck.
CA-344-23	Chaplain's state room.
CA-344-24	Passenger state room.
CA-344-25	Main galley troop mess.
CA-344-26	Dispensary.
CA-344-27	Passenger entrance, second deck.
CA-344-28	Exchange office adjacent to passenger entrance.
CA-344-29	Troop berths and watertight compartment door.
CA-344-30	Troop showers.
CA-344-31	Troop head.
CA-344-32	Engine room.
CA-344-33	Engine room control panel.

HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-1



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-2



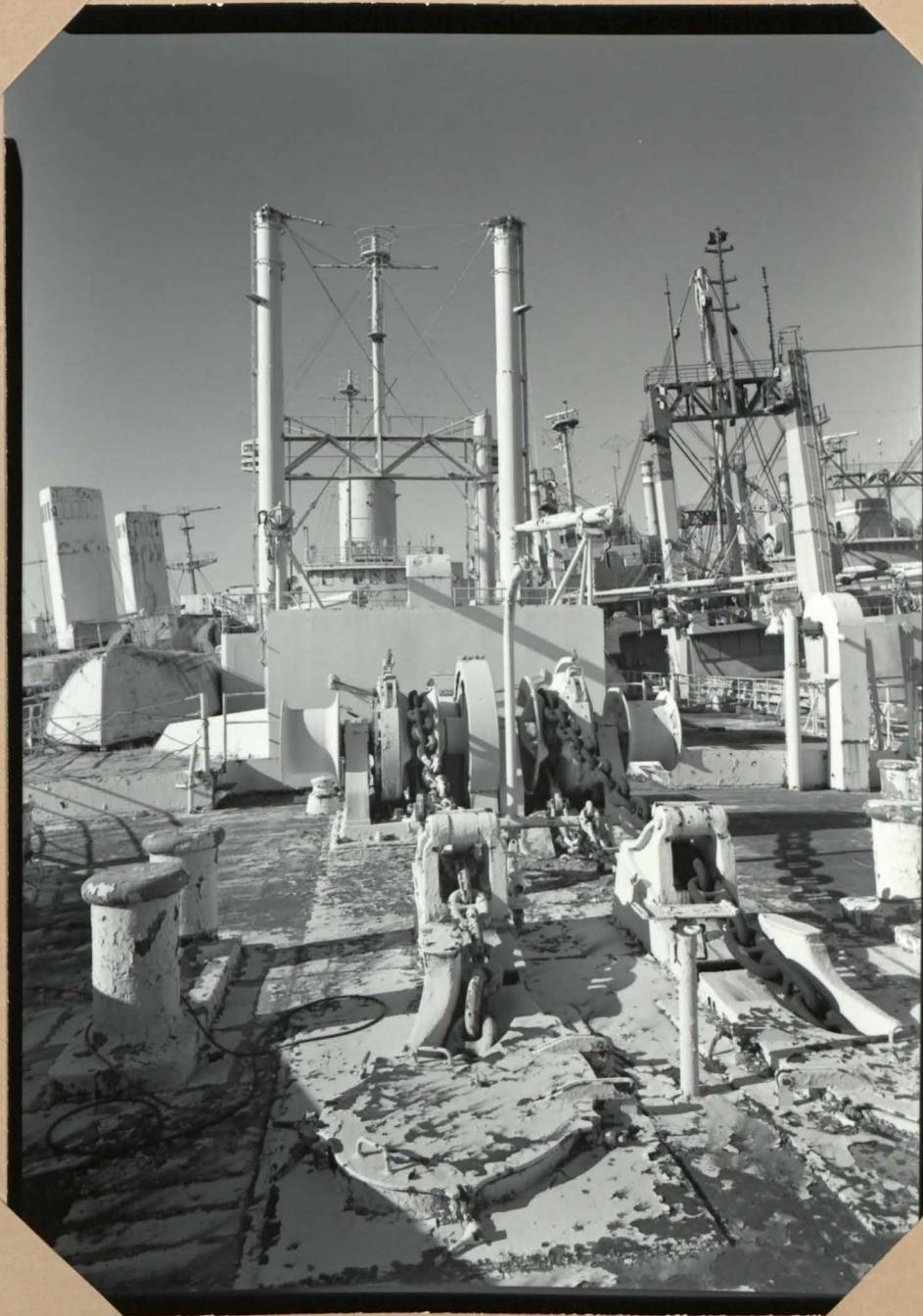
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-3



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-4



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-5



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-6



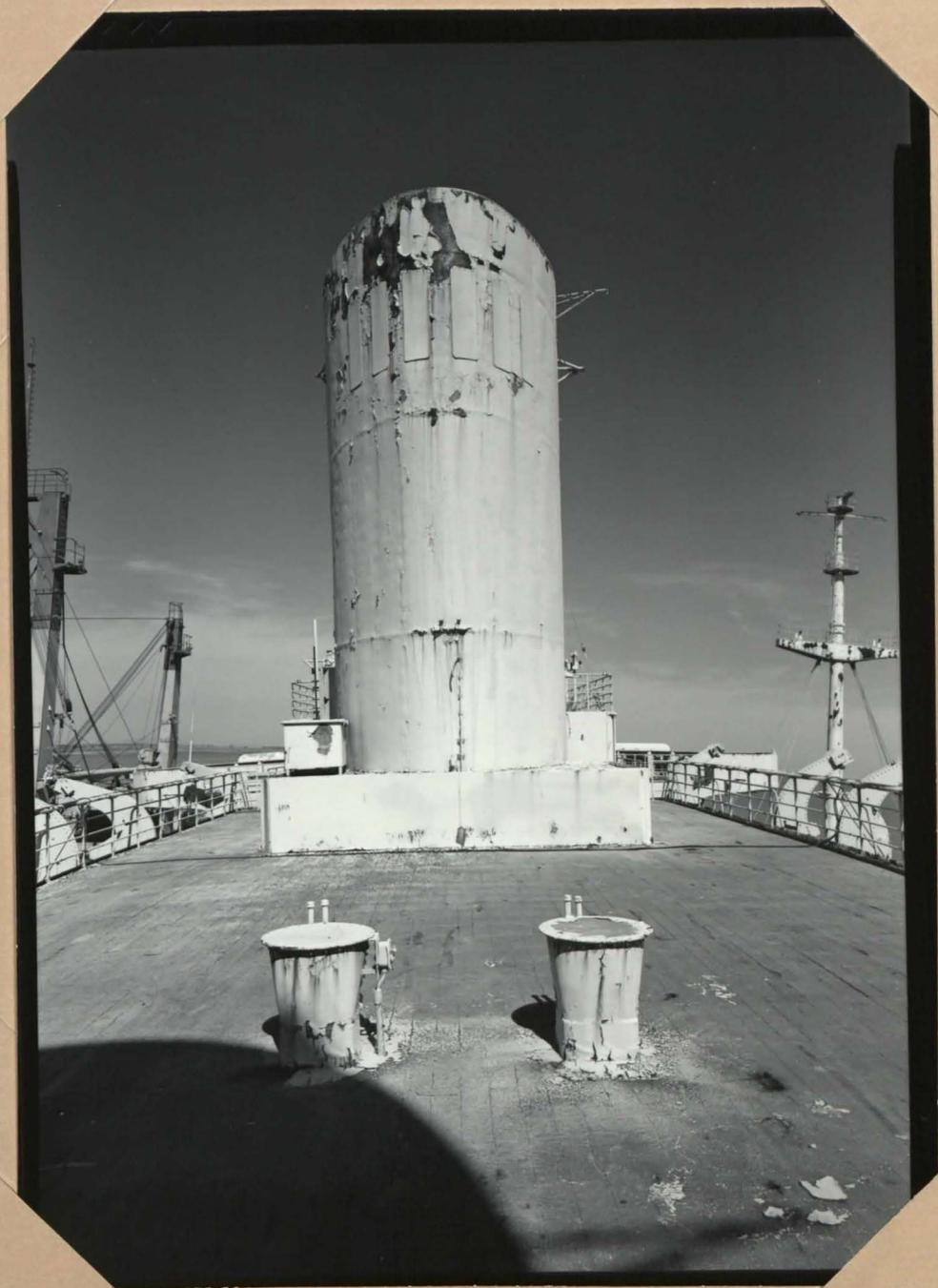
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-7



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-8



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-9



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-10



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-11



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-12



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-13



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-14



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-15



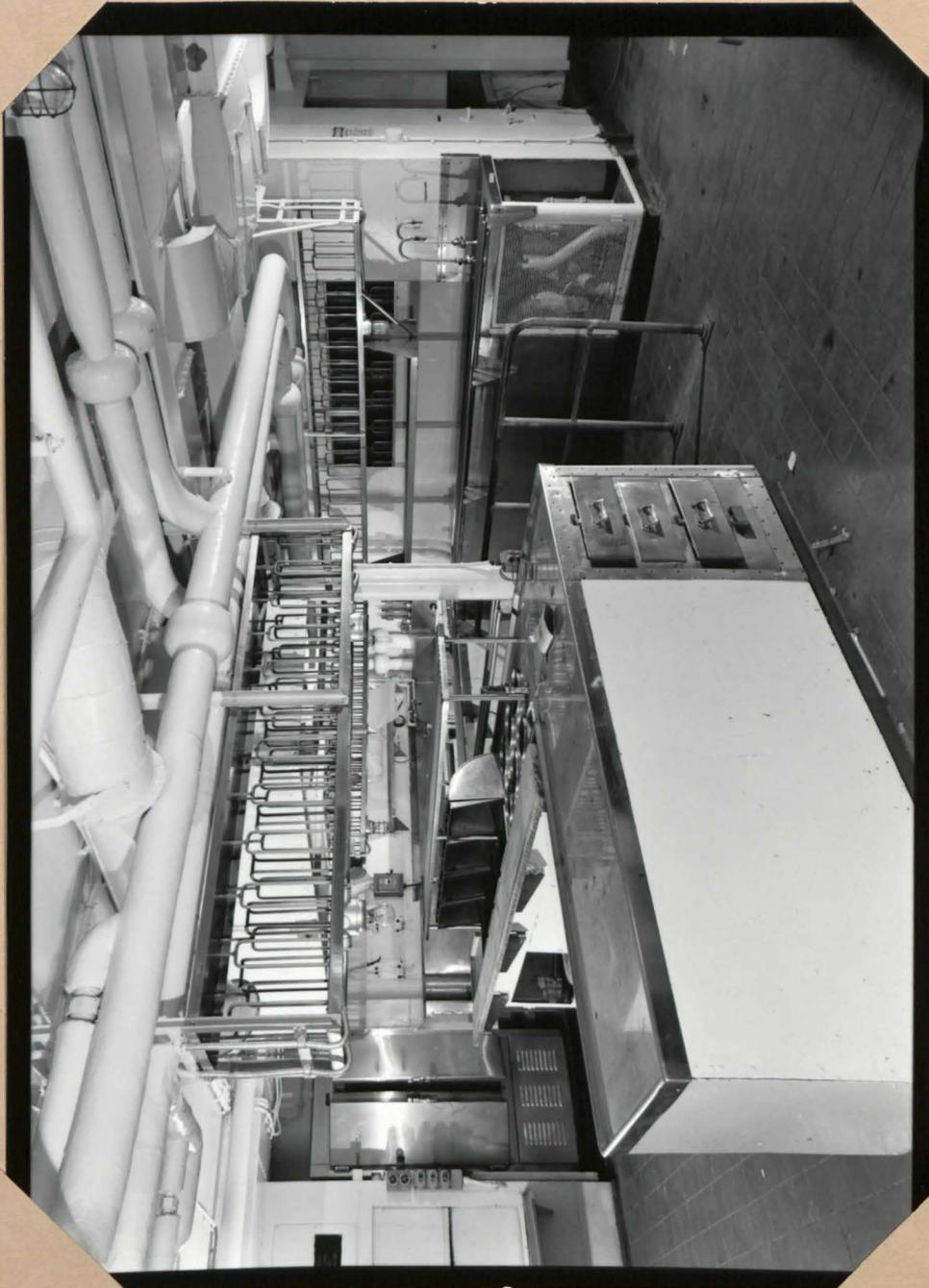
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-16



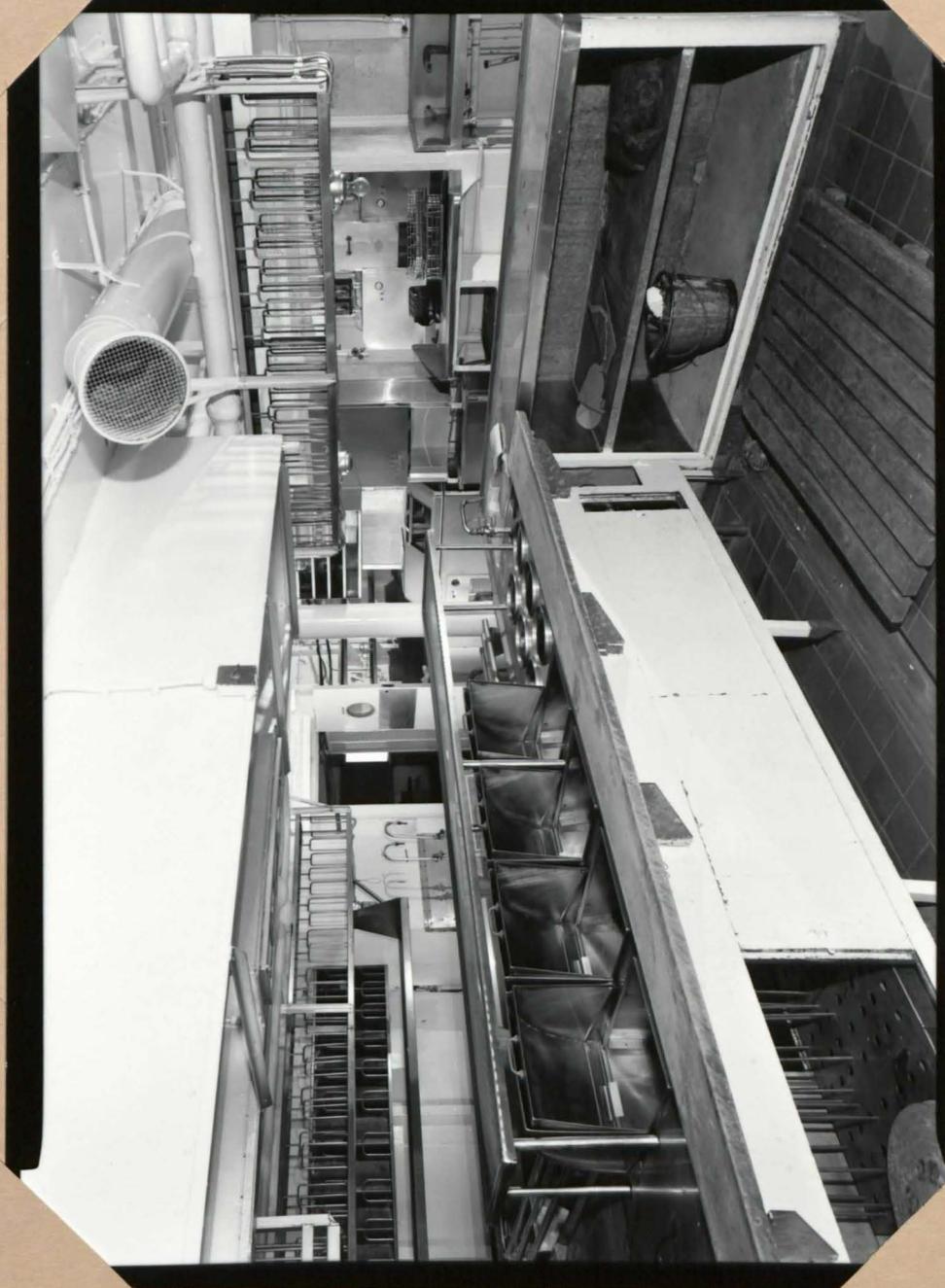
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-17



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-18



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-19



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-20



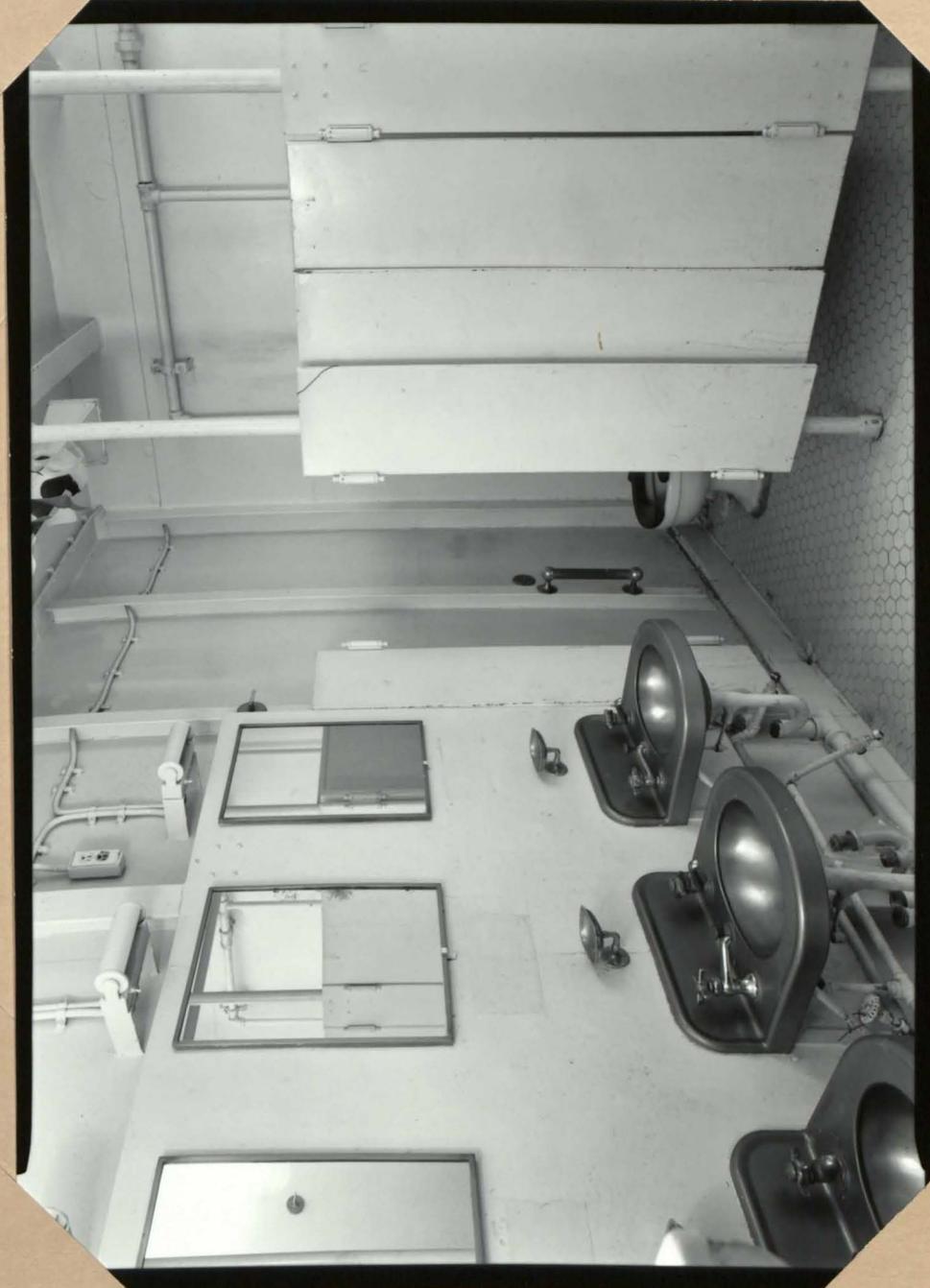
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-21



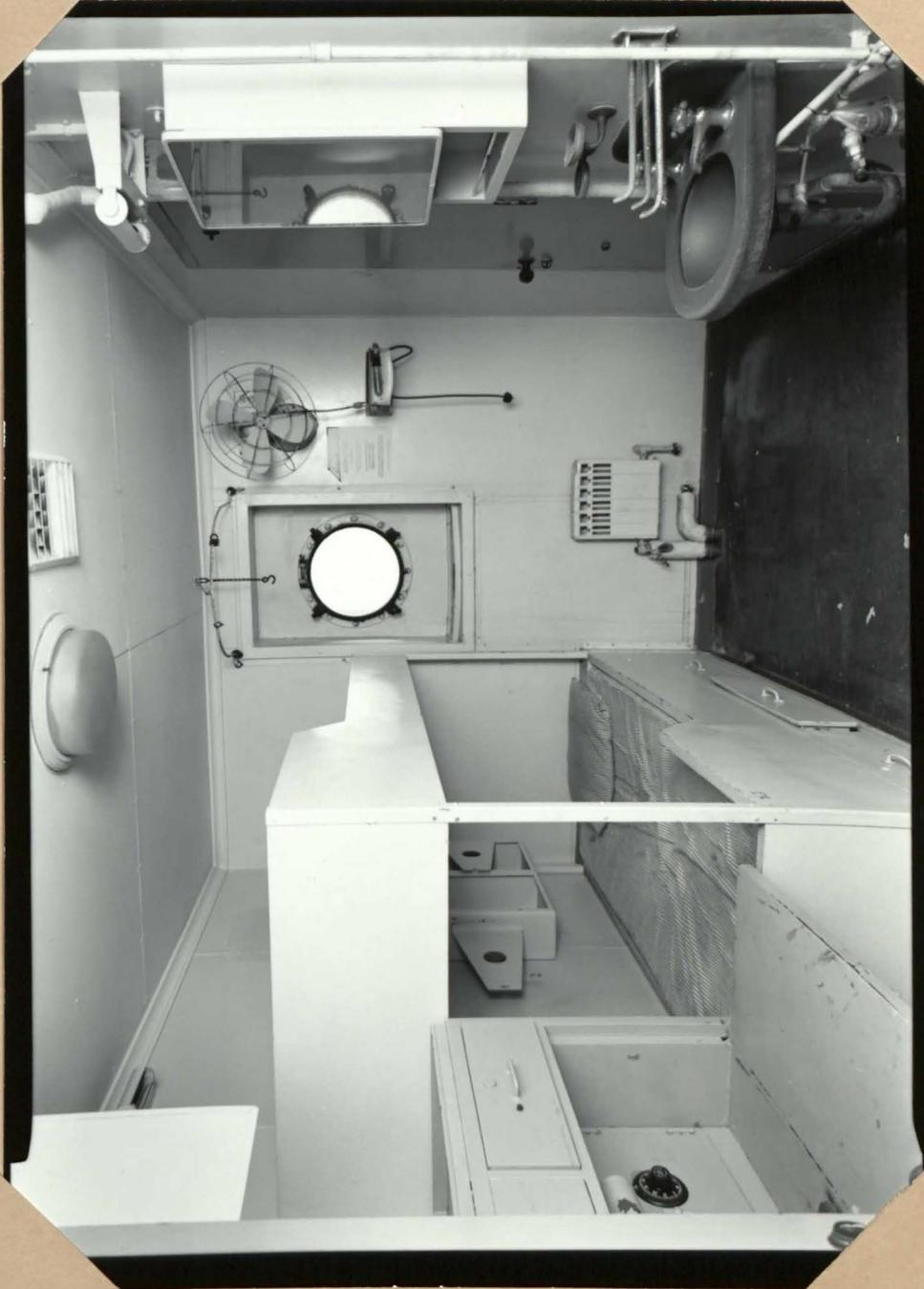
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-22



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-23



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-24



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-25



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-26



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-27



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-28



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-29



HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-30



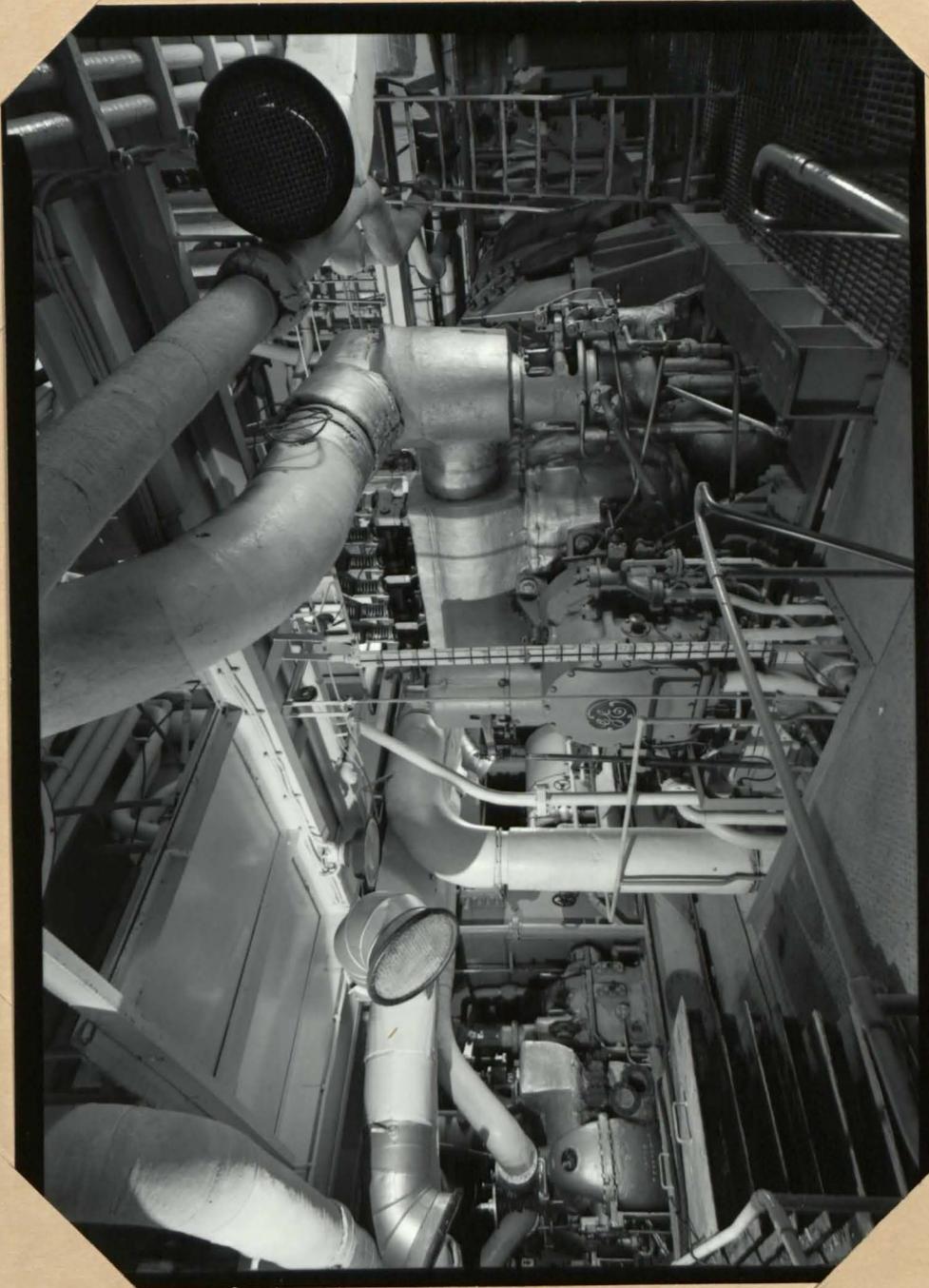
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-31



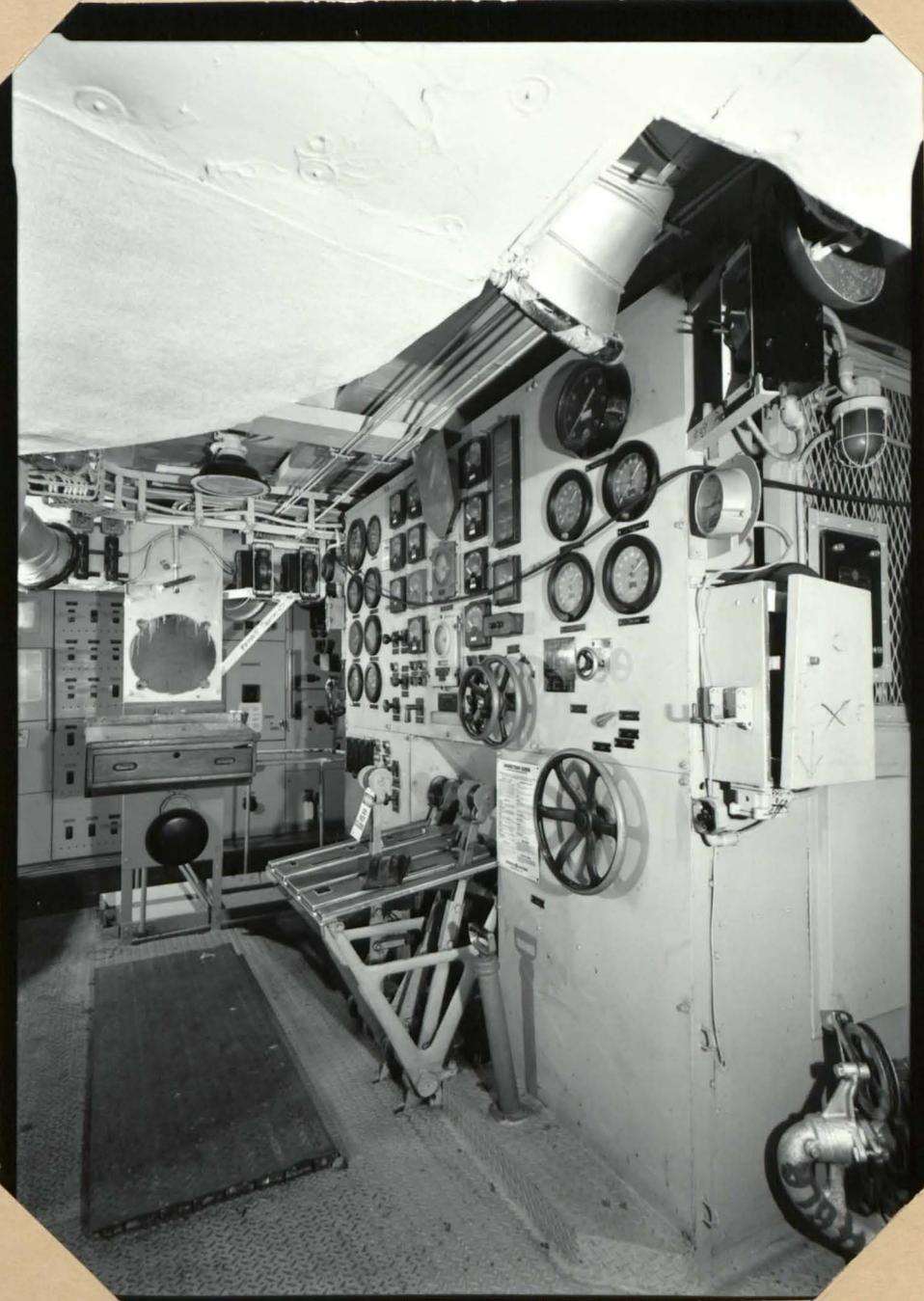
HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-32

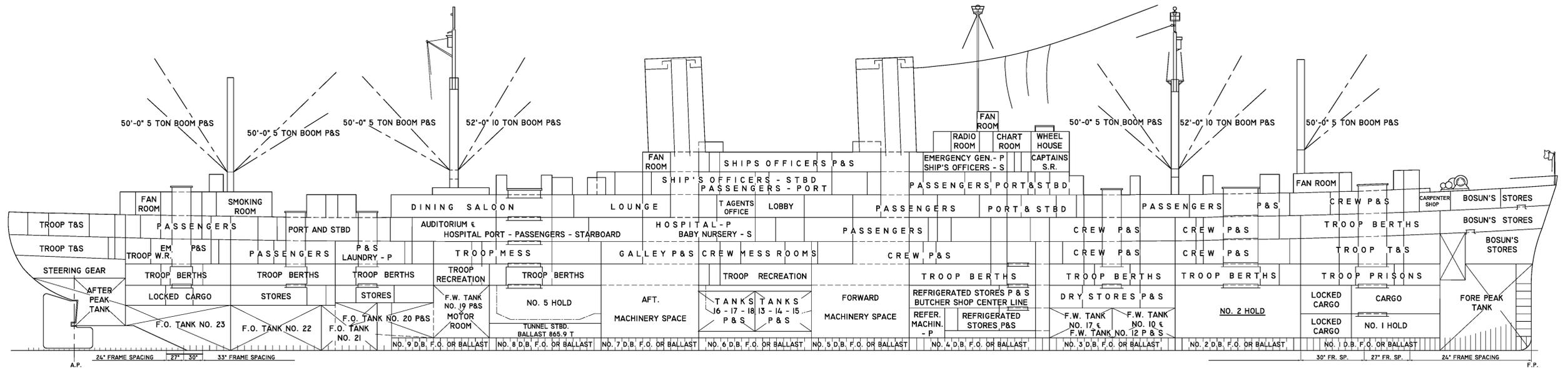


HISTORIC AMERICAN ENGINEERING RECORD
SEE INDEX TO PHOTOGRAPHS FOR CAPTION

HAER No. CA-344-33

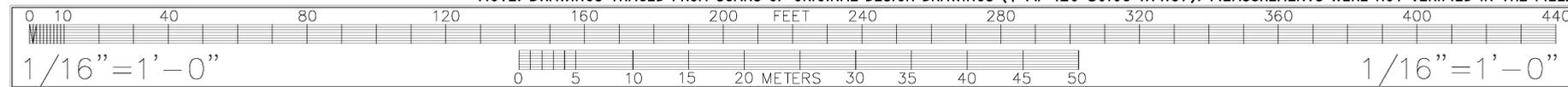


General Edwin D. Patrick



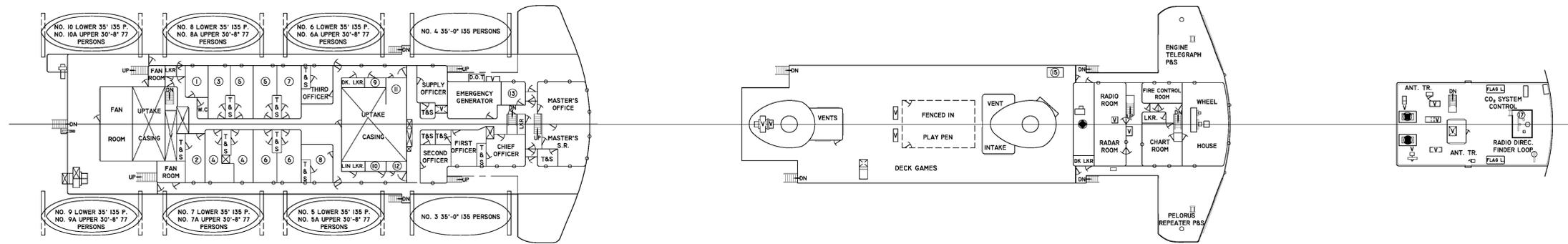
INBOARD PROFILE

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (T-AP-120-S0103-1171157). MEASUREMENTS WERE NOT VERIFIED IN THE FIELD

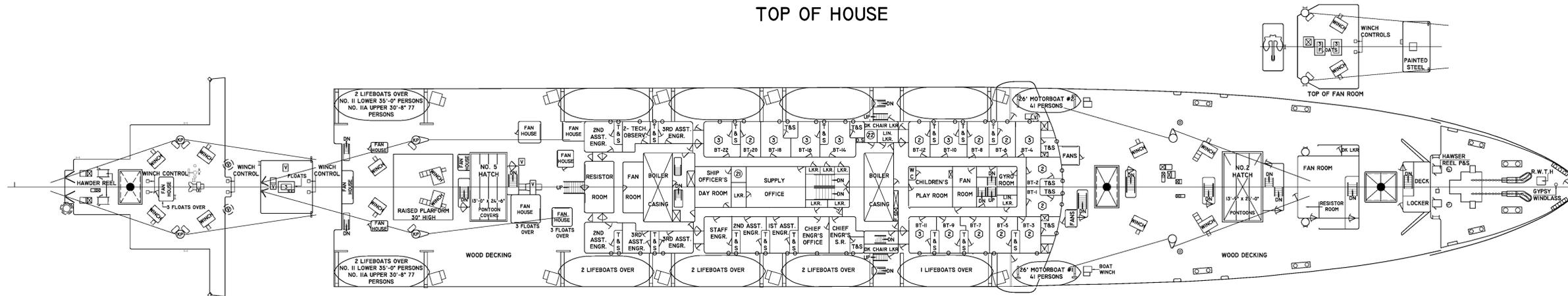


General Edwin D. Patrick

HISTORIC AMERICAN ENGINEERING RECORD
 SHEET 3 OF 8
 CALIFORNIA
 GENERAL EDWIN D. PATRICK (ADMIRAL C.F. HUGHES)
 SOLANO COUNTY
 BENICIA VICINITY
 SCANNED FROM HISTORIC DRAWINGS AND REFORMATTED BY: ASHLEY T. WALKER, 2009.
 NAVAL MARITIME RECORDING PROGRAM
 UNITED STATES DEPARTMENT OF THE INTERIOR

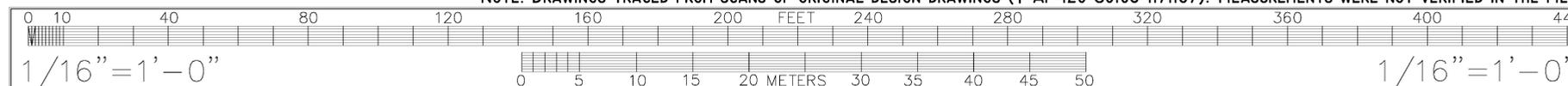


TOP OF HOUSE



BOAT DECK

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (T-AP-120-S0103-1171157). MEASUREMENTS WERE NOT VERIFIED IN THE FIELD

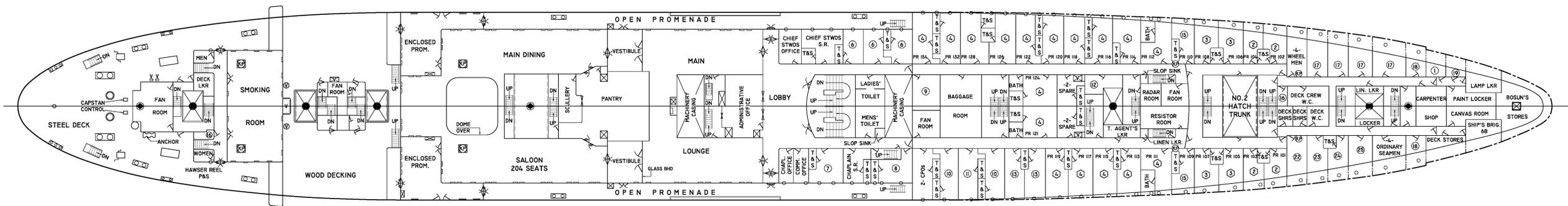


SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	PILOT'S ROOM	6	2- RADAR OPERATORS	11	FIRE FIGHTING EQUIPMENT LOCKER	16	4- FLOATS	21	PANTRY
2	CHIEF ELECTRICAL ENGINEER	7	2- JUNIOR THIRD OFFICERS	12	PORTFOLIO LOCKER	17	RAISED PLATE	22	SLOP SINK
3	2- JUNIOR THIRD ENGINEERS	8	CHIEF RADIO OPERATOR	13	CAPTAIN'S PANTRY	18	NO.1 HATCH 11'-6" x 10'-0" PONTOONS		
4	2- JUNIOR ENGINEERS	9	O.S. LOCKER	14	BATTERY ROOM	19	NO. 3 HATCH 7'-6" x 15'-0"		
5	1- JUNIOR THIRD ENGINEER 1- SPARE	10	CLEANING GEAR LOCKER	15	LYLE GUN	20	NO. 8 HATCH 7'-6" x 11'-0" METAL LUMBER		

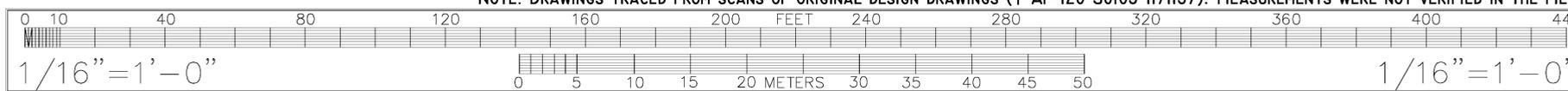
- REPRESENTS NUMBER OF OCCUPANTS IN SPACE

General Edwin D. Patrick



PROMENADE DECK

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (T-AP-120-S0103-1171157). MEASUREMENTS WERE NOT VERIFIED IN THE FIELD

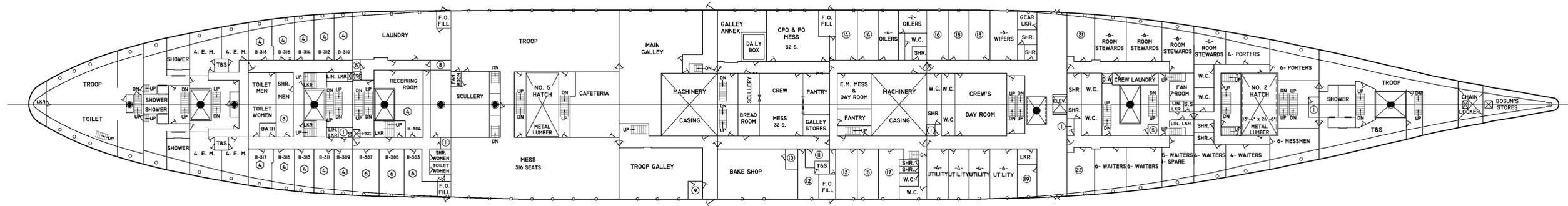


SCHEDULE OF ROOMS & FEATURES OF VESSEL

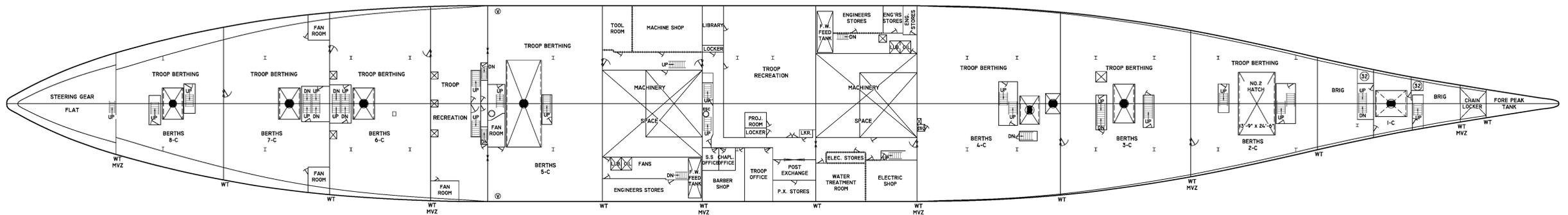
NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	RESISTOR ROOM	6	2- ADMINISTRATIVE CLERKS	11	1- EXECUTIVE OFFICER 1- SPARE	16	CLEANING GEAR LOCKER	21	CREW LAUNDRY
2	NO. 8 HATCH 7'-6" x 12'-0"	7	MILITARY DEPARTMENT COMMANDER STATEROOM	12	PASSENGER LAUNDRY	17	4- A.B. SEAMEN	22	4- MASTER-AT-ARMS
3	NO. 7 HATCH 7'-6" x 12'-0"	8	ADMINISTRATIVE OFFICER S.R.	13	1- NURSE 1- SPARE	18	2- A.B. SEAMEN	23	BOSUN'S MATE CARPENTER'S MATE 2-SPARE
4	NO.6 HATCH 7'-6" x 12'-0"	9	TELEPHONE CONTROL ROOM	14	NO. 3 HATCH 7'-6" x 13'-0"	19	DECK LOCKER	14	BOSUN'S CARPENTER
5	NO. 5 HATCH 13'-0" x 24'-6"	10	1- SURGEON 1- SPARE	15	1- STEWARDESS 1- SPARE	20	NO. 1 HATCH (NO COVER)	25	1- YEOMAN 1- STRKPR 1- SPARE

 - REPRESENTS NUMBER OF OCCUPANTS IN SPACE

General Edwin D. Patrick

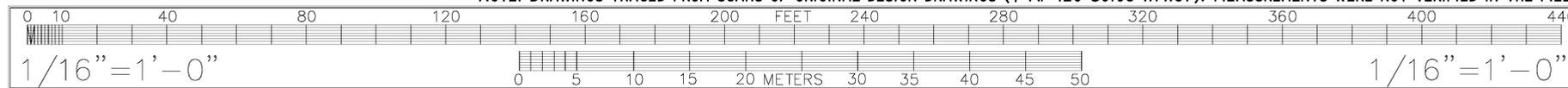


"B" DECK



"C" DECK

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (T-AP-120-S0103-1171157). MEASUREMENTS WERE NOT VERIFIED IN THE FIELD

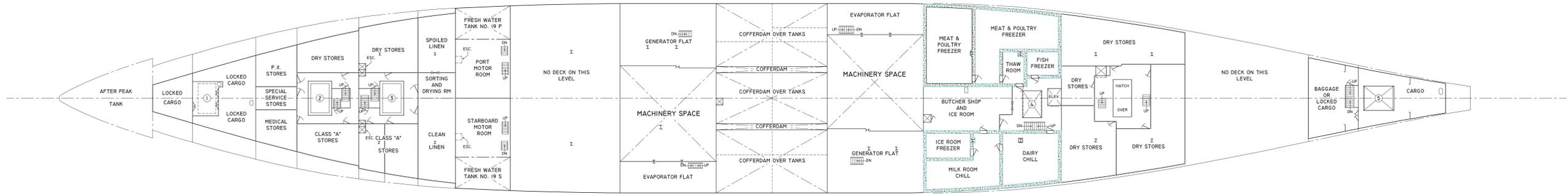


SCHEDULE OF ROOMS & FEATURES OF VESSEL											
NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	CLEANING GEAR LOCKER	7	BAGGAGE ROOM	13	4 - SECOND COOKS	19	DECK YEOMAN OFFICE	25	NO. 8 HATCH 7'-6" x 12'-0"	31	NO.3 HATCH 7'-6" x 15'-0"
2	NO. 8 HATCH TRUNKED NO COVERS	8	LAUNDRY LOCKER	14	3- WATER TENDERS 1- SPARE	20	NO. 4 HATCH 7'-0" x 11'-0"	26	NO. 7 HATCH 7'-6" x 12'-0"	32	RAISED PLATE
3	SHOWER WOMEN	9	GARBAGE CHUTE	15	1- THIRD BAKER 2- THIRD COOKS 1- CHIEF ARMY COOK	21	3- ROOM STEWARDS 2- DECK STEWARDS 1- UTILITY	27	NO. 6 HATCH 7'-6" x 12'-0"	33	NO.1 HATCH 10'-0" x 11'-6"
4	NO. 7 HATCH TRUNKED NO COVERS	10	FLOUR ROOM	16	3- UTILITY 1- SPARE	22	3- WAITERS 1- SPARE	28	NO. 5 HATCH 13'-0" x 34'-0"		
5	SLOP SINK	11	CHIEF COOKS OFFICE	17	3- SECOND BAKERS 1- THIRD BAKER	23	NO. 3 HATCH 7'-6" x 15'-0"	29	NO. 4 HATCH 7'-0" x 11'-0"		
6	NO. 6 HATCH TRUNKED NO COVERS	12	CHIEF COOK CHIEF BAKER	18	3- FIREMEN 1- SPARE	24	NO. 1 HATCH 10'-0" x 11'-0"	30	ELEVATOR SHAFT		

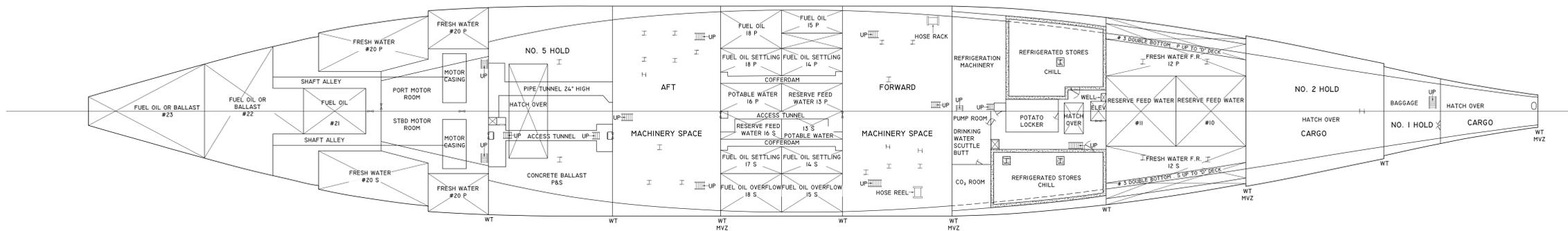


- REPRESENTS NUMBER OF OCCUPANTS IN SPACE

General Edwin D. Patrick

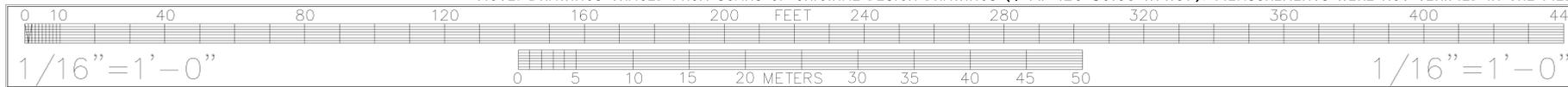


"D" DECK



HOLD

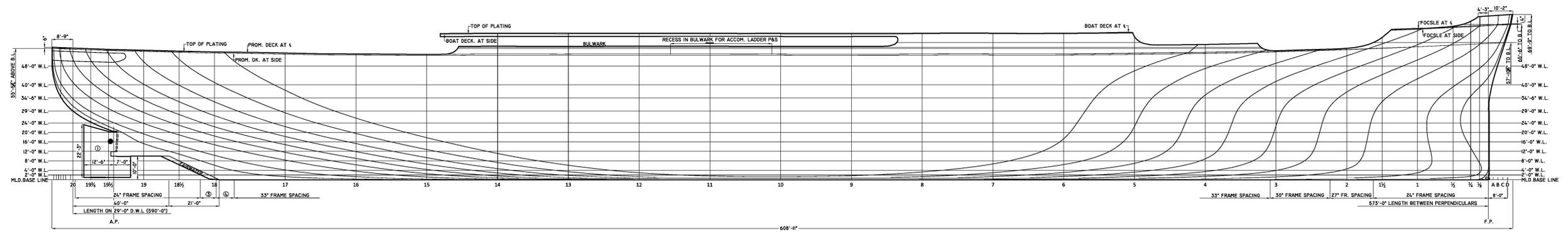
NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (T-AP-120-S0103-1171157). MEASUREMENTS WERE NOT VERIFIED IN THE FIELD



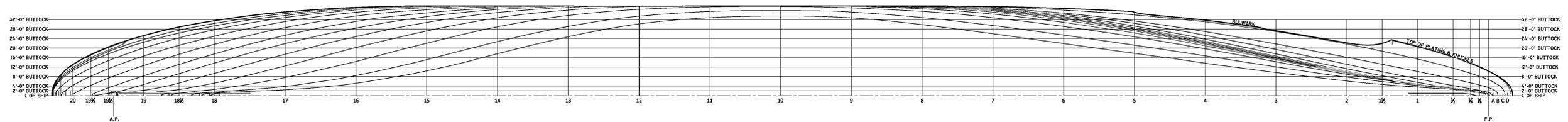
SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	NO.8 HATCH OVER	2	NO. 7 HATCH OVER	3	NO. 6 HATCH OVER	4	NO. 4 HATCH 7'-0" x 11'-0"	5	NO. 1 HATCH 11'-6" x 10'-0"

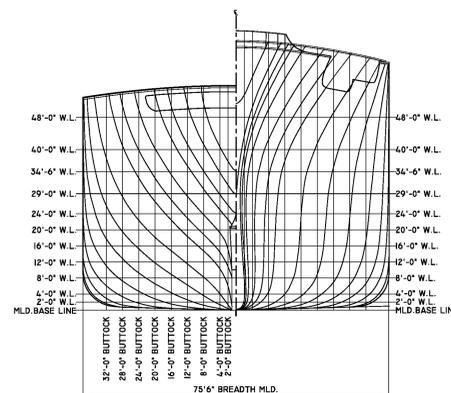
General Edwin D. Patrick



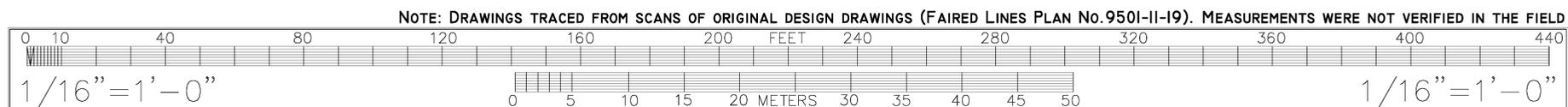
SHEER PLAN



HALF-BREADTH PLAN



BODY PLAN



SCHEDULE OF DIMENSIONS OF VESSEL			
NO.	NAME/TITLE	NO.	NAME/TITLE
1	AREA OF RUDDER 315.8 SQUARE FEET 19½ % BALANCE	3	27" FRAME SPACING
2	ϵ OF RUDDER STOCK	4	30" FRAME SPACING