

NATIONAL REGISTER ELIGIBILITY ASSESSMENT
VESSEL: *Empire State VI*, ex-SS *Oregon*, ex-SS *Mormactide*



***Empire State VI* transiting the East River, just north of the Hell Gate Bridge, July 1990.
Photo by Erhard Koehler**

Vessel History

TS *Empire State VI* is the longest serving training ship of the post-World War I era. It was converted by the Maritime Administration (MARAD) at the Bay Shipbuilding Corporation in Sturgeon Bay, Wisconsin, and delivered to the State University of New York Maritime College at its campus in the Bronx in late 1989. *Empire State VI* was originally constructed as a C4-S-lu *Mariner*-type cargo vessel for the States Steamship Company by Newport News Shipbuilding and Drydock Company in 1960 and launched in 1961 as SS *Oregon*. It was the second of the company's *California*-class cargo ships, a variation of MARAD's C4-type vessel. The company had commissioned the class as part of an effort to rebuild its fleet

after World War II. Lumber merchant Charles Dant originally founded the company as the Columbia Steamship Company in 1919. The original fleet of World War I-built steam vessels transported lumber exports from the Columbia River to markets in Asia and Europe. As the company expanded beyond Oregon and Washington, its name changed to States Steamship Company, or States Line as it was familiarly known.¹

States Line's rebuilding effort included the six-ship *California* class. Newport News Shipbuilding in Virginia built the first four: SS *California*, SS *Oregon*, SS *Washington*, and SS *Hawaii*. National Steel and Shipbuilding Company (NASSCO) of San Diego built the other two: *CE. Dant* and *MM Dant*. States Line operated SS *Oregon* in the Pacific trades throughout the 1960s and 1970s, but with increasing fuel prices, the global shift to containerization, and the decline of government contracts with the end of the Vietnam War, the class became obsolete. As the company turned to new classes like the *Colorado* and *Maine*², the *California*-class ships were leased to other companies. The new vessels did not solve the States Line's financial troubles, however, and the company went bankrupt in December 1978.



SS *Oregon*, Vancouver, British Columbia, April 11, 1963. Photo by Walter E. Frost, City of Vancouver Archives, Ref. No. CVA 447-7344. Downloaded from “shipspotting.com” October 12, 2022, copyright Paul Willie

¹ Jim Shaw, "What Ever Happened to States Lines?" *Pacific Maritime Magazine*, June 1, 2017, available at <http://www.pacmar.com/story/2017/06/01/features/what-ever-happened-to-states-line/527.html>, accessed August 2, 2018.

² See HAER CA-2333, *Cape Inscription* for additional information.

Several of the *California-class* ships were sold to Moore-McCormack Lines and renamed, including SS *Oregon*, which became SS *Mormactide*. The ship operated on the South American run until the United States Line bought Moore-McCormack in 1982. It was laid up in Brooklyn until that company also went bankrupt. The Maritime Administration then acquired the vessel in 1985 and placed it in the James River National Defense Reserve Fleet with plans to convert it into an ammunition ship and rename it USNS *Cape Junction*. Instead, the vessel was selected to be repurposed as the State University of New York Maritime College's training ship and was converted at the Bay Shipbuilding Corporation of Sturgeon Bay, Wisconsin, beginning in 1988.³

SERVICE HISTORY

Oregon operated in the Pacific trades from the 1960s to the early 1970s for States Line. The Vietnam War provided the company with government contracts that kept the ship in service long after containerization had rendered breakbulk type ships obsolete. When Moore-McCormack Lines acquired the ship in 1976, it was operated on South American routes that had not yet fully containerized. By the time both companies had gone bankrupt in the late 1970s, there was little use for breakbulk freighters. The ship's new owner, United States Lines, kept it in port until that company also went under. *Mormactide* was acquired by MARAD in 1985.

³ Shaw, "What Ever Happened."



SS *Mormacsea*, ex SS *Hawaii*, April 1977 location unknown. Representative of *Mormactide*. Photo courtesy Erhard W. Koehler collection

Mormactide was one of many relatively new breakbulk ships acquired by MARAD in the 1970s and 80s under several authorities; among these were the Merchant Marine Act (of 1936) Section 510(i) trade-in program, and defaults under ship financing programs such as Construction Differential Subsidy (CDS) or Title XI mortgage guarantees. Soon after MARAD's Ready Reserve Force (RRF) was established, the agency set about to assign these newer ships to that program, rather than the remaining World War II-vintage Victory Ships originally envisioned. Four of *Mormactide*'s sister ships were eventually upgraded into RRF service in the 1980s, becoming the *Cape J* class. However, by the middle of the decade, emphasis was being placed on acquiring more militarily useful Roll On / Roll Off (RO/RO) vessels for the RRF, and further breakbulk upgrades were cancelled. This was the case with *Mormactide* and *Mormacwave* (ex *Washington*).

The RRF program was (and is) administered by MARAD's Office of Ship Operations and is one of several major agency programs in which government-owned merchant ships are employed for national security and other purposes. Since 1940, MARAD (and its immediate predecessor the U.S. Maritime Commission) has administered the federal program providing support to State Maritime Academies (SMA, formerly known as Public Nautical Schools, going back to 1874). The principal form of support is a MARAD-furnished training

ship. During the 1980s the five SMAs⁴ were actively engaged with MARAD in replacing their aging training ships, two of which were of World War II vintage, and the other three dating to the Korean War. The Massachusetts Maritime Academy received its replacement, *Patriot State*, in 1985. Although a sister ship was considered for acquisition and assignment to SUNY Maritime College, the relatively poor material condition of *Patriot State* when acquired prompted consideration of other candidate ships. The Office of Ship Operations issued a Request for Proposals to acquire a ship for conversion, which was “won” by a dark horse submittal by MARAD’s Office of Ship Construction to convert *Mormactide*. By choosing an existing MARAD-owned vessel, the projected costs of acquisition could be placed into conversion and upgrades instead⁵.

After the conversion of the vessel to a training ship by the Bay Shipbuilding Corporation, it was delivered to the Maritime College in 1989. On May 9, 1990, the ship was commissioned as TS *Empire State VI*. The primary employment of a training ship is to embark maritime academy cadets (students) for hands-on practical training and experience in shiphandling, navigation, and engineering necessary to sit for U.S. Coast Guard licenses as merchant marine officers. Graduates from the SMAs receive entry level licenses as either deck or engineering officers. SUNY Maritime College embarks on annual training cruises during the summer, generally from mid-May to mid-July. From about 2010 onwards, SUNY increased the length of the training voyage from 60 to 90 days, to accommodate large increases in enrollment. Cadets typically sail on three training voyages over the course of their academic study, with their duties increasing in complexity and importance as they advance in the program.

⁴ Maine, Massachusetts, New York, Texas and California. A sixth academy in Michigan did not have a training ship assigned until 2002. The Pennsylvania academy closed in 1947.

⁵ See “The T-AGS 39 Class Ocean Survey Ships and Their Conversion to Schoolships” by John C. Daidola, Robert S. Behr, Erhard W. Koehler and John G. Lynch, *Marine Technology* July 2002 published by the Society of Naval Architects and Marine Engineers



***Empire State VI* downbound in the St. Lawrence River off Vercheres, Quebec, December 24, 1989 Enroute to SUNY Maritime College, Fort Schuyler, Bronx, NY after delivery from Bay Shipbuilding Co. Photo by Marc Piche used with permission.**

From 1985 to 2003, two of the MARAD training ships were also designated as troopships in the RRF. The initial two ships were *Patriot State* and *Empire State V* (formerly the troopship USNS *Barrett*). When *Empire State VI* was delivered, it assumed the designation in place of its predecessor. After *Patriot State* was removed from service in 1999, the California Maritime Academy training ship *Golden Bear* was designated as the second RRF troopship. The designation was discontinued in 2003. In January 1994, *Empire State VI* was activated to help evacuate United States troops from Mogadishu, Somalia, after President Bill Clinton ordered withdrawal from the region in October 1993.⁶ This marked both the first formal use of a government-owned troopship since the end of the Vietnam War, and the last such activation to-date.

In 2005, *Empire State VI* was activated to help with relief efforts after Hurricane Katrina devastated New Orleans. The ship's crew transported supplies to the city and provided berthing and meals on board for relief workers. It has subsequently served as a support vessel in other disaster relief efforts, including

⁶ "Bosun 's Pipe," 45; Lawrence E. Casper, *Falcon Brigade: Combat and Command in Somalia and Haiti* (Boulder, CO: Lynne Reiner Publishers, 2001), 130.

after Hurricane Sandy in 2012, and Hurricanes Harvey, and Maria in 2017.⁷ Although the use of training ships in this role had been contemplated over many decades, *Empire State VI* became the first such ship to actually be used for the purpose, and is again the most-frequently used such platform to-date.



***Empire State VI* moored at SUNY Maritime College, Fort Schuyler, Bronx, NY, October 8, 2002
Photo by Erhard W. Koehler, Maritime Administration.**

Without fail, *Empire State VI* embarked the SUNY Maritime College cadet complement on summer training voyages (called “summer sea term” by the college) beginning in 1990 and ending in 2022. SUNY Maritime College and California Maritime Academy are the only SMAs which have never lost a training ship for any reason, and who have never needed to borrow a training ship to satisfy their needs. *Empire State VI* was loaned to the Massachusetts Maritime Academy for four winter training voyages between 2000 and 2003, as its replacement training ship *Enterprise* (later renamed *Kennedy*) was undergoing conversion. While not directly loaned to the other schools, *Empire State VI* has supported embarked cadet complements from the Texas Maritime Academy, and

⁷ "The RRF Response to Hurricane Katrina - MARAD," available at <https://www.marad.dot.gov/about-us/maritimeadministration-history-program/historical-documents-and-resources/the-rrf-response-to-hurricane-katrina/>, accessed September 4, 2018.

the U.S. Merchant Marine Academy in other years to provide necessary seetime for those cadets to qualify for their Coast Guard licenses.

Summer sea terms at SUNY Maritime College typically involve international and domestic port calls, although from time to time the ship operated on what is referred to as a “stateside” cruise involving domestic ports and perhaps ports in Atlantic Canada only. International voyages were usually transatlantic, with port calls in Northern Europe (including the North and Baltic Seas), major Atlantic Islands (Iceland, Azores, Canaries etc.) and along the northern coast of the Mediterranean Sea. In 20XX, the ship made a voyage just north of the Arctic Circle to earn its bluenose. After serving nearly 33 years, with 37 training voyages, four disaster relief deployments, and a three-month stint as the nation’s last serving troopship, *Empire State VI* has earned the distinction of longest-serving⁸ and most-active training ship of the modern era.

DESIGN DESCRIPTION

MARAD Designation	C4-S-1u
Length:	565’ overall
Length between perpendiculars:	528’
Beam:	76’
Depth:	44-46’
Draft:	25’
Displacement:	17,160 long tons
Gross registered tonnage (as SS <i>Oregon</i>)	12,700
Net registered tonnage (as SS <i>Oregon</i>)	8,180
Maximum continuous shaft hp;	19,250
Service speed:	20 knots
Propulsion:	Steam turbine, single screw

TS *Empire State VI* is a single screw, steam-powered training vessel converted from a C4 Mariner cargo ship. It has a vertically framed, welded-steel hull with a double bottom. The original design included six cargo holds. The deck 2 reefer compartments in holds 4 and 5 were used for food storage. The ship was initially

⁸ In the modern era, the California Maritime Academy training ships *Golden State*, *Golden Bear I*, *II*, and *III* have all served a minimum of 20 years, with *Golden Bear III* currently the longest-lived at 26 years. It is scheduled to be replaced circa 2026, after about 30 years of service. The first training ship under the 1874 act was the sailing sloop of war USS *St Mary’s*, assigned to the New York Nautical School (antecedent of SUNY Maritime College), which served for 38 years

designed with a raised foc's'le. The superstructure is moderately streamlined with an exhaust funnel protruding amidships, just abaft of the wheelhouse.⁹

The C4-S-1 u design was a variation of MARAD's *Mariner-class* breakbulk cargo vessel. The C4 cargo vessels possessed relatively standard features that made them desirable to shipping companies like States Steamship Company. The 1959/1960 plans for the C4-S-1 u vessel by George Sharp Company showed the general design was for a vessel with six cargo holds (numbered one through six beginning forward), cranes mounted on the main deck, and a superstructure between frames 115 and 145. There were twenty-three cranes ranging in capacity from 5 to 60 tons mounted on the main deck for loading and unloading cargo from the holds.

The five-deck superstructure of the C4-S-1 u class was located amidships, with propulsion machinery directly below. The main deck of the superstructure had accommodations for the galley and deck crew, as well as the crew's dining facilities. The cabin deck featured a passenger lounge and space for twelve passengers housed in eight staterooms. The deck was 71' above the base line. Finally, the bridge deck was the uppermost deck of the superstructure at 79'-6" above the base line. The ship's wheelhouse, chart room, gyro room, and radio room were on this deck. The captain's stateroom and day room were on the starboard side between the gyro room and wheelhouse. The radar mast, search and signal lights, compass, and gyro repeater were mounted on the top of the house.¹⁰

Training Ship Conversion

In 1988-1989, the vessel underwent major conversion to a training ship that could also be used for troop transport. The U.S. Coast Guard defines a major conversion as one which accomplishes at least one of the following criteria: a) change in vessel type, b) significantly extends a ship's service life, or c) a re-

⁹ R.A. Steam Inc., Maritime Administration, "Conversion of Breakbulk Cargo Ship C4-S-1 u to Public Nautical School Ship S5-S-MA 1 ua," MARAD Contract DTMA9-89-C-9000, Booklet of General Plans, unknown date [Note: the date on the scans of these drawings was cut off but they presumably date to 1986-7 since the ship was converted in 1988.]

¹⁰ National Register Eligibility Assessment, Vessel: SS Cape John/ex Santa Ana/ex C.E. Dant, May 16, 2012, available at <https://www.marad.dot.gov/sh/ShipHistory/Download?filename=c2fDfed1-fd20-4908-b934-5e57eda7f379.pdf>, accessed September 2018; C4-S-1 u Cargo Ship, Designed for States Steamship Company, "General Arrangement of Main Dk. & Above & Inboard Profile," designed by George G. Ship Co., Plan No. V-3140, S9-2-4, Alt. I, November 4, 1959; C4-S-1 u Cargo Ship, Designed for States Steamship Company, "Outboard Profile," Designed by George G. Ship Co., Plan No. V-3140, S9-2-6 ALT, September 25, 1959; Office of Ship Construction, Maritime Administration, "States Steamship Company, Single Screw Cargo Vessel, MA Design C4-S-1 u," MA Plan No. C4-S-1 u-S9-0- I, April 1960.

engining. By 1988, *Mormactide* was 26 years old, and had seen 20 full years of service – essentially a complete service life, at least for tax and depreciation standards. The converted ship was expected to serve about 15-20 years, which qualified as a service life extension, and under the Coast Guard regulations, all modifications to the ship were required to meet regulations in effect in 1988, as if the ship were new. The change in vessel type was less dramatic, in that a training ship is essentially a cargo ship whose cargo is human¹¹. The distinction here is that although the training ship carries a large enough complement of persons to require meeting passenger ship rules and requirements, its purpose is not to transport people. Instead, it is a working ship whose “passengers”, i.e., the cadets, operate the ship under the supervision of experienced licensed personnel. At best, a training ship is an austere passenger ship without any of the trappings that make a passenger ship a destination in and of itself.

As a Mariner-type vessel, *Mormactide* was well-suited for conversion. The Mariners were designed with possible conversion in-mind, and in fact several were converted to naval transports, and three were converted into commercial passenger ships in the 1950s¹². In all cases, the ships were comfortably able to meet Coast Guard and international passenger ship rules for stability and subdivision. As with the previous conversions, *Mormactide* required significant alterations to cargo holds to provide the necessary accommodations for hundreds of persons, to provide safe means of access and egress among the interior decks, to provide larger galleys and messdecks to feed the increased complement, increased storeroom capacity, and an expanded suite of lifesaving equipment. Instead of attractive public spaces such as lounges, bars and theaters, the ship was fitted with classrooms and training laboratories for academic and hands-on instruction in between watchstanding assignments.

The conversion kept the forward and aft kingposts of the original ship but repurposed the rest of the deck area. The deck forward of the superstructure was raised to the level of the foc's'le deck, providing extra compartments to holds 3 and 4 on the main deck. The aft end of the superstructure was extended over hold 5 to accommodate cadets and crew.

¹¹ Quote from Erhard W. Koehler, MARAD Schoolship Program Manager, 1994 – 2007. Mr. Koehler managed the conversions of the current training ships *Golden Bear*, *State of Maine*, *Kennedy* (ex *Enterprise*) and *State of Michigan*, as well as a major renovation of *Empire State VI* between 2000-2002.

¹² Attack Transports *Tulare*, *Paul Revere* and *Francis Marion*, and passenger vessels *Atlantic* (*Banner*), *Mariposa* and *Monterey*. Subsequent names not shown.

As a training ship, accommodations for 791 people (107 crew and 685 cadets) were required. In addition, the ship needed to be able to carry 2,341 troops in Navy-style racks. Modifications included added compartments or alterations for berthing throughout the ship. The stern section of the third deck housed classrooms and labs where cadets could train in their various fields while underway.

The superstructure retains much of its original configuration and purpose, except for an extension aft that houses additional officers and crew. The former officers lounge on the cabin deck has been converted to a second chart room to train cadets in navigation. The former passenger lounge on the bridge deck was converted into a navigation laboratory, while the ship's bridge served the dual purpose of primary ship control, and to train cadets on the helm and prepare them to respond to a wide range of circumstances.

In the original conversion, four new lifeboats were installed to supplement the existing two lifeboats. Two large 145-person lifeboats were installed on the new open main deck forward of the existing superstructure, and two 76-person lifeboats, equal to the originals, were installed on the new extension of the Boat Deck, aft of the original pair. All six of these lifeboats were "open" lifeboats of traditional form. In the mid-1990s, SUNY Maritime and MARAD acquired four (4) Schat-Harding 9.4 meter totally enclosed lifeboats as replacements for the four open 76-person boats. MARAD also furnished suitable davits for these boats, which were stripped from the incomplete U.S. Navy oiler *Benjamin Isherwood*. In addition to the lifeboats, *Empire State VI* also carried a suite of davit-launched and float-free liferafts, to meet U.S. Coast Guard lifesaving requirements. The liferaft arrangements were modified several times over the ship's career. In 2000, a modern diesel-driven rigid-hull inflatable rescue boat was fitting to bring the lifesaving complement in line with the Safety of Life at Sea (SOLAS) convention.¹³

The conversion of *Mormactide* into *Empire State VI* was the first such major conversion of a training ship. Prior to *Mormactide*, the vessels acquired by MARAD had already previously been built or converted into passenger vessels, troop transports, or similar vessels which required little or no structural

¹³ R.A. Steam Inc., Maritime Administration, "Conversion of Breakbulk Cargo Ship C4-S-I u to Public Nautical School Ship S5-S-MA 1 ua," MA RAD Contract DTMA9-89-C-9000, Booklet of General Plans, unknown date [Note: the date on the scans of these drawings was cut off but they presumably date to 1986-7 since the ship was converted in 1988.]; Leon Suty, Port Engineer of New York Maritime College, phone interview by Wesley Hale, August 3 1, 2018; Ron Siegmann, First Assistant Engineer, TS *Empire State VI*, interview by Wesley Hale, September 1, 2018; "Bosun's Pipe," 45.

modifications to be useful as training ships. The immediately preceding conversion, *Patriot State*, was an existing passenger-cargo vessel with capacity for some 150 persons, so the modifications required for it were much less extensive than those required for *Mormactide*. The lessons learned from *Empire State VI* were later applied to successive conversions at California, Maine, and Massachusetts. The last conversion, *Enterprise*, followed the example of *Empire State* in that the parent ship was also a breakbulk ship, albeit of somewhat different original design. Despite its precedent setting nature, however, the design features of *Empire State VI* were entirely conventional, and did not advance the training ship state of the art in any significant way.

Statement of Significance

TS *Empire State VI* has the distinction of being MARAD's longest serving and most used training vessel to date and is the last U.S. Navy troop transport in service. Originally a C4 breakbulk cargo vessel belonging to the States Steamship Company, *Empire State VI* was acquired by MARAD and placed in the National Defense Reserve Fleet in 1985. It was selected for conversion to a training vessel in 1986 and conducted its first training voyage in 1990. The ship conducted annual training voyages for SUNY Maritime College from 1990 to 2022, and for Massachusetts Maritime Academy from 2000 to 2003. *Empire State VI* was activated in 1994 to evacuate American troops from Mogadishu at the close of Operation Rescue Hope. The ship also took part in relief operations after hurricane's Katrina (2005 Gulf Coast), Sandy (2012 New York/New Jersey), Harvey (2017 Gulf Coast), and Maria (Puerto Rico 2017).

National Register Eligibility Statement

Empire State VI had a distinctive career as a training vessel and participated in several major events in U.S. history, however, its participation in those events have not contributed to the major patterns of American history. The vessel's design is not distinctive, and it is not associated with people significant in America's past. Therefore, the ship does not meet any of the eligibility criteria in the National Register.

Date:14 October 2022

Determination: NOT ELIGIBLE

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