

NATIONAL REGISTER ELIGIBILITY ASSESSMENT SS *Cape Jacob*/ ex-*Santa Rita*/ ex-*California*



Cape Jacob underway. Maritime Administration Photographs circa 1998.

Vessel History

Cape Jacob (ex-*Santa Rita*, ex-*California*) was built under Maritime Administration (MARAD) contract MA 97 as a MARAD type C4-S-1u¹, break-bulk design.² MARAD subsidized a contract for six ships of this design.³ Four ships, *Mormacsea*, *California*, *Washington* and *Oregon* were built for the States Steamship Company at Newport News Shipbuilding and Dry Dock Company under contracts FMB-106 and FMB-110.⁴ *Cape Jacob* (ex-*California*) was delivered in 1962.⁵ The ship was designed, and equipped meet the requirements of the States Steamship Company.⁶

States Lines (SL)

The States Lines (SL) were a transatlantic shipping company operating from 1921-1979. Initially Charles Dant, a lumber merchant in Portland, Oregon, founded States

¹ MARAD uses a vessel classification system based on groups of letters and numbers. For example, for the classification C8-S-81b, the C signifies vessel type (cargo, passenger, tanker) and the number 8 signifies its approximate length. Therefore, C8 is a cargo vessel with a length ~800 feet. The S indicates the type of propulsion and has a single propeller, in this example the ship is equipped with steam propulsion machinery. The last group indicates the original vessel design and any modifications made to the vessel.

² The group of four C4-S-1u ships were of the *California* class when built, the J Class when with the Maritime Administration and were overall a Mariner type of design.

³ The six built were *Cape Jacob* (ex-*California*, *Santa-Rita*), *Cape Juby* (ex-*Hawaii*, *Mormacsea*), *Cape Johnson* (ex-*M. M. Dant*, *Mormacsaga*), *Cape John* (ex-*C. E. Dant*, *Santa Ana*) *Empire State VI* (ex-*Mormactide*, ex-*Oregon*) and *Mormacwave* (ex-*Washington*). U.S. Department of Transportation, Maritime Administration. *Characteristics and Index of Maritime Administration Ship Designs*. January 1991.

⁴ Construction Contractor. *Report of Progressive Speed, Maneuvering, Endurance and Fuel Economy Trials of the S. S. Hawaii Design C4-S-1u*. U.S. Department of Commerce, Maritime Administration. Washington, DC, 1962, p. 3.

⁵ MARAD Vessel History Database, Status Card for *Cape Jacob*.

⁶ Construction Contractor. *Report of Progressive Speed, Maneuvering, Endurance and Fuel Economy Trials of the S. S. Hawaii Design C4-S-1u*. U.S. Department of Commerce, Maritime Administration. Washington, DC, 1962, p. 8.

Steamship Company in 1921 with its headquarters in San Francisco. The Dant family owned the company until its bankruptcy and eventual dissolution. Until the 1930s, the company operated routes to Europe and the Far East. The European routes were abandoned prior to World War II. States originally operated a fleet of World War I-era U.S. Shipping Board vessels, but after World War II upgraded its fleet with more modern Maritime Commission vessels. States was one of the smallest of the subsidized carriers in the postwar era and expanded by acquiring Pacific Transport Lines. By the late 1950s the combined States–Pacific Transport fleet was nearing its statutory replacement age and States embarked on a new construction program based on the successful Mariner⁷ design. The first six replacement vessels of the *California* Class (MA design C4-S-1u) were delivered in 1962 and 1963.⁸ Although built in different shipyards, the vessels were externally indistinguishable from one another; the significant differences between the Newport News and NASSCO vessels being the suppliers of the propulsion machinery.

The rapid development of containerization in the transatlantic trade took hold later in the Pacific; however, States did not construct ships capable of carrying significant numbers of containers until the mid-1970s, well after other Pacific carriers had done so. In the interim, the company constructed five large break-bulk vessels of the *Colorado* class (MA design C4-S-69b). The *Colorado*'s were designed from the outset to carry a small number (200) of containers on deck; the *California*'s were modified after construction to carry a similar number of containers on deck. The last vessels constructed for States Lines, beginning in 1976, were the four very large Roll-On/Roll-Off vessels of the *Maine* Class (C7-S-95a). These vessels could carry a combination of vehicular cargo and containers (max 1,000); however, they were not successful in the market, and they proved to be an excessive financial drain on the company. States was forced into bankruptcy in 1979 a few years after the delivery of the last vessel of the class.

The six *California*-class vessels were chartered or sold to other U.S. shipping companies in the mid-1970s. In 1974 *California* was also chartered and renamed *Santa Rita*. The Maritime Administration (MARAD) acquired the vessel subsequent to the bankruptcy on November 15, 1979. MARAD eventually acquired all six of the *California* Class; four of which (*Santa Rita* ex-*California*, *Mormacsea* ex-*Hawaii*, *Moracsaga* ex-*M.M. Dant* and *Santa Ana* ex-*C.E. Dant*) were upgraded to RRF status. The intended upgrade of *Mormactide* (ex-*Oregon*) was cancelled in 1987, which made the vessel available for conversion into the Training Ship *Empire State VI*. The sixth vessel, *Washington*, under the name *Mormacwave*, was retained in MARAD's National Defense Reserve Fleet (NDRF) until it was scrapped in 2005.

⁷ The Mariners were the first new class of cargo ships built in the U.S. by MARAD's predecessor the Maritime Commission after WWII.

⁸ *California*, *Oregon*, *Washington* and *Hawaii* were constructed by Newport News Shipbuilding; *M.M. Dant* and *C.E. Dant* were constructed by the National Steel and Shipbuilding Company (NASSCO) in San Diego, California.



***California* while with States Steamship Lines. Prior to 1979. Wikimapia photograph.**

Maritime Administration

California's career with MARAD was a long and active one. In 1980, MARAD placed *California* under the American President Lines as Agent for the RRF.⁹ While under a readiness status of 5-day reactivation, the ship participated in the no notice exercise BOLD EAGLE 84¹⁰ carrying military cargo from the SBRF to Santa Rosa Island, off Eglin Air Force Base, Florida. BOLD EAGLE 84 was the sixth in a continuing series of readiness exercises for the Department of Defense (DoD) in joint tactics.¹¹

In 1985, the Chief of Naval Operations ordered *California* and two other RRF ships to carry DoD cargo and ammunition to U.S. forces in Japan, Korea and the Philippines during TS 85.¹² When at SBRF, and not on active duty, the Reserve Cargo Handling Battalion often used the ship for training in cargo handling.¹³ During 1985, the ship was modified to handle underway replenishment service (UNREP); the ability to replenish the fleet and the services while underway, without having to offload cargo in a port, and upload it to another vessel saved time and money for the DoD.¹⁴

⁹ On 5-7-80 under contract MA-9626. MARAD ship's files.

¹⁰ It was fiscal year 1984, therefore known as BOLD EAGLE 84.

¹¹ <https://www.usmcu.edu/Research/Marine-Corps-History-Division/Research-Tools-Facts-and-Figures/Chronologies-of-the-Marine-Corps/1983/>. Accessed 8-2-22.

¹² Marad Ship files, p. 555.

¹³ MARAD Ship's Files, p. 530.

¹⁴ MARAD Annual Report 1998. MARAD ship's files.

Taking advantage of these modifications, the ship remained active beginning with Desert Shield and Desert Storm in 1990 and 1991.¹⁵ In August 1990, the RRF consisted of 96 ships, 78 of which were activated to support Operations Desert Shield/Desert Storm. This was the first large-scale activation and employment of the RRF since it was separated from MARAD's National Defense Reserve Fleet (NDRF).¹⁶ Prior to RRF operations, NDRF vessels supported emergency shipping requirements in seven wars and crises. During the Korean War, 540 vessels were activated to support military forces. A worldwide tonnage shortfall from 1951 to 1953 required over 600 ship activations to lift coal to Northern Europe and grain to India. Another tonnage shortfall following the Suez Canal closing in 1956 activated 223 cargo ships and 29 tankers from the NDRF. From 1955 through 1964, another 698 ships stored grain for the Department of Agriculture. During the Berlin crisis of 1961, 18 vessels were activated and remained in service until 1970. During the Vietnam War, 172 vessels were activated. *California* undertook one trip between Oakland, CA and Ad Dammam, Saudi Arabia for this conflict, carrying military supplies for the U.S. Army.¹⁷

In 1993, *California* was renamed *Cape Jacob* and became one of four "Cape J" class Mariner type C4 ships in the RRF.¹⁸ American President Lines remained the agent for the ship. In 1998, *California* underwent sealift enhancement features (SEF) conversion. As with the previous modifications, these enhancements further allowed the ship to provide important service to the DoD. *Cape Jacob* participated in exercise Comptuex 98-2 transferring ordnance at sea during exercises with the USS *Enterprise* battle group, held off Roosevelt Roads, Puerto Rico.¹⁹ In mid-1998 Military Sealift Command (MSC) assigned the ship to Pre-Positioning Squadron Three operating out of the naval base at Diego Garcia, Puerto Rico, adding five vertical pallet lifter cranes to aid in its UNREP capabilities.²⁰ *Cape Jacob* participated in an UNREP demonstration with USS *Arctic* in November 1998. The demonstration, off the East Coast of the U.S., was the first successful live ordnance transfer demonstration of the MCDS system.²¹

In 1999, MARAD overhauled *Cape Jacob* with a Modular Cargo Discharge System (MCDS). After this modification, *Cape Jacob* took a full load of ammunition from New Jersey to Diego Garcia, PR. Throughout the years between 1999 and 2015 *Cape Jacob* successfully fulfilled its duties with the MSC Pre-Positioning Program, operating in Singapore, Korea, Great Britain, and Australia, in addition to many other areas.²² *Cape Jacob* also provided surveillance and picket duty of Diego Garcia. During Operation

¹⁵ MARAD status card, *Cape Jacob*.

¹⁶ The NDRF was established under Section XI of the Merchant Ship Sales Act of 1946 to serve as a reserve of ships for national defense and national emergencies. The RRF component was established in 1976.

¹⁷ Rost, Ronald F., John F. Addams, and John J. Nelson. Sealift in Operation Desert Shield / Desert Storm: 7 August 1990 to 17 February 1991, Report CRM 91-109. Alexandria, Va.: Center for Naval Analyses, May 1991., B-9.

¹⁸ MARAD status card, *Cape Jacob*.

¹⁹ MARAD Annual Report 1998.

²⁰ MARAD ship's files, p. 1181

²¹ MARAD Annual Report 1999.

²² MARAD Ship Files, Annual Reports.

ENDURING FREEDM, the ship was under Matson Navigation Company acting as Agent for MARAD and the ship moved Navy ordnance from Saipan/Guam to overseas destinations.²³



Cape Jacob at NAS Alameda circa 2015. Wikimapia photograph.

The Department of Defense removed *Cape Jacob* from the MSC Pre-Positioning Program in 2015 and the ship went back to SBRF in retention status. In August 2021 the ship was downgraded to non-retention status. *Cape Jacob* is currently at SBRF in Benecia, CA in non-retention status awaiting disposal.²⁴

RRF Modifications

One effect of the Reagan-era buildup of the U.S. Navy's combatant fleet was a substantially increased requirement for auxiliary forces, including at-sea replenishment vessels. In response, the Navy developed the Merchant Ship Naval Augmentation Program (MSNAP) to meet the requirement. As originally conceived, MSNAP vessels would serve as "shuttle ships" to resupply the dry cargo replenishment vessels, which could then remain on station with battle groups for extended periods of time. These shuttle ships were modified internally to suit the permanent carriage of palletized

²³ <http://www.globalsecurity.org/military/systems/ship/cape-j.htm> 9-7-09.

²⁴ MARAD Files.

ammunition. This required fitting of tracked dunnage systems on cargo hold decks to secure the pallets, isolation bulkheads were installed to reduce heat transfer into the cargo holds from the engine room, and means were installed to support at-sea transfer of the ammunition to the primary replenishment vessels. All modified vessels had their personnel complements increased to support specialized navy cargo handling battalions.

Eight RRF vessels²⁵ were modified under the MSNAP program prior to Operation DESERT STORM. A ninth vessel, *Cape Alexander*, completed modifications after the conflict ended. The MCDS was a fully capable installation that allowed the equipped vessel to control the ship-to-ship transfer operation. An MCDS-equipped vessel could effectively operate as an underway replenishment vessel, thus freeing the larger and more sophisticated naval auxiliaries for more important assignments. Given the enhanced capability of the MCDS-equipped vessels, the program was renamed Sealift Enhancement Features (SEF), with the term generally applied to the entire suite of modifications. Six additional RRF vessels were modified under the SEF program; the four C4-S-1u *Cape J* class, and two larger vessels of the C5-S-75a class, *Cape Gibson* and *Cape Girardeau*.

Vertical Replenishment (VERTREP)

VERTREP is the ability to transfer cargo between ships while underway using helicopters. It is a versatile improvement to underway replenishment and allows material transfers to be performed at distances well beyond traditional alongside operations. Nine of the RRF MSNAP/SEF vessels were equipped with elevated platforms and controls to support VERTREP operations. Three SPE-equipped *Cape A*-class vessels²⁶ (C4-S-58a; similar to but not including *Cape Ann*) were fitted with VERTREP platforms that were certified for hover-only operations. This required the receiving ship to supply the helicopter, which could not land on the RRF vessel. Palletized cargo was delivered to the platform by electric forklift trucks using a ramp located on one side of the ship. Because the MCDS consoles were much heavier than the SPE, *Cape Ann* did not have sufficient stability to permit installation of a VERTREP platform; it was the only MCDS ship that did not have VERTREP capability.

Cape Jacob and its three RRF sisters, along with *Cape's Gibson* and *Girardeau* were fitted with VERTREP platforms similar to those fitted to the *Cape A's*. Like the previous ships, these installations did not include helicopter support facilities and the platforms were certified for hover-only operations.

The combination of MCDS and VERTREP required significantly larger complements of navy cargo handling personnel than the SPE-equipped vessels. The *Cape J's* passenger

²⁵ These include: *Agent*; *Aide*; *Ambassador*; *Adventurer*, *Cape Alava*; *Cape Archway*; *Cape Ann*; and *Cape Avinof*.

²⁶ *Cape Archway*, *Cape Ann* and *Cape Avinof*.

staterooms were converted into navy troop and officer berthing for these teams. This was the only significant internal change to the ships accommodations spaces.

Description/Characteristics of Vessel Type

Type: C4-S-1u

Official Number: 287232

Previous names: *Santa Rita, California*

Builder: Newport News Shipbuilding and Dry Dock Company

Year: 1962

Sister Ships: *Cape John, Cape Juby, Cape Johnson, Mormacwave, Empire State (VI)*

Location: Suisan Bay Reserve Fleet, Benecia, CA

Length: 528' (between perpendiculars; 565' overall)

Beam: 76.0'

Depth: 46.0' (at centerline; 44.5' at side)

Draft, design: 29.83'

Displacement (maximum): 22,630 LT

Deadweight (maximum): 12,740 LT

Gross Tonnage (GRT): 12,690 Measurement Tons

Net Tonnage (NRT): 8,150 Measurement Tons

Cargo Capacity: 683,000 cubic feet

Power (Normal): 17,500 SHP (19,250 maximum)

Speed (Service): 20 knots (20.75 maximum)

Main Engine: General Electric Cross-Compound, Geared Steam Turbines [5]
Two Water Tube Foster-Wheeler Boilers

The C4-S-1u class, including *Cape Jacob*, is a typical “modified Mariner” of domestic design and construction. At the time that these ships were designed, most break-bulk vessels being built in the United States were modifications of, or derivatives from, MARAD’s basic Mariner design. The C4-S-1a Mariner program of the mid-1950s was a government effort to design new and improved standardized, subsidized vessels to replace aging WWII-era Maritime Commission ships that were then nearing the end of their service lives and were being rapidly eclipsed in foreign trades by more modern and efficient European and Japanese competitors. The Mariners were not fully successful at first, but soon developed a strong following, particularly in the transpacific trades, which could make best use of their speed and range characteristics. The *Mariners* eventually proved to be very popular ships and through the early 1960s a total of about 65 modified and derivative *Mariner*-class vessels were built for several U.S. steamship companies.

Cape Jacob follows the typical Mariner arrangements and hull form. Seven cargo holds are arranged, four forward of the machinery space, and three aft. A single superstructure is fitted above the machinery space, which provides accommodations for licensed officers, crew, and up to 12 passengers. The cargo gear features booms and kingposts topped with crosstrees with four booms provided for each hold except holds one and seven, which each have two booms. The forecastle is raised and continues over cargo holds one and two and features an attractive curved transition to the main deck. As originally constructed, there were no provisions for stowage of containers. *Cape Jacob*

is propelled by cross-compound geared marine steam turbines driving a single propeller. The boilers are typical marine “D” type operating at about 600 psi.

As mentioned previously, the *Cape J* class was constructed at two different shipyards. Of the four RRF vessels in the *Cape J* class, two (*Cape Jacob* and *Cape Juby*) were built by Newport News Shipbuilding & Dry Dock Company and delivered in 1962. The other two vessels (*Cape John* and *Cape Johnson*) were built by the National Steel & Shipbuilding Company. The differences between the Newport News and National Steel vessels were minor. Except for a forecastle that is stated to be 15 feet longer in the National ships, and some differences in the capacity of the cargo handling gear, they appear to be essentially the same. The National vessels have General Electric turbines, whereas the Newport News vessels have turbines manufactured by the shipyard; however, all six vessels (including *Empire State VI* and the scrapped *Mormacwave*) were fitted with the same design Foster-Wheeler boilers.

Cape John and *Cape Johnson* were fitted with an additional “tween deck” in several cargo holds during their SEF modifications. This was possible because the height of standard palletized ammunition was low enough to allow an intermediate deck to be fitted in what were otherwise very high cargo holds, thus allowing for denser stowage of ammunition. The change did not significantly alter the ships total cargo capacity because the volume of the holds remained close to the original (some break-bulk stowage capacity was lost due to the volume of the new deck structure). This modification did not significantly alter the basic design parameters of the vessel and had no external impact or impact to machinery.

Historical Integrity

The overall condition of *Cape Jacob* is good; it has experienced only normal wear and aging for a vessel of its age. The late 1980’s SEF program did not significantly change the ship’s structure, arrangements or equipment. Throughout its service life *Cape Jacob* has retained much of its original form and its overall historical integrity is good.

Statement of Significance

Cape Jacob is a good, but not unique example of the final evolutionary development of the break-bulk general cargo ship in the age just before the containerization revolution. It is an equally good representative of the domestic Mariner design, which dominated the U.S. foreign trade in the latter half of the 1950s and through the mid-1960s. The C4-S-1u was among the last modified-Mariner classes constructed, yet paradoxically is nearly the closest to the original C4-S-1a design from among the five major design variants built (C4-S-1q; 1s; 1sa; 1t and 1u).²⁷ Consequently, *Cape Jacob* is not significant from a technical standpoint.

²⁷ MARAD, Characteristics and Index of Maritime Administration Ship Designs, January 1991.

The activation of the RRF during the build-up to DESERT SHIELD/DESERT STORM was the first large-scale activation and operation of the force since its creation in 1976, and the first major sustained sealift operation since the end of the Vietnam War. *Cape Jacob* delivered military cargoes and provided desperately needed services in a time of national need. *Cape Jacob* later served a similar function during Operation ENDURING FREEDOM. Subsequent crises involving MARAD's role of assisting the military during national emergencies have generally utilized more efficient ship types more in keeping with modern logistics operations. The employment of *Cape Jacob* in the aforementioned operations thus represented the end of the era of traditional oceangoing shipping.

Cape Jacob is one of six of its class and type built at a time of rapidly changing commercial shipping needs. The ship is more than 50-years-old but does not possess the extraordinary historical significance in any category necessary to be eligible for listing on the National Register of Historic Places. It remains a fairly typical break-bulk ship, similar in size, construction, machinery, propulsion, cargo capacity and other features to many of the 100 or so other break-bulk vessels constructed domestically in the 1950s and 60s. It was one of 78 RRF vessels activated by the Navy to support Operation DESERT SHIELD/DESERT STORM and later for Operation IRAQI FREEDOM; however, its role was not significant enough to qualify under Criteria A, particularly considering the recent nature of those operations.

Date: December 8, 2022

Determination: NOT ELIGIBLE

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