

**NATIONAL REGISTER ELIGIBILITY ASSESSMENT**  
**VESSEL: SS *Cape Flattery*, ex-*Delta Norte***



**SS *Cape Flattery* Beaumont Reserve Fleet. Maritime Administration photograph.**

### **Vessel History**

*Cape Flattery* is a lighter aboard ship (LASH) barge carrier ship owned by the federal government. Built for subsidized commercial liner service in 1973, the Maritime Administration (MARAD) purchased the ship in 1986 for use in its Ready Reserve Force (RRF), which consists of a group of vessels that can be activated on short notice to assist in the deployment of military equipment and supplies during times of national emergency. RRF ships are maintained under contract for MARAD and are manned by civilian crews when activated by the U.S. Navy's Military Sealift Command (MSC). *Cape Flattery* was downgraded from RRF status in August 2021. It is currently moored at MARAD's Beaumont Reserve Fleet (BRF) at Beaumont, Texas.

### **Delta Lines**

The Maritime Administration (MARAD) contracted with Avondale Shipyards, New Orleans, LA to build *Delta Norte* in 1973 for operation by the Delta Steamship Lines. The

Maritime Administration classified the vessel C9-S-81d.<sup>1</sup> Also in 1973 Avondale Shipyards built two more ships of this design for Delta Steamship lines, *Delta Mar* (1974, renamed *Cape Farewell*, currently in the BRF), and *Delta Sud* (1974, scrapped). In total Avondale Shipyards built nine C9-S-81d cargo vessels. *Green Harbour* (ex-*William Hooper*), *Green Island* (ex-*George Wythe*), *Green Valley* (ex-*Button Gwinnett*), *Robert E. Lee*, *Sam Houston*, and *Stonewall Jackson* were all a part of the Maritime Security Program, but all have since been released.<sup>2</sup>

Delta Steamship Lines, operated from Baton Rouge, LA and used *Delta Norte* for its routes to South American ports. In 1985, United States Lines (USL) acquired Delta Steamship lines along with Moore McCormack lines and McLean Industries. A part of the acquisition included title to *Delta Norte*, *Delta Mar* and *Delta Sud* as well as eight other vessels in the Delta fleet.<sup>3</sup> United States Lines had terminated its passenger services but continued to operate as a container ship line, run by containerization pioneer Malcom McLean.

In the 1980s USL rapidly expanded its fleet in addition to acquiring its competitors. United States Lines bet on an expected surge in oil prices by borrowing heavily to construct a new class of Jumbo Econships, designed to be fuel efficient, but also the largest cargo ships yet built at 57,000 gross tons. Unfortunately, USL lost the gamble. During the mid-80s when the new ships were being delivered, oil prices fell to nearly historic lows. Although the vessels were more economical, they were giant and slow leaving USL with overcapacity, deeply in debt and unable to compete with faster ships. From this disaster USL filed for bankruptcy 24 November 1986. United States Lines sold vessels to pay creditors- vessels like *Delta Norte*, which MARAD purchased April 1986.<sup>4</sup>

## Maritime Administration

A year after purchase MARAD changed the vessel's name to *Cape Flattery*. The ship was in good condition when purchased and was in good working order when reactivated for

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<sup>1</sup> MARAD uses a vessel classification system based on groups of letters and numbers. For example, for the classification C9-S-81d, the C signifies vessel type (cargo, passenger, tanker) and the number 9 signifies its approximate length. Therefore, C9 is a cargo vessel with a length of 900 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.

<sup>2</sup> President Clinton established the Maritime Security Program on October 8, 1996, to maintain a fleet of commercially viable, militarily useful merchant ships active in international trade. This fleet is available to support U.S. Department of Defense sealift requirements during conflict or national emergencies. MSP provides a retainer incentive to ensure these vessels are available to the Secretary of Defense during war of national emergency. <https://maritime.dot.gov/national-security/strategic-sealift/maritime-security-program-msp>, accessed 4-11-22.

<sup>3</sup> Vessel History Database, "Status Card," *Delta Norte*.

<https://magazines.marinelink.com/Magazines/MaritimeReporter/198503/content/approves-steamship-united-203077>, accessed 4-11-22. [https://en.wikipedia.org/wiki/United\\_States\\_Lines](https://en.wikipedia.org/wiki/United_States_Lines). Accessed 4-11-22.

<sup>4</sup> Feder, Barnaby J. (6 July 1988). "McLean Industries Files Its Reorganization Plan". *The New York Times*. Accessed 25 February 2012. Rasky, Susan F. (1986-11-25). "Bankruptcy Step Taken By McLean". *The New York Times*. Accessed 11-16-2016. <http://www.oldsaltblog.com/2019/09/a-look-at-mcleans-clipper-ships-the-fastest-cargo-ships-in-the-world/>. Accessed 4-11-22.

Desert Storm. *Cape Flattery* was reactivated in 5 days, and made two trips to Ad Dammam, Saudi Arabia. The first shipment, from Wilmington, had a cargo for the 1<sup>st</sup> Theater Sustainment Command (COSCOM), the logistical support arm of the XVIII Airborne Corps for Operation Desert Shield and Desert Storm.<sup>5</sup> The second started at Sunny Point, NC, and carried ammunition.<sup>6</sup>

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).<sup>7</sup> More than seventy-five percent of the RRF provided sealift to support the U.S. effort in the Persian Gulf between August 1990 and April 1991. The ships transported 750,000 short tons of dry cargo, which was one-fifth of the total dry cargo sealifted during the conflict.

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. *Cape Flattery* joined the RRF too late to assist in those operations but performed valuable service during the Desert Storm international military operations to stop Iraqi military expansion in the Persian Gulf area and subsequently to liberate occupied Kuwait.

On March 18, 2004, *Cape Flattery* was activated for TURBO CADS<sup>8</sup> which lifted cargo to the Far East. The ship encountered two tropical typhoons on the way to the discharge port. The *Cape Flattery* completed discharging cargo following Exercise TURBOCADS 04 and stood by for reassignment to a non-OIF cargo mission of munitions retrograde movement from Korea to Concord, CA, in September and October.<sup>9</sup>

While with MARAD, in the RRF, *Cape Flattery* was activated and put through sea trials often. It also took part in military readiness exercises like the joint exercise on humanitarian and security response to an international disaster at the Navy's

<sup>5</sup>[https://www.army.mil/article/49920/1st\\_theater\\_sustainment\\_command#:~:text=The%201st%20COSCOM%20deployed%20to%20Saudi%20Arabia%20in,provided%20crucial%20logistics%20support%20to%204%201%2F3%20divisions](https://www.army.mil/article/49920/1st_theater_sustainment_command#:~:text=The%201st%20COSCOM%20deployed%20to%20Saudi%20Arabia%20in,provided%20crucial%20logistics%20support%20to%204%201%2F3%20divisions). Accessed 4-12-22.

<sup>6</sup> 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.

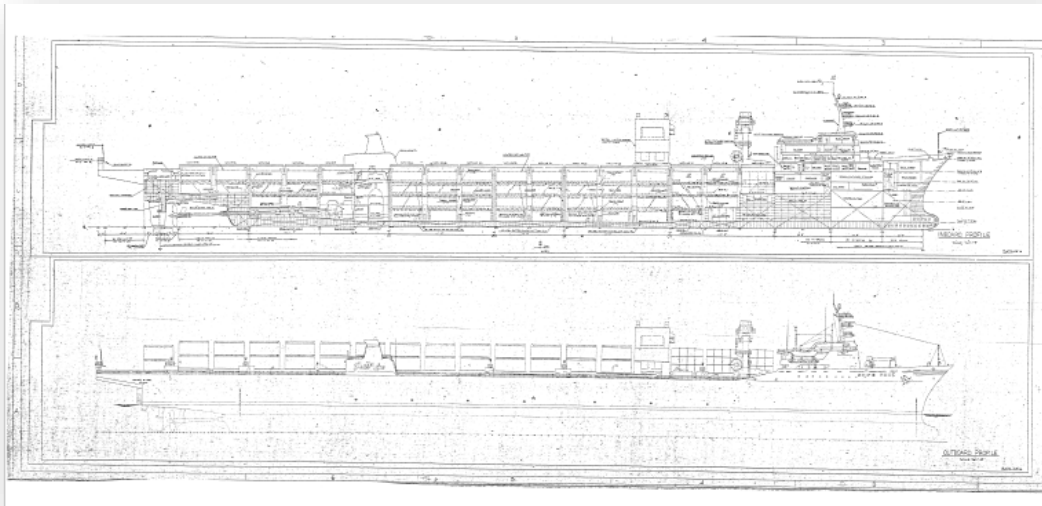
<sup>7</sup> The NDRF was established under Section XI of the Merchant Ship Sales Act of 1946 to serve as a reserve of ships for national defense and national emergencies. The RRF component was established in 1976.

<sup>8</sup> "Turbo" indicates an exercise sponsored by the U.S. Transportation Command; CADS stands for Containerized Ammunition Distribution System.

<sup>9</sup> Marad 612 files "2003-2006 RRF history."

installation Port Hadlock in August 2005. *Cape Flattery* and *Keystone State* delivered 800 containers of ammunition each weighing 10-20 tons. The joint exercise included US Naval Reserve, US Air Force, US Coast Guard, and civilian workers.<sup>10</sup>

### Description/Characteristics of Vessel Type



#### C9-S-81d Ship's plans.

LASH, or lighter aboard ship vessels, were designed to transport fully loaded barges in ocean freight service. An extension of the idea of the multimodal shipping container, the LASH system was developed to reduce the cost of shipping bulk cargo. As described in a contemporary trade journal, “[P]re-stowed lighters can be raised and lowered from the mother ship without lengthy in-port layovers, thereby offering an unparalleled express delivery service for shippers.” The LASH concept was developed by naval architect Jerome L. Goldman of Friede & Goldman, Inc., of New Orleans, who received a patent for the idea in 1966. He also founded LASH Systems, Inc., to license construction of LASH vessels based on his concept.<sup>11</sup>

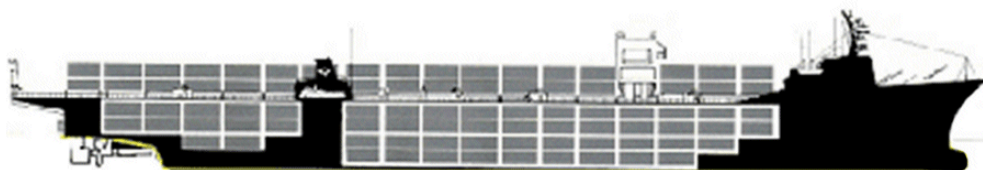
*Cape Flattery* is a large, steel oceangoing freighter, of moderately high speed. Depending on the company and the length of the ship<sup>12</sup>, the LASH vessel was configured to carry

<sup>10</sup> *Kitsap Sun*, “Looking Out for World Emergencies,” 11 Aug 2005, <https://www.newspapers.com/image/815704333>. Accessed 4-11-22.

<sup>11</sup> Quote from Bob Ware, “The Editor’s Log,” *Marine Engineering / Log* (August 1870), 98; John Pope, “Jerome Goldman, a naval architect and real estate developer, dies at 89,” *New Orleans Times-Picayune*, Sept. 10, 2013; Jerome L. Goldman, “Integrated Barge and Cargo Ship Construction,” U.S. Patent 3,273,527, Sept. 20, 1966.

<sup>12</sup> There were two “standard” LASH designs, the C8-S-81b of 820 ft overall length, and the C9-S-81d of 893’-4” overall. Internal differences accounted for the variations in barge and container capacities among the 20 ships originally built for 5 different companies.

between 49 and 89 lighters, and as many as 488 twenty-foot containers (TEUs). The ship was self-sustaining; it was fitted with a 500 LT gantry crane to handle the lighters, and a second 30T gantry crane to handle containers.<sup>13</sup> The image below depicts the Central Gulf Lines vessel *Green Island*, a C9-S-81d variant equipped to carry 89 lighters and no containers; hence, only the barge gantry crane is shown.



**An example of a loading configuration of a LASH vessel, SS *Green Island*.**

*Cape Flattery* has an all steel, welded construction. Its design employs a curved stem and a square stern. The hull is longitudinally framed, divided by 10 transverse watertight bulkheads. The ship measures 893.04 feet to include its aft crane overhang. It has a beam of 100 feet. As originally built, *Cape Flattery* was configured to carry 74 barges, and 288 TEUs. It had a service speed of 21 knots, and a maximum speed of nearly 23 knots, but often operated at an economical speed of 18 knots.<sup>14</sup> In 2002, at a cost of 15 million, MARAD converted *Cape Flattery* to accommodate containers.<sup>15</sup>

Jerome L. Goldman, shipbuilding engineer, designed the first LASH ships *Acadia Forest* and *Atlantic Forest* in the late 1960s.<sup>16</sup> These ships were foreign built and owned. Renowned for his work in offshore design and engineering, Jerome L. Goldman was trained in Naval Architecture and created Friede and Goldman Ltd., which was an international leader in ship and offshore rig design.<sup>17</sup>

LASH ships were designed for a higher speed service and had fine lines fore and aft as well as a protruding bulb bow. Short but deep bilge keels were fitted to reduce roll, and the ship carried passive anti-roll tanks. The hull was longitudinally framed except near the bow to provide deep open holds without intervening decks. Longitudinal bulkheads outboard of the holds serve as side tanks.<sup>18</sup> During periods of activation with MSC, the

<sup>13</sup> <https://maritime-executive.com/editorials/remembering-lash>. Accessed 4-1-22.

<sup>14</sup> *Cape Flattery* Ship File, MARAD 05.05 NDRF Ship Files, HQ office. Mentz, Paul. *U.S. Merchant Fleet Characteristics*. The Maritime Administration United States Department of Commerce, July 1974, p. 9.

<sup>15</sup> MARAD ship's files.

<sup>16</sup> [https://en.wikipedia.org/wiki/Type\\_C8-class\\_ship](https://en.wikipedia.org/wiki/Type_C8-class_ship). Accessed 4-1-21.

<sup>17</sup> <https://www.oceanstaroec.com/hall-of-fame/industry-pioneers/jerome-l-goldman/>. Accessed 3-31-22.

<sup>18</sup> "LASH Italia, First U.S.-Built Barge Carrier Completed," *Marine Engineering / Log*, January 1971, pp. 37–41, 80.

ship only needed a crew of 24.<sup>19</sup> The ships were powered by two Babcock & Wilcox boilers supplying two DeLaval steam turbines, geared to a single shaft and a single, 23'-diameter, four-bladed screw. Maximum shaft horsepower was 32,000 at 105 rpm. Service speed was 22.5 knots. Steering was through a semi-balanced rudder carried on a horn.<sup>20</sup> Ship's electrical service was supplied by two turbogenerators, one of 2,500 kW capacity powered by steam, and a second diesel generator with 2,000kW capacity. The vessels had one evaporator with a capacity of 25,000 gallons per day.

## Modifications

In January 2002, MARAD modified *Cape Flattery* making it easier to load and off-load containers as opposed to the LASH barges it was designed to use. This entailed adding container cranes to the ship at a cost of over 15 million dollars.<sup>21</sup>

## Historical Integrity

*Cape Flattery* is in good condition. The ship is largely unchanged from its original configuration, and still possesses its signature original barge crane. Modifications made to increase container stowage did not significantly alter the ship's arrangement, hatch covers, or primary structure.

## Statement of Significance

The LASH concept was developed by naval architect Jerome L. Goldman of Friede & Goldman, Inc., of New Orleans. LASH vessels were mainly used between 1969 and 2007.<sup>22</sup> LASH carried all types of breakbulk and bulk cargos to include lumber, steel, grain, minerals, machinery, military equipment and various other supplies and household goods. The LASH system was superseded by the container system, still in use today, but it served initially as a revolutionary and ultimately reliable work horse design for many years in the shipping industry.<sup>23</sup>

The ship activated for service during Operations *Desert Shield/Desert Storm*, where it, along with 79 others MARAD vessels, provided war materiel in support of U.S. and coalition forces. It is one of the last of its kind, but was not the first built, nor did it encompass any particularly unique characteristics. Subsequent crises involving

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<sup>19</sup> Norman Polmar, *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis, Md.: Naval Institute Press, 2005), p. 310.

<sup>20</sup> Polmar, *Naval Institute Guide*, 310; Dillon, E.S. et al, "Forty Years of Ship Designs," Presented at SNAME Annual Meeting, New York, NY, November 13-15, 1976, p. 206.

<sup>21</sup> MARAD Ship's files. Email Erhard Koehler, 4-12-22.

<sup>22</sup> Based on use it would appear LASH fell out of favor as early as 2003 although one of *Cape Fear*'s contemporaries *Lihue ex Thomas E. Cuffee*, is still operating. MARAD Annual Reports, multiple years.

<https://www.vesselfinder.com/vessels/LIHUE-IMO-7105471-MMSI-0>. Accessed 5-4-22.

<http://www.hawaiiifreepress.com/Articles-Main/ID/25324/Matson-Recycles-Containership-Kauai-in-Texas>. Accessed 5-4-22.

<sup>23</sup> "Remembering LASH," *The Marine Executive*, 25 January 2020.

MARAD's role of assisting the military during national emergencies have generally utilized different ship types more in keeping with modern logistics operations.

### **National Register Eligibility Statement**

*Cape Flattery* does not possess the extraordinary historical significance necessary under Criteria Consideration G or in any category necessary to be eligible for listing on the National Register of Historic Places. While it did participate in Operations Desert Shield/Desert Storm, it was one of 79 RRF vessels activated by the U.S. Navy to support those operations and its role was not significant enough to qualify under Criteria A, particularly considering the recent nature of those operations.

**Date: April 1, 2023**

**Determination: NOT ELIGIBLE**

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