

NATIONAL REGISTER ELIGIBILITY ASSESSMENT

VESSEL: *Diamond State* / ex-*Japan Mail*, *President Truman*



Figure 1: Crane ship *Diamond State* with heavy-lift cranes mounted in pairs on the Main Deck. Maritime Administration photograph, from *Diamond State* historical information.¹

Vessel History

SS Diamond State is a heavy-lift crane ship owned by the United States government. It was originally a break-bulk cargo vessel but was lengthened and converted to a container ship in 1971. MARAD purchased it in 1987 and converted it to a crane ship for use in the Ready Reserve Force (RRF). The RRF is a fleet of cargo ships maintained in ready to operate status by the Maritime Administration (MARAD) and operated by Military Sealift Command (MSC) during times of national emergency. RRF ships provided sealift capacity during Operations DESERT SHIELD/DESERT STORM in 1990–92 and assisted in the relief of the port of New Orleans after Hurricane Katrina in 2004. *Diamond State* is currently moored at MARAD's National Defense Reserve Fleet (NDRF) in Beaumont, Texas, where it is retained for parts for other reserve-fleet vessels.

¹ MARAD Vessel History Database, Accessed on August 28, 2023, <http://www.marad.dot.gov/sh/ShipHistory/Det>.



Figure 2: S.S. *Japan Mail* at dock in Vancouver, British Columbia, December 7, 1960.²

Construction

The crane ship *Diamond State* was originally the break-bulk cargo liner *Japan Mail* built for the American Mail Line, Ltd. American Mail's fleet reached statutory obsolescence in the late 1950s, and the company embarked on a construction program to replace its aging cargo ships. *Japan Mail* was the first of three identical vessels designed to transport general cargo in subsidized liner service between ports in the U.S. Pacific Northwest and the East Asia. Its sister ships included *Washington Mail* (1961, now *Equality State*) and *Philippine Mail* (1962, later *American Banker*, scrapped in 2005). American Mail Line ordered two additional ships of similar design, *Oregon Mail* and *Canada Mail*, in December 1962; they were completed in 1964 and 1965 respectively.³

The J. J. Henry Company of New York and Philadelphia designed *Japan Mail*. It also supervised the vessel's construction at the Los Angeles Division of the Todd Shipyards Corporation in San Pedro, California. The design, designated C4-S-1s by MARAD, was an adaptation of the Mariner cargo ship design (C4-S-1a) developed in the early 1950s.

² Source: Photograph by Walter E. Frost, City of Vancouver Archives, no. AM1506-S3-3-: CVA 447-5300. Permission for republication not secured.

³ "AML's Washington Mail," *Marine Engineering / Log* (March 1962), 61–72; "SS Oregon Mail: High-Speed Cargoliner Joins American Mail Line's Far East Service," *Marine Engineering / Log* (March 1963), 50–57, 119, 121; Frank A. Gerhardt, "The Maritime Administration Shipbuilding Program from 1950 to 1984," chart reproducing contract data found in the Records of the Maritime Administration (RG 357), National Archives and Records Administration, http://appendix.usmaritimecommission.de/documents/documents_main.htm.

It employed the same overall dimensions and horsepower as the *Mariner* but was modified to suit the requirements of American Mail Line's Pacific cargo service. These modifications included an extended forecastle deck with flaring bulwarks to deflect water in higher sea states and bipod cargo masts in place of kingposts. A. Baker Barnhart Associates of New York designed the interiors of the accommodation spaces.⁴

The contract for the vessel's construction was awarded August 5, 1959, and the keel laid November 22, 1960. *Japan Mail* launched August 8, 1961, and Todd Shipyards delivered April 19, 1962. Elizabeth Gleed, wife of Thomas F. Gleed, a director of the American Mail Line, christened the ship. Matron for the occasion was Helen V. (Poe) Goodrich, wife of James F. Goodrich, the general manager of Todd Los Angeles (and future Under Secretary of the Navy under President Ronald Reagan).⁵

Japan Mail was built under a federal construction-differential subsidy administered by MARAD. Todd Shipyards bid \$11,925,055 each to build the ship and its sisters. Government-stipulated national-defense features, such as additional reserve horsepower, added \$80,539 to the price of each ship, for a total contract price of \$12,005,594 each or \$36,016,782 total. MARAD calculated that the cost of these vessels if built in a foreign shipyard would be \$18,450,000, for an anticipated subsidy of 50.7 percent.⁶ Changes made during construction led to somewhat higher final costs. MARAD purchased the three vessels from Todd Shipyards for about \$39.1 million and sold them to American Mail Line for \$19.3 million. American Mail Line traded in three old vessels from its fleet to MARAD for an allowance of \$2.349 million against the purchase of the new ships. The line leased the old freighters back until the new vessels were ready.⁷

⁴ "AML's Washington Mail," 61, 63.

⁵ Gerhardt, "Maritime Administration Shipbuilding Program"; "SS *Japan Mail* launched by Todd," *Marine Digest*, August 12, 1961, 1.

⁶ Frank A. Gerhardt, "Title V New Construction Contracts, for period beginning July 1st 1957," chart reproducing financial data found in the Records of the Maritime Administration (RG 357), National Archives and Records Administration, http://appendix.usmaritimecommission.de/documents/documents_main.htm. The professional press reported a lower vessel cost of \$11,350,000; see "U.S. Shipyard Production during 1962," *Marine Engineering / Log* (February 1963), 55.

⁷ *Annual Report of the Federal Maritime Board and Maritime Administration 1960*, 4; *Annual Report of the Federal Maritime Board and Maritime Administration 1961*, 52.



Figure 3: The *Japan Mail* at Vancouver, British Columbia, January 23, 1972, after being lengthened and converted to all-containerized cargo.⁸

Service History

Japan Mail, registered in Seattle, and entered service in April 1962 carrying general cargo on the American Mail Line's subsidized routes connecting ports in Washington, Oregon, and British Columbia to ports in Japan, Korea, Taiwan, the Philippines, and Hong Kong. A March 1964 advertisement lists additional stops at Pusan, Keelung, Manila, "Phil[ippine] Outports," Hong Kong, Kobe, Nagoya, Shimizu, and Yokohama prior to arrival in Vancouver. Its first captain was Capt. Trygve A. Mithassel of Seattle.⁹

In 1963, *Japan Mail* and its two sisters made 15 voyages and generated \$7.985 million in revenue for American Mail Line. At the time American President Lines, Ltd had a 90% stake in the company. The three ships made the same number of roundtrips in 1964 and generated \$8.5 million in revenue.¹⁰

The industry-wide shift to intermodal, containerized freight handling during the late 1960s made the *Japan Mail* uneconomical. American Mail Line had the vessel lengthened in 1971 and converted to a fixed-guides containership. The ship was cut in two at Bethlehem Steel's San Francisco yard and a new 105'-6" midbody added. The yard also added sponsons to either side of the main deck at the stern and immediately abaft the raised foredeck to give the main deck a rectangular shape for container stowage. The ship's bipod cargo masts were removed, two decks were added atop the midships deckhouse to raise the wheelhouse, and an 800-hp bow thruster was installed. The vessel's enlarged design was designated C6-S-1x by MARAD. The conversion,

⁸ Source: Photograph by Walter E. Frost, City of Vancouver Archives, no. AM1506-S3-3-: CVA 447-5301. No Permission for republication.

⁹ "Shaft Alley Chatter," *Marine Engineering / Log* (April 1962), 121; "American Mail Trans Pacific Service," *Montreal Gazette*, March 25, 1964, 15.

¹⁰ *Annual Report of the Maritime Administration* 1962, 45; House Committee on the Judiciary, *The Ocean Freight Industry*, H. Rpt. 1419, 87th Cong. 2d. sess., March 12, 1962., 47; "Pacific Marine," *Marine Engineering / Log* (June 15, 1965), 42G.

completed in December 1971, increased the ship's container capacity from 211 TEUs to 892 TEUs. It was fitted to carry both 20' and 40' containers and retained capacity for reefer and deep-tank cargoes. A 1974 advertisement solicited cargoes of all these types for carriage to Yokohama, Kobe, Nagoya, Hong Kong, Keelung, the Far East, and Southeast Asian ports.¹¹

Ownership of the ship was transferred from American Mail Line to American President Lines (APL) on October 1, 1973. APL changed the ship's name to *President Truman* on November 14, 1975, although it continued to operate under the AML flag until 1978. From 1978 until 1987 the ship sailed directly for APL.¹²

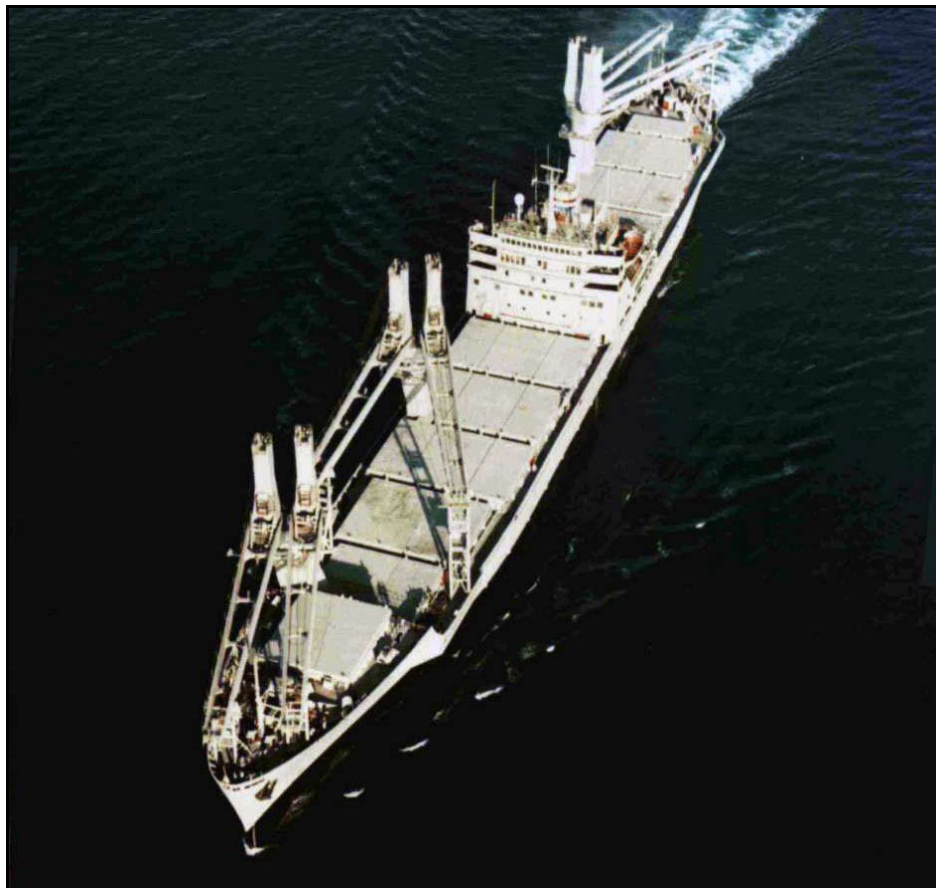


Figure 4: *Diamond State*, aerial view showing heavy-lift cranes and cargo hatches.¹³

¹¹ "Around the Shipyards," *Marine Engineering / Log* (October 1971), 78. American President Lines' corporate history gives the converted ship's TEU capacity as 1,1124; APL, "History—1952–69 Vessel Statistics," <http://aplinfo.apl.com/history/timeline/stat8.htm#pro2>; "American Mail Line," *Montreal Gazette*, July 16, 1974, 45.

¹² Vessel status cards for *Diamond State*, MARAD Vessel History Database, <http://www.marad.dot.gov/sh/ShipHistory/Detail/1262>; APL, "History—1952–69 Vessel Statistics."

¹³ Source: Maritime Administration photograph, from *Diamond State* historical information, MARAD Vessel

MARAD History

On January 23, 1987, APL sold *President Truman* to the federal government. The government planned to convert it to a crane ship for use by Military Sealift Command (MSC), “to unload cargo from other ships at ports where shore facilities are unavailable.” The ship was converted at Tampa Shipbuilding Company, Tampa, Florida, between November 1987 and January 1989. Three pedestal cranes with twin booms were added on the Main Deck, which were designed to lift containers, vehicles, and other cargo from the ship to a pier, from the ship to a lighter, or from other ships to adjacent piers or lighters. The ship’s maximum lift capacity after conversion, using four cranes working together, was 90-tons. The former *Washington Mail*, renamed *Equality State*, was similarly converted soon afterwards, for a total cost to the government for both ships of \$43 million. *President Truman* was renamed *Diamond State* on February 14, 1989.¹⁴ The ship entered the Ready Reserve Force (RRF) on February 22, 1989, and was assigned a five-day-readiness status and outported in New Orleans in June 1989.¹⁵

At the time of Operation DESERT SHIELD in August 1990, the RRF included 96 ships, 68 percent of which were in five-day readiness status, just like *Diamond State*. Between the beginning of the operation and late February 1991, the U.S. government shipped about 3.3 million short tons of dry cargo to the Persian Gulf to support military operations there.

MSC activated *Diamond State* on December 4, 1990, and turned it over to MSC on December 14, six days longer than the vessel’s nominal five-day activation window. A MARAD internal review explained the delay:

DIAMOND STATE was completing a repair period and was on sea trials when ordered to activate on December 4, 1990. The trial was successfully completed on the next day. Tender of the vessel was arranged to occur following minor repairs, provisioning and crew arrival. As with most Central Region activations, crew arrival became the predominant factor in delaying this activation. The full crew was not aboard until December 13,

History Database, <http://www.marad.dot.gov/sh/ShipHistory/Detail/1262>.

¹⁴ Quote from “Newest Navy Crane Ship Christened ‘Diamond State’ at Tampa Yards,” *Maritime Reporter* (March 1989), 31; “Navy plans to launch 2 ships,” *Sarasota Herald-Tribune*, January 28, 1989, 8BCE; vessel status cards for *Diamond State*; Norman Polmar, *Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis, Md.: Naval Institute Press, 2005), 308; “Navy Christens ACS at Tamps Shipyards,” *Maritime Reporter* (June 1989), 11.

¹⁵ Vessel status cards for *Diamond State*.

and MSC did not accept opcon until the full crew was aboard. The vessel was tendered and accepted on December 14.¹⁶

The ship arrived in Charleston, South Carolina to load combat service support cargo December 18, and departed December 22, for Ad Dammam, Saudi Arabia, where it arrived on January 11, 1991. It remained on station in the Middle East assisting with military cargo operations until April 1991, when it sailed for the U.S. West Coast as part of Operation *Desert Sortie*, the redeployment of military assets to their home bases after the war. After a further period on station in the Middle East, *Diamond State* was deactivated in September 1992 and repaired before returning to its outport location in January 1993. About 85 percent of material for Operation DESERT SHIELD/STORM was carried by sea. The United States government utilized 344 vessels during the conflict and *Diamond State* was one of 78 RRF vessels activated for service.¹⁷

From 1993 to 2005, the ship remained in a five-day ready-reserve status. It was tested periodically by no-notice activation drills and sent from different shipyards from time to time for maintenance and repairs. It was outported to Houston, Texas in 1997, and, beginning in spring 2000, was managed for MARAD by Pacific Gulf Marine, Inc., under contract.¹⁸

On September 7, 2005, *Diamond State* was activated for use in the relief of New Orleans after Hurricane Katrina, where it generated electrical power in the port and unloaded the first cargo ship to arrive after the hurricane. The ship was one of eight RRF vessels, including sister ship *Equality State*, activated for the emergency. This was the first time RRF assets were activated for a civilian mission. The ship returned to Houston October 19.¹⁹

¹⁶ “RRF Activation Summary (Desert Shield / Desert Storm),” Maritime Administration files, Washington, D.C.; Ronald F. Rost, 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), 1–5, 11, B4. Seventy RRF vessels were activated for these operations, but two additional RRF vessels, activated for another mission, also made Desert Shield cargo deliveries.

¹⁷ Erhard Koehler, “RRF Operation Desert Shield / Desert Storm readiness notes,” Maritime Administration files; Rost, *Sealift in Operation Desert Shield*, B-9; “RRF Activation Summary (Desert Shield / Desert Storm);” MARAD Division of Ship Maintenance and Repair, Office of Ship Operations, *Readiness Assessment of the RRF*, August 28, 1992, Maritime Administration files.

¹⁸ “*Diamond State* Milestones,” MARAD Vessel History Database, <http://www.marad.dot.gov/sh/ShipHistory/Detail/1262>; “Ready Reserve Force (RRF) Ship Manager,” <http://www.globalsecurity.org/military/agency/dot/rf-sm.htm>.

¹⁹ *Maritime Administration Annual Report to Congress Fiscal Year 2005*, U.S. Department of Transportation, Maritime Administration, 10, http://www.marad.dot.gov/documents/MARAD_Annual_Report_2005.pdf; “Maritime Administration,” *Seapower 2006 Almanac* (January 2006).

In May 2006, MARAD downgraded *Diamond State* from RRF status to militarily useful (retention) in MARAD's Beaumont Reserve Fleet in Texas. Its retention status was downgraded from militarily useful to logistics support on October 1, 2009. The ship is currently used as a materials and equipment source to support the maintenance of other Reserve Fleet vessels.²⁰



Figure 5: *Diamond State*, view of port bow.²¹

²⁰ “*Diamond State* Milestones”; MARAD, “National Defense Reserve Fleet Inventory for the month ending May 31, 2006” and “National Defense Reserve Fleet Inventory for the month ending October 31, 2009,” http://www.marad.dot.gov/ships_shipping_landing_page/national_security/ship_operations/national_defense_reserve_fleet/NDRF_Inventory_Archive.htm.

²¹ Maritime Administration photograph, from *Diamond State* historical information, MARAD Vessel History

Description/Characteristics of Vessel Type

Vessel Name: *Diamond State*
Former Names: *Japan Mail* (1961–75)
President Truman (1975–87)
Dates of Construction: Contract signed August 5, 1959
Keel laid November 22, 1960
Launched August 8, 1961
Delivered April 19, 1962
Designer: J. J. Henry Company, Inc., New York, N.Y.
Builder: Todd Shipyards, Los Angeles Division, San Pedro, Calif.
Type of Craft: Crane ship (originally break-bulk cargo ship)
MARAD Design No.: C6-S-MA1xb (originally C4-S-1s)
MARAD Hull No.: MA-87
Builder's Hull No.: 78
Official No.: 287976
IMO No.: 5170185
Navy Designation: T-ACS 7
Propulsion: Steam turbines
Original Owner: American Mail Line, Ltd.
Present Owner: Maritime Administration
U.S. Department of Transportation
Disposition: Laid up in the National Defense Reserve Fleet

Principal Measurements	Original	Current
Length (bp):	528'-0"	633'
Length (oa):	563'-8"	668'
Beam (molded):	76'-0"	76'
Depth:	44'-6"	44.68'
Draft (summer):	31'-7"	33.3'
Displacement (full load):	22,595 long tons	31,498 long tons
Deadweight:	14,797 long tons	19,871 long tons
Gross registered tonnage:	12,712	16,303
Net registered tonnage:	7,631	9,982
National Defense rating horsepower:	22,000	n/a
Maximum continuous shaft horsepower:	19,250	22,000

Database, <http://www.marad.dot.gov/sh/ShipHistory/Detail/1262>.

Normal shaft horsepower:	17,500
Service speed:	20 knots
Cruising radius (at 20 knots):	15,000 miles ²²

Design Description

Diamond State has a welded steel hull with riveting in selected gunwale, deck, side, and bottom seams. It has a semi-raked stem, cruiser stern, and long forecastle with flaring bulwarks. It is transversely framed and subdivided by nine watertight bulkheads into six holds, fore and after peaks, and the machinery compartment. A double bottom runs from the forepeak to the afterpeak bulkheads. There are two decks in the hull, constructed almost entirely without sheer and camber, plus a third deck forward and aft.²³

The ship has a single amidships deck house containing the navigation spaces and crew accommodations. Uppermost is the Bridge Deck containing the wheelhouse, chart room, radio room, gyro room, bonded storeroom, fan room, sea cabin, and staterooms for three mates and radio operator. The Boat Deck contains the captain's stateroom and office, another officer's stateroom, and five double and two single staterooms with attached lavatory and shower spaces that originally served as passenger accommodations. This deck also includes the original passenger lounge and the emergency generator room. Upper Deck contains the officers' dining saloon (originally the passenger dining saloon as well), plus the hospital, the purser's office, and single staterooms with en suite toilets and showers for officers. The Main Deck has double staterooms for crew, the crew lounge, and the crew laundry. Adjacent staterooms on this level share shower and toilet compartments. The crew's mess rooms, the galley, and food storage spaces are located on the Second Deck amidships. All staterooms and public spaces are air conditioned.

The machinery compartment is located amidships. Two oil-fired Combustion Engineering boilers provide steam to two impulse-type General Electric steam turbines double-reduction geared to a single shaft. An astern element is fitted into the low-

²² Figures from *Lloyd's Register of Shipping* (1965–66 and 1995–96); *American Bureau of Shipping Record* (1963 and 1990); and "AML's Washington Mail," *Marine Engineering / Log* (March 1962), 62. It should be noted that draft, displacement, and tonnages are subject to alteration over time as well as variations in measurement.

²³ All details of the ship's construction are from *American Bureau of Shipping Record*, 1963, 1380; "AML's Washington Mail," *Marine Engineering / Log* (March 1962), 61–72; and "Distinctive Ships: AML Cargoliner 'Washington Mail,'" *Marine Engineering / Log* (December 1962), 80–81, 93–94.

pressure turbine. The maximum continuous output of the propulsion plant when the ship first entered service was 19,250 shp at 105 rpm, with a normal output of 17,500 shp at 102 rpm for a service speed of 20 knots. The ship's reserve horsepower for national defense purposes was 22,000 shp, but this power is no longer reserved only for emergency use.

Electrical supply is provided by two General Electric 700-kW turbogenerators. Emergency supply comes from a 100-kW emergency generator powered by a General Motors four-cylinder diesel engine. Two Griscom-Russell low-pressure distilling plants provide up to 20,000 gallons of fresh water per day. The steering gear, by Western Gear Corporation, is electrohydraulic with a single-cylinder and a rapson slide.

The ship has four cargo holds. These are served by six cargo booms, mounted in pairs atop three pedestals on the Main Deck, two forward of the deckhouse and one aft.

Two 74-person motor lifeboats are carried in addition to five inflatable rafts with a total capacity of 154 persons.

Historical Integrity

Since construction in 1962, *Diamond State* has undergone complete renovations on two separate occasions. It underwent container ship conversion in 1971 and ceased to have any of the qualities of the original 1962 mariner class type construction. When MARAD assumed ownership, it was again subjected to substantial renovations to comport with MSC needs for a crane ship. The addition of the cranes and changes to the decks and hull makes the ship entirely different from its 1971 configuration. Since 2005 the vessel had undergone gradual disassembly as MARAD used it as a source for replacement material for active vessels. Very little of the original 1962 vessel currently remains.

Statement of Significance

Diamond State's current configuration is the product of logistics evolution from break-bulk general cargo ships to containerization. Due to its complete retrofitting on two separate occasions, it is not representative of any one period in maritime history. It was twice activated for national service and participated in Operations DESERT SHIELD/DESERT STORM, where it, along with 78 others, provided war materiel in support of U.S. and coalition forces. It was also utilized in assisting the city and port of New Orleans in the wake of Hurricane Katrina in 2005.

National Register Eligibility Statement

Diamond State is older than 50-years-old, but it 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. Little remains of its original mariner style configuration and the ship has undergone extensive retrofitting and has been stripped of part for use in other vessels. While it did participate in Katrina relief and DESERT SHIELD/DESERT STORM it was one of dozens of RRF vessels activated 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: 9/9/2024

Determination: NOT ELIGIBLE

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