

NATIONAL REGISTER ELIGIBILITY ASSESSMENT VESSEL: *M/V CAPE LAMBERT*



M/V Cape Lambert at anchorage in Wilmington, North Carolina circa 1990s. Maritime Administration photo.

Vessel History

M/V Cape Lambert is a roll-on, roll-off carrier¹ built in 1972–1973 for the Burnett Steamship Company, Ltd., of Newcastle, England. The ship was originally built as the *Avon Forest*, the second of two identical ships ordered by Burnett (a subsidiary of Federal Commerce & Navigation, Ltd., Montreal [Fednav]) from Port Weller Dry Docks, Ltd., in St. Catharines, Ontario, Canada. *Avon Forest* was delivered to its owners in June 1973. The ship passed through two additional owners before the Maritime Administration (MARAD) purchased it in 1987 for use in its National Defense Reserve Fleet (NDRF).

Cape Lambert and its earlier sister, *Laurentian Forest* (now *Cape Lobos*), were designed by Knud E. Hansen I/S of Copenhagen, Denmark to carry Canadian newsprint to Europe and European cars to Canada. Harrison's (Clyde) Ltd. of Glasgow, Scotland managed the ships' design and construction. Their design included a number of features intended to allow them to serve ports on the St. Lawrence River year round: their hulls were strengthened to the standards of Lloyd's Ice Class 1; their propulsion machinery was fitted with shock-resistant clutches; their mooring

¹ Sometimes called Ro/Ro, which describes how wheeled-vehicular cargo is loaded and unloaded.

equipment was sheltered at both bow and stern; and their side cargo doors were fitted with electrical heating systems to prevent ice build-up.²

The Burnett Steamship Company chartered *Avon Forest* to Seatrade, Ltd., of Bermuda, which used the ship on westbound transatlantic voyages, transporting up to 1,900 British and Continental automobiles to Halifax and Montreal. Eastbound, Seatrade chartered the ship to International Navigation, Ltd., of Nassau, a subsidiary of the International Paper Corporation of New York, for the transport of up to 14,000 tons of Canadian newsprint to Avonmouth, England. Harrison's (Clyde) Ltd. managed the ship³. In 1980 Burnett sold the ship to Carlton Steamship Company, Ltd. It continued to be registered in England and managed by Harrison's.⁴

In 1985, Piute Energy & Transportation Company of Seattle purchased *Avon Forest* on behalf of Fednav Lakes Services of Detroit, a U.S. subsidiary of Fednav Ltd. (Montreal). Fednav managed and operated the vessel, renaming it *Federal Lakes* and reregistering it in the United States in order to start a monthly cargo service for the U.S. Department of Defense between Toledo, Ohio, and Europe. The ship began this service in May. Later that year, Fednav acquired (again through Piute Energy) *Laurentian Forest*, which it renamed *Federal Seaway*, to maintain a biweekly service. The two ships carried military vehicles eastbound and military families' household goods and cars westbound.⁵

Federal Lakes operated out of Charleston, South Carolina and Baltimore, Maryland when shipping on the Great Lakes was closed due to ice during the winter of 1985–86.⁶

Fednav Lake Services cargo service did not make money. Short of cash, the company offered *Federal Lakes* and *Federal Seaway* to the federal government in the summer of 1986 for \$29 million. A reporter noted that company officials felt the ships were "old" and that they "saw a chance to sell them for a profit." The government accepted the company's offer and purchased both ships in June 1987 for use in MARAD's Ready Reserve Fleet (RRF).⁷ *Federal Lakes* was renamed *Cape Lambert* and entered the James River Reserve Fleet on November 2, 1987. It was assigned a Ready Reserve activation status of five days.⁸

² "The MV Avon Forest," *Marine Reporter and Engineering News*, November 15, 1973, 46, 49; "M.V. Laurentian Forest," *Scanner* (December 1972), <http://www.maritimehistoryofthegreatlakes.ca/Documents/scanner/05/03/default.asp?ID=c004>.

³ "The MV Avon Forest," 46.

⁴ "Burnett Steamship Company, Newcastle," <http://www.mariners-list.com>; *Lloyd's Register of Ships*, 1985–86.

⁵ Dave Murray, "Ports on lakes to get Pentagon overflow cargo," *Toledo Blade*, April 25, 1985, 1; "A welcome ship," *Toledo Blade*, November 8, 1985, 14; "New flag ship to sail Great Lakes in spring," *Ludington Daily News*, November 27, 1985, 2; Roberta de Boer, "Shipping of heavy military equipment resumes," *Toledo Blade*, December 1, 1985, 1; "Lakes shipping firm using 2 east coast ports," *Toledo Blade*, January 30, 1986, 29; Hand Harvey, "Tanks through Port of Toledo," *Toledo Blade*, September 29, 1986, 1; "Tanks ready for shipment, but vessel is delayed," *Toledo Blade*, October 17, 1986, 13.

⁶ "Lakes shipping firm using 2 east coast ports," *Toledo Blade*, January 30, 1986, 29

⁷ 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 emergencies. A Ready Reserve Fleet (RRF) component was established in 1976, which consists of vessels that can be activated on short notice to provide rapid deployment of military equipment during national emergencies. The RRF later became known as the Ready Reserve Force.

⁸ "Delay sought in sale of vessel used for military shipments," *Toledo Blade*, June 19, 1987, 15; "Navy delay lets Fednav ship overseas," *Toledo Blade*, July 30, 1987, 35; "2 ex-Toledo ships join Persian Gulf fleet," *Toledo Blade*, September 28, 1990, 22; vessel status cards for *Cape Lambert* ex-*Avon Forest*, MARAD Vessel History Database, <http://www.marad.dot.gov/sh/ShipHistory/769>; Polmar, *Naval Institute Guide*, 315.

Maritime Administration

In 1986 *Cape Lambert* was assigned to MARAD's RRF. These vessels can be activated on short notice to provide rapid deployment of military equipment during an emergency. When activated, operational control of the ships is transferred from MARAD to the Navy's Military Sealift Command (MSC).

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 Lambert arrived in the RRF too late to operate in those crises, but performed valuable service in the *Desert Shield/Desert Storm* international military operations to halt Iraqi military expansion in the Persian Gulf area and subsequently to liberate occupied Kuwait.

Operations *Desert Shield/Desert Storm*

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 the NDRF. The vessels involved were roll-on/roll-off (Ro-Ro) vessels, break-bulk cargo ships, tankers and barge carriers.

More than seventy-five percent of the RRF provided sealift to support the U.S. effort's 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. The Ro-Ros proved to be the most effective vessels and they delivered nearly twenty percent of Central Command's material and other support during the first phase of the operations. Unfortunately, there is very little published on MARAD's role during the Gulf War. Locating information that details individual ship operations has proved difficult. One of the better books published on the subject is, *Shield and Sword: The United States Navy and the Persian Gulf War*, by Edward J. Marolda and Robert J. Schneller. While this book does not discuss details of a specific ship's operations, it does provide an excellent overview of the logistical build-up to the war and the RRF's role. Several of the topics that the book discusses include the difficulties encountered during the vessels' activation into the MSC, their successes, and the amount and kind of material they carried.

Cape Lambert was one of the first RRF vessels activated for service in the First Persian Gulf War. MSC ordered its activation on August 10, 1990, three days after the start of Operation *Desert Shield*. MARAD planned to tender the ship to MSC for cargo operations within a five-day

window. Although the ship was successfully activated and began sea trials en route to Jacksonville, Florida where it was to load its first cargo, it failed these trials and was taken to North Florida Shipyard for repairs. A succession of mechanical failures delayed the ship's tender to MSC until October 9, a full 55 days late. A MARAD assessment noted, "Among the problems encountered were 2 engine crankcase explosions, rebuilding all 3 generators, replacement of 7 pumps and foundation and badly scored pinions on the reduction gears. Most of these problems were attributed to the poor material condition of the vessel."⁹

After acceptance by MSC, *Cape Lambert* made three cargo voyages during Operations *Desert Shield/Desert Storm*:

- Arrived Jacksonville, Florida, October 11, 1990; departed October 14; arrived Ad Dammam, Saudi Arabia, November 13.
- Arrived Bayonne, New Jersey, December 13, 1990; departed December 19; arrival date at Ad Dammam unavailable.
- Arrived Bayonne, February 10, 1991; departed February 15; arrival date at Ad Dammam unavailable.¹⁰

The ship made additional voyages during Operation *Desert Sortie*, the repositioning of military assets after the war. It was returned to MARAD in 1992 and deactivated and overhauled between August 1992 and March 1993 at G&M Welding, Galveston, Texas.¹¹

In 1994, *Cape Lambert* and its sister ship *Cape Lobos* (the former *Laurentian Forest*) were outported to Wilmington, North Carolina. They were maintained for MARAD by American Overseas Marine Corp., a subsidiary of General Dynamics with ten-man crews aboard. In September 1999, the ship was downgraded to Ready Reserve ten-day activation status. The ship entered the James River Reserve Fleet March 14, 2000, where it was maintained by Crowley Liner Services without a standing crew aboard.¹²

Cape Lambert underwent a no-notice "turbo activation" to test its emergency readiness between September 30 and October 9, 2001. It was activated for service in Operation *Iraqi Freedom* in March 2003, and returned to MARAD the following May, to its earlier homeport in Wilmington, North Carolina. The ship was towed to Tampa Shipbuilding and Repair for drydocking, repainting, and repairs in late November 2003 and returned to Wilmington in December 2003.¹³

⁹ "RRF Activation Summary (*Desert Shield/Desert Storm*)," Maritime Administration files.

¹⁰ 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), B3, B6.

¹¹ "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.

¹² Gareth McGrath, "Navy Reserve switches ships in Wilmington," *Wilmington Morning Star*, September 24, 1999, B1; "*Cape Lambert* Milestones," MARAD Vessel History Database; "Ready Reserve Force (RRF) Ship Manager," <http://www.globalsecurity.org/military/agency/dot/trf-sm.htm>.

¹³ "*Cape Lambert* Milestones," MARAD Vessel History Database; Rommyn Skipper, "'Cape Lambert' leaves town for painting, minor repairs," *Wilmington Star-News*, November 22, 2003, 8B; Trista Talton, "Reserve ships back home," *Wilmington Star-News*, December 31, 2003, 2B.

Cape Lambert was again tested by a turbo activation September 22–25, 2004. In July 2006, the ship was downgraded from RRF status. It departed Wilmington in early August 2006 for the Beaumont Reserve Fleet in Texas. Initially retained as “militarily useful” (“reserved for future military or strategic use”), the ship was downgraded to “emergency sealift” status in February 2009. On September 30, 2013, the ship was downgraded again to non-retention status, and the stripping of useful material prior to the vessel’s eventual disposal was begun.¹⁴ It is currently moored in the Beaumont Reserve Fleet, Beaumont, Texas.

Description/Characteristics of Vessel Type

Vessel Name:	<i>Cape Lambert</i>
Former Names:	<i>Avon Forest</i> (1972–85) <i>Federal Lakes</i> (1985–88)
Dates of Construction:	Completed June 1973
Type of Craft:	Roll-on, roll-off vehicle cargo ship
MARAD Design No.:	Dsl/Canada
Builder’s Hull No.:	56
Official No.:	681926
Navy Designation:	T-AKR 5077
Designer:	Knud E. Hansen I/S, Copenhagen, Denmark
Builder:	Port Weller Dry Docks, Ltd., St. Catharines, Ontario, Canada
Length (bp):	621'-6"
Length (oa):	682'-0"
Breadth (molded):	75'-0"
Breadth (extreme):	75'-10"
Depth (molded):	58'-0"
Draft (molded):	30'-0"
Draft (summer):	30'-6"
Displacement (light ship):	10,557 long tons
Displacement (full load):	30,375 long tons
Deadweight (summer):	19,803 long tons (originally 20,220)
Gross tonnage:	15,005 (originally 16,382)
Net tonnage:	10,164 (originally 9,918)
Propulsion:	Diesel engines
Maximum shaft horsepower:	18,000 bhp
Normal shaft horsepower:	17,000 bhp
Service speed:	18 knots
Cruising radius:	6,000 nautical miles at 17.5 knots
Crew:	27 ¹⁵

Cape Lambert has a welded steel hull with three decks, a sharply raking stem with a bulbous bow and a flat stern. The hull is subdivided by seven bulkheads (six extending to the Second Deck plus a collision bulkhead forward extending to the Upper Deck) into four holds, an aft machinery compartment and fore and after peaks.

¹⁴ “Cape Lobos pulls out of port,” WECT News, July 14, 2006, <http://www.wect.com/story/5152461/cape-lobos-pulls-out-of-port>; “*Cape Lambert* Milestones,” MARAD Vessel History Database; MARAD, *National Defense Reserve Fleet Inventory for the month ending September 30, 2013*, 2, 12, 17, <http://www.marad.dot.gov/documents/i130930.pdf>.

¹⁵ Crowley Liner Services, *M/V Cape Lobos Activation Specifications*, March 2002, 6, https://voa.marad.dot.gov/docs/Library/ship_manager/docs/Group 02/Cape L Activation Specification.pdf; Norman Polmar, *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis, Md.: Naval Institute Press, 2005), 315; *American Bureau of Shipping Record*, various years.

A single deck house aft contains crew accommodations and ship's navigation spaces on five decks. The accommodations are fully air conditioned, and each stateroom is fitted with private toilet and shower. The compartments in the deck house are disposed as follows:

- Navigating Bridge Deck: wheelhouse, chartroom
- Bridge Deck: sea cabin, four cadet's staterooms, master's stateroom, chief engineer's stateroom, radio officer's stateroom
- Boat Deck: staterooms for other officers
- Poop Deck: Officer's mess, crew mess, galley, hospital, additional staterooms, officers' laundry
- Upper Deck: recreation room, crew cabins, crew laundry ¹⁶

The machinery compartment is located aft. Because of the location of the aft cargo ramp, the engine room has unusually low headroom. It contains two Pielstick 18 PC 2V direct-reversing diesel engines made by Crossley Premier Engines, Ltd. Maximum output of each engine is 9,000 bhp, while normal output is 8,500 bhp at 520 rpm. The engines drive twin four-bladed, controllable-pitch propellers of 17'-4" diameter at 110 rpm via single-helical reduction gears specially designed and manufactured by the Philadelphia Gear Corporation to provide Lloyd's Ice Class 1 horsepower capacity within the engine room's confined space. The Wichita Marine clutches that connect the gearboxes to the propeller shafts are specially fitted to withstand propeller shock loading in case of contact with ice. The engine room is fully automated. ¹⁷

The ship has a 1,000-bhp bow thruster. The steering gear is of rotary-vane type and was made by A/S Frydenbo, Bergen, Norway.

Cape Lambert is fitted with a special ballasting system to allow the ship to engage in Ro/Ro cargo operations in the extreme tidal changes encountered at certain Canadian ports. The system can handle up to 2,400 tons of water per hour when making adjustments to the ship's draft. It also has tank-type stabilizers. ¹⁸

The ship's electrical service is provided by three 845 kW diesel generators powered by Caterpillar engines. A Perkins Diesel generator provides emergency electrical supply. ¹⁹

Roll-on, roll-off cargo loading is accomplished through two shell doors located forward and aft on the ship's starboard side. Thirty-ton-capacity vehicle ramps serve each cargo door and can adjust to differences in dock height of up to 24'. The ship contains 189,937 square feet of vehicle space in four holds. Moveable decks in addition to the fixed decks provide seven levels of vehicle stowage, connected by internal ramps. Internal elevators of 23 ton capacity transfer cargo between the 'tween decks and the lower holds. The cargo holds are thoroughly ventilated.

¹⁶ Crowley Liner Services, *M/V Cape Lobos Activation Specifications*, 6, 49–54.

¹⁷ Philadelphia Gear advertisement, *Marine Engineering / Log* (January 1973), 23; Wichita Clutches advertisement, *Marine Reporter and Engineering News*, November 15, 1973, 47; "The MV Avon Forest," 49; Crowley Liner Services, *M/V Cape Lobos Activation Specifications*, 6, 43–44.

¹⁸ "The MV Avon Forest," 46, 49.

¹⁹ Crowley Liner Services, *M/V Cape Lobos Activation Specifications*, 44, 62.

The shell doors, vehicle ramps, car decks, and cargo lifts were designed and furnished by Cargospeed Ltd. of Glasgow, Scotland.²⁰

The ship carries two lifeboats and three Viking inflatable life rafts. The port boat is rated for 36 passengers, the starboard boat for 39. The life rafts are variously rated for 6, 16, and 20 persons.²¹

Statement of Significance

The activation of *Cape Lambert* during the build-up for Operations *Desert Shield/Desert Storm* was the RRF's first large-scale activation since its creation in 1976. *Cape Lambert* delivered cargoes of military supplies and ammunition without incident and provided desperately needed services in a time of national need. 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.

Historical Integrity

The overall condition of the *Cape Lambert* is good; it has experienced only normal wear and aging for a vessel of its age, and routine upgrades to navigation and communications systems. The hull, machinery, passenger and crew accommodations are largely intact.

National Register Eligibility Statement

Cape Lambert is not 50-years-old and does not possess the extraordinary historical significance 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 78 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: 26 September 2014

Determination: NOT ELIGIBLE

²⁰ "The MV Avon Forest," 46; Polmar, *Naval Institute Guide*, 315.

²¹ Crowley Liner Services, *M/V Cape Lobos Activation Specifications*, 61–62.



Top left: M/V Avon Forest, view of the starboard bow with shell doors open, Macquarie Wharf No. 2, Hobart, Tasmania, late 1979. Photograph by William Edward Burton, wburton@iinet.net.au.

Below: M/V Avon Forest, view of the starboard quarter with shell doors open, Macquarie Wharf No. 2, Hobart, Tasmania, late 1979. Photograph by William Edward Burton, wburton@iinet.net.au,..



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