

NATIONAL REGISTER ELIGIBILITY ASSESSMENT
VESSEL: *American Osprey*



American Osprey in Beaumont, Texas, June 26, 2008

Type: OPDS (Offshore Petroleum Discharge System) Tanker
Hull Number: T-AOT 5075
Official Number: 276034
Year: 1958
Former Name: *Gulf Prince*
Location: Beaumont, TX
Last Owner: Chevron
Builder: Bethlehem Steel Company, Sparrows Point, MD.
Length: 661'
Beam: 90.40'
Depth: 45.40'
Draft: 35.66'
Displacement: 44,840
Gross tonnage: 20,143 tons
Dead Wt: 34,723 tons
Cargo Capacity: 235,000 Bbls.
Propulsion: Steam Turbine
HP: 15,000 shp
Speed: 17 knots
Propulsion System: Two Cyl Steam Turbines

Vessel History

The tanker *American Osprey* was originally launched as the *Gulf Prince* at the Bethlehem Steel Company Shipyard, Sparrows Point, Maryland, and was delivered to the Gulf Oil Corporation March 1, 1958. The *Gulf Prince* was one of a series of ten similar tankers built for the company between 1957 and 1961. The first four ships were named for royalty or nobility, which included: *Gulf King*; *Gulf Queen*; *Gulf Prince*; and *Gulf Knight*. The remaining six were named for Gulf Oil Corporation products.

The Gulf Oil Company was founded early in the 20th century as a direct result of the discovery of Texas's Spindletop Oil Field in 1901. Gulf built its first refinery at Port Arthur soon afterward. In 1951 the refinery placed in operation one of the world's largest cracking units capable of producing 60,000 bbls. per day of petroleum products, including aviation and automotive gasoline. The company was steadily expanding in the 1950s and 1960s through acquisitions, additional production facilities, and the discovery of new oil fields. It eventually controlled half a dozen refineries in the United States and 22 overseas. Gulf operated one of the largest tanker fleets in the world on routes all over the globe. In 1968 it owned the 312,000 deadweight ton super tanker *Universe Ireland*, the largest ship in the world at the time.

Tankers of the *Gulf Prince* series delivered cargoes of petroleum products loaded at Port Arthur, Texas, to Puerto Rico and a number of ports along the Atlantic seaboard of the United States. When required, they temporarily filled in on any of the other routes served by the company. Gulf's fortunes declined in the 1970s, and it was finally sold to Chevron in March 1984 and the *Gulf Prince* was renamed *American Osprey*. Later that year the ship was transferred to the Maritime Administration and placed in the Reserve Fleet in Beaumont, Texas.

The *American Osprey* was assigned to the Ready Reserve Fleet (RRF), a subset of the National Defense Reserve Fleet (NDRF). 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. A RRF component was established in 1976 as a subset of the NDRF, which is composed of vessels that can be activated on short notice to provide rapid deployment of military equipment during an emergency. When activated, the ships are transferred from the Maritime Administration to the Navy's Military Sealift Command. The RRF later became known as the Ready Reserve Force.

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 caused 223 cargo ship and 29 tanker activations from the NDRF. From 1955 through 1964, another 698 ships were used to store 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.

Desert Shield/Desert Storm

In August 1990, the RRF consisted of 96 ships, 78 of which were activated to support 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 (which describe how cargo is handled), break-bulk cargo ships, tankers, and barge carriers.

The *American Osprey* was one of three tankers recalled for Desert Shield/Desert Storm. The *Potomac*, another OPDS tanker, and the *Mission Buenaventura* were the two other tankers that were activated. *American Osprey*'s activation was ordered on August 31, 1990, and it was ready for service on September 11. The work was performed by Houston Ship Repair of Orange Texas. The ship loaded fuel in Houston which it delivered to the port of Ad Dammam, Saudi Arabia. The vessel was later deployed in the OPDS mode until March 1991.

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 the role of the Maritime Administration during the Gulf War. Locating information that details the operations of the individual ships has proved very difficult. One of the best 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 logistics during the build-up to the war and RRF's role in that build-up. Several of the topics that the book discusses include the difficulties encountered during the vessels' activation into the Navy's Military Sealift Command, their successes, and the amount and kind of material that they carried.

In March 1991, both the *American Osprey* and the *Potomac* were assigned to the Afloat Prepositioning Force at Diego Garcia. *American Osprey* returned to the RRF, but was reactivated in 1992 to be one of two tankers pre-positioned in the Indian Ocean to support the United Nations Operation in Somalia (UNOSOM II) and the U.S. initiated effort, Restore Hope. Restore Hope carried out U.N. Security Council Resolution 794, which was passed to create a protected environment for conducting humanitarian operations in the southern part of Somalia.

During 1997-1998 the *American Osprey* served as a pre-positioned ship based at Guam in the central Pacific. It went to sea on a number of occasions for steaming exercises and to ride out typhoons, and made visits to Saipan and Okinawa. It visited Sasebo, Japan and Pusan, South Korea in November 1998 to discharge cargo, and then transited the Panama

Canal enroute to Orange, Texas. It was deactivated at Orange in April 1999 and towed from there to the Reserve Fleet in Beaumont. The *American Osprey* was subsequently reduced from the RRF to the National Defense Reserve Fleet (NDRF).

Description/Characteristics of Vessel Type

The ships of the *Gulf Prince* series were designed with the then standard layout for seagoing tankers, with a raised foc'sle deck forward, a multi-story bridge structure amidships and engines at the stern. In addition to the wheelhouse, the bridge superstructure accommodated the radio room and state rooms for the officers. An aft superstructure surrounding the upper machinery spaces contained the galley, messrooms, and living quarters for the remainder of the crew.

OPDS-Offshore Petroleum Discharge System

In 1988, *American Osprey* was converted to an Offshore Petroleum Discharge System (OPDS). The OPDS is designed to transfer petroleum products directly from an offshore tanker to support military operations on shore. A pipeline is run to the beach from a mooring buoy where tankers can attach and pump fuel to onshore storage facilities. The OPDS is particularly effective at locations where fuel piers are unavailable, and tankers are unable to tie up ashore to off-load fuel. The OPDS can pump up to 1.7 million gallons of fuel per day. The OPDS was developed in the early 1980s using existing technology and was based on earlier systems. It was a U.S. government system deployed by military personnel from a government-owned contractor operated tanker.

Major components of the system include the OPDS tanker with booster pumps and spread mooring winches; a recoverable single anchor leg mooring (SALM) to accommodate tankers of up to 70,000 deadweight tons; ship to SALM hose lines; up to four miles of six-inch (internal diameter) conduit for pumping to the beach; and two Beach Termination Units (BTUs)¹ to interface with the shore side systems. OPDS can support a two line system for multiproduct discharge, but ship standoff distance is reduced from 4 to 2 miles.

To begin the process, a support ship and a tender work together to install up to eight miles of eight-inch-diameter flexible pipe. Next, the support ship positions the tanker for safe off-load operations. While the tender holds the tanker in place, the tanker's lines connect to the flexible pipe through the support ship. Booster pumps aboard the support ship increase the pressure of fuel, pushing the fuel to shore.

The OPDS is the successor to Operation *Pluto* (Pipeline under the Ocean), a World War II invention where underwater pipelines were laid between England and France to supply fuel to the Allied forces in Europe. Pipelines were considered necessary to relieve

¹ A Beach Termination Unit (BTU) is a metal enclosure containing a skid base, piping, valves, gauges, pig trap and associated fittings. The BTU acts as an anchor for the OPDS conduit on the beach at the high water mark. It passes product from the tanker to the onshore distribution system at a regulated discharge pressure. (See diagram on attachment 1).

dependence on oil tankers, which could be slowed by bad weather, were susceptible to German submarines, and were also needed in the Pacific War.

The Maritime Administration currently has five OPDS tankers in its inventory. These include the RRF ships *Petersburg* and *Chesapeake* located in Alameda, California, and the inactive NDRF vessels *Mount Washington* in Suisun Bay, and *Potomac* and *American Osprey* in Beaumont. The Navy is currently working on the next generation of OPDS tankers to replace the aging vessels.

Historic Context

Immediately following WWII, the demand for petroleum products rose rapidly, which led to a rapid succession of new tanker designs that increased their capacity from 16,000 deadweight tons (dwt) during WWII to nearly 100,000 dwt by 1960, and to over 300,000 dwt by 1970. The following provides a summary of the history of U.S. tanker development from WWII to 1960, within which the historic significance of the *American Osprey* can be evaluated.

The era of the “super-size” tankers, as they were first called, began in 1947 with the *Ulysses*, a 27,928 dwt tanker built by Welding Shipyards of Norfolk, Virginia. The *Ulysses* was the largest tanker in world, approaching twice the size of its predecessors. The ship’s construction marks the beginning of an industry trend to build increasingly larger tankers—tankers that would ultimately directly shape the future business and politics of oil. Welding Shipyards signed a contract with National Bulk Carriers to build ten identical tankers of even larger capacity and in 1948 launched the first of the fleet, the 30,000 dwt tanker *Bulkpetrol*, which established another world record.

By 1949 the major commercial shipyards were all rapidly building “supertankers” in the 27,000-28,000 dwt class, including Bethlehem Steel Company, at their Quincy, Massachusetts, and Sparrows Point, Maryland, yards, at Newport News Shipbuilding in Virginia, and at Sun Shipbuilding in Chester, Pennsylvania. Twenty-nine supertankers were launched in 1949, establishing a new peacetime record of total deadweight tonnage for self-propelled commercial vessels ships built by U.S. shipyards. The Bethlehem-Quincy yard produced five 28,000 dwt tankers in 1949 and five more in 1950. New York Shipbuilding Corporation in Camden, New Jersey, entered the market in 1950 with the 30,155 dwt *Atlantic Seaman*, a new world record by a small margin. The *Atlantic Seaman* was 627’ long, 85’ wide, and 45’ in depth with 18,000 horsepower.

In 1952 Bethlehem-Quincy built the *Waneta*, a 29,250 dwt tanker with a length of 615’, a width of 84’ and a depth of 44’. The next year the horsepower was upped from 13,000 to 15,000, and the design became a standard for at least 20 more vessels over the next eight years that would be produced by the company’s yards or by Sun Shipbuilding. The design provided for deadweight capacities in the range of 28,000 to 31,000 tons. The next major leap in tanker technology came in 1954 when the Greek shipping magnate Stavros S. Niarchos took delivery of several huge new 45,000 dwt tankers from various yards around the world, one being the Bethlehem-Quincy yard, which built the *World Glory*. With a length of 737’ and a deadweight tonnage of 45,000 tons, *World*

Glory was the largest tanker in the world and the second largest merchant ship ever built in the U.S. after the passenger liner *United States*.

Also notable in 1954 was the construction of four 39,000 dwt tankers of the *W. Alton Jones* class by Newport News Shipyard that incorporated important new features and advancements in tanker technology. In 1956 the advanced features of the *W. Alton Jones* were incorporated into the Cities Service tanker *Baltimore*, the first tanker built under the Maritime Administration's "trade-in-and-build" program. Cities Service replaced seven WWII vintage T-2 tankers with three *Baltimore*-class tankers.

By the mid-1950s, Japan had become established as a major shipbuilder competing in the world tanker construction market. In 1956 the *Universe Leader* was built in Japan's Kure Shipyard, establishing the new tanker size record with a length of 854', a beam of 125', and a deadweight capacity of 85,515 tons. In the U.S. the demand remained strong for tankers in the 30,000 and 45,000 dwt classes, the former now the U.S. coastwise workhorse, and the latter the "fleetbuilder" of choice for the expanding Greek and new South American shipping companies. In 1957 and 1958 the Bethlehem-Quincy yard built three sister ships of its standard 30,000 dwt design for use by Socony Mobil Oil Company, and three tankers of its 46,000 dwt design, one for Niarchos and two for Venezuelan interests.

In 1959 the demand for American-built tankers reached its highest level to date, with 26 tankers completed with an aggregate deadweight tonnage of over 1,000,000 tons. Tankers of the 45,000 dwt class formed the largest group, but the need for 30,000 dwt tankers remained with seven delivered. The largest tanker built by an American yard to date, the 860', 71,282 dwt *Princess Sophie* was completed in 1959 by Bethlehem-Quincy for the Niarchos-owned shipping company, World Brilliance Corporation. By 1960 the market for 30,000 dwt tankers like *American Osprey* began to wane although certain domestic carriers, including Gulf Oil, continued to purchase them for serving ports and loading/unloading facilities that could not handle the larger ships. American shipyards were now regularly producing "standard design" tankers in the 45,000 dwt and 66,000 dwt classes, but the demand for bigger ships continued. In 1962 Bethlehem-Quincy delivered the *Manhattan*, which at 106,568 dwt, redefined the meaning of "supertanker," a term coined 10 years earlier for 30,000 dwt tankers. With a length of 940' and a draft of 50', the *Manhattan* was the largest U.S. merchant ship ever built.

Statement of Significance

The *American Osprey* is an example of a standard design tanker built for coastwise service during the 1950s. The vessel was not the first in its class, nor was it an early or important example of its type, the standard design having been developed and built five years earlier. At least 20 of the specific Bethlehem-design type were built, and over 120 of the general design type—the 27,000 to 31,000 dwt tanker (although *American Osprey* was slightly larger at 34,723 dwt)—were built between 1947 and 1960. The vessel does not possess important or innovative design or equipment features representative of the state-of-the-art tanker technology of its time. It is not associated with individuals

important to American history; however, it is associated with Desert Shield/Desert Storm and the humanitarian crisis in Somalia. Its role in these important events, however, was not particularly significant. While the designer/builder of the vessel, Bethlehem Steel Company has made important contributions to American shipbuilding history, the *American Osprey* is not an outstanding or a good representative of those contributions.

Integrity of Characteristics/Features

The vessel is in poor condition and has been in the NDRF for eight years. The ship was converted to an OPDS tanker in 1988; however, this conversion did not compromise the vessel's original configuration. In 2000, some of the spare parts and outfitting related to the OPDS were removed from the tanker and placed on the RRF OPDS tanker, *Chesapeake*.

National Register Eligibility Statement

The vessel does not possess the significant historical or technological characteristics, or integrity of design and materials necessary for listing. While it did participate in Desert Shield/Desert Storm, it was just one of 78 RRF vessels activated by the Navy to support the operations and its role was not significant enough to qualify under criteria A. *American Osprey* did participate in the humanitarian aid during the 1992 crisis in Somalia; however, its role was also not significant enough to qualify under Criteria A.

Date: 7 August 2008

Determination: NOT ELIGIBLE

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American Osprey

Beaumont, Texas, June 26, 2008

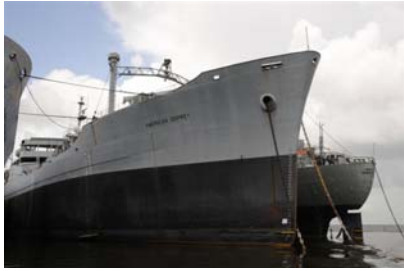


Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

1. Starboard bow.
2. Pipe racks midship.
3. Conduit Reel.
4. Pipe racks.
5. Row of hose fittings.
6. Forward starboard deck.
7. Hose fittings.
8. Single Anchor Leg Mooring (SLAM) The submersible barge carried by the host tanker, deployed and used as a mooring and fuel node by the OPDS.
9. Forward storage compartment.
10. Forward port deck.



Figure 9



Figure 10

American Osprey
 Beaumont, Texas, June 26, 2008

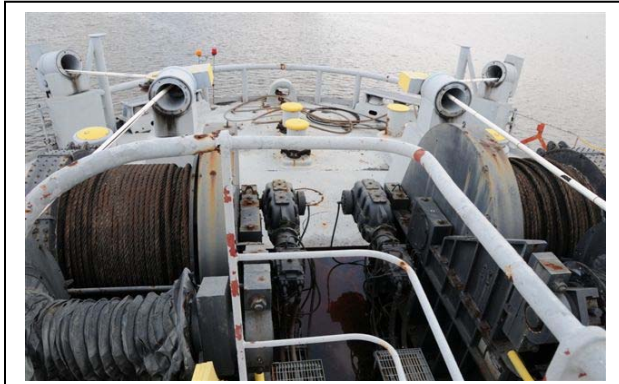


Figure 11

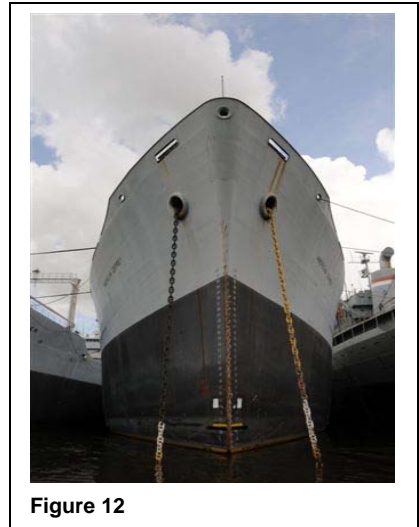


Figure 12



Figure 13



Figure 14



Figure 15

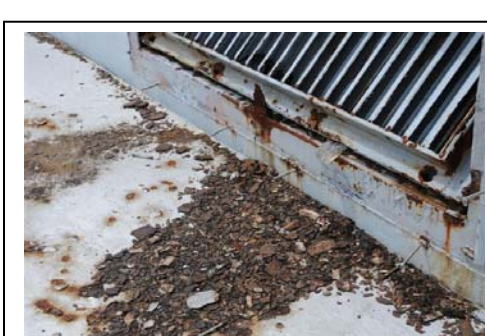


Figure 16



Figure 17



Figure 18



Figure 19

- 11. Bow winches.
- 12. *Osprey's* bow.
- 13. Piping.
- 14. SALM.
- 15. Conduit reels.
- 16. Rust on the deck.
- 17. OPDS tanker *Petersburg* in Honolulu.
- 18. *American Osprey* (date and location of photograph are unknown).
- 19. OPDS tanker *Petersburg* in Honolulu