NATIONAL REGISTER ELIGIBILITY ASSESSMENT
VESSEL: SS *Adventurer*

SS *Adventurer* (center) sits at the Suisun Bay Reserve Fleet in Benicia, California, February 2009. Maritime Administration photograph.

Vessel History

The SS *Adventurer* was launched on July 9, 1960 as the break-bulk cargo SS *Export Adventurer.* Bethlehem Steel's[1] Technical Department designed the ship and it was built by the New York Shipbuilding Company in Camden, New Jersey. It was delivered to its owners, American Export Lines, on December 30, 1960.

In 1919 a group of businessmen originally organized AEL as the Export Steamship Corporation. By the mid-1920s, "American" was added to the name. Between 1919 and 1977, AEL was the principal U.S.-flag shipping company that operated between the U.S. East Coast and the Mediterranean. In 1960 the company operated three passenger liners,[2] two combination cargo and passenger vessels, and 17 C-3 type cargo ships on services between the U.S. Atlantic seaboard, including the Great Lakes, and Spain, Portugal, the Mediterranean, the Middle East and, via the Suez Canal, southern Asia as far east as Rangoon. The combination vessels and cargo ships were built between 1939 and 1946.

[1] For much of the 20th century, Bethlehem Steel was a major domestic shipbuilder, operating as many as eight separate shipyards and ship repair facilities on the U.S. East, West, and Gulf coasts. Bethlehem's marine technical department provided design services, even to shipowners who chose not to construct vessels in a Bethlehem yard.
[2] Two of the three liners AEL operated included the American-built luxury ocean liners *Independence* and *Constitution*. The liners provided passenger service between the U.S. to Europe via the Mediterranean throughout the 1950s and 1960s.

The *Export Adventurer* was the third ship of an ambitious AEL modernization program begun in the late 1950s. Thirty vessels were initially scheduled for construction but the number was later reduced to 12 after AEL merged with the Isbrandtsen Company, creating American Export-Isbrandtsen Lines (AEIL) in 1962. The partnership continued until Isbrandtsen's interests were dissolved in 1973.

The 12 replacement ships were divided into three series of four vessels each, which were called the "A," "B" and "C" series. Ships in the "A" series included the *Export Ambassador* and *Export Adventurer,* built by New York Shipbuilding Corporation of Camden, New Jersey, and the *Export Agent* and *Export Aide*, built by the National Steel and Shipbuilding Company of San Diego, California. The "A" series employed the classic midships machinery arrangement, and was designated C3-S-38a under the Maritime Administration design classification scheme; the "B" and "C" series were machinery-aft versions of the "A" series and were designated C3-S-46a and 46b respectively. The new cargo ships ranged from 10,589 to 11,040 gross tons; much larger than the ships they replaced, which ranged from 6,536 to 7,052 gross tons.

The company placed the "A" series ships on their three trade routes: the Great Lakes to the Mediterranean; the U.S. Atlantic seaboard to the Mediterranean; and the U.S. Atlantic seaboard to the Red Sea, India, Pakistan, and Burma. They operated in these trades with the "B" and "C" series ships, and with the nuclear-powered merchant ship *Savannah*, which was operated by the company for the Maritime Administration in the 1960s under a general agency agreement. The Military Sea Transportation Service (MSTS) [3] chartered AEIL vessels during the Vietnam War from 1966-1971. During the early 1970s AEIL (after 1973 going by its original name of American Export Lines), was also operating services to ports on the Atlantic coast of Europe as far north as Scandinavia, and to ports in the Far East.

The replacement ships of the early 1960s were larger and in many ways more modern than the ships they replaced. However, they were designed and built without full appreciation for the coming impact of containerization. As built, their holds were not practical for transporting the 40-foot containers that soon came into universal use. Just two or three containers (stacked) could be stowed on top of the deck's hatches. This area could be extended on ships with centerline hatches by installing pedestals the same height as the hatches placed on both sides of the hatches. By the late 1960s AEIL began contracting for the construction of pure container vessels. In addition to constructing container ships, the company also invested heavily in road transport for containers and built a container handling terminal at Howland Hook, Staten Island, New York. However, Isbrandtsen had over extended itself financially and was forced into receivership. Not long after, AEL also filed for bankruptcy and in 1978 Farrell Lines of New York purchased the company.

[3] MSTS was a post-World War II combination of four predecessor government agencies that handled similar sealift functions. These included the Navy's Naval Transportation Service and Fleet Support Service, the Army Transport Service, and the War Shipping Administration of the United States Maritime Commission. In 1970, MSTS was renamed the Military Sealift Command.

There was now little commercial demand for break-bulk cargo ships. However the vessel type remained in demand for the transportation of military cargo, especially palletized ammunition. Consequently, the four *Export* "A"-series vessels, along with all of the "B" and "C" series, were acquired by the Maritime Administration for its National Defense Reserve Fleet (NDRF). The vessels were renamed by dropping the "*Export*" prefix; the *Export Adventurer* became simply the *Adventurer*.

One notable incident occurred on July 21, 1961 when the *Export Adventurer* collided with the submarine USS *Angler* (SS-240) off Block Island, Rhode Island. The *Angler* was conducting maneuvers with a destroyer when the accident occurred. The submarine sustained minor damage.

Maritime Administration

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 Ready Reserve Fleet (RRF) component was established in 1976. RRF 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 the Maritime Administration to the Navy's Military Sealift Command (MSC).

On February 25, 1980 the *Adventurer* was assigned to the RRF,[4] and was placed on a ten-day activation status at the James River Reserve Fleet (JRRF) off Fort Eustis, Virginia.

On September 10, 1990 the ship was moved to a New York shipyard for drydocking and painting. On April 27, 1991 the vessel arrived at Hunters Point Naval Shipyard in San Francisco. The vessel arrived at Suisun Bay Reserve Fleet in Benicia, California on November 11, 1994, where it has remained. In 2001 it was downgraded from retention status to non-retention status.

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 U.S. 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. The *Adventurer* arrived in the NDRF/RRF too late to operate in those crises, and unlike its three sisterships, it did not participate in Operations DESERT SHIELD/DESERT STORM, which stemmed Iraqi military expansion in the Persian Gulf area and subsequently liberated occupied Kuwait in 1991.

[4] The Ready Reserve Fleet later became known as the Ready Reserve Force.

RRF Modifications

The "A" class ships were among a large population of RRF break-bulk cargo ships modified during the mid-to-late 1980s under the Navy's "Sealift Enhancement Features" program (SEF). The modifications were generally intended to allow these commercial vessels to better support military operations, particularly underway replenishment of stores and ammunition to naval auxiliary vessels such as fleet oilers, ammunition ships, and stores ships. The "A" class ships were fitted with dunnage systems in cargo holds to permit secure handling of palletized ammunition; heat isolation bulkheads in the cargo holds bordering on the ship's engine room; two (2) receive-only underway replenishment rigs – one each forward and aft; and main deck modifications to allow for passage of electric forklifts. All modified vessels had their personnel complements increased to support specialized Navy cargo handling battalions. Modifications made under the SEF program did not significantly alter the ships, but instead were incremental improvements. The change to the ships' exterior appearance was imperceptible; the two underway replenishment rigs were installed against the vertical sides of two kingposts on one side of the ship only.

Description/Principal Characteristics of Vessel

Type: C3-S-38a
Official Number: 284024
Builder: New York Shipbuilding Company in Camden, New Jersey
Year: 1960
Sister Ships: *Agent; Ambassador; Aide*
Location: Suisun Bay Reserve Fleet
Length (overall): 492.6'
Length (between perpendiculars): 470'
Beam: 73'
Draft (maximum loaded): 27'
Depth to (molded to main deck): 42.2'
Deadweight: 10,986 tons
Gross Tonnage (GRT): 7,848
Net Tonnage (NRT): 4,274
Speed: 18.5 knots

The 12 replacement ships built by AEL all shared common hull form and propulsion machinery. The first class of the four "A" ship series were constructed along conventional lines with the propulsion machinery and superstructure located amidships. Cargo holds fore and aft of the machinery space were served by conventional cargo handling gear. Although this arrangement had survived for many years, it had several inherent disadvantages; most notably that it effectively wasted the fullest portion of the hull by occupying it with machinery, not cargo. Among the evolutions in ship design that was taking place in the 1960s was a widespread effort to move machinery further aft. Ships derived from the classic Mariner hull form were being built with machinery moved to the 2/3 or 3/4 aft position. AEIL exploited this trend during the design of the "B" and "C" classes by moving the machinery as far aft as possible. [5]

[5] Refer to the Maritime Administration's March 18, 2009 National Register Eligibility Assessment for the vessel *Bay*, formerly *Export Bay*, for a more detailed discussion of the differences between the "A" and "B/C" classes.

The "A" series had a modernized version of the traditional cargo ship profile. There was a unified superstructure amidships containing the navigating bridge, crew quarters and upper machinery spaces. There were six hatches on the centerline serving six cargo holds, three forward of the superstructure and three aft of it. A raised forecastle deck extending aft of the No. 1 hatch provided additional cargo space in the No. 1 hold. Cargo gear was provided on four sets of linked king posts located between the hatches, and two sets of free standing samson posts; one set on the fore side of the superstructure and one on the aft side. The No. 1 and No. 6 hatches were each served by two 7-ton capacity booms. Each of the other four hatches was served by four booms. The No. 3 hatch was also served by a 50-ton heavy lift boom. The cargo winches were operated by electricity and mounted on the king posts to create more deck space. There were hydraulic folding hatch covers at every deck level.

The *Export Adventurer* was powered by steam turbines built by the General Electric Company rated at 12,500 shaft horsepower. Steam was provided by two Babcock & Wilcox boilers. It had a cruising speed of 18 ½ knots. There were living quarters for a crew of 55, staterooms for 12 passengers on the Boat Deck, and a passengers' lounge on the deck above.

Statement of Significance

At the time that the "A" class vessels were designed, they were considered state-of-the-art; however, the class did not influence the design of future comparable cargo ships. The *Adventurer* is representative of the general trends in break-bulk shipping over its final decades of significance. The vessel's history demonstrates the rapid obsolescence of the type, which was of little utility in shipping markets within a decade of its construction. It is not of exceptional significance, either in design, or service history.

Integrity of Characteristics/Features

The vessel was originally constructed in 1960 and did not undergo any substantial modifications during its service life. The vessel retains its historical integrity, being substantially unchanged from original construction. All (or most) salient design features of structure, machinery, and equipment are substantially intact. The *Adventurer* has been in a non-retention status for more than nine years. Its physical integrity is degraded, and the ship's overall condition is poor. Moreover it currently holds a large amount of oil.

National Register Eligibility Statement

The vessel is not quite 50-years-old and does not possess the exceptional importance necessary for such properties to be eligible for listing on the National Register of Historic Places. The vessel does not possess the significant historical or technological characteristics, or integrity of design and materials necessary for listing.

Date: FEBRUARY 18, 2010
Determination: Not eligible

Sources

Brouwer, Norman. *Adventurer* Ship History, 2008.

De la Pedraja, René. *The Rise & Decline of U.S. Merchant Shipping in the Twentieth Century*. New York: Twayne Publishers, 1992.

---------- *A Historical Dictionary of the U.S. Merchant Marine & Shipping Industry*. Westport, CT: Greenwood Press, 1994.

"Historic Assessment of Non-Retention Vessels in the National Defense Reserve Fleet; SS *Shirley Lykes*." Maritime Administration, Washington, D.C., Office of Ship Operations, November 2004.

"The Evaluation of Selected Obsolete Break-Bulk Cargo Vessels in the Maritime Administration Reserve Fleets". Prime, Inc., Washington, D.C., November 14, 2006.

Maritime Administration's Property Management and Archive Record System Website: https://pmars.marad.dot.gov/detail.asp?Ship=47