NATIONAL REGISTER ELIGIBILITY ASSESSMENT
VESSEL: USNS *Sirius* (T-AFS-8) ex-RFA *Lyness*

USNS *Sirius* underway circa 1980s. http://en.wikipedia.org/wiki/File:USNS_Sirius.jpg.

Vessel History

The British Royal Navy Fleet Auxiliary ship (RFA) *Lyness* was built at Swan Hunter and Wigham Richardson at Wallsend-on-Tyne, England in 1966. *Lyness* (A339) was the first in a class of three Stores Support Ships that served the British Royal Navy for more than a decade; sisterships included RFA *Stromness* (A344) and RFA *Tarbatness* (A345).

The U.S. government acquired *Lyness* on a one-year bare-boat charter on January 17, 1981 renaming the vessel *Sirius* after the brightest star in the evening sky. On March 1, 1982 the U.S. Navy purchased the ship to help support its increased presence in the Middle East following the 1979 Iranian Revolution and subsequent Iran-Iraq war. Soon after, the navy purchased *Stromness* and *Tarbatness* renaming them *Saturn* and *Spica* respectively; by October 1983 all three vessels were supporting the U.S. Navy's two battle carrier groups then serving in the Persian Gulf-Indian Ocean area.

From 1982-2005 *Sirius* provided support for the U.S. Navy's combatant fleet. In 2003, the ship served in the Persian Gulf during Operations IRAQI FREEDOM and ENDURING FREEDOM. The vessel underwent a major overhaul in 2004 in preparation for continued naval service; however, in early 2005, budget cutbacks forced the navy to decommission *Sirius* by the end of that year. The Maritime Administration (MARAD)

took advantage of this development to obtain the vessel as a prospective replacement training ship for the Texas Maritime Academy at Galveston[1]. After surveys and evaluations were completed in the early spring, the navy delivered *Sirius* to MARAD at the Texas Maritime Academy that summer. Within two months MARAD activated *Sirius* for emergency relief operations after Hurricanes Katrina and Rita devastated the U.S. Gulf Coast in August and September.

On September 10 *Sirius* steamed from Galveston arriving two days later at the Nashville Avenue Wharf in New Orleans where it provided berthing and meals for port workers and Federal responders. On November 23 *Sirius* left New Orleans for Lake Charles, Louisiana where it continued to provide berthing and meals to college students, port workers and Federal responders in the aftermath of Hurricane Rita, which made landfall less than one month after Katrina came ashore. *Sirius* remained in Lake Charles until early March 2006. By the end of January 2006, the vessel had already provided 27,780 meals and 11,648 berths.

USNS *Sirius* in New Orleans, Louisiana after Hurricane Katrina in 2005. Maritime Administration photograph.

Sirius returned to Galveston in the spring of 2006. After its return, MARAD resumed planning for the training ship conversion; however, the project was reconsidered when budgetary constraints prevented dedicated conversion funding from being appropriated. Although the technical challenges to upgrading and converting the vessel to bring it into compliance with U.S. Coast Guard inspection regulations were not insurmountable, the lack of funding and the passage of time eventually pushed MARAD

[1] Texas Maritime Academy is one of six state maritime schools charged with preparing students for service in the U.S. Merchant Marine. MARAD provides and maintains training ships and funding for the six schools.

to seek other options for a Texas training ship. With no other employment for the vessel, MARAD downgraded *Sirius* to non-retention status and moved it to the Beaumont Reserve Fleet where it is moored today awaiting disposal.

Description/Characteristics of Vessel Type

Type: Combat Stores Ship (Ex-British Stores Support Ship)
Hull Number: AFS-8
Previous name: RFA *Lyness*
Builder: Swan Hunter and Wigham Richardson, Wallsend, England
Year: 1966
Sister Ships: *Tarbatness* (T-AFS-9) and *Stromness* (T-AFS-10)
Location: Beaumont Reserve Fleet, Beaumont Texas
Length (overall): 523.25'
Length between perpendiculars:
Beam: 72'
Draft, full load: 25.50'
Displacement light: 9,010 tons
Displacement, loaded: 16,793 tons
Deadweight: 6,476
Gross Tonnage (GRT):
Net Tonnage (NRT):
Main Engine: One turbocharged diesel engine (Wallsend-Sulzer 8RD76)
Shaft horsepower: 12,700 bhp; 1 shaft
Designed Sea Speed: 19 knots
Aircraft: Two UH-46 Sea Knight helicopters
Complement: 123 civilians; 47 Navy personnel

Sirius and its sisters were built for the British Royal Fleet Auxiliary[2] as multi-purpose replenishment vessels. In U.S. naval service they were classified as Combat Stores Ships (AFS). Combat Stores Ships support U.S. military forces at sea by providing refrigerated stores, dry provisions, equipment and parts, general stores, freight, mail, and personnel from underway replenishment stations (UNREP) strategically located onboard the ship. They may also conduct vertical replenishment, or VERTREP, if fitted with helicopter flight decks and support facilities. The *Sirius* class was equipped with five UNREP stations (x port and y starboard), a helicopter flight deck and hangar with support for two UH-46 Sea Knight helicopters.

Although the vessels of the *Sirius* class were constructed and arranged for military purposes, and were equipped with features unique to the naval underway replenishment function, they were nevertheless designed and built to the merchant ship standards of the British Board of Trade. They were classed by the British classification society Lloyd's Register. Their machinery and structural design characteristics are typical of British merchant ships of the era. The vessels feature a midships machinery space (engine room), with breakbulk cargo holds arranged fore and aft. Each cargo hold is serviced by a large elevator. The main deck is sheltered, and allows for forklifts and

[2] Set up in August 1905, the Royal Fleet Auxiliary was originally a logistic support organization, part of the (British) Navy proper but run on civilian lines, comprising a miscellaneous and very unglamorous collection of colliers, store ships and harbor craft.

other light vehicles to move fore and aft, staging cargo from the cargo holds to the underway replenishment stations for further transfer to other vessels.

The vessel is propelled by a single slow speed diesel engine, arranged along typical merchant ship lines. However, the ship is fitted with an extensive suite of auxiliary equipment, particularly diesel generators, to support the large hotel and service loads associated with a design complement of 200 persons and the cargo transfer and underway replenishment gear.

The vessels were constructed to the contemporary standards of the international Safety of Life at Sea (SOLAS) Code, and employed the Method II-C standard of interior construction. This standard permits the use of combustible joiner (partition) bulkheads and furnishings, provided that an active fire suppression system (sprinklers) is also fitted. Although this method of construction was permitted in Great Britain, it has not been allowed under the U.S. flag since the catastrophic loss of the passenger liner *Morro Castle* to fire in 1934. U.S. flag vessels are designed to resist the spread of fire using installed passive systems, such as structural fire protection (insulation) on all decks and bulkheads; joiner work and furnishings constructed of incombustible or fire retardant materials, automatically closing fire doors and ventilation fire dampers. U.S. naval auxiliaries are similarly constructed. The Method II-C standard of construction complicated the entry of *Sirius* into U.S. Naval service after it was purchased in 1982.

The general design and characteristics of *Sirius* were not changed after the navy acquired the vessel. Although the navy initially hoped to bring the ships under U.S. registry as Coast Guard-inspected vessels, the certification studies concluded that the Method II-C materials would require replacement. The cost to make those replacements was not prohibitive; however, the navy was able to self-inspect (Board of Inspection and Survey – INSURV) and certify the vessels without physical change. Consequently, the navy chose the lesser-cost option.

Statement of Significance

USNS *Sirius* supported dozens of U.S. Navy combatant deployments, participated in Operations ENDURING FREEDOM and IRAQI FREEDOM from 2003-2004 and provided support for the disaster relief operations following Hurricanes Katrina and Rita in 2005.

Historical Integrity

Sirius is substantially unchanged from its original construction and configuration. Some superficial changes were made over the course of its nearly 40-year career, and the vessel received numerous equipment and control systems upgrades up through the last year of its naval service. The most noticeable external change was the removal of lifeboats in favor of liferafts and davit-launched rescue boats sometime after the vessel

was purchased by the U.S. Navy. Many of the original features are intact, including substantial percentages of the wooden joinery and furnishings.

National Register Eligibility Statement

Sirius is one of three in a class of Stores Support Ships built for the British Royal Navy Auxiliary Fleet in the mid-1960s. The ship 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. It supported Operations IRAQI FREEDOM and ENDURING FREEDOM as well as relief operations subsequent to Hurricanes Katrina and Rita; however, its role was not significant enough to qualify under Criteria A, particularly considering the recent nature of those operations.

Date: 19 September 2012
Determination: NOT ELIGIBLE