

THE BIMONTHLY PERIODICAL ON GREAT LAKES SHIPPING NEWS

EDITION #62 – MARCH-APRIL 2022

OFFICIAL NEWSLETTER OF SHIPWATCHER NEWS - SINCE 2014 - WRITTEN BY BRENDAN FALKOWSKI - WWW.SHIPWATCHER-NEWS.COM



- ☐ 2021 SEASON RECAP
- ☐ THE NEW SEASON HAS BEGUN
- **□** WELCOME USCGC SPAR!
- ☐ IN THE DESIGN: MECHANICAL AND SUPPORT SYSTEMS

### **2021 SEASON RECAP**

MARCH 25, 2022

The 2021 Great Lakes shipping season was nothing short of busy and eventful. As the economy continued to rebound following the COVID pandemic, cargo shipments increased.

At the beginning of the season, Grand River Navigation chartered five ships from American Steamship Co., those being the American Courage, American Mariner, H. Lee White, John J. Boland, and Sam Laud.

Algoma Central took delivery of yet another foreign newbuild, welcoming the new *Captain Henry Jackman*, an Equinox Class straight-deck bulk carrier, in June of 2021.

At the end of the 2020 season, the Algoma Spirit was retired from service, being towed to the scrapyard overseas in July 2021. Mississagi was also retired at the end of 2020, sailing to Sarnia, ON, in April 2021 to be stripped of parts before she was towed to Sault Ste Marie, ON, in October for scrapping. The St. Clair, which was damaged by fire back in 2019, was finally towed to her date with the scrapper in Port Colborne, ON, in December 2021. It was announced in March 2022 that the Manistee and Ojibway would be scrapped at the beginning of the season.

Great Lakes sailors and boat watchers alike bid farewell to the USCGC *Alder* in July 2021. The "King of the Waters" of the Upper Great Lakes of 17 years departed for Baltimore, MD, for a midlife refit before being restationed at San Francisco, CA. She was replaced by the USCGC *Spar* in March 2022.

The vessels Edward L. Ryerson, American Valor, Philip R. Clarke, Roger Blough, John Sherwin, McKee Sons, and C.T.C. No. 1 remain in layup in ports across the lakes. Joining them at the end of the 2020 season was the Cason J. Callaway, entering long-term layup in Sturgeon Bay, WI.

Several grain records were set at Thunder Bay, ON, this past season, the most recent set by the *CSL Welland* in November with a cargo of 31,362 metric tons of grain.



(Above): Edgar B. Speer and Edwin H. Gott await passage through the Soo Locks, March 24, 2022. (Inset): Capt. Grogan presented with a plaque for the first ship of the season through the Soo Locks. Photos: Roger LeLievre

(Right): USCGC *Spar* arrives at her new homeport of Duluth, MN, greeted by family members of the crew. Photo: David Schauer



# THE NEW SEASON HAS BEGUN MARCH 25, 2022

The Soo Locks officially opened for the 2022 season at 12:01 AM on March 25, 2022. The first upbound vessel through the Soo Locks was the *Edgar B. Speer*. Captain Abe Grogan, Chief Engineer Isaiah Majetich, and the crew of the *Speer* were presented with a plaque for being the first ship of the season. The crew was greeted by several dignitaries from Sault Ste. Marie as well as local celebrity Roger LeLievre. The greeting of the first vessel of the season is a longstanding tradition at Sault Ste. Marie, as well as several other Great Lakes port cities.

Vessels have been slowly creeping out of layup since the middle of March, with the shipping season working its way up to speed as vessels head out of layup to begin moving cargo.

## WELCOME USCGC SPAR!

MARCH 30, 2022

The USGC Spar arrived to her new homeport of Duluth, MN, on March 30, 2022. USCGC Spar was built in 2001, and was originally stationed at Kodiak, AK. She replaced the USCGC Alder, which sailed to Baltimore in July 2021 for her midlife refit before being restationed in San Francisco, CA, later this year. The crew of the USCGC Alder returned to the Great Lakes on the USCGC Spar. Both ships are identical sisters, being members of the Juniper class. USCGC Spar sailed from Baltimore, MD, in March, passing upbound through the Seaway as soon as it opened. She assisted in icebreaking operations on her journey to the head of the lakes before stopping for a short rest for the crew. Welcome to the Great Lakes, USCGC Spar!

Sources

LeLievre, Roger. Know Your Ships 2022. Marine Publishing Co., 2022. Pp. 6-14.
Slater, Brady. "Twin Ports Rolls Out Snow Welcome Mat for Spar". Duluth News Tribune, 30 March 2022. Accessed 15 April 2022.

## **News in Photos**

THE LATEST NEWS CAPTURED IN PHOTOS



Close-up view of the mural on the accommodations of CSL Welland. Photo: Don Detloff

### **FAREWELL TO TWO CLASSIC LADIES**

MANISTEE AND OJIBWAY RETIRED AND HEADED TO THE SCRAPYARD



She was acquired by Lower Lakes Towing in 2008 where she received her current name.

Ojibway, St. Marys River, September 2022. Photo: Roger LeLievre

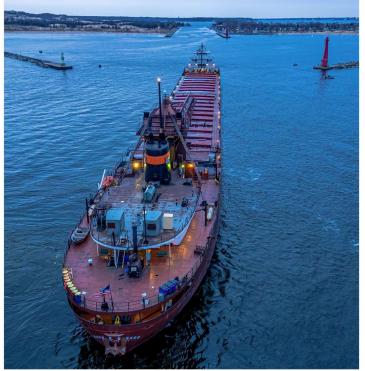
## KAYE E. BARKER STUCK ON THE SANDBAR

KAYE E. BARKER RUNS AGROUND ON SANDBAR OUTSIDE MUSKEGON, MI APRIL 28, 2022



Kaye E. Barker ran aground while attempting to enter Muskegon harbor at around 8:30 PM on Thursday April 28, 2022. The Barker was coming in with a load of 25,000 tons of limestone taken on at Port Inland, MI, for delivery to the Verplank's Port Terminal at the old Cobb Power Plant dock on the east end of Muskegon Lake. As she was approaching the breakwater entrance, she hit a sandbar formed outside the break arms and came to a stop. On Friday a local construction tug and deck barge came out to help lighter some of her stone cargo to reduce her draft. She was freed on Friday and went to anchor. The Wilfred Sykes arrived earlier in the day on Friday, with a load of slag for Verplank's Port Terminal. The Sykes went to anchor, later proceeding to the dock to unload around midnight on Friday night. After the Sykes finished unloading, the Barker entered port to unload her cargo.

Moore, Lynn. "Freighter stuck in sand on Lake Michigan outside Muskegon's harbor. MLive, 29 April 2022. Accessed 1 May 2022. https://www.mlive.com/news/muskegon/2022/04/freighter-stuck-in-sand-on-lake-michigan-outside-muskegons-harbor.html



Kaye E. Barker stuck in the breakwater entrance at Muskegon. Photo: Brian Caswell

### IN THE DESIGN: MECHANICAL AND ANCILLARY SYSTEMS PART II

LOOKING AT THE SUPPORT EQUIPMENT THAT BRING THE SHIPS TO LIFE

View of the spar deck of the barge Michigan Trader. Photo: Brendan Falkowski

INTRODUCTION

In the previous part to this article, we looked at the internal mechanical and ancillary systems onboard a typical Great Lakes ship. In this part, we will look at deck equipment, controls, and accommodations and their role in keeping the ships going.

### **DECK EQUIPMENT**

On deck, ship handling systems and unloading systems are critical. Winches are found at the bow, midship, and stern, for line handling. The St. Lawrence Seaway requires vessels transiting to be equipped with a certain number of mooring winches. Winches once were steam operated, but in the modern era are usually electrically or hydraulically operated. Size is determined, once again, by the size and needs of the vessel. Anchors are located on the bow and on the stern, and use windlasses to hoist and lower them. Size of the anchor and chain are determined by ABS rules, and chain length is determined by the vessel's Equipment Numeral, which is prescribed by the vessel's gross tonnage. Vessels are also required to have different types of anchor locks as well in order to prevent accidental dropping of the anchors.

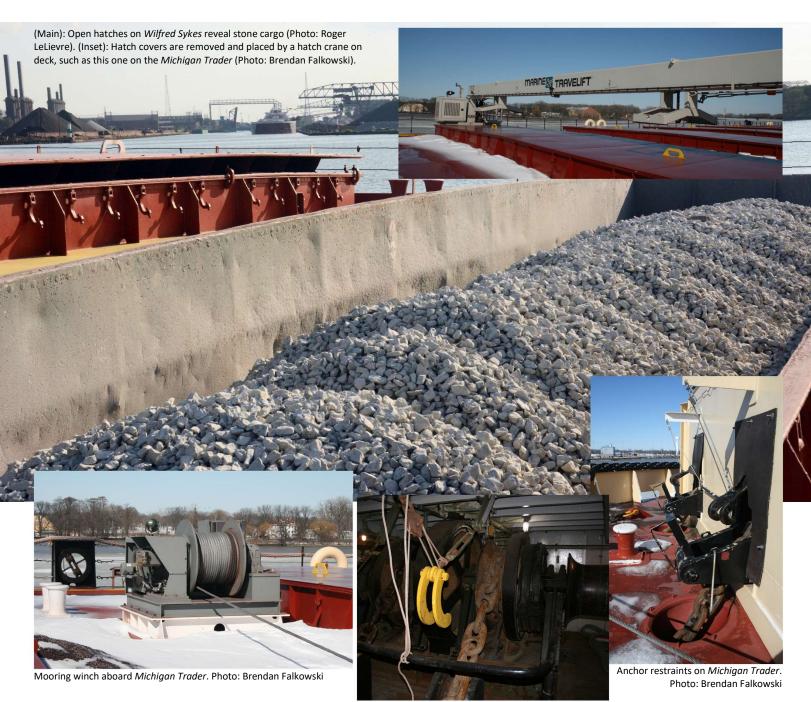
On vessels with traditional Great Lakes-style cargo hatches, an unloading crane is used to lift and move hatch covers when loading or unloading. An electric motor on the crane is used to run a winch to lift the hatch covers. Several different arrangements of these cranes are used, some using vertical hydraulic cylinders to lift, some use horizontal hydraulic cylinders with a pully system.  $\square$ 

Some vessels, such as those with older telescoping hatch covers like the *Saginaw*, or vessels with large panel covers like the *Mark W. Barker*, do not necessitate the use of a hatch crane. Smaller equipment cranes are also found on deck for lifting things onboard or in and out of hatches to mechanical spaces. Man-booms are used for lowering crewmembers to the dock when passing through locks or tying up at a dock.

Some ships are equipped with deck sprinklers to help cool the spar deck on hot days in order to prevent hogging. Deck sprinklers are left to owner preference, and installation is sometimes experience driven. Ships will also have a washdown system on the spar deck for hosing off dust, or in the winter time, use hot water to melt ice on the deck. Sprinklers can also be found on unloading booms and occasionally in loop belt systems for dust prevention. Some vessels use dustpans or tarpaulins beneath the boom over the deck to keep excess dust off the deck. Booms can also have dust covers over the belt or end of the boom. On cement carriers, special unloading spouts use dust collection systems that send excess dust back down to the elevator to be unloaded.

### CONTROL SYSTEMS & CREW COMFORTS

Most vessel control systems on modern ships run into consoles inside the pilothouse and engine rooms. Vessels with more automated systems will have centralized or remote control of systems. Ballast and unloading systems are usually controlled from the unloading control room, typically found on the spar deck near the unloading boom on conventional self-unloaders.  $\bigcirc$ 



Anchor winch aboard *Joseph H. Thompson*. Photo: Brendan Falkowski

⇒ Ships with less automated control of ballast systems will direct ballast instructions to the ballast valve control area onboard. Some vessels with automated unloading and ballast systems can be programmed for a specific unloading and ballast plan and rate, and can engage the plan with the press of a button.

Inside the crew accommodations, newer vessels will have their own climate controls, while older vessels have temperature control by opening/closing vents. A centralized HVAC system will run through the entire accommodations space. Since steel is not a great insulator, crew spaces will often be insulated in order to not lose as much heat in the winter time or absorb too much heat in the summer time. Crew spaces must also be ventilated in order to refresh the air in the accommodations. Machinery and hazardous spaces are ventilated as well. In machinery spaces, cooling is often strictly by ventilation, but some spaces with high electrical loads or engine control rooms may be air conditioned  $\Rightarrow$ 

and equipped with special fans.

Crew safety is always a priority, so machinery and accommodations sections are separated by special fireproofing. Accommodations and machinery spaces require A60 rating, meaning the bulkheads must resist heat and flame for more than 60 minutes. Fireproofing, fire prevention, and fire suppression will be discussed in future articles.

Mechanical and ancillary systems are important to the operation of a ship, and handle a great deal of responsibility in ensuring the function of each component onboard is supported.

Special thanks to the naval architects who provided their time and resources to help me write this article. Thank you to Travis Martin, Fred Koller, and Ryan Dow from Bay Engineering, Eric Helder from Interlake Steamship Co., Nick Hunter from NETSCo., and Dave Groh from VanEnkevort Tug & Barge –Brendan Falkowski

## AMERICAN MARINER

American Mariner in lay-by at the Lakehead Pipeline dock in Superior, WI, October 2021. Photo: Daniel Lindner



In October 1970, the federal government passed the Merchant Marine Act of 1970, an amendment to the Merchant Marine Act of 1936. The new Marine Act included provisions for the Federal Ship Financing Program, also known as Title XI, which allowed and encouraged U.S. shipping companies to construct new vessels or modernize their existing ships with guaranteed low-interest financing through the government with tax benefits. The passage of this act sparked a major boom in Great Lakes shipbuilding that would take place over the next decade. One of the companies to take advantage of this Act was American Steamship Co., which constructed ten new ships during this time period.

American Steamship Co. contracted Bay Shipbuilding Corp. of Sturgeon Bay, WI, for the ninth of their ten vessels in 1978, which was laid down as BayShip Hull #723, otherwise known as the *Chicago {3}*, on December 5, 1978. She was designed to be 730' long, 78' wide, and 45' deep, with a capacity of 37,300 tons at her mid-summer draft of 30'11". *Chicago* was built with a single unloading belt running beneath her cargo hold, leading to an incline belt elevator system that feeds a 250' deck-mounted boom. She is powered by a pair of General Motors EMD 20-645-E7 diesels, providing 7000 BHP to turn her single controllable pitch propeller. She is very similar in design to three other vessels constructed by Bay Shipbuilding during the mid-1970's, nearly identical to the *John J. Boland {4}* and *H. Lee White {2}*, with the addition of 50' and 26' over her sisters.



American Mariner launch day, August 2, 1979. Photo: Roger LeLievre Collection



American Mariner on the Welland Canal, July 2013. Photo: Isaac Pennock

View from the pilothouse of the American Mariner approaching the mouth of the Detroit River from Lake Erie. Great Lakes Trader / Joyce L. VanEnkevort and American Spirit are passing downbound. November 2021. Photo: Daniel Lindner

Above): American Mariner losding srein at Superior, WI, November 2021.

Photo: Daniel Lindner

Above): American Mariner losding srein at Superior, WI, November 2021.

Photo: Daniel Lindner

(Below): American Mariner, arriving at Muskegon, MI, with seagulls, September 2020. Photo: Brendan Falkowski



Her closest sister is the *Joseph L. Block*, which has a slightly different forecastle and larger guest quarters. American Steamship Co.'s new ship was launched on August 2, 1979, and had her name changed to *American Mariner* during fit out. She was officially christened *American Mariner* on April 16, 1980, and departed on her maiden voyage two days later, loading 31,322 gross tons of iron ore at Escanaba, MI, for delivery to Ashtabula, OH.

On March 17, 1995, American Mariner suffered a minor fire in her conveyor belt system while in winter layup at Toledo, OH. The damage was quickly repaired, and she returned to service as usual. American Mariner is one of the few U.S. flag Great Lakes vessels built within the size constraints of the Welland Canal and St. Lawrence Seaway, and has traversed the Seaway several times throughout the late 1990's and into the 2000's.

Though she has had a rather uneventful career, *American Mariner* had one notable accident on April 28, 2000, when she lost steering and struck Light No. 7 in the Huron Cut at the lower end of Lake Huron. The collision and subsequent grounding tore several holes into the *Mariner's* hull, requiring lightering into her fleetmate *Adam E. Cornelius* to free her before proceeding



American Mariner on the Upper St. Marys River, June 2019. Photo: Logan Vasicek

**⊃**to Toledo to be placed in drydock for repairs. The U.S. Coast Guard temporary closed the St. Clair River to vessel traffic, delaying almost 25 ships.

In February 2020, Rand Logistics announced that they purchased American Steamship Co. and their vessels from their parent company GATX Corp. Operations of the fleet remained the same during the 2020 season. In March 2021, Rand subsidiary Grand River Navigation bareboat chartered the American Mariner and her fleetmates American Courage, H. Lee White, John J. Boland, and Sam Laud from American Steamship, operating them as part of their fleet. American Mariner continues to be an active vessel in the ore, coal, stone, and grain trades on the Great Lakes.

#### Sources

Ahoy & Farewell II. Marine Historical Society of Detroit, 1996. Pp. 5-6.
"American Mariner". Shipwatcher News Great Lakes Ships, 31 March 2021. Accessed 20 April 2022.

Greenwood's Guide to Great Lakes Shipping 2016, Harbor House Publishers, 2016. Pp. 4.4. "M/V American Mariner". American Steamship Company, N.d. Accessed 15 April 2022.



**BRENDAN FALKOWSKI** is a Great Lakes ship enthusiast who shares his passion for the freighters through his newsletter and his research. He is currently pursuing his high school education in mid-Michigan before graduating and moving on to college, where he will attend the University of Michigan's College of Engineering to study Naval Architecture and Mechanical Engineering. Brendan is an avid musician, and is a drum major in his high school marching band. He enjoys sailing and spending time with his friends and family.

### SHIPWATCHER NEWS GREAT LAKES SHIPS

www.greatlakesships.wordpress.com

### SPECIAL THANKS TO OUR SPONSORS

Support Shipwatcher News at <a href="https://www.shipwatcher-news.com/support/">www.shipwatcher-news.com/support/</a>
Special thanks to the sponsors of Shipwatcher News:

#### **BOSUN SPONSORS**

Daryl & Lyn Falkowski Bill & Robin Lyons

### **MATE SPONSORS**

John & Kay DeCarli

International Shipmasters Association Toledo Lodge 9

### **ENGINEER SPONSORS**

Jack Baker

Ross & Debbie Falkowski

Jerry & Dee Dee Heck

Tom & Donna Heck

### **CAPTAIN SPONSORS**

Bay Engineering, Inc.

Martha Heck & Richard Wilson

Gene Helveston

**Know Your Ships** 

NETSCo., Inc.

Port City Marine Services

Shepler's Mackinac Island Ferry

**Bud Siudara** 

Jerry Siudara & Lisa Lemans

**Dennis Sobeck** 

VanEnkevort Tug & Barge

Susan Wolfe



Subscribe for free at: <a href="www.shipwatcher-news.com/subscribe/">www.shipwatcher-news.com/subscribe/</a>
Contact Brendan Falkowski at: brendan@shipwatcher-news.com



©2022 Brendan Falkowski

Cover Photo: *Ojibway* upbound above the Soo Locks, June 30, 2019. Photo: Logan Vasicek