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FROM PLANS TO FLOATING STEEL

CONSTRUCTING THE MARK W. BARKER

EDITOR'S PICK

SHORT ARTICLES ON VARIOUS HAPPENINGS AROUND THE LAKES

INTERLAKE LOGISTICS SOLUTIONS PURCHASES FORMER U.S. ARMY TUGBOAT

NOVEMBER 29, 2021

This fall, Interlake Maritime Services subsidiary Interlake Logistics Solutions purchased the retired U.S. Army tugboat *MG Winfield Scott* [LT-805]. Interlake Logistics Solutions operates the articulated tug-barge *Undaunted / Pere Marquette 41*. The tug *MG Winfield Scott* was built in 1993 by Moss Point Marine of Escatawpa, MS, for the U.S. Army. She was recently retired and sold at a government auction to Interlake Logistics Solutions. The tugboat is 128' long, and according to an Army press release, has enough horsepower to tow and assist an aircraft carrier.

Interlake did not indicate any current plans for the tugboat at this point. *MG Winfield Scott* departed Norfolk, VA, in mid-November for delivery to the Great Lakes, and arrived at Ludington, MI, on November 29. She was rafted alongside the carferry SS *Spartan*, which is also laid up in the port. ☐

(Left, Above): *MG Winfield Scott* arriving at Ludington, MI, November 29, 2021. Photo courtesy of Interlake Steamship
(Right): *MG Winfield Scott* on her maiden trip up the Detroit River, November 27, 2021. Photo by Isaac Pennock

MICHIGAN SENATE INTRODUCES BILL PACKAGE TO SUPPORT MICHIGAN PORTS

DECEMBER 3, 2021

Michigan State Senators recently introduced a bill package to support the state's maritime industry and ports. The bills are intended to help improve the infrastructure at Michigan ports and provide support to aid ports in expanding business. This in turn will hopefully lead to the creation of more jobs and help strengthen local economies.

Senate bills 743, 744, 745, and 746 are all part of the package. Bill 743 would create a Great Lakes Maritime Office within the Michigan Department of Transportation. A grant program would be created by Bill 744, which would provide assistance for port infrastructure projects. The last significant portion of the bill package is Bill 745, which would allow ports to use revenue bonds to fund ➲ transportation related projects and improvements to infrastructure.

This legislation package comes after a long period of neglect of Michigan ports from the state government. Neighboring states such as Ohio and Wisconsin have poured millions of dollars into their ports in recent years and are now seeing their investments paying off. With several Michigan ports lacking in the necessary facilities to handle a diverse pool of cargoes, many are instead bypassed into ports like Cleveland, Toledo, Milwaukee, Chicago, or Duluth.

"This legislation will strengthen Michigan ports, sustain our supply chain, and ensure that our identity as the 'Great Lakes State' is as strong as the infrastructure that supports it." Stated Paul C. LaMarre III, Director at the Port of Monroe, in response to the bill package. With the passage of this bill many Michigan ports would begiven the opportunity to be more competitive with ports across the Great Lakes. ☐

MV ST. CLAIR TOWED TO THE SCRAPYARD

DECEMBER 9, 2021

On the morning of December 5, the tugboat *Molly M I* arrived at Toledo, OH, in preparation for towing the fire-ravaged *St. Clair* to meet her fate at the scrapyard. The tow was delayed until December 7 due to high winds, departing in the early afternoon. *St. Clair* arrived at Port Colborne, ON, on December 9, and was docked at the wharf just north of the Marine Recycling Corp. scrapyard.

St. Clair was originally constructed in 1976 by Bay Shipbuilding in Sturgeon Bay, WI, for American Steamship Co. of Buffalo, NY. On February 16, 2019, *St. Clair* suffered a severe fire while in winter layup at Toledo, OH. The fire burned for two days, and spread through the engine room spaces, fuel bunkers, accommodations block and into the unloading system. Following inspection, she was declared a total loss. ☐

SOURCES:

"Fire-gutted St. Clair towed from Toledo to Port Colborne for scrap". Great Lakes & Seaway Shipping Online, 8 December 2021. https://boatnerd.com/boatnerd-news-december-8/

"Interlake's new tug on its way to lakes from East Coast". Great Lakes & Seaway Shipping Online, 23 November 2021. https://boatnerd.com/boatnerd-news-november-23/

"Senators Announce Port Infrastructure Improvement Legislation to Support Maritime Industry". State Senator Stephanie Chang, 3 December, 2021. https://senatedems.com/chang/news/2021/12/03/senators-announce-port-infrastructure-improvement-legislation-to-support-maritime-industry/

News in Photos

THE LATEST NEWS CAPTURED IN PHOTOS

Michigan teens deliver care packages to Great Lakes freighter crews

Two teenagers from mid-Michigan have delivered care packages to sailors on Great Lakes freighters again this season. Brendan Falkowski and Brock Johnson are both seniors in high school.

Last fall, the two started the SN Caring for our Sailors program, with a mission of putting together care packages for sailors on Great Lakes freighters. The project turned out to be a huge success. Care packages were sent to 29 ships and reached 565 sailors. The project was meant as a COVID relief project. They decided to do the project once again in their senior year due to the ongoing pandemic. This time it was expanded, with a goal of sending packages to 772 sailors on 41 ships.

The two received $1,380 in contributions from individual donors and Thrivent grants to pay for the items in the packages.

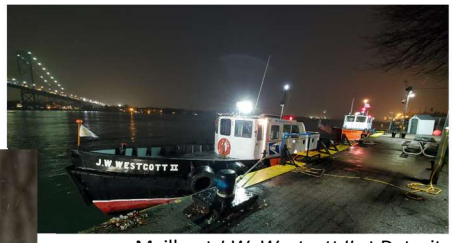
The boxes were filled with individual bags for each sailor, with a few snacks and treats to help boost morale onboard the ships. Delivery of the boxes could not have been done without the assistance of the J.W. Westcott Co. of Detroit, MI, and Soo Marine Supply of Sault Ste. Marie, MI. J.W. Westcott Co. delivered 24 boxes to passing ships via the mailboat *J.W. Westcott II*, while Soo Marine Supply delivered 11 boxes to ships transiting the St. Marys River on their supply boat *Ojibway*. The remaining 6 boxes were sent through the mail.

"The Great Lakes region is filled with so many wonderful people, we are just happy to give back to the sailors." said Brock Johnson. The project received an overwhelmingly positive response from those receiving the packages. "It means a lot to be able to give back to our community and the sailors that ply the inland seas," Falkowski, director of the project, added. "They sacrifice so much to be out there transporting our essential cargoes to keep our economy moving. Many are away from their homes and families during the holiday season so these care packages are a way for us to show them how much their work is appreciated and that there are some people on shore looking out for them."

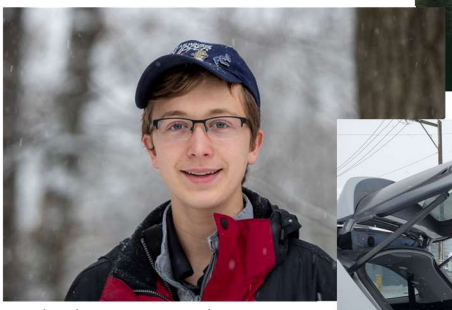
Falkowski is from Bath, MI, and plans to attend the University of Michigan's Naval Architecture and Marine Engineering program following high school. Johnson is a student in Northview, MI, and plans to go into business and law after college. The duo was introduced over email, and their friendship has grown over a passion for Great Lakes ships. ◻

Treats were packed in bags for each sailor.

Boxes stacked and ready for delivery to J.W. Westcott



Mailboat *J.W. Westcott II* at Detroit.

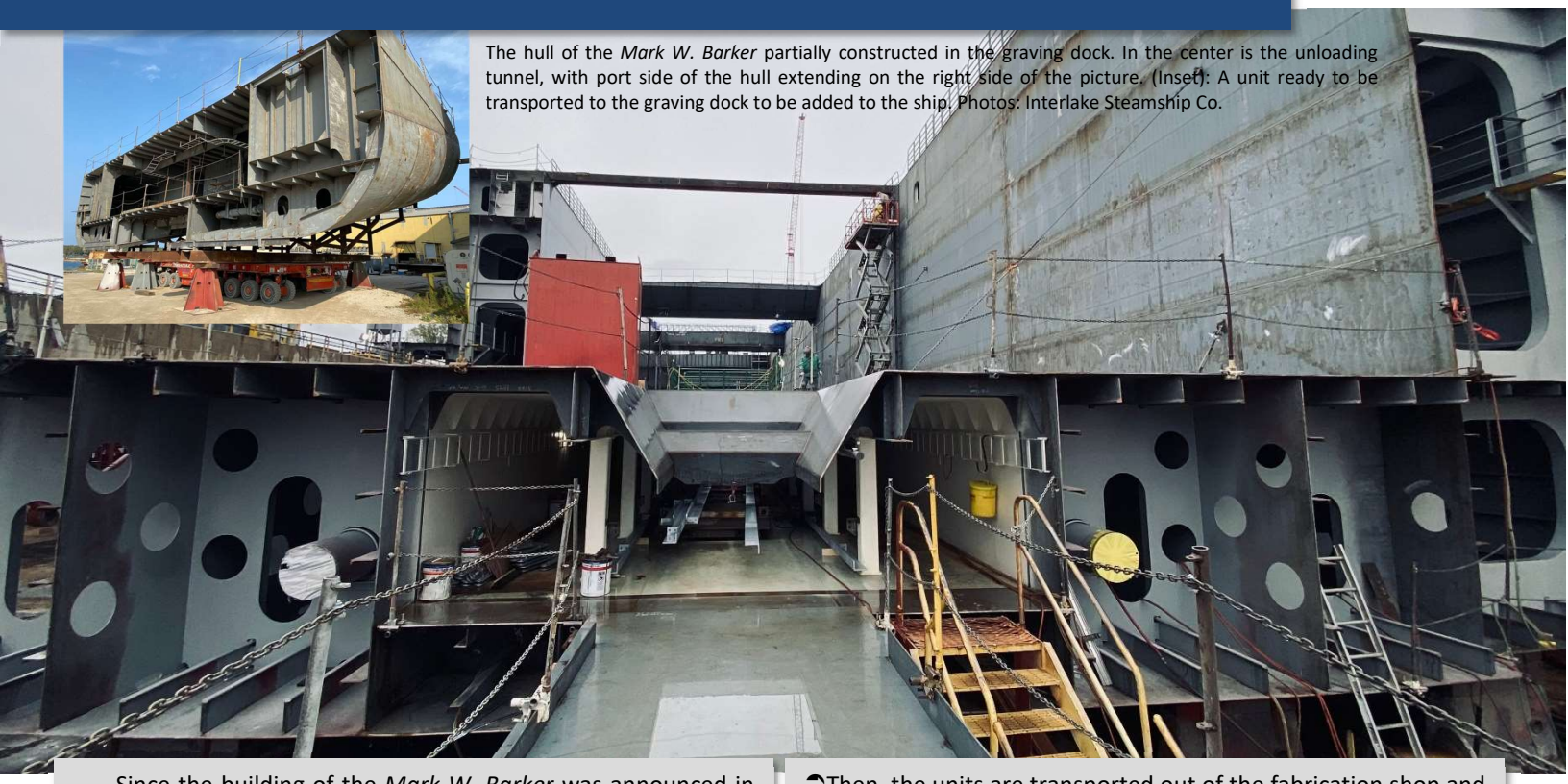

Brock Johnson. MLive Photo


Brendan Falkowski delivering care packages to Soo Marine Supply at Sault Ste. Marie.


Crew of the *Olive L. Moore* / *Menominee* with their gifts.
Photo: Captain Kevin Lees

Building the Mark W. Barker: the construction process

A look at how the design and construction of the *Mark W. Barker*



The hull of the *Mark W. Barker* partially constructed in the graving dock. In the center is the unloading tunnel, with port side of the hull extending on the right side of the picture. (Inset): A unit ready to be transported to the graving dock to be added to the ship. Photos: Interlake Steamship Co.

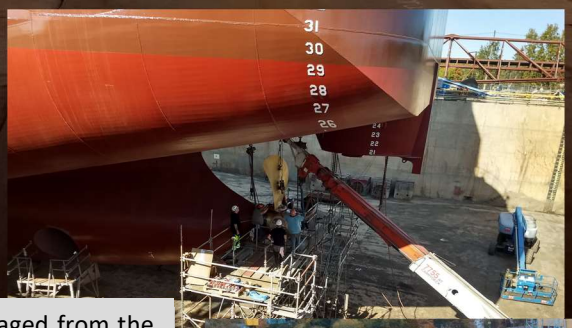
Since the building of the *Mark W. Barker* was announced in 2019, the ship has quickly progressed from a set of plans to an almost complete vessel. In this article, we will take a look at Fincantieri Bay Shipbuilding's role in the design and construction of the *Mark W. Barker*. Design of the vessel was a group effort from the collaboration of Interlake Steamship doing concept design, Bay Engineering doing detail design of the hull, and Fincantieri Bay Shipbuilding (BayShip) doing the detail design for the cabins and accommodations block. The collaboration effort worked smoothly and effectively, and after Bay Engineering completed their design of the hull, BayShip was given an envelope in which to work to design the aft deckhouse. The deckhouse design was challenging in the respect that large spans had to be supported without any breaks in between, making it necessary to use larger members between decks while maintaining enough head space, and using stanchion supports to hold up the deck as needed. The decks above spar deck level only have a major bulkhead surrounding the main staircase, the rooms inside are divided by non-structural bulkheads.

After the design was ready to go and approved by the classification society, it was time to start construction. BayShip utilizes specialized computer software to model the plans and virtually construct the vessel. From the model, the ship is then divided into units, and part numbers are assigned to each piece on the plans. Then, each of the pieces are lofted, meaning the designs of each part are laid out in a program in preparation for cutting. These plans are loaded onto nest tapes that program the CNC cutting machines in the fabrication shop. After cutting, the parts are welded and assembled in the fabrication shop into what are called units. Inside the fabrication shop there is a combined 3-crane pick up capacity of about 170 tons, limiting the size of the units that can be constructed indoors. ➲

➲Then, the units are transported out of the fabrication shop and to the graving dock where they are placed and welded together to construct the hull. Once they are outside of the fabrication shop, some units are put together into super sections to help simplify some parts of the construction process. For example, the hull walls of the *Barker* were constructed using super sections, made of two units welded together. The size of these super sections is limited to about 170 tons with the capacity of the gantry crane and added weight of the lifting tackle.

Observers will notice that there are many curved surfaces in the hull of the *Mark W. Barker*. Curved steel plating poses a unique challenge in the shipbuilding process. BayShip has the capability to do single curvature in-house, but had to outsource double curvature plating, plating curved on multiple axis, for this project. BayShip lofted and cut the plating for the double curvature plates in-house before shipping them to a firm in Texas for the double curvature work before they were shipped back.

One of the unique design features on the *Mark W. Barker* are its large hatch covers. The ten hatch cover panels were fabricated overseas and loaded onboard a heavy lift ship with the tanks for an LNG barge under construction at BayShip, and transported into the Great Lakes and to the shipyard. They were then unloaded at the south end of the yard, using three stick cranes to offload them from the ship to the dock. From there, they were hoisted onto the transporter and taken to the graving dock in the north end of the yard to be fitted on the vessel. Each hatch is 54' wide and 80' long, and is covered by two panels. Since the hatch covers are so large, they require a lot of support from their coamings. One of the biggest challenges from this portion of the project was constructing the hatch coamings, which were made of 3'' thick steel, and had to be carefully lined up and welded for the hatch covers to slide on them. ➲



(Above Main): Looking down the cargo hold towards the bow, September 29, 2021. (Left): Close-up of one of the unloading gates in the tunnel. (Center): Fitting the propeller blades onto the controllable pitch propeller. Photos by Brendan Falkowski

➲The unloading boom for the *Barker* was salvaged from the now-scrapped *American Victory*, which was converted to a self-unloader in the 1980's. The boom was shipped in two pieces by barge to Sturgeon Bay from Superior, WI, in June 2019. Once at the yard, the boom was put back together and structurally tested. In order to bring it up to new ABS rules, structural reinforcements were added to the boom. The electronics and piping systems were replaced and installed. A few other parts were salvaged, including the slewing actuator, which moves the boom side-to-side, and the hydraulic ram which raises and lowers the boom. Other parts, such as the kingpin, which holds the base of the boom at the deck, were newly manufactured for the project. A lot of work has been done to make sure the new components fit with the refurbished parts.

Since the *Barker* was designed and constructed primarily for a salt hauling contract, special coatings will be used to ensure the vessel is prepared to last. Normally, ballast tanks on Great Lakes ships are not coated since they sail in freshwater, but since the *Barker* will be hauling salt, she will have an epoxy coating in her tanks to prevent any corrosion. Inside the hold, the hold walls, bottom of the hatch covers, and unloading tunnel are all coated with zinc and epoxy linings.

Now that the construction process is nearing an end, things are being wrapped up across the ship. Finishing touches are being installed in the accommodations block. Right now, all of the exterior bulkheads have thermal insulation installed, and the divider bulkheads have been fitted to make the individual rooms. Ceilings are being prepared to go in once wiring and cable are finished up, and doors will be following soon after. Then, built-in flooring such as beds, desks, couches, will be fitted so that they will not move while the ship is underway and floors will be installed. ➲

The *Barker*, nearly complete on the outside, was launched on October 28, 2021. Photo: Interlake Steamship Co.

➲The *Barker* will be a highly-automated vessel when she enters service, and incorporates many design innovations. She is 639' long and 78' wide, with a cargo capacity of 28,000 tons. With her forward unloading boom, she will be capable of unloading her cargo in difficult locations in just a few hours.

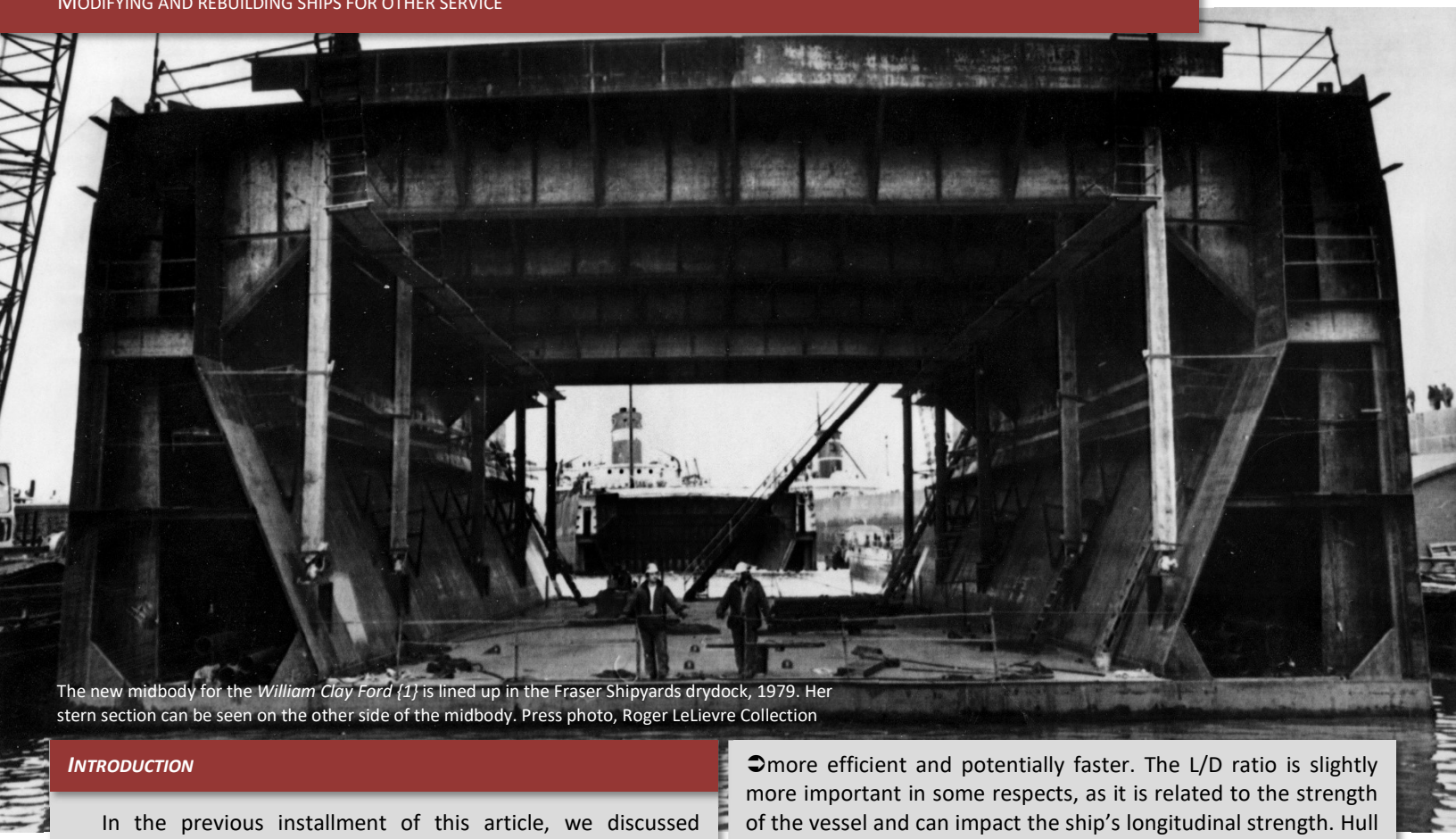
As construction is wrapping up, the project is entering the final phase of completion, testing and commissioning. Stability and dock testing will be done over the next few months, and the main engines will be aligned and set up. The onboard systems will be brought online and engines commissioned in preparation for sea trials this spring. Following successful completion of trials, the *Mark W. Barker* will be delivered to Interlake Steamship Company in the spring of 2022. ◘

Special thanks to Amelia Ott from Fincantieri Bay Shipbuilding for her assistance in making this article possible, and Chrissy Kadleck from Interlake Steamship for providing photos.

NAVAL ARCHITECTURE & MARINE ENGINEERING

IN THE DESIGN: MAJOR CONVERSIONS & REBUILDS PART II

MODIFYING AND REBUILDING SHIPS FOR OTHER SERVICE



The new midbody for the *William Clay Ford {1}* is lined up in the Fraser Shipyards drydock, 1979. Her stern section can be seen on the other side of the midbody. Press photo, Roger LeLievre Collection

INTRODUCTION

In the previous installment of this article, we discussed modifications and conversion projects that have been done on Great Lakes ships to keep them competitive in the shipping industry, such as conversion to a self-unloader, cement carrier, or to an Articulated Tug-Barge (ATB). In this part of the article, we will look at lengthenings, repowerings, and reenginings.

LENGTHENINGS

Building new ships to expand fleet tonnage can be rather expensive, so operators will sometimes look into lengthening an existing ship. Lengthening a ship is considered a major conversion in most situations, and usually involves a lot of oversight and communication with classification societies during the project. The operator will need to consider how much they want to expand the vessel's capacity, and keep in mind the length restrictions in the ports that the vessel will operate in. Most of the common lengthenings done on Great Lakes ships were by 96' or 120', multiples of 8' to match the frame spacing onboard. The lengthening procedure is usually done in the midbody of the hull, and is strategically lined up with current bulkheads and frames in order to reduce the amount of extra work to be done.

The new midbody is based off of the original midship section in order to match up with the current hull. Engineers will also look at two major ratios when doing the design work for a lengthening in a project, the length to beam (L/B) ratio and the length to depth (L/D) ratio. The L/B is important in terms of stability and efficiency. With an increased length over a slenderer beam the vessel's stability starts to decrease, but it will be ➲more efficient and potentially faster. The L/D ratio is slightly more important in some respects, as it is related to the strength of the vessel and can impact the ship's longitudinal strength. Hull girder strength is another important item that engineers must keep in mind. As the ship is lengthened, the moment of inertia increases, and more strength is needed in the midbody.

In order to meet these strength requirements, strapping is added onboard on the spar deck and on the bottom of the hull to strengthen the midsection. Usually, the bottom of the hull meets the section modulus, so strapping is not as common on the bottom as it is on the spar deck. Strapping is made of thick steel plating about 1-2'' thick by around 12-18'' wide, and is welded to the spar deck in long strips. There are often 3-4 straps on each outboard side of the spar deck. Another important aspect to consider is the age of the vessel. Many older vessels sailing the Great Lakes have riveted hulls, but modern vessels have welded hulls. Unfortunately, riveting hull plates can be very expensive, so rivet work is avoided when possible. In order to accomplish this when modifying riveted hulls, it is necessary to transition from riveted to welded plates. This is done by cutting the overlapped riveted seam back so it can be transitioned to a butted weld joint at the end. Over the interval, the seam is transitioned from overlapped to a butted weld seam to be mated with the new midbody.

The lengthening process is pretty straightforward, as the ship being lengthened is placed in drydock and cut in half at a specified point in the midbody. One end of the vessel is floated out of drydock and the newly constructed midbody is floated in, followed by the other end of the vessel. After all of the sections are lined up, the drydock is drained, and the sections are welded together, and strapping installed. Some equipment onboard,➲

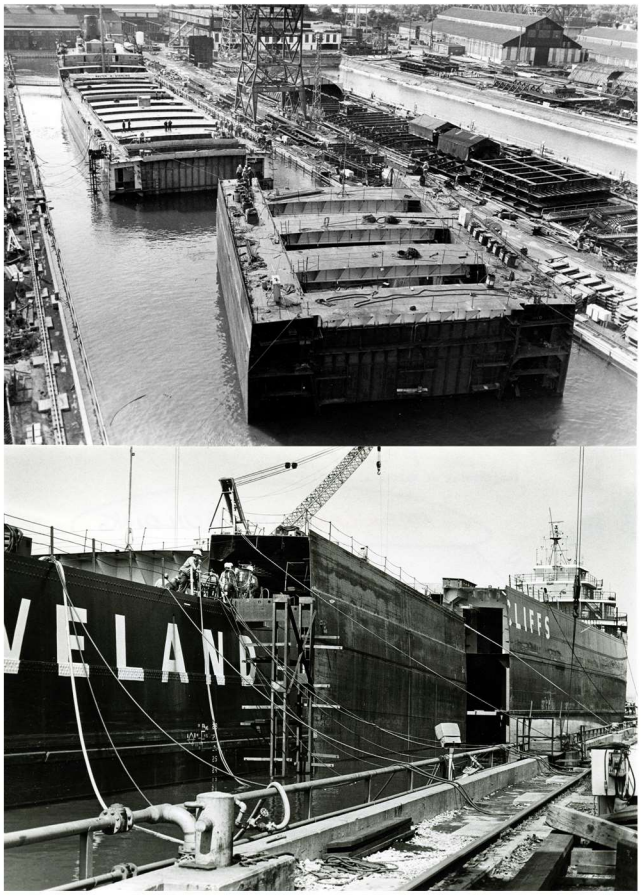
➲such as mooring winches, deck fittings, anchors and chain, and rudders may have to be upsized in order to accommodate the vessel's larger size and weight following lengthening. After the ship is put back together, the vessel can be refloated and return to service.

When planning a new ship, some operators may want to prepare to eventually lengthen the vessel in the future. Preparations can be made when designing the vessel to minimize costs later on by designing the vessel with larger stiffeners and framing to that of the overall length after lengthening, but building the ship to the initial length desired by the owners.

Repowerings & Reenginings

When preparing for a repower project, several things must be considered. First off, an operator may want to consider the costs of converting the ship into an Articulated Tug-Barge (ATB) unit versus repowering the vessel. If they opt to follow through with repowering, preparations are made to begin the project. When selecting a new power plant, available space and weight are two of the top considerations. Engineers will typically look at multiple propulsion packages to compare prices to see what will best match the needs onboard the vessel. Propulsion system design works backwards in a way, starting with the propeller, and matching a compatible shaft and gearbox and engine to the propeller. If the operator opts to keep the existing shafting and prop arrangement, engine choices will be narrowed down to match the existing horsepower limits and configuration. If the operator decides to install a new shafting arrangement, they have a bit more freedom with changes from the existing arrangement that can be made. Other considerations that may help narrow down choices are required maintenance for the engine, fleet uniformity of similar propulsion systems and arrangements, and emissions regulations. Some engines have built-in emissions management systems, but others require additional systems to meet requirements.

The process of repowering a vessel is a large project and involves a significant rearrangement of the engine room and its related systems. In most cases on the Great Lakes, a steam plant or turbine is replaced with an internal combustion engine in a repowering project. After the old propulsion system is removed, main engine foundations may have to be significantly modified to support the new engines as well as new gears, shaft generators, shaft bearings, and shaft seals if the owner decides to replace the shafting arrangement. Ancillary systems, such as the raw water, freshwater cooling, and fuel piping will have to be replaced and rearranged. A new room will have to be set up for the fuel purifiers to heat and filter the Heavy Fuel Oil (HFO) before it can be burned in the engines. New emissions systems infrastructure will have to be installed to meet regulations, meaning the stacks and surrounding structure may have to be enlarged or modified for housing scrubber units. Engines that burn #2 Diesel Oil do not have to be equipped with exhaust scrubbers to meet sulfur requirements, but those that burn HFO do. HFO is a less-refined diesel fuel, and costs much less than #2 diesel. If an operator repowered a steamship with a new diesel engine before 2025, an EPA program allows them to burn HFO with the use of exhaust scrubbers to meet sulfur emissions requirements. In terms of other related infrastructure, access platforms and monorail or trolley systems may have to be modified in order for crews to access systems for➲



The new midbody for the *Walter A. Sterling* (now *Lee A. Tregurtha*) is floated into place in the drydock at American Shipbuilding in Lorain, OH, July 1976. Press photos, Roger LeLievre Collection

➲maintenance. If converting from steam to diesel, an auxiliary boiler will have to be added or replaced to operate the steam systems. Shaft generator capacity can also be added at this time. Control systems will also have to be updated, necessitating electrical system modifications. Operators may consider automating the engine room to Automatic Centralized Control Unmanned (ACCU) certification, meaning it is an unmanned engine room, reducing the number of crew required to watch and maintain the propulsion systems. Since repowering is considered a major conversion, the vessel will lose its "grandfathered" position, so other systems across the vessel will have to be updated, such as the electrical, heating, emissions systems, and even rescue boats.

Reengining a ship is a similar project to repowering, but is different in the fact that the engine onboard a ship is replaced with the same type of propulsion system, for example, a reciprocating steam engine being replaced with a diesel engine, or a diesel being replaced with a diesel. Reengining does not change a shaft setup, as changing the engine out does not require the change of the shafting.

Since Great Lakes ships see freshwater service, their hulls last much longer than those of their saltwater counterparts, and usually sail for anywhere between 40 to 100 or more years. The modifications described in the past two articles allow these great ships to adapt to the ever-changing needs of industry and sail into the future. ◻

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 Nicholas Posh from Bay Engineering, Eric Helder from Interlake Steamship Co., Nick Hunter from NETSCo., Andrew MacDonald from Port City Marine Services, and Dave Groh from VanEnkevort Tug & Barge –Brendan Falkowski

KAYE E. BARKER

Kaye E. Barker, on the Detroit River, September 1, 2021. Photo by Sam Hankinson

In 1950, shortly after Pittsburgh Steamship placed their orders for the first members of the AAA class ships, Cleveland-Cliffs contracted American Shipbuilding (AmShip) to construct a vessel of identical dimensions and capacity. Her hull would be nearly identical to the Pittsburgh vessels at 647' long, 70' wide, 36' deep with a capacity of 20,150 tons, and feature an asymmetrical stern to improve waterflow to her propeller. She would be powered by a DeLaval cross-compound steam turbine with a pair of oil-fired Foster-Wheeler boilers. Cliffs ordered the ship with a triple-deck forward cabin, fitted with lush guest quarters and a lounge on the Texas Deck.

The keel for the new Cleveland-Cliffs laker was laid in the drydock at AmShip's Toledo, OH, yard, making her the first Great Lakes vessel constructed entirely in drydock. She was christened *Edward B. Greene* and floated from the drydock on January 10, 1952, and sailed on sea trials on June 18. The maiden voyage of the *Greene* was delayed by about a month due to a steelworkers' union strike, but the new Cleveland-Cliffs flagship departed Toledo with great fanfare on July 29, 1952, bound for Marquette, MI, to load her maiden cargo of ore for Cleveland, OH.

Improvements were continuously made on *Edward B. Greene* to increase her efficiency and keep her moving with the future. A bow thruster was installed onboard in 1964, and in 1966 her boilers were automated. In 1975, Cleveland-Cliffs contracted Fraser Shipyards of Superior, WI, to lengthen the *Greene* by 120'. She arrived at the shipyard in early 1976 following the end of the season to begin the procedure. *Edward B. Greene* was placed in drydock where she was cut in half at midship, and the stern floated out of the drydock. Then, the new 120' midbody was floated in followed by the stern, and the sections were all lined up and welded together. The *Greene* returned to service in June 1976. Shortly after her return, on June 20, 1976, a large crack was found in her hull, but she was quickly repaired. ➲

Upper: Edward B. Greene on Maumee Bay, 1983. Jim Hoffman
Lower: Benson Ford at the Soo Locks, late 1980's. Tom Manse Photo

➲ In 1978, the critical Republic Steel ore contract that Cleveland-Cliffs held was rebid, and awarded to Interlake Steamship Co. instead. Cliffs was at least able to secure a contract with Detroit-Edison for a portion of their coal-hauling demand, prompting the conversion of the *Greene*'s fleetmate *Walter A. Sterling* into a self-unloader in 1978. The benefits of operating self-unloading vessels were quickly realized by Cleveland-Cliffs management, and soon after they contracted AmShip to convert the *Edward B. Greene* into a self-unloader at Toledo. The *Greene* arrived at her builder's yard on August 6, 1980 to begin her conversion. New sloped cargo hold sections were installed to feed a single conveyor belt running the length of the cargo hold. This belt led to an aft loop-belt system feeding a 250' deck-mounted boom. Ironically, the *Elton Hoyt 2nd*, owned by Interlake Steamship Co., was being converted to a self-unloader for the Republic contract at the same shipyard at the time of the *Greene*'s arrival.

Cleveland-Cliffs struggled through the economic downturn➲

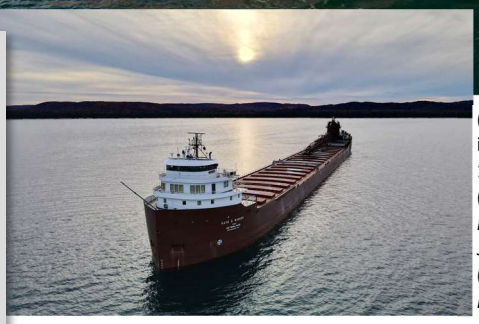
Kaye E. Barker unloading at Marquette, MI, October 24, 2021.
Photo by Gus Schauer

Kaye E. Barker passing downtown Detroit, summer 2021.
Daniel Lindner

➲downturn of the early 1980's, and threw in the towel in December 1984 when they sold their last two active vessels, the *Edward B. Greene* and *Walter A. Sterling*, to the Ford Motor Co.'s Rouge Steel Marine Division. Following the closing of the sale in early 1985, Cliffs abandoned all marine shipping operations. The two ships sold to Ford were renamed *Benson Ford {3}* and *William Clay Ford {2}*, respectively. As the *Benson Ford*, she was primarily engaged in the transport of ore from Lake Superior ports to the Rouge Steel mill complex at Dearborn, MI. She would occasionally carry the odd-spot cargo of coal or stone in the midst of her ore runs. On August 2, 1985, the *Benson Ford* delivered a load of coal to Manistee, MI, becoming the largest vessel to ever enter that port.

On March 13, 1989, Ford announced the sale of their marine operations and three remaining vessels to Interlake Steamship Co. of Cleveland, OH, who outbid Oglebay Norton for the ships. *Benson Ford* was renamed *Kaye E. Barker*, and the *William Clay Ford* was renamed *Lee A. Tregurtha*. The third vessel included in the transaction, the *Henry Ford II*, was renamed *Samuel Mather {7}*, but never operated under that name. To accommodate for different unions, Interlake formed the Lakes Shipping Company to manage the ships with a union agreement to integrate. The two former Cleveland-Cliffs fleetmates were rechristened at the Cleveland lakefront on May 13, 1989. Under the Interlake flag, the *Kaye E. Barker* remained largely dedicated to the Dearborn ore runs.

In 1997 *Kaye E. Barker* became the first Interlake ship to handle a grain cargo. While sailing on Lake Superior on November 5, 2006, she suffered a rare boiler explosion, injuring two crewmembers. ➲



(Left): *Kaye E. Barker* anchored in Good Harbor Bay, November 10, 2021. Logan Vasicek
(Top Right Corner, Left): *Kaye E. Barker* on the St. Marys River, July 2010. Roger LeLievre
(Top Right Corner, Right): *Kaye E. Barker* on the Rouge River, August 5, 2021. Isaac Pennock

➲In 2012, *Kaye E. Barker* was repowered with a pair of Rolls Royce Bergen diesel engines by Fincantieri Bay Shipbuilding in Sturgeon Bay, WI. The engines were originally meant for the refit of her fleetmate *John Sherwin*, but after that project fell through it was decided to repower the *Barker*. In addition to the replacement of her engines, her gearbox was replaced and a new controllable pitch propeller were installed, requiring her old asymmetrical stern to be cut off and a new symmetrical stern constructed. She returned to service in the fall of 2012. In 2015, the Lakes Shipping subsidiary was dissolved and the *Barker* was absorbed directly into the Interlake fleet.

Kaye E. Barker remains an active vessel in the Interlake Steamship fleet, operating in the iron ore, coal, and stone trades across the upper Great Lakes. ◻

Sources

Bawal, Raymond A., Jr. Twilight of the Great Lakes Steamer. Inland Expressions, 2009. Pp. 31-36.
Davidson, Todd. "Kaye E. Barker". Great Lakes and Seaway Shipping Online, N.d. Accessed 24 December 2021. http://boatnerd.com/pictures/fleet/kebarker.htm
Falkowski, Brendan. "Edward B. Greene". SN Great Lakes Ships, 1 July 2020. https://greatlakesships.wordpress.com/edward-b-greene/
"M/V Kaye E. Barker". Interlake Steamship Company, N.d. Accessed 24 December 2021. http://www.interlake-steamship.com/our-fleet/m-v-kaye-e.-barker/

BRENDAN FALKOWSKI is a Great Lakes ship enthusiast who shares his passion for the freighters through his newsletter and his artwork. He is currently pursuing his high school education in mid-Michigan before graduating and moving on to college, where he plans to 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.

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Cover Photo: The upper section to the accommodations block is lowered into place onboard the *Mark W. Barker,* September 2021. Photo courtesy of Interlake Steamship Co.