

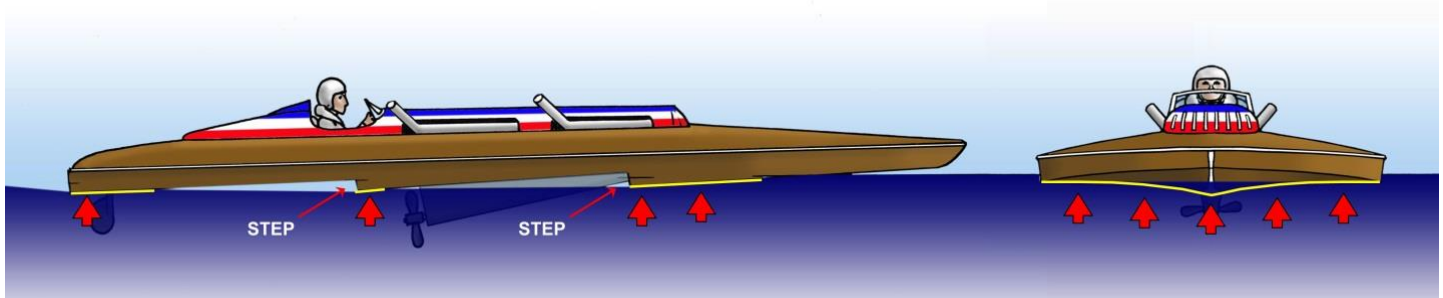
Dossin Great Lakes Museum Touring Outline

90 Minute Tour of DGLM ♦♦♦ Begin tour from any of the following locations

Miss Pepsi – 10 Minutes

The *Miss Pepsi* boats were owned by the Dossin brothers who helped start the Dossin Great Lakes Museum. The *Dossin Food Products Company* was started by their father, Ernest J Dossin, in 1898. Dossin was also the major distributor of the *Pepsi Cola* products in the Detroit area. His sons, Walter, Roy and Russell, took over the company and got into boat racing by 1938. They owned several *Miss Pepsi* boats during the '30's-'40's.

- In 1950 Les Staudacher designed the first two step hull that would do over 100 mph on the Detroit River. The two step hull design as seen below allows all of the hull to release



- **Fun Fact:** Two step hulls had been around since 1898.
- This boat was powered by two Allison aircraft engines that developed a combined 3300 horsepower and these engines were used in WWII fighter planes.
- *Miss Pepsi* required a driver and mechanic.
 - It was the mechanic's job to keep the engines in sync because they were both attached to the same drive shaft.
- *Miss Pepsi* is constructed of spruce, oak, teak, mahogany, and aluminum.
- The driver of *Miss Pepsi*, Chuck Thompson, is known today as one of the all-time great Hydroplane racing drivers.
- The boat was put here in the museum in 1963.
- *Miss Pepsi* set the heat speed record of 105 mph in 1951.
 - During its racing years it won many of the major boat races including the Gold Cup.
- *Miss Pepsi* is 36' long and 9'3" wide. The first hull step is just before the driver and the propeller is just below them. The boat would ride on the second step and the propeller.
 - It carried 230 gallons of high test aviation fuel.
 - The rudder is in the back.

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Lobby Cannon – 5 minutes

This is a British 4 pounder cannon. It is called a 4 pounder because it fires 4 pound projectiles. This cannon was discovered in 2011 along with 5 others in the Detroit River near Cobo Hall. It was recovered by a dive team from the Detroit Police Department then raised and restored. It was cleaned by young visitors at the *Cranbrook Institute of Science* and now has a place of honor in the lobby of the *Dossin Great Lakes Museum*.

Cannon Barrel Markings:

- Numbers on the barrel indicate its weight at 1288 pounds.
- The “**P**” on the barrel means that it **passed** the civilian board approval testing. This passing means that the unit was shot and tested with approval to be sold on the civilian arms market.
- The “**X**” means it **failed** the military ordinance board testing. This means the cannon was shot, and fired for the purposes of accuracy and quality and did not pass military standards.
 - **Fun Fact:** This cannon was used at Fort Lernoult, because the British would rather have a faulty cannon than have it sold to the French or worse the Americans!
- The “**M**” means it was sold by *Mangles*, the arms dealer who sold it to the British.
- The “**H**” on the right trunnion (or side mounting bracket) means that it was made at the *Hamsell Furnaces* of East Sussex, England.
- The crest of *King George (1727 – 1760)* is on the barrel.
- It was sold to the arms company and saw action in various battles before ending up at the British *Fort Lernoult* in Detroit after the British took control of the Territory from the French in November of 1760.

After the Revolutionary War Treaty, before the Americans took control of Detroit in July of 1796, the British took all the cannons out on the frozen waters of the Detroit River and to let them sink to the bottom of the River. They did not want the Native Americans or US troops to have them.

Gothic Room – 20 minutes

The **Cigar Stand** (cashier area) is from the *SS Western States*. This was one of the elegant passenger ships built in the 20th century.

- It was designed by Frank Kirby, an outstanding naval architect of his time.
- Built in Wyandotte and launched in 1902.
- Its sister ship, the *SS Eastern States*, also launched in 1902 and was a duplicate of its elegance.

The **Gothic Room** is from the *SS City of Detroit III*, or the “*III*”.

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- The vessel was built at Wyandotte and launched in 1911.
 - **Fun Fact:** Make a connection of this boat and the Titanic discuss the how both boats were launched during the same time.
- It could do 22 mph carrying 4,000 passengers and a 200 person crew.
- It ran between Detroit, Cleveland and Buffalo.
- Standard staterooms with bunk beds and hot and cold running water were \$7.00 a night. The First Class staterooms were \$15.00 a night and had 1 room with twin beds and a 2nd room with bathtub, sink and toilet.

The *Gothic Room* was the men's smoking lounge. It was purchased by a man from Ohio who removed it from the ship before it was scrapped. The Detroit Historical Society found this room in an Ohio estate sale and paid \$40,000 for it.

- **Fun Fact:** It was heralded as the most beautiful room ever to be installed in a ship and it wrapped around the back two smokestacks on the upper deck of the ship, in front of the skylight.
- The fireplace in the lobby was backed to the second of the stacks, but never vented and never had a fire in it because the ship's upper areas were built of wood.
- The griffins on the front of the fireplace are mythical characters that have a body of a lion with the front claws and head of an eagle. They were put there in honor of Rene-Robert Cavalier, Sieur de la Salle's ship the *La Griffon*.
- **Fun Fact:** The two front columns have frogs carved into the wood. The frog was the symbol of the D & C line. When the frogs started croaking again in the spring, it meant the ice was melting and the ships could start sailing again.
- The paneled stained glass window was made in France and depicted Rene-Robert Cavalier, Sieur de la Salle and Fr. Louis Hennepin, who first came up the Detroit River in 1669 in a sailing vessel, landing in Detroit.
- **Fun Fact:** The doorways beside the stained glass look short because the room had to have 18" cut from its height to fit in to its current area. It is also smaller in its width and length.

The enclosed glass *Model of City of Detroit III* shows the graceful of lines designed in to it.

- The hulls were painted black because of the dirty coal fired boiler smoke. These areas were painted black because they could not be reached for washing during the shipping season.
- The white painted areas could be washed and painted as needed.

Built on the River – 15 Minutes

Begin at Great Lakes chart.

HOMES - Huron, Ontario, Michigan, Erie and Superior

Lakes:

- *Superior* – 1330 ft. deep.

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- *Michigan* – 923 ft. deep.
- *Huron* – 750 ft. deep.
- *Ontario* – 802 ft. deep.
- *Lake Erie* – 210 ft. deep.

Rivers:

- *St. Mary's River* – 74.5 miles long with a drop of 23 feet. The Soo Locks are needed to raise and lower the ships. The biggest lock is 1200 ft. long, 110 ft. wide, and 32 ft. deep. It can handle the largest ore carrier that is currently 1013 ft. long, the *SS Paul Tregurtha*.
- *St Clair River* – 40.5 miles long Port Huron to Lake St Clair.
- *Lake St Clair* – Avg. depth of 11 ft., the shipping channel had to be dredged.
- *Detroit River* - 28 miles long and has a maximum depth of 53 ft. under the Ambassador Bridge. The river has many islands including Peche, Belle Isle, Fighting Island, Grosse Ile and Bob-lo. The Dutch colonists from New Amsterdam where the first traders into the area before the French claimed it.
- *Niagara Falls and Welland Canal* - The Niagara Falls and river connects Lake Erie with Lake Ontario. The Welland Canal was built to allow ships to transit between the Lake Erie and Lake Ontario. There are 7 locks to raise and lower the 3,000 ships that annually pass through the canal.
- *St. Lawrence River* – This River runs northeast for 1900 miles from Lake Ontario to the Atlantic Ocean. The River is navigable from the Atlantic Ocean up to Montreal.

The *French traders* came up the St. Lawrence River in the 1600's looking for beaver pelts. The pelts were all the rage in France for the upper class, after King Louis XIV started having his hats made from their pelts. The beaver were trapped to extinction in Europe and Russia and a new source had to be found. The early traders traded French goods for the pelts hunted by Native Americans. Quebec City was founded in 1604 and Montreal in 1654.

- The Great Lakes were first discovered in 1615 at what is now Georgian Bay on Lake Huron by the French explorer Samuel de Le Champlain. He canoed up the Ottawa River and across the northern lakes and rivers into Georgian Bay. He made an agreement with the *Wyandotte (Huron's) tribes* in the area to let young French trappers live among them to learn and adopt their customs. This would help with future interactions with the natives and trading.
- As trading with the Native Americans developed, the traders created routes using the Ottawa River and the northern lakes and rivers to move their cargoes across to Lake Huron. They created a fort and trading center at what is today, Mackinac City. This allowed for the additional exploration of the northern Great Lakes.
- The French stayed to the north because they did not get along with the Iroquois nations that settled around the lakes of Ontario and Erie, as they sided with the Colonial British.

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Detroit was a very important point on the Great Lakes because of its location and ties to Native American nations.

- Antoine de la Cadillac was the Governor of Mackinaw from 1690 to 1696. He went back to Montreal and asked the French Governor of Canada for permission to build a settlement at the River *De Troit* (“the strait”). His argument for the settlement was that if the French controlled the river, it would stop the British from moving into the area. He went back to Fort Mackinac in 1701 via the Ottawa River waterway to Mackinac, and then came down to Detroit by canoe and established the village and fort of Detroit. He originally wanted to build his fort on Grosse Ile but there were not enough trees at the time. He established *Fort Pontchartrain du Detroit* in an area currently between Larned, Griswold and the Civic Center.
- As the city grew the fort supported fur trading and farming (show skins and pelts). Early French settlers were given ribbon farms which were land plots that were small at the waterfront, but went back a great distance. This was so everyone has access to the river which was the only transportation method for goods at the time. These farms also span on both sides of the river.
- Pelt trading and leather tanning was also a big part of village life.
- Fort Pontchartrain continued to supply protection for these early settlers and trappers.

Nautical Education Area - Different educational work areas where our young visitors can build and understand various pieces of maritime history and knowledge.

- **Ships of All Types:** *During Detroit’s shipbuilding era, Detroit River shipyards built many kinds of boats, from schooners to giant freighters to recreational craft.*
 - During the nineteenth century, shipyards along the Detroit and St. Clair Rivers constructed hundreds of schooners – sailing ships used during the lumber and early iron ore era. With the arrival of steel construction, yards built “Long Ships” – freight carrying vessels with a slim design unique to the Great Lakes.
 - Detroit builders also turned out elegant passenger steamers, as well as ferries, barges, tugboats and some of the biggest yachts in the world. Smaller shops made canoes, rowboats, speedboats and pleasure sailing craft.
 - Visitors have the opportunity to build their own ships for the great lakes, creating your own version of a schooner or sail boat.
- **Shipbuilding:** *Through nearly two centuries, the Detroit region built and launched more ships than any other area on the Great Lakes.*

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- Detroit's first ship, the sailboat *Enterprise*, was built in 1769. Afterward, shipyards appeared along the river from Belle Isle to Trenton. Two shipbuilding giants led the way.
 - Detroit Shipbuilding Company, with roots dating to 1852, built hulls in Wyandotte. They also assembled and repaired ships east of downtown Detroit, where the company owned shops that made engines, boilers and interior fixtures.
 - Great Lakes Engineering Works began building ships in 1902, launching more than 300 vessels from yards in Ecorse, St. Clair and Ashtabula, Ohio, and maintaining an engine works at the foot of Rivard Street in Detroit
- Explore how the shipping of goods can affect the buoyancy of lake freighters, practice using our weighted barrels on the wooden freighter.
- **Economics and Industry:** *The end of the fur trade coincided with the rise of the Industrial Revolution and Detroit became a key shipbuilding center.*
 - As the nineteenth century progressed, Detroit changed from a frontier town to a burgeoning industrial center. The discovery of natural resources such as iron and copper in the Upper Peninsula, along with the extensive lumber industry in the northern Lower Peninsula, created a demand for better transportation methods. With few decent roads, the Great Lakes continued to be the most practical route for transporting goods. Detroit adapted to meet the need, becoming one of the United States' top shipbuilding centers
 - Visitors have the opportunity to touch some of Michigan's natural resources including iron, copper and lumber.
- **Maritime Know How:** *Allow visitors to test their knowledge*
 - Knot tying area where different nautical knots can be learned.
 - Freighter whistle and horn signals, learn what they mean.

Recreation on the Water

Interactive display where individuals can sit and 'drive' different types of boats.

- Great Lakes Cruises –
 - By the 1880s, large steamers that rivaled any in the world for luxury and accommodations began offering extended cruises around the Great Lakes.
 - Spectacular scenery and a temperate summer climate drew people from around the world to the comfortable inland cruise experience. For a modest fare, travelers from the east could catch a boat in Buffalo or Cleveland and sail to the middle of the continent, visiting bustling cities

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like Detroit and Chicago, beach resorts on Lake Michigan, and the wilderness along Lake Superior.

- The last Great Lakes cruise ship, the *SS South American*, made its final voyage from Detroit to Montreal in 1967.
- Racing on the River –
 - Whether rowing, sailing or power boating, Detroit is home to some of the finest maritime racing in the world.
 - Detroit became the world's speedboat racing capital by 1920. The American Power Boat Association Challenge Cup race began in New York in 1904, but it moved to Detroit in 1916 after the hydroplane *Miss Detroit* won the race's "Gold Cup" the year before.
 - Today, sailors can find a sailing race any day of the week during the summer and fall. During winter weekends, iceboating is popular on Lake St. Clair. The Detroit Regional Yacht-Racing Association's member clubs sponsor hundreds of races each year, many at the national level.
 - In the early years of powerboat racing, the most coveted international award was the British Harmsworth Trophy. Detroit's Gar Wood dominated the race in the early twentieth century, winning the trophy nine times between 1920 and 1933.
 - Bayview Yacht Club's annual race to Mackinac Island began in 1925. It is still among the premier long-distance events on the national racing circuit.
 - **Fun Fact:** Founded in 1839, the Detroit Boat Club is the oldest continually operating rowing club in North America. An 1842 race was the first of its kind outside of Europe.
- Recreational Boating –
 - *Despite a short summer season, Michigan has more than 800,000 registered boats with a high percentage docked in the Detroit area.*
 - Pleasure boating grew in popularity in Detroit in the late nineteenth century. By 1900, Belle Isle canoe liveries rented boats to thousands of visitors each weekend. On the region's lakes and rivers, Detroiters rowed or sailed small "dinghies" for an afternoon of fishing or sunbathing.
 - In the first half of the twentieth century, local boat yards supplied Detroiters with all types of pleasure craft, from small motorized "runabouts" to giant racing sailboats. Recreational boating became a favorite pastime, prompting the formation of dozens of boating clubs. Today more than 40 boat and yacht clubs are active in the region.
- Fishing the River –
 - **Fun Fact:** The Detroit River is one of the most fertile fishing grounds in North America.

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- In the nineteenth century, Detroit had a thriving commercial fishing industry. However, over-fishing and pollution ended operations by the early 1900s. Today, fishing on the Detroit River is a recreational sport.
- The Detroit River is home to more than 65 species of fish, including muskellunge, northern pike and several types of perch and bass. Each spring, 10 million walleye migrate through the strait, creating some of the finest fishing in the world. Aggressive conservation efforts have encouraged the return of sturgeon and whitefish after an absence of nearly a century.

Back Hall – 5 minutes

The sailing vessel model is the ***J.T. Wing***. This boat was the last commercial sailing ship on the Great Lakes. A channel was cut into Belle Isle where the museum is now and the ship was floated in. The channel was then backfilled and the hull became the first marine museum. Dry rot and termites got to the ship and it had to be destroyed. All items of value were removed and the hull was burned. DGLM is currently built on its original site.

The Periscope on the right side of the staircase is from the *USS Tambor*. This was a WWII submarine that saw action in the Pacific during the war. It has Naval Service Awards. After the war, the *Tambor* served as the training vessel for the Brodhead Naval Armory located on Jefferson Ave, just east of the Belle Isle Bridge. As the Navy submarine fleet went Nuclear, the *Tambor* was decommissioned and scrapped.

Edmund Fitzgerald Memorial – 15 minutes

Lower Level Pilot House

Large scale graphics illustrating the two common types of Great Lakes bulk carriers define different areas and part of the ships, such as bow and stern, pilothouse and galley. Associated with these images are descriptions of the various jobs aboard a ship, from Captain to Cook.

These displays give visitors an in-depth view into life aboard a Great Lakes ship, and the background necessary to understand the tragedy of the *Edmund Fitzgerald* and the bravery of the crew of *William Clay Ford*. The sinking of the *Edmund Fitzgerald* represents the last major shipwreck on the Great Lakes, a maritime environment that has claimed well over three thousand vessels.

- On November 10, 1975, the *Edmund Fitzgerald* sailed into a dangerous storm. Events conspired to send the ship and 29 crewmen to the bottom of Lake Superior. It happened so quickly that no distress call was sent. Later that evening, the *William Clay Ford* sailed from a safe anchorage into the same dark storm to find their friends. The pilothouse was filled with crewmen searching in vain for any sign of the “Fitz,” even at the peril of their own lives.

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- Model of the *Edmund Fitzgerald* shows every detail of the vessel's exterior, with photo murals illustrating the ship during her successful career. A Lake Superior chart, covering an entire wall, traces the route of the *Edmund Fitzgerald* and her escort, the *Arthur M. Anderson*, in the hours leading up to the disaster.
- **Note:** The *Edmund Fitzgerald* and the *William Clay Ford* were built in the same shipyard just south of Detroit. Both shipped cargoes of iron ore to the Ford Rouge Steel Plant, and carried crewmen who had worked together.
- Activate an audio recording of US Coast Guard radio communication with the *Arthur M. Anderson* and *William Clay Ford* as they coordinated the search for the Fitz.

Note: Docents can silence the radio broadcast by pushing the “doorbell” on the top of the S.S. *Arthur Anderson* display case.

Pilot House – 20 minutes

It was built and launched in 1952 as hull 300 at the Great Lakes Engineering Boat Works in Ecorse, MI

- It was named for William Clay Ford Sr. It was one of the 3 brother boats named after the sons of Edsel Ford.
- The SS *William Clay Ford* was decommissioned in 1985. The ship was scrapped in 1989. A ship that had already been converted, the SS *Walter A. Sterling* was purchased and renamed as SS *William Clay Ford*. This ship is still sailing today as the SS *Lee Tregurtha* and delivering ore to the Rouge Plant.
- **Note:** A Pilot House in front of the bow is a lake freighter. A Pilot House in rear or aft is an ocean freighter. The SS *William Clay Ford* had a front mounted pilot house.

The Bridge is as it was when the ship was decommissioned in 1985. The only difference is the carpeting installed to prevent slipping.

As you enter the lobby next to the Bridge, point out the 3 pictures on the wall of the *William Clay Ford*. Including images of it cruising down the Detroit River, the bridge structure being installed, and the bridge structure with masts and radar being removed for placement here at the Dossin.

- Entering the Bridge, the Captain's chair is on the right. He was on the bridge as needed for navigation and docking. His cabin and office were immediately below on the officer's deck and he was available immediately.
- Moving forward, you have the Control Panel that controlled many different functions such as whistles and lights and emergency warning signals. The large handle on the right of the panel was the Emergency Whistle Signal, (continuous short blasts) that signaled abandon ship.

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- The chadburn or engine order telegraph was used by the bridge to communicate with the engine room. This device gave the ship's engineer the engine speed commands.
Note: This doesn't actually control the ship; it only told the engine room what to do.
- The original radar unit is behind the chadburn. This is the unit that was installed in 1952. It was moved to this position from its original location when the newer 1979 unit was installed during the lengthening procedure.
- The two single handled standing units are the Bow and Stern Thruster controllers that were installed in 1979. The bow and stern thrusters were 6 ft. tubes that ran crosswise in the bow and stern and allowed the ship to be moved sideways or rotated. This eliminated the need for tugboats when maneuvering in port.
- The chrome voice tube went to the captain's quarters and the brass voice tube went to the anchor room.
- The whistle lever was located on the front wall behind the thruster controls. It had two operational positions, auto and manual.

Moving Portside of the Bridge

- The RDF – Radio Directional Finder. These units were developed in the 1930's and use any radio sources that use long wavelengths (low frequencies) which is good, as they travel very long distances and “over the horizon”, which is valuable for ships when they lose line of sight. RDF's are used by boats and aircraft to determine their location. They were replaced when Lorain C (mid 70's) and GPS (late 90's) came online.

The Helm Station:

- The hand rail around the helm station was to give the helmsman protection in heavy seas so he could not be tossed around the bridge. Some vessels used harnesses to hold the helmsman at the wheel.
 - The magnetic compass was the backup if the gyro compass failed. The device tracks “Magnetic North” which is located in northern Ontario, not at the North Pole. With all the steel in the ship, the large iron balls were used to align the compass to as true a north and south as possible. This is essential since many freighters carry iron ore.
 - Show how the compass had to be aligned with the large iron balls and the small tube using iron pucks on the front needed when carrying an iron ore cargo.
 - The gyro compass points to “True North”. This is a mechanical device and works in conjunction with the Autopilot. The magnetic compass backs it up in case of failure.

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The Chart Room has the necessary charts for the ship to move across the lakes to the necessary ports. The glass between the Bridge and Chart Room has metal blinds that can be closed to stop any light from the Chart Room reflecting on the bridge at night, affecting the night vision of the helmsman.