## Winter lay-up: Pit stop for Great Lakes shipping

Lay-up: Vessel moored at a protected anchorage or berth for a period of time with most onboard systems shut down and only a skeleton crew or watchman. Normally vessels enter lay-up in times of economic hardship.

On the Great Lakes, winter is the transitional time between shipping seasons; a time when normal trade temporarily ceases and maintenance and rejuve-

nation begin, a time known simply as winter lay-up.



The Port's Past By Patrick Lapinski

When winter arrives in the upper Midwest, the rivers connecting the Great Lakes to the outside world freeze; the canals

that link lake to lake, forming a chain of fresh water, stop flowing; and for several weeks shipping comes to a halt as another short-lived ice age covers the land.

Every lay-up season begins in earnest months or more before the end of the regular shipping season, when speculation commences on who will winter where and when. This is the homestretch for vessel crews eager for some time off. For owners, this is the time to prioritize repairs, to align schedules and proposed work with budgets and contracts.

Winter work can be broken down into several major categories: hull; engine; topside; and interior "hotel" work.

Hull work encompasses anything to do with the steel structure that is the boat itself, interior and exterior, and can include surveys below the water line, sand blasting, painting and patching, inspection and repair of hatch coamings, vents, winches, cargo holds and on down to bow and stern thrusters.

Work related to the engine department concerns all things mechanical and operational on the ship — in essence, everything from the large main engines to water coolers. Many skilled trades, such as electrical, plumbing and heating and air conditioning are involved to repair and maintain anything that warrants attention. In many cases manufacturers' representatives and specialized technicians are on board to conduct and oversee work on their particular component of the ship's power plant.

Topside work covers many things on deck and along the ship cabins, such as the installation and upkeep of navigation and electrical equipment or the inspection and certification of lifesaving devices.

In the ship's interior, the galley undergoes any needed repairs or replacement of kitchen utilities. Meanwhile the ship keeper and winter workers perform cosmetic chores such as painting rooms, removing and replacing old furniture, as well as facilitating access to the ship for outside vendors and shipyard crews.

Historically, the winter lay-up season in the Twin Ports has seen its share of good times as well as lean years. Surprisingly, until the end of World War II the Twin Ports were not particularly noted as a location to berth ships in the winter for anything but minor work. Ships remaining in the harbor over the winter were tied along grain elevators, coal and stone docks, or beneath ore trestles, waiting for the spring thaw to release them from their self-imposed bondage.

The start of lay-up also began much earlier than it does today. Many ships built on the lakes before the 1940s were simply not powerful enough to push their way through heavy winter ice, so between the Thanksgiving and Christmas holidays they would find their way to local docks to end the season. Sighting a ship sailing after the end of December was extremely rare.

Today, a ship in lay-up by mid-December is more the exception than the norm. Aside from an economic downturn, lay-up season on Lake Superior now is dictated by the annual closing of the Soo Locks on Jan. 15 (barring unusual circumstances).

The use of Fraser Shipyard for winter work came into prominence in the mid 1940s. Only during last half of the preceding century has the shipyard at Superior been known as a haven for winter repair, accounting for a little over half of the shipyard's long history. Between World Wars, when the American Shipbuilding Company owned the yard, they rarely, if ever, used Fraser for winter work unless it was an emergency situation. All major jobs were sent down to shipyards in Toledo, South Chicago, Milwaukee, Cleveland and Lorain. It was only after the sale of the shipyard in 1945 to the Knudsen brothers of Superior that ships began to lay-up inside the yard on a regular basis.

In December 1945, the Bethlehem steamer Cambria became the first vessel of the post-World War era to winter in the Knudsen shipyard. The following winter two steamers and the barge Magna wintered in the shipyard. The following decade saw tremendous growth in ship related lay-up work. From 1953 to 1960 the shipyard averaged 16 ships per winter, reaching a record of 22 during the winter of 1957-58.

The overall number of active ships

wintering in the harbor continued climbing each year as well. Thirty-nine ships stayed in the Port during the 1960-61 winter lay-up, the largest number since the 1918-19 season. Statistically, this added up to 23,101 feet of ship, equivalent to nearly 4.5 miles of paved road, with a combined single trip capacity of 543,600 gross

tons at rest inside the harbor. In layman's terms, lined up stem to stern, the vessels would extend from Third Street Superior's north end midway through the city to 33rd Street, while in Duluth, the same line of ships would extend from the downtown intersection of Lake Avenue and Superior Street well out into the east end of the city.

The pace continued steadily for the next two decades as shipping companies relied on the area's skilled and versatile labor force. On Dec. 28, 1978, the face of

winter lay-up in the Twin Ports began to change when the 1,000-foot vessel Belle River tied up at Superior's Midwest Energy Terminal, becoming the largest vessel ever to winter in the Twin Ports. Two years later the Belle River returned to the harbor, along with fleet-mate Indiana Harbor, the first thousand-footer to lay-up in Duluth, at the Port Terminal.

As vessel sizes and cargo capacities increased during the construction boom of the 1980s, many of the older ships quickly became obsolete, leading to a rapid decline in the overall number of vessels on the Great Lakes. Lay-up numbers continued to be high for a few years, but many of the older steamers were now rafted together at obscure locations in the Port awaiting sale or a tow to the scrapyard. The steamer *John Sherwin*, arriving in November of 1981, is one of the few to have survived

Terminal, the Great Lakes Fleet's Roger Blough is undergoing an overhaul on the starboard-side main engine and work to its unloading system. (For a complete list of vessels in winter lay-up in Duluth-Superior, see Page 7)

While the sheer number of vessels may have declined, the economic impact is still



June 24, 1947, at the Knudsen Brothers Ship Building Co., three steamers and, in front, the barge Magna.

this time of transition on the lakes, but has remained in long-term lay-up, not sailing now for 24 years.

This winter the harbor is host to 11 ships. Making its first winter appearance in the port is Oglebay Norton's river-class ship, Earl W. Oglebay. Additionally, the American Mariner is making its first off-season in Fraser Shipyard, undergoing cargo hold renewal and hull painting, while at the other end of the shipyard the Charles M. Beeghly marks its 14th visit to the shipyard proper. At Duluth's Port

vital to the local economy. On average, each vessel wintering in the harbor generates around \$800,000 worth of work. Multiply that by the 10 to 12 vessels here over any given winter and the importance of winter work is easily observed.

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