BARNHART

LIFTING LETTER

www.barnhartcrane.com

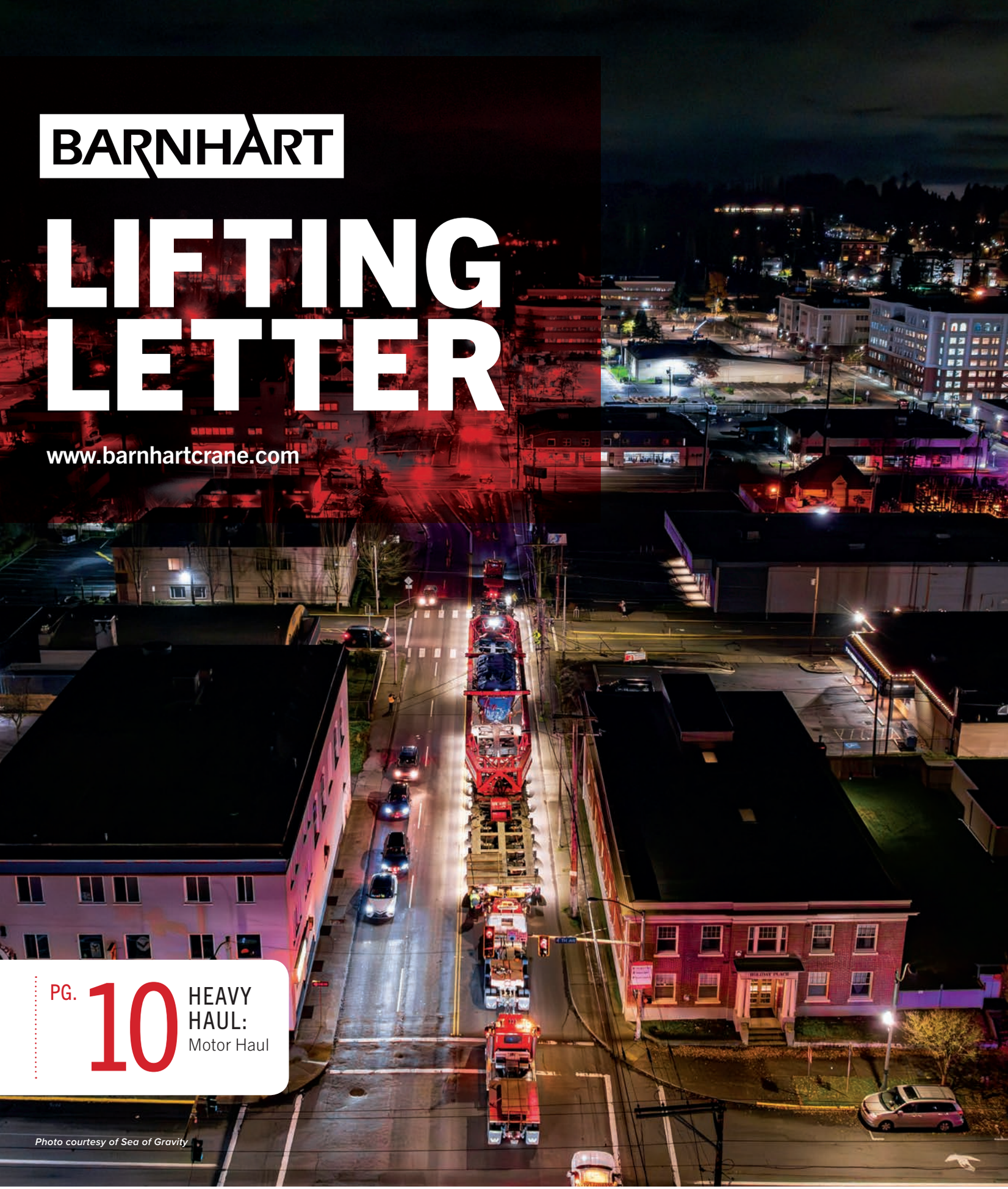


Photo courtesy of Sea of Gravity

VOL. 74

Copyright 2025
A Publication of Barnhart

TABLE OF CONTENTS

PG. 8 HYDROELECTRIC: Bulkhead Replacement

Barnhart removed and replaced six bulkheads at a dam in Nebraska.

THE CROSS-BORDER CHALLENGE: HOW BARNHART LEADS U.S.-CANADA HAULS

Early engagement with Barnhart paved the way for safe and successful delivery. (See the case study profile on page 12.)

As capital investments surge in Western Canada, the demand for large-scale equipment transport between the United States and Canada has significantly increased. Barnhart has emerged as the go-to partner for these complex hauls, thanks to its extensive experience, robust logistics network and deep understanding of cross-border regulations.

With decades of experience in cross-border transport, Barnhart boasts one of the most experienced Project Cargo Logistics teams in North America. “We have the largest toolbox of heavy transport equipment, along with the largest branch network of resources to support,” says Ragan Watson, Project Sales at Barnhart. This unparalleled infrastructure allows Barnhart to efficiently coordinate oversized and overweight hauls across multiple jurisdictions, ensuring seamless delivery for clients.

THE ADVANTAGE OF STRONG REGULATORY RELATIONSHIPS

One of the most significant challenges in executing U.S.-Canada hauls is navigating the maze of state, provincial and national regulations. Barnhart’s edge comes from years of developing relationships with state permit managers and engineers. “Having loyal clients that create frequency of freight deliveries allows us to continually work with each state as projects execute,” Watson explains. “We have spent years logging our data created on each project to expedite the development of the next project.”

Transporting massive loads across North America requires intimate knowledge of Department of Transportation (DOT) regulations and seasonal road restrictions like Frost Laws. “Relationships matter,” says Watson. “We are well-versed in the seasonal requirements of each northern state and western Canadian province. However, it is getting warmer sooner each year; winter is not as deep or cold as it was, therefore the timeline for road bans is inching ever further to the left.”

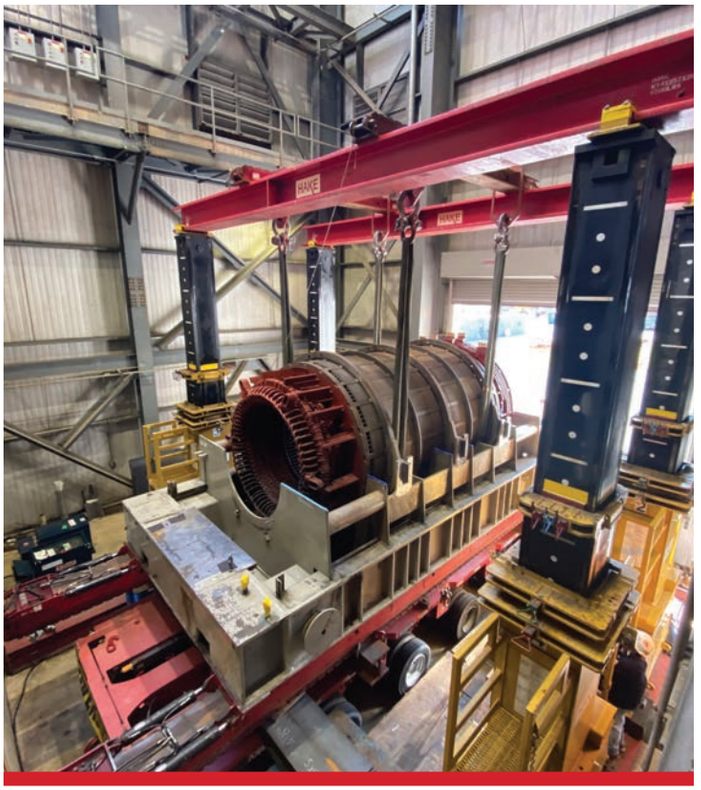
A CASE STUDY IN CROSS-BORDER EXCELLENCE

Barnhart’s expertise was on full display during a recent large-scale project involving 28 mega-load deliveries from Houston and Duluth to Edmonton, Alberta. “Throughout this major project, we experienced everything from blizzards, hurricanes, tornadoes, grassfires, forest fires—you name it,” Watson recalls.

Despite these challenges, Barnhart’s team of four project managers, two engineers and more than 20 field professionals executed the plan with precision.
By leveraging its expertise, regulatory knowledge and extensive network, Barnhart continues to set the standard for cross-border heavy haul solutions. As demand grows, Barnhart stands ready to deliver—efficiently, safely and on time.

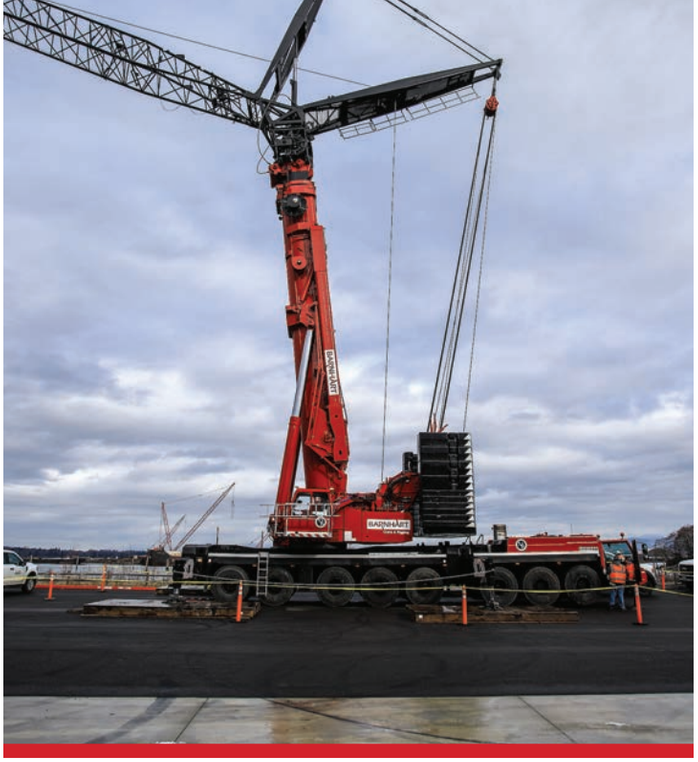
1 Barnhart was contacted about an emergency job to remove and replace the core of a 350,000-pound generator at a power plant in Delaware. The failure of the generator had caused a forced outage, so time was of the essence. The new generator was coming in by rail, so the team assembled a lift system for the generator. They loaded it onto a Goldhofer trailer.

2 The new generator was hauled one mile to the site. The crew staged the new generator on stands and beams.

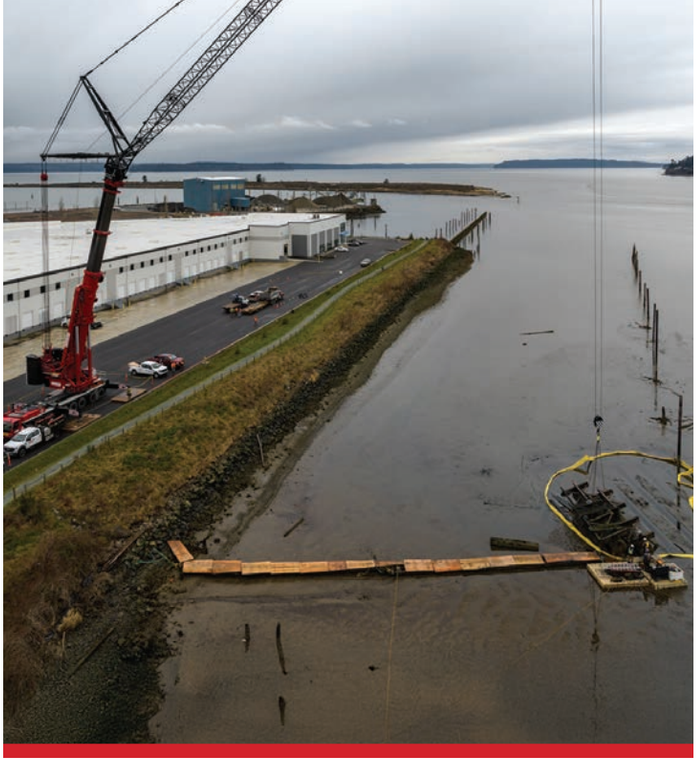


3 The entire generator had to be removed to access its 172,000-pound core. It was lifted from its pedestal using jacks, and a slide system was installed beneath it. The damaged generator was positioned under gantries and the core was removed.

4 The replacement core was brought in on a trailer, then set into the generator base. The crew jack and slid the generator back onto its foundation. The project was completed on schedule with a delighted customer.



1 A project in Washington involved removing sections of a derelict barge that had sunk in the bay years earlier at the Port of Everett. The customer initially considered building a road to the barge. However, Barnhart proposed using its LTM 1500 from the shore to reduce costs and environmental impact.



2 The customer approved the plan after Barnhart created 3D lift plans that showed the crew could safely hoist the pieces within budget. To reduce traffic in the parking lot, Barnhart extended assembly/disassembly to two days and used 8' x 16' mats with plywood to mitigate point loading.

3 The crew hoisted 23,000-pound barge sections at a 240' radius with 363,000 pounds of counterweight from the bay to waiting trucks. In all, there were 12 loads lifted.

4 The pieces were loaded and removed from the site. The project was completed two days ahead of schedule, safely, and to the satisfaction of the customer.

1 After an EF-3 tornado struck Texas in Spring 2022, Barnhart responded to a customer's call to repair four damaged wind turbines. The violent tornado caused damage to every blade, control cabinets were sucked out of the hub and nacelle, and repairs were intensive. Once replacement components were secured, Barnhart mobilized to dismantle and rebuild the affected turbines.

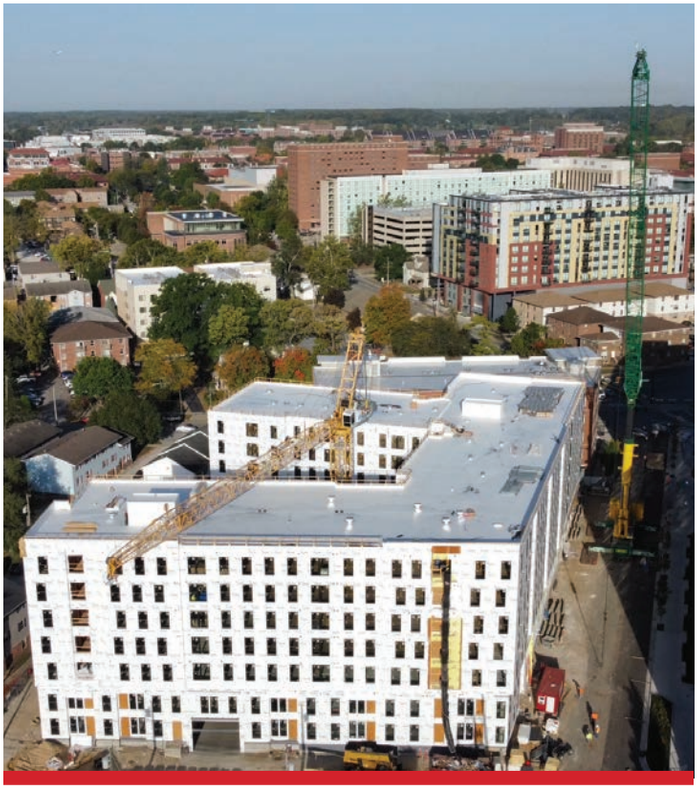
2 Barnhart utilized engineered rigging to remove the damaged rotors and safely lower them to the ground. Blade debris was removed from the hub and recycled.

3 Barnhart rebuilt hub pitch and hydraulic systems, installed replacement bearings, cabinets and fiberglass, and readied components for reassembly.

4 Barnhart completed the rebuild of all four towers over the course of 15,000 man-hours in 2024. Towers were returned to service as they were completed and are once again producing power.

1 Barnhart was hired to disassemble a tower crane at a university in Indiana. The team brought in a Liebherr LTM1450 to perform the work on a permitted route around the campus.

2 The crane was brought into a congested pedestrian area, so logistics and efficiency were important. Due to its proximity to the university airport, coordination with the FAA and local air traffic control was necessary for proper clearance. The crew set up on a side street and assembled the crane's luffing jib to perform the work.



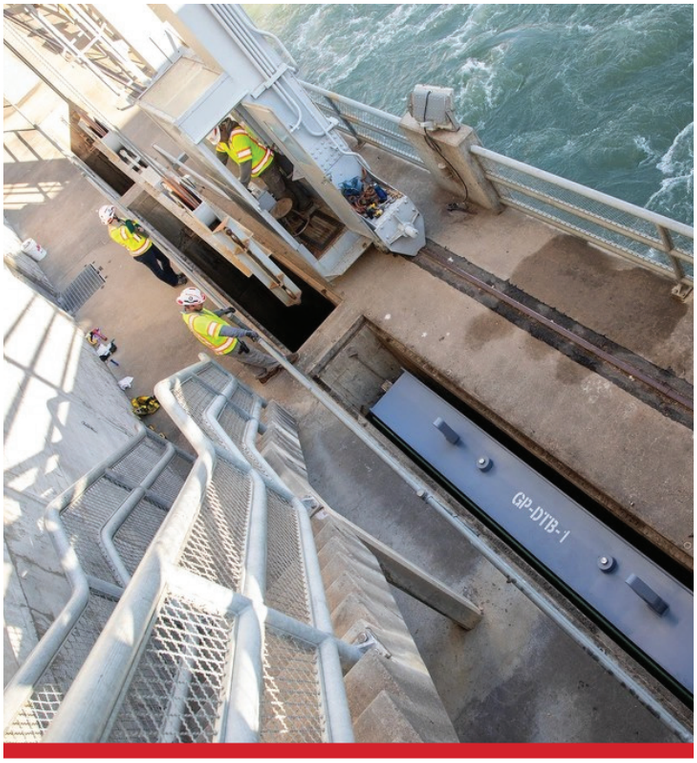
3 Barnhart removed the crane in 12 sections and placed them on the customer's truck for removal over the course of two 10-hour days.

4 Challenges also included planning road closures and the logistics of getting truckloads of crane sections and counterweights in and out of the site after disassembly. Ultimately, the tower crane was safely disassembled on schedule.

1 Barnhart was hired to provide crane service to remove and replace six bulkheads at a dam in Nebraska. The team mobilized its 210-ton and 330-ton cranes to the site.

2 Each gate was 19.5' wide and 25' long and weighed 37,500 pounds. Barnhart's 330-ton crane was used to remove the old gates, which were set onto cribbing and then loaded into a truck to be hauled off for scrap.

3 The new gates arrived by truck, were offloaded by the 210-ton crane, transferred to an on-site truck and trailer, and then picked up by the 330-ton crane to be set into their slots.



4 The operator set the bulkhead into slots at a 70-foot radius. The crew had to be careful not to disturb the bulkhead's coating, which could easily be scratched or damaged. Despite these precautions, the crew finished ahead of schedule.

1 Barnhart's Knoxville branch was hired for a project at Douglas Lake in Tennessee to lift and place four boats and multiple barges into the lake for a Hurricane Helene cleanup. The lake level first had to be lowered and a temporary road to the water constructed.

2 Barnhart mobilized a 500-ton crane to the site with outriggers and set it up on the edge of the water. Windy and cold conditions proved to be a challenge.

3 The three 55,000-pound boats, along with 28,000-pound barge sections, were brought in by third-party transport. Barnhart used a 12' spreader bar, six 20' slings and 12-ton shackles to attach and lift the boats.

4 Despite delays due to high winds, the team was able to launch all the boats and barge sections to finish the project successfully after nine weeks on-site.

1 A recent Barnhart project to move four marine motors spanned eight years, three stops and two branches. The journey began in 2016, when Barnhart received the 420,000-pound motors from ship's gear and placed them in storage at the Port of Seattle.

2 In 2024, Barnhart retrieved the motors from storage at the port and transported them to the Port of Olympia by barge. To address pier loading concerns, the team used 24 lines of SPMT, along with 500-ton slide systems and 400-ton gantries, to extract the motors from the buildings and stage them for the next phase.

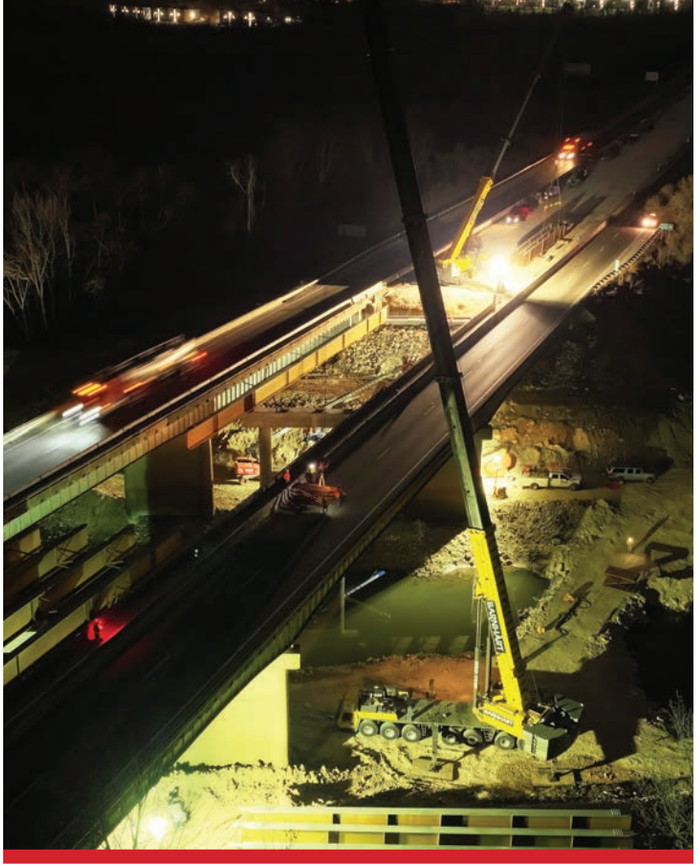
Photo courtesy of Sea of Gravity

3 For the over-the-road haul, Barnhart designed, fabricated and load tested custom shipping frames to meet Washington State DOT height and weight limits. Barnhart used a dual lane 11 x 11 GS800 trailer (22 axle lines) with a combined length spanning over 372 feet and a combined weight of just over 960,000 pounds — the longest permitted load in Washington state history and the longest ever for Barnhart.

Photo courtesy of Sea of Gravity

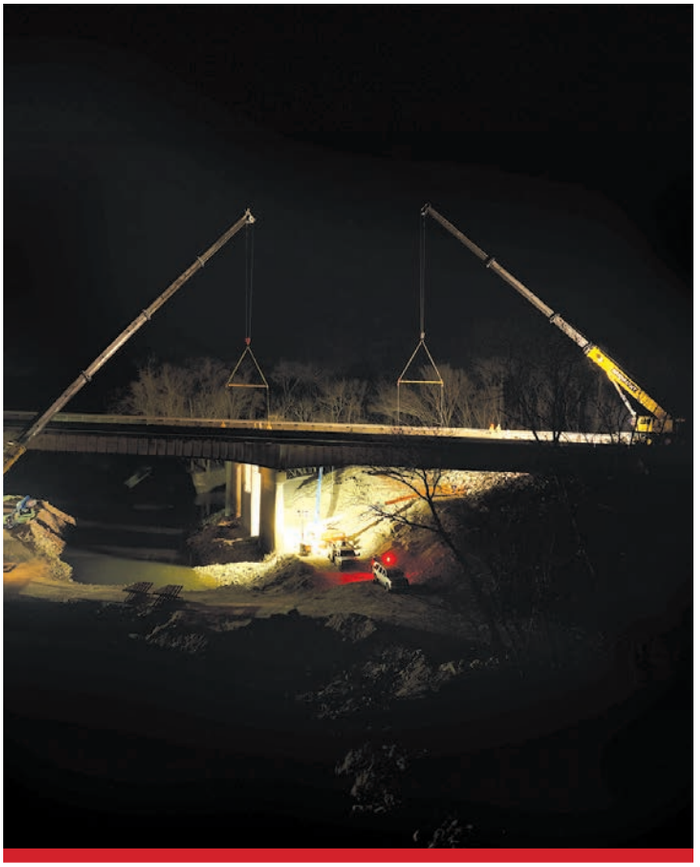
4 The team coordinated with city, state, and county officials to plan a 45-mile route along the I-5 Corridor from Olympia to Centralia, Washington. All four trips were completed within a month and incident-free, with no first aids or recordable injuries. **This job received an SC&RA Hauling Job of the Year 160,000 to 500,000 pounds.**

1 Barnhart was contracted to set 20 steel girders on a 400-foot-long bridge in St. Louis. To complete the job, northbound Interstate 55 had to be closed to traffic. The work was carried out over several nights to minimize disruptions.



2 The team positioned a 550-ton crane and a 350-ton crane behind the bridge abutment and beneath the east side of the bridge.

3 Barnhart's crew included two crane operators and two apprentice operators. Each night, the cranes set approximately four girders during the six-hour window the interstate was closed.



4 Through detailed lift planning and strong team coordination, Barnhart successfully completed all required picks.

1 Four cold boxes that originated in China required Barnhart's expertise to transport them from Texas to Edmonton, Alberta. After arriving at the Port of Houston, Barnhart offloaded and set the four boxes, which ranged in weight from 200,000 pounds to 395,000 pounds each.

2 To avoid Frost Laws, construction zones and spring road restrictions, Barnhart proposed a change order to barge the largest cold box up the Mississippi River to Minneapolis. This cut 1,600 miles of over-the-road transit from the trip. The small boxes were hauled 3,450 miles directly from Houston to Edmonton on Goldhofer trailers.

3 Barnhart's preferred roll-off sites were unavailable, so the team pivoted to a terminal in St. Paul to offload the large cold box to a 14-axle Goldhofer trailer. The nighttime haul required tight coordination with the Minnesota DOT, multiple counties and utility companies.

4 The cargo moved successfully through St. Paul and the Twin Cities metro area over two nightshifts. The team then rejoined a proven route and completed the 16-day transport to Edmonton. Spanning 3,450 miles over nine months, the project drew on the resources of four U.S. branches and Barnhart's Canada team.

The Moving Counterweight Cantilever System has a number of advantages, most notably reduced setup time and the ability to reconfigure for a variety of loads.

MOVING COUNTERWEIGHT CANTILEVER SYSTEM

Barnhart's Moving Counterweight Cantilever System (MOCCS) is a revolutionary rigging solution that redefines efficiency, versatility and safety in cantilevered operations. Engineered with a unique moving counterweight system along a beam, the MOCCS delivers unmatched precision and control. Its remote-controlled gear box and counterweight significantly reduce operator risk, setting a new standard for workplace safety.

One of the system's greatest advantages is its self-contained design, supported by a single hook. This eliminates the need for an auxiliary line, enabling 360-degree rotation for unparalleled flexibility during operations. The MOCCS not only reduces mobilization and start-up times but also integrates safety limit switches into its controls, ensuring seamless and secure functionality. With a minimum system weight of 38,000 pounds and a maximum of 68,000 pounds, it is built to handle a wide range of challenging rigging scenarios.

The standard MOCCS has a couple of siblings: the Mini and Mega MOCCS. The mini can be transported pre-assembled on one legal truckload and has a maximum capacity of 24,000 pounds. The Mega MOCCS has a reach of up to 45' with a maximum capacity of 200,000 pounds.

In addition to being highly adaptable, the MOCCS also has the ability to switch between single and double beam configurations to meet specific project needs. Its versatility makes it ideal for various industries, including refineries, chemical plants, and pulp and paper mills, where it excels in tasks like removing and replacing heat exchangers. The system's ability to access confined spaces, such as reaching inside structures, further demonstrates its practical value.

Beyond simply helping get the job done, the MOCCS can do so with greater speed, safety, and precision than traditional methods allow. By combining advanced engineering with operational flexibility, this equipment continues to set the standard for efficient rigging solutions across industries, making it an indispensable tool for tackling even the most demanding projects.

SCAN THE QR CODE TO SEE THE MOCCS IN ACTION

Edmonton's Manitowoc M18000 and Liebherr LTM 11200 tackled critical crane work at a pulp mill.

EDMONTON, ALBERTA

Barnhart's Edmonton branch, headquartered in Acheson, marks the company's first location outside the United States—a milestone that reflects its commitment to expanding into Canada while maintaining top-tier crane, rigging and transport services.

The Edmonton branch is one of nine former NCSG locations acquired by Barnhart in 2024 across three provinces, strategically positioning the company to serve Western Canada's energy corridor.

Staffed by approximately 120 experienced professionals, the branch supports a wide range of projects, including refinery upgrades, oversized equipment transport and civil construction. Its extensive fleet of cranes and heavy-haul equipment enables the team to handle everything from precision industrial lifts to cross-country moves of massive components.

Barnhart's Edmonton branch safely transported a 562,000-pound demethanizer tower approximately 385 miles.

Safety, efficiency and innovation are at the heart of the branch's operations. In addition to cutting-edge equipment, the team applies best-in-class practices to ensure environmentally responsible, cost-effective project delivery.

As part of Barnhart's network of over 60 locations across Canada and the U.S., Edmonton benefits from shared expertise and resources. This collaboration enables the branch to offer advanced services such as engineered lifts, specialized rigging and complex logistics planning—all designed to reduce total project costs.

"With our experienced team and deep roots in Western Canada's energy sector, the Edmonton branch is poised to deliver the same level of excellence Barnhart's customers have come to expect," says John Woulfe, VP Business Development Canada. "Our focus is on providing exceptional service that builds lasting relationships with our customers."

From small taxi crane jobs to transporting heavy components, the Edmonton branch is uniquely positioned to serve industries across Alberta's capital region with innovative, reliable solutions backed by Barnhart's decades of expertise.

BARNHART

2163 Airways Blvd.
Memphis, TN 38114

www.barnhartcrane.com
1-800-587-3249
sales@barnhartcrane.com

PRSRT STD
U.S. POSTAGE
PAID
MOBILE, AL
PERMIT NO. 274

NORTH AMERICA OFFICE LOCATIONS & FACILITIES

CANADA

- BONNYVILLE, AB
- CALGARY, AB
- EDMONTON, AB
- FORT MCMURRAY, AB
- GRANDE PRAIRIE, AB
- FORT ST. JOHN, BC
- TERRACE, BC
- REGINA, SK

UNITED STATES

- AXIS, AL
- DECATUR, AL
- GADSDEN, AL
- MOBILE, AL
- BLYTHEVILLE, AR
- EL DORADO, AR
- LITTLE ROCK, AR
- SPRINGDALE, AR
- PHOENIX, AZ
- LOS ANGELES, CA
- MIDDLETOWN, CT
- AMES, IA
- CEDAR RAPIDS, IA
- DES MOINES, IA
- FOREST CITY, IA
- MASON CITY, IA
- CHICAGO, IL
- EAST MOLINE, IL
- LADD, IL
- MADISON, IL
- ELKHART, IN
- FOWLER, IN
- EL DORADO, KS
- OWENSBORO, KY
- SHREVEPORT, LA
- WEST MONROE, LA
- MONROE, MI
- MINNEAPOLIS, MN
- ST. LOUIS, MO
- COLUMBUS, MS
- JACKSON, MS
- PASCAGOULA, MS
- TUPELO, MS
- LINCOLN, NE
- OMAHA, NE
- SOUTH SIOUX CITY, NE
- MANDAN, ND
- ALBUQUERQUE, NM
- OKLAHOMA CITY, OK
- TULSA, OK
- CANTON, OH
- COLUMBUS, OH
- PORTLAND, OR
- PHILADELPHIA, PA
- CHARLESTON, SC
- COLUMBIA, SC
- SIOUX FALLS, SD
- CHATTANOOGA, TN
- JACKSON, TN
- KNOXVILLE, TN
- MEMPHIS, TN
- TRI-CITIES, TN
- EL PASO, TX
- HOUSTON, TX
- CHESAPEAKE, VA
- KENT, WA
- MT. VERNON, WA
- RICHLAND, WA
- SPOKANE, WA
- SUPERIOR, WI

IF YOU WOULD LIKE TO STOP RECEIVING THE LIFTING LETTER, PLEASE EMAIL US AT SALES@BARNHARTCRANE.COM

BARNHART EQUIPMENT

ALTERNATIVE LIFTING

- FULL FLEET OF HYDRAULIC JACKING
- GANTRY TO 800 TONS
- LIFT TABLES
- STRAND JACKS
- TEMPORARY OVERHEAD CRANES
- EXTENSIVE SPECIALTY RIGGING

TRANSPORTATION & LOGISTICS

- DUAL LANE TRANSPORTERS
- SUSPENSION GIRDER SYSTEMS
- HYDRAULIC PLATFORM TRAILER
- PROJECT CARGO BARGING
- RAMPS AND TEMPORARY BRIDGES

MARINE HEAVY LIFT

- 1,250 TON MS RIVER DERRICK – MEMPHIS

TELESCOPIC BOOM CRANES

- FROM 7 TO 900 TONS

LATTICE BOOM CRANES

- CRAWLERS 100 TO 1,375 TONS
- 1,760 TON RINGER

SERVICE SPECIALTIES

- OVER 700 OPERATED CRANES
- RIGGING ENGINEERING
- LASER SCANNING
- STORAGE FACILITIES
- TURNAROUND OPERATIONS
- ENGINEERED LOAD TESTS
- LOAD WEIGHING
- MOCK LIFTS