MARCH 2012 / VOLUME 25 ISSUE 1

FOSS

Tow Bitts

Ernesto Rodriguez

TWIN HYBRIDS IN LONG BEACH

The twin hybrid-powered tugs Carolyn Dorothy, foreground, and Campbell Foss posed for a photo recently in Long Beach, with Long Beach Container Terminal in the background. The Campbell Foss arrived in southern California in January following a hybrid retrofit at Foss Rainier Shipyard in Oregon. The Carolyn Dorothy entered service in 2009. *Article on page 5.*

FOSS WINS CONTRACT TO BUILD COLUMBIA RIVER FERRY BOAT

The Foss Rainier Shipyard in March will begin construction of a 20-car ferry whose hull will be cut into three longitudinal sections for over-the-road shipment to an assembly site at Crescent Bay adjacent to the Grand Coulee Dam in Coulee, Wash. Foss won the contract to build the ferry for the Washington State Department of Transportation in a competitive bidding process. As part of the project, the state and Foss have partnered with the Confederated Tribes of the Colville Reservation, whose members will participate in the final assembly work.

The ferry will measure 116 feet in

Continued on page 4

INSIDE Tow Bitts

Twin Hybrids At Work
The *Campbell Foss*, retrofitted with a hybrid propulsion system, has joined the hybrid tug *Carolyn Dorothy* in the Los Angeles/Long Beach harbor. The two Foss vessels are the world's only operating hybrid-powered tugs.
Photo on cover, article on page 5

Tropical Adventure for Drew Foss
The tug *Drew Foss* in December embarked on a journey through the South Pacific and Indian oceans and won't return to the U.S. Northwest until June. The customer said the tug's high fuel capacity and Foss' experience in Asia helped the company win the job.
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Threading the Needle on 'Chelsea Creek'
Foss Boston Port Captain and Docking Pilot, Capt. **Chris Deeley**, writes about the challenges of moving ships through the Chelsea River, where "Boston Beam" ships pass through one bridge with only three feet of clearance on each side.
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Foss Drydocks Ship that Found Air France Wreckage
Three attempts were made to find the wreckage of Air France Flight 447 in the Atlantic Ocean off the Coast of Brazil before the *Alucia*, equipped with deepwater submersibles, found it in April 2011. The vessel underwent a three-month overhaul at Foss Shipyard this winter.
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Foss Expands Presence in Haiti
More than two years after an earthquake devastated Port-au-Prince, Haiti, and its port, only one permanent cargo berth is in use at the port. Foss has supplied two barges being used as temporary cargo docks and hopes to supply a third.
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Memorial Fund for family of Slain Captain
Capt. **Patrick Warga** of Bainbridge Island was a husband and father of three who loved working and playing on the water. A memorial fund has been established for the family of the Foss captain who died from injuries suffered in Tampico, Mexico.
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At Home And Abroad, The Same Message: Always Safe

Much of our company's growth over the last 10 years has been in the international arena, and that has provided many opportunities for our mariners to experience and explore different and interesting cultures.

Gary Faber

They have been to the Middle East, remote ports in Africa, Asia, the South Pacific and Eastern Russia and to new ports in Mexico and elsewhere in Latin America. In short, our vessels and the people who run them have been all over the world.

But along with the positive experiences in our business, there also can be a dark side.

Capt. **Patrick Warga** of the *Lauren Foss* died as a result of injuries suffered in a robbery in the port city of Tampico, Mexico, on Christmas Day. The *Lauren* was berthed at the port while working on an oil field development project off the Mexican coast. (An article and a photo of Capt. Warga appear on page 18.)

On behalf of all Foss employees, I would like to express my sincerest condolences to the Warga family for their loss. Capt. Warga, 46, leaves a widow and three children.

The incident was the first of its kind for the company in recent memory. Our international growth has not brought a spate of these attacks. But the incident in Tampico can be a lesson for all of us that when we travel to these foreign lands, we should take our awareness of our personal safety up a notch.

In addition, we should not take lightly our attention to personal safety as we move about in domestic ports. There are areas of Seattle, Oakland, Detroit or Boston, among others, that can present significant risks to our safety.

Sometimes, of course, all the precautions in the world can't keep us from being in the wrong place at the wrong time. We will never know exactly how tragedy befell Capt. Warga.

But if the safety culture we have developed at Foss keeps us safe during our working routines, a heightened awareness of personal safety can do nothing but help protect us in less familiar surroundings.

At home and abroad, the message is the same: Always Safe.

President and Chief Operating Officer

Tow Bitts

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NO LOST-TIME INJURIES FOR A YEAR

Foss Rainier Shipyard team members posed for a photo in their new Foss logo jackets, presented by the company to recognize the Shipyard group's success in working more than one year with no lost-time injuries. Each jacket features the employee's name on the right sleeve with "Always Safe" embroidered directly above the name.

FOSS SET CRUCIAL NEW STANDARDS IN 2011 FOR FUTURE SAFETY SUCCESS

Positive safety statistics for the year 2011 show that Foss has achieved "a complete shift in our safety culture," for which every employee deserves credit, according to **Frank Williamson**, vice president safety, quality and general counsel.

"We are several years past harvesting the low hanging fruit in safety at Foss," Williamson wrote in his year-end safety report. "We are now proving every day that everyone at Foss truly gets it—the safety of our employees is absolutely our top priority in all our operations."

Among the most impressive statistics was that all Foss operations incurred only one lost-time injury in 2011, an all-time low for the company. The achievement is especially impressive because the number of at-risk employees has grown in recent years through acquisitions. By comparison, the company had 64 LTIs in 2007.

The Seattle and Rainier Shipyards completed nearly 400,000 man hours in 2011 with no lost time injuries, compared to an industry standard rate of 2.60. "Clearly, the Foss shipyards are leading the pack in the industry in safety performance," Williamson wrote.

Marine operations, despite one lost time injury, made progress in safety achievement in continuing an impressive downward trend in recordable injuries to an all-time low of 17. "If we can continue this consistent reduction in minor injuries," Williamson said in his report, "we will surely achieve the elusive no lost-time injury goal."

FOSS WINS BIG CONTRACTS FOR WORK IN ALASKAN ARCTIC

Foss Maritime has been awarded two significant contracts for work in the Beaufort and Chukchi Seas in support of a large oil and gas company.

"These important projects further establish Foss in the oil and gas industry and expand our operations in Alaska," said President and Chief Operating Officer **Gary Faber**.

Both the *Corbin Foss* and *Lauren Foss* have returned to the Pacific and will be assigned to these long-term projects. In addition, the 400-foot-by-100-foot deck barge *ZBIG1* will undergo extensive modifications at a Gulf of Mexico shipyard and will be mobilized to Puget Sound for further outfitting in May prior to departing with the *Corbin Foss*.

Faber said winning the contracts follows years of business development activities led by Director of Oil Field Services **Paul Gallagher**.

"He really brought the project home," Faber said. "And securing this work is built upon the hard work of our staff and the crews that operate in Alaska every day."

He added, "The expertise and culture of Foss, reflected in our personnel, equipment, engineering department and world-class safety programs were key factors that contributed to Foss winning these major contracts. "

Foss is developing its operations plan and beginning preparations for the projects.

"This is an exciting step forward for Foss Maritime and our Alaska operations," Faber said. "We look forward to future opportunities as we continue to work in the Gulf and East Coast and expand our operations in Alaska."

ALWAYS SAFE

COLUMBIA RIVER FERRY BOAT CONTRACT

(Continued from the cover)

length and 46 feet in beam. It will cross the Columbia River on a 1.25-mile link on State Route 21 between the reservation and Lincoln County, replacing a six-car ferry, the *Martha S.*, which has been in service since it was built in 1947.

Gary Faber, president and COO of Foss, said the project's benefits will have a ripple effect across the state.

"The Foss bid is good for the Northwest economy as it creates jobs at our shipyard near Longview and in Eastern Washington," he said, "and we'll deliver a highly efficient new ferry to serve a vital cross-Columbia transportation link."

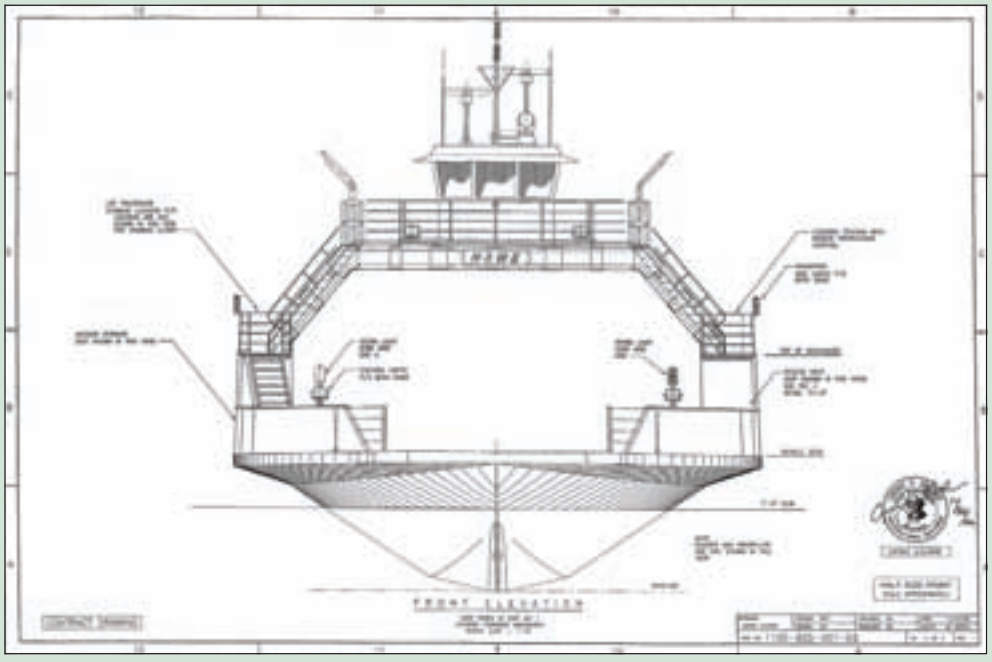
He also noted that Foss has a history of working with Native American nations in the Northwest and Alaska, including stationing an emergency-response tug on the Makah reservation on the Olympic Peninsula.

Foss Shipyards Director **Mark Houghton**, who oversees the Rainier operation, said the ferry's hull would be the largest ever built at the yard. It also will be the yard's second aluminum hull, the first being that of the *Ava Foss*, a crew boat built two years ago for El Segundo Moorings in southern California.

"Another significant aspect of this is that having Washington State Ferries as a customer looks pretty credible on the resume for the type of product that Rainier Shipyard produces," Houghton said.

As a result of the ferry project, the shipyard plans to add nine or ten employees, bringing its workforce to 33 or 34 people.

Foss Project Manager **Warren Snider** said that because the hull will be aluminum, it must be built under cover. And since covered space at Rainier is currently limited, the hull will be built in three transverse sections. Those sections will be joined together when completed under a large portable structure Foss is obtaining.



The ferry will measure 116 feet by 36 feet and will have a capacity of 20 automobiles.

The hull structure will be outfitted with engines, generators, piping systems, steering and other gear. It will then be cut into three longitudinal sections, the largest being the 22-foot wide center section, for the road trip next November to Crescent Bay on Lake Roosevelt, behind the Grand Coulee Dam.

Snider said trucking a vessel over the road in parts is unusual but not unprecedented. For example, Foss sent a portable barge over the road in pieces a few years ago to transport a turbine up the Columbia to a hydroelectric project in British Columbia. And Snider said a tug (not owned by Foss) was shipped in pieces over the road to Alaska's North Slope.

Another big challenge in the project will be setting up what will amount to a temporary shipyard in Crescent Bay for final assembly of the ferry.

"At the assembly site is a launch ramp and a fairly large gravel area where people park boats and trailers," Snider said. "You're starting with a blank slate, and you have to bring everything with you in terms of tools, welding machines and other equipment."

Foss also will disassemble the large structure used to cover the hull at the Rainer yard, truck it to Crescent Bay and re-assemble it there.

In addition to joining the three hull sections, workers in Crescent Bay will install a couple of deck houses for a head, crew day room and equipment storage, as well as a cross-over structure that will support the pilothouse.

The ferry is scheduled for delivery in May 2013.

FOSS

Foss Vessels Recognized for Environmental Performance

Sixty Foss vessels were recognized by a major maritime organization recently for their standout environmental records.

The Chamber of Shipping of America (CSA) announced the awards honoring Foss' environmental achievements at a banquet in Washington, D.C.

"Safety and the environment are the first things that our customers bring up when we talk with them," said **Gary Faber**, Foss's president and chief operating officer. "To be honored by the Chamber of Shipping for our environmental record is something that underscores all our efforts at Foss. It is part of our corporate culture."

U.S. Coast Guard Vice Admiral **Brian Salerno**, Deputy Commandant for Operations, participated in the awards ceremony and congratulated the industry's safety and environmental record.

Foss Vice President for Environmental and Governmental Affairs **Susan Hayman** accepted the environmental awards on behalf of the company. With her are CSA President **Joseph J. Cox**, left, and Coast Guard Vice Admiral **Brian Salerno**.

Joseph J. Cox, president and chief executive officer of CSA said, "These awards celebrate the dedication to environmental excellence of our seafarers and the company personnel shoreside who operate our vessels to the highest standards.

"In today's world, it seems our industry only gets front-page news when spills or other environmental problems occur. It is encouraging to see how many vessels go for years achieving environmental excellence. It should be clear to the American public that we in the maritime industry take our stewardship of the marine environment very seriously."

WORLD'S SECOND HYBRID TUG AT WORK IN SOCAL; U.S. PATENT PROTECTION GRANTED FOR INNOVATIVE SYSTEM

The *Campbell Foss* is now the world's second operating hybrid-powered tug following a retrofit at Foss Rainier Shipyard on the Columbia River in Oregon.

Originally built as a diesel-powered Dolphin-Class tug in 2005, the *Campbell* in January joined its twin hybrid tug, the *Carolyn Dorothy*, in the Los Angeles/Long Beach Harbor.

"The *Campbell* is operating as expected, and both the customers and our crews like the tug a lot," said **Jerry Allen**, Foss southern California port engineer.

Meanwhile, Foss and Aspin Kemp & Associates (AKA) with their technology partner XeroPoint Energy have received U.S. patent protection for the hybrid propulsion and energy management system.

Foss partnered with AKA, a Canadian system integrator and marine engineering company, in developing the technology.

The hybrid propulsion and energy management system has been proven to significantly reduce emissions, fuel consumption and equipment maintenance.

"Diesel engines are designed to optimally perform at or near their full load design point," said **Paul Jamer**, vice president of corporate development at AKA. "However, many marine vessels operate under variable load requirements. Our system provides operators with the flexibility of a diesel electric system and the simplicity of a conventional system, without the cost or footprint of a traditional full diesel electric installation.

Both hybrid tugs use the AKA energy management system to provide Green Assists™ to customers.

The hybrid propulsion and energy management system is patented under U.S. Patent 8,062,081 and additional international patents are pending.

Drew Foss, Barge, on 20,000 Mile Adventure Through South Pacific and Indian Oceans

The ocean-going tug *Drew Foss* is in the midst of a 20,000-mile voyage through the South Pacific and Indian oceans in support of construction projects in the Marshall Islands and on the island of Diego Garcia.

The customer is Seattle-based construction and logistics company Heko Services, Inc., whose barge, the KRS 330, is being towed by the *Drew* and is carrying equipment and materials for the far-flung projects.

Heko Services is providing logistics services to Colorado-based San Juan Construction.

Paul Gallagher of Foss Global Services said the *Drew* arrived at Kwajalein Atoll in the Republic of the Marshall Islands in late January, completing a 4,350-nautical-mile leg that included a stop in Honolulu, where the tug received support services from Foss sister company Hawaiian Tug and Barge.

Kwajalein Island is about 2,100 miles southwest of Honolulu.

Justin Buckley, Heko Services operations manager, said the work in the Marshall Islands includes dock-repair projects on the island of Roi-Namur and on Kwajalein Island.

From there, the tug and barge headed to Singapore (4,000 miles) to pick up cargo for shoreline remediation work for the U.S. military on Diego Garcia, an atoll 1,200 miles south of the southern tip of India. The *Drew* traveled to Diego Garcia (2,200 miles) via Bintan, Indonesia.

The *Drew Foss* departed Honolulu for Kwajalein Island in January.

The return trip to Seattle will be nearly 9,300 miles, and the *Drew* is expected home sometime in June.

Buckley said among the reasons he picked Foss for the job was the tug's high fuel capacity and its range, as well as the fact that it is fully capable of operating in a warm climate.

"It was also just the experience Foss has in this neighborhood," he said, "particularly in Asia."

Crewmembers for the Seattle-Singapore portion of the trip were Capt. **Edwin "Clare" Nelson**, Mate **Charles Hammer**, Second Mate **Patrick Miller**, Chief Engineer **Charles Lott**, Able Seamen **David Jankowski** and **Timothy Gleeson** and Cook **Mark Steven Phillips**.

LUCY FOSS CREW HELPS EVACUATE STRICKEN SEAMAN

The line-handling boat *Lucy Foss* assisted with the medical evacuation of a tanker crewmember stricken with an apparent heart attack at El Segundo Moorings in Southern California on Feb. 2.

The crew of the *Lucy* called harbor authorities after being informed of the medical emergency aboard the tanker *Pichincha*, and a Baywatch vessel was alongside in about 10 minutes.

Lucy Foss crewmembers **Jim Markus** and **Mike Markus** assisted as the ailing crewmember was lowered onto the deck of the line boat and then transferred to the Baywatch vessel for transportation to shore and to a hospital.

Foss Successfully Completes Tows for Oil Sands Project; Crews Work 28,000 Hours without a Lost-Time Injury

Completing a project viewed as a key to its continued growth in the petroleum sector, Foss in December made the last of 17 tows from Vancouver, Wash., to inland ports on the Columbia River, delivering production modules for an oil sands development project in Alberta.

Foss employees put in more than 28,000 man hours on the job without a single lost-time injury, earning praise from customer Mammoet Canada Western Ltd, the heavy-haul company coordinating the movements for the Exxon Mobil Canada, Imperial Oil development.

"Please accept my thanks and congratulations for successfully completing your scope of work on the KOSP (Kearl Oil Sands Project)," **Craig White**, Mammoet project manager, wrote in a congratulatory email to Foss. "Foss's experience in the barging industry, namely knowledge of the river system, was a major factor in the successful planning of the project."

Foss started work on the project in September 2010, loading the Korean built modules—as big as 150 tons and measuring up to 118 feet long, 19 feet high and 26 feet wide—at the Port of Vancouver, Wash.

In total, 147 modules were moved in 17 voyages, nine to Pasco, Wash., and eight to Lewiston, Idaho. The modules were being carried from the river ports over the road to the project near Fort McMurray, Alberta.

"Foss met all our safety and plan deliverables for our segment of the job which was carried out quite smoothly," said **Tim Beyer**, Foss director of regional towing. He noted that Foss was not faced with the same permitting and routing issues for the river segment that challenged those planning the over-the-road portion.

"Once we delivered modules to the inland ports, the inland permitting issues for the heavy-haul contractor through several states to the Canadian border required a great deal of planning and effort on their part to mitigate and clear many hurdles throughout the inland routing process," Beyer said.

The last module was rolled from the Foss Barge *286-3* in Pasco, Wash., in the photo above. In the photo below, taken at sunset in Pasco, Project Manager **Steve Gorniak** cracks a smile as the job is completed.

Those road-travel issues caused some delays for the river portion, however. Foss' part of the project was supposed to be done by July. The project also was delayed by a scheduled, yet unprecedented three-month shutdown of river traffic for locks gate replacement at three of the hydroelectric dams from December 2010 to March 2011.

Beyer gave special credit for the success of the project to **Steve Gorniak**, a consultant hired by Foss to manage the effort, and to Safety Manager **Dan Brechtel**, also a consultant.

Drew Arenth, Foss manager of project services in Portland, said the captains and crews of the tugs *P.J. Brix* and *Betsy L.* and the barges *Sitka* and *286-3* "ran an impeccable operation, and Foss was commended repeatedly from every level of the joint venture, all the way to Exxon Mobil."

Walt Partika, who joined Foss as a dispatcher in 2000, is retiring as Bay Area tankbarge manager on March 31.

Tankbarge Manager's Mantra: 'When in Doubt, Shut it Down"

After a 41-year career in the maritime industry, almost all of it in the environmentally sensitive area of tankbarge operations and management, **Walt Partika** doesn't hesitate when asked to describe his working philosophy.

"It's just zero tolerance for any spill," said Partika, 66, who will retire as Foss' tankbarge manager in the San Francisco Bay Area on March 31. "Whenever my tankermen are in doubt, or if it ain't going right, just shut it down."

The son of a merchant seaman, Partika was raised in Santa Rosa, Calif., and went to work as a seaman on Chevron tankers in 1970, becoming a pumpman before going to work for Crowley Maritime as a tankerman in 1974. At Crowley, he soon became a supervisor and later was promoted to manager of tankbarge operations and Pacific Division tankbarge sales manager.

He worked 24 years at Crowley before his love of golf prompted him to take a year away from the industry and work as a caddy in the LPGA. Among the pros he worked with were **Wendy Doolan**, **Kim Bauer** and **Jennifer Feldot**. Feldot made 8 cuts in the 13 weeks Partika was with her and finished second at a tournament in Tennessee.

He joined Foss as a dispatcher in the Bay Area in 2000, became tankbarge manager in 2002, and has held the position ever since.

Partika was part of the Foss task force that planned the layout of machinery, equipment and piping on the seven double-hull tankbarges now in operation in California, four on the Bay and three in L.A./Long Beach.

Foss California General Manager **John Marcantonio** said Partika managed the safe transport of more than 100 million barrels of bunker fuel and residual oils during his tenure at Foss.

"Walt's contributions to Foss from an operational and customer relationship management perspective have been immeasurable and his spirit will be impossible to replace," Marcantonio said.

Partika says his company and his team of tankermen have helped him live up to his zero-tolerance philosophy since joining Foss.

"When it comes to the environment and safety, Foss is the industry leader, just tops," he said. "And I've managed tankermen in every port on the West Coast and in Alaska, and the group here is as good as you'll find anywhere."

In his retirement, Partika and his wife **Carol** with their cat **Buddy** plan to take off in their 40-foot motor home with a Harley-Davidson on the back and tour the United States. Chances are they'll seldom be too far from a golf course.

"Carol doesn't play, so I bought her a Kindle," Partika said. "She can read while I'm golfing."

FOSS SHIPYARD ON DISPLAY AT MARINE EXPO

Foss Shipyard Director ***Mark Houghton****, left, and Foss Terminal Manager* ***Spencer O'Grady****, were among company representatives who manned the Foss Shipyard booth at Pacific Marine Expo in Seattle in November. The annual event features displays from hundreds of companies that do business with the fishing industry and is one of the biggest marine trade shows on the West Coast.*

LIFT AT THE LOCKS

The Foss 300 derrick moved an upstream gate into place at the Hiram Chittenden Locks in Seattle on Dec. 16. The dead weight of the gate was 180 tons, but its buoyant condition during the lift put it well within the 75-ton capacity of the derrick. The gate and a matching one, placed the day before, measure about 39 feet tall and 46 feet wide. They had been floated and towed into a drydock at Northlake Shipyard in Seattle for replacement of their pintels as part of a locks maintenance and improvement project. Foss is working as a subcontractor to Redside Construction of Port Gamble.

Narrow Bridges and Tight Corners are an Everyday Challenge in Boston

The Foss tug *Leo* is on the bow as the tanker *Conti Equator* approaches the Chelsea Street Bridge in this photo taken by ship pilot Capt. **Chris Deeley**.

The outbound "*Boston Beam*" tanker squeezes its way through the Chelsea Street Bridge.

The tractor tug *Leo* helps the tanker around Cabot's Corner.

Editor's Note:

Chris Deeley is Foss' Boston Port Captain and doubles as a docking pilot, a job which requires him to guide ships up the tricky and narrow Chelsea River channel.

By Chris Deeley

The Chelsea River or "Chelsea Creek" as it is known locally, is a 2.5-mile long waterway located in Boston's inner harbor. It is estimated that 70 percent of the greater Boston area's petroleum imports and most of its road salt pass through this river to four different oil terminals and one bulk storage facility.

The creek represents a unique challenge to navigators due to its narrow confines, controlling depth of only 37 feet, and two small bridges that are both located on turns in the river. The arrival of Foss Atlantic tractor tugs *Leo* and *Orion* in Boston five years ago has made transiting the area safer and more economical.

Vessels bound for Chelsea Creek and Boston Inner Harbor are usually joined by assist tugs in the vicinity of Logan Airport, which is approximately two miles from the creek's entrance. Foss Atlantic's new pier location on the East Boston waterfront is adjacent to the airport, making it a short trip from the dock to pick up inbound ships.

After the passage through the Chelsea Street Bridge, the channel through the Andrew P. McArdle Bridge looks like a wide one.

The Andrew P. McArdle Bridge is the first obstacle one encounters upon entering the creek. It is a bascule bridge that opens on demand with a horizontal clearance of 175 feet. The biggest ships that transit are no larger than 106 foot beam and 800 feet in length, but with a tug traditionally tied alongside the port bow to control the ship, the clearance during passage can be as little as 20 feet on either side.

The bridge is also located on a bend in the river, making negotiating the turn even more difficult. The *Leo* is typically stationed on the port bow of these vessels on arrival and has the unique ability to power herself in front of a moving ship just before entering the bridge while still maintaining a line attached. After the bow of the ship passes through, the *Leo* can quickly spin around back into position and be ready to push or pull before the entire ship passes completely through the span. The Leo's ability to perform this maneuver gives the pilot both extra clearance in the bridge span and the safety of always having the bow tug attached and ready to assist.

For vessels greater than 90 feet in beam, there is no turning basin in the creek, and they must be backed stern-first through the McArdle Bridge. Before the advent of tractor tugs, this was a maneuver that required four assist tugs; one on each side of the bow, one attached to the quarter and one towing tug. The job is now done with just the *Leo* and *Orion* tied to each end of the ship. This is one of the most difficult jobs for visiting ship captains to witness, as they are not accustomed to having their ships backed stern first down such a narrow river and through a drawbridge being under the complete control of assist tugs.

Beyond the McArdle Bridge and around "Cabot's Corner" is an even more challenging bridge to negotiate, the Chelsea Street Bridge. This bascule bridge has a horizontal

(Continued on page 12.)

Capt. **Chris Deeley** points out the location of the Chelsea Street Bridge, which "Boston Beam" tankers transit with just three feet on either side of the ship.

(Continued from page 11)
opening of only 96 feet and vessels that transit it are subject to restrictions described in the Code of Federal Regulations (CFR). Depending upon the dimensions of the vessel, passage is subject to assist tug requirements and sometimes daylight only transit.

The largest and most frequent ships passing through the bridge are 90.5 feet in beam and approximately 600 feet in length. These "Boston Beam" tankers are the widest ships allowed to pass through, doing so with less than 3 feet to spare on either side. Four assist tugs and daylight only transits are CFR requirements for these ships. Not only is the bridge extremely narrow, but during the inbound transits the ship must be turned immediately to the left after going through in order to negotiate a bend in the river.

The ability of the *Leo* and *Orion* to be tethered on the bow and stern of ships transiting this bridge has added an extra level of safety to piloting. The tugs are able to fine tune the heading of the ship while it is still in the bridge span and assist in making the hard turn to port immediately after passing.

In 1992, the Coast Guard deemed the Chelsea Street Bridge a hazard to navigation and earmarked it for replacement after multiple vessel allisions. Funded by the American Recovery and Reinvestment Act, a $125 million lift bridge is currently being constructed to replace the old Chelsea Street Bridge.

This new bridge will span the entire width of the river and have a vertical clearance of 175 feet; however, even with the replacement of the old bridge, navigation of this section of the creek will still be difficult. Due to the sloping requirements of bottom sediment to prevent shoreline collapse and the presence of several below-ground utilities crossing the channel, the Army Corps of Engineers will only be able to dredge the channel to a width of 175 feet. The edges of this improved channel will be marked solely by three sets of wooden beacons to be installed by the Coast Guard with no rigid abutments designed to withstand a ship strike or prevent a vessel from venturing outside the dredged area limits.

Several terminal operators have joined together to hire a design firm to develop a simulator program to prepare pilots for transiting this area in light of the dramatic changes that will occur in channel alignment and bottom contour. It is hoped that 106-foot beam ships will eventually be able to pass through and eliminate the 90.5-foot beam restriction. The decision will have to wait until the channel improvements are completed and the Coast Guard and pilots of the port deem it to be safe.

FOSS

WEDELL DRYDOCKED FOR DRIVE WORK, INSPECTION

The tug Wedell Foss was drydocked at Foss Shipyard in Seattle for a week in January for a regulatory inspection and repair work on its Schottel Z-drive. The yard also performed some work dockside before the tug was returned to service.

SHIPYARD OVERHAULS SHIP THAT FOUND JETLINER WRECKAGE

The combination research ship and superyacht that discovered the wreckage of Air France Flight 447 off the coast of Brazil in April 2011 underwent a three-month refit and drydocking beginning last December at Foss Shipyard in Seattle.

The vessel is the 182-foot-long *Alucia*, built as a research vessel by the French government in 1973. It was subsequently sold and overhauled with the addition of luxury accommodations and equipped to carry three deepwater submersibles.

Currently privately owned, the ship is on assignment to the Woods Hole Oceanographic Institute in Massachusetts.

Foss Manager of Shipyard Sales **Ken LeRoy** said the yard painted the vessel's topsides and superstructure, installed protective glass in windows overlooking the helicopter pad, refurbished the crew quarters, upgraded electrical and piping systems and performed other dry dock related work.

"It was a nice catch for the yard," said Ken, noting that about 25 Foss craftsmen were assigned to the *Alucia* for most of the project. "The estimating department did a lot of leg work securing the job for the yard."

Dave Palmer is the ship repair superintendent overseeing the work.

Air France Flight 447 plunged into the South Atlantic in June 2009, killing all 228 people on board. The *Alucia's* effort to find the plane, financed by Air France and Airbus, was the fourth attempt to find the jetliner.

The *Alucia*, center, dwarfs the *Stacey Foss*, left, and the yacht *Thea Foss*.

The Foss Brand and Quality Craftsmen Are The Keys to Growing Company's Shipyard Business

Meet the new sales team for Foss Shipyards.

Manager of Shipyards Sales **Ken LeRoy**, a three-year veteran of Foss, has joined forces with new co-worker **Luba Babadzhanov**, a native of Sakhalin Island, Russia, who became acquainted with Foss when the company ran an oil field sealift to the island in the early 2000s.

LeRoy said the Foss brand and the quality of the shipyard employees and their work are the keys to growing the business, which has a full-service repair yard in Seattle and a new-construction ship-repair operation in Rainier, Oregon.

"Our brand is highly recognized in the industry, and the people in the shipyards are amazing, both here and at Rainier," LeRoy said. "People know they are going to get the job done right and that they will get real value from Foss Shipyards."

An important source of confidence for the yards' customers is the fact that Foss also operates, builds and repairs its own vessels and has a "tradition of fixing it right with their own fleet. The customers know that and they value it."

LeRoy, a native of Seattle, got into the industry as a shipwright at Todd Pacific Shipyards and worked his way up to project manager before joining Foss in 2008.

Ken Leroy joined Foss in 2008 and was recently joined on the shipyard sales team by **Luba Babadzhanov**

Babadzhanov moved to Seattle from her native Russia to go to college. She got an internship at Foss three years ago, then worked in cargo operations at subsidiary America Cargo Transport Corp. (Now Foss International) before taking a job in Purchasing at Foss. She took the shipyard sales job last December.

"I like this job because things are always changing—never the same," she said. "Every day there are new people and new opportunities."

NAVAL ARCHITECT JOINS FOSS ENGINEERING

Theresa Fielding, a 16-year naval architect who spent much of the last five years helping to decommission hurricane-damaged oil platforms in the Gulf of Mexico, has joined the Foss Engineering Department.

Fielding is a 1996 graduate of the Webb Institute of Naval Architecture in Glen Cove, N.Y., and before her work in the Gulf, she was with The Glosten Associates and the Elliott Bay Design Group, both in Seattle.

Working as a consultant mainly for a company called Wild Well Control of Houston, Fielding did engineering work to remove several damaged oil production platforms and permanently abandon their wells. The structures were damaged by hurricanes Ivan and Katrina.

She specializes in stability analysis and structural design analysis and, at Foss, will report to Engineering Director **Douglas Wolff**. In her spare time, Fielding is a mountain climber, kayaker, cycler and runner.

Naval architect and avid mountain climber **Theresa Fielding**, on a trail to Mount Tokachi, Hokkaido, Japan.

The barges *Heavy Lifter*, foreground, and *Columbia Boston* on station in Port-au-Prince, Haiti.

Second Foss Barge is Temporary Terminal in Port-au-Prince; Haitian Government Plans to Rebuild Devastated Port

Foss International is expanding its presence in post-earthquake Haiti, already providing two of the three barges being used as temporary floating cargo docks in Port-au-Prince and negotiating to replace the third.

Rob Wagoner, cargo operations manager for Foss International, said Foss also supplied the three track cranes being used on the barges to load and unload cargo ships and is maintaining the barges and cranes for OPR, the Haitian operating company.

All but one permanent berth remain out of service at the port, devastated along with most of Port-au-Prince by the earthquake on Jan. 12, 2010. The Haitian government is about to start a two-phased project to rebuild the port, but Wagoner said he expects the barges will be needed as temporary floating docks for another 18 to 24 months while construction takes place.

In October 2010, Foss supplied the barge *Columbia Boston* and a 4600 S4 crane to supplement two barges provided by another company as temporary floating docks in Port-au-Prince.

Under a contract with OPR, the Haitian company that operates the government-owned port, Foss subsequently secured a 400- by 130-foot barge, the *Heavy Lifter*, to replace one of the deteriorating barges owned by the other company.

The *Lauren Foss* towed the *Heavy Lifter* to Port-au-Prince last October for installation, and upon arrival one of the 4100 S2 cranes was rolled on board from the barge it replaced. Foss also was contracted by OPR to remove the barge replaced by the *Heavy Lifter* and tow it back to the US Gulf Coast.

Because of its condition, getting US Coast Guard permits to tow the deteriorating barge to the Gulf Coast was challenging and complicated. **Tim Stewart** of the Foss Fleet engineering department facilitated that process, which included completely de-ballasting the old barge for an inspection.

The *Lauren Foss* towed the barge to Texas on Oct. 20, 2011.

"And we're working as we speak to get the last remaining non-Foss barge replaced with another Foss asset," Wagoner said.

Wagoner gave credit to **Vince Godfrey**, Foss vice president for global towing and transportation, with whom he worked on the business side of the barge replacement project. **Steve Imhoff**, retired engineer on the *Foss 300* derrick, and **William Roy** of Foss International handled the crane transfer and barge installation. Capt. **Doug Engdahl** and his crew of the *Lauren Foss also* were key to the project's success, according to Wagoner.

SEATTLE SNOWFALL

In the photo above, the tugs Sandra Foss, at left, and the Stacey Foss wore cloaks of white at their berths on the Lake Washington Ship Canal on Wednesday, Jan. 18.

SNOWY TOW IN ALASKA

The tugs Justine Foss and Jeffrey Foss successfully towed the jackup drilling rig Spartan 151 to its winter harbor in Port Graham, Alaska, on a snowy Thanksgiving Day. The rig had been at its drilling site near Nikiski, which is choked with ice during the winter. Foss will tow the rig back to the drilling site when conditions allow in the spring.

Chris Mack, Jr.

NIGHT TIME ASSIST

The Wedell Foss assisted a bulk carrier on a recent night at the Temco grain terminal at the Port of Tacoma. The ship is the Rapallo, which measures 722 feet in length at 75,123 deadweight tons. Its port of registry is Valletta, Italy.

APPLICATIONS SOUGHT FOR FOSS SCHOLARSHIPS

Applications will be accepted until April 15 for college scholarships awarded annually to the children of Foss employees.

To be eligible applicants can be up to the age of 26 and must be children of full—time employees with six months or more of service with the company as of the application deadline.

Applicants also must be high school seniors or graduates who plan to enroll, or students already enrolled in a full time course of study at an accredited two-or four-year college, university or vocational/technical school.

For an application and more information, log into the Foss web portal. Under the HR tab, scroll over the benefits tab and then click the scholarship link. The application and a current, complete official transcript of grades should be mailed to Scholarship America, which is managing the program for Foss, and postmarked by the deadline.

Memorial Fund Established for Family of Slain Foss Captain

A memorial fund has been set up for the family of **Patrick Warga**, a Foss captain whose widow said he loved his job, being on the water, learning from industry old-timers and working with cadets making their way into the business.

Warga, 46, of Bainbridge Island, Wash., died from injuries suffered in a street robbery on Christmas Day in Tampico, Mexico. At the time, he was master of the tug *Lauren Foss*, which was berthed at the Mexican port while assigned to an oil-field project.

Warga was raised in Seattle and went into the fishing business after high school, working as a deckhand, engineer, running boats and eventually owning his own. During the off season, he took courses to earn a Coast Guard captain's license and went to work for tug-barge companies about 10 years ago.

He worked for Island Tug & Barge and Olympic Tug & Barge before joining Foss as a mate in June 2010, quickly moving into a captain's position. In addition to the *Lauren Foss*, his vessels included the *Drew Foss* and *Justine Foss*.

"He loved the water and when he wasn't working on it, he liked playing on it," said his widow **Kelly**. "He always would say that even on a bad day, his job beat sitting in rush-hour traffic."

She said he also enjoyed working with cadets and young seamen and teaching them, "And he respected the older captains who had been there forever and did things in the old-school ways."

In addition to his widow, Warga is survived by three children, **Adam**, 18, **Anna**, 15 and **Benjamin**, 10. Donations can be made to the Patrick Warga Fund at any Wells Fargo Bank.

Captain **Patrick Warga** in Tampico, Mexico, the week before his death.

PASSINGS

LAWRENCE URBANSKI

Customer Service Representative
Portland

A memorial service was held recently for **Lawrence "Larry" Urbanski**, 67, a Foss customer service representative in Portland consistently described as well-liked, organized and a good communicator both within Foss and with customers.

Urbanski, who died on Feb. 6, joined Foss in 1970 and held a variety of shoreside positions in Portland, including harbor services coordinator, forest products coordinator and wood products operations manager, before joining the customer service team.

Survivors include his wife, **Susan**, two children and a brother and sister.

CHONG WONG

Retired cook, PNW

Chong **"Jim" Wong**, a Foss cook whose culinary skills were so well known that company executives sometimes invited themselves to meals on his tugs, died recently at the age of 86.

Wong retired 25 years ago after spending 11 years with the company, sailing offshore on the East and Alaska coasts and finishing his career on the *Wedell Foss* on Puget Sound. A native of Seattle, he previously had worked in the restaurant industry.

During retirement, Wong liked to travel, including going to annual reunions of his World War II army air support group. He is survived by three children and four grandchildren.

NEW EMPLOYEES

Jim Daley
Director of Marine Operations, Global Services

Matthew Barrett
Tank Barge Manager, San Francisco

Michelle McGrath
Buyer I

Theresa Fielding
Staff Naval Architect

Kyle Sailers
Office Assistant

PROMOTIONS

Colin Evanson
Temporary IT to Help Desk Coordinator

Josh Jones
Temporary Marine Personnel Assistant to Customer Service Representative Seattle

Scott Jason
Manager Regional Operations to General Manager, Atlantic Division

Kevin McElroy
Marine Personnel Assistant to Marine Personnel Coordinator

Cody Pearson
Temporary Marine Personnel Assistant to Marine Personnel Assistant

RETIREMENTS

Michael Port
Shipyard Superintendent

Port was a 22-year vetaran of Foss who joined the company as a chief engineer in the ocean fleet and then came ashore to work as a machinist and engineer, including 11 years in the San Francisco Bay Area, before becoming a ship repair superintendent at the Seattle Shipyard.

Charles Boggs
VP Government Marketing, Foss International

Boggs was a five-year employee of ACTC/Foss with 40 plus years in the international shipping industry. When joining ACTC as vice president of government sales, he was responsible for Washington, D.C., contacts in the Department of Defense, Maritime Administration, food aid industry and connecting carrier relationships.

Rex Barnes
Captain, San Francisco Bay

Barnes started his career with Foss in 1979 as a deckhand on Puget Sound. He worked his way into a mate's position and eventually to a fulltime captain in 1989. When the Foss San Francisco Bay division opened in 1993, he was one of the first captains to transfer there.

BUYER EARNS MBA

***Chris Huizi**, a buyer in the Foss Purchasing Department in Seattle, has earned a master of business administration degree from Seattle University. Huizi, who specializes in purchases for the Seattle Shipyard and the Foss Atlantic Division, is a 1992 graduate of Gonzaga University in Spokane and joined Foss in June of 2010. He lives in Redmond with his wife, Theresa, a son 3 ½ and a daughter 1 ½.*

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Seattle, WA 98119

Brian Knight

PORTLAND SUNRISE

The St. Johns Bridge stretches across the Willamette River and the St. Johns Railroad Bridge is in the background in this photo taken recently at sunrise from Foss headquarters in Portland. In profile in the foreground is the tug P.J. Brix. With a center span of 1,207 feet and a total length of 2,067 feet, the St. Johns Bridge was the largest suspension bridge west of the Mississippi when it was completed in 1931.