





Port of Long Beach

HUGE CONTAINERSHIP IN LONG BEACH, OAKLAND

The MSC Fabiola, said to be the largest containership ever to call a North American port, stopped in Long Beach March 16 and Oakland March 21 and was assisted by Foss tugs in each port. In the photo above, the Arthur Foss, in the foreground, joins the twin hybrid tugs Carolyn Dorothy, middle, and Campbell Foss in assisting the ship into its berth at the Port of Long Beach. The ship is 1,200 feet long and can carry more than 12,500 20-foot-equivalent container units.

TWO TUGS HEADING TO ARCTIC TO SUPPORT SHELL DRILLING

Foss has signed multi-year contracts that will send the company's most powerful ocean-going tugs to the Arctic beginning this year to support Shell Oil in its exploratory drilling operations in the Beaufort and Chukchi seas.

Under a contract with Houston-based Superior Energy Services, the *Corbin Foss* in June will tow the barge *Arctic Challenger* north for the ice-free season, which lasts through October. Superior is currently equipping the barge in Bellingham with a containment system that would be deployed in the event of a well blowout.

The Lauren Foss and barge Tuuq (former Z-Big 1) will head north under a contract with Shell. The barge was outfitted by Foss in Mobile, Ala., to serve as a warehouse for Shell's drilling operations in the Beaufort Sea.

Foss Vice President for Global Towing and Transportation Vince Godfrey said the contracts continue to establish Foss in the oil and gas industry.

"We're on the ground floor of what looks to be a rapidly growing market that's in our core competency," Godfrey said. "And it's in an area

Continued on page 4

INSIDE Tow Bitts

Supporting Shell in the Arctic

In a contract that puts Foss "on the ground floor" of a growing energy development market, the company has signed multi-year contracts that will send its two largest ocean tugs to the Arctic to support Shell Oil drilling operations.

Cover

The Chevron Alliance

Foss and Chevron share values, particularly with regard to safety and environmental excellence, creating a common ground that has fostered a close relationship between the two companies. They recently observed the 15th anniversary of their alliance.

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Foss in North and South Korea

Foss embarked on voyages to both Koreas recently. The *Lauren Foss* picked up two container cranes in South Korea for delivery to North Carolina. And the *Strong Mariner* made the first visit to North Korea by a U.S.-flag vessel in five years.

South Korea, Page 5 and North Korea, 10

Freighter Rescue

The Corbin Foss sailed about 800 miles off the Washington Coast recently to rescue a bulk carrier that lost power in its main engine. The challenges included high seas and difficulty communicating with the ship's Asian crew.

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Foss Profile: The Shipyard Pipe Shop

Their work encompasses installing, repairing and maintaining all manner of piping, tubing and hoses on vessels at the Foss Seattle Shipyard. The craftsmen in the Pipe Shop offer a unique blend of skills for a relatively small group of workers.

Page 14

Keel-Laying Ceremony at Rainier Yard

With Washington Secretary of Transportation **Paula Hammond** as the guest of honor, the Foss Rainier Shipyard began construction of a 20-car ferry that will serve a Columbia River crossing in rural eastern Washington.

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Rainier Shipyard Builds New Boat To Transport Ship Pilots on Columbia River

The pilot boat *Connor Foss* was launched April 18 at Foss Rainier Shipyard in Oregon and will replace the *Arrow 2* in June. The *Arrow 2* will be taken out of service after 50 years transporting river and bar pilots on the Columbia River at Astoria, Oregon.

The *Arrow 2* began service on the Columbia River in 1962. The steel hull launch boat with a single 700 horsepower engine has made thousands of pilot transfers in its long career.

"It's just time to upgrade our equipment," said Foss project manager **Dan Cole**. "The *Arrow 2* has done a great job all these years, but the *Connor Foss* will far surpass it in terms of safety and efficiency."

The *Connor Foss* was designed by Kvichak Marine Industries and is based on the design of the pilot vessel *Skomer*, currently operating for the Milford Haven Port Authority in the United Kingdom.

The Connor Foss has a steel hull with an aluminum deckhouse and is propelled by twin engines rated for up to 1,430 horsepower, offering power and maneuverability. The new pilot boat can travel up to 14 knots with a semi-displacement hull riding more atop the waves than its predecessor.

Carrying on Foss' corporate focus on safety, the *Connor Foss* will have many safety redundancies in place, tilted windows that reduce glare, technologically modern operating systems, a side-mounted hoist system in case of an overboard incident, an onboard speaker system to aid communication, and a wet exhaust



The tug *Betsy L.* caught the *Connor Foss* after it was launched April 18 at Foss Rainier Shipyard on the Columbia River.

system—removing the traditional smoke stack, which can hinder the operator's rear view.

"The Connor Foss will provide a more modern and, therefore, more stable and safe boarding platform," said Regional Operations Manager, Mike Walker. "Seasonal wind and tidal conditions combine in and around the pilot boarding area, resulting in very challenging conditions at times. You have to have a boarding platform that will remain stable even at 10 plus knots, the Connor Foss will do upwards of 14 knots."

Once in service, the *Connor Foss*—named after company founders
Andrew and Thea Foss' great-great-great-great-grandson Connor Hansen who is eight years old—will transport
Columbia River pilots and Columbia Bar pilots between Astoria, Ore., and ocean-going vessels in the designated pilot exchange area of the
Columbia River.

Correction CSA Official's Identity: A Chamber of Shipping of America (CSA) official was identified incorrectly in a photo on page 5 of the March edition of *Tow Bitts*. The correct identity of the CSA representative is **Michael Bohlman**, chairman.



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Foss-Chevron Alliance Works due to Shared Values; Approaches to Safety, Environment are Keys to Partnership

Foss and Chevron recently observed the fifteenth anniversary of their West Coast "alliance," a relationship that functions more like a partnership than a vendor-customer arrangement.

"We work together on best practices and how to improve our operations," said Foss California General Manager John Marcantonio. "We have shared values with Chevron, particularly with regard to safety and operational excellence, and over the years it's evolved into a brotherly type of relationship."

Chevron Shipping General Manager of Marine Assurance **Tim Coombs** agreed.

"We are aligned on what's important in regards to doing business ethically and with the right value systems, he said. "That's one of the things that really makes the alliance work."

More specifically, Coombs said, Foss and Chevron both place the highest value on safety and environmental protection, which are core values for both companies.

As part of the alliance, Foss provides escort and ship assist services to Chevron on the Columbia River, on San Francisco Bay and in Southern California.

Foss also supplies oil terminals around San Francisco Bay from Chevron's Richmond Long Wharf. And both on San Francisco Bay and in Southern California, Foss delivers Chevron marine fuels to ships with seven double-hulled bunkering barges.

In addition, Foss uses the highspeed service vessel *Piper Inness* to deliver supplies and crewmembers to Chevron ships in the Pacific Area Lightering zone, a designated area about 50 miles off the southern California Coast where crude oil is transferred from ultra-large tankers to smaller ones.

And the Foss tug *Brynn Foss* is assigned full-time to a mooring area

about one and a half miles offshore of El Segundo on Santa Monica Bay, where tankers deliver crude oil and pick up products transferred by underwater lines from Chevron's El Segundo Refinery.

Foss also built two new boats recently at its Rainier Shipyard for the El Segundo Moorings. The *Lucy Foss* handles mooring lines for tankers and the *Ava Foss* shuttles crewmembers to and from the moorings. Foss's *Caribe Alliance* also services ships at the moorings, and the barge *San Pedro* provides vapor recovery services.

Regional committees in each of the three areas where the alliance operates meet regularly to discuss operations common issues.

A steering committee made up of executives and managers of the two companies also meets regularly for long-term planning and strategic analysis. Foss representatives include Senior Vice President Operations Scott Merritt, Pacific Division Vice President Dave Hill and Vice President Safety, Quality and General Counsel Frank Williamson, and General Manager of California, John Marcantonio.

A recent example of how the two companies worked together successfully was the development of the *Lucy Foss* and *Ava Foss* for El Segundo Moorings.

"We worked as a team—from design to construction," Marcantonio said.

Coombs offered another example: Although there were contractual requirements for speed and fuel consumption for the *Piper Inness*, running at the high speeds wasn't good for the boat. So the companies got together and agreed to lower speeds.

"At the end of the day it saved fuel and was more economical for us as well," Coombs said. "We looked outside the contract to ask, 'What makes sense here?'"



The Marshall Foss with a Chevron tanker on San Francisco Bay.

Merritt echoed these sentiments.

"From the first day of the alliance the driving force was not what the contract said, but what was the right thing to do. We knew we could amend the contract if it makes us safer, more efficient and provides value to the companies."

"Foss understands us so well that they produced an end product that truly met our needs," Coombs said.

Chevron has similar relationships with other vendors, but Coombs said Foss is the best example of how an alliance can work.

"It works especially well because of our having similar values—it works the way it should," he said. "With some of the others, it works, but it takes more effort."



The tugs *Garth Foss*, left, and *Corbin Foss* maneuver the barge *Arctic Challenger* in Bellingham Bay in late March. The barge is undergoing modifications at the Port of Bellingham.

where we have a lot of experience and want to increase our footprint."

The Corbin Foss and Lauren Foss are sisters. Each is 149 feet long, 40 feet wide and is rated at 8,200 horsepower. Both tugs have extensive experience working in oil field support operations in the Gulf of Mexico, off the coast of Mexico and in Africa.

Both tugs are receiving extensive modifications, being overseen by Marine Transportation Port Engineer **Lee Scholl**, to prepare for the Shell work.

The improvements include the addition of extra decks to store large workboats, modifications to the cranes, adding accommodations to some of the staterooms and adding ice guards to the tugs' keel coolers. Replacement propellers also are being fabricated for the tugs, and their electronics and communications systems are being upgraded.

Part of the work on the *Corbin* was done at Foss Rainier Shipyard on the Columbia River, after which the tug towed the barge *Arctic Challenger* to Bellingham, where the barge upgrades are being performed. The rest of the work on the *Corbin* will be done at Foss Shipyard in Seattle, which also will do the work on the *Lauren* when it returns after a trip to Korea (see story on page 5.)

Superior Energy Services developed the "Arctic Containment System" being installed on the *Arctic Challenger*. It consists of an oil watergas separation system. Also to respond to possible blowouts, Shell will have on hand a "capping stack" that can be lowered onto a well to stop the flow.

The *Tuuq* underwent modifications in Mobile, with **Steve Roundtree** of Foss Hawaiian sister company Young Brothers and Alaskan consultant **Casey Comfort** supervising. In addition

to being used for storage of drilling equipment, the barge will be used for storage of treated wastewater and other byproducts of the operation that normally would go overboard. Shell's permit for Beaufort Sea drilling calls for zero discharge.



SATISFACTION GUARANTEED

If you promise the moon, be able to deliver it.

– From Satisfaction Guaranteed, By Byrd Baggett

Foss Had No Lost-Time Injuries in Q1 2012 And Once Again Beat Industry-Standard Rates

Foss logged what company officials described as an "excellent" safety record in the first quarter of 2012, reporting no lost-time injuries throughout the company's operations and recordable injury rates that were well below industry standards.

Vice President Safety, Quality and General Counsel **Frank Williamson** attributed the positive performance to the company's "people-based" safety program, which he said is "completely driven by our employees and their safe behavior."

"Any time spent engaging in safety

conversations is well spent," he said, "and maintaining safe behaviors at the forefront of our attention throughout our work is critical to Foss' continued success."

Foss reported two recordable injuries in marine operations in the first quarter and five in its shipyards. All the injuries were minor, the most recent being a finger laceration and a hand strain.

Injury rates are calculated based on the number of incidents per 100 employees during the reporting period and are intended to enable comparisons of companies of varying sizes.

Marine Operations had a lost-time rate of 0.00 and a recordable rate of 1.24 during the first quarter, both significantly better than the American Waterways Operators benchmarks of 1.01 and 2.15 and even farther ahead of the federal Bureau of Labor Statics standards of 1.20 and 4.00.

The Shipyards' lost-time rate of 0.00 and recordable rate of 8.52 compare to BLS standards of 3.20 and 9.30 respectively.

LAUREN FOSS ON TRANS-PACIFIC VOYAGE FROM KOREA TOWING BARGE CARRYING TWO CONTAINER CRANES

The *Lauren Foss* and its crew departed from the port of Masan, South Korea, in early April on a trans-Pacific voyage to deliver the largest single pieces of cargo handled by the company since the Sakhalin Island sealifts that ended in 2006.

The pieces, secured on a 105-by-400 foot barge, are two ship-to-shore container cranes, each weighing about 2,000 metric tons while measuring 180 feet tall and 90 feet wide. They were built at Doosan Heavy Industries, and their ultimate destination is the Military Ocean Terminal in Sunny Point, North Carolina.

"This is an important project for us," said Foss Manager of Business Development **Mike Lauer**. "It's a good opportunity for us to showcase our abilities in the international market."

The project also is significant, according to Lauer, in that it has brought together talent from numerous parts of Foss, including: the Portland group, which helped prepare the chartered barge, the Atlantic Division, which is managing the project, the Pacific Northwest group, which along with Boston is overseeing the loading and



The Lauren Foss leaves the port of Masan, South Korea, with a barge carrying two cranes bound for North Carolina.

discharging the cargo, the engineering group, which drew up the ballasting and loading plans, and Marine Transportation, which is operating the *Lauren*.

Boston-based project manager **Bob Manning** said the challenges of the project started with the *Lauren's* westbound trip, when the tug and barge encountered stormy seas with waves up to 10 meters high in the Aleutian Islands.

In Korea, ballasting the barge was more challenging than usual as the self-propelled module transporters were arranged 90 degrees to the barge centerline during roll-on over the stern. He credited **Dave Dumont**

of Barque Maritime Engineering and Foss Engineering Director **Doug Wolff** for their work on the ballasting and loading plan. Foss took all of the equipment necessary for ballasting to Korea, including pumps, hoses, fittings and other gear.

Another challenge was the width of the barge. At 105 feet in beam it isn't too wide to get through the Panama Canal locks, but its beam is more than the standard maximum of 100 feet. Manning made a trip to Panama to sort out additional requirements for the barge to be towed through the canal, which included adding chocks and bitts in several places.

Foss Line Service Wins PMA Safety Awards

Foss Line Service received a Washington-area award and two coast-wide awards at the 64th annual Washington Area Safety Awards Banquet held by the Pacific Maritime Association Feb. 29 at the SeaTac Hilton.

In the Washington-area category, the Foss group won a 2011 first-place safety award, based on the incident rate as determined by OSHA recordable injury reporting. This is the second year in a row and the fifth of the last six Foss has received this award.

One of the coast-wide awards was a second-place for accident prevention, also based on the incident rate based on OSHA recordable injury reporting. Foss Lines actually was tied for first place with a California lines company with zero recordable injuries. The tiebreaker went to the California company because it logged more long-shore hours worked.



Foss Line Service Manager **Brian Goodwin**, right, received safety awards from **Hank Bynaker**, General Manager and Director of Operations and Marketing at Washington United Terminals in Tacoma.

Foss also received another coastwide accident-prevention award for its two-year zero injury rate with no recordable injuries.

Line Service Manager **Brian Goodwin** credited Line Superintendents **Dan Kerege**, **Dan Ryles** and

Mel Cordova for helping Foss win the awards with their focus on safety culture and called on them to "keep up the good work at keeping our workforce safe in a very challenging environment."



DREW FOSS IN INDONESIA

The Drew Foss pulled into Bintan Indonesia with the barge KRS 130 in late February to take on a load of gravel that was delivered to the U.S. military on the island of Diego Garcia for shoreline remediation work. The Drew and the barge are on a 20,000-mile trip that included a trans-Pacific stop in Honolulu, a delivery to the Marshall Islands in the South Pacific, and stops in Singapore and Indonesia to pick up materials and equipment for Diego Garcia. The tug and barge are expected back in Seattle in June.



INSTALLING A PERISCOPE

The Foss 300 derrick, right, lowered a World War II era submarine periscope recently into the maritime gallery of the new Museum of History and Industry (MOHAI) on Lake Union in Seattle. The working periscope, 39 feet long and weighing 1,775 pounds, was given to MOHAI in 1964 by the Navy as an "indefinite loan" and had been installed in the museum's existing facility on the Montlake Cut. In the photo above, civilian employees of the Navy base in Bangor guide the periscope, still suspended by the Foss crane, to its new base.



LAUNCHING A SUBMARINE

In the photos below, the derrick lifted a 17,600-pound, three-man submarine from a flatbed trailer, high over the docked tug *Sandra Foss*, and into the Lake Washington Ship Canal at Foss Terminal in Seattle on April 18. The new sub, trucked to Seattle from its manufacturer in Florida, is one of three on the 182-foot research ship/superyacht *Alucia*, which was in Foss Shipard for an extensive overhaul. Upon leaving the shipyard, the *Alucia* was to cross the Pacific to Japan, where the subs will search for giant squid for a television documentary. The new submersible, which is capable of diving to a depth of 3,300 feet, was manufactured by Triton Submarines of Vero Beach, Fla.







The Corbin Foss towed the STX Kyla east through the Strait of Juan de Fuca. Alongside the ship is the Justine Foss, which escorted the Corbin and ship for added safety after they entered the Strait.

The ocean-going tug *Corbin Foss* sailed 800 nautical miles off the coast of Washington in mid-April to rescue a 751-foot-long bulk carrier that was adrift after losing power in its main engine.

With Capt. **Mark McKinley** in command, the *Corbin* reached the *STX Kyla* on April 9 after a two-and-a-half day trip from Bellingham and completed the tow in six days safely and successfully to Pier 66 at the

Port of Seattle, where repairs were performed.

"The hardest part was the initial connection," said Marine Transportation Port Capt. **Chris Mack Jr.**, noting that the ships' crewmembers lowered a messenger line to the *Corbin* as the tug maneuvered around the ship's bow in 10–15-foot seas.

Communication with the ship's Asian crew on how to rig the towing gear also was a challenge that the *Corbin* crew overcame, Mack said, adding, "Capt. McKinley and the crew demonstrated great patience."

In addition to McKinley, the *Corbin's* crewmembers were: Chief Mate **Dean Pappas**, Second Mate **Peter Roney**, Chief Engineer **Chris Mack Sr.**, Oiler **Roger Fallon**, Able Seamen **Sam Anderson** and **Ryan Meyer** and Cook Cliff Acre.



STAR ASSIST IN SEATTLE

Foss Capt. Dave Corrie on the tug Pacific Star talks to the pilot of the containership COSCO Long Beach after assisting the ship at the Port of Seattle. The ship is 981 feet long and has a capacity of 8,000 20-foot containers. The Pacific Star is a 98-foot-long ASD tug rated at 6,610 horsepower.

Angie Upchurch Photo

Foss, Coast Guard Work Together on Helo Training; Live Drill Possible During Second Exercise in June

Coast Guard airmen and Foss San Francisco Bay Area Regional Safety Committee members are engaged in a cooperative effort to familiarize Foss mariners with procedures for working with helicopters in emergencies.

Petty Officer **Shawn Pugmire** met with the safety committee in early March to outline the Maritime Industry Rescue Training program being introduced by Coast Guard Air Station San Francisco.

Bob Gregory, Foss regional operations manager, said he hopes that when the committee meets again in June, the Coast Guard will stage a live drill, perhaps with a simulated medical evacuation from a tug or retrieval of a man overboard by a rescue swimmer.

"The goal, in addition to practical training, is to foster a good relationship with the Coast Guard and establish more connection points with them," he said. Gregory added that there would probably be opportunities to hold exercises with the Coast Guard in other areas, such as security.

Pugmire told the Safety Committee the program would familiarize

NEW BREATH-ALCOHOL TESTING UNITS

Louis Meltz president of American Maritime Safety, Inc, gives a breathalcohol test to Colin Evanson, Foss help desk coordinator, as Tina Wissmar of the Foss Human Resources Department shoots video of the demonstration on the Stacey Foss in Seattle. The video will be distributed to all Foss vessels to supplement training materials for the new AlcoMate Premium Breathalyzer devices, which have replaced saliva kits. The new units, about the size of an iPod, meet Coast Guard requirements for post-incident testing and are ISO 9002 certified. Wissmar oversees the company's drug and alcohol testing program.



Around the table, from the left foreground, are Deckhand John Goodwin, Tankerman Richard Smiley, Petty Officer Shawn Pugmire, Tankerman Tom Tynan, Buyer Greg Poettgen, Deckhand Maurice Lessard, Director of Safety and Health Al Rainsberger, Tankbarge Manager Matt Barrett and Leverman Sal Hernandez. In attendance but not in the photo were Marine Personnel Manager Laura Rosenberg, Customer Service Manager Dan Eddleston, Dredge Superintendent Mike Erwin, Tankerman Eric Partika and retiring Tankbarge Manager Walt Partika.

vessel crews with procedures that would be used in an actual rescue, including rescue basket delivery and rescue swimmer deployment.

Foss Director of Health and Safety **Al Rainsberger** called the program

"an opportunity to work with another agency that would provide us with assistance in case there was a situation where we needed a helicopter for an emergency or the rescue of Foss personnel."



Foss International Makes Rare Visit to Communist Country; Strong Mariner Delivers Supplies to Recover GIs' Bodies

By Reed Clark and Robert Wagoner

Foss International and American Presidential Lines (APL) have successfully partnered for the first delivery U.S. flag cargo into North Korea in over five years.

The shipment process started in December 2011 and needed approvals from various government agencies including U.S. State Department, Commerce, Treasury, U.S. Transportation Command, and MARAD, before a U.S. flag vessel would be allowed to enter North Korean waters.

The U.S. military cargo was initially lifted by an APL vessel in mid February in Busan, South Korea, for transshipment in Qingdao, China. From Qingdao, Foss's Integrated Tug and Barge, Strong Mariner, captained by Arvid Anderson, loaded the 85 containers for delivery into Nampo, North Korea. Director of Operations, Rob Wagoner and Super Cargo William Roy were flown to China to assist in operations throughout the voyage. Foss was fortunate to have Capt. Anderson and Roy on the voyage as both previously had been to Nampo prior to the sale of Foss International's predecessor company (ACTC) to Foss.

The cargo consisted of supplies for recovering bodies of American soldiers killed in the Korean War. This first voyage by the Strong Mariner additionally served as a proof to the U.S. government of Foss's ability to safely deliver cargoes into North Korea.

As Foss was a subcontractor to APL, the APL team took a primary role with the North Korea state-owned agency (KOSA).

Foss coordinated closely with APL's operations team and APL's



The Foss International team was photographed in Nampo by their North Korean agent in front of a statue of of the "Great Leader," Kim Il-Sung, who ruled from 1948 until his death in 1994. It is the only photo they have, as cameras and phones were confiscated for the duration of their visit. From left are Bosun **Jon Blair Peterson**, Able Seamen **John Carlson** and **Scott Matis**, Director of Cargo Operations **Robert Wagoner**, Capt. **Arvid Anderson**, Cook **Richard Frakes**, and Assistant Engineer. **Dustin Van Duin**.

container terminal provider QQCTUA in Qingdao to load the containers with two possible discharge scenarios in mind. One focused on using Nampo's only gantry crane at the DPRK State Container Terminal, just a few years old.

The second scenario was based on ACTC's humanitarian deliveries to Nampo's DPRK Terminal in 2002–2003 and called for a self-sustaining discharge at a breakbulk berth. The barge was equipped with a 40-metric-ton crane, one 30-ton

forklift, one 15-ton forklift, a yard truck and 40-foot trailers along with 8,000-pound forklifts for container stripping, enabling a turnkey operation without any assistance from the DPRK stevedores or the container yard.

In addition, Foss needed to vet the lock system, ice conditions and the draft at the pier not knowing fully where the discharge would occur. In both cases it wasn't until the vessel arrived at Nampo Port that the decision to use the DPRK State Container Terminal was confirmed. Discharge



The rack of signal flags on the Strong Mariner is evidence of the the ITB's world travels.

operations were quick, only taking four hours to offload the 85 containers.

Communication with The Korean Ocean Shipping Agency of the DPRK proved to be a challenge as it could initially only be accomplished through a third party agency in China coordinated by APL. Direct communications with KOSA weren't established until the vessel had reached the Nampo Pilot station; those communications were made strictly by VHF radio channel 16.

Upon reaching the pilot Station the vessel was joined by two DPRK pilots, two immigration officers and one quarantine officer for the remainder of the voyage to Nampo Port. After the DPRK officials checked the passports and vaccination cards of the two Foss supercargoes and ten crew members, collected and sealed all cameras, cell phones, binoculars, and disabled the ships SATNAV, the vessel was allowed to proceed to the lock/gate for passage into Taedong Gang (Nampo).

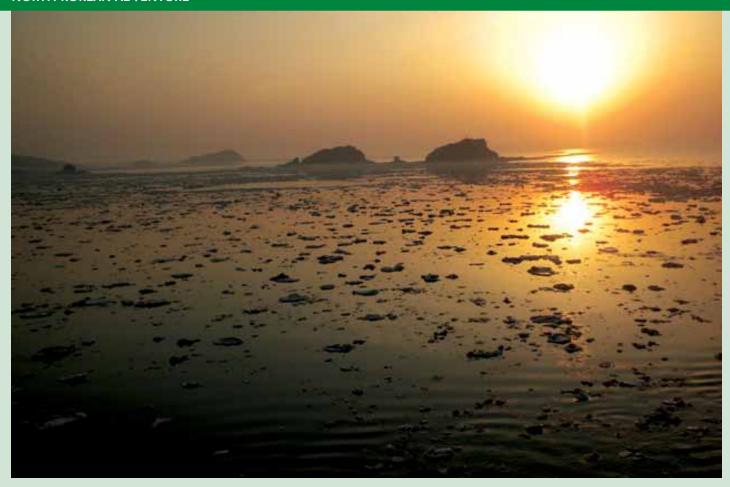
Transit through the lock was seamless and well coordinated; the vessel encountered ice immediately varying from 10-15 inches thick and with darkness approaching made the 12-mile

(Continued on page 12.)



The Strong Mariner leaves a trail through thick ice after departing from North Korea.

Foss representatives worked to develop a mutual working relationship with KOSA during the vessel's three- day port stay, focusing on improved direct communications, available Port infrastructure and logistics and future business opportunities.



Their cameras returned, the crew shot this photo after the tug departed from Nampo.

(Continued from page 11.) transit to Nampo Port anchorage with steady attention paid to safety by the captain and pilots.

Foss representatives worked to develop a mutual working relationship with KOSA during the vessel's three-day port stay, focusing on improved direct communications, available port infrastructure and logistics and future business opportunities.

The KOSA agents and all DPRK officials were professional and respectful throughout the vessel's Nampo visit. The mission was completed through the efforts of the Marine Transportation Team, Jim Daley, Doug Pearson, Mary Beedle, Reed Clark, Rob Wagoner and William Roy and the *Strong Mariner* crew led by Capt. Anderson in coordination with APL.

Days prior to Kim Jong Il's death, the United States Agency for International Development (USAID) representatives were in China

negotiating with the DPRK (North Korea) to reopen the flow of food aid to the beleaguered country.

Since Foss delivered the supplies into North Korea, representatives from USAID returned to China the first week of March, resuming negotiations with North Korea on the so called "food for nukes" program.

The current projection is for more than 125,000 metric tons of food aid to be delivered in 2012. This volume has the potential to provide a year of work for either of Foss' roll-on roll-off barges in partnership with a U.S.-flag carrier to handle the shipments.

Foss, as a subcontractor, needs to partner with a carrier like APL which has regular U.S.-flag service to the Far East, where cargo can be relayed to Nampo with Foss International's *Strong Mariner*. If the shipments are approved, the business would go through the USAID monthly bidding process.

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Humberto Moreno, right, helped handle the lines as the W.C. Park Responder was moved into drydock on April 25.

Shipyard Begins Six Week Overhaul on Everett-Based Oil Spill Response Vessel

Foss Shipyard is performing a six-week overhaul on the W.C. Park Responder, one of 15 210-foot ships built to improve the nation's oil-spill-response capabilities following the Exxon Valdez incident in 1989.

The ship and its sisters are stationed around the country and owned and operated by the Marine Spill Response Corp. (MSRC) a company created by the major oil companies to comply with spill cleanup requirements of the Oil Pollution Act of 1990.

Foss Shipyard Production Manager **Hap Richards** described the work on the *W.C. Park Responder* as "a big job for us that will bring in pretty much all the crafts in the yard."

It includes removing 90,000 gallons of fuel from the ship and cleaning the tanks.

The yard also will sandblast and coat all voids in the vessel, plus four large holding tanks for oily water and its ballast tanks. In addition, the ship will be painted from the keel to the cap rail.

Another major aspect of the job is replacing its hydraulic hoses. All of the deck equipment on the ship is hydraulically controlled, as using electric equipment might be dangerous in the explosive environments the ship was designed for.

"It's a pretty straightforward job with a lot of sandblasting and painting," said **Don Harris**, the ship repair superintendent overseeing the work. "There's nothing really complicated, just a lot of work. We will be putting one foot in front of the other to get it done."

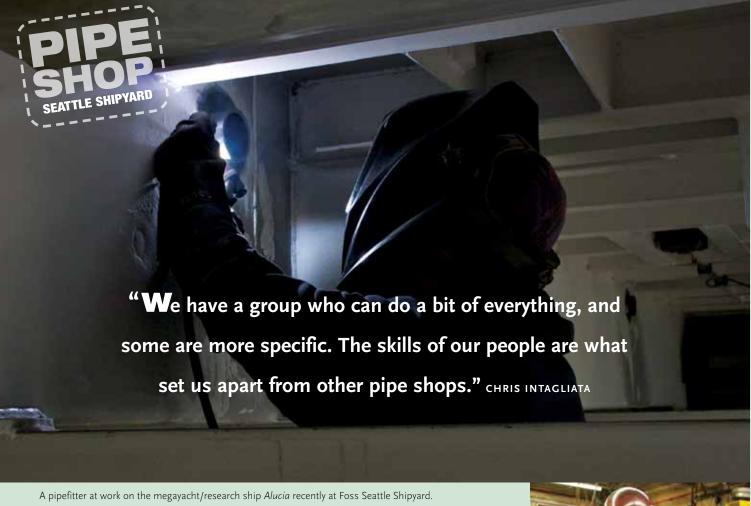
The ship was built in 1992 at Halter Marine in Lockport, La., and was originally called the *Washington Responder*. It was renamed a few years ago for an MSRC regional manager who died of cancer and is homeported

in Everett, Wash.

In addition to their hydraulic systems, the *W.C. Park* and its sisters are unique in their ability to maneuver at a speed of 1 knot, enabling them to tow a boom slowly enough that oil won't escape underneath the boom.

The ships have slipping clutches between their main engines and propellers that enable their engines to maintain high RPMs and run the hydraulics while the propellers turns slowly.

Holding tanks on the ships are capable of storing 4,000 barrels of recovered oil, which during an incident would be pumped to MSRC barges. The ships also are equipped with large oil-water separators, enabling them to discharge separated water overboard while maximizing oil storage capacity.



SPECIALIZING IN ALL KINDS OF PIPING.

The various crafts in shipyards are grouped into "shops." The Pipe Shop at Foss Seattle Shipyard employs 14 pipefitters who install piping systems, tubes and hoses made of a variety of metals and plastics in vessels undergoing maintenance, repairs and upgrades at the yard. Their work encompasses hydraulic and refrigeration systems, engines and motors, marine sanitation devices and residential-style plumbing, such as sinks and toilets.

PERSONNEL WITH A VARIETY OF SKILLS

Pipe Shop Foreman **Chris Intagliata** says his workers have a unique blend of skills. Five are expert operators of the shop's pipe bending machines, skills that save time and money for customers, compared to welding an elbow into a pipe. A skilled worker can bend a pipe in five minutes, and welding in an elbow can take two hours.

Half of the Pipe Shop workers are expert welders, particularly in tungsten inert gas, or TIG, welding, which produces stronger, higher-quality welds than other methods. "Ninety percent of what we do are TIG welds," Intagliata said. Seven in the pipe shop also are experts in fabricating hydraulic hoses and tubing, which



Foreman **Chris Intagliata** displays a high-quality "TIG" weld executed in the Seattle Pipe Shop.



Pipe Shop crewmembers, from left, are Brandon Nordeste, Bobby Flickinger, Carlisle Phillips, Debbie Arroyo (front), Nicholas Soha, Chris Intagliata, Justin Fuzie, Jonathan Hetzel, Joel Rydzak, Steve Riverman, Bruce Shaw, and Adam Caron.

Intagliata said is an unusually high number for a group the size of his. Three are qualified in residential-style plumbing.

"We have a group who can do a bit of everything, and some are more specific," Intagliata said. "The skills of our people are what set us apart from other pipe shops."

FABRICATING PIPE ASSEMBLIES IN THE SHOP

Another practice that sets the Foss Pipe Shop apart from others is that it generally builds pipe assemblies inside its shop, not in the vessels, as most pipe shops would. The process requires precise measurements of the spaces where the assemblies will be installed. "It takes a lot of skill, but it takes care of housekeeping problems and it's safer," Intagliata said. "Welding blackens everything. When we go into a room that's white, it's also white when we leave it."

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everything. When we go
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we leave it.""

CHRIS INTAGLIATA



Keel-Laying Ceremony Kicks Off Construction of New State Ferry at Foss Rainier Shipyard on the Columbia River

Construction of a new 20-car ferry for the Washington State Department of Transportation is underway at Foss Rainier Shipyard following a keellaying ceremony on March 28.

Shipyards Director Mark Houghton said half-inch aluminum plate for the ferry's main deck arrived at the yard in early April and was laid on a steel jig upon which the ferry hull is being built upside down.

Already assembled at the yard are two dome-shaped fabric enclosures where craftsmen will build aluminum components of the ferry. Aluminum welding requires protection from the weather and temperature control.

A third, larger enclosure (140 by 82 feet) was being shipped to the yard from Florida in three pieces. The 116-foot-long hull will be assembled in the portable enclosure, which will be broken down and moved to the eastern Washington launching site for final assembly of the ferry.

The guest of honor at the keel-laying was Washington State Department of Transportation (WSDOT) Secretary Paula Hammond, who was the ceremonial assistant to the yard's Keith Gorans as he welded a representation of the ferry's vertical keel to an aluminum plate.

Hammond spoke at the ceremony, along with Foss President and COO Gary Faber, WSDOT East Regional Administrator Keith Metcalf, Sylvia Peasley of the Council of Colville Confederated tribes and Rainier Mayor Jerry Cole.

Also at the ceremony were Oregon State Sen. **Betsy Johnson**, whose district includes Rainier, and **Steve Peters**, WSDOT project manager.

The ferry will be assigned to a 1.25-mile Columbia River crossing on State Route 21 between the Colville Reservation and Lincoln County. It is scheduled to be delivered in May 2013 and will replace a six-car ferry, the



Keith Gorans welds a representation of the ferry's vertical keel onto an aluminum plate at the keel-laying ceremony.



State Transportation Secretary **Paula Hamond** displays a plaque commemorating the keel-laying. Also in the photo are Shipyards Director **Mark Houghton** and **Luba Babadzhanov** of the shipyard sales team.

Martha S., which has been in service since it was built in 1947.

As part of a partnership between Foss, the state and the tribes, tribal members will participate in the final assembly at Crescent Bay, Wash.

ALWAYS READY

Globetrotting Summers Takes Safety Program Worldwide

Knows Safety. Will Travel.

That pretty much describes the message **Clark Summers** has been spreading recently in the Foss International division, whose tugs and barges at any given time could be in such far-flung places as Asia, the Middle East and Africa.

"What makes Foss International unique is they really have a global footprint," said Summers, the safety coordinator for the company's marine operations. "There's no center of mass where you can find a group of mariners to participate in a regional safety committee meeting."

"And it's pretty straightforward—if you don't have the vessel crews, you don't have a good committee."

So Summers goes to them.

He recently caught up with one crew in Mobile, and in October, headed for Naha, Okinawa, Japan, to convene a meeting with crewmembers of the integrated tug-barge Strong Mariner.

Crewmembers and managers discuss a wide range of safety issues at these meetings, some specific to their particular vessel and some of more fleet-wide concern.

On the *Strong Mariner*, for example, crewmembers wondered whether it would be possible for the captain to make exceptions to the requirement that they always wear floatation vests on deck, as required by the Safety Management System (SMS).

They noted they rarely work outside the bulwarks or are in danger of being tossed overboard. Summers said he explained the process required to change the SMS.

"These meetings are always productive," Summers said. "Foss International crews sometimes have a sense of isolation because they're not doing inland or harbor work, and they appreciate it when we make the effort to take the meetings out to them so



Clark Summers

they can be involved in a valuable part of our safety program."

So he's ready to go, wherever and whenever he's needed.

"Wherever Foss International boats are operating and need support from the safety team, I'm first in the chute," he said.

FOSS ENGINEERING TECHNICAL MANAGER ADDRESSES MIDSHIPMEN, DISCUSSES ETHICAL DECISION MAKING IN ABSENCE OF REGULATION

The challenges of designing and building a cutting-edge vessel, so advanced that it isn't covered by existing regulations, were outlined for U.S. Coast Guard Academy midshipmen recently by a Foss engineering manager.

Fleet Engineering and Technical Support Manager **Tim Stewart** focused on the hybrid tug *Carolyn Dorothy* in lectures on April 19 to marine safety and naval architecture/engineering students at the academy in New London, Conn.

"When you build a tug in advance of regulatory guidance, how do you determine the right thing to do?," Stewart asked. "When you're not required by regulations to comply, how do you decide what's proper, safe and ethical?"

The answer, according to Stewart, is

that the maritime industry in general, and Foss in particular, doesn't make ethical design and construction decisions only when forced to do so by regulations.

"We make decisions based on safety of the crew, safety of the vessel and environmental responsibility that go way beyond regulatory requirements," he said.

The *Carolyn Dorothy* was built at Foss Rainier Shipyard in Oregon and entered service in 2009 as the world's first hybrid tug. Since then, Foss has retrofitted the *Campbell Foss* with hybrid power.

Speaking to the midshipmen, Stewart outlined the benefits of hybrid technology as it applies to harbor tugs, which require the full power of their diesel engines only part of the time, when assisting ships. Switching to electric propulsion at other times, such as when the tug is traveling to jobs, saves fuel and reduces emissions, he said.

During seven months of emissions testing, compared



Tim Stewart of Foss with Rear Adm. **Sandra Stosz**, superintendent of the U.S. Coast Guard Academy.

with its diesel-powered sister tug the *Alta June*, the *Carolyn Dorothy* showed a 73 percent reduction in particulate emissions; a 51 percent reduction in nitrous oxide emissions, and a 27 percent reduction in carbon dioxide emissions.





The Leslie Foss, in a circa 1952 photo, heads east through Seattle's Hiram Chittenden Locks.

Leslie Foss and 'Miki' Class Tugs Were Backbone Of Foss' Coastwise and Ocean-Going Fleet

By Mike Skalley

The original *Leslie Foss* operated for Foss Launch and Tug between 1951 and 1968. It was the sixth of nine World War II built "Miki" class tugs purchased by Foss. The *Leslie*, originally the U.S. Army, LT-495, was 117 feet in length and powered by a single 1,200 horsepower Superior diesel.

The wooden-hulled *Leslie* had a fuel capacity of 28,000 gallons with an average consumption of 1,200 gallons per day. The *Leslie* and the other eight

Miki-class tugs were the backbone of the Foss ocean and coastwise fleet for many years, until a new building program was undertaken in the late 1960's and early 70's.

During its relatively short career with Foss, the *Leslie* covered all areas of the West Coast stretching from the Panama Canal, west to the Hawaiian Islands, and north to the Bering Sea of Alaska. After its sale from Foss the *Leslie* operated for numerous companies both as a tugboat and private yacht, finally being scrapped in

Anacortes some 56 years after its construction.

Editor's Note: Mike Skalley is the Foss historian and the author of "Foss: Ninety Years of Towboating."



Capt. Mick Burton liked Freedom and Working on Water

Capt. **Mick Burton**, a 43-year Foss mariner known as a good teacher and boat handler, died in his sleep on March 26 at his home near Tonasket in northeastern Washington. He was 77.

Capt. Burton joined Foss in 1952 and retired in 1995. He was captain of the *Claudia Foss* for many years, running the tug on the North Vancouver rail-car run and then on the container barge service between Surrey, B.C., and the ports of Seattle and Tacoma.

His wife, **Noriene**, who also retired in 1995, was the first woman to work as cook on a Foss tug. Her maiden name was Frederickson, and her fellow crewmembers knew her as "Fred."

"Mick liked his freedom and working on the water," his widow said. In addition to his service on the Claudia, Capt. Burton ran the Donna Foss on the car barge run before the Claudia. He also worked on both the old, conventionally-powered Wedell Foss and the newer Voith-powered tug with the same name.

"He was an excellent captain, teacher, crew and boat handler," current Foss Capt. Loren Stout recalled of Capt. Burton. "He had an uncanny weather eye, and never lost a railcar from his many tows through all weathers."

At the ranch where he and his wife retired, according to Stout, Capt.Burton lived with his dogs, llamas, cows and other animals. When he worked on the *Claudia Foss*, Capt. Burton would bring along his golden retriever "Tug," who Stout described as "a great sea dog."

Retired Chief Engineer Steve Burns,



Mick Burton

who worked for Capt. Burton on the *Claudia Foss*, described him as "a real fair guy. He loved his guys on the boats, and he took good care of us."

PASSINGS

RICHARD BERGHAMMER

Retired driver, PNW

Richard Berghammer, 83, a retired driver with the Seattle trucking group, died as a result of a stroke on Nov. 16, 2011. Mr. Berghammer joined Foss in the early 1960s and retired in 1993.

His widow, **Betty**, said Mr. Berghammer loved working at Foss because of the company's "family feeling," and in his retirement, Foss hats were among his favorite things. "He wore out two of them," she said.

Mr. Berghammer's and his wife's home is in Bonney Lake, southeast

of Tacoma. In his retirement, he gardened, fished, enjoyed fixing cars, and loved spending time with his children, according to his widow.



NEW EMPLOYEES

Alex Otero

New construction estimator and project manager, Seattle Shipyard.

Jim Blake

Manager of fleet engineering, Northwest Division.

RETIREMENTS

Tom Merchant, assistant foreman of the truck drivers in the Foss Purchasing Department in Seattle, retired April 27. Merchant joined Foss in 1974 as a warehouseman before joining the driver group.

Greg Schaut, Northwest Division fleet engineering manager, retired May 3. He joined the company as an apprentice in the shipyard's Inside Machine Shop in 1974 and worked his way up to foreman and superintendent. He became Pacific Northwest port engineer in 2005 and then Marine Transportation Port Engineer before moving to his current position.

Leland Schmidt retired March 31 after 35 years of service. Schmidt began his career in Everett and retired from the Seattle Customer Service Department.

Lloyd Wilbur retired Dec. 31 after 41 years of service. Wilbur began his career in Everett and retired from the Seattle Customer Service Department.



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FOSS AND CHEVRON MAINTAIN 15-YEAR ALLIANCE

The Foss tug America assisted the Chevron tanker Cygnus Voyager on San Francisco Bay recently. Foss and Chevron recently observed the 15th anniversary of their "alliance," a relationship that functions more like a partnership than a vendor-customer arrangement. Story on page 3.