

## Foss is on the Front Lines as Construction Starts on New Bridge over Tacoma Narrows



Bill Sutton Photo

*With the existing Tacoma Narrows Bridge above them, the enhanced tractor tugs Lindsey Foss, left, and Garth Foss tow a 14,000-ton caisson for the new bridge into position on August 18. The caisson, and another towed to the site on July 21, will be the foundations for the bridge's towers.*

Harnessing its ability to combine substantial horsepower with seasoned project planning skills, Foss Maritime this summer joined the team building a second suspension bridge across the Tacoma Narrows on Puget Sound.

Tacoma Narrows Constructors (TNC), a joint venture of Bechtel Corporation and Kiewit Pacific, brought Foss on board to tow two giant caissons — which will form the bridge's

tower bases — from the Port of Tacoma to the construction site 10 miles away.

Foss successfully executed separate 10.5-hour tows of the 14,000-ton rectangular structures on July 21 and August 18. Tugs then held the caissons in place, against swirling tides sometimes exceeding three knots, as crews attached 16 anchor lines to each, a process that required five days for the first caisson.

“From the tow boat end, things went just as we had expected,” said Pacific Northwest Port Captain **Steve Kimmel**, who wrote the project plan and acted as on-site manager for Foss.

He noted, however, that crews from other companies faced challenges in attaching the permanent anchor lines to the first caisson, including untangling

CONTINUED ON PAGE 12

## Inside *Tow Bitts*

The State of Washington is building a second suspension bridge over the Tacoma Narrows, and Foss this summer deployed two 8,000-horsepower enhanced tractor tugs to tow the first major structural components to the site.

..... Cover

Paul Stevens, the new President of Marine Resources Inc., brings 27 years of maritime business experience to his job as head of the holding company that oversees Foss and five smaller tug-barge operations.

..... Page 3

In an attempt to take the "next step" in its safety program, Foss is turning its attention to worker behavior as the primary cause of on-the-job accidents.

..... Page 4

Four Foss tugs arrived before the daily winds of San Francisco Bay and successfully moved a 900-foot dry dock before it had a chance to set sail.

..... Page 7

Foss and "K" Line have a longstanding relationship under which Foss provides vessel assists, bunkering and line services for the Japanese-owned company at the Port of Tacoma.

..... Page 8

A Foss team battled low visibility and high swells while contending with a surf-washed beach to successfully land cargo this summer at an Exxon site on an island off the east coast of Russia.

..... Page 10

The *Barbara Foss* is back in Neah Bay, serving as the state's winter rescue tug and providing protection against spills and other potential hazards from ships entering the Strait of Juan de Fuca.

..... Page 18

## *Tow Bitts*

*Tow Bitts* is published quarterly by Foss Maritime for Foss employees, customers and friends. Changes to the *Tow Bitts* mailing list should be referred to the Marine Personnel office in Seattle, (206) 281-3821/3830. *Tow Bitts* editor is Bruce Sherman, graphic designer is Stacy Mutnick and coordinator of production is Gil Graham, Foss Vice President of Human Resources.



# Lines

By Steve Scalzo,  
President & CEO

## Fact Versus Fiction: A Short Overview of The Jones Act



*Lines* continues to generate many comments and suggestions regarding Foss' operations and the many business issues affecting our company. It was most gratifying to receive

your supportive thoughts about the numerous projects and activities we have underway during the second and third quarters of this year — several of which are featured in this edition of *Tow Bitts*.

Again, it is your dedication to the safe and successful completion of these very challenging jobs that enables us to exceed our customers' performance expectations. I recently received several very complimentary letters from our customers expressing their appreciation for the quality of your hard work. Thank you — the "Always Ready" tradition of safe, reliable and quality service continues because of the strength of Foss' personnel.

I also received several questions about the Jones Act, which affects the work we perform and how we perform it. With the help of Joe Langjahr, we pulled together a short overview of this important law.

The Jones Act is the law that reserves the coastwise trade for vessels built in the United States, owned by U.S. citizens and manned by U.S. crews.

As many of you know, foreign vessel owners have utilized a 1996 statutory change regarding lease financing of Jones Act vessels to enter the coastwise trade. There have also been proposals from time to time in the past that would exempt certain trades from the requirements of the Jones Act based on the belief that foreign-owned and foreign-manned vessels would be less expensive to operate in U.S. waters. Recently, legislation has been proposed

that would amend or repeal the Jones Act as it applies to the Hawaiian trade.

I strongly believe that such legislation is not in the best interest of domestic waterborne transportation.

Many people outside our industry have misconceptions about the Jones Act, but once they understand the importance and value of the Act, they too become very supportive. I'd like to share some facts about the Jones Act with you.

## Benefits of the Jones Act

The Jones Act and its U.S. flag requirements bring important benefits. These include **national security** — a concern that has become unfortunately very real to each and every one of us in recent times. By contract, our vessels will be made available to the U.S. military in times of emergency. American seamen are the expert, experienced seafarers that provide the essential manning for sealift ships in times of national emergency. And Jones Act vessels support a modern shipyard industrial base critical to the nation's military and economic base.

U.S. flag vessels are also held to **higher safety and environmental standards** of the U.S. Coast Guard and other agencies. Also, U.S. flag vessel operators are subject to the U.S. Civil Rights laws, the National Labor Relations Act, federal hours-of-service regulations, and numerous other requirements not applicable to foreign flag vessels.

Owners of U.S. flag vessels and the U.S. shipyards that build and maintain these vessels pay about \$355 million annually in **federal and state taxes**. Further, American employees on Jones Act vessels and related industries pay \$1.41 billion in federal income taxes and \$322 million in state taxes. Foreign vessel owners and foreign crews do not pay such taxes.

And lastly, the Jones Act produces **jobs** for the American people. More than 124,000 people are employed in

CONTINUED ON PAGE 5

# New President of Marine Resources Inc. Hopes To Help Foss and Sister Tug Companies Grow

**Paul Stevens** will be the first to tell you that he doesn't know a whole lot about the towing industry.

But in 27 years at Matson Navigation Company, Stevens said he gained wide-ranging management experience in an assortment of business lines and developed a sense of how management should be structured and motivated.

"Those skills and a broad knowledge of the maritime business are what I bring to this organization," said Stevens, who this summer became President and Chief Executive of Marine Resources Inc. (MRI), a holding company that oversees Foss and five smaller tug-barge operations.

Stevens most recently was executive Vice President at Matson, responsible for the day-to-day operations of the company, including shipping, intermodal operations and logistics. Matson is the leading carrier of cargo between the U.S. West Coast and the Hawaiian Islands.

Stevens, 50, became acquainted with MRI parent Saltchuk Resources through Sea Star Lines, a Matson/Saltchuk/Intership joint venture company that carries cargo between the mainland, the Caribbean and Puerto Rico.

"I met **Mark Tabbutt** (SaltChuk President) and **Bob Magee** (Chief Executive of both Sea Star and Saltchuk's Totem Ocean Trailer Express), and I admired the way they conducted business," Stevens said. "Mark and I began chatting about possible opportunities."



Dan Porter Photo

*Paul Stevens, right, chats with Marine Transportation Specialists **Walt Partika**, left, and **Greg Poettgen** during a visit to Foss San Francisco Bay Area headquarters in Richmond, California.*



*Paul Stevens is the new President of Marine Resources Inc.*

He said the MRI position is a "new challenge — something to get my juices running with a group of companies and people that all have great reputations." Stevens added:

"The challenges are to bring a structure to these various businesses and set up a strategy to grow the business."

A native of Brooklyn, New York, Stevens was raised in New Jersey and moved west at the age of 16 when Johnson & Johnson transferred his father to California. He finished high school in Southern California and went to the University of San Diego, earning a B.S. in business administration. He earned a Master's Degree in international management at the American Graduate School of International Management and attended a program for senior executives at Massachusetts Institute of Technology.

Recruited out of graduate school by Matson, Stevens took a sales job in Southern California and subsequently was made Manager of Matson Agencies (which represented NYK Line). He later was promoted to Sales Manager for Matson's Hawaii service and also worked for Matson Terminals where he helped plan the conversion of the company's Terminal Island facility to overhead container handling.

He moved to Honolulu in 1981 and entered the company's executive development program, working in terminal operations for about two years and then moving to San Francisco as General Manager of freight operations. He then ran the company's container terminal in Oakland and subsequently

CONTINUED ON PAGE 6



# Fundamental Shift in Accident-Prevention Effort Will Transfer Foss' Focus to 'Human Element'



Attending a gathering of Foss Shipyard's Behavioral Safety Design Team on August 27 were, clockwise from bottom right, Director of Safety and Quality Assurance **Mike Sutton**, Safety Consultant **John Stafnsnes**, President and CEO **Steve Scalzo**, Driver Assistant Foreman **Tom Merchant**, Steel Shop Foreman **Mike Kammer**, Swing Shift General Foreman **Kenny Younger**, Ship Superintendent **Greg Schaut**, Paint Shop Foreman **Bill Ibsen**, Outside Machine Shop Foreman **Paul Erikson**, Terminal Manager **Steve Spencer**, Shipyard Director **Jim Stewart** and Shipyard Office Administrator **Mindy Osbjornsen**.

Foss Maritime is implementing an important shift in its safety program, moving the effort beyond its traditional emphasis on the working environment and toward a focus on what is a far greater cause of accidents — worker behavior.

The "Behavioral Safety Program," as it will be known, also aims to embed safety into the company culture, as has been done at Dupont, ChevronTexaco, and other corporations with what are considered to be world-class safety efforts.

Foss has hired **John Stafnsnes**, a retired ChevronTexaco executive now working as a consultant, to help develop and implement the program. Stafnsnes played a key role in implementing a successful behavioral safety program at ChevronTexaco.

The program started with a series of focus groups among shipyard and marine employees. Later, the company will train observers, including rank-and-file workers, who will watch their

fellow employees do their jobs while looking for unsafe behaviors. Currently, a design team is developing plans for observations.

And in a continuing process, observers will gather data that will be used to correct those behaviors while reinforcing and describing safe behaviors for every potentially hazardous task performed by marine and shipyard employees.

**Mike Sutton**, Safety and Quality Assurance Director, said Stafnsnes evaluated the existing Foss safety program and found it to be effective, as far as it went.

"But we've taken hard hats and safety glasses and safety policies as far as we can," Sutton said. "If we want to continue down that road to becoming a world-class safety program, then we need to take that next step."

President and CEO **Steve Scalzo** said Foss' emphasis on safety, both ashore and afloat, is part of what differentiates the company from its competitors.

"We have the equipment, personnel and expertise to perform successfully for our customers and we do our jobs safely," Scalzo said. "All of those things are important parts of the package we offer."

Shipyards Director **Jim Stewart** said he is "encouraged, excited and committed" to the program, which has the potential to significantly reduce injuries to employees. "This process will encourage teamwork and streamline a number of our processes, resulting in safety becoming a key element of our culture," Stewart said.

More than 80 percent of incidents are the direct result of unsafe acts or what the safety director described as "people issues." "We all know we can create a perfect environment, yet when the human element is introduced, almost anything can and will happen," Sutton said.

Also, according to Sutton, traditional safety programs depend on managers for planning and decision making. That sets the programs apart from the workers doing the jobs and makes it less likely that those workers will "buy into" the programs.

Sutton said it will be important to overcome any discomfort among employees with co-workers observing and recording their work processes. "That gets to the genesis of what this is all about," he explained. "Employees are

## Behavioral Safety

"To further build our culture so everyone positively reinforces safe attitudes and behaviors and works to eliminate identified barriers to safety."

— From the Purpose Statement for the Behavioral Safety Process

going to have to observe tasks and point out unsafe things their co-workers are doing.”

Among the many tasks to be observed, for example, might be welding or building a scaffolding. The observer would watch the work and identify the safe and at-risk behaviors, which might involve such things as the use of safety equipment or housekeeping. If the task involved driving a vehicle, the observer might take note of the speed.

Then the observer could come up with a checklist of behaviors.

“They would just say these are the types of behaviors to look at when you perform a particular activity, and give the checklist to employees,” Sutton said.

Out of the data gained through observations, “a number of items will jump out at us — behaviors that we have to fix — and we’ll train people to work that out.”

Sutton said the Behavioral Safety program will be “a living, breathing entity,” in line with Foss’ goal of continuous safety improvement.

“In the past, sometimes we would accept the hazard of the job and try to work around it,” he explained. “Now, we’re looking at how we deal with those hazards.”



### **Double Delivery**

*The Foss “Rocket Ship” in May carried two Boeing-built Delta IV Common Booster Cores (CBCs) in its cargo bay, delivering them from a factory in Decatur, Alabama, to Cape Canaveral, Florida. The CBC, also known as a “flight vehicle” is a large fuel tank, coupled with rocket motors, used to lift payloads into space. While capable of carrying three CBCs, the M/V Delta Mariner had previously carried only one at a time since October 2001. The May voyage also marked the first time the ship has carried the “heavy-launch” version of the Delta IV flight vehicle, which can handle a payload of up to 29,000 pounds. The heavy-lift Delta IV is viewed as a candidate to be the launch vehicle for a new “space plane,” successor to NASA’s space shuttle. In the photograph, the CBCs are rolling off the Delta Mariner at the custom dock at the Port of Cape Canaveral.*

### **Lines**

CONTINUED FROM PAGE 2

jobs all over the U.S. that are directly related to the U.S. flag domestic shipping industry. The Jones Act trade is a major contributor to U.S. employment and U.S. industry.

The Jones Act fleet of more than 44,000 vessels directly contributes approximately \$15 billion per year to the U.S. economy and represents an investment of about \$26 billion in vessel construction. The domestic merchant fleet creates 87 percent of the entire seafarer employment base in the United States, and touches the economy of every U.S. region. Each year the Jones Act fleet transports about 1.1 billion tons of cargo worth approximately \$222 billion; and

generates an additional \$3 billion in tourism and support of the oil and gas and marine industries.

### **Jones Act Is Not a Unique Transportation Policy**

It is important to also point out that every major mode of transportation in the United States is governed by its own form of “Jones Act” — this is a major tenet of U.S. transportation policy. Air service between two U.S. domestic points can only be offered by U.S. air carriers. For example, Japan Airlines or Air France cannot transport passengers between the Seattle and Anchorage. Similar laws apply to railroads and trucking companies. Furthermore, the Jones Act is not unique with respect to the laws of other nations. In fact, 48 of the 54 most important maritime nations have similar laws.

There is an on-going need to educate the public and political leaders on the importance of the Jones Act to U.S. homeland security, economic, and environmental interests. Support for the Jones Act is a fundamental policy of Foss’ political efforts and we will continue these efforts to ensure the continued integrity of the U.S. cabotage laws.

If you have any questions regarding the Jones Act, please do not hesitate to contact Joe or me. Also, forward to me your questions, suggestions and ideas for interesting topics for future *Lines* articles.

Be safe,

# Red Dog Team is on Track in Spite of Rough Alaska Weather

A Foss team of four tugs and two barges was working through tough weather conditions this summer but expected to meet its lighterage goals at the Red Dog Mine Port in Northwestern Alaska.

Marine Transportation Port Captain **Doug Pearson** said higher than average temperatures meant there was no ice in sight when the Foss convoy arrived in late June. Although they had an ice-free voyage to the Port, the lack of ice also meant higher swells and more challenging working conditions.

Pearson said in mid-August that the weather had been “awful,” noting, “it’s hard to get a working window — it’s not one ship at a time, it’s one barge load at a time.”

But Pearson said the barges *Kivalina* and *Noatak*, working with the tugs *Iver Foss*, *Sandra Foss*, *Stacey Foss* and *Jeffrey Foss*, were on track to reach their goal of lightering 1.3 million tons of ore to 26 ships.

The *Kivalina*, damaged last season in a grounding at Red Dog, was functioning normally, according to Pearson, who gave credit to those who oversaw the repairs.

Also functioning successfully were dust-control systems installed on both barges during the off-season. Senior Engineering and Project Manager **Warren Snider** and Red Dog Project Manager **Bob Fellows** directed that effort.



Bill Sutton Photo

## Tall Order

*The tractor tug Wedell Foss assists the ship Zhen Hua 4 into its berth at the Hanjin Terminal at the Port of Seattle on July 28. The ship was carrying three new cranes each 391 feet tall with the booms up, and weighing 3.18 million pounds each. The cranes, bigger than any in the Pacific Northwest and equal in size to the world’s largest, were manufactured at Zhen Hua Port Machinery Company in Shanghai, China. The enhanced tractor tug Garth Foss, not visible in the photo, was assisting at the stern of the specialized ship.*

## New MRI President

CONTINUED FROM PAGE 3

was named General Sales Manager for Matson.

Stevens became Senior Vice President, Marketing, in 1995 and in 2002 was named executive Vice President.

He and his wife, **Barbara**, were in

the process of selling their Bay Area home late this summer and moving to Mercer Island, near Seattle. They have three daughters, two in college and one beginning high school this fall.

As for Foss, Stevens said the company “clearly has the brand established, the reputation of quality and commitment. . . . What you have to do is build off that brand — take

what’s good about that brand and leverage it to the continued success of the business.”

MRI companies in addition to Foss are: Young Brothers and Hawaiian Tug & Barge, Honolulu; Sea Coast Towing, Inc., Seattle; AmNav Maritime Services, San Francisco; and Gulf Caribe Maritime, Inc., Mobile, Alabama.



# Giant Dry Dock Doesn't Set Sail This Time; Foss Executes Precision Move on SF Bay

Foss successfully completed the precision move of a 900-foot dry dock in San Francisco early this summer, using three tugs, with a fourth on standby, to inch the dock out through a graveyard of old pilings and piers before landing it perfectly in a temporary berth.

The customer was San Francisco DryDock, Inc., which needed the dry dock moved to clear shoaling that had accumulated in its permanent berth. The yard uses the dry dock for maintenance and repairs of cruise ships and other large vessels.

**Dan Porter**, Foss San Francisco Port Captain, said the weather was flat-calm and ideal for both the removal of the dry dock on the morning of June 20 and for its return on July 10.

"The wing walls of the dry dock are 61 feet above the water with rolling cranes mounted on top, and it has only an eight and a half foot draft," Porter said, noting that afternoon winds in the Bay area frequently reach 25 knots. "With all that windage, it's like a giant sail. With that in mind, both moves were

scheduled at dawn in order to have the dry dock moved and secure before the afternoon winds picked up."

The last time a dry dock was tied up at Pier 70 Foss tugs also had a hand in its movement, although in a much different manner. On November 7, 2002, during a severe winter storm, a 700-foot drydock was torn loose from its moorings and went sailing toward the San Francisco-Oakland Bay Bridge.

The *Brynn Foss* and *Andrew Foss* immediately responded to a Vessel Traffic Service alert, and in the words of Captain **Gerald M. Swanson**, Coast Guard Captain of the Port, their action prevented an "almost certain" collision with the bridge.

The vessels received a letter of commendation from the Swanson for their contributions to the safety and security of the Port.

During the recent move, with the San Francisco Bar Pilots coordinating the tugs, Porter said the dry dock landed on the first shot within a quarter of an inch of its temporary berthing target, a move that had to be precise because the dry dock was mechanically coupled to the dock with heavy steel keepers clamped over a rail mounted vertically on the dry dock wingwall.

On the both trips, the tractor tugs *Brynn* and *Arthur Foss* were on the offshore side of the dry dock, while the pusher tug *San Joaquin River* was made up to the north end of the dry dock. The *Richard M* stood by on the outbound trip, and the *Dean Foss* did that job on the way back.

Crewmembers were:

*Arthur Foss*. Captain **Rex Barnes**, Captain **Dave McCloy**, Deckhand/



Dan Porter Photos

*The Arthur Foss, foreground, and the Brynn Foss were positioned on the offshore side of the dry dock during the moves.*

Engineer **Ted Stevens** and Deckhands **Jamye Ferguson** and **Bruce McBride**.

*Brynn Foss* (June 20). Captain **Dan Tynan**, Captain **Paul Sweeney**, Deckhand **Bernard Taylor** and Deckhand/Engineer **Mike Port**.

*Brynn Foss* (July 10). Captain **Henry (Scooter) Rochon**, Captain **Whit Olson**, Deckhand/Engineer **Brian Wynn** and Deckhand **Gilbert Sontag**.

*San Joaquin River* (June 20). Captain **Jim Jensen**, Captain **Doug Gould**, Deckhand/Engineer **Andre Scott** and Deckhand **Todd Hand**.

*San Joaquin River* (July 10). Captain **Jim Jensen**, Captain **Dan Bowen**, Deckhand/Engineer **Alex Lowe** and Deckhand **Joe Plant**.

*Richard M* (June 20). Captain **Jeff Amdahl**, Deckhand/Engineer **John Jensen** and Deckhand **Lennox Merritt**.

*Dean Foss* (July 10). Captain **Ray Ridens**, Deckhand/Engineer **Don Nichols** and Deckhand **Jennifer Woodruff**.

The pilot for the first move was Captain **Arnold Kelso** of the San Francisco Bar Pilot Association. For the return, lead pilot Captain **Kenneth O'Laughlin** had assistance from Captain **Dennis Welch** and pilot trainees **Richard Hurt**, **Eric Robinson** and **Randy Pinetti**.



*Shipyard workers prepare to fix a big "keeper" to a rail mounted vertically on the wall of the dry dock, being moved precisely into a temporary berth by three Foss tugs.*

# “K” Line: Longtime Customer and Working Partner for Foss Co. in the Pacific Northwest



1

Foss and “K” Line have a longstanding history of working together in the Northwest.

Foss provides vessel assists, bunkering and line services to the company’s ships in Tacoma. The Japanese-owned line brings one containership each week into Husky Terminal and specialized car-carrying vessels into Pierce County Terminal.

Foss and “K” Line also work together on shipments of Boeing aircraft parts imported from Japan and barged from Tacoma to Everett. And the line is a member of the Washington State Maritime Cooperative, which uses Foss Environmental Services as a spill contingency contractor.

**Matt Brown**, Foss Pacific Northwest Sales Manager for Harbor Services and Regional Towing, said “K” Line is one of the most consistent and reliable ocean carriers in Tacoma.

“When S.K. (Bae, General Manager, Marine Operations) places a tug and line order, we can rest assured this is when the vessel will actually move,” Brown said, noting that this is particularly appreciated by Foss Customer Service Representatives and Line Superintendents.

“Both K-Line and Foss really value open, honest communication,” he added. “And I think that’s a key to the longevity of our relationship.”



2

- 1 *The Henry Foss in Tacoma’s Commencement Bay, awaits the arrival of the “K” Line containership Rhein Bridge.*
- 2 *Chief Engineer Rich Easley passes a line to crewmembers of the Rhein Bridge.*
- 3 *The Henry Foss provides braking power as the Rhein Bridge approaches the Port of Tacoma.*
- 4 *The Henry Foss nudges the ship into its berth at Husky Terminal.*
- 5 *Captain Bob Bezona is at the controls of the Henry Foss.*



3



**Tim Brewer**, Foss Director of National Accounts, said the company's relationship with "K" Line goes back at least to the mid-1970s, when he joined Foss. "K" Line began operations at Husky Terminal in 1988. Previously, its ships called the Port of Seattle.

"It's a great shipping company that recognizes the benefits of long-term relationships and service," Brewer said.

"K" Line America, Inc., Vice President **Peter Bennett**, said the company is "very happy with the service we've received from Foss over the years."

The Boeing work, according to Bennett, is a good example of how Foss and "K" Line work together to make shipments cost effective and efficient for a customer.

"That's perhaps indicative of how we see the relationship," Bennett said.

"K" Line, whose full name is Kawasaki Kisen Kaisha, Ltd., operates 26 liner routes between the Far East, North America, Europe, Central and South America, Australia and Africa. Its fleet of 337 vessels includes state-of-the-art containerships, tramp and specialized carriers, car carriers and tanker and gas carriers.

"K" Line America is the company's North American arm.



# Russian Job Finished Before First Typhoon; Team Returns to Seattle after Chayvo Success

Teamwork and seamanship helped Foss Maritime produce success for a customer this summer at a remote oil-development site on an island off the coast of eastern Russia.

A Foss convoy that included two big tugs, three work boats and two barges, overcame four- to six-foot breakers and visibility that dropped as low as 100 feet to land cargo for Exxon Neftegas, Ltd., on a beach at Chayvo, on the north end of Sakhalin Island.

"The team worked together and performed very well," said Foss Senior Vice President for Engineering **Gary Faber**, who managed the project. "We had some difficult sea and swell conditions, but we managed them with the mooring arrangement and the equipment we brought, working with our plan and the contingencies in our plan."

The entire operation was completed with no injuries, lost-time accidents or damage.

Important to the success, Faber said, was the ability of Captain **Gary May**, working under the guidance of

Operations Manager **Herb Gazeley**, to maneuver the tug *Emma Foss* and the ramp barge *Beach Bear* into wave-washed water with as little as a foot under the keel. The *Emma* is 101 feet long and draws 14 feet.

"They delivered the barge right to the moorings off the beach" Faber said. "We had anticipated using the shallow-draft work boats to do that, and doing it with the *Emma* alone saved us a lot of time."

Once on the moorings, with anchors on the offshore side of the barge, the routine called for the crew of the *Emma* to run messenger lines toward the shore with a rigid-hulled inflatable boat and send them to the beach with heaving lines.

When the surf and safety considerations kept the beach out of range of the



*With the Beach Bear's ramp down, cargo is hauled off the barge toward the oil development site at Chayvo.*

heaving lines, which occurred twice, the *Emma's* crew used line guns to send the messengers ashore.

Shoreside personnel used loaders to move the mooring lines to big "dead-man" anchors, and the *Beach Bear* winched itself about 500 feet to the shore. One of the shallow-draft work boats steadied the barge as it came through the shore break.

Crews then lowered the ramp on the barge. Bigge Crane and Rigging offloaded the cargo and rolled it up the sand on a temporary road made of Dura Mats.

The Foss team executed the beach landings six times between July 14 and August 7, delivering a total of 51 pieces of cargo, which consisted of diesel oil storage tanks, oil field support equipment and 20-foot containers.

The cargo had been staged 600 miles to the south, at Korsakov, and towed in two trips to Chayvo by both the *Emma* and its partner on the job, the 8,200 horsepower ocean-going tug *Lauren Foss*, under the command of Captain **Gennady Novichihin**. At Chayvo, the team performed four at-sea lightering operations from the barge *MZB 287* to the *Beach Bear*.

The time saved through the combined efforts of Captain May and Captain Gazeley, according to Faber, enabled the team to finish a few



*The Emma Foss maneuvers in the fog, close to the beach, to move the barge Beach Bear into its mooring.*

CONTINUED ON PAGE 19

# Missile Defense Cargo Moved to Valdez in Four Tows from Vancouver, Washington



Mike Walker Photos

The tug *Howard Olsen* brings the barge *Seattle* into its berth in Valdez.

Foss in August completed the last of four tows of missile defense cargo from Vancouver, Washington, to Valdez, Alaska. The company used the tug *Howard Olsen* for one

of the eight-day northbound trips and the *Halle Foss* (former *Astoria*) for three.

The cargo, all carried on the barge *Seattle*, included containerized freight, steel missile silos and support components. The largest pieces were 70 to 80 tons and measured about 80 feet by 14 feet.

Foss worked jointly with Carlile Transportation Systems of Anchorage to provide a seamless transportation package to Oregon Iron Works and Bechtel Corporation.

Foss arranged the loading at Columbia Business Park in Vancouver. The cargo was unloaded in Valdez by Northstar Stevedoring, and

Carlile handled the overland portion of the trip from Valdez to Fort Greeley, near Fairbanks.

Crewmembers on the voyages were:

- April 24, *Howard Olsen*, Captain **Monty L. McCleary**, Mate **Dan Riser**, Deckhands **Darren Olsen** and **Robbie Ackerman**, and Cook **Chris Lieziert**.

- May 7, *Halle Foss*, Captain **Ray Freel**, Mate **Dennis Green**, Deckhand/Engineers **Curt Dawson** and **Brian Dodge** and Cook **Dustin Everson**.

- June 30, *Halle Foss*, Captain **Ray Freel**, Mate **Scotty Parker**, Deckhand/Engineers **Ben Hartley** and **Chris Green** and Cook **Dustin Everson**.

- August 4, *Halle Foss*, Captain **Ray Freel**, Mate **Scotty Parker**, Deckhand/Engineers **Brian Dodge** and **Chris Green** and Cook **Dustin Everson**.



*Howard Olsen* Mate **Dan Riser**.



# Foss Pulls For Narrows Bridge

CONTINUED FROM PAGE 1

pennants that became ensnarled in the remains of the original Tacoma Narrows Bridge, which shook itself apart in a windstorm on November 7, 1940.

"Based on lessons learned, placement of the second caisson took about half as long," Kimmel said.

The caissons measured 130 feet long, 80 feet wide and 78 feet high, with 45 feet of the height submerged. The enhanced tractor tugs *Garth Foss* and *Lindsey Foss*, at 8,000 horsepower each, provided the power for the job,

assisted by the tractor tug *Wedell Foss* and the HP (high-performance) class ocean-going tug *Barbara Foss*.

TNC Caisson Project Manager **Tom Sherman**, said Foss performed admirably.

"We had to time everything perfectly to get it to the bridge when the currents were right, and that was carefully orchestrated by TNC and Steve Kimmel," he said.

TNC Manager of Contracting **Bob Berry** noted that the company created for the bridge project is a union of

"high-performance contractors — Bechtel and Kiewit — and we like to have team members who meet that profile as well."

"Foss has a reputation and a history of being one of those high-performance companies," Berry said, adding that Foss also has a longstanding relationship with both of TNC's parent companies.

Foss Pacific Northwest Sales Manager **Matt Brown** said that relationship helped Foss land the job, but most important was the equipment Foss offered, its experienced personnel, its dock and office in Tacoma, and its history of working on major projects.

That history includes towing the caissons into position in 1939 for "Galloping Gertie," the infamous original bridge over the Tacoma Narrows. Ironically, those original caissons were the only major component of the first bridge that survived its collapse and formed the foundations for its replacement, completed in 1950, also with Foss assistance.

Part of Foss' preparation for the recent tows was construction of all the caisson towing pendants and the bridle used to connect the caissons to a "tensioning barge" anchored at the construction site before each tow. When a caisson arrived, its north side was attached to the barge and the tugs pulled to the south, maintaining tension and keeping the huge structure in position while the permanent anchors were attached.

**Joel Altus**, Foss Supervisor of Vessel Rigging and Supply, said the towing pendants and tensioning barge bridles were built with nine-inch, 12-by-12 strand Plasma line, pioneered by Foss in marine towing and escort applications. The line weighs only 2.14 pounds per foot and has a breaking strength of nearly 1 million pounds.



Bill Sutton Photo

*The Lindsey Foss, foreground, and Garth Foss maneuver a 14,000-ton caisson out of Tacoma's Commencement Bay on July 21, with the Port of Tacoma and Mount Rainier in the background.*

## Our Mission

Foss is a marine transportation company providing an "Always Ready," quality based, safe, reliable and environmentally responsible service.

*From the Foss Mission Statement*



Bill Sutton Photo

The twin tugs Lindsey Foss, left, and Garth Foss pass under the existing bridge with the second caisson in tow on August 18.

All towing pendant connections to vessel towlines were established with the patented Foss “transom link,” which works like a very-heavy-duty version of a mountaineer’s carabiner and enables quick connections.

The five days of constant tension on the lines during placement of the first caisson, not including the tow from Tacoma, was unprecedented, according to Altus.

“No one, to my knowledge, has ever done this before, as it exceeds even the most arduous winter escort and assist

scenarios where the loads are cycled and relaxed in relatively compressed time frames,” Altus said.

In spite of all the calculations before the caissons left Tacoma, Kimmel said there was a moment of truth as the tugs pulled the first one out into Commencement Bay. Crews conducted a test to make sure they’d be able to hold the caissons in the current of Tacoma Narrows.

“We had calculated bollard pull to hold it in a three-knot current was

CONTINUED ON PAGE 20

## Spanning the Tacoma Narrows In Late 1930s Was a Challenge To Bridge-Building Ingenuity

By Mike Skalley

The people of Western Washington had discussed the advantages of constructing a bridge across the Tacoma Narrows for many years. In the first half of the twentieth century the Olympic Peninsula was largely undeveloped. Tapping its resources through the construction of a bridge became a popular proposal.

In 1937, the Washington Legislature passed an act creating the State Toll Bridge Authority, under the direction of State Highway Director **L.V. Murrow**. On September 27, 1938, the state awarded a contract for the construction of what was at the time the world’s third longest suspension bridge, with a span of 2,800 feet.

CONTINUED ON PAGE 14

## The New Narrows Bridge

### Project Facts

- **Owner/Administrator:** Washington State Department of Transportation
- **Design-Builder:** Tacoma Narrows Constructors (TNC), a Bechtel and Kiewit Pacific joint venture, headquartered in Gig Harbor, Washington.

### Tower Foundations (Caissons)

- **Size:** 130 by 80 by 78 feet high, with 45 feet submerged during tow to construction site. Concrete will be added from the top, slowly sinking the caissons and eventually making them 225 feet high, with 54 feet below the seabed.
- **Concrete:** A total of 34,000 cubic yards in each caisson.
- **Water depth:** 150 feet.
- **Anchors:** Each caisson has been fixed initially with 16 concrete anchors and will have 32 permanent anchors.

### Towers and Suspension System

- **Height:** 510 feet.
- **Extra Capacity:** Towers and caissons designed for second deck (either road or light rail) to be added in the future.
- **Main Cables:** 21 inches in diameter made of 5,500 tons of wire.

### Bridge Deck

- 5,400 feet total, 2,800 feet main span.
- Three 12-foot traffic lanes, two 10-foot shoulders, and a 10-foot bicycle/pedestrian path separated by a barrier from shoulders.

## Spanning the Narrows

CONTINUED FROM PAGE 13

The contractors for the \$6.4 million bridge were the Pacific Bridge Company of San Francisco, General Construction Company of Seattle and the Columbia Construction Company of Bonneville. Designated the operating company, Pacific Bridge began the first structure work in November 1938.

The construction of the Narrows Bridge was a new challenge to the ingenuity of bridge builders. The strong currents and the extreme depths to which the pier foundations had to be sunk required special equipment and new engineering methods.

The pier foundations consisted of two large steel caissons, 120 feet long, 66 feet wide, and 50 feet high. The caissons, built by Pacific Car & Foundry in Lake Washington, were filled with 900 tons of steel shapes and boarded with timber walls. The main engineering challenge was how to anchor the huge steel structures in place against strong tidal currents while they were being filled with concrete and lowered to the sea floor.

The engineers solved the challenge by building 56 anchors, 32 for the east pier and 24 for the west pier. Each anchor consisted of a huge block 56 feet in length and 12 feet square made of concrete, weighing 600 tons each. The anchors had to be dropped in a precise location designated by the engineers and attached to the caisson by means of heavy cables.



*The concrete anchor has just slid off the barge into the Narrows. (1939)*



*The crew of tug Foss No. 12 prepares to flood the port side of the deck barge to allow the 600-ton cement anchor to slide off into the appointed location in the Tacoma Narrows. (1939)*

Foss was subcontracted by Pacific Bridge Co. to supply the tugs and barges to set the anchors. With a fleet of 35 tugs and 140 barges, Foss was one of few operators on the West Coast that could handle a job of this magnitude. The six barges used for this operation were 110 feet long by 46 feet wide, with a capacity of 600 tons.

Approaching the bridge site, the tug maneuvered, awaiting word from "transit" men on both shores that they were in position. The Foss barges were equipped with center bulkheads, and on the port side were two plugged limber holes in which were eight-inch covered valves. On the command of the engineers on shore, the tug crew pulled the plugs and the port side of the barge flooded with seawater. Within five minutes the barge developed enough of a list to drop its payload.

Divers reported the anchor blocks all landed within three feet of the indicated location. This was a high degree of

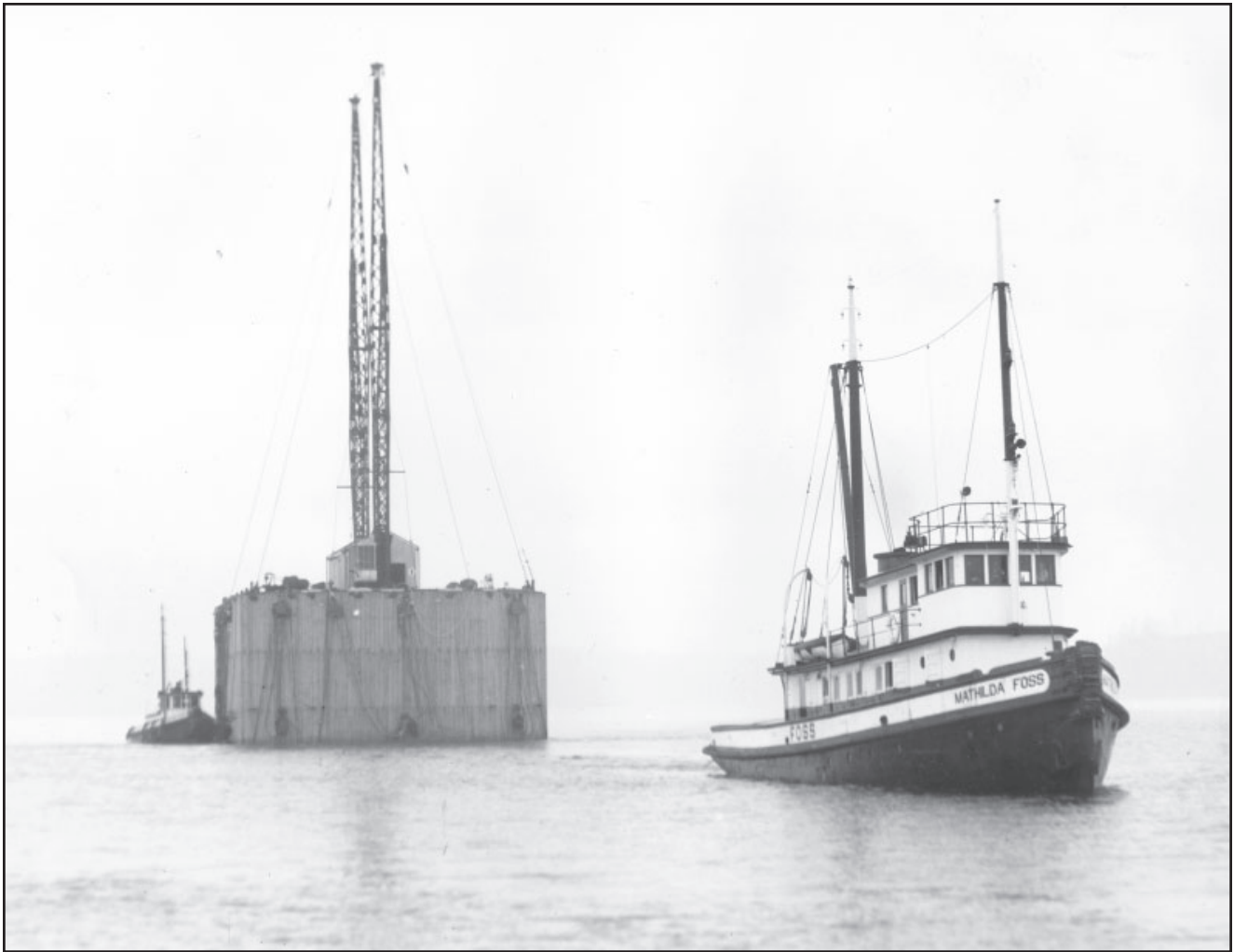
accuracy, considering the locations were done by triangulation from shore, as no electronic aids to position fixing existed sixty years ago.

On March 18, 1939, the first caisson departed Seattle under tow of the Foss tugs, *Mathilda Foss*, *Peter Foss* and *Wanderer*, with a combined 1,675 horsepower. They made the 25-mile tow in 16 hours. The tug captains reported the tow was heavy and unwieldy and they had a difficult task positioning it in the exact location, fighting strong currents and wind. Two additional Foss tugs assisted in the positioning process, the 200-horsepower *Justine Foss* and the 160-horsepower *Henrietta Foss*.

With continued support by Foss tugs and barges, working 24 hours a day, seven days a week, the bridge pier and foundation building phase was completed in September 1939.

Construction on the towers began in July 1939 and was completed by mid-November. The individual girders, floor beams and stringers that supported the roadway were assembled on Foss barges and then positioned under the bridge for lifting into place by





*The 500-horsepower Mathilda Foss with help from the 200-horsepower Justine Foss towing the first Narrows Bridge caisson between Seattle and the Tacoma Narrows on March 19, 1939.*

the travelling derricks, which were attached to the main cables.

The bridge opened on July 1, 1940, to great public acclaim. It had been completed in record time, and the people of Western Washington celebrated their dreams of access to the area of the Northwest known as the Great Peninsula.

### **The Collapse**

The Tacoma Narrows Bridge lasted just four months.

An early winter windstorm blew through Puget Sound the morning of November 7, 1940. Around 0945, with increasing winds, the Narrows Bridge began to move slightly, as it



*The Mathilda Foss nearing the anchoring site on the Tacoma side of the Narrows on March 19, 1939.*

CONTINUED ON PAGE 16

## Spanning the Narrows

CONTINUED FROM PAGE 15

had done normally many times in the previous four months. The vertical motion was similar in feeling to a roller coaster ride. Many people, enjoying the unusual motion of the bridge gathered to watch, walk or drive across the bridge.

As the winds increased to gale force the bridge began twisting laterally in addition to the vertical waves. The cars on the bridge were being thrown against the curbing. People who were walking began running to the nearest end, staggering as they went. A couple of large trucks, unable to navigate the combined sideways and vertical movements, abandoned their rigs in mid span. By 1045, eyewitnesses were reporting the roadway was buckling at an angle of 45 degrees.

The concrete continued to hold together for a few more minutes. As the wind hit a sustained 42 knots, the vertical steel suspension cables began to snap allowing one section of the roadway to disintegrate. After the first section fell, the lateral twisting ceased for a few minutes, allowing the remaining people on the bridge to evacuate to the safety of solid ground on the Tacoma end.

The twisting began again with renewed vigor in the main span and both approaches. The failure progressed along the bridge. The time was 1100. The main towers and the approaches remained but were severely damaged. What had taken 20 months to construct was destroyed by “mother-nature” in 1 hour and 15 minutes. Plans to rebuild the bridge were discussed immediately, but it would be 10 years before vehicles once again crossed the Tacoma Narrows.

## Reconstruction

A scale model of the damaged bridge was constructed at the University of Washington to determine the cause of the collapse. Scientific tests were run during World War II, and it was determined that the collapse of the bridge was due to its structural lightness and the effect of built-up wind pressure on poorly designed closed girders and a solid roadway.

A second scale model was built incorporating a new design that would withstand steady winds of 125 mph. Construction of the new \$14 million bridge began in June 1948. Numerous structural changes were made, including widening the deck to accommodate four lanes of traffic, raising the two main towers by 54 feet, and widening them by 21 feet. The weight of the structural steel increased from 9,200 tons to 15,500 tons.

Foss’ participation in the reconstruction consisted, once again, of tugs and barges. **Henry Foss** signed the contract, dated, March 3, 1949, along with **H. W. Warley**, president of Bethlehem Pacific Coast Steel Corporation. The steam crane, Foss 300 was also made available to the contractors.

The boats approved for the Tacoma Narrows shifting work were the 140-horsepower tugs, *Foss No. 12*, *Henrietta Foss* and *Joe Foss*, the 200-horsepower *Carl Foss*, and *Foss No. 15* and the 375-horsepower *Peter Foss*.

*Editor’s Note: Mike Skalley is Foss’ Manager of Customer Service in the Pacific Northwest, the company’s historian and the author of “Foss — 90 years of Towboating.”*



*In this 1939 photo, both caissons are anchored in place. The west tower is under construction and the concrete bases for the legs of the east tower have just been poured. Two Foss deck barges are anchored in a stationary position by the caissons during the construction of the bridge. Other Foss barges arrived on a daily basis bringing equipment and supplies to the two bridge piers.*



# Surprise Drill Sprung on Foss Environmental; Company Comes Through with Flying Colors



Shelley Scatzo Photos

*Jeff Edwards of Foss Environmental Services with a vacuum hose connected to a “Foilex Mini” suction skimmer.*

Foss Environmental Services (FES), with assistance from Foss Maritime, averted a spill drill sprung on them by the State of California on June 11, completing deployment of containment boom and other required tasks in about half of the time allowed.

In the unannounced drill, managed by the state Department of Fish and Game, FES responded to an imaginary spill of crude oil in the West Basin area of the Los Angeles Harbor, about three nautical miles from the FES dock in Long Beach.

**Kent Creighton**, FES Marine Project Manager, said the company dispatched two 32-foot response vessels carrying containment boom, two 18-footers for anchoring and boom assist, and a self-propelled skimmer.



*Foss Environmental employees towed containment boom in the Los Angeles harbor during an oil spill drill June 11.*

CONTINUED ON PAGE 18



## Surprise Drill

CONTINUED FROM PAGE 17

The boats and about 31 people, some arriving by road, were on the scene within an hour. Seven stationary skimmers were deployed on the shoreline.

The tug *Marshall Foss* and tank barge *San Pedro* were on the scene within two hours, four hours before required, Creighton said.

The state allowed FES six hours to set 5,000 feet of boom and complete the drill. They finished in three hours. Successful completion of the drill was required for FES to retain its state Oil Spill Response Organization (OSRO) rating.

**Carlton D. Moore**, Interim Administrator of the Office of Spill Prevention and Response for the Department of Fish and Game, congratulated FES for its performance.

"We note with pleasure that FES has now met the regulatory caps for the on-water recovery service at all levels," Moore wrote in a letter to FES following the drill.

Creighton said, "When FES was informed of the drill, the company had to pool all of its resources at a moments notice, and show that our versatile response oriented personnel are 'Always Ready.'

"We had to adjust ongoing jobs and projects to make personnel and equipment



*The tug Marshall Foss, with the Barge San Pedro, joined Foss Environmental in responding to the staged incident.*

available," he said. "We pulled a few people from each job and our customers were understanding. We were able to go back to tank cleaning and land service jobs and finish up after the drill, or go back the next day."

He added, "There's no telling the state we're busy and can't do it."

Members of the FES team included **Todd Roloff, Ken Woodhall, Shelley Scalzo, Anthony Palma, Doug Butler** and **Tom Becker**, along with additional response personnel.

Foss Maritime personnel who responded were: *Marshall Foss*,

Captain **Chuck Holmes**, Engineer **Dave Betzer** and Deckhand **Robert Romero**; and barge *San Pedro*, Tankerman **Ruben Hernandez**.

## Barbara Back In Neah Bay For the Winter

Foss and the Washington State Department of Ecology in September reached an agreement to extend the contract under which the *Barbara Foss* serves as rescue tug at Neah Bay during the stormy season.

Under the agreement, the *Barbara* is slated to be on station September 15 at Neah Bay, where the Strait of Juan de Fuca meets the Pacific Ocean. The tug will stay there at least through April 30, said **Ed Woodfield**, Foss Pacific Northwest Regional Director of Harbor Services and Regional Transportation.

As rescue tug, the *Barbara* is designated as the initial responder to vessel emergencies in the area. Over the last four years, the *Barbara* has provided assistance to ships that have lost power, has rescued breakaway barges and has helped a number of other vessels in distress.

## Foss Team Repairs First of Two Cranes at Norfolk Yard

A five-man team from Foss Shipyard endured 102-degree heat, thunderstorms and hail while successfully completing the repair of a 100-ton capacity crane at Norfolk (Virginia) Naval Shipyard June 25, two days ahead of schedule.

The team replaced the main rotation bearing on the crane and was to return to the shipyard September 8 to perform the same month-long job on an identical one. Foss previously had replaced bearings on three of the

cranes, two in the Puget Sound area and one in Hawaii.

Project Manager **Ken Rau** said the team received good support from McLean Industries in Norfolk, which provided welding services and an electrician.

Others on the Foss team were Ship Repair Superintendent **Danny Gipson**, Crane Operator and Technical Advisor **Lloyd Priest**, Rigger Foreman **Jim Mosman** and Machinist **Ken Purtteman**.

# Dispatcher Retires After 34 Years with Foss Maritime Co.

In nearly 34 years with Foss Maritime, **Sander “Sandy” Macham** saw plenty of changes.

Macham, who retired July 15 as a Senior Customer Service Representative, was hired on as a night dispatcher in Everett on August 15, 1969, when the log export business was thriving. He reckons the typing skills he picked up as a Navy yeoman helped him land the job, which at that time included punching out customer invoices.

“It was extremely busy in Everett,” he recalled. “Foss owned the docks at that time, and it was not uncommon to see five to six log ships a week.”

After 17 years in Everett, where business slowed with the decline in log exports, Macham moved to Seattle for three years and then to a day job in Tacoma, where he finished his career. In recent years, he says, he’s seen ever larger ships come into the harbor that require fewer tugs than big ships did in the old days.

“The tugs have more horsepower, and both tugs and ships are more maneuverable,” he said. “In a lot of cases, ships have thrusters and they might need just one tug or none at all.”

Contact with people has been the best part of his job, says the 60-year-old Macham, “not only the customers but the employees of Foss — the captains, deckhands, engineers and cooks are a great group of people to work with.”

After completing a remodeling job on his house in Everett and selling his house in Puyallup, Macham and his wife Anne plan to do some traveling. They have two sons, a granddaughter, a step granddaughter and a great grandson.

Macham also is a retired Navy chief petty officer and works on-call as a captain on a 32-foot fast-response vessel for Foss Environmental.

Why did he decide to retire?

“I just thought it was a good time to go ahead and enjoy myself,” Macham said.

## Chayvo Success

CONTINUED FROM PAGE 10

deliveries in a single tide cycle, working through the flood tide and getting out before the water was too low.

“They were operating in an area where they didn’t know the exact bottom contours and they were working with less than a foot of water under the boat,” Faber said. “Handling the barge with those conditions in the swell, and positioning the barge in the moor so we didn’t have to do a lot of wrestling with the small boats was the stellar part.”

The quick completion of the job proved to be “very fortuitous,” Faber said, because it enabled the team to get out of Chayvo before the typhoon season started. The convoy’s return trip to Seattle from Korsakov was delayed while a typhoon passed.

“It could have extended our operations at least two weeks,” Faber said.

Faber had nothing but good things to say about Russians hired for the project — five longshoremen-utility workers on the beach and two mariners who worked on the tugs as observers.

“They were all hard-working, diligent and very professional in their demeanor and work ethic,” Faber said. “All of our Russian contractors and the TransFes agents were just first class. They gave us excellent support.”

Foss management and marine personnel on the project totaled 24 people.

The return trip to Seattle, by way of Dutch Harbor, Alaska, took about three weeks.



Mike Stork/Photo

*Sandy Macham was caught at his desk in Tacoma shortly before his retirement July 15.*



*Exxon Neftegas, Ltd., is building this oil production operation on the north end of Russia’s Sakhalin Island.*

# Children of Foss Employees Awarded College Scholarships

Foss Maritime Scholarships were awarded recently to three young people who are children of employees. The Foss workers are an Electrician at the Seattle Shipyard, a Deckhand in the Columbia Snake River Region (CSR) and a Captain based in the CSR.

The recipients are:

- **Travis Dodge**, the son of Brian Dodge, a CSR Deckhand. Travis lives in Milwaukie, Oregon, and is a graduate of Rex Putnam High School in Milwaukie. He plans to attend Clackamas Community College in Portland, Oregon.

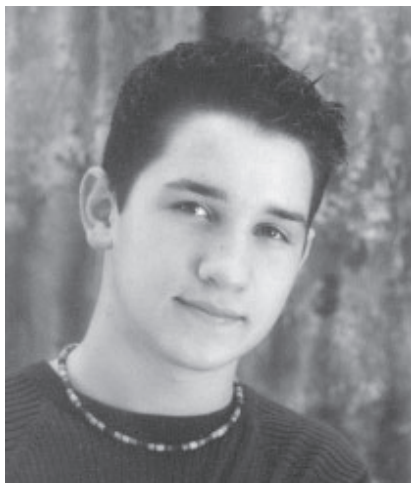
In high school, Travis was a member of the National Honors Society, was Associated Student Body President, on the Honor Roll, a member of the track team, and did charity volunteer work.

- **Melissa Gilliam**, the daughter of Thomas Denison, an Electrician at Foss Shipyard in Seattle. She lives in Festus, Missouri and is a cum-laude graduate of Jefferson College, a two-year school in Hillsboro, Missouri.

Melissa plans to study history during the coming academic year at the University of Missouri-Columbia. She also is a graduate of Hillsboro High School and enjoys reading hiking and learning foreign languages.

- **Kyle Roush** is the son of CSR Captain Ronald Everman. He lives in Rainier, Oregon, and is an honors graduate of Rainier High School. During the coming academic year, Kyle plans to attend the University of Puget Sound in Tacoma, Washington.

His accomplishments include membership in the National Honor Society, his high school English Department Creativity and Language Talent Award, and the KLOG/KUKN Student of the month award in December 2002. He also is a Board member of the Camas-Washougal Wildlife League and is a competitive trapshooter.



Travis Dodge



Melissa Gilliam



Kyle Roush

## Narrows

CONTINUED FROM PAGE 13

300,000 pounds, and then you add the effect of the wheel (propeller) wash,” Kimmel said. “When we first got it out there, we took it up over three knots, because if we couldn’t do that in calm water, we couldn’t hold it in the current, and we didn’t want to find out when it was too late.”

After the successful test, the tugs continued southward, idling at a little more than a knot, with the two enhanced tractors pulling to the south, the *Barbara* in the middle and the *Wedell* trailing behind as a break.

“When we got there, we went through the center span and past the buoys and anchors set there, and then we let the current set the caisson back to the north so we were close enough to the tensioning barge to get a line across and hooked up.

In order to maintain the caisson’s position in the highest currents, while also keeping up tension on the tensioning barge, the two enhanced tractor tugs pulled at as high as 150,000 pounds of bollard pull each, while the *Barbara* pulled at 120,000 pounds, for a total of 420,000 pounds. A meter on the tensioning barge showed 40,000 to 60,000 pounds.

“We didn’t want to pull through the ebb to slack water, so basically I was out there bringing the tugs up in RPMs as the tide increased,” Kimmel said. “The maximum current lasted maybe an hour, and then we had to start backing them off.”

The tugs were on the job so long that Foss relieved the crew on the *Garth*, performed two-man crew changes on the *Wedell*, and switched one crewmember on the *Barbara*. Groceries were delivered to both the *Garth* and *Lindsey*.



## Party Barge

The Foss barge BMC 33 got a party makeover for a fundraising auction held July 13 at the home of **Stan and Alta Barer** on Lake Washington's Webster Point in Seattle. Stan Barer is one of the owners of SaltChuk Resources, Foss' parent company. Right, the tug David Foss nudges the 180-by-45-foot barge into the shore. On board the barge as volunteers put finishing touches on the decorations, the Barers, left, were photographed with **Dorothy and David Fluke**. Alta Barer and Dorothy Fluke were co-chairs of the auction for "ARCS," which stands for Achievement Rewards for College Scientists. The group gives scholarships to graduate students in the sciences. Members of the David Foss crew were Captain **Chris Sauer**, Mate **Roger Foszcz**, Engineer **Frank Rodgers**, Deckhand **Stephen Harsh** and Cook/deckhand **Jimmie Converse**. Foss Shipyard personnel who rigged a 40-foot boarding ramp to the barge were **Tom Faehnrich** and **Terry Dawley**.



## Fired-Up July 4<sup>th</sup> For Foss

Foss continued its longstanding support for Fourth of July fireworks shows this year, helping to stage two in Washington and two in Southern California.

The Washington shows included the Washington Mutual Family Fourth celebration on Seattle's Lake Union, produced by One Reel. The tugs *Shelley*, *Wedell* and *David Foss* handled the barges used in the show, the Foss' *BMC 33* and one owned by another company.

While the *Shelley* and *Wedell* stood by in Lake Union, the *David Foss* headed south to Quartermaster Harbor on Vashon Island with the barge *183*. The customer for that show was Foss sister company Totem Ocean Trailer Express, which put on a show for its customer, Food Services of America.

In Southern California, Foss used the tug *Pacific King* and barge *379* to stage a show for the City of Dana Point. The *Point Vincente* and barge *26* were used to put on the fireworks display at the *Queen Mary* in Long Beach.



### Foss Biker Gang

An eight person team from Foss participated in Bike to Work Month, sponsored by Seattle's Cascade Bicycle Club and software developer WRQ from May 16 to June 15. Each team member was required to commute to and from, work by bicycle a minimum of eight times. Foss ranked 25<sup>th</sup> of about 230 teams with 1,507.5 miles, and 55<sup>th</sup> in the number of trips, 93.5. In the photo are team members, front from left, **Craig Campbell** and **Doug Johnson** and, behind them, **Jane Habiger**, team captain, **Gisli Olafsson** and **Matt Brown**. Not photographed were **Merridith Champagne**, **Paul Flynn** and **Dmitry Klimko**.

### Beat the Bridge

A seven-member team represented Foss Maritime at the annual Nordstrom Beat-the-Bridge charity event to raise money for the Juvenile Diabetes Foundation May 18 in Seattle. It was the 10<sup>th</sup> consecutive year that Foss has fielded a team and made a contribution through the event. Beat-the-Bridge draws its name from its challenge to participants to finish before the draw bridge over Seattle's Montlake cut opens and blocks their path to the finish, which happens 20 minutes after the start of the last heat. Foss participants were, from left: **Jane Habiger**, Operations Support, 4-mile walk; **Craig Campbell**, Information Technology (IT) Department, 8-k run; **Paul Flynn**, Habiger's friend, 4-mile walk; **Violet Walsh**, daughter of IT Department's **Richard Walsh**, 1-mile fun run; **Shelly Rieger**, Marketing, 1-mile fun run, **Bob Wilkinson**, Payroll, 8-k run; and **Cullen Walsh**, son of Richard Walsh, 1-mile fun run.

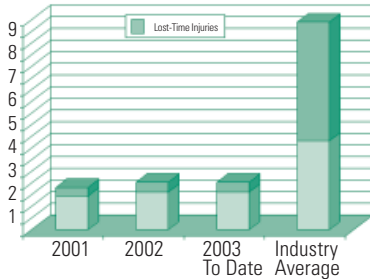




# Spotlight on Safety

## Injuries

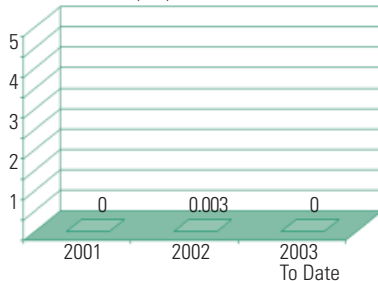
Rate of recordable injuries per 100 workers, per year



- Recordable injuries are injuries requiring medical treatment.
- Lost-time injuries are injuries which cause a worker to miss time on the job.

## Spills

Number of spills per 100,000 barrels handled



- A spill is defined as any spilled material that produces a visible sheen on the water.
- Spills reported on the chart are those occurring during oil cargo transfers.



## Annual Barbecues

Foss customers and friends were treated to hot dogs and hamburgers at the company's annual barbecues in Seattle and Tacoma. Tending the grill in Seattle on August 19, above from left, are Foss volunteers **Doug Johnson**, **Craig Campbell**, **Monte Crowley** and **Bruce Reed**. Below in Tacoma on August 26 are, clockwise from left, **Tim Brewer** and **Steve Scalzo** of Foss and **Helmut Kellerman**, **Dave Mason** and **Ariel Pupko**, all of Westwood Shipping.



## People News

### NEW EMPLOYEES

**Kayce Hawk**  
Accountant

### PROMOTIONS

**Jim Wilcox**  
Captain to Dredge Superintendent,  
SF Bay

### RETIREMENTS

**Larry Bronner**  
Barge Superintendent, Marine  
Transportation  
**Dwayne Crowley**  
Captain, PNW  
**Bill Johnson**  
Captain, PNW

### PASSINGS

**Barney Bruce**  
Retired, Operations, PNW  
**Lloyd Conine**  
Retired Captain, PNW  
**Jim Kieffer**  
Retired, Outside Machine Shop,  
Seattle Shipyard





Tom Stevens Photo

## 2003 Foss Cup

*Patrick Plueard of Seattle and his remote-controlled pusher tug Miss-Happ were the winners of this year's Foss Cup competition for tugboat modelers August 16 at Twin Lakes, near Marysville, Washington. Plueard was one of 35 entries in the competition, sponsored annually by Foss Maritime, in which entrants navigate their tugs and barges through obstacle courses. Retired Foss Captains **Jim Martin** and **Andy Andrews** were this year's judges and supplied handling tips to the competitors.*



660 W. Ewing St.  
Seattle, WA 98119

PRESORTED  
STANDARD  
U.S. POSTAGE PAID  
SEATTLE, WA  
PERMIT NO. 15551