Fatigue and sleep deprivation figure in about half of the maritime accidents in the Pacific Northwest and manage to defeat even the most modern wheelhouse technology, experts said at the Pacific Marine Expo in Seattle yesterday.

“There is only one solution to sleep deprivation. It’s eight hours of sleep in 24 hours,” said Jerry Dzugan, director of the Alaska Marine Safety Education Association. U.S. and Canadian investigators found lack of sleep was a central factor in the October 2016 grounding of the Kirby Offshore Marine tug Nathan E. Stewart in the Inside Passage of British Columbia. The National Transportation Safety Board and Transportation Safety Board of Canada found the second mate dozed off and missed a course change before the 95’4″x32’x12’, 3,400-hp Nathan E. Stewart and its 287’6″x77’8″x8′ double-hulled barge ran aground just before 1 a.m.

Over the preceding three days, the mate had slept between 4.5 hours and 6.5 hours on mornings, but not during his off-watches after noon, the agencies reported. The Canadian board put much blame on the six hours on, six hours off watch system widely used in the towing industry, which they said does not allow enough time for crew rest.

The NTSB report called for watch alarms in towing vessels, that helmsmen must reset at intervals or an alarms sounds to alert other crew members.

In the Northwest fishing industry, fatigue and sleep deprivation is a common factor in vessel casualties, said Mike Lynch of the Washington state Department of Ecology spill investigation and response unit. A former ferry pilot and research vessel captain, Lynch recalled his days on the six-on, six-off watch system and the worry of “nodding off in the wheelhouse.”

“So I know from first-hand experience in our business that fatigue is a big problem,” he said. Over five years, fatigue has been implicated in 82 accidents in the region, inspiring a cautionary video for mariners titled “Fatigue Bites,” a cooperative production of the Washington spill prevention program and the Coast Guard’s Sector Columbia River. The film is just one in a series of stories about deeply experienced captains undone by fatigue, their perceptions and reactions dulled, and sophisticated vessels run up on jetties and rocks.

There was the a 78’ Titan, an East Coast scallop boat converted for crabbing, lost in December 2014 when the captain dozed and the autopilot ran the boat and its 50,000 lbs. of crab onto a Columbia River jetty at Iwaco, Ore.

“This was a well-appointed vessel: dual GPS, autopilot, a watch alarm which was not functioning,” said Lynch. “Weather was good, clear, west wind, slight swell, yet there they were.” The vessel was a total loss at $1.8 million.

Two months later, the 82’ pot fishing boat Savannah Ray grounded at Long Island, Alaska, and sank.

continued next page

CRANE OPERATOR CERTIFICATION

There has been a lot of talk about OSHA finally beginning to enforce their 2014 standard requiring crane operators in the construction industry to be certified by a nationally recognized testing organization such as the NCCCO. NCCCO Certification is strictly testing. Candidates must pass a 60-question written test and then pass an in-depth test of them actually operating the crane. Many are wondering if this standard applies to everyone including crane operators in the general, maritime or mining industries. The quick answer is: No, it applies only to crane operators in the construction industry. Does this mean that crane operators in these other industries do not need to be certified? No. Anyone who operates a crane must receive training in all aspects of their job and be evaluated by someone who has the knowledge, training, and experience to do this. When someone successfully completes this, then they may receive some sort of certificate. This is another type of certification. This training and evaluation may be performed in-house if you have a program that adequately covers all aspects of the type of crane they will be operating, and you have someone that is qualified to do the training and evaluation. Or, many companies opt for an outside company to come in and offer site-specific training at your location and on your cranes. And, other companies will send their employees to an outside training facility. Also, remember, refresher training should be ongoing even for employees that have NCCCO certification.
continued from previous page

Like the Titan, the Savannah Ray had redundant instruments on the bridge and a watch alarm, yet the captain dozed off for another total loss at $800,000.

NTSB investigators reported the Savannah Ray’s crew got no more than 4.5 hours of sleep daily, while the captain told them he slept “a little less.” The watch alarm had been set for 60 minutes, but the captain drifted into inattention about 15 minutes before it would have sounded. In a January 2017 advisory Coast Guard officials recommended setting watch alarms for 15-minute intervals.

Dzugan said the effects of sleep deprivation are so severe that it is recognized as a form of torture under international law: “In four or five days, you’ll get them talking.”

But mariners, like most people, tend to dismiss the hazards of not getting enough sleep, he said.

“One excuse I hear is, ‘I’ll catch up on my sleep,’” said Dzugan. But sleep deficits persist until they can be treated with a solid eight hours, he said. Chronic sleep deprivation erodes work skills, alertness, concentration and reaction time, and can heighten tendency toward risk-taking, said Dzugan. Over time there are health effects, including obesity — brought on by snacking during times of stressed and fatigued work — and anxiety and depression. While a solid eight hours of sleep is healthy, taking any sleep when it can be gotten helps, Lynch and Dzugan said.

“Doing this eight-hour stretch is a construction because we have electricity to extend work into the evening hours,” said Dzugan. “For most of this time on Earth we’ve been four and four,” a natural resting rhythm in traditional societies with afternoon siestas, he said.

The six-on, six-off watch system has come in for renewed scrutiny with the advent of Subchapter M safety regulations for towing vessels. Of his days on the watch system, Lynch says, “I would have qualified for a zombie movie. It’s very tough to get the full six hours (of rest).”

The six-by-six watch system “is not real life,” said Dzugan. “When you come into a harbor with a fuel barge, it’s all hands on deck.” Circumstances vary, and in fact there is “no perfect watch cycle,” he said.

COAST GUARD WARNS LED LIGHTING COULD INTERFERE WITH COMMUNICATIONS
Michael Crowley, November 27, 2018

LED lighting is increasingly popular in the commercial sector, especially for nighttime fishing. But those lights — as well as LEDs used for navigation, searchlights and interior lighting — can adversely affect VHF frequencies as well as AIS and DSC signals, according to the U.S. Coast Guard.

“Radio frequency interference caused by these LED lamps was found to create potential safety hazards,” said a Coast Guard Marine Safety Alert released in August.

In one port, the maritime rescue coordination center wasn’t able to contact a ship by VHF radio. The same vessel had poor AIS reception.

“LED lighting installed near VHF antennas has also shown to compound the reception,” read the alert.

The recently released Marine Electronics Journal’s November/December issue said the Global Maritime Distress and Safety System task force recently began investigating the LED issue “but so far has identified no solutions.”

For the same story, the journal spoke with Brian Rodgers, president of Shadow-Caster, a manufacturer of LED lighting in Dunedin, Fla., about the issue.

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He said the problem is with “some of the ‘switching’ power supplies that are used inside these lighting fixtures. LED lighting fixtures that use linear and passive-type power supplies do not create any more noise than a traditional incandescent bulb. However, ‘switching’ power supplies, which literally switch to convert power at a very fast rate and cause electromagnetic interference in the AM and VHF ranges, are the culprit here.”

Rodgers adds there are standards for measuring and controlling EMI and the marine industry needs to enforce those standards for lighting products with “switching” power supplies.

You don’t always know if you are getting LED interference on a VHF radio — if you are, there’s also probably AIS interference. However, the Coast Guard’s Marine Safety Alert has a short section describing how to test for LED interference. It’s worth checking out first before tossing those LED lights overboard.

DRAFT MERCHANT MARINER MEDICAL MANUAL NOTIFICATION OF AVAILABILITY AND REQUEST FOR COMMENTS
Kristen R. Martin, November 20, 2018

The Coast Guard is seeking public comment regarding the draft Merchant Mariner Medical Manual. The guidance in this manual should assist medical practitioners, the maritime industry, individual mariners, and Coast Guard personnel in evaluating mariner applicants’ physical and medical statuses to meet the requirements of the merchant mariner medical certificate. This draft commandant instruction manual incorporates and consolidates prior guidance on the medical evaluation of merchant mariners contained in several Coast Guard documents. The manual includes guidance on the medical certificate and related processes, including procedures for application, issuance, and cancellation of the medical certificate.

The Coast Guard requests public comment on the draft Medical Manual, with emphasis on its readability, clarity, and ease of use. We welcome suggestions on how the manual can be improved.

We are particularly interested in whether the draft manual adequately addresses safety concerns in situations where the Coast Guard receives information indicating that a medical certificate holder has developed a medical condition that poses a significant risk of sudden incapacitation, or is taking a medication that poses a significant risk of impairment.

The Notice of Availability and draft Medical Manual may be viewed on the Federal eRulemaking Portal, under docket number USCG-2018-0041. For information about this document, contact Adrienne Buggs, M.D., United States Coast Guard, Office of Merchant Mariner Credentialing by telephone at (202) 372-2357 or by e-mail to MMCPolicy@uscg.mil.

IMPORTANT INFORMATION ABOUT TWIC ENROLLMENT
Kristen R. Martin, November 13, 2018

Mariners applying for a Merchant Mariner Credential (MMC) must list their occupation as Merchant Mariner on their Transportation Worker Identification Credential (TWIC) applications. The United States Coast Guard relies on data provided by the Transportation Security Administration (TSA) when evaluating MMC applications.

Personal data supplied to TSA must match what is provided to the Coast Guard on the MMC application. If a TWIC applicant does not list his or her occupation as Merchant Mariner, the Coast Guard cannot reconcile the data provided by the TSA. In such cases, mariners may be asked to work with TSA to update information, which could result in MMC application issuance delays. To begin the application process for a TWIC, visit the TSA TWIC enrollment website.
NEW ‘COLD CARD’ HELPS FIRST RESPONDERS TREAT HYPOTHERMIA

Search and rescue teams and first responders have a new resource for assessing people who have been exposed to extreme cold. Based on Wilderness Medical Society guidelines, the two-sided card provides practical advice and visuals that quickly explain how to evaluate someone with potential hypothermia.

“Although there are many people in wilderness medicine and search and rescue, hypothermia is a rare event for any given practitioner,” said Gordon Giesbrecht of the University of Manitoba in Winnipeg, Canada, who created the card for doctors, paramedics and first responders to print and keep handy.

“When I gave a talk to the Ontario Association of Chiefs of Police, a guy asked if there was a card that summarized everything I had just taught,” Giesbrecht said in a phone interview. “I told him that the only thing wrong with that idea was that I hadn’t thought of it myself.”

The card is available for free on the Wilderness & Environmental Medicine journal website (http://bit.ly/2BbBKEV). The front of the card explains how to evaluate a cold-exposed patient based on consciousness, movement, shivering and alertness. For instance, patients who are conscious, have normal movement, are shivering and alert are considered “cold stressed” and not hypothermic. They should remove wet clothing, add dry clothing, move around to warm up, and consume a high-calorie food or drink.

Those who are conscious, alert and shivering but showing impaired movement have mild hypothermia. They should be handled gently, insulated with a vapor barrier, provided heat around the upper trunk, given a high-calorie food or drink, monitored for at least 30 minutes and advised to sit or lie down for at least 30 minutes. If there’s no improvement after that period, they should be evacuated.

Moderate hypothermia includes a dramatic shift from shivering to not shivering and from alert to not alert, although still conscious. These patients should be kept horizontal, not allowed to stand or walk, and not advised to eat or drink. They should be insulated with a vapor barrier, given heat to the upper trunk and given a warm intravenous fluid. They should be evacuated from the area carefully.

In the worst cases, severe hypothermia occurs when someone is unconscious as a result of the cold. Typically, these patients are treated in the same way as moderate hypothermia cases. If there’s no breathing or pulse, CPR should be started immediately. In addition, these patients should be evacuated as soon as possible.

“Hypothermia is rare but it’s important for people to know about the signs and what to do,” Giesbrecht said.

The back of the card explains how to care for a cold patient, including how to do “The Burrito” hypothermia wrap. Search and response teams should carry several supplies when in cold environments, including a hooded sleeping bag, an insulated ground pad, a tarp or plastic sheet as a vapor barrier outside the sleeping bag, a plastic or foil sheet for a vapor barrier inside the sleeping bag, and a source of heat for each team member.

When creating “The Burrito,” patients with dry or damp clothing should leave their clothes on before being wrapped. With wet clothing, those who are less than 30 minutes away from transport and shelter can leave clothing on but must be wrapped immediately. For those who are more than 30 minutes away from shelter or transport, wet clothing should be removed before the patient is wrapped.

The tarp should be placed on the ground, followed by the ground pad, sleeping bag and foil. The patient should lie on the foil, and heat should be applied to the upper torso and armpit areas. The Cold Card then shows a visual for how to fold the foil, sleeping bag, ground pad and tarp around the patient to allow for a sealed moisture barrier but also space around the face for the patient to breathe.

continued next column

“Treatments for hypothermia are based on core temperature, but in the field setting, that’s hard to measure,” said Dr. Colin Grissom of the Intermountain Medical Center in Murray, Utah. Grissom, who wasn’t involved in creating the Cold Card, was part of the Wilderness Medical Society team that wrote the hypothermia guidelines on which the card is based.

“The simple visual layout shows an easy-to-understand way to assess a patient,” he told Reuters Health by phone. “This card would be helpful for a relatively inexperienced first responder or lay person who wants common understanding of how to treat cold-exposed people.”

FISHING VESSEL STABILITY

Lori Crews and Brian Kirk, Washington State Department of Ecology

Fishermen know a sudden loss of stability can mean a loss of life, loss of the vessel, and the potential of a costly fuel oil spill that could cause great damage to the environment. Being aware of your vessel’s initial stability and actively managing changes that could affect stability are important responsibilities of every vessel operator that can help keep your vessel safely afloat.

All vessels floating in water have buoyancy. The more space enclosed within the watertight portion of the hull, the more reserve buoyancy a vessel has.

Weight added to the vessel affects the center of gravity, and any added weight reduces freeboard because the vessel sits lower in the water. Weight added high on a vessel can decrease stability, since the weight can tend to pull the vessel further over as it swings off the centerline. Weight added low in a vessel can improve initial stability, since the vessel will return to upright faster when it rolls. Too much weight low in the vessel can cause snap rolling. And, by reducing freeboard, the added weight can make the vessel’s overall stability worse. The deck edge will submerge quicker, and the vessel could capsize at a smaller angle of roll or heel.

A solid or liquid weight on a vessel which moves – sliding, rolling or sloshing – will cause the center of gravity to move, interfering with the vessel’s ability to right itself.

Lifting loads, such as pots, nets, or pieces of equipment, can quickly change the stability of a boat. As soon as the load is lifted clear of the deck, the center of gravity of the load immediately shifts to the tip of the boom or the block doing the lifting. A swinging load will also impact stability, as the center of gravity will move into the vessel, and the potential of a costly fuel oil spill that could cause great damage to the environment.

A fishing vessel operator can improve stability by doing the following:

- Maintain your watertight doors and hatches.
- Securely close watertight doors and hatches in poor weather.
- Keep freeing ports clear when at sea, so water on deck can rapidly drain back over the side.
- Check voids, bilges, and lazarettes for signs of progressive downflooding, which can add weight to a vessel over time.
- Pay attention to any changes in the vessel’s weight distribution, whether from loading pots, lifting nets or equipment, or the accumulation of ice.
- Secure all items that can move in poor weather.
- Minimize the number of tanks with free surface; try to have tanks either full or empty.
GLOBAL FISHING WATCH, USCG TEAM UP TO STUDY ILLEGAL FISHING
Maritime Executive, December 11, 2018

Fisheries data NGO Global Fishing Watch is teaming up with the United States Coast Guard Research & Development Center (RDC) to conduct research on illegal, unreported and unregulated fishing. The effort will focus on evaluating open-source vessel movement data, capturing data and satellite imagery, and advancing understanding of patterns of vessel activity related to IUU fishing.

With backing from Bloomberg Philanthropies, Global Fishing Watch is setting up a new data and analytical group to collaborate with external agencies. The collaboration with RDC is the division’s first external partnership, but Global Fishing Watch has collaborated with many other governmental agencies in the past, including the Australian National Centre for Ocean Resources and Security and the Japan Fisheries Research and Education Agency.

“The Global Fishing Watch Data and Analytical Cell is all about making data available and then making use of that data to achieve better analysis and shared awareness,” said Tony Long, CEO of Global Fishing Watch and Commander, Royal Navy (retired). “To have the USCG be the first organization to benefit from our new cell would be an honor . . . effective collaborations like this can be game-changing in the fight to combat IUU fishing.”

Global Fishing Watch’s database includes vessel-tracking data from other government agencies, including NOAA and the Peruvian and Indonesian fishery authorities. The group is also working with Colombia, Costa Rica and Panama to bring their national fishing-vessel tracking data (including VMS data) into its database.

Global Fishing Watch has led the way in efforts to correlate satellite visual imagery with AIS and VMS tracking to identify IUU fishing patterns, including tracking-evasion behavior. Unlicensed squid-jigging is particularly susceptible to satellite detection due to its reliance on high-intensity lamps during night fishing. Ship-to-ship transfers on the high seas are also an identifiable indicator of potential unregulated fishing.

COAST GUARD GIVES APPROVAL TO AMERICA’S FINEST JONES ACT WAIVER
Steve Büttendorf, January 18, 2019

The U.S. Coast Guard has signed off on a Jones Act waiver for America’s Finest, a USD 75 million (EUR 65.8 million) vessel commissioned by Fishermen’s Finest, according to a press release issued by U.S. Rep. Rick Larsen (D-Washington) earlier this month.

That means the boat built by Dakota Creek Industries is free to fish in U.S. waters and deliver products to American ports.

“The Coast Guard worked hard to create a thorough report absolving Dakota Creek and giving the green light to America’s Finest vessel,” said Larsen in the statement. “The employees at Dakota Creek support a job-creating industry that strengthens national defense and fosters innovation and contributes to the maritime economy in Washington state and Alaska. I am proud to be a part of giving the hard working employees at Dakota Creek a stronger future.”

The review ends a nearly two-year ordeal regarding the ship due to the amount of foreign processed steel used in its construction. The Jones Act limits ships traveling between two U.S. ports to have no more than 1.5 percent foreign steel. About 10 percent of America’s Finest steel was bent in the Netherlands.

Dakota Creek is a leader in the seafood processing industry, and contributes to the maritime economy in Washington state and Alaska.

President Trump signed that bill into law last month.

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America’s Finest seemed destined for an international sale at a substantial loss after repeated attempts to get a waiver failed. However, Washington state’s Congressional delegation worked to get waiver language into a Coast Guard reauthorization bill that both chambers passed in November 2018 in an attempt to save hundreds of jobs at Dakota Creek, a leading shipbuilder in the state.

President Trump signed that bill into law last month.

Dakota Creek Vice President Mike Nelson told the Skagit Valley Herald the news hadn’t really sunk in.

“I think we’re done as far as we can tell,” he said. “It’s like there’s always been one thing around the corner, but I don’t think there is anymore.”

One of the conditions for the waiver was for the Coast Guard to inspect records and verify neither Dakota Creek nor Fishermen’s Finest deliberately circumvented Jones Act regulations in building the 264-foot trawler-processor vessel.

The waiver also puts some limitations on the number of fish the ship can process for the next six years. That was done after Alaska officials raised concerns that the ship could impact processors at the state’s Dutch Harbor port, the nation’s largest fishing port.

Dennis Moran, president of Fishermen’s Finest, told the Herald that the restrictions will require the company to discard dead fish, something he deets. Still, he’s pleased the waiver was granted for a vessel that will “be the best ship in the country” and that Dakota Creek shipyard will stay in business.

“We will deal with the restrictions in a variety of ways,” he said. “That will just have to play itself out in the next year.”

USCG – FORMAL MARINE CASUALTY INVESTIGATION
Bryant’s Maritime Newsletter, January 17, 2019

The US Coast Guard issued a news release stating that a formal marine casualty investigation has been convened into the marine casualty of the fishing vessel Mary B II, which capsized off Newport, Oregon on 9 January 2019, resulting in the loss of three lives and loss of the vessel.

USCG – ELECTRONIC VISUAL DISTRESS SIGNAL DEVICES
Bryant’s Maritime Newsletter, December 26, 2018

The US Coast Guard issued a policy letter providing guidance for acceptance of electronic visual distress signal devices (eVDSDs) that are evaluated as meeting the design and performance requirements of RTCM Standard 13200.0 as equivalent to electric distress lights certified to 46 CFR § 161.013.

DOJ – F/V CAPTAIN SENTENCED FOR INTERFERING WITH USCG BOARDING
Bryant’s Maritime Newsletter, November 29, 2018

The Department of Justice (DOJ) issued a news release stating that a fishing boat captain pleaded guilty to interfering with a Coast Guard inspection and was sentenced to two years of probation, with the first four months to be served in home confinement with electronic monitoring.

When the Coast Guard boarded his vessel, the net was being towed behind. The boarding officer directed him to haul in the net for inspection. Instead, he let out more cable. He ignored a second order to reverse the winch and haul in the net, letting it go to full length, whereupon the cable snapped, swinging violently across the deck and endangering the crew and the boarding party. The net was later recovered from the ocean floor and was found to consist of three separate layers, effectively reducing the size of the mesh and allowing for the catch smaller fish.
The Alaska Division of Public Health’s Section of Epidemiology keeps Alaskans safe from infectious diseases; injuries; and environmental, occupational, and other health hazards.

In Alaska, healthcare providers and laboratories are **required** to report infectious diseases of public health importance to the Section of Epidemiology (7 AAC 27.005, 7 AAC 27.007).

The complete list of reportable conditions is available at: http://dhss.alaska.gov/dph/Epi/Pages/pubs/conditions/default.aspx

Other Alaskans, including those working in the seafood processing industry, are **encouraged** to report any suspected cases or outbreaks of an infectious disease (or other public health concern) to the Section of Epidemiology.

Rapid investigations of infectious diseases in the workplace are critical to limit:
- The spread of disease in workers and surrounding communities
- Disruption of work activities leading to decreased productivity
- The time and resources needed for disease control
- Fear among employees and surrounding communities

The Section of Epidemiology also offers:
- Answers to infection control questions
- Assistance with disease prevention strategies
- Clinical consultation (though not medical decision making)

Report suspected infectious disease cases to the Alaska Section of Epidemiology by phone at (907) 269-8000 or (800) 478-0084 afterhours

*For more information, you can also reach the Section of Epidemiology*
- **By email:** InfDisease@alaska.gov (for non-urgent matters only)
- **On the web:** http://dhss.alaska.gov/dph/Epi/Pages/default.aspx

Section of Epidemiology investigations in the workplace are not regulatory; they are conducted in partnership with affected businesses/organizations, with the shared goal of protecting the health of workers and communities.
**DECEMBER 2019 CLASS SCHEDULE**

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<th>Course Description</th>
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<tr>
<td><strong>STCW 5-Day Basic Training (BT)</strong></td>
<td>$1,100</td>
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<td>Feb. 11-15, Mar. 11-15, Apr. 8-12, May 13-17, Jun. 3-7, Jul. 8-12, Aug. 12-16, Sept. 9-13, Oct. 7-11, Nov. 11-15, Dec. 9-13</td>
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<td><strong>STCW Basic Training Refresher</strong></td>
<td>$900</td>
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<td>Feb. 12/14/15, Mar. 11/13/14, Apr. 9/11/12, May 13/15/16, Jun. 4/6/7, Jul. 8/10/11, Aug. 12/14/15, Sept. 10/12/13, Oct. 7/9/10, Nov. 11/13/14, Dec. 9/11/12</td>
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<td><strong>Medical Emergencies at Sea</strong></td>
<td>$125</td>
<td>$135</td>
<td>Feb. 15, Mar. 11, Apr. 12, May 13, Jun. 7, Jul. 8, Aug. 12, Sept. 13, Oct. 7, Nov. 11, Dec. 9</td>
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<td><strong>STCW Medical Care Provider</strong></td>
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<td>Apr. 30-May 3</td>
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<td><strong>Drill Instructor Workshop</strong></td>
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**Please Call Us to Schedule the Following Classes:**

- **Safety Equipment & Survival Procedures**
  - $280 Members / $300 Non-Members
- **8-Hour Shipboard Damage Control**
  - $300 Members / $315 Non-Members
- **STABILITY**
  - $150 Members/$175 Non-Members

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**NPFVOA Welcomes New Individual Member**

Joan Marie Van Gasken

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**WHAT’S NEW?**

NPFVOA understands how difficult it can be to have your crews take the training they need to keep certifications current. We are pleased to announce that we have an instructor who can either ride northbound or southbound on your vessel and hold First Aid/CPR, HAZWOPER Refresher, and Drill Instructor courses. They can also run drills with your crews or work with your fire teams. The potential training is endless! Call Rebecca to schedule.

---

**MEET OUR NEW PROGRAM ASSISTANT!**

We are pleased to introduce our new program assistant, Krystle Reiter. Krystle will be your new contact for signing up for classes, golf, and general questions. Please update your address books with her email, krystle@npfvoa.org. Cait is leaving us for a job closer to her house, and we wish her the best.

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**NPFVOA’S SPRING GOLF TOURNAMENT FUNDRAISER**

Sponsored by Ocean Peace

Thursday, May 23, 2019
Harbour Pointe Golf Club
1pm Start Time

Day of fun with dinner to follow! If you haven’t attended our tournaments in the past and would like to this year, please email info@npfvoa.org to be added to our mailing list.

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**NPFVOA VESSEL SAFETY PROGRAM STAFF**

- **Karen Conrad**—Executive Director
- **Rebecca Hanratty**—Program Coordinator
- **Krystle Reiter**—Program Assistant

For your convenience, current and past issues of our newsletter are available online at npfvoa.org.

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This newsletter is published quarterly by the North Pacific Fishing Vessel Owners’ Association (NPFVOA) Vessel Safety Program and is free to members. To receive a subscription, please consider joining NPFVOA by completing the membership form on the back page and mailing it to NPFVOA with the appropriate fee. Memberships are annual, and all contributions are tax deductible. NPFVOA is a 501(c)(3) non-profit association.
NPFVOA Vessel Safety Program

Courses Include:

- STCW Basic Training
- STCW Basic Training Refresher
- STCW 2-Day Basic Firefighting
- STCW Medical Emergencies at Sea
- STCW Personal Survival Techniques
- STCW Personal Safety & Social Responsibility
- STCW Medical Care Provider
- STCW Basic Training Revalidation
- DRILL INSTRUCTOR WORKSHOP
- 24-HOUR HAZWOPER Technician
- 8-HOUR HAZWOPER Refresher
- SPECIMEN COLLECTION CERTIFICATION
- SHIPYARD COMPETENT PERSON
- SHIPYARD COMPETENT PERSON REFRESHER
- 8-HOUR SHIPBOARD DAMAGE CONTROL
- OSHA Marine 10-Hour
- OSHA COMPLIANCE AT THE DOCK OR SHIPYARD
- ONBOARD DRILL INSTRUCTOR WORKSHOP
- IN-THE-WATER SURVIVAL TRAINING
- PEDESTAL CRANE OPERATOR SAFETY TRAINING
- NAVIGATION: COLLISION AVOIDANCE
- STABILITY
- O/B FIRE TEAM TRAINING

ADDITIONAL CUSTOM COURSES TO FIT ALL YOUR SAFETY TRAINING NEEDS!
The NPFVOA Vessel Safety Program is a non-profit association dedicated to education and training in marine safety. Because safety is a concern for everyone in our industry, NPFVOA seeks membership from an expanded industry sector—commercial fishing, workboats, passenger and recreational vessels, and the businesses that support them.

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Primary Contact Name &amp; Title:</th>
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Would you like to receive information & updates via email? Yes No

Would you like us to link to you from our web site? Yes No

Please describe the services your company provides:

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<tr>
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</table>

- □ Vessel (over 79 ft.) $600 Benefits apply to all current crew members and management company.
- □ Vessel (60-79 ft.) $300 Benefits apply to all current crew members and management company.
- □ Vessel (under 60 ft.) $125 Benefits apply to business personnel only; vessel crew ineligible at this level. (Appropriate for marine support industry, e.g., law firms, ship yards, fuel suppliers, etc.)
- □ Associate $400 Benefits are limited to named individual and are non-transferable (Appropriate for crewmen and single-person business entities.)
- □ Individual $75 Benefits are limited to named individual and are non-transferable (Appropriate for crewmen and single-person business entities.)