

# Alaska Marine Safety Education Association

A community-based  
information & training network

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# MARINE SAFETY UPDATE

## Alaska Students Benefit From Teacher Workshops

School teachers across Alaska are integrating marine survival, boating safety, cold water survival skills and land survival into their classes. Most have taken either AMSEA instructor courses or special AMSEA teacher workshops as a part of the **Cold Water Safety in the Schools** project. They are using resources they obtained in these seminars.

Some teachers were teaching about these topics even before their AMSEA training; others are incorporating them into their classrooms for the first time. Following are just a few examples of how teachers are using safety training with their students.

**Petersburg** teacher **Karen Schramek** has been teaching marine safety since the early 1980's and credits the program with saving at least five lives. "My main emphasis is teaching students how to save their own lives and how to rescue others without being injured," Schramek explained. Schramek and pool staff Katy Baldwin and Kelly Peterson recently took the AMSEA teacher's workshop in Petersburg.

**Homer** Middle School teacher **Brenda Dolma** completed her second year of training 120 seventh graders in wild edibles, navigation, sea survival, preparation and first aid. She runs the two-week program with four other teaching team members including **Anna Borland-Ivy**, who also works with children from the area's Russian Old

Believer community.

On Kodiak Island, **Louis Martinez** in **Port Lions** has been teaching marine safety to 9<sup>th</sup> through 12<sup>th</sup> grade students in a nine-week Outdoor Education elective class. In **Kodiak**, **Jane Eisemann**, instructs high school students in her semester-long Marine and Wilderness Survival Training course.

Further west, **Bernie Gurule** of **Lake and Peninsula School District**, coordinated training for more than 100 students in **Nondalton** in compass and map work, and for more than 80 students in **Chignik Lake** in survival training. Meanwhile, **Ron Bowers** continues his work in **Dillingham** and other **Bristol Bay** schools, bringing Commercial Fishing Drill Instructor training and other marine safety training to schools in his area.

**Josh Miller** of **Valdez** does very cool marine safety training with his high school students using SERVS oil spill clean-up boats, as well as working with TransAlaska terminal personnel. He will also be providing U.S. Coast Guard approved Drill Instructor training for his students who commercially fish.

**Sitkan** **Kathy O'Gara** continues to train hundreds of students in communities served by Southeast Alaska Regional Health Consortium. (Ask her how to teach about the perils of alcohol and boating using grease-smear glasses.) **Gustavus** Principal/Teacher **Peter Kokes** teaches his 6th to 8th graders a boating safety class each spring. **Al Hill** of **Hoonah** teaches an outdoor recreational and survival course using AMSEA materials to grades 3, 11 and 12.

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## *Marine Safety Instruction Available*

### **AMSEA MARINE SAFETY TRAINER INSTRUCTOR COURSE**

**Seward, April 3-8, 2000** - AMSEA offers the only U.S. Coast Guard-approved marine safety instructor course in the U.S. It is appropriate for people teaching agency personnel, school children, recreational boaters, commercial fishermen or other mariners. Cost is \$355. Up to three 500-level University of Alaska credits are available for an additional \$35. Contact AMSEA for more information or to register.

### **DRILL INSTRUCTION COURSES IN ALASKA**

Bristol Bay area - BBEDC, (800) 478-4370  
Cordova - Bob Plumb, (907) 424-6117  
Haines - Karl Johnson, (907) 766-2218  
Homer - Ocean Safety Services, (907) 235-7908  
Ketchikan - Southeast Ocean Survival, (907) 225-8985  
Kodiak - Joycrafts, (907) 486-6293  
Naknek - Debby Robertson, University of Alaska, (907) 246-4292  
Petersburg - Jan. 29-30, 2000. Contact AMSEA.  
Prince of Wales Island - Pete Willburn, (907) 828-3924  
Seward - AVTEC, (800) 478-5389  
Sitka - AMSEA, (907) 747-3287  
Wrangell - Todd Harding, (907) 874-2085



### **OUT-OF-ALASKA DRILL INSTRUCTION**

Bellingham & Seattle, WA - Fremont Maritime Services,  
(206) 522-5377 or Washington Sea Grant, (206) 543-1224  
California - Coastwise Marine Safety, (707) 464-2934  
Eastern U.S. - Marine Expeditors, Ltd., David Briggs, Norfolk, VA (757) 587-5290  
New Jersey - Thompson Maritime, (908) 899-7990  
Oregon - Clatsop Community College, (503) 325-0910 or, in Newport, Ginny Goblirsch (503) 265-3463  
Rhode Island - Vessel Safety Corp., Paul Helland, (401) 782-2021  
Texas - Israel Linarte, (210) 943-7935  
Westport, WA - Washington Sea Grant, (360) 875-9331

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Contributions to this publication and letters to the editor are most welcome. Please submit them to: Editor, AMSEA - **Marine Safety Update**, P.O. Box 2592, Sitka, AK 99835 or fax (907) 747-3259 or e-mail [amsea@alaska.com](mailto:amsea@alaska.com)

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## SAFETY TRAINING: HOW MUCH IS ENOUGH?

By Jerry Dzugan

For the first time in history, safety training has become an accepted part of working lives. At the beginning of the twentieth century, there were few safety-training standards for industry. The industrial injury and fatality rates were appalling. Life was treated cheaply.

However, safety standards eventually developed. Government mandated some, but industry also saw the cost-benefit of safety in the workplace and voluntary standards were developed. Many industries recognized that unsafe practices were expensive. Now at the end of the century, voluntary and mandated safety-training efforts have resulted in dramatic decreases in on-the-job injuries and fatalities. But, how much training is enough?

In the commercial passenger airline industry, some airlines require pilots to undertake simulator training every six months and classroom refreshers every 12 months. With hundreds of passengers' lives at stake with every take-off and landing, safety training is considered a high priority.

Search and rescue pilots with the U.S. Coast Guard are required to take flight simulator training every year, as well as an annual flight with a "standardization" pilot. Even recreational pilots are required to complete at least three take-offs and landings every 90 days. If flying at night, three nighttime take-off and landings must be included as well. This, of course, does not take into account the intensive training a pilot must initially go through to obtain a license.

In the maritime industry, licensed mariners are required to renew their licenses, certificates and endorsements only every five years. Often this is accomplished just by logging sea time and passing physical, drug and background checks. For some endorsement renewals, such as radar, refresher training must take place. Many, but not all, vessels that have licensed personnel are required to conduct weekly emergency drills on board.

Commercial fishermen on documented vessels that operate beyond the Boundary Line are required to conduct monthly drills. The drill conductor must complete a minimum eight-hour classroom course. That individual is then "qualified" to conduct drills on any size fishing vessel for the

rest of his or her life, without any requirement for refresher training. Again, how much training is enough?

Requirements for training are usually a compromise between regulatory agencies and industry. Public pressure also plays a role. The answer to "how much training is enough?" must be answered individually. Consider, however, these statistics on retention of information and skills:

When **told** something, most people recall 70% of the information three hours later, but only 10% of the information three days later.

When **shown** something, most people recall 72% of the information three hours later, but only 20% of the information three days later.

When **told and shown** something, most people recall 85% of the information three hours later, and 65% three days later.

Learning that engages many senses is the most effective, but knowledge "drop off" always occurs if information and skills are not constantly reinforced. Driving a car or flying an airplane regularly provides one with ongoing reinforcement of driving or flying skills. However, skills for use during emergencies are perhaps tested only once in a lifetime. Refresher training for disasters does not occur "naturally" as part of daily activities.

To answer the question of "how much is enough?" consider:

- What are the risks associated with an activity?
- Does training offer new skills for emergencies or reinforce old skills that must be retained?
- Are the skills learned **relevant** to the risks faced?
- Is the training commensurate with the complexity of the task to be performed?
- If a performance standard exists for the task, can you realistically meet that standard?
- What are the expectations of industry and/or co-workers of your skills in an emergency?

The daily challenges of working lives often keep us from asking the questions that determine "how much training is enough?" The answer lies not in regulation or industry standards. Rather, in appraising the risks we face on a regular basis and assessing our readiness, without pressure from other groups or individuals. To be able to answer this question honestly is perhaps our greatest challenge.

### AMSEA STAFF NEWS:

## Michael Jones Sails Away; Steven Campbell Comes Onboard

Former AMSEA Schools Coordinator Michael Jones has left Sitka for a long-planned sail to ports south. Since November 1997, Michael coordinated and taught marine safety instructor classes around Alaska, added to the **Outdoor Adventures** curriculum, taught classes in schools throughout the state, and endowed the AMSEA office with his great, and sometimes strange, sense of humor.

During his time in Sitka, Michael served as lifeguard at the pool, volunteered at the public radio station and tried in vain to teach Sitka drivers how to act when approaching four-way-stops. Michael found that Sitkans get very confused as they approach a four-way-stop. Some stop and wildly gesture, trying to direct traffic from behind their steering wheels. Others ignore every rule about right-of-way and just follow their own impulsiveness. The AMSEA staff is already missing Michael's rages following traumatic, near-death experiences at Sitka four-way stop intersections.

Everyone at AMSEA wishes Michael great warm water adventures, and looks forward to his return to Sitka in April. The place is just not the same without him.

Meanwhile, long-time AMSEA instructor and staff Resource Manager, Marian Allen has moved into the Schools Coordinator position. New staff member, Steven Campbell, will assist Marian with the schools program, teach AMSEA courses and take on the Resource Manager duties.

Prior to settling in Sitka in 1988, Steven worked as a teacher and commercial fisherman while living in Western Alaska, the Pribilofs, Anchorage and the Mat-Su Valley. After his arrival in Southeastern Alaska, Steven taught at Sitka High School until his retirement in 1997. He has kept his hand in commercial fishing and also uses his U.S. Coast Guard license to run boat tours and fishing charters in the summer months.



## Alaska Students Benefit continued from page 1 . . .

Near **Bethel**, **Nick Kamerof** and his assistants continue doing great marine safety and survival training in the villages along the Yukon-Kuskokwim River, training hundreds of school children of all ages.

In addition, **Bill Gablehouse** is working in **Wrangell's** high school, **Jetta** Budd continues to offer **Sitka** Migrant Education students a survival training program, and **Pete Willburn** delivers safety training in **Prince of Wales Island** schools.

In all, nearly 100 teachers in Alaska are providing students hands-on, outdoor survival training using the AMSEA interdisciplinary curriculum.

AMSEA's three-year **Cold Water Safety in the Schools** project continues to offer three-day workshops for teachers. Participants receive a K-12 curriculum, **Outdoor Adventures**, compatible with Alaska latest teaching standards.

This curriculum contains a wealth of hands-on learning activities that teach safe outdoor practices and survival skills on land, river, ice and sea. Follow-up teaching assistance is available from experienced AMSEA instructors. Up to two University of Alaska credits are available for \$35. For qualified teachers, there is no fee for the course or materials.

Workshops are tentatively planned in **Bethel**, **Juneau** and **Mat-Su**. For a workshop in your school district contact AMSEA.

## Marine Safety Training Top Priority in Kodiak

For almost 20 years, marine safety training for fishermen and others has been available in Kodiak. Today, as in the past, this training is often a cooperative effort thanks to the U.S. Coast Guard Kodiak Air Station, private trainers such as Ted Rogers with Joycrafts, nonprofit organizations including Kodiak Fishermen's Wives, University of Alaska Marine Advisory Program, AMSEA, and others including Kodiak High School's marine safety training program under the tutelage of Jane Eisemann.

In a typical training session at Kodiak Air Station, experienced rescue swimmers, flight mechanics and pilots brief fishermen. The fishermen then get to see and try some of the equipment the Coast Guard provides in an emergency such as dewatering pumps and rescue baskets. They take part in a question and answer session about hoisting. As Ted Rogers states, "It's easier to teach them here in the hanger as opposed to out on the open water when the boat is sinking."

AMSEA instructors, like Ted Rogers, have trained more than 3,800 Alaska fishermen in marine safety. AMSEA instructors also educate more than 5,000 recreational boaters and children every year. Kodiak is one of the ports most responsive to training.

"At this point we've run the bulk of the Kodiak fleet through this class," Rogers explained, "We're picking up a few stragglers and some newcomers, but now we are getting fishermen who want a refresher." AMSEA's new USCG-approved 10-hour drill instructor class is designed for crews of six or less on one vessel.

It fills the need for either first-time training on a vessel, or refresher training.

Rescue swimmers and other Coast Guard search and rescue personnel in the Pacific Northwest are happy to educate fishermen. "I think it's an excellent idea to conduct the training," said AST2 Will Milam, a rescue swimmer assigned to Air Station Kodiak. "Just from being involved with cases with fishermen who have been through the course, it makes our job much easier on scene if they've had the training."

The Kodiak fleet is very safety conscious according to Rogers. "What makes me happy about the guys coming back is that the training is totally voluntary. The fishermen in Kodiak really deserve a pat on the back."

The Coast Guard Air Station in Sitka is also involved with training fishermen, with help from Fishing Vessel Safety

Examiners Tim Clepper, Larry Synder and Matt Odom. Recently the station helped AMSEA train new marine safety instructors, Mt. Edgecumbe High School students and members of the public in dewatering simulation and helicopter evacuations. According to Pilot Bob Yerex from the Sitka Air station, "We consider this type of training to be money in the bank!"

Kodiak's Milam, who also provided training to fishermen when he was assigned in Astoria, Oregon, notes, "Any education we can give them is good. If its take an hour out of my day to train a dozen guys about our rescue equipment, it's well worth it, because it might save their lives."





# Life Raft Servicing - Why Do It Every Year?

Excerpted from an article by Bob Markle, U.S. Coast Guard

## WHY EVERY YEAR?

When life rafts were first approved in the 1960s, annual servicing was established to ensure cylinders were charged, fabric was in good condition (no dampness), and survival equipment was not damaged or outdated. Thus, manufacturers built life rafts with the understanding that they would go through yearly servicing.

Experience has shown that annual servicing ensures that life rafts remain operational. Annual servicing has been adopted as the international standard by treaty.

## WHY DO I HAVE TO SERVICE MY RAFT ANNUALLY? THE MILITARY DOESN'T HAVE TO!

The U.S. Coast Guard *does* service their smaller, standard commercial life rafts annually. On larger Navy and Coast Guard ships MkVI life rafts are repacked every four years. Unlike small, commercial rafts, these rafts are packed with compressed air at very high rates of pressure. This system is more reliable at low temperatures and is less stressful than the commercially used carbon dioxide (CO<sub>2</sub>) packing.

However, it costs three times that for the same-sized commercial life raft. Servicing, although needed only every four years, is more than four times as expensive. Also, within the four-year servicing cycle, random rafts are periodically pulled from service for inspection.

## DOESN'T SERVICING CAUSE WEAR AND TEAR IN A RAFT?

Every five years, a commercial life raft is required to be inflated with its CO<sub>2</sub> inflation system. This could damage the fabric and hoses, but design features protect the raft from such damage. In fact, it is beneficial to the fabric of the raft to be frequently unfolded and refolded, thereby relocating creases and chafing points in the material. Moisture accumulation also needs to be dried out of rafts periodically.

## WHAT CAN BE DONE TO EXTEND THE SERVICE INTERVAL?

For this to happen, manufacturers would have to make some design changes. Cylinder status would need to be checked without removing the cylinder. The fabric would need to be treated for longer exposure. Operational trials, in a wide variety of climate situations, would have to demonstrate that longer servicing intervals did not lead to deterioration.

Vacuum packing has been suggested. However, this causes problems since small amounts of moisture have no place to drain and this leads to fungus growth. Also, vacuum packing causes sharper wrinkles in the material, which damages the fabric. Finally, it is difficult to check the operation of the cylinder without breaking the vacuum.

One manufacturer is conducting operational tests for extended service intervals and the USCG is cooperating in these tests.

## WHY ARE SEALED LIFE RAFTS IN CONTAINERS EXPOSED TO THE ELEMENTS?

Moisture from condensation forms inside the container. This is why most life raft containers have holes in the bottom for drainage. Moisture also enters where the painter enters the container and at the hole for the lifting ring in a davit-launched life raft.

## WHY IS SERVICING SO EXPENSIVE?

Servicing is a labor-intensive activity. The Navy estimates that it takes 17 man-hours to service one of their four-year service life rafts. Rafts must be picked up, delivered, unpacked, inflated, cleaned, dried, inspected, checked for leakage, deflated, folded and repacked. Expired equipment must be replaced. Repackers must be trained at cost by the manufacturers and be certified for handling hazardous materials. Overhead costs must be paid for their facilities and liability insurance is not cheap.

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## NEW! On the Web:

### Address Listed Incorrectly in Last Issue

<http://www.heads-up.net> is a site connecting West Coast fishing industry interests. It is regularly updated and includes a safety page.

### New Link Available from AMSEA Web Site

The AMSEA web site [www.uaf.edu/seagrant/amsea](http://www.uaf.edu/seagrant/amsea) has a new link to today's National Weather Service weather map for Alaska. Starting on our home page, click on **Links**, go down the links page to the Alaska Weather heading, click on **National Weather Service Alaska Region Headquarters** ([www.alaska.net/~nwsar](http://www.alaska.net/~nwsar)), click on **Television Weather Images**, then **Today's Weather Images**.

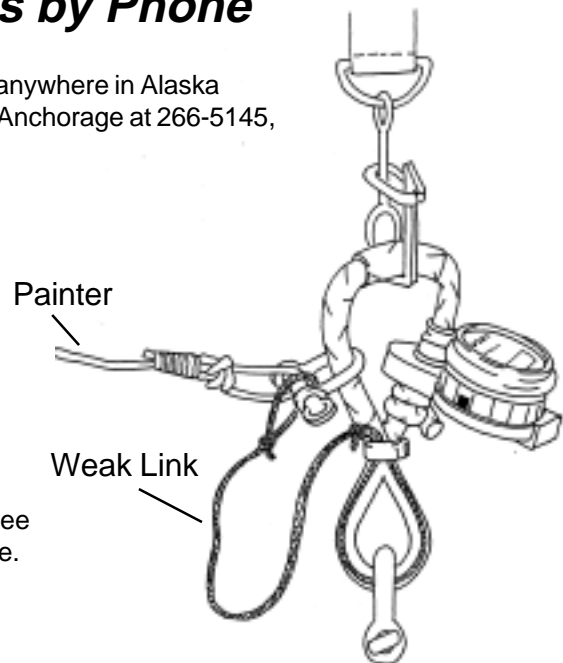
## Obtain Alaska Weather Reports by Phone

Alaska weather reports are available, toll-free, from anywhere in Alaska at 1-800-472-0391. Weather information is also available in Anchorage at 266-5145, in Fairbanks at 458-3745, and in Juneau at 790-6850.

## Hydrostatic Release Check Advised

This winter has seen several casualties involving commercial fishing vessels with life rafts that were not installed according to manufacturers' instructions.

Check to make sure your raft is installed properly (see adjacent diagram) and your hydrostatic release is still in date.



## Life Raft Servicing *continued from page 6 . . .*

### WHY CAN'T I SERVICE MY OWN LIFE RAFT?

Repacking is a specialized, brand-specific, skill taught by manufacturers. The course is several days in length. Specialized equipment and tools must be bought, current service manuals and updates maintained, climate controlled space reserved, spare parts inventory kept up, inflation gear and calibration scales obtained, and hazardous materials certification held.

### WHY ARE THE SERVICE LIVES OF BATTERIES, FOOD, FLARES ETC. SO SHORT?

The expiration dates are designed so that items used within these dates will provide full performance. Items may indeed "last longer" than these expiration dates suggest, but not at full serviceability.

## AMSEA Reviews 1999 Achievements

With the help of members and the AMSEA network, much was accomplished during 1999:

- ◆ Over 5,000 Alaskans received marine safety and cold water survival skills training in at least 30 different communities.
- ◆ Over 235 Drill Instructors for the commercial fishing industry were trained in 26 courses in 16 ports.
- ◆ **Marine Safety Update** was published quarterly and distributed to more than 1,300 mariners.
- ◆ Seven Drill Instructor refresher classes were provided in four locations.
- ◆ Seven in-school teacher workshops were conducted. Sixty teachers in Sitka, Haines, Naknek, Fairbanks, Petersburg, Soldotna and Kodiak received training in AMSEA's K-12<sup>th</sup> grade outdoor safety curriculum.
- ◆ Over 3,000 children experienced outdoor safety and survival training.
- ◆ A 600-page K-12<sup>th</sup> grade curriculum in outdoor safety, **Outdoor Adventures**, was developed. It is tied to Alaska's latest education standards.
- ◆ AMSEA's 350-page **Marine Safety Instructor Manual** was revised and updated.
- ◆ **Water Wise**, a 196-page book on boating safety for recreational boaters was written and published. This book fills a need with both the state and national boating public.
- ◆ **When Seconds Count**, a video on the care and use of immersion suits was produced.
- ◆ A refresher-training course was conducted for Marine Safety Instructors training fishermen.
- ◆ Forty-two new AMSEA Marine Safety Instructors were trained.
- ◆ Over \$30,000 worth of marine safety training equipment and donated services were solicited and received.
- ◆ AMSEA's marine safety web site ([www.uaf.edu/seagrant/amsea](http://www.uaf.edu/seagrant/amsea)) was developed.
- ◆ A distance delivery Methods of Instruction course was developed and implemented.
- ◆ International (STCW) approval for AMSEA's U.S. Coast Guard-approved courses was sought.
- ◆ A State of Alaska recreational safe boating program was drafted.
- ◆ AMSEA worked with more than 65 agencies and private companies promoting marine and boating safety.





## THANKS . . .

The following individuals and organizations are helping AMSEA to keep marine safety training widely available.

### 1999 Sustaining Memberships

F/V Cloud Nine, Sitka

### 1999 Supporting Memberships

Alaska Longline Fishermen's Association  
LFS, Inc., Bellingham, WA  
F/V Searcher, Sitka  
Petersburg Vessel Owners Assoc.  
Educational Training Co., Sitka  
SEAPRO, Ketchikan  
F/V Coral Lee, Sitka  
F/V EH, Sitka  
F/V Rocky B, Sitka  
Southeast Alaska Regional Health Consortium (SEARHC)  
Southern Region EMS Council, Anchorage  
Vessel Safety Corp., Rhode Island  
F/V Kariel, Sitka  
H. Daniel Hull, Anchorage  
F/V Sequoia, Sitka  
Coastal Safety Services, Sitka  
U.S. Forest Service, Chatham Area  
Dan Russell, Seattle  
F/V St. Lazaria, Sitka  
F/V Defiant, Petersburg  
Maritime Enterprises, Homer

F/V Flagship, Sitka  
F/V Sprite, Anchorage  
F/V Northern Light, Seward  
F/V Cordova, Sitka  
Marine & Industrial Training Assoc., Port Isabel, TX

### 1999 Donor Memberships

C. Bond, Ralston Cunningham Assoc., Bellevue  
F/V Whisker III, Haines  
M/V Carpe Diem, Dutch Harbor  
Fisheries Business Consulting, Juneau  
City of Sitka  
Betty Oakey, USCG Auxiliary, Greenbrae, CA.  
F/V Sea Miner, Haines  
F/V Pacific Dawn, Pelican  
Gabriel Films, Cold Spring, NY

Thanks also to the individual members of AMSEA. Your support is vital to keeping AMSEA's network of instructors providing marine and boating safety instruction.

### Recent Service & Equipment Donations

To Morrow, Sitka  
North Pacific Fisheries Observer Training Program,  
Anchorage

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## 121.5/243 EPIRB Phase-Out to Take Place

Both the old, cylindrical Class A, and the more popular Class B, pocket-sized 121.5/243 EPIRBs, will be phased out over the next 10 years, according to Lieutenant Commander Paul Steward of the U.S. Coast Guard. According to Steward, who is in charge of the program, the phase-out is intended to replace a "poorly functioning service with a transition to a much more efficient and effective 406 Mhz alerting service."

There are over 100,000 false alerts on the 121.5 frequency every year. In other words, the 12 U.S. Rescue Coordination Centers respond to 300 false alerts every day. This equates to a waste of responder resources that could be utilized for real emergencies. The 406 EPIRBs are not only less prone to false alerts, but indicate the names and numbers of registered owners, making false alerts easy to trace.

The U.S. intends to deactivate 121.5 by January 2008. However, because the system is international and other nations will have to agree to the deactivation, the date may extend to 2010. In any event, the next few years should see more pocket-sized 406 EPIRBs offered by manufacturers, and prices should fall as these come on the market.

For more information on the 121.5 phase-out, contact Paul Steward via E-mail at [PSteward@comdt.uscg.mil](mailto:PSteward@comdt.uscg.mil)

# MARINE SAFETY INSTRUCTOR REFRESHER CLASS HELD IN OREGON

On September 16 and 17, 1999, a Marine Safety Instructor refresher class was held in Astoria, Oregon for 11 instructors. The Oregon instructor network has trained over 900 fishermen since they started.

Ginny Goblirsch of Oregon Sea Grant and Clatsop Community College coordinated and hosted the refresher course. It was a worthwhile event for everyone involved, and may become a regularly scheduled event.



Tom McAdams displays some of his rope work during a recent Marine Safety Instructor refresher class in Astoria, Oregon.



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