### AMSEA's Port-Based Safety Training



by Mr. Jerry Dzugan Executive Director Alaska Marine Safety Education Association

The emerald-green island of Kodiak rises out of the Gulf of Alaska about 25 miles from its mainland, about 200 miles from Anchorage. Commercial fishing has been a mainstay for all of the communities on the island.

Unfortunately, plane fare to Anchorage to take fishing vessel safety training would cost almost \$600. Fortu-

nately fishermen on Kodiak do not have to travel to take safety training: It has been brought to them for years.

#### History

It wasn't always this way. In the not-so-distant past, Alaska suffered the highest rate of fishing fatalities in

the nation. There were no resources, fishing vessel safety training programs, or budget for them for Alaska.

So, with few training resources and great need, individuals from the University of Alaska Sea Grant/Marine Advisory Program and Coast Guard air stations in Alaska pulled together resources from their own agencies. They flew out to remote fishing ports to teach marine safety workshops. In 1983 the University of Alaska produced a four-part "Fishermen's Survival" video series to help in this effort. In addition, a number of safety workshops were given.

Since most of the remote fishing ports strung along thousands of miles of Alaska coastline are not connected by roads, it became obvious that a more permanent training and outreach effort was needed to make safety training available to these far-flung ports.



AMSEA instructor Steven Campbell explains to commercial fishermen how to form a human raft in pool exercise. USCG photo.

### The Alaska Marine Safety Education Association

By the mid-1980s, a group of people from these and other agencies formed a non-profit group, the Alaska Marine Safety Education Association (AMSEA), to address the high fatality rates in boating activities. Core principles of AMSEA's safety training program:

- The training had to be meaningful, relevant, and hands-on.
- It had to be delivered to their homeports when fishermen were not fishing.
- Additionally, the training needed to be low- or nocost to effectively include even small fishing ports that did not have a steady cash economy.

#### **Program Basics**

Initial efforts focused on four areas.

First, much of the information on cold water survival at that time was outdated or not appropriate to cold climates such as Alaska, so new information needed to be



AMSEA trainer Mary Chambers trains Sitka teens like Ellen Chenowith, pictured left, in outboard motor safety. Photo by Mr. Jerry Dzugan courtesy of the Alaska Marine Safety Education Association.

incorporated into a cold weather-relevant marine safety manual.

Second, marine safety instructors needed to be trained so remote fishing ports could have their own local training resources. These instructors would know the local fishery and would mostly be credible fishermen themselves.

Third, an inventory of marine safety training gear such as immersion suits, life rafts, wearable lifejackets, etc.,

had to be established so this gear could be procured, maintained, and sent to instructors in these ports. Many port-based instructors would only teach a few times a year, but needed expensive gear for training. They would be able to obtain this gear through AMSEA in a revolving loan program.

Finally, these instructors would need support staff to help acquire funding, promote safety work-

As part of an AMSEA drill conductor course, Floyd Tomkins (foreground) splits wedges wrapped in cloth to fix one of several flooding problems (similar to a crack in a hull) in AMSEA's flooding control trailer, which was designed based on the USCG's flooding control trailers stationed around the U.S. Photo by Mr. Jerry Dzugan.



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#### **Get the Kids On Board**

In Alaska, many children work on their family's fishing vessels. They learn to clean fish and other fishing skills at a young age. When a boat is at risk, so are the children, so the survival skills they learn are critical.

Training school children in marine safety is also seen as critical, since the attitudes and behaviors of children are typically easier to influence than those of adults. Since 1986 the AMSEA network has trained teachers in half the school systems in Alaska as well as schools in Maine and other states.

Some school systems start training their children in immersion suit use and marine safety through AMSEA as early as third grade. Some of these former third graders are now taking over their parents' fishing operations and are asking for refresher training.

shops, maintain training gear, coordinate classes, and perform other duties.

#### Accomplishments

The first Marine Safety Instructor Training (MSIT) course was held in Sitka, Alaska in 1986. Since that time, more than 1,000 instructors have been trained. These instructors train commercial fishermen from American Samoa to Maine and from Florida to Northwestern Alaska. Almost 10,000 fishing emergency drill conductors have been trained in more than 1,000 workshops since 1990. In addition, over 180,000 fishermen and other mariners have also been provided with hands-on safety training in custom courses on different topics.

Agencies such as the National Marine Fisheries Service Observer Training Program have also used the MSIT training as the basic qualifications for their instructors; thus, all fisheries observers receive this training. "AMSEA training" has become synonymous with marine safety training in many parts of the country.

#### -For more INFORMATION:

For books, curriculum, brochures, DVDs, current information on marine safety, and a quarterly newsletter, go to www.amsea.org.

#### Results

AMSEA has documented mariners who have been helped in an emergency by the training they received through this community-based instructor network. Research by the National Institute of Occupational Safety and Health has documented that a mariner is one and a half times more likely to survive an emergency at sea if he has taken safety training.<sup>1</sup>

Additionally, the majority of instructors teaching marine safety to commercial fishermen in the U.S. have now been trained in AMSEA's Coast Guard-ac-



Robert Ngugen teaches MAYDAYs to Vietnamese fishermen in Galveston, Texas. Photo by Jerry Dzugan.

cepted MSIT course. This network would not be possible without the collaboration of a network that includes the Coast Guard, Sea Grant agents, marine equipment suppliers, private trainers, and many others. These partners provide survival gear, expertise, funding, promotion, and facilitate training in many ways.

Due in part to these efforts, in the last 20 years the average number of fishing fatalities in Alaska fell from 38 per year to an average of 11.<sup>2</sup>

#### About the author:

Mr. Jerry Dzugan is the Executive Director of the Alaska Marine Safety Education Association. He is also currently serving as the chairman of the Coast Guard's Commercial Fishing Industry Vessel Safety Advisory Committee. He has been a lifelong educator and has commercially fished Alaskan salmon and halibut.

#### Endnotes

- Lincoln, J. (2006). Fresh Seafood at a Price: Factors Associated with Surviving Fishing Vessel Sinkings in Alaska, 1992-2004. Unpublished doctoral dissertation, Johns Hopkins University, Baltimore, Maryland.
- <sup>2</sup> AMSEA analysis.

## The Coast Guard and the Alaska Marine Safety Education Association

Partners in fishing vessel safety.

by Mr. David Belliveau
U.S. Coast Guard Fishing Vessel Safety Division

With fishing vessel casualties rising in the 1980s and 1990s, the Coast Guard concluded that, in conjunction with writing and implementing new regulations, implementing an aggressive fishing vessel safety training program would help reduce fatalities.

The Coast Guard sought assistance from other organizations to provide products and services to enhance the training infrastructure for commercial fishermen in Alaska and throughout the U.S., and in 2001 it awarded a contract to the Alaska Marine Safety Education Association (AMSEA).

AMSEA focused its training on practical information delivered in a hands-on format. The initial training focused on cold water safety and survivability and was presented to school children, commercial fishermen, and the general boating public in remote areas of Alaska.

Its courses have expanded and now include training for:

- fishing vessel drill conductors,
- fishing vessel marine safety instructors,

"If you rescue a man at sea, you give him his life that day. Teach a man how to save himself, and you save him for a lifetime."

- · fishing vessel crew survivability,
- · fishing vessel stability awareness,
- fishing vessel examiners,
- fishing vessel inspection techniques.

Training is not limited to commercial fisherman and their local communities; it is also offered to people such as state and federal employees who work closely along-side the fishing community and industry. Additionally, training locations have expanded to include ports in Hawaii and on the West, East, and Gulf Coasts.

To date AMSEA has trained approximately 9,500 fishing vessel drill conductors, over 1,000 vessel marine safety instructor trainers, 114,300 school children, and 55,000 members of the general public.

#### For more INFORMATION:

For information on training opportunities, visit www.fishsafe.info.



U.S. Department of Homeland Security

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Winter 2010 - 11

The COAST GUARD B Security at Sea PROCEFDINGS

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