

Final Training Grant Report (Closeout Report) - July 1, 2020 – June 30, 2021

TPG Grant Name: Commercial Fishing Safety Training
Institution: Alaska Marine Safety Education Association
Grant Number: 5TO3OH008631-16-00
Address: 2924 Halibut Point Rd. Sitka, Alaska 99835

Section I

TPG Summary

This project increases the availability of commercial fishing safety workshops. This is done by continuing to build and reinforce a network of port based fishing safety instructors around Alaska and the U.S. The goal is for fishermen to have credible fishing safety instructors from the fishing industry who know the local area and local fishery risks and meet federal safety training requirements for fishermen and decrease their risk of death in a worker environment that is remains high risk.

We have assured in this report that none of the EDCs or other trainees in this report are duplicated in reports by other NIOSH fishing safety grant recipients, nor have the same trainees been reported again in AMSEA's other NIOSH fishing safety projects.

The training took place on five levels.

1. Deliver Marine Safety Instructor-Training (MSITs) to train port based trainers who can provide accessible training to the US's far-flung commercial fishing fleet. COVID-19 and travel restrictions and shutdowns restricted delivery and the availability of trainees to be able to take this training in this full year under pandemic. However, to make up for small class size, we offered more MSIT courses. Great efforts were made to continue to train new instructors and follow federal, local and our own COVID guidelines to prevent illness to students and staff. Following federal, state, local and our own protocols under COVID, and revision of training methodology to ensure distancing and masking resulted, in no one being infected with COVID in any of our training.

The objective in this 5th year was to offer three MSIT classes for 36 people. Despite the pandemic this year, we coordinated and held four in-person MSITs in the Alaska fishing ports of Ketchikan, Nome, Seward and Sitka, for a total of 26 people attending which reached 130% and 72% of our objective respectively in this 5th year.

The objectives during this 5-year project was to conduct 15 MSIT workshops and train 180 new fishing vessel safety instructors. We reached 93% (n14) and 70% (n126) respectively of this objective despite the limitations of the pandemic.

2. Deliver Emergency Drill Conductor (EDC) training to commercial fishermen to qualify them to conduct required monthly drills on their fishing vessels. The objective in this 5th year was to offer 95 EDC workshops and train 700 EDCs. COVID restricted training opportunities due to

safety of staff and students. It was not until the Spring of this year that we were able to conduct almost the EDC training in this report. 240 EDCs were trained in 32 courses, mostly in Alaska. It took much more effort and expense and number of courses to train smaller groups of fishermen. Instead of an average of 10 fishermen per course prior to COVID, there are now only 7.5 fishermen per course since the pandemic started.

In addition, at the beginning of this 5-year project, AMSEA instructors across the U.S. were teaching EDC classes under our Coast Guard approval, and we were able to claim the EDCs these instructors were training with our support. Now however, most of our east coast instructors are teaching EDCs under their own (FPSS) NIOSH funding. Although we still support these instructors with our instructor training, Coast Guard course approval, curriculum development and printed training materials, we are not including their EDC trainees. Thus we no longer count the number of EDCs other NIOSH supported projects train, to avoid what could be viewed as overlapping support from differing NIOSH projects. Thus we are not counting 83 EDCs from 10 EDC workshops conducted under the FPSS as a part of this project to avoid double counting their trainees

In this fifth year of the project, and despite the travel and risk constraints of the pandemic, the number of courses we actually planned and promoted in this project were about double what was actually held. However, these classes had to be canceled due to COVID spikes experienced in rural fishing ports cases and were not acceptable risks for instructors or fishermen trainees. Also our Coast Guard Accepted courses for MSITs and EDC do not allow for a switch to an online delivery methodology.

Despite these impediments, in this year 5 we successfully held 32 EDC courses and trained 240 new EDCs which met 37% and 34% of our objectives respectively for the year.

The five-year objective was to hold 380 EDC workshops for 4,500 EDC fishermen. We held 97% of the EDC workshops we projected to conduct (n368), not counting another 90 classes that were promoted but not held due to lack of students. We also trained 80% of the students we projected to train (n3,579). The pandemic of the last two reporting years was the only issue responsible for this smaller than expected turnout of students despite our herculean efforts.

3. Our best results over the last 5-years was in the delivery of short safety workshops for fishermen in topics such as vessel stability, damage control, cold water survival and other short safety workshops. Although the objective in this 5th and last year was to offer 50 specialized safety workshops and train 600 fishermen, all short safety workshops in our 5-year objectives have been previously meet.

The five-year objective of delivering 170 short safety workshops to 2,000 fishermen was exceeded by 524% (10,473 fishermen in 1,023 workshops were trained) after only 4 years in this project. This objective demonstrated that short one to five-hour safety workshops on a greater variety of topics was much preferred by commercial fishermen as opposed to Emergency Drill Conductor refresher training (see objective 4 refresher training following).

Distance delivered portals were used much more for this delivery in the final two years of this project due to the pandemic.

4. This objective was to deliver refresher training for both MSITs and EDCs to maintain currency in marine safety topics and updates. Refresher training continued to be very slow in the last two years of this project due to the lack of Coast Guard enforcement of refresher training.

The objective in this 5th year was to offer 3 MSIT refresher training courses for 25 new instructors and EDC refresher training to 400 fishermen. In this final year 19 EDCs and only 6 MSITs were refresher trained due to training shutdowns caused by COVID-19 and the lack of enforcement of refresher training by the Coast Guard. This represents only 5% and 24% of our respective objectives for the year.

The five-year objective of refresher training 100 MSITs and 1,350 EDCs resulted in only 55% (n55) and 23% (n310) respectively being refresher trained. This was mostly due to the lack of a Coast Guard regulation mandating refresher training and the difficulty presented by the current pandemic and travel restrictions. However, there were thousands of fishermen (see objective 3 results) who did receive refresher safety training in shorter workshops, greatly exceeding our expectations.

5. Further development of curriculum outline and training resources for future proposed training mandates. and field testing of new curriculum took place in this 5th year. The objective was to train 300 fishermen in new curriculum. Further refinement in curriculum developed included Stability, Sleep Deprivation, Fishermen's First Aid, Risk Management and Ergonomics and new slide decks were developed. Training in these and other new fishing vessel safety topics was given in 26 workshops to 228 fishermen in this year alone.

The five-year objective of training 550 fishermen in new curriculum was 79% met.

Relevance

The goal of this project is to lower the high fatality rate in commercial fishing. This project continues to build needed training infrastructure and instructional materials nationally to reduce commercial fishing fatalities.

Key Personnel

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TPG web link

<https://www.amsea.org/>

<https://www.amsea.org/training>

Section II

High Impact Stories in this 5th project year

1. According to the U.S. Coast Guard, in calendar year 2020 there were only 2 fishing vessel operational fatalities in Alaska. This is down 63% from the previous 5-year average of 5.4 fatalities a year in Alaska. This is slightly under the fatalities yearly reported for the previous five years and a continuation of the downward trend in fatalities since 1989.
2. In a random sampling of 150 trained drill conductors, 34% of them stated they "used the skills learned in a drill class to prevent or manage an emergency at sea" and 91% stated they had "changed their safety practices as a result of the training".
3. In a random selection of 100 EDC course evaluations in this project year, to the question *How will this training change your safety practices*", of those who answered the question, 100% listed ways in which they were going to lower the risk on their fishing vessel through more frequent emergency drills, buying more safety equipment, or being more thorough in their procedures, maintenance or risk awareness.
4. The effectiveness of this project is demonstrated by the fact that although training was limited this year by the pandemic, 18 crewmembers from around the U.S., trained in the past in this program, reported surviving an emergency at sea in FY 2021. This only counts the trained individual who was directly trained in using survival equipment and in emergency procedures. It does not count the additional crewmembers who survived that were helped in the emergency by presence of the EDC trained crewmember/captain. Additionally, it can be surmised that that other fishermen trained in this project also survived a casualty but were not reported to us.
5. Despite the pandemic which canceled the most productive part of the training year, over 80 Emergency Drill Conductor classes were promoted and planned and 35 actually were held for 240 fishermen. Most EDC workshops took place in 16 remote Alaska fishing ports, often multiple times in one port if there was demand.
- 6.
7. Results from student post course evaluations this year resulted in:
 - a. Over 98% of students stated the training meet or exceeded their expectations.
 - b. Over 99% stated they would recommend the course to others.
 - c. Over 99% stated the port based Marine Safety Instructors were "Good to Excellent"
8. Post course feedback asked "How will this training change your safety practices on the water". The majority of respondents from just a few randomly chosen EDC classes in this project year, reported a positive change in safety behavior and included comments as follows:

"Being more organized with drill and paperwork. Having medical records for clients."

“Will actually make me practice safety drills, also get flooding kit!”
‘I’m a greenhorn, so it provided a great foundation.”
“We will be more prepared with new crew.”
“More motivation to do more drills and log them.”
“Make emergency situations smoother.”
“More efficient procedures onboard (less chaos).
“I now feel comfortable to set up scenarios to practice drill and debrief.”
“I will dedicate much more time to safety of crew, guests, vessel.”
“It makes me want to train more.”
“Knowing what PFDs work best for my operation.”
“Learning the importance of knowing your boat. Not relying on others to know.”
“My fears and reality was justified and changed respectively.”

9. AMSEA has documented at least 293 fishermen trained and surviving an emergency at sea since the start of NIOSH support over 20 years ago. This does not count the number of crewmembers who would have also been helped by the effective response of the AMSEA trainee. Following are just a few examples of incidents that occurred in this year’s reporting period where the training changed behavior and resulted in a more positive outcome in an emergency. AMSEA trained survivors and rescuers testimonials and reports from this report year follow:

A. “An AMSEA EDC trained fisherman in Bristol Bay, AK and his crewmate were headed home to Dillingham when his voyage home was met with an untimely storm as the winds and waves picked up. He had expected four foot waves on his trip back but encountered giant swells after they rounded the tip of the Nushagak Peninsula. ‘Those four foot waves were now 16 plus, and every once in a while, 20,’ the captain said. ‘Surfing a 32-foot vessel on those -- a little difficult, absolutely.’ As the waves struck his boat, he realized they needed help.”

‘First we hit the radio and did a distress vessel and explained we’re not sinking but any wave here could take us over and capsize us,’ he said. As they called for help, fatigue started to set in.’

‘At some point I’m thinking my arm’s failing, my body’s cramping and I’m losing control in my dexterity,” the captain recalled. “Those thoughts creep into your head that you can’t do this forever. You are going to fail and it’s hard to multitask and disallow those thoughts and I had to put it to one wave at a time.”

Westfall said they were about five miles from shore. He didn’t get a response to his call right away, but he kept reaching out.

'Through the AMSEA training they say even if you can't hear anybody keep yapping because they might be able to hear you and you may not be able to hear them back,' he said.

It turned out that multiple people heard his call – the Coast Guard flew to the location in a helicopter and OBI Seafoods sent a 100-foot tender. The tender broke waves and allowed Westfall to follow its surf while the Coast Guard monitored the situation.

Westfall said he was lucky to get back to shore and it was thanks to the extra effort he put into safety precautions.

'It turned out to be a hellacious storm but all my training and all my safety equipment worked,' he said. Westfall thanked his training with the Alaska Marine Safety Education Association to help him maximize his odds for survival. 'I don't think I would have been nearly as comfortable or maybe not without the AMSEA training. It's a wonderful program,' he said." <https://www.kdlg.org/post/halibut-fisherman-encounters-freak-storm-trip-back-togiak>

B. A letter received from an AMSEA EDC trained fisherman received this year stated: "I want to thank you for the training I received back in 2019. I had to use that knowledge last summer to survive an incident. The skills I learned and passed onto the crew did make the situation as manageable as possible. I cannot praise my crew enough for their actions that day. Every command I issued, they executed exactly as we had practiced. From the man overboard and recovery, to first aid and CPR, their ability to independently handle the situation on deck, allowed me to do what was required from the bridge without further distraction. It was our training that got us through."

C. An AMSEA EDC trained captain from Cordova, AK. wrote this year and told us of an emergency on his fishing vessel. "It was a stack fire. We took all of the AMSEA training, watched your videos, did drills on the vessel...the drills were great. The crew did awesome. They did what they could to prevent the fire from spreading and cool the fire. They got the skiff ready, got into their immersion suits, took over gear but it just stayed too hot and got out of control again and we knew we had to leave the boat. But the crew had everything ready to go. The crew did an awesome job. They bought us enough time to get off the boat. Without the way they reacted to the fire we may not have made it off the boat. I was very impressed with the training and their reaction to the emergency. I can't say enough about AMSEA...you can quote me on that".

D. A Sitka, AK. EDC trained commercial fisherman inadvertently grounded his vessel on an island at night and it subsequently caught fire as he was fishing alone. As the vessel slammed against the rocks due to the seas, the fishermen called a mayday to the Coast

Guard, donned his survival suit and grabbed a dry bag containing a VHF radio, headlamp and inREACH and EPIRB signaling and location devices. He fired his flares and used another flare to guide a rescue helicopter to his location. He was rescued within an hour. The Coast said of the incident “The guy did everything he was supposed to do. So good for him.”

10. A total of 14, 987 people who work on commercial fishing vessels were given safety training in the 5-years of this project across the U.S.