## Vocational Training for Fishing Vessel Crews

R. T. WHITELEATHER
Bureau of Commercial Fisheries
St. Petersburg, Florida

LET'S START HERE with two facts: (1) growth in United States' fisheries production, as in all other economic pursuits, has been achieved through a high degree of labor specialization and (2) the process of modernization in the fisheries is a perpetual one so that the technical requirements of manpower will ever be higher. Even though automation and mechanization of the fishing industry are being carefully studied in several countries and discussed in an international conference scheduled for Montreal, Canada, in February 1970, the impact is not likely to eliminate the need for people with technical orientation within the fishing industry.

The use of complex equipment for finding and catching fish today calls for the same kind of organized training for the fisherman that is available in other trades. It is no longer economically feasible to expect fishing crews to learn the job by trial and error. Where vessels costing hundreds of thousands of dollars are equipped with sophisticated electronic equipment and complicated deck gear, it is too expensive for skippers and fishermen to learn through their mistakes while on the job. In shore plants and installations, the operators of mechanical equipment are required to be certified as stationary engineers, mechanical engineers or the like. Why is it that anyone would be expected to go to sea and operate complex fishing equipment simply because he thinks he would like to be a fisherman?

From a quick look at the literature, it is quite obvious that the countries that have well-established training facilities for fishermen are either foremost in world fish production or highly successful in their local fisheries. Vocational training facilities are found in Japan, Norway, Soviet Union, Canada, Portugal, Australia and South Africa among others. For example, fisheries training in Japan dates back to 1895. In 1966, there were 55 high schools with 19,000 students in fisheries courses in that country. There were 32 training vessels, and some shore processing units were used for this purpose. Not all trainees go into fishery occupations, but it is reported that slightly over 60% enter into some phase of fishery activity.

In most segments of the U.S. fisheries, there is not much "new blood" being recruited. In the Boston fleet, the average age of fishermen is said to be 57 years. Even in the United States' first-ranking fisheries by pounds and value, labor is a distinct problem. The menhaden industry suffers from shortages of crews and must resort to guarantees to attract even temporary crewmen. However, nowhere is the vessel crew problem any more acute than in the shrimp industry. The need for more shrimp captains and shrimp fishermen is aggravated to some extent because this is a large industry that is thriving and expanding, that requires long trips and distant-water fishing. It is important to remember that the cost of production is seriously affected where there is incompetency of vessel crews. Vessel safety and maintenance and safety of shipboard personnel are factors that distinctly influence the vessel owner's insurance costs in a direct ratio to the competency of the crew. Poor catches by poor crews are also costly. Alert fishery operators have always taken these

things into consideration. It would seem inevitable then that fishery training in the United States would be much further advanced. The fact is, however, that it has been mostly aborted in development. In looking over my notes, I see that as far back as February 1956 I had some discussion with Dr. Fish of the University of Rhode Island who was then attempting to initiate some type of vocational education for fishermen through university sponsorship. After a dozen years, the University of Rhode Island now offers a well-rounded curriculum of training for fishermen which, to my knowledge, is the most comprehensive of any in the United States. Some other institutions are in the talking stages of developing similar programs, but I do not know of any that are functioning.

In 1963 in Boston, and in 1964 and 1965 in Gloucester, our Bureau, cooperating with state and municipal agencies and the U.S. Labor Department, carried on fishermen's training programs under the Manpower Development and Training Act. In 1965, a similar program started in New Bedford. This program resulted in employment of about 90 fishermen who were trained for places in this tight labor area. This program, financed by the Federal government, cost less than \$800 per man. Safety training programs are still being carried out, but teaching of the fishing trade has been discontinued except for classes still being held in New Bedford. Ten or 12 years ago an attempt was made to set up a fishermen training project in Brownsville, Texas but this project never got off the ground. In Tampa, Florida, 3 years ago, the Florida Shrimp Association sponsored a training course for shrimp fishermen with the assistance of the U.S. Department of Labor, Bureau of Apprenticeship and Training. This program conducted two classes. In the first class, 29 completed the course; 19 completed the second. This was considered a successful program since most of the trainees went into marineoriented jobs. However, only a few actually joined the shrimp fleet. I believe that this is just about the crop of training programs. There may be a few others that have bloomed and faded in the past, but the point to make here is that none of the training attempts have actually maintained any continuity.

Why have so many of these well intended projects gone out of existence when there is such a dire need for fishermen? Apparently there is no problem in placing trainees after completing courses, so disillusionment after training is not a reason. The pay, especially in better grades of fishing skills, such as captains or mates, is generally high enough to be attractive. The problem seems to center around attracting applicants. Even in cases where reasonable incentive, such as pay during training periods, is provided, applicants have been scarce. It would seem that there needs to be a better system for selecting people with seagoing interest, i.e., those who have something in their psychological makeup that makes them like the sea, perhaps the feeling of independence aboard a vessel, perhaps the gamble of going for a large catch and big money, or some other factors inherent in a marine vocation. Discussions today may be able to identify some of these factors more closely.

There is another area which will need attention before dynamic training programs can be established. This is development of visual aids and teaching materials which can be utilized in training fishing vessel crews. At present, there is a shortage of aids which can be applied specifically to fishermen training. Various government pamphlets, documents and vocational training leaflets are usually pulled together to make up course reference material. What is needed is something aimed directly at the vocation involved. Perhaps our

Bureau and some of the state agencies and universities can give assistance in this field, and these prospects should be examined fully.

I hope this brief background summary of the various courses of action taken in the past will now stimulate some further ideas on ways of establishing training in the future.

## REFERENCES

DANNO, S.

1966. Fishery Education in Senior High Schools, IPFC Symposium, Honolulu, October 1966.

GERHARDSEN, G. M.

1966. Fisheries Education and Training in Growth and Development Programs, IPFC Symposium, Honolulu.

KONDA, S.

1962. Japan's Fisheries Education. Fishing News International (Commercial Fisheries Abstract 9.7).

MURRAY, JOHN J.

1965. On-the-Job Training Program for Trainee Commercial Fishermen, Bureau of Commercial Fisheries Separate 731.

NAVRATIL, Z. A., PROVAN, A. J., AND STRONG, J. J.

1968. Education of Technical Personnel and Fishermen, Conference on Future U.S. Fishing Industry, Seattle.

1968. Fisheries Council of Canada Bulletin, July, p. 4, Automation and Mechanization.