### **DISCUSSION**<sup>1</sup>

#### Labor Session

Discussion Leader: BILLY F. GREER
Discussion Panel: Joseph Colson, Sydney Herndon,
Oscar Longnecker, Larry Shafer

Comment, Moderator Schaefers: That concludes the formal presentation of this particular symposium; however, I have a few general remarks to make before we go into the discussion.

A couple of years ago, during the fishing vessel session of the Annual Gulf and Caribbean Fisheries Institute, I asked, "Why should men spend 4,800 to 7,200 hours a year on a vessel, away from their families and subject to all the hardships attendant with life at sea, when their counterparts ashore are spending about 2,000 hours a year on the job and often at higher pay?" That question has not been answered yet, but evidently a lot of people who might have been interested in going to sea have mulled over that fact and have decided against it.

John Mehos tells me that the fisherman invited to join us and give the fisherman's side of this whole picture just couldn't make it. In the absence of the fisherman, I want to read a skipper's viewpoint on offshore fishing vessels. This was given by Captain M. H. Rodgerson at the 1966 Canadian Atlantic Offshore Fishing Vessel Conference, and it goes something like this: "We are 50 years behind agriculture. Today, almost all of the farmers have replaced their horse-drawn plows with tractors, but in fisheries thousands

<sup>&</sup>lt;sup>1</sup>Editor's note: For reasons of clarity and continuity, discussions have been edited and questions are not necessarily in the order originally asked.

of our fishermen are still fishing in boats which, in all truth, as far as productivity is concerned, can be compared to the horse and plow. Automation is coming. Bigger and bigger fishing vessels are going to be operated by smaller and smaller crews."

You people in the shrimp industry might say, "We are down to two or three men now and we really can't operate with less." In the future, however, your small crews will have to be more skilled and they will have to be paid more money.

It is difficult, if not impossible, to conceive what fishing vessels will be like in 1978. Captain Rodgerson says: "The boats we are going to build in Canada will be influenced by what the other great fishing nations of the world will build. Ships without efficient stabilization systems will be looking around for crew members in 5 years' time. The crews of the future, if, indeed, we shall have men to man our vessels in 10 years' time, will come from the high schools, fisheries colleges or perhaps come into the country as immigrants. Men with a lower education than grade eleven or twelve will not be capable of either managing or operating the fishing boats of the future. If we are to retain men of this calibre, they must have accommodation which is equal to or better than that which they have at home, with showers, recreation space, libraries, comfortable chairs and the like. Vessel operators will have to get used to these ideas in the very near future.

"The naval architects, ship builders and vessel owners must now think in terms of building ships in which men of the future will want to fish." I am quite sure that many shrimp vessel crew members and skippers would agree with most of Captain Rodgerson's statements.

Q. Oscar Longnecker: How can the Bureau of Commercial Fisheries give industry guidance in setting up training programs, even though the means lie in some other agency?

A. Richard Whiteleather:

Our Bureau has given some guidance already in this problem. We will work with the representatives of the Fitzgerald Laboratories, we have worked with SAOTA and we have worked with you. But to specifically answer your question, I think that we must coordinate our efforts more closely with the Labor Department and Manpower Training Programs. Before we can do very much in this field we must have two things: money and people. You can't do this on a fragmentary basis and you can't do it free. It is possible that the Labor Department has funds of this kind and wants to contract for technical assistance. We have people on our staff with technical "know-how" in this field that we could get into it, and we will try to do this.

O. Billy Greer:

I would like to ask John Mehos: How could we organize this, obtain leadership and planning? Dick Whiteleather's answer was that the Bureau of Commercial Fisheries would love to do it, they are qualified to do it, but they have no funding. Does industry have an alternate plan for obtaining leadership guidance to establish a program of training in these facets that have been discussed this morning?

O. John Mehos:

As far as curriculum?

O. Greer:

No, as far as attacking each one of these areas where we can get recruitment. Someone will have to lead and the Bureau can't through lack of funds. Do you have an alternate plan?

A. Mehos:

I think the various trade associations, of course, will have to work together with the kind of people that are here today advising us of the recruiting programs they have available. Through the trade associations we will have to coordinate and find the recruits from various sources. One big purpose of this program today was to bring out this type of information. Oscar Longnecker has been tearing his hair trying to find out this sort of thing, and I think he has made more progress today than in the past 3 months.

Robert Brown: (Comment):

I want to call your attention to a new development this year that I didn't mention during my presentation. It is terribly important. In 1968 we have had new amendments to the Vocational-Education Act that provide almost \$3.5 billion of new authority, which really ought to be taken advantage of by the fishing industry. This is the most important vocational-education development since the turn of the century. The Act provides for a wide spectrum of capability and the man to contact immediately is the state voc-ed representative in each of the fifty states. Get together with this man in each state. Again, you must prepare a plan, and I would get your "two cents" in early and long and hard, both at a state level and at a Federal level. If you want to get some Federal information on these amendments the person to write is Grant Venn, Associate Commissioner of Education, Office of Education, Washington, D.C.

Q. Sydney Herndon: I followed the talks very closely and I also believe the state voc-ed people have the answer for us. That is, veterans' participation in the industry. Was it said that about 70% go into skilled labor when they leave?

A. Frank McKernan: Most of the service men who need training prefer vocational occupations.

Q. Herndon:

Since 70% prefer vocational training, is there some way that you think we could get government sponsorship on training programs through the G.I. Bill or some similar program?

A. Marshall Miller:

Government sponsored training is what Bob Brown was just now talking about in terms of vocational-rehabilitation. You want to remember, there are opportunities within the G.I. Bill itself, where it is up to industry to demonstrate the need for specialized training in technical high schools and junior colleges. There are opportunities, you see, to guide these courses, and they come under the joint administration

of vocational rehabilitation and the Veterans Administration.

We have found that United States government financing is limited to certain metropolitan areas, while the fishing industry's needs are largely located in the rural areas outside

the area of financial assistance. What is presently available to provide training for unemployment in the rural areas for industries such as ours, and what can be done to solve this

A. Brown:

Q. Longnecker:

As you know, the Manpower Development and Training Act is in effect and its general provisions are not specifically problem in these areas? aimed at the cities. Those funds are also available in the rural areas, but planning and development of those programs are really handled at a state level. The assignments or priorities are made at a state level, so that if you had a rural

program, a program in a small town, that program will only be set up if you have told your story and sold your need to your state employment service director and voc-ed men.

There are some special provisions in the Manpower Development and Training Act, especially in Section 241, which are aimed directly at economic redevelopment areas. I am not certain, but I think the Brownsville, Texas, area is probably one of those. You might submit your contract

against the 241 provision for Federal funding. Now, just a short comment on the IOBS program, the one

that really is held to the 50 cities. That decision was made by the President, as there is no question but that we have a serious problem in all of our 50 cities. I am certain that the program is going to be expanded to an additional 50 or 75 cities. There is always some possibility that it may be expanded to a limited number of rural areas, but at this time that is somewhat speculative because of our economic

One does not know whether or not the new administration will approve massive increases in programs if at the same time we have to reduce government expenditures because of fiscal situations.

Mr. McKernan, I understand that very little subsistence was given to the students in the Florida training program. This is quite a problem because the low income bracket people

are not financially able to leave their jobs and take the training program. This appealed to me, as far as your military men being trained prior to discharge as they would continue to receive their military pay. What duties do they

A. McKernan:

Q. Joseph

Colson.

We ask the commanders to relieve them for half a day, so a man could work, let's say, from 1:00 to 5:00. He might go on for a few more hours and put in maybe 6 hours in a have? training day. Some men even put in additional time on The men in this kind of training are housed, fed and

clothed. In many cases, we transport them, if it is an off-base place of training.

In other words, the key is for you to develop any kind of a training program that you might need and to locate it near a military base. It is necessary to work out some schedule with the local people at that base involving participation in a training program. This is done in the Norfolk area that I referred to this morning. There are 20 or 30 companies that put two or three men on the job in many kinds of small business activities. This mounts up into a fairly reasonable number of people who would be training at any one job in the various kinds of industries of the area.

So, in answer to your question, we would like to work with the companies if they are near a military base.

Q. Colson:

What would the requirements be if we were to implement a training program at the high school level? What qualifications would instructors have to have to get your group to endorse this training program?

A. McKernan:

We limit our endorsement to what the industry really needs. As far as the Department of Defense is concerned, we don't set any standard. We leave this up to you, in terms of what your requirements are. This program is heavily industry-oriented, and for that very reason we leave it that way. In other words, we are looking for employment of that man with reasonable training that fits your requirements.

Longnecker (Comment):

In proposing my first question to Dick Whiteleather I had in mind that our fishing industry needs help in finding agencies with funds, or programs, or both. We need guidance and somebody to take us by the hand and help us find the solutions to our problems. Mainly, the problem is money.

Whiteleather (Comment):

I think your point is well taken on this availability of Federal assistance. It is very complicated. In fact, if you take the total Federal programs of assistance for industries, you will get a book about the size of the telephone book in small print. You really do need somebody to give you technical and financial assistance. We can give some help, and I think we can give more help possibly than we have been giving. I have been particularly impressed by some of the things that have been said by the Labor Department people. I believe they are in a position to give us assistance here, and we will get in touch with them afterwards.

Q. Whiteleather:

I would like to ask a question of Mr. Miller. It gets down to this business of developing something that we can put before the recruits or applicants who are looking for positions. The separation centers seem to be the place for this. I am sure that our industry has not been aware of this source or how to tap it. Is there any material, or could there be a film or a brochure, to be made available to the officers who are interviewing in these separation centers? And, secondly, does your Department have grants of money that will provide for the development of these things, whether

in concert with industry or the Bureau and industry? How could we get a grant to work on this?

A. Miller:

I don't think there is any one simple answer. In Florida at your local office in St. Petersburg you have a very capable group. This should be brought to everybody's attention. I think the main point to remember is that you must make your desires known, and you must make your need known to the top man in the state. This is the chairman of your State Industrial Commission here in Florida, and then to the directors of the employment service. When you get down to the specifics of preparing brochures and informational statements, the local office manager in that particular community is the best man to talk with. He has at his own fingertips materials that have been prepared. Most certainly, the state veterans' employment representative in each of your states is available for advice. He can tell you where separation centers are located within each state and where these brochures should be made available in those separation centers. In order to get your story told you have to tell it yourselves. This organization or one like it really ought to develop an attack and have an affective brochure of your own. Don't wait for us to do it, because if we tried to tell your story, it

Brown (Comment):

is not going to be told nearly as well as you can. Secondly, I would organize to do that job, and all of the

other jobs that we have talked about today, in a specific kind of way as an industry. This may even mean hiring one or two or three people to follow up in this, as it is an important problem to your industry.

The brochure is just one tool that an individual would use.

There are hundreds of others.

O. Whiteleather:

A. Brown:

Is a film permissible to present? We can go beyond that. We can arrange for your local representatives to come into the local employment service office and interview applicants at the office. We will provide space, and if you want to get a group of applicants together, you can show your movie, if you have a movie. I think we have to remember that the local employment service officer has 40,000 occupations in that dictionary of occupation titles. One of them is "shrimp mate," I guess you call it. That is a little description that takes about one

short paragraph, and that is all that service officer really knows. He has 39,999 other paragraphs just like that. He can use it to tell your story, but it isn't going to be very

effective. You must carry that message yourself.

O. Colson:

2.

Has the Bureau given any thought to creating an incentive film, to attract the younger talent at the high school level? I believe it should be something that would display the adventure, the glamour of the sea, income, technique and all of the scope of the fishing industry.

A. Whiteleather:

Our office has given considerable thought to this idea and we have been thinking about suggesting that industry make a film that can enhance its image. We want to improve the image of the fishing industry. In our neighborhood, if you talk about a commercial fisherman, they think the guy is a bum. Well, this is not entirely true. They don't see a man that has a good home, a good automobile and lives in a good community, but they see a few of the people that don't portray the best side of the fishing industry.

For example, our little city of St. Petersburg Beach made a promotional film that cost \$16,000. A report was made the other day that 200 thousand people had seen this film; these were civic associations and TV. Now, why can't the fishing industry have this kind of a film that will present to the public the best side of its image?

Q. Colson:

Why couldn't we do that in cooperation with the Bureau with some of our P.L. 88309 monies? It is research development; trying to develop labor.

A. Whiteleather:

I wouldn't want to say yes or no about it right here.

Colson (Comment):

I would like to just make one short statement about money. I have done some inquiring through our local interests where our district office is in New Orleans, and I have contacted some foundations that were nearly willing to make some outright grants. They would cooperate with a government or state program and in some cases, they will go the whole route. I represent the five-state compact encompassing every aspect of the industry. I would say that one of our great problems is to get our story to the potential fisherman, that they will have full-time employment the year 'round and how much income they have, and so forth. I would be glad to dedicate time to your meeting and to establish trade groups and see if we could get committees and plan the discussions to produce this film. We are leaders in this region for such development, and I think that we could work with Dick Whiteleather's group and get them to participate in producing this film.

A. Larry Shafer:

You said that you considered the equipment on the trawlers to be complicated. Why? Many of us who are working with the vessel crews consider it quite simple.

A. Whiteleather:

I think I can answer that in two ways. In my judgement, we have two kinds of problems. We have a "here-and-now problem." That is the problem you have with the present trawlers that are tied up for lack of crews. Secondly, we have a long-range basis for more sophisticated vessels. You know as well as I do that these vessels are coming, and a lot of them are here. They are larger vessels with diesel engines, larger auxiliaries and more complicated sonic and navigational equipment. These are just more complicated vessels than the standard trawler of a year or two ago. Every day vessels are becoming more complex and that is the reason that I say that we do have a need for more people that can handle sophisticated equipment.

Q. Herndon:

I have one question for John Mehos: Is the man that you were speaking of, the crewman that was in jail—is he still there, or what has been done with his prosecution? Or has he been hired by a competitor, or is he now the captain of a larger and more modern vessel?

A. Mehos:

His case is pending. We are certain that he will retire to some penitentiary since he has a record about a mile long. We now find that out! Seriously, this is another thing that we lack in the industry. A number of years ago some of us unsuccessfully tried to put together a personnel records program, and I think we were derelict in not doing so.

At that time, we had a plan whereby an association of former law enforcement officers would proceed over a period of time to compile some central records. When a man applied to me for a job on the boat, I could check with the agency and get his background. We failed to do that, and I think this is another thing that we in the industry should seriously consider now. I think that we may very well holler to the government that they have to do a lot of things, but there are many things that we have to do.

Q. Shafer:

A. John Sainsbury: Dr. Sainsbury, what kind of response in the way of number of students taking and completing your course have you had? We had something like 50 applicants for the first program, which ends in June 1969. Of these, we accepted 30, 26 of whom enrolled. We now have 19 students in that particular class, and I think 15 will graduate successfully.

The second year we had well over 100 applicants, and we went through them very carefully. They have to meet the usual university requirements, even though it is a 2-year program, and this eliminated quite a number. We always personally interview each of the applicants; we finally accepted 36. We feel that 30 is about the maximum that we can manage with the staff and the funds that we have available. A program of this type needs a much higher staff to student ratio than the normal in-university program.

It is worth noting that the second group of entrants to the program is somewhat superior to the first, and they show much more likelihood of success.

Q. Herndon:

Dr. Sainesbury, I am sure that your students pay tuition. Do the fishing companies sponsor those students or advance them money?

A. Sainsbury:

At the moment, we have a number of fishing companies interested in doing this, but none has done it. The first students are being financed privately by fishing companies. They are not doing it officially. I am thinking particularly of two boys who are from the state of Washington and one from the state of Oregon. These boys are financed by fishing interests. One other boy is sponsored by the government of Puerto Rico. He is a graduate of the University of Puerto Rico and has been sent to us for training in commercial fisheries.

Q. Herndon:

Then the majority of them pay their own tuition?

A. Sainsbury:

I would say something like 25% of them are under the G.l. Bill. The remainder pay their own tuition and this for an out-of-state person comes to about \$2,800 a year. We help. There are a few small scholarships for \$100 to \$300. We also help them out by giving them jobs as lab assistants. The people that we need most we help in other ways. We have two laboratory buildings which have residences for caretakers or janitors. They get free accommodations. Students are willing to come, and if they are willing to do this, then they are willing to stake their future in the industry, and there is no doubt that they are.

O. Herndon:

Then, in comparing that to our local problem here in the Gulf shrimping industry, you said there were three things that they were interested in: status, earnings and living and working conditions?

A. Sainsbury:

Yes.

Herndon (Comment):

We feel that the earnings are high enough in the shrimp industry to attract good men, and I guess if the earnings are good enough, that will take care of the status to a certain extent.

Sainsbury (Comment):

From the experience I have had these are technically trained people; they are a step above a crew level. They would pass through the crew level on the way up to the skippers' positions, but I don't think this is going to overcome the status problem. I think the status is an aspect that goes much further than this. Fisheries is not going to be a completely respectable occupation until there is the vertical distribution of qualifications from the top to the bottom. I believe that you must have interest at a university level and from local industry to establish this. This appears to be happening, and it is amazing. I couldn't have realized that our University program would have such an effect upon the local industry, that industry would be so appreciative of the efforts and would take advantage of it. We had something like 60 industry vessels cooperating in our 3-months' commercial experience with the boys. They fish between the two school years. Industry is receptive to this type of thing. I am certain that you must have the vocational, technical and professional education to go along with it. I think that if you are doing the job piecemeal, that you won't go as far as if you try to develop the whole thing, I am open to criticism on this. This is my own opinion.

Herndon (Comment): I believe that we could improve our living and working conditions. I believe we have to, because the boats are making more extended trips.

(Comment):

George Ferguson I believe that fishing is an occupation that has never been given any status or respectability. I agree completely with Dr. Sainsbury, that if any solution should be sought in this business status is one of the first things that should be improved.

One of the main things that we must do today, if we are going to succeed in fishing in all parts of the world as Japan has, is to create a social standard in fishing and not to have it looked down on as a degraded profession, as it has been for too many years. This has kept too many people of better standing and intelligence away from the fishing industry. The capital investment in ships requires people to respect their owners and the owner's capital investment, and it is only then that we shall be able to succeed in this venture.

Sainsbury (Comment):

The 60-vessel Point Judith fleet that I mentioned works as a cooperative and not by any agreement between owners, associations or unions, as is general in New England. There are several skippers of that fleet who have had the advantage of a university degree. It is very notable that the ability of these men is far in advance of those who have not had this education, and these people went into the fleet on their own choice.

Joe Cerruto (Comment):

I am from the Grumman Aircraft Engineering Corporation and am fairly new to your type of business. There is one observation that I have made in listening to the gentlemen from the industry here today, which I hope could be of value to you, since I am an outsider. It appears to me that industry has a tendency to look to government to solve its problems. I would suggest that you must look upon yourselves and look within yourselves to develop your own training program and sell your own story, because you know your problems and you know now what you need.

Mehos (Comment):

I would like to elaborate on that. Mr. Cerruto is absolutely correct in that industry has not done enough for itself, not only along these lines but also along other lines. This is due to the nature of the industry and the way it has grown. It is composed of thousands of small businesses, each one represented by a boat and one man that owns that boat. You don't find much opportunity here to do the sort of thing that you are suggesting that industry should do. It is only recently that a number of larger firms capable of doing this sort of thing have entered the industry. One reason larger businesses are entering the industry is to get in on the ground-floor of the development of marine resources and oceanography. This is one example of what is about to happen over the next several years.

I previously mentioned food from the seas, and the necessity for avoiding famine in the future. All of these things are bringing about progress that will match the development in outer space. That makes it all the more important for industry and government to join forces to develop the fisheries and to train the thousands of people that we shall need in the future. A part of this is industry's job, but the reason industry asks for a program such as today's is that we need trained people. We have discussed the necessity for industry to prepare background information to interest people in coming into the fishery business, but the important thing is, as Dr. Sainsbury pointed out, training these people so they can do the job. This in itself will raise their status.

Q. Charles Caillouet:

Of the successful graduates from the New England area, what proportion do you anticipate will enter fisheries in the New England area?

A. Sainsbury:

When we talk about the whole fishing industry, you will probably find something like 95% will go into some part of the fishing industry. Now, how many will actually go to sea is a different matter because they have training which also fits them for many jobs ashore. For instance, their ideal is a position as representatives for engine companies, electronics firms and maintenance people who work in the net lofts and this type of thing. I think that almost immediately they will go to such jobs rather than in fact spend most time afloat. I would say, probably 40% would end up at sea for a minimum of 5 years.

Q. Caillouet:

What proportion will remain in your area to help alleviate the problem in your area?

A. Sainsbury:

Something like 85% of the students are from the New England area. The rest come from other states and one from abroad. So I think you will possibly find that something like 80% will stay in the area.

I represent Western Marine. What particular type of people

Q. William Lee:

A. Mehos:

are you looking for to man these boats to catch the fish? In contrast to the kind of people that Dr. Sainsbury has in his school, people who want a college education or at least a junior college education, we need a large number of people. We feel that they can be trained from among the college graduates, or even the dropouts, but particularly the young people. We want to be able to train them and develop them rather than look towards the older people. So it is the young at any stage of education, because with the training program that we envision, we will be able to train

Q. Lee:

A. Mehos:

You still haven't mentioned their particular job classification. We are looking for what we call rig men, that is, the second man on the boat. The shrimp trawler operates with two and, at most, three men. Very rarely are there four. The rig man is the second man in command after the captain and he must know almost everything that a captain knows. Actually, in the past years it is from these people that captains have developed.

them without regard to background or education.

Q. Lee:

I see. Don't you think it would be wise for the government, then, to set up some sort of a license or qualification which

would give the people status and also set a salary bracket so that it would attract these people to the industry?

A. Mehos:

Again, this implies training and the training has to come first. Whether you want to license these people, and license them because they have gone through a certified course or not, you have to get back to the training. Right now, for instance, any one of these captains can get an F.C.C. license to operate a radio. He doesn't have to know the first thing. not even how to talk on the radio phone.

(Comment):

You have touched a very critical subject. The F.C.C. radio license that the captain gets is nothing but a third telephone and it doesn't require any particular technical knowledge to operate.

What I am driving at is that I used to fly. I was a radio operator for Pan American, and had the identification of a flight radio certificate, which was equivalent to status and also commanded more money. I have worked in the Miami area in the marine field for quite a few years now. I see the type of people that are in the area operating the boats, and there isn't any status to it. This is one of the reasons you have this run-down condition of your crews and your captains. If you are going to attract a better quality person, you have to give him a license to work and a certain salary bracket so he knows what he is going to get, then he feels he is in a select area.

Mehos: (Comment): I am willing to give the man a license, but a license based on some qualifications. We lack the men with qualifications. Again, we need schools to train them in order to give the licenses.

Lee: (Comment):

That would be up to the government, just like the F.C.C. license. You have to have an examination and set out certain standards of operation. Once they have passed that part, then they would be recognized as a rig man or being able to hold a captain's position.

I wondered if you have considered sending your captains and mates to the Merchant Marine Training School. We have tried to get them to put in a course that would direct them towards this end in the shrimp industry.

Mehos: (Comment):

I know the 3-year old Galveston Merchant Marine Academy is quite willing and anxious to open up a department for training fishermen, but it is a question of funding. They expect us to find some kind of a government program that will help with the funds.

We are not against licensing, but what I am saying is that you have to have some basis for licensing. Right now we need training courses and training schools to train a lot of people. Licensing them is fine, as long as they pass the course and are certified that they have had a period of apprenticeship, then the license can follow.

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Lee:

## Robert Wallace: (Comment):

I'm with the Office of Sea Grant Programs of the National Science Foundation. One aspect of our new marine science program is in the area of providing manpower to all levels for marine resources and activities. This includes crew at the 2-year technician level. We have three programs now in marine technology and training in the United States and we have several more in the development stage. Most of these are with 2-year institutions at junior or community colleges.

My point is that for some of your needs you should look to your local community colleges. Many of these schools have already contacted us. They are interested in doing something in the marine field, and they are struggling to find the best area in which they could train people. At the present time, there are three or four in the Greater Miami area. I suggest that you look to this source of manpower for your future needs.

## Schaefers: (Comment):

I think we have touched on many important points that will eventually lead to the solutions of these problems in the shortage of trained personnel in the fishing industry, and particularly in the shrimp industry.

I am sure that you all realize that we touched on the fringes of some of the underlying problems of licensing.

Another aspect that hasn't been mentioned is the training courses. We talked about training courses but we really haven't gotten down to the crux of the matter. How do you attract applicants and trainees? For example, in New Bedford there is the Fisheries Training School set up under the Manpower Development and Training Act. All costs at this school are borne by the Department of Labor, including the salaries of the instructors, rental of the training loft, the space and equipment, procurement of supplies, materials, protective clothes and trainee insurance coverage. Johnny Murray of the Bureau of Commercial Fisheries happens to be active in this particular school and is well qualified to judge its capabilities, says that the facilities and instruction in New Bedford are the best for this type of training. He would suggest that the southeastern shrimp fisheries could use this program by sending their prospective trainees to school for the 12-week course. Since both the groundfish and shrimp fisheries use otter trawls as the fishing gear, the men would be well grounded in the fundamentals of trawl fishing when they return home. Such a measure could be applied to any part of the country that has applicants but does not have the facilities to set up a training school. Additionally, it would solve one of the major obstacles, that of obtaining full enrollment in the school.

There is another possibility that we might follow up. There is a lot of expertise right in this audience. Alex Anderson,

who is very knowledgeable about the fisherman training program in Barbados, is here.

### Alex Anderson: (Comment):

I agree with Dr. Sainsbury that there is no real substitute for extended formal training. We have talked about 12-week courses and 3-month courses, and these are all well and good; but if you want to provide a man with certificates and qualifications and career opportunities, then I think you must think in terms of 2- and 3-year courses leading to mates' certificates and to skippers' certificates.

In our Caribbean project we don't have the time or the facilities to provide such extended courses, but we have provided 8-month courses for selective fishermen. This may be of interest to companies operating in the Caribbean. This could be on a "first aid" basis. During the 8-months course. we give these fishermen 2 months on shore and 6 months at sea on board the project vessels. In this curriculum they are taught navigation, instruction in all of deck duties, care and handling of fish, fishing methods and gear and so on. We have a commitment to train approximately 75 people. We have trained 60, and of this group about 20% seemed to suggest that they could go on to be mates and skippers. The interesting thing is that we did this, not on the training vessel, but on our own three exploratory ships which had full-time commitments for exploring the fishing production in the Caribbean. This means that the vessels are not so efficient for training as they should be, and undoubtedly the catch rate of the vessels drops, but it doesn't drop all that much.

The companies which are operating down in the Caribbean might like to give this consideration, particularly if the labor problem is as acute as they say it is. I must emphasize that there is no real substitute for long-term training on the 2- or 3-year basis.

# Schaefers: (Comment):

I think we have made a good start but we just can't let it drop. I mean, the problem is here, and the problem is now. There must be a follow-up on this. One of our objectives was to try and come up with some kind of a recommendation for the best training program. I don't think that we can do that at this particular discussion, but I think it is up to you people, the leaders in the shrimp industry, to carry the ball from here. I can assure you that all the people concerned at the Federal level will help in any way we can, and I think I also speak for the symposium members here.