
A.F.D.C. NEWSLETTER

ALASKA FISHERIES DEVELOPMENT CORPORATION

VOL. 1, NO. 4

NOVEMBER 10, 1978

Bottomfish Workshop Held

Over 300 people attended the bottomfish workshop held in Anchorage Oct. 24-25, 1978. It was sponsored by the Alaska Federation of Natives, Inc., the Office of the Governor and the Department of Commerce and Economic Development.

The welcoming address was given by Gov. Jay Hammond who referred to the bottomfish industry as Alaska's "sleeping giant." "We are doing a lot to get this 'sleeping giant' awakened so that he can go to work for us," Hammond said. "This workshop will hopefully serve as sort of a hot foot to help get him on that road."

Jim Edenso, Gov. Hammond's bottomfish coordinator moderated the workshop. "One of the targets and policies the governor has always had is to do what we can to make Alaska a blue chip investment," Edenso said. "We think with the activities that we are undertaking with the development of bottomfishing industry that through good, sound policies and strategies adopted by the state to work with industry and fishermen and the investment communities, we can make Alaska a blue chip investment. We can make the bottomfish industry a good investment..."

The first morning's session of the workshop covered financing and the present capitalization patterns of Alaska's fishing industry. The eight speakers on the panel represented private banking institutions and state and federal lending agencies.

Edenso explained some of the details of the new Commercial Fishing and Agriculture Bank that is in the process of being organized to take advantage of the bank cooperative system. "The owners ultimately will be the participants in the bank," Edenso said, "the members who join the cooperative to borrow and to interact with the bank in their financial concerns." Edenso anticipated the governor will appoint the first board of directors this year and that the bank "should be off and running sometime within the next 12-month period subsequent to the appointment of the board of directors. Future boards will not be appointed but will be elected by the owners of the bank."

Foreign Allocations

The bottomfish workshop broke away from the afternoon agenda on the last day of the workshop to consider a resolution prepared by Ed Furia, an attorney and urban planner. Furia spoke during the introduction on the meaning of the "200-mile law." he returned to the podium to explain to those present at the workshop proposed changes in the allocation of surplus Alaskan bottomfish.

"In the 200-mile zone any fish that Americans don't catch or utilize is allocated to other nations by the State Department and the Department of Commerce. They use several criteria to allocate the remaining fish. At this moment in Geneva, the United States is engaged in multilateral negotiations with other nations and the key subject for all of us here is negotiations concerning the elimination of tariff and non-tariff barriers to U.S. seafood products in foreign nations.

"Specifically, Japan and Korea have significant barriers to American seafood products specifically to Alaska bottomfish: pollock. A great amount of the bottomfish that comes in the U.S. is caught by Koreans and much of it in Alaska waters. And we found out this morning quite coincidentally to this conference that the State Department is considering increasing the allocation of Alaska bottomfish to Korea and to Poland so that they can sell those bottomfish in the United States. These bottomfish will be sold in direct competition with any fish that could be caught and processed by those of you in this room.

"It is a significant potential inhibitor of the development of the Alaska bottomfish industry. There are three markets for bottomfish: the U.S., Korea, and Japan. Korea and Japan are foreclosed. They have barriers we are trying to have eliminated. The Commerce Department seems quite committed to helping us do that and to setting the stage for us selling bottomfish in those nations. The American market is available to us but what is clearly going on is an attempt to make it easier for the Poles and Koreans to take fish from the 200-mile zone and sell it here. We think that that is an incredible result..."

(Continued on page 6)

AFDC Newsletter

Alaska Fishing Development Corporation
Box 969
Cordova, Alaska 99574
(907) 424-3116

Published By: Alaska Fisheries Development Corp.
Editor: Connie Taylor
Art Work: Susan Harding
Printed By: The Cordova Times

Board of Directors:
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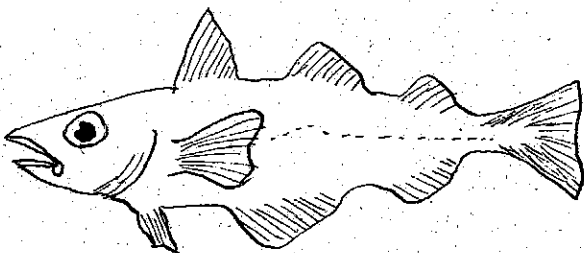
Editor's Corner

Many times people have asked me to tell them "confidentially, should our organization really join AFDC?" My not so confidential answer is YES!

Not long ago I read a story about two boys playing near the railroad tracks. They tried to walk down the tracks without losing their balance and try as they might, they were unable to make it a full length of the track without falling off. One afternoon they hit upon the solution. Each boy stood on a rail and they reached across and held hands. Each helped the other maintain his balance and together they were able to walk many lengths of track.

The Alaska fishing industry resembles the two boys. As the industry matures there is more and more need of cooperation among the segments of the industry. The Alaska Fisheries Development Corporation is the only statewide organization of fishermen and processors. AFDC symbolizes "hands held across the track."

Do you want the Alaska Fisheries Development Corporation to reflect and serve the needs of your processing company? Of your fishermen's organization? Of your region or fishing port? There is only one way to ensure that AFDC will grow and function in a manner that will fill your need for research and promote the development that you want. Join AFDC and work with the board!



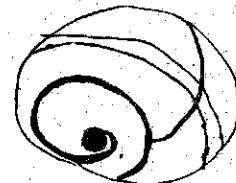
AFDC Membership

Harvesters

Alaska Longline Fishermen's Association
Alaska Shrimp Trawlers' Association
Alaska Trollers' Association
Aleutian Fisheries Cooperative
Commercial Fishermen of Cook Inlet
Cook Inlet Fishermen's Fund
Cordova Aquatic Marketing Association
Lower Yukon Fishermen's Association/United
Fishermen of Kuskokwim
Prospector, Inc.
Southeast Alaska Seine Boat Owners and Operators

Processors

Alaska Far East Corporation
B&B Fisheries, Inc.
East Point Seafood Company
Harbor Seafoods Company, Inc
Icicle Seafoods, Inc.
Morpac, Inc.
New England Fish Company
North Pacific Processors
Osmar's Ocean Specialties, Inc.
Pan Alaska Fisheries/Bumble Bee
Pelican Cold Storage Company
St. Elias Ocean Products
Taylor Enterprises



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Bulletin Board

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Welcome New Members

AFDC extends a welcome to two new associate members who joined this month. Richard M. Farrell of Vallejo, Calif., and Flohr Metal Fabricators, Inc. of Seattle, Wash. Thank you for supporting AFDC.

New Board Member

At the November 1st board meeting Jim Marr, a Southeast Alaska fisherman, was appointed to fill the position of board member from Region II. Marr will serve on the board until the annual election Dec. 1, 1979. Welcome aboard, Jim!

Call to Debate

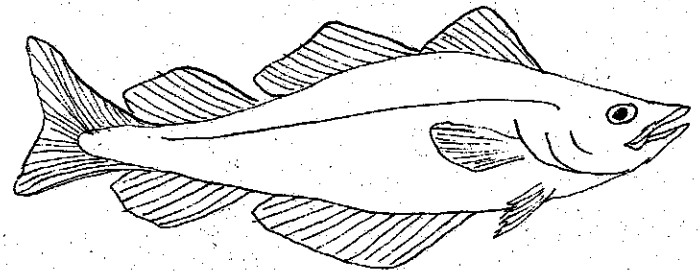
It is frequently said, "Alaska processors should have their main offices in Alaska, not in Seattle." Your Newsletter is looking for debaters to tackle this question, pro and con. Please let the editor know if you would like to write an article supporting either side: Yes, Alaskan industry should maintain its main offices within the state! — or — No, it is unfeasible for Alaskan industry to have its offices anywhere other than Seattle!

Research Proposals

The Alaska Fisheries Development Corporation is looking for ways to strengthen the Alaska fishing industry. AFDC is soliciting proposals for research that will provide lasting benefits for the fishing industry, local Alaska communities, the state of Alaska and the nation.

AFDC will evaluate proposals to determine if one or more of the following criteria will be fulfilled:

- 1) Develop new fisheries.
- 2) Improve quality of Alaska seafood products.
- 3) Increase harvesting and processing efficiency.
- 4) Expand existing fisheries.
- 5) Promote marketing of Alaska seafood products.



New Developments

The AFDC Newsletter is looking for articles on new fisheries-related developments. If you know of a new gear type, a new technique, a report on a fishing area, new or improved processing equipment or any information that you would like the rest of the industry to know about let us know about it.

Please send us your meeting dates to run in our Upcoming Events section.

The Newsletter welcomes articles from members of the fishing community. We are here to serve you.

Mail Policy

Starting this month the Newsletter will be mailed at third class bulk mail rates. You will receive your copies about three weeks after the date of publication. As postal regulations require all pieces mailed under our permit to weigh the same, you may receive extra copies. Please share them with your friends.

Corporation members, associate members and supporting members will receive their copies of the Newsletter first class as a special service.

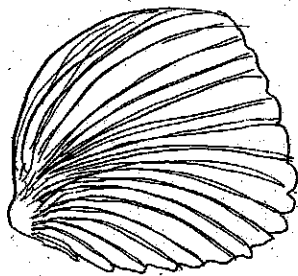
Allocations, Continued

"What we need to do are several things. First, make it clear to the politicians, the leaders of Alaska, that we do not support this [increase in the foreign allocation]. We are asking that this group, ad hoc as it may be — a mixture of processors and fishermen and native people, consider adopting a resolution. (See resolution on this page.) Secondly, that you contact Ted Stevens, Don Young, Mike Gravel, Gov. Hammond and ask them to use their good offices to make it clear to the State Department they you are very concerned about this . . .

"This is a particularly troubling development. They are not only considering increasing the allocation for 1979 which could have a very mild effect on the development of Alaska bottomfishing because we are in such a formative state, but it is the articulation of that principle that it should be a criterion of allocation of surplus fish that we should give it to nations who are going to sell it back . . . But exactly the opposite is true. The effect of that would be to inhibit the development of the U.S. industry."

Workshop moderator Jim Edenso spoke briefly in favor of the proposed resolution. "The issue is do we want foreign caught fish allocated to foreign nations specifically targeted for the United States market in competition with Alaskan caught fish by Alaska's fishermen and processors." Edenso said that the state of Alaska supported the resolution.

On a voice vote, the members of the workshop passed the resolution unanimously.



Fisheries Fare Well

According to an article in the September issue of *Nautilus*, *Marine Fish Management*, "fisheries fared exceedingly well in the compromises reached on NOAA's budget by the Senate and House." Some of the increases in the final fiscal year 1979 budget as compared with the President's original submission are as follows: restore New England sea herring study (+\$65,000), continue South Carolina menhaden research (+\$43,000), and recreational fishing surveys (+\$175,000). "A transfer of \$5 million from the Kennedy-Saltonstall Fund was agreed to in order to offset new financing."

RESOLUTION OF THE ALASKA BOTTOMFISH WORKSHOP OCTOBER 24-25, 1978 ANCHORAGE, ALASKA

WHEREAS: it is our understanding that the United States Department of State is considering allocating larger quotas of surplus Alaska bottomfish in the 200-mile zone to Korean and Polish fishing interests in order to facilitate these nations' selling increased amounts of these same fish in the United States domestic market, therefore inhibiting the development of the United States Alaska bottomfish industry, and

WHEREAS: it is our understanding that tariff and non-tariff barriers exist in nations such as Korea and Japan which inhibit or totally prevent U.S. harvested and processed bottomfish from entering these significant foreign markets, and

WHEREAS: the United States Departments of State and Commerce and the White House office of the Special Trade Negotiator are engaged in multi-lateral trade negotiations to reduce or eliminate such barriers to U.S. products in these nations;

THEREFORE, IT IS RESOLVED, that the Carter Administration not allocate surplus fish to Poland, Korea or any other foreign nation based on the criterion that such nations will market the processed fish in the United States. TO THE CONTRARY, in order to foster the development of the Alaska bottomfish industry and to implement the purposes and policy of the Fishery Conservation and Management Act and H.R. 10732, the participants of the bottomfish workshop believe that allocations of surplus fish should be given only to those nations which permit the United States to market processed fish in such foreign nations and that the inhibiting effect on the development of an American bottomfish industry of such nations exporting these fish back to the United States should be a relevant criterion in keeping these allocations at present levels or reducing them.

Study of pink shrimp industry

Sea Grant scientists at the University of Alaska are beginning a study of the pink shrimp industry to determine if catch declines in recent years are related to oceanographic factors.

Supported by a \$1.05 million grant from the National Oceanic and Atmospheric Administration, the study will give fishery managers new information upon which to base their management of the important cash crop.

The grant is being supplemented by \$829,283 in non-federal funds.

Also supported by the NOAA award is continued research on the use of fisheries by-products as feed supplement for livestock. Preliminary results indicate processed crab by-products have promise as protein and energy sources in livestock feeds and can be used to replace high percentages of soybeans.

Bottomfish Processing: Different From Salmon

By TOM STEINBACH
Peter Pan Seafoods

(Editor's note: The following are excerpts from a speech given by Tom Steinbach on Oct. 24, 1978, at the Bottomfish Workshop in Anchorage.)

I thought I would deal with how bottom fish is different than other more conventional or historical seafood processing in Alaska — for instance salmon, king crab, tanner crab, shrimp — because there are some significant differences.

Breaking into the bottom fish industry is an enterprise that differs from salmon specifically because we are breaking into a world market. We are breaking into something that the Western Europeans — the Danes, Norwegians, Scandinavians, the Icelanders — have been doing for years and years. The Japanese are well experienced in bottom fishing. South American in the last decade has become a large bottom fish producer in Western Europe.

Iceland has a well developed system throughout their whole country that is well advertised in the United States. Icelandic products are advertised as top quality and I think they do a good job of backing it up. All their fish are gutted on board. There are some 80 to 90 mobile plants in Iceland, none of which are huge as far as daily capacity but they are strategically located next to the fishing grounds.

The president of Peter Pan had the same opportunity to visit the Faroe Islands last year. He said when they came down out of the clouds and he looked out and he saw an island and said, "I thought I was looking out at Unga Island." He felt right at home. The point of this is that many of the problems we face in Western Alaska and the Aleutians, the Faroese and the Icelanders have years of experience in handling: local community problems, arctic problems, shipping problems, communication problems.

The point of these three different areas — South American, Iceland and Western Europe is that as we break into the world market, we are competing with these people, and the only way that we can compete and break into new markets which will be required is by producing a top quality product. The fish when they come out of the water are every bit as good as the fish anywhere else in the world. What happens to them from that point on is critical to the development of the bottom fish from the beginning to the end.

This world market situation separates bottom fishing from salmon fishing. There are other stocks of salmon in the world, but the bulk of the world supply of salmon comes from Alaska, British Columbia and the western part of the United States — most of it from Alaska. It's a captive market — if Alaska puts out poor quality salmon: That is all there is. That approach will not work in bottom fishing.

Within Alaska there are a number of geographic differences in the industry. In the Southeastern sector and from what I would call Midwestern Alaska

Peninsula and the Aleutians are where the bulk of the bottom fish exist. Within these areas there are different local stocks — different proportions of cod, pollock: different size pollock. We have heard a number of comments about millions and billions and trillions of ponds and the immensity of the project is well defined by these numbers. When you get to a specific plan, then you have to become vitally concerned, not with the trillions and the billions. What about 30 or 20 million that is going to come into our plant? Are pollock going to be 17-inch average or 4-inch average? Are you going to make a half million dollar investment in a bottom cutting line and then find out you got the wrong machine? You end up getting a far poorer yield on your material because you made a mistake.

Peter Pan has undertaken to do considerable test fishing in the area about King Cove. We are also continuing to explore other various regions for further development of plants, but King Cove is where we have a plant now. We are doing our best to determine what fish docks are available and what equipment will specifically go into the plant. And I would say that sometime in the very new future that equipment will be ordered and the line should be ready to go.

The equipment purchase will be roughly half a million dollars, that includes installation and conveyors. It doesn't include the other necessary items in the camp: better housing, more housing, all the other facilities that are needed to make a plant like that go. I would estimate that we are looking at spending another million dollars to upgrade Peter Pan's effort within King Cove in order to make that bottom fishing venture successful there.

This is different than salmon, this is different than crab. With salmon there was a huge capital investment. To convert a salmon cannery to a fresh salmon operation requires very little money. Maybe \$10,000 for a cutting table, another \$40,000 or \$50,000 for an ice maker and storage. As long as you have access to an airport you can fly it out. The point is that for very little money you can convert your salmon operation into a fresh cutting line.

Today when we view bottom fish, we assume putting the operation in an existing plant. For king crab as long as you have a plant you can buy the baskets and you can put in the equipment. It doesn't take that much money to get into king crabbing. There is a little room to grow, you can start out gradually in king crab. You can start out gradually in salmon. You can work into them. It is our opinion that you can't start out gradually in bottom fishing. Not in the locations such as we have out in Western Alaska. Probably the scariest part of the whole operation is getting the right size boat, getting the right fishermen, getting the fish to

(Continued on page 6)

Bottomfish Processing, Continued

come in a timely manner into the plant, scheduling the production, developing the market, developing transportation, which again in the Gulf of Alaska separates it from anywhere else in the world. Transportation is miserable.

This is an ever increasing problem. We can store 800,000 pounds of product in King Cove, in king crab that is overloaded in a week. We have nowhere to get rid of it. We can't ship it out. In bottom fish it will take longer to fill it up, because the blocks are frozen and the cube in the freezer is much more efficiently used, but the transportation needs are still there. That is a question that Peter Pan intends to try to solve before we plan our first fishery.

Another difference in bottom fish operation as it relates to a full service plan for year-round operation such as King Cove, is the fact that it is a year-round operation. We can no longer in the processing industry view our plants as bunk house installations, where we send the crew in for six weeks or eight weeks and put up the pack and unload the pack on a tender or barge and then everybody winterizes the place and goes home. Those days are over, or I should say rapidly coming to an end. We simply can't attract or maintain good people in any community in Western Alaska without decent housing.

I think the development of the community is going to be closely tied into the bottom fish development because it is really the last key in aiding a processing center for installation in that part of the world to becoming a year-round operation — king crab, tanner crab, shrimp, salmon and bottom fishing. The caliber of people that will be attracted and retained in these areas will help all the operations, not just bottom fish, but the other parts of the business as well. It is a tremendous opportunity for Alaskans to use this bottom fish to upgrade what is called the intra-structure of the local community.

Another conflict, or difference, that the bottom fish has that other industries don't within Alaska is the season conflict. I don't know how a bottom fisherman will be able to drag in the Bering Sea with king crab pots out there. I don't think there will be room.

Currently most of the discussions about bottom fish vessels have included the king crab season and the tanner crab season. In the future this may become less attractive. It may become more attractive as people become more experienced and proficient in bottom fishing to have a boat that does nothing but either drag or midwater trawl but there will be time conflicts with all of these different seasons. The bottom fisherman is just going to have to sit while the king crab season is on.

There is a developed world market for king crab — most of it, again, comes from Alaska. There is some king crab that comes from South America now. It is a lower quality king crab. It is easy to say that Alaskans produce the best king crab in the world, because they do, by far. I hope in the next two or three years we will be able to stand up and say Alaska produces the best bottom fish in the world.

Workshop, Continued

The afternoon session was devoted to discussions of fishing vessels and gear. Peter Schmidt's presentation on costs and design is on page 11 of this newsletter.

Wes Johnson, well known for his experience on every type of fishing vessel, gave his views on the types of gear needed to outfit a trawler for bottomfishing. Johnson is employed by the Canadian Department of Fisheries and is responsible for many of the improvements made in the Canadian fleet in recent years.

AFDC was well represented on the Wednesday morning panel by board members Pete Harris and John Enge.

Tom Steinbach of Peter Pan Seafoods gave some straight talk on the differences in bottomfish processing and his remarks are printed in this newsletter.

John Enge of Icicle Seafoods represents a plant that was actually in operation handling bottomfish. Instead of studying the situation Icicle bought equipment and started buying and processing fish. Enge said that his company has made some mistakes in the equipment they have purchased but they have been learning as they go along.

There is room in Alaska for both approaches to the bottomfish industry: plan ahead for every step or jump in and swim. Icicle Seafoods can make a good case for the success of the jump-in-and-swim method.

Erik Norgaard, consulting engineer for the state of Alaska, presented a preview of his company's report to the state on the impact of the bottomfishing industry on community development.

The last session of the workshop addressed the question of markets and marketing. Bob Rubin, National Marine Fisheries Service, gave a review of the information that NMFS can provide for the fishing industry. "We offer what is a free service to American companies: f - r - e - e, no cost to you," said Rubin. "We have a complete set of people to service you who are professionals. They are exploratory fishing and gear research people, fishery development people, economic people, market research people. We have just about every facet of the business covered."

"We don't pretend to know all the answers," Rubin continued, "but we do know where to go get them." NMFS offices are located in many of the largest American cities and can provide marketing information needs for their surrounding areas. They can put processors in touch with prospective buyers.

Bob Erkins, publisher of the Erkins Seafood Letter and the Erkins Food Service Letter, presented his views on the outlook for international seafood markets and the potential effect on Alaska bottomfish. "There is only one way to sell against competition," said Erkins, "and that is you sell and you sell through promotion." Erkins was referring to the need for careful marketing of Alaska bottomfish which resemble the fish products of many foreign nations that are already being sold in the United States.

Byron Mallot, president of the AFN, closed the workshop meeting with a brief recap and a thank-you for all the participants and audience.

Marco Longline System: TiLiner

By MARCO CONSTRUCTION & DESIGN CO.

An automated longline fishing system that features automatic baiting has been introduced by Marine Construction & Design Co. (MARCO). The MARCO fishing system, named the "TiLiner," is designed for use on small- to medium-size longline vessels that use any conventional longline gear.

The MARCO TiLiner system consists of 19 components comprising three basic groups — a bait cutter, a baiting and setting group and a hauling group.

"The past 25 years have seen mechanization introduced to many different types of fishing, most notably purse seining, trawling, and pot fishing," said Peter G. Schmidt, MARCO president. "Longliners, however, have continued to fish very much as they have for centuries, with very little mechanization."

As few as two people can fish longline gear with the TiLiner system, primarily because of automatic baiting and hauling features. Because of the automatic baiting, a greater number of hooks can be handled per day. Also, in some fisheries, time previously spent ashore baiting can now be utilized for fishing.

The TiLiner system is compatible with all types of conventional longline gear and offers the longline fisherman an opportunity to improve the efficiency of his operation and at the same time reduce crew requirements.

To set the gear, two TiLiner spools, each containing groundline, gangions, and hooks are mounted on the setting stand which is located forward of the bait trough and exit chute. Spring-operated latches on the setting stand enable spools to be easily pulled off and pushed on. Actual setting begins when a crew member releases the buoy and buoyline that are attached to the groundline.

As the vessel moves forward, the groundline with gangions and hooks is pulled through the bait trough where the hooks are automatically baited. Stiff brushes are installed in the exit chute to ensure that bait is firmly hooked and that loose bait is not dragged overboard as the groundline passes through the bait trough.

Groundline tension during setting is controlled by a man applying pressure with his leg to the hydraulic brake lever, leaving his hands free for clipping floats and weights on the line.

When all the line of a spool is set, the boat is stopped, the two spools on the setting stand are swiveled 180 degrees, the line from the previous spool is connected to the line now ready for setting, and then setting is resumed. When the desired number of spools is set, the second anchor and buoyline are connected and released to complete the set.

The TiLiner hydraulic-powered bait cutter cuts fresh, thawed, and partially frozen bait. Bait can be cut while the vessel is underway to fishing grounds as well as during the setting operation. The TiLiner bait cutter can produce more than 500 pieces of bait per minute. Large scrap fish can be used for bait by

running them through the cutter twice; once for slicing lengthwise, and again for cutting into chunks.

The TiLiner hauling operation uses three components: a patented, adjustable TiUnwinder Roller, mounted on the gunwale, that controls groundline twisting; a power line hauler with idler arm and idler sheave; a take-up power head; and, a foot pedal control.

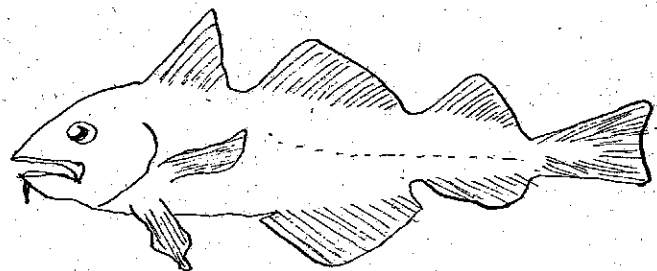
The hauling operation is conducted by two men, one stationed at the gunwale and one between the hauler and the power head.

The first man, at the gunwale, gaffs the fish and ensures that the TiUnwinder Roller is properly adjusted and is controlling the twisting of the groundline so as to prevent gangions winding about the groundline. With remote engine and steering controls properly located, the man gaffing can also control the boat during hauling.

The second man, who sits between the hauler and spooler, controls the hauling operation by operating the foot pedal. The foot pedal is a dead-man control. In addition to operating the foot pedal, the second crew member places each hook on a spoke as the line comes from the hauler. While rotating, the power head oscillates, creating an automatic levelwinding action that causes the groundline to be wound evenly on the spool. The power head operates at a very low torque, and it generates a constant line tension.

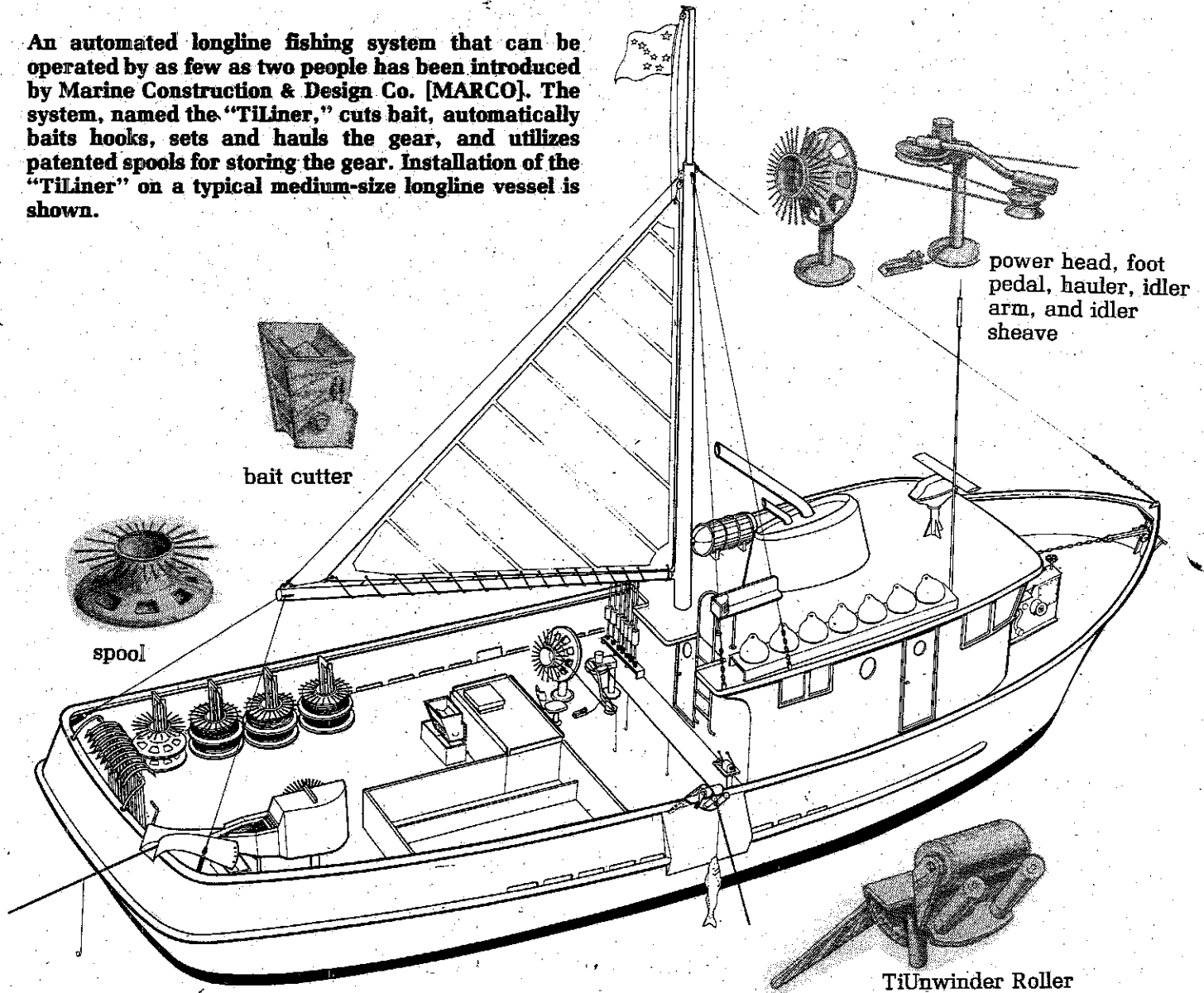
Minor repairs such as resetting bent hooks and removing bait can be performed during hauling by removing the foot from the deadman control pedal and briefly stopping hauling. The fishing gear is easily inspected by winding the line from a spool on the setting stand onto an empty spool mounted on the power head. Repairs, if necessary, can be made on line between the spools.

Further information may be obtained from MARCO Manufactured Products Division, 2300 West Commodore Way, Seattle, WA 98199.



Marco Automated Longlining

An automated longline fishing system that can be operated by as few as two people has been introduced by Marine Construction & Design Co. [MARCO]. The system, named the "TiLiner," cuts bait, automatically baits hooks, sets and hauls the gear, and utilizes patented spools for storing the gear. Installation of the "TiLiner" on a typical medium-size longline vessel is shown.

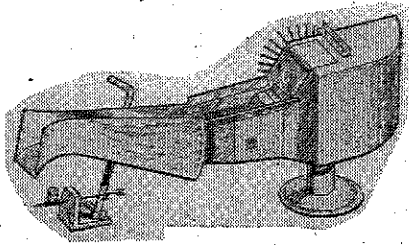


bait cutter

spool

power head, foot pedal, hauler, idler arm, and idler sheave

TiUnwinder Roller



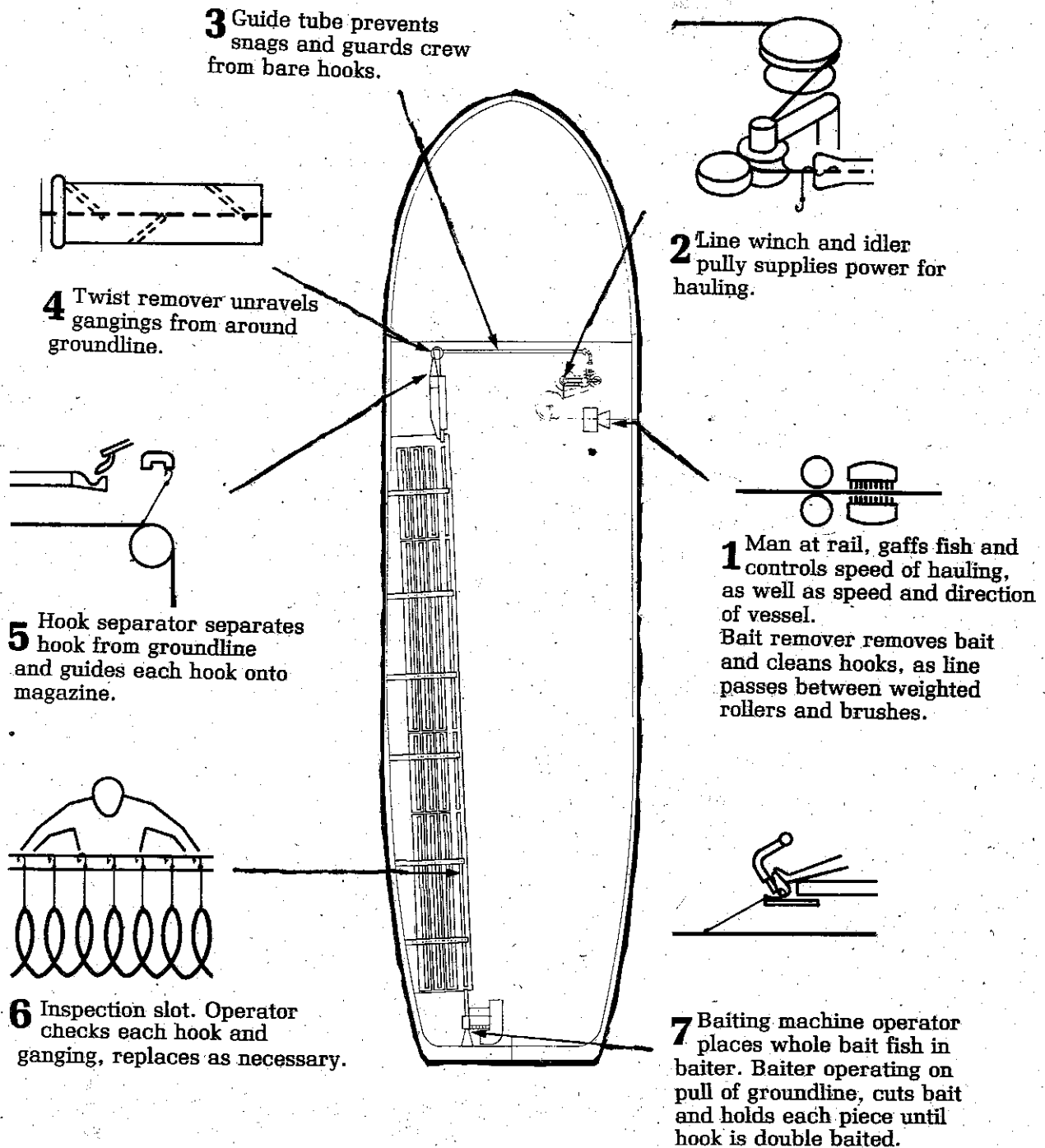
brake, exit chute, bait trough and setting stand

The hauling operation utilizes an adjustable bulwark roller, called the TiUnwinder, that controls the twisting of the groundline during hauling. After the fish are gaffed at the gunwale by one crew member, the groundline with gangions and hooks intact is led to the hydraulic hauling assembly where another crew member sits and places the hooks on a slowly rotating spool.

During fishing operations with the TiLiner, bait is cut by the hydraulic-powered bait cutter and then placed in a bait trough during setting. The gear is set at conventional speeds.

Mustad Autoline

The North American type of fishing vessel with wheelhouse forward and a wide, open working deck aft is well suited to the installation of the Mustad Autoline system. The system can be used for all types of longline fishing which can be adapted to the given specifications for line equipment.



Status of Mustad Autoline

By O. MUSTAD & SON A.S

The type of fishery that first accepted mechanized longlining with Autoline was longlining for dogfish in the North Sea. Today 15 vessels are dogfishing with Autoline. These vessels are typically 100-foot length, have a crew of 9 to 11 men, and haul average 21,000 hooks per 24 hours. 100 metric tons of dogfish is considered to be a good catch for a 12-day trip.

Cusk and ling fishing on the slope outside Norway and on the Atlantic slope from Ireland to the Faeroes was the next area for Autolining. This fleet today numbers 12 Autoline vessels, and among them are the first Scottish Autoline "Anni Elisabeth" of Stornoway and the first special purpose build Autoliner M/S "Oyliner" of Kristiansund.

Silver hake and codfishing off the east coast of Nova Scotia and Newfoundland came next and was taken up in 1977 by 90-foot M/V "Clara & Linda" of Hubbards, Nova Scotia.

A breakthrough for codfishing with Autoline came with the Faeroes M/V "Vadhorn" in 1977, and today the Faeroes has four Autoliners with three more in operation shortly.

Another breakthrough for codfishing with Autoline came in December 1977 when "Oyliner" reported top catches from Tromsflaket in North Norway.

Pacific cod and black cod is the target for the first North American west coast vessel equipped with Autoline. This vessel is a new 72-foot combined longliner/purse seiner being built by Allied Shipbuilders in Vancouver for Egil Elvan of Prince Rupert, British Columbia.

By the end of '78, 55 vessels will be fishing with Autoline. The smallest being 52-foot M/V "Nyrapp" of Kristiansund, Norway, with a crew of seven men, and a net earning per man which is as great as the larger Autoline vessels. It does not necessarily pay to be big.

To meet the demand for a medium size coastal Autoliner, designers Fiskarstrand and Eldoy of Alesund has developed a 59-foot longliner tailored to the Autoline system. This vessel is being delivered from Norwegian yards ready for fishing including Autoline and fishing gear for approximately Norw. kr. 3.2 Mill. She has crew accommodation for seven men and a fishhold of 55 m3. The vessel is highly maneuverable with becker-rudder and a small sidethruster. She has a novel engine arrangement with two 200 hp fast running diesel engines on one gearbox. One engine is used as an auxiliary for the other, and the generator set is connected to one of the engines.

Another interesting design for Autoline is Egil Elvans' 72-foot multi-purpose vessel. On this vessel Autoline is built into a detachable 6- by 6-meter aluminum container. When drum seining, Elvan is lifting the whole Autoline container ashore where it is kept dry and ready for next longlining season.

We have asked skippers, crew and owners from Autoline-vessels about their experience. The crew obtains the greatest benefit from Autoline. A common

statement from Norwegian and Faroese crews is that they will never go back to manual baiting. They work on shift arrangements with a total working time per day of 12 to 14 hours. The finger corroding work of manual baiting is completely removed and on most Autoline vessels the crew works under shelterdeck well protected from the sea.

Most important for the owner is that he is now able to obtain a good and stable crew. With manual baiting this was hardly the case.

Skipper and owner Per Holmeseth of M/V "Geir" of Alesund, one of the latest additions to the Autoline fleet, stated that, "I fish as well or better than with manual baiting." He fishes mostly off the Hebrides, Rockall and Faeroes for cusk and ling.

Per Holmeseth is in many ways typical for the innovative skipper. He was the first man to introduce a skew hook with Autoline and he claims that he fishes 15 to 20 percent better than with a straight. He is also going to have two skippers and one-and-a-half crew. The crew will be able to have one trip free and two trips fishing, while the skipper will have every second trip free.

The economic outcome for the owners (very often the skipper and his family) is dependent on the crew share arrangement. In Norway this is regulated by an agreement between the Fishermen's Association and the Vessel Owners Association. According to this agreement the owner will keep a higher percentage of the net catch than before. A similar arrangement is under way for the Faeroes. If this kind of benefit is sufficient to pay for the equipment, it is dependent on the kind of fishery the vessel is employed in, fish prices, loans and grants available for the investment.

The Alaskan government is sponsoring a demonstration project with the purpose of introducing Autoline to the longlining fleet. The Alaskans intend to take over the black cod fishery from the Japanese and the Koreans in the Gulf of Alaska.

Mustad is following up this initiative from the Alaskan government by positioning their chief instructor for Autoline on the West Coast for a period of one year from Jan. 1, 1979.

The Canadian government is introducing mechanized longlining on the East Coast. By the end of October the Norwegian 120-foot Autoliner m1v "Synstrand" of Maloy will have completed 70 days demonstration-charter off the coast of Newfoundland and Labrador.

There is hope for longlining in the future, and Mustad and other companies are continuously refining their equipment for new kinds of fisheries and vessels.

For more information on the Mustad Autoline System, contact O. Mustad & Son A.S, P.O. Box 40, 2801 Gjøvik, Norway.

Costs and Design

By PETER G. SCHMIDT
MARCO Marine Construction & Design

of Bottomfish Vessels

(Editor's note: The following are excerpts from a speech given by Peter G. Schmidt on Oct. 24, 1978, at the Bottomfish Workshop in Anchorage.)

I am going to speak today on the types of bottom trawling vessels that we may see in Alaska in the next few years. As we are involved in the building of larger fishing vessels for North Pacific fisheries, I think we should develop some kind of special insight as to what is the best size and type to engage in this theoretical bottomfishing development.

I have been involved in several developing fisheries in South America, which went from almost nowhere to extremely large industries in a period of, say, 10 years. I have come to the conclusion that in a rapidly developing fishery, the most important thing is that the fishing effort, the processing and marketing all go together, little by little. And time and economics will answer the questions we find hard to answer today.

If the development of the fleet becomes too rapid, and particularly if the vessels get too big and too complex too fast for the ability and the capacity of the processors to handle the product and for the market to absorb it at profitable prices, the boat owners can suffer financial collapse, even in a promising, developing fishery. Likewise, of course, if large monuments and plants are constructed, without an equal development of the fisheries production, they can certainly be economic turkeys. I have seen plenty of these all over South America.

It is also very dangerous to transport an entire technology from a mature, developed fishery in another country to a new set of conditions in a new developing fishery. What makes economic sense in one area, almost always does not make economic sense anywhere else. This is something that I am sure we are going to see some good examples of right here in the coming years. On the other hand, we can learn and must learn from Europeans and Japanese in areas where their technology is ahead of ours, just as they must do the same in the areas where we are ahead of them.

My company has been involved now for 25 years in fisheries innovation. We have taken many of our innovations worldwide, with a rather profound effect of fishing methods, even in such developed fishing countries as Iceland, Norway and Spain. On the other hand, we have learned much from these other countries, which we have brought back to home.

Basically I think there are going to be three different classes of vessels developed for this fishery. How big a factor each one will be in the near future is hard to predict but it could be that all three types can and will be a part of the full development of Alaska fisheries.

The design considerations that one must take into account when designing a trawler pretty well apply

regardless of whether we are talking about a small in-shore trawler, a distant water all-weather, all-purpose trawler or a large factory trawler.

The first, and probably the most difficult selection to make in building, designing or purchasing a new boat is its size. Second, the arrangement — Do we have a house forward or aft? Third is the horsepower. Trawlers traditionally will have more horsepower for their size than other types of vessels. Fourth is how are the fish going to be handled or preserved on board — sorting the fish, gutting, preserving on ice, chilled water or freezing. Fifth is the propulsion train. On trawlers there are advantages in utilizing controllable pitch propellers and Kort nozzles.

Sixth is the machinery involved. A small trawler can operate with a single trawl winch with multiple drums or a split winch system with one drum per winch individually mounted. As the vessels get bigger and more sophisticated other winch gear is required including today the new automatic trawling system, which has been primarily developed in Norway. Seventh is the deck arrangement itself including ramp or not having ramp.

Finally, one must give consideration to the hold arrangement. If chill sea water is to be used, the hold must be broken into small individual compartments to keep the fish from wearing itself out, literally. How are the fish going to be preserved? Chill sea water, which is probably going to become more popular in many of the fisheries; coils with ice, just plain ice, or is there going to be a total or partial processing? In the bigger trawler this becomes a major consideration. In the large process vessels, entire process decks are made available for handling of fish.

So those are the design considerations. They are pretty fundamental, and that is what one goes through in trying to select what the ideal vessel will be.

Then in design one must take into account the house living quarters. For the trawler, without exception, it is always better that the pilot house have a 360-degree view — that being, of course, a good view forward and also a good view aft under the working deck, preferably a view of the winch gear. On most modern trawler installations the machinery is all operated from a console in the pilot house by the skipper who also has at hand sonar information to conduct the entire fishing operation.

Trawling in the Pacific Northwest has been going on for many years in small boats, with very small crews. Even though we have not been a big trawling nation or area, the methods of handling the net have allowed us to fish with extremely small crews. These small boats, which in some cases have been Alaska limit seiners and, in other cases, the ole Monterey sardine seiners, make pretty good trawlers.

(Continued on page 12)

Cost and Design Continued

The designer always gets involved in the question of whether the house should be aft or forward. Fortunately, the Pacific styles derived from our seiners exemplify the majority of our newly built crab fleet which is ideally suited to trawling.

Until about 30 years ago most trawlers around the world except on the Pacific coast fished on the side and were called side trawlers. Shortly after the Second World War the stern trawler was developed in Europe with the stern ramp. Today's stern trawler utilizing the stern ramp with engine and machinery forward is most popular worldwide. There are some exceptions, of course, and the trawler can be built with the engines aft. For instance, in Norway, most of the trawlers there have machinery and quarters aft. These vessels are influenced by the herring fishery because many of the big trawlers are a combination of the herring seiners and herring mid-water trawlers. The Norwegian system for seining has the machinery and living quarters aft.

Likewise, they have a very strong tradition toward building boats this way, which I think has influenced them just as our tradition is influencing us in keeping our machinery and living quarters and power house forward. However, it is our impression that in developing Pacific trawl fishery most of the boats will be built with propulsion, accommodations and power house forward for many reasons peculiar to all of our fisheries requirements.

There will be three primary new types of trawlers in the future of Alaska plus the conversion of many existing smaller craft.

The first type, assuming that the Alaska limit laws are removed, will be a combination boat in the 65- to 90-foot range. It will have up to 600 hp. It will be utilized in salmon, seining and tendering, crabbing, long lining, pot fishing, and last but not least, trawling. These boats will be equipped with chill sea water refrigeration installations and many of them will be set up in addition to ice fish and probably some of them have coils to hold fish and ice. They will operate at short range and deliver to the growing fish processing centers.

They will have a full or partial height bridge with a good visibility pilot house, 360 degrees. The smaller vessels may get involved in pair trawling; that is two vessels fishing together with one net, and maybe even Danish seining, a method which has not been used in Alaska to this day, to my knowledge. I believe that both pair trawling and Danish seining might be one of the big prime factors of the fishery development of the parts of the Bering Sea.

The second type of vessel we will call the all-weather offshore trawler, and it will be from 90 to 100 feet in length. It will also be a combination crabber/trawler. Of course, every vessel of this size in Alaska must give some consideration to the possibility of tendering salmon for a short period in the summer. These trawlers will engage in bottom trawling, possibly mid-water trawling, maybe for herring and some other

species. They will not be far different from the present newly built crabbers. The current new steel crab boats of 100 to 150 feet which are coming into the Alaska fishery are very capable, all winter vessels which can be converted with some degree of efficiency to all around offshore trawlers.

The third group are what we call the larger trawler/crabber processors and these will be from 150 to 200 feet and, of course, one cannot tell, they could even grow to be bigger than that. These vessels will have full or partial processing facilities on board. They will be strengthened by ice. They will be able to roam anywhere in the North Pacific, holding their catch until return in some state of process. Two of these are being planned at the present time.

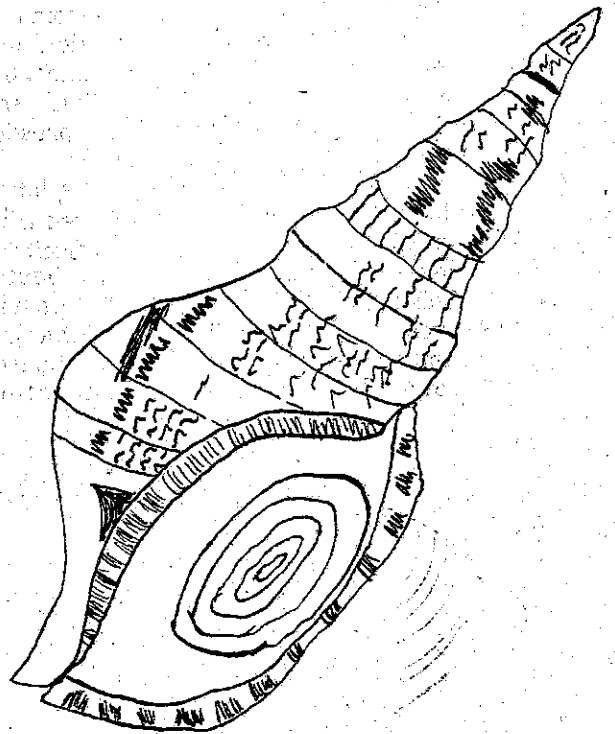
The cost of the first group of vessels, in-shore vessels of 65 to 90 feet in length, will be in the range of from \$600,000 to \$1.5 million. The reason for the large spread is the wide variety of costs one can get involved in deck machinery and gear, electronics and main engine.

The cost of the vessel goes up something like the cube of its length — everything else being equal — it goes up in proportion to its displacement.

The second group which we call the offshore trawler, from 90 to 100 feet in length, are going to be in the \$1.5 million to the \$5 million class.

The third group which are the large trawler/crabber processors from 150 to 200 feet, will be in the \$5 to \$10 million range.

I don't think the technological problems are going to delay the development of the fishery. This is the least problem. Boats, fishermen, and technology will be ready when needed. I have total confidence in the flexibility and imagination of the American fishermen to rise to what will be required to develop an economic potential of this fishery.



AFDC Board Meeting

Fog delayed airline departures from Seattle on November 1st and so four of the AFDC board members were unable to make the 9 a.m. scheduled call to order of the board meeting. They arrived in Anchorage two hours late and the meeting started at 11:30 a.m. The first order of business was the executive director's report.

Executive Director Sara Hemphill reported to the board on her recent trip to Washington, D.C., and her meetings with officials concerning the Saltonstall-Kennedy fund (S-K fund). The National Marine Fisheries Service (NMFS) and the Office of Management and Budget (OMB) are in the process of working out the procedure to handle S-K funds. OMB has asked NMFS to prepare an overview scheme for fisheries development. It is hoped that the procedure for disbursing S-K funds will be ready by Dec. 1, 1978. This would clear the way for AFDC to receive the funds requested for bottomfish projects.

Today the administration of S-K funds is handled by NMFS/NOAA. Suggestions are being made to reorganize the management of these funds. Three other management possibilities under consideration are regional councils, the Economic Development Administration (EDA) or the Department of Commerce. There is more money in the S-K fund than was ever anticipated and the fund is expected to continue growing in size.

Possible sources of other funds for research were reported on by Hemphill and board members. Some of the sources that came under discussion were the EDA and the states of Washington and Oregon.

The board of directors heard presentations from two accounting firms and will make a final selection of a firm to handle the corporation's records at the next meeting. Johnson and Morgan, an Alaskan firm, and Coopers and Lybrand, a national firm, made presentations.

The Alaska Trollers Association presented a letter requesting that their membership be transferred from Region I to Region II and the board voted to permit the transfer. The Alaska Trollers Association, the Southeastern Alaska Seine Boat Owners and Operators and the United Fishermen of Alaska recommended that Jim Marr be appointed to fill the vacancy on the board. The Alaska Longline Fishermen's Association

recommended Jake Phillips. The board voted to appoint Jim Marr to the position of board member from Region II until the next annual meeting.

The corporation will be opening offices in Anchorage in November at the campus of the Alaska Pacific University. This will be a temporary situation while the possibility of moving the offices to a downtown location are considered.

Hemphill was instructed to contract with Wes Johnson, a noted gear specialist, to go over the bottomfish proposal and update it. All of the gear prices and vessel charter figures are a year old now. The projects will also be evaluated to be certain that they do not overlap work that has been done since they were written.

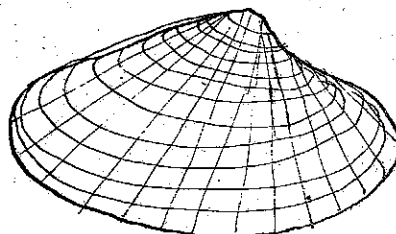
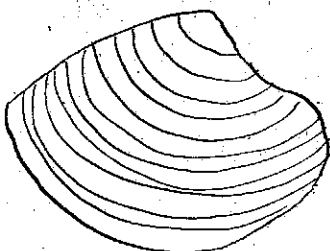
Ex-officio board member Jim Branson reported that in a conversation with the Corps of Engineers he was requested to ask AFDC for input into plans for a harbor facility at St. Paul Island in the Pribilofs. The corps is looking for predictions on harbor use from bottom-fishing vessels.

Ex-officio board member Walt Jones reported that the Japan Trade Commission might be traveling in the United States in November and that there was a possibility of meetings to be held in Seattle on Nov. 13 and 14, 1978.

The board reviewed the by-laws passed at the Sept. 21 meeting. A few minor corrections were made in the approved version. President of the board Ron Jensen volunteered to get copies made for distribution.

The board discussed the composition of the executive committee and some members of the board and audience expressed the view that there were too many processors representatives on the committee. Board member Ferguson offered his resignation from the committee and the board accepted it. Board member Robert Morgan moved that Larry Painter, harvester representative from Region I be appointed to the executive committee. The board approved the appointment. The executive committee is now composed of two fishermen representatives, Alvin Burch and Larry Painter and processor representative Pete Harris and president of the board Ron Jensen.

The board decided that there did not appear to be a need for a board meeting in December and so no date for the next meeting was set.



Information to Write For

NAUTILUS NEWS

Nautilus News, 1056 National Press Building, Washington, D.C. 20045, publishes weekly and monthly newsletters with a wide range of ocean and fisheries related information.

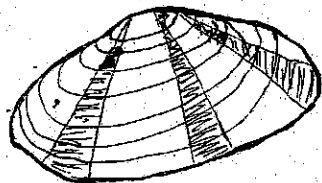
OCEAN SCIENCE NEWS—The leading weekly newsletter in the field covers national and international developments in science, mining, energy, the environment, technology, engineering, law of the sea, and national policy. \$205 per year.

COASTAL ZONE MANAGEMENT—This weekly emphasizes federal-state relations in the coastal zone, including the impact of oil and gas development offshore, and the siting of energy facilities in the zone. \$160 per year

MARINE MAMMAL NEWS—As this monthly newsletter enters its fifth year, it stands alone as the only publication which provides complete and unbiased reporting about marine mammals and their relationship to man. \$37.50 per year

MARINE FISH MANAGEMENT—The new era of the U.S. 200-mile fishery zone created this publication, which has gained recognition for its understanding of the delicate balance required between federal and regional governmental bodies. \$47.50 per year

WEATHER & CLIMATE REPORT—The newest Nautilus publication provides a complete wrap-up every month of all that's going on in the field of management and research. \$62.50 per year



TRAWL SURVEYS EAST GULF AND SOUTHEASTERN ALASKA 1976-77

The Northwest and Alaska Fisheries Center has published a report on "Trawl Surveys of Groundfish Resources in the Eastern Gulf of Alaska and Southeastern Alaskan Waters." An interesting feature of the report is the presentation of each sample area in terms of catch per hour by species. A copy of this report is available by writing to:

Northwest & Alaska Fisheries Center
National Marine Fisheries Service
2725 Montlake Boulevard
Seattle, Washington 98112

WEST COAST FISHERIES DEVELOPMENT ALTERNATIVES

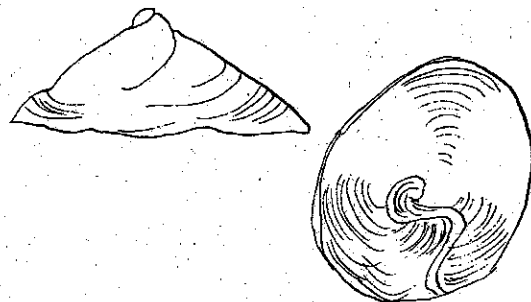
Those seeking information or wishing to comment on the Pacific Marine Fisheries Commission's six-month evaluation of alternatives for the formation of a West Coast fisheries development institution are invited to contact Michael B. Fraser, PMFC Principal Investigator, 528 S.W. Mill St., Portland, Ore. 97201, (503) 229-5840. The principal role for this proposed new institution would be to focus on efforts to encourage the commercial development of underutilized fisheries and aquatic products by the domestic fishing industry.

SOCIO-ECONOMIC PLAN

Hoyt A. Wheeland, chief of the Data Management and Information Systems Division of the National Marine Fisheries Service (NMFS) has been assigned the responsibility for coordinating the preparation of a five-year plan for collecting socio-economic data that is needed to support the Fishery Conservation and Management Act of 1976 (FCMA). The Department of Commerce Committee on Fisheries Management Data recommended to NMFS that more resources should be devoted to the planning for and collection of economic data to support FCMA.

The five-year plan which is expected to be completed by July 1979 will be used as a basis for NMFS funding in the area of socio-economic data beginning in FY 1982.

NMFS sponsored a workshop to discuss the sociological and economic data needs for fisheries management and to develop a strategy to address those needs and any problems the workshop identified. A copy of the workshop report with several recommendations for a socio-economic data policy: standards, planning, collection, is available from Mr. Wheeland, NMFS, Washington, D.C. 20235.



Upcoming Events

Meetings and Expositions

NOVEMBER

Nov. 12-15: First International Seafood Conference, Loews Hotel, Monte Carlo, Monaco. Contact ISC, 111 E. Wacker Drive, Department r-1, Chicago, Ill. 60601.

Nov. 14-18: 17th International Maritime Conference and Exhibition, Europort '78, RAI Halls, Amsterdam, The Netherlands. Contact Europort, 600 Ballaire Boulevard, Suite 101, Houston, Texas 77081.

Nov. 17-19: COMM/FISH/MART and work boat show, MGM Grand Hotel, Reno, Nevada. Contact Comm/Fish/Mart, 622 6th Avenue West, Seattle, Wash. 98119, (206) 284-6176.

Nov. 18-20: The Work Boat Show, the Rivergate, New Orleans, La. Contact the Work Boat Show, P.O. Box 217, Mandeville, La. 70448.

Nov. 20-26: Norfishing '78, the Seventh International Fisheries Fair, Oslo, Norway. Contact Norges Varemese, P.O. Box 130 Skoyen, Oslo 2, Norway.

Nov.30-Dec.1: North Pacific Fishery Management Council meeting in Anchorage. Contact NPFMC, 333 W. Fourth Ave., Anchorage, Alaska 99501.

DECEMBER

Dec. 1-3: COMM/FISH/MART AND WORK BOAT SHOW, PNE Food Building, Vancouver, B.C. Contact Comm/Fish/Mart, 622 6th Avenue West, Seattle, Wash. 98119, (206) 284-6176.

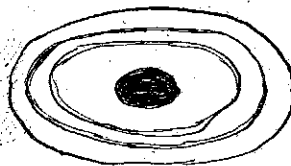
Dec. 3-8: Economic Development Workshop for Alaska Communities, Alyeska, Alaska. Contact James R. Deagen, Division of Economic Enterprise, Pouch EE, Juneau, Alaska 98111.

Dec. 4-15: Board of Fisheries meeting, Juneau, Alaska. Contact your local Fish and Game office for details.

Dec. 8-10: COMM/FISH/MART and work boat show, Center Exhibition Hall, Seattle, Wash. Contact Comm/Fish/Mart, 622 6th Avenue, West, Seattle, Wash. 98119, (206) 284-6176.

Dec. 8-15: Negotiations for a Pacific salmon agreement between the U.S. and Canada will continue in Vancouver, B.C.

Dec. 15-17: COMM/FISH/MART and work boat shows, Assembly Hall, Memorial Coliseum, Portland, Ore. Contact Comm/Fish/Mart, 622 6th Avenue West, Seattle, Wash. 98119, (206) 284-6176.



JANUARY

Jan. 8-10: National Fisheries Policy Conference (a cross-section of fisheries associations), Shoreham Americana Hotel, Washington, D.C.

Jan 10-12: The Fisheries Export Expansion Conference, Shoreham Americana Hotel, Washington, D.C. The conference will present the results of the "Wexler study" aimed at finding underutilized species of fish which U.S. fishermen can take and export.

Jan. 26-28: Fifth Annual Commercial Fishermen's Trade Association Exposition, Ocean City Convention Hall, Ocean City, Maryland. Contact Lee L. Troutner, Mid-Atlantic Expositions, P.O. Box 3315, Annapolis, Maryland 21403.

FEBRUARY

Feb. 5-8: Proposed dates for the American Fisheries Society, Alaska Chapter annual meeting, Juneau, Alaska. Contact the Alaska Chapter c/o USFWS, 800 A st., Anchorage, Alaska 99501.

Public Hearings

Dec. 5: Board of Fisheries public hearings on proposed changes in the shellfish regulations, McPheter's Hall, Juneau, Alaska.

Dec. 9: Board of Fisheries public hearings on proposed changes in finfish regulations, McPheter's Hall, Juneau, Alaska.

Dec. 14: Board of Fisheries public hearings on proposed changes in private non-profit salmon hatchery regulations, McPheter's Hall, Juneau, Alaska.

Deadlines

Nov. 15: Last date to respond to NMFS request for suggestions of "Model Retail Identification Plan for Seafood Species." For more information contact James Brooker, staff Specialist, United States Department of Commerce, NMFS, Washington, D.C.

Nov. 27: Last date to submit written comments on proposed changes to fisheries regulations to Board of Fisheries, Subport Building, Juneau, Alaska 99801. Contact your local Fish and Game office for copies of proposed changes.

Alaska Fisheries Development Corporation
Box 969
Cordova, Alaska 99574

I am interested in learning more about your work. Please send me the following additional information:

_____ Copy of Articles of Incorporation and by-laws

_____ Applications for membership

_____ Back copies of AFDC Newsletter

_____ Please add my name to mailing list

Name _____

Representing _____

Address _____

MEMBERSHIP INFORMATION

Voting membership in the Alaska Fisheries Development Corporation is open to bona fide fishery organizations representing Alaska fishermen and to processors who are licensed in the state of Alaska.

To become a member you need only fill out an application and send it to the corporation office. Fishery groups should designate their regional affiliation and include with their application a copy of their articles of incorporation, by-laws or other evidence of their purposes and objectives. Processors should include their Alaska Processor's License number.

Associate memberships and supporting memberships are open to any individual or company interested in promoting the Alaska fishing industry.

