

The Future of Oregon Maritime Industries //

Proceedings of the Conference

Sponsored by Oregon State University Extension Service

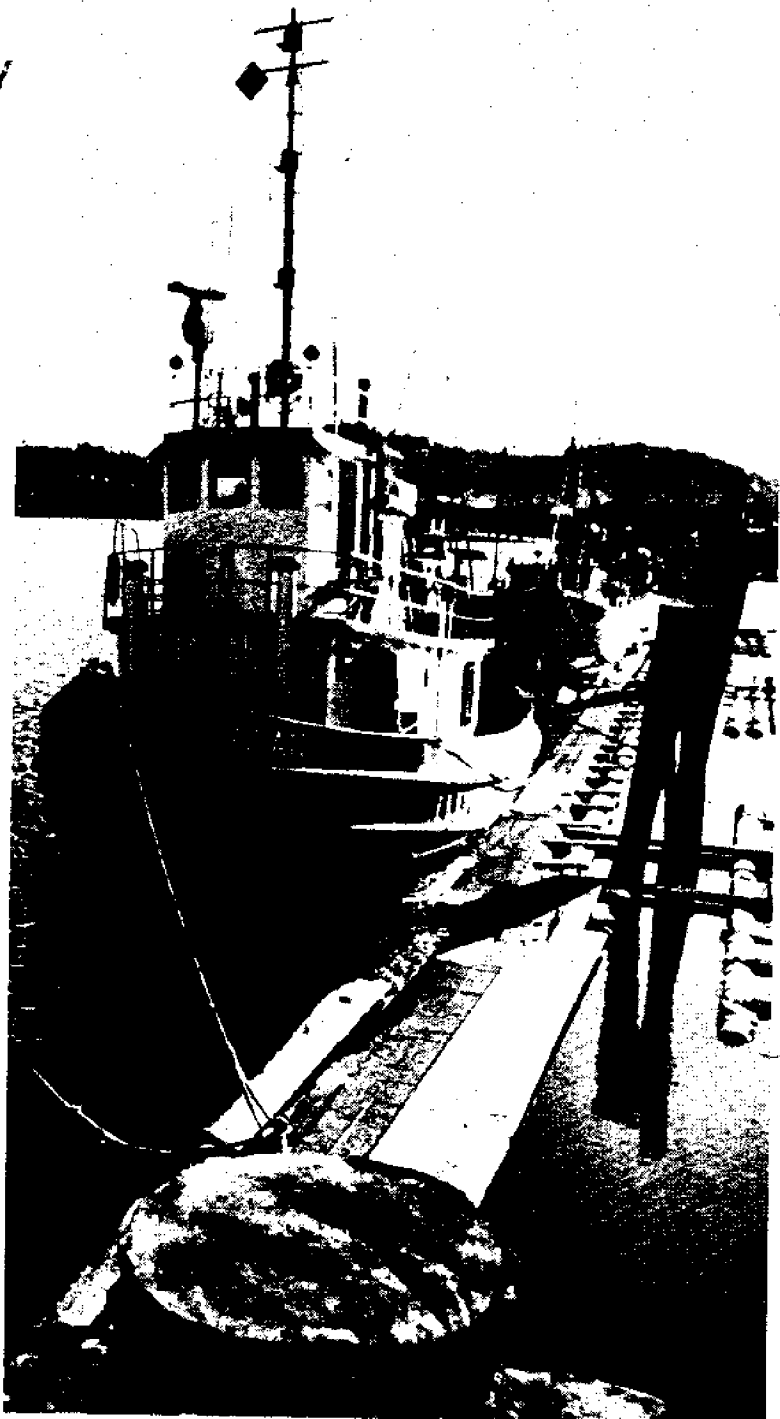
Sea Grant Marine Advisory Program

and Portland Propeller Club

Sheraton Inn Airport, Portland, Oregon / 22-23 May 1974

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Proceedings

The Future of Oregon Maritime Industries //



A Conference Sponsored by
Oregon State University Extension Service
Sea Grant / Marine Advisory Program

Portland, Oregon
22-23 May 1974

\$2.00

Oregon State University Extension Service
Sea Grant / Marine Advisory Program
Corvallis 97331

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Extension Service, Oregon State University, Corvallis, Joseph R. Cox, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Extension's Marine Advisory Program is supported in part by the Sea Grant Program, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

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INTRODUCTION

Edward J. Condon

Extension Oceanographer, Oregon State University, Corvallis



Probably the only really clear reaction from our first conference, in 1973, was, "Oregon State University should do it again!" There were a lot of other reactions, to be sure, but that one came across loud and clear. So we did it again.

The reactions at FOMI II were, if anything, more varied and complex. But one reaction was familiar: "It's important that we meet again in 1975." (You might note here the pleased reaction by participants in Workshop D—see recommendation D-4 and the report on page 57—that agriculture and export interests had sat down together for the first time.)

Our topics this year covered a broad spectrum; some attendees saw this as a problem. But it's clear to me that these first two conferences, at any rate, had to cover a range of topics—after all, it's a wild and woolly mix of maritime industries we're trying to serve.

I draw your attention to Bill Wick's opening remarks for a special reason: as he indicates, we may now be able to identify a few results of the first (1973) conference on The Future of Oregon Maritime Industries.

Looking Ahead

After the close of the general session on the second day of the conference, some attendees were kind enough to remain for a critique. Here are some of their comments:

1. Why a two-day conference? A one-day conference would be better attended.
2. Late May is a poor time of year for a conference; it conflicts with school graduations, etc.
3. The conference agenda was good, but it should be shortened to one day.
4. Workshops are an important tool for the conference and should be continued.

5. Labor is an important element of the maritime industries; why didn't we get more attendees from union ranks?
6. Try to confine the conference agenda to more specific Northwest maritime problems.
7. Rename and redirect the conference: The Future of Pacific Northwest Maritime Industries.
8. The conference might work better if it could zero in on two or three specific problems.

In response to the first three items above, we will set aside *one* day in March 1976 for our next conference, FOMI III. The conference city will once again be Portland, at a site to be determined.

(That's 1976, not 1975. This year Dan Panshin, Extension Oceanographer, and I are cochairmen for Oregon State University's effort to put some real life into the Oregon State Fair theme, "Salute to the Sea." You can bet that the concerns of Oregon's maritime industries will have an important place in our overall presentation in Salem this August and September! You may be hearing from me again on the fair.)

Now, I am in total agreement with item 5, above; without participation by the offshore and onshore unions, our conferences cannot really solve any problems. It takes all the members of a family, sitting and discussing together, to solve problems. Our attendance by union leaders this year was poor. Our two attendees from the International Organization of Masters, Mates, and Pilots expressed their disappointment that there were no other union representatives.

I will work harder to obtain labor representation at FOMI III, so that all elements of the maritime industries will be truly present and represented.

I would appreciate your comments on items 7 and 8, above; do you feel strongly about the conference name? I am also very interested in your thoughts about topics, problems, and subject areas for our March 1976 agenda.

Perhaps we could call this conference a qualified success; there were good presentations, good workshops, and good discussions—and fine cooperation from all who attended. Our 1976 conference will be even better if you will take a moment to phone me or drop me a line on the points I've reported here, on the State Fair—or any others you consider important. Thanks.

Send your comments to: Edward J. Condon, Extension Oceanographer, School of Oceanography, Oregon State University, Corvallis, Oregon 97331; phone (503) 754-3771. (Additional copies of these proceedings may be obtained from this same address; single copies are \$2.00 each.)

SUMMARY OF CONFERENCE RECOMMENDATIONS

Why We Don't Ship More U.S. Goods on U.S. Ships (Workshop A, page 51)

- A-1 The Government, industry, academia, and the media should encourage U.S. firms to ship their products on U.S. bottoms because these ships help maintain a favorable balance of payments; approximately 80 percent of every dollar spent for freight on a U.S.-flag ship stays in this country.
- A-2 Industry should ship U.S. goods on U.S.-flag ships because this action protects the U.S. merchant fleet for national defense purposes.
- A-3 Industry should ship more U.S. products on U.S. ships because this action supports the U.S. ship repair and building capability, so that these will be available with facilities and trained personnel in case of national emergency.
- A-4 Industry should ship U.S. goods on U.S.-flag ships because this action helps maintain competition on world trade routes, which in turn will guarantee reasonable freight rate levels for U.S. exporters and importers.

Pollution Control in Ports and Harbors (Workshop B, page 53)

- B-1 A Maritime Industry Pollution Control Committee for the Portland-Columbia River area should be organized, composed of the U.S. Coast Guard, Oregon Department of Environmental Quality, Corps of Engineers, Port of Portland, Portland Police Association, and the Oregon State University Extension Service; its goal would be to organize an aggressive pollution control program.
- B-2 Permanent members of the pollution control committee should include industry groups representing steamship companies and terminal and ship repair companies or agencies.
- B-3 The pollution control committee's specific objectives should include (but should not be limited to): a coordinated personnel training program; a mutual sharing of expertise and equipment; problem identification and plans of action for resolution; a centralized information dissemination system; and a unified voice in the legislative and regulatory process.

*Deepening the Columbia River Bar Channel and the Effects of Dredging
(Workshop C, page 55)*

- C-1 Columbia River ports and other interested bodies should take appropriate steps now to secure a deepening of the Columbia River bar to a depth (estimated to be 53 to 55 feet) that will mean full utilization of the existing river channel.
- C-2 The Corps of Engineers should initiate the required study of bar deepening as soon as possible and should carry it out without delay.
- C-3 The Corps of Engineers' required environmental impact study should give due weight to the social effects that would result from bar deepening, as well as to the biological and physical effects.
- C-4 Columbia River ports should form an ad hoc committee, under the chairmanship of the Port of Portland, to work with the Corps of Engineers in support of bar deepening.
- C-5 The States of Oregon, Washington, and Idaho should form a regional water transportation program for the Columbia River system.

Alaskan Fertilizer—An Exemption to the Jones Act? (Workshop D, page 57)

- D-1 The Wheat League of Oregon should ask Oregon State University to convene a meeting including Collier Chemical decisionmakers and representatives of: Wheat Leagues of Oregon and Washington; Masters, Mates, and Pilots and other unions; MarAd; foreign shipping lines; Washington and Oregon congressmen; towboat and barge companies; the Ports of Portland and Seattle, and the U.S. Coast Guard.
- D-2 The Oregon State University Extension Service should investigate Collier Chemical's position on a Jones Act exemption.
- D-3 The Wheat Leagues of Washington and Oregon, and other agricultural organizations in both states, should prepare a request to Congress for a Jones Act exemption, with documentation of the specific needs of Pacific Northwest agriculture.
- D-4 The Oregon State University Extension Service should bring agriculture and export interests together again for exchange of information, at next year's Future of Oregon Maritime Industries conference.

Presentations

WELCOME

William Q. Wick

Director, Sea Grant College Program, Oregon State University, Corvallis



Maritime transportation is a major economic activity whose status has an impact on world activities far out of proportion to its economic worth. As pointed out in the recent Massachusetts Institute of Technology book, *Ocean Transportation*, maritime shipping accounts for the bulk of commodity movement in the world today. Seven percent of the world's gross national product is spent for international commodity transportation. Most of this, of course, is in maritime shipping.

It is appropriate that this conference is being held in Portland, which is a seaport to the world, a major U.S. port in foreign trade. Nearly one-fourth of Portland's jobs and income are tied to port activities.

At last year's first conference on the Future of Oregon Maritime Industries, President MacVicar of Oregon State University cautioned about impending energy problems. Few of us realized how soon this change would come—when ton-mile costs might be expressed in Btu's rather than cents. As President MacVicar said, "Maritime shipping is a no-option solution—essential to our maintenance as a nation."

At last year's conference we "viewed with concern" some of the environmental restrictions, ship repair problems, the need for deeper draft ships and ports, and the questions of labor and management; but I am happy to relate today that some positive changes are occurring. How many of these changes had their genesis at last year's conference? For example:

1. The workload picture in Oregon shipyards is improving.
2. A consortium of labor, management, and agency people is meeting on a regular basis to stimulate increased production on the waterfront.
3. Intermodal rate changes are being discussed.
4. An international fisheries export conference, held in Newport, is stimulating new interest in fish sales.
5. The towboaters and crab fishermen got together and mapped out the towing lanes and fishing areas from San Francisco to Destruction Island, Washington.

6. Environmental progress is being achieved, with compromises that protect essential resources while encouraging economic development.

Yaquina Bay is an example of this phenomenon. Yaquina is a planned and zoned bay (natural food production is safeguarded; water is clean), but commerce and industrial development are also being stimulated. Because of planning and zoning, the Northwest Natural Gas Company could find a place to construct a gasification plant on Yaquina Bay; the project fit the plan.

Through cooperation with local leaders on Yaquina Bay, Oregon State University was involved in a study of the safety of liquified natural gas shipments. The university was also asked to investigate the potential for using excess cold from the gasification process as a refrigerant for cold storage and icemaking in support of the fishing industry.

Another significant development in the Newport area relates to a proposed recreational marina to be established on the south side adjacent to the OSU Marine Science Center. The establishment of Oregon Aqua-foods is another link in the plan. Federal and state agencies involved in management of Yaquina Bay are excited with the opportunities for action because the agencies were a party to the plan rather than commenting on it afterwards.

Interesting actions are occurring on the Columbia River:

1. An interstate task force of citizens at the "mouth" is engaged in natural resource and economic developments and planning. I wish them well. This activity involves several counties on both sides of the river. Comprehensive land and water use planning is never an easy task but must be an effort primarily of residents of the area.
2. The Corps of Engineers is conducting a series of public participation meetings.
3. Beneficial uses of dredge spoils on the Columbia are being investigated by the Corps of Engineers and Oregon State University.

With all of the progress, there are still complex maritime problems. According to Vice Admiral Gerald E. Miller, U.S.N., deputy director of the Joint Strategic Target Planning Staff, speaking in Portland the other day, only five percent of America's exports are carried on American ships. There are no ports capable of unloading a 100,000-ton tanker in the U.S. Admiral Miller concluded that merchant fleets must be increased by thousands of ships of various sizes.

Major shipyards of the world provide a sample of the problem. Based on 1972 data, 12 shipyards in the world have the capacity for building larger than 500,000-ton vessels. Five of these are in Japan, two are in the Netherlands, and there is one each in Denmark, France, Sweden, the United Kingdom, and Spain. The U.S. has none.

Where does the Oregon State University Sea Grant College Program—a program committed to putting Oregon's ocean to work—enter the maritime picture in Oregon? The Sea Grant program in Oregon, as in all parts of the country, is a function of the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. It is a cooperatively funded program using a combination of two federal dollars to one state, local, or industry dollar. Oregon was the first Sea Grant College Program in the United States and currently is the largest.

Many of the Sea Grant Colleges are involved in maritime research and information delivery. Some examples: University of Wisconsin is involved in ports, harbors, dredging, port policy, ice forecasting, transitting delays, containerization, seaway corridor studies, and the energy crisis on the Great Lakes. Texas A & M University is studying offshore ports and marine commodity flow statistics. Louisiana State University is involved in work on superports. The University of Delaware is working with industry on port location and marine cargo tonnage futures. At the Massachusetts Institute of Technology, the emphasis is on the effect of oil on marine organisms and on port analysis.

At Oregon State University, projects include the effects of dredging, estuarine hydraulics, preservation of wooden docks and piling, and a study of cellular bulkhead wharfs in cooperation with the Port of Portland. In addition, Oregon State University is involved in the activities mentioned earlier: studies on crab fisherman-towboat lane problems, the fisheries export conferences, estuarine planning and zoning, beneficial use of dredge spoils, and estuarine renovation. This conference, The Future of Oregon Maritime Industries II, is sponsored by Oregon State University.

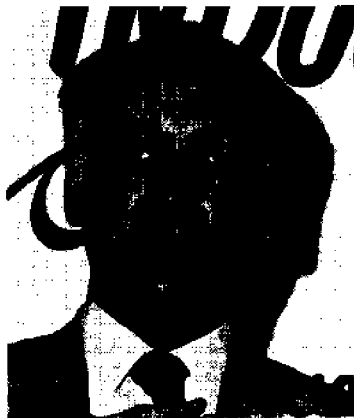
Through the combination of education and training, adaptive research, and advisory (extension) services to put information to use, the Oregon State University Sea Grant College Program will work with you on projects beneficial to the growth and development of Oregon's maritime industries. A point to keep in mind is that the Sea Grant College Program is a network linking the universities in nearly all the coastal and Great Lakes states toward development of ocean resources.

Fred Huntsinger, coast committeeman for the International Longshoremen's and Warehousemen's Union, San Francisco, who was one of our speakers last year, recently wrote us about the first conference, "I have attended many conferences, symposiums, workshops, and other types of get-togethers where great spirit and dedication are manifested during the proceedings, but the most lingering memories are the social aspects; but I recall last year's conference as possessing more of an aura of resolution, and would be greatly disappointed if the conference would drift away into the lassitude common to many omnibus efforts."

Fred cannot be with us this because of a conflict, but let's take him at his word. We have much to do; let's get on with it.

MARITIME POLICIES FOR THE 1970'S

Robert E. Athay, Director, Division of Marine Plans
U.S. Maritime Administration, Washington, D.C.



I appreciate the opportunity to address this conference. I would like to discuss two policy issues that may not relate too closely to the maritime industry of Oregon but are important to the entire industry.

First, I will outline the present status of the maritime industry. The gains from the Merchant Marine Act of 1970 are as follows:

1. *Shipbuilding*
 - a. 52 ships contracted for or completed.
 - b. These total 4.5 million dwt, valued at \$2.4 billion.
 - c. Included are 30 tankers and OBO's (ore-bulk-oil vessels), and 9 LNG (liquid natural gas) carriers.
 - d. In addition, there are 13 LASH's (lighter aboard ship) and RO-RO's (roll-on-roll-off vessels).
 - e. 107 tanker applications are pending; these total \$31 billion.
2. *Ship-operating conditions* have improved in the past year. Cargo backlogs have existed recently. Most ships are now operating at high-load factors.

We are nationally operating in what can best be described as a changing environment. Our maritime program has been successful—probably the best in peacetime history. The outlook remains somewhat cloudy because this is a period of rapid change in industry's environment:

1. *Technological*—new ships are larger, faster, more specialized.
2. *Economic*—increasing trade flows and the devaluation of the dollar have stimulated exports; fuel prices have increased sharply.
3. *Policy changes* are also evident; two examples will illustrate this fact, both dealing with cargo reservations: liner traffic, international in origin; oil shipments, originating in the U.S.

Code of Conduct of Liner Conferences

Lesser developed countries have been restive for some time about the practices of liner conferences (rate-setting conferences for regularly scheduled shipping companies); these countries' basic complaint is freight charges for imports. Basic to this problem is the fact that these countries generally have serious balance-of-payment difficulties.

The lesser developed nations have been seeking redress for grievances—for example, in international forums such as the United Nations Committee for Trade and Development (UNCTAD); some of these countries are also developing their own merchant fleets.

UNCTAD passed the Code of Conduct for Liner Conferences by a wide margin last April 7. The lesser developed and the Socialist countries provided its basic support; the U.S. and cross-trading (third-country) nations opposed it. However, 24 countries, with a total of 25 percent of all liner tonnage, must ratify the code before it becomes effective. Ratification is expected within a year.

The code's basic feature is a cargo-sharing provision that calls for a 40-40-20 division of cargo between trading partners' ships and third-country ships. This is not mandatory; it becomes effective if and when one partner demands it. The division could turn out to be different—say, 50-50 between trading partners.

The impact on U.S. liner operations is not clear because two-thirds of U.S. trade is with developed countries, which are not likely to initiate demands for cargo sharing; and the U.S. already has cargo sharing with Latin American countries through conference pools.

On many trade routes (e.g., between the U.S. and many of the less developed countries), much less than 40 percent of the ships currently involved are American. If such countries should create or charter merchant fleets capable of carrying 40 percent of their trade with the United States, they may decide that the remaining 60 percent will go to "all other" carriers, and the U.S. share could be much less than 40 percent.

Another significant impact will be on cross-trader nations (e.g., Norwegian ships handling more than 40 percent of the traffic on a route that neither begins nor ends in Norway); their share drops to 20 percent or less, which means they will seek alternative employment for many of the ships currently involved in these trades.

The Energy Transportation Security Act of 1974

This legislation is currently before the Senate (it has passed the House); it will require mandatory carriage of a significant share of U.S. petroleum imports in U.S.-flag ships. Specifically, it calls for a 20 percent share upon enactment; 25 percent after June 30, 1975; and 30 percent after June 30, 1977. It is worth noting that the act would apply to both crude oil and products and that small refineries (30,000 bbl/d) would be exempt.

Similar proposals have been around for several years. One was narrowly defeated in the Senate in 1972; however, the 1974 bill passed the House by a large majority and is expected to pass the Senate. A presidential veto is possible, since the administration opposes this bill.

Impact on maritime industry. The impact will depend on the level of oil shipments, on trade routes, and on the ships available. Our level of imports is uncertain but is expected to remain high for several years. To haul the 20 to 30 percent of foreign oil in U.S. ships will require additional tankers; however, this in turn will stimulate both shipbuilding and ship operating. The Maritime Administration estimates that by 1980 the 30 percent quota would require approximately 69 tankers of 265,000 dwt each and would create about 150,000 man-years of employment.

The bill has received strong support from broad segments of the maritime industry and strong support in Congress, for understandable reasons. The administration opposes the bill, for reasons that may not be so apparent.

Without commenting on the merits of arguments for or against this bill, let me point out the grounds for administration opposition. The administration strongly supports the goal of an expanded tanker fleet, the main thrust of the current maritime program. The cargo preference bill is based on the concept that the Merchant Marine Act of 1970 is not working, and the administration disagrees with this conclusion.

A vigorous tanker-building program has been underway under the Merchant Marine Act of 1970: 30 tankers have been ordered or completed under the Construction Differential Subsidy program; these total 5 million dwt, valued at \$1.7 billion.

If current funding levels continue, the U.S.-flag tanker fleet will be capable of 20 percent penetration by 1980. Additionally, the program has stimulated considerable shipyard expansion. It has contributed to meeting declining subsidy goals, which were included in the 1970 act in the belief that long-range economic viability of the maritime industry requires closing the cost gap between the U.S. and its foreign competitors.

Cargo preference is likely to undermine the progress we have made in this area. It will increase the demands on already busy shipyards. It will bid up prices for scarce manpower and materials, such as steel plate; it will, therefore, aggravate already strong inflationary pressures.

Cargo preference will mean higher costs for oil because the impending oversupply of tankers on world markets will depress charter rates and because the U.S. will not be able to take advantage of those lower rates. Some reasons are:

1. Cargo preference will impose an unequal cost burden on different regions of the country because of their different import needs.
2. It will weaken national security, trigger Arab expansion in downstream facilities, and reduce the flexibility of the U.S. tanker fleet.

3. It will intensify the energy shortage; product imports require flexibility in tanker use.
4. It will create a bad precedent, since it extends preference to commercial cargoes for the first time and breaks the tradition of liberalizing commercial policy. It may invite retaliation.
5. It will adversely affect U.S. economic competitiveness because of higher fuel costs.
6. It will require a large regulatory bureaucracy.

In conclusion, then, these issues are two examples of the dynamic nature of the environment in which the maritime industry operates. We cannot expect the rapid rate of change to slow down; therefore, flexible policy approaches are required. MarAd is alert to these needs: We try to anticipate the needs of industry and to devise responsive policies; we seek to develop appropriate responses to changes in policy directed by the Congress or by the executive branch.

Should the cargo preference bill become law, we will find ways to deal with it. It could be very important to the whole industry.

I want to thank you again for the opportunity to address this conference; I hope these brief remarks will serve to stimulate your thinking about some of the problems that confront the maritime industry in the policy area.

CAN WE COUNT ON OUR RUNAWAY FLEET IN INTERNATIONAL CRISES?

Captain William M. Caldwell, International Executive Vice President
International Organization of Masters, Mates, and Pilots, San Francisco



The answer to this question is an empathic NO! First, it is a certainty in the modern world, with its fast-changing political picture, that some of our nation's allies today will be enemies tomorrow. The American people cannot afford to take any chance whatever on being dependent on shipping that flies foreign flags, whether it is owned by American companies or not, either in peacetime or wartime.

Although it has been argued most strongly by those American citizens who do own vessels plying the oceans under foreign flags that their vessels are under "effective control of the U.S.," no practical-minded American can actually believe that, in time of war with the United States, the foreigners who man these American-owned vessels would be loyal to the United States over their own native country. During recent war years, there have been several instances where foreign crews of runaway-flag vessels refused to load U.S. cargo destined for South Viet-Nam.

Recently there has been reaction to the false "effective control" argument advanced by these American companies and some high officials in the Defense Department—this because of Liberia's action in breaking diplomatic relations with Israel and directing that no vessel under Liberian registry could deliver armaments to Israel or Arab countries, with the penalties for noncompliance cancellation of registry and a \$50,000 fine.

This action by Liberia should explode the myth that vessels under foreign flags can be considered as reliably under effective control of their U.S. owners. The danger of the "effective control" concept, if accepted, can best be understood if it is realized that, prior to the passage of the Merchant Marine Act of 1970, these runaway-flag fleets (owned by U.S. citizens), had approximately five million dwt more than the American-flag merchant fleet.

During recent oil hearings conducted by Senator Jackson in Washington, D.C., the question of the loyalty of multinational oil companies such as Aramco (Arabian American Oil Company) was raised. The hearings revealed that, during the recent worldwide strategic alert of the military forces, for 48 hours this combine of oil companies failed to inform the Defense Department that the Saudi Arabian Government was trying to use them as instruments of anti-U.S. policy.

Saudi Arabia had requested from the oil companies information about products produced from Saudi Arabia's crude oil and in turn sold to the U.S. military. This combine of companies furnished the information to Saudi Arabia, which then placed an embargo on such oil, to stop the flow of such products to the U.S. military. The furnishing of this information to Saudi Arabia during the energy crisis and during the strategic alert, and then two days later advising the Pentagon about it, certainly shows that Saudi Arabia had the first claim on the companies' allegiance and the United States had the last.

The Shah of Iran created an uproar this winter (we saw him on national television) when he stated that oil had departed in tankers from Arabian ports for U.S. ports during the embargo and had been subsequently diverted to other nations' ports, where higher prices could be obtained by the companies. This was a proven fact regardless of Energy Czar Simon's denial.

The Federal Energy Administration revealed this month that it has preliminary evidence that Gulf Oil Corporation illegally inflated crude oil prices, but it doesn't know how much was passed on to consumers at the gasoline pumps. The agency's initial findings say that Gulf overcharged itself \$46.5 million on crude oil purchased from its subsidiaries in Africa, a substantially greater amount than its African affiliate received in sales to other parties.

The basic reason for these sales was to make a profit possible for the foreign side of Gulf's organization and thereby evade payment of any U.S. taxes. Evidence of Gulf's profits is revealed in the company's first quarter earnings report released April 22, 1974. The report shows that its net income from petroleum producing, refining, and marketing operations overseas had climbed 171 percent to \$152 million, from \$56 million in the first quarter of 1973. For 1973, the company had reported for petroleum operations a profit of \$560 million, compared with \$150 million in 1972.

It is known all over the world that the profits of the big international oil companies are huge. Day by day through the years these companies have exploited the natural resources of the foreign countries where they operate. These big oil companies are aware that profiteering through the years with peoples' birthrights has caused the pendulum to swing back, and they are going to be faced with government controls and restrictive climates in these countries that will cut their profits.

Evidence of how far things can go in foreign oil-producing nations has been shown in a South American country where the general manager of an Exxon refinery was held by guerrillas for a \$14 million ransom. In some countries there is also talk of nationalization, expropriation, and higher taxes; but popular sentiment of people in oil-producing nations throughout the world is that they want to secure a larger portion of this oil wealth as their own and out of earnings of the oil companies.

February's election in Britain brought to power a Labor Party that has pledged to nationalize the North Sea oil and gas. It is really uncertain at this time whether the Labor Party has the ability to keep this pledge.

Some huge international oil companies, which have over \$2 billion invested in exploring and developing wells in the North Sea, are becoming more than alarmed. They know that, whether or not the Labor Party keeps its pledge to nationalize, they are in for some bad times about terms and profits, and that the British Government for sure is going to increase its share of the profits from North Sea oil and gas.

Venezuela's new president has also promised to nationalize the petroleum industry during his five-year term. The oil companies were well aware of this action and are keeping their fingers crossed about how deep a cut will be taken into their profits and shares. The president of Venezuela says, "We are going to realize our country's old aspiration that its petroleum be Venezuelan and that the national Congress will have the final word."

The Government of India is also planning to move ahead with a plan to purchase a 75 percent increase in Exxon's petroleum holdings in India for approximately \$4 million. This company has been operating in India for 90 years, and the Indian Government intends to take over the remaining 25 percent by the time the company has been there 100 years. Exxon's total investment in India is \$50 million.

Last week, in a new display of Arab oil militancy, Kuwait's parliament voted to take over 60 percent of the American- and British-owned Kuwait Oil Company, the second largest producing firm in the Arab world. The move is certain to increase pressure on other Arab oil owners to go after larger shares of ownership in Western firms.

Saudi Arabia, the world's largest exporter of petroleum, has already expressed new interest in negotiations for majority control of Aramco (Arabian American Oil Company), which is producing 8.5 million bbl/d.

Kuwait's petroleum and finance minister has stated that Kuwait has the right to review the agreement at any time and could take complete ownership whenever it desired by terminating the company's concession. He also has stated that Kuwait will continue to set its own prices unilaterally and that it will also control the production level, which at present is 2.6 million bbl/d.

The recent international crises brought about by the Israel-Arab war, the Arab oil embargo, and moves by certain countries to nationalize and take over oil companies have caused U.S. citizens to pause and wonder what is happening. Many in the maritime industry, as well as others, were aware that big oil companies were playing games with the oil industry and contriving to make even higher and higher profits. But where does it end for the American people?

When the American people realize the full impact of the abuses being perpetrated on them, by the big U.S. oil companies importing oil almost exclusively in their own foreign-flag tankers, they will correct such abuses. But until this is done, it is obvious the oil companies will not cut their profit margins at a time when they are losing certain other rights to the Arab oil-producing countries.

A review of the past 60 years shows a recurring pattern of events. Presidents Wilson, Roosevelt, Eisenhower, and Nixon pressed for maritime legislation that would provide for an American-flag merchant marine adequate in size to carry U.S. imports and exports in both peacetime and wartime. History also shows that before both World Wars I and II, our American-flag merchant marine was allowed to deteriorate, to become almost nonexistent. Then, when the nation got involved in these wars, the same thing happened: an emergency shipbuilding program was frantically implemented, and it spent billions of dollars in a short time for ships—money that should have been spent on building ships through the years, so the nucleus of a fast, modern fleet, with modern shipyards and skilled workers, would have been available to the nation at all times.

After World War II, when the need for ships diminished somewhat, surplus ships were placed in mothballs in various reserve fleets throughout the United States. It wasn't long before unscrupulous operators saw a method where some fast money could be made, by obtaining these vessels from the Government for trading under the Government's tremendous aid program for other countries. Although these vessels were mostly to be operated under the American flag, many and devious were the maneuvers that were used to get them under foreign flags.

The basic reason for placing them under foreign flags was to evade paying American seamen's wages and conditions and American taxes, and to engage in cutthroat competition with U.S.-flag merchant ships that were paying American wages, conditions, and taxes.

Dry cargo vessels as well as oil tankers were placed under foreign flags. Some companies had their vessels built in foreign shipyards, all to avoid paying American wages, conditions, and taxes. These companies were supported by many top defense officials in such transfers and foreign shipbuilding programs, under the argument that the U.S. had effective control of such runaway-flag vessels in the event of emergencies and outright war.

Panama, Greece, and Liberia were the major countries that welcomed such transfers to their own national flags. Despite American labor's protests and demonstrations against such unpatriotic and damaging actions (which they considered as outright detrimental to the nation's Fourth Arm of Defense, the American-flag merchant marine), there was a consistent transfer from American-flag to foreign-flag in the decades after World War II.

During this period, it was a tragic picture in Washington, D.C.—the State and Agriculture Departments advocated more aid, with such cargoes to be carried as cheaply as possible and on foreign-flag vessels; other departments urged that such aid cargoes be carried on American-flag vessels, regardless of cost. Cargo preference legislation was finally passed that guaranteed a certain percentage to be carried on American-flag vessels, when and if available. Many in the maritime industry doubt that American-flag vessels did receive their fair share of the cargoes through the years.

A box score shows that prior to passage of the Merchant Marine Act of 1970, American-flag merchant ships only carried 4.7 percent of the United States ocean-born foreign trade, which was certainly a great difference between the 50-50 cargo preference required for aid cargoes—and costly to the balance of payments situation. At this time, the runaway-flag fleet,

owned by U.S. citizens but operating under foreign flags, had tonnage that was equivalent to the fifth largest maritime fleet.

At the year's end (1973), there were 549 American-flag merchant vessels being privately operated: 196 dry cargo conventional freighters, 225 tankers, 122 ships listed as intermodal type, and 6 combination passenger-cargo ships.

There is no doubt that the Arab oil embargo, the fast rise in oil prices, and the unreliable transport situation solidified the American people's grave concern over the wisdom of depending on foreign oil and foreign-flag tankers to move the oil. It has become increasingly clear to them that the United States cannot depend on foreign-flag tankers for imported oil. This concern was strengthened by the Arab countries' cutoff of oil to American military forces in Europe and by the present accelerated takeover of the oil companies.

As an outcome of the crisis, more and more support has been built up for the bona fide American-flag shipping industry's argument that the national interest would be better protected by assuring regular cargoes to U.S.-flag tankers. The industry argues that legislation is needed to guarantee that a certain percentage of foreign oil imports would be transported on American-flag tankers, as stated in H.R. 8193 (the Cargo Preference Bill), which would require an immediate 20 percent importing by American-flag vessels, rising to 30 percent by 1977. (In April 1974 the House Merchant Marine Committee approved a bill that would require 20 percent of the oil imported into the U.S. by sea be carried on U.S.-flag vessels.)

Regardless of President Nixon's aim of achieving U.S. fuel independence by 1980, the Maritime Administration has estimated that sea-born oil imports are likely to reach 14 million bbl/d by 1985, compared with 6 million bbl/d in 1963. It is estimated that a fleet of 25 million dwt of American-flag tankers would be needed to handle 30 percent of the 14 million bbl/d, and such a fleet could be built by 1982.

There is no doubt that preference legislation will help existing U.S.-flag tankers and will create competition with foreign flag tankers and the oil company's runaway-flag fleet of tankers. Oil preference legislation is also the only way to respond to the danger of the expanding tanker fleets of the Arab oil-producing countries, which now have billions of dollars to invest in ships, shipyards, and transportation.

This winter's oil shortage really revealed to the American people how big companies can manipulate peoples' resources for corporate profit. It also has showed the people the folly of being dependent on foreign interests and foreign-flag shipping for strategic imports that are necessary to the American economy, defense, and well-being.

Many American citizens are gravely concerned about the control, the interlocking directorates, and the joint ventures of the worldwide oil companies, and the control they have over the United States welfare through their joint actions—especially when it is known that these same big companies owe allegiance first to profits and foreign oil-producing nations, and then to the United States. Many Americans are very doubtful about these same companies and are suspicious about possible violations of U.S. antitrust laws, to the overall detriment of the Nation.

They also are gravely concerned because of the recent oil embargo placed on the U.S. by Arab countries, and the diversion in midocean of Persian Gulf oil, originally destined for U.S. ports, to foreign ports where higher prices for the oil could be obtained, thereby leaving the U.S. dangling and short of oil. From the standpoint of our nation's economy and its defense, the people are aware this imported oil must be transported in U.S.-flag tankers so the U.S. won't be dependent on foreign-flag shipping for such oil.

Interior Secretary Morton recently warned that the Arab oil embargo should teach the U.S. to reduce its dependence on imports of nonfuel minerals as well as oil. He also stated, "The spectacle of the most powerful nation being backed into a corner by a handful of oil-producing countries is bound to be noted by all the other nations who have raw materials to sell."

On this National Maritime Day, we all should know that the American-flag merchant marine, manned by American officers and seamen, working for American wages and conditions, paying American taxes, is our nation's Fourth Arm of Defense, and that it can be depended on always in time of emergencies and all-out war.

We all should know that going hand in hand with our American-flag merchant marine is the American shipbuilding industry, which builds and repairs the American-flag ships.

It is vital to our Nation's welfare in emergencies to have American shipyard workers on the West Coast, East Coast, Gulf Coast, and Great Lakes as a necessary adjunct to our Fourth Arm of Defense. The United States should never become dependent on foreign-flag shipping in any respect, because of the danger that an ally today could become an enemy tomorrow.

I believe this recent international crisis has solidified the concern and belief of the American people—labor, management, and government—that they cannot depend on foreign-flag shipping in times of emergency. The outcome will be that they will now work together to build in American shipyards the biggest, finest, and most productive and competitive American-flag merchant marine in history—one that will be a guarantee that the United States will never be in any way dependent on any nation for the carrying of her imports and exports in peace or war.

PORTLAND'S SWAN ISLAND COMPLEX

Ogden Beeman

Director, Marine Marketing, The Port of Portland



[Mr. Beeman recounted the history of Port of Portland involvement in ship repair activities, beginning with the construction of Drydock No. 1 in 1904; Drydock No. 2 followed in 1920.]

The reasons why the Port of Portland is in the ship repair business relate to operating a full-service port where ships can be guaranteed repairs for voyage damages or any other factors. The port operated the shipyard in St. Johns from 1904 until 1950, when it was moved to its present location at the foot of Swan Island. This location had been used during World War II by Kaiser Industries to construct T2 tankers.

At the present time, the ship repair yard yields about \$2.5 million to the port; this amounts to 5 to 10 percent of the gross income to the contractors. There are several major contractors working at the yard and in nearby facilities. The present facility has five fitting berths and three drydocks, the largest of which (Drydock No. 3) was built in 1963 and has a 25,000-ton lift capacity.

After the large surge in the ship repair business in the late 1960's caused by the Viet-Nam conflict, the business trend has been downward until the last year. The strategy of the port and of the ship repair contractors has been to keep our tariff charges low and for contractors to be highly aggressive in competitive bidding for contracts. This means that the ship repair yard has done better than comparable facilities on the West Coast; in fact, it has done extremely well during the last year.

Because of the high level of business presently enjoyed, the port launched a study about six months ago to determine the future of the West Coast ship repair business and the future of the Swan Island facility. As a result of the study, the port has identified three alternative futures for the development of the repair facility.

Strategy number one would treat the yard as an economic generator and growth industry in the repair end of the shipyard business. This would call for a very high capital investment for a new drydock and probably a new pier. As a result of these investments, we could expect a high level of tanker business and a high gross income for the shipyard and for the repair contractors.

Strategy number two would look more toward serving the local transportation industry. Special facilities would be built to facilitate the repair of tugs and barges. This calls for a low capital investment but would result in a low gross income and a low employment factor in the yard.

A *third strategy* would be to emphasize job creation; this can easily be done through the encouragement of new construction. This probably would emphasize construction of barges, tugs, and construction equipment rather than the large vessels now being constructed at Gunderson FMC. A fairly low capital investment would be required for this, and there would be a high level of new job creation.

Which one of these alternate strategies is followed by the Port of Portland and the ship repair contractors will depend on evaluation of the various policy questions involved and will also relate a great deal to the capital funds the port has available for this type of activity.

FOREIGN FISHING ACTIVITIES OFF THE PACIFIC NORTHWEST COAST

Thomas E. Kruse, Ph.D.

State Fisheries Director, Fish Commission of Oregon, Portland



I apologize for Hal Brauner, the governor's assistant on natural resources; he had an emergency visit to the southern Oregon coast and asked me to make some comments for him. I notice his subject was "Oregon's Navy." I spent some time looking for the Navy, but I couldn't find it. I started out looking for destroyers, but I couldn't even find a rowboat. I couldn't find an admiral's name, either.

So I will talk instead about foreign fishing off the Pacific Northwest coast, from Alaska to California: how the fishery is being conducted; what resources are being affected; how the U.S. is trying to resolve the problem; and what problems remain to be resolved.

The presence of foreign fishing fleets off the Oregon coast is not a new situation, at least from a national perspective. There have been foreign vessels fishing off Alaska since the 1930's and off the East Coast since slightly later than that—and in far larger numbers than off Oregon. At the present time I have no great concern about the foreign vessels operating off Oregon, Washington, and California, although they definitely present a problem. There are 200 to 400 foreign vessels off Alaska, 200 to 300 off the East Coast (with at least eight countries involved there), but only about 50 boats off our own coast at any one time. Foreign boats off Oregon are fishing essentially on the hake resource and are not overfishing these stocks at present.

The Fisheries

My comments will primarily concern the Soviet fishery, as that is the one that has been active off the coast of Oregon and Washington. Before 1959, their fishery took place mainly off the coast of the Soviet Union; that year they expanded into the Bering Sea, just north of the Aleutian chain. By 1963 there were over 100 Soviet vessels, both north and south of the Aleutians.

By 1966 they had expanded along the entire U.S. coast, and also off the coast of Australia and off the remainder of the Soviet coast. Theirs were mainly distant-water fleets that could stay on the fishing grounds for many months at a time and that could be serviced by transports, tugs, tankers, etc.

King crab. The first significant foreign fishery was king crab, fished by the Soviets and the Japanese. In the mid-1960's, the last time the Soviets

fished very hard for king crab, their take was about 2.5 million crabs; the U.S. take was essentially nothing.

But the king crab is a resource of the continental shelf, and by virtue of the Geneva Convention of 1958, creatures of the continental shelf can be regulated by the countries off whose shore the shelf lies. Both the Soviet Union and the United States are signatories to that convention, and the Soviet Union has recognized our right to regulate king crab. As a result, the Soviet catch decreased to zero by 1972-1973, while our catch rose to 5 million crabs a year. So the Soviets are essentially out of the king crab business off our coast. The Japanese fishery is going the same way, as a result of bilateral agreements we have with them.

Pacific ocean perch (a red rockfish that occurs off the coast from 150 to 200 meters in depth). These are very long-lived, slow-growing fish that enter the fishery around years eight to ten; some still appear in the fishery that are 18 or 19 years of age. When they are harvested, they are 12 to 17 inches long.

In 1965 the countries combined took about 455,000 t (metric tons) of Pacific ocean perch off the Alaska and British Columbia coast. This species has been overfished; the stocks are down, and now the annual harvests are in the area of 10,000 to 50,000 t.

Pacific hake. This is the primary target species for the Soviet fleet off Oregon. A very abundant species, hake breed off California; the mature adults migrate each summer up the coast to the southern end of Vancouver Island and then turn around and go back to California. The Soviet fleet follows the migration; it usually times its appearance off Oregon to coincide with the hake's arrival, around the first of May. (Last year many hake did not move all the way to Washington, so the fleet was off Oregon most of the year.)

Herring. The Soviet Union claims that there is a harvestable resource of about 70,000 t, but the catches of the past few years have been about 10,000 to 15,000 t. Right now, the U.S. catch is about twice the Soviets'.

Shrimp. These are taken primarily by the Japanese now, in the middle of the Bering Sea. The catches are not large, about 30,000 t a year.

Ground fish (flounders and pollock). After the Pacific ocean perch decreased in abundance, foreign fisheries turned to yellowfin sole and pollock. The yellowfin sole catch in 1961 was about 568,750 t. This resource has also declined because of the fishing pressure; while a considerable amount is still taken, the fish are small and mostly immature specimens.

The pollock fishery, primarily by the Japanese, is still expanding; the catch was 1.0 million t in 1971 and about 1.8 million t (about 4 billion pounds) in 1972. There is no indication of a problem with pollock yet, except that their average size is getting smaller. This is to be expected with intensive fishing on stocks that have not been fished before, but we do not yet know whether this is a cause for concern.

Foreign Vessels and Gear

The smallest Soviet fishing vessel that we commonly see is called a side-trawler; the name comes from bag-shaped nets hung over the side and dragged through the water. These boats are about 170 feet long; American trawlers are 35 to 75 feet long, less than half this size. When the Soviet fleet first appeared in 1966, they were using primarily side-trawlers; in the next couple of years their fleet increased to about 114.

Side-trawlers have declined since that time and have been replaced by the larger stern-trawlers. We understand from the fleet commander that the maximum number of stern-trawlers we can expect to see off Oregon this year will be about 50, but their fishing capability is much larger than that of the side-trawlers. In addition, these vessels have processing and storage capabilities.

Japanese stern-trawlers are typically much better kept than the Soviets', and I understand their efficiency is higher.

When the Soviet herring fleet operates in Alaskan waters, the side-trawlers go out from the mother ship (up to 650 crew members), purse-seine for herring, and bring the fish back to the mother ship for processing.

Some Soviet factory ships are over 500 feet long and process primarily in areas where side-trawlers are operating. Refrigerated transports (240 to 350 feet long) take frozen or processed fish back to the Soviet Union and deliver supplies to the fleet.

There are a few Japanese long-liners that operate off Oregon each year; they set long lines of hooks and fish on the bottom, primarily for black cod.

The Soviets use primarily otter trawls to fish on the bottom. What they call a pair trawl is pulled by two separate boats, in order to fly the net off the bottom at the level at which the Pacific hake are concentrated.

Soviet gear is in proportion to the size of their trawlers. Their side-trawler uses a 120-foot ground rope (an American fisherman would use an otter trawl with about a 96-foot ground rope; the R.V. *John Cobb*, a National Marine Fisheries Service research vessel, uses a trawl with a 160-foot ground rope). A Soviet stern-trawler of the type down on the Portland docks right now has a 250-foot ground rope; their pair-trawl vessels have about a 400-foot ground rope.

The Size of the Problem

As I indicated, the Soviet fleet appeared in 1966. From April to June they fished quite hard on Pacific Ocean perch; they were under the impression at that time that stocks off Oregon and Washington were about the same magnitude as they were off Alaska—and that they could just fish all year long. Although they shifted their effort to hake in July and moved up off Washington, they had already severely damaged our Pacific ocean perch stocks.

Ocean perch had been a building American fishery; Oregon catches had increased until 1965 (about 6,370 t). In 1966, the first year the Soviets showed up, this dropped to about 2,047 t. The Soviets recognized that the perch stocks were at a low level and have agreed not to conduct a specialized fishery for perch south of a line essentially at the northern Washington border.

However, even though they do not fish specifically for perch, they still continue to take it as an incidental species. Our concern is that, with the low abundance and the long life of this species, even this incidental catch could prevent recovery of perch stocks.

The primary species the Soviets are taking is Pacific hake. While we have noticed fluctuations in hake abundance, scientists in both the Soviet Union and the United States have felt that the stocks can withstand the present harvest. We are talking about a sustained catch level of 150,000 t, something over 300 million pounds a year, and this is about what the Soviets are catching.

We see a new complication this year: the Polish have told us they are going to have five or six vessels over here, fishing this summer; we have no agreement with Poland. Where they are going to get the numbers of fish they catch, from which quota, is not evident. They could gill-net for salmon, use drag nets for perch, or take hake. On the East Coast Poland has been the easiest country to deal with, so we are hopeful we can work something out.

At the present time I still do not have any concern about the stocks of fish being taken off Oregon, but we do recognize a potential problem we are going to have to monitor closely; we must be prepared to get together with foreign representatives immediately if they start harvesting a species we are trying to protect.

How We Are Responding to the Problem

Twelve-mile limit. Public reaction to foreign fisheries influenced Congress, in 1966, to establish a 12-mile area off our coasts—that is, the three-mile territorial sea we have always had, plus an additional nine-mile contiguous fishery zone, which gave the U.S. the right to authorize or exclude foreign vessels from fishing within it.

Research meetings. In 1966 the U.S. started a series of scientific meetings with the U.S.S.R.; each year we meet in Moscow or in Seattle. We have talked about our respective concerns; exchanged information on fish landings and evaluations of maximum sustained yields; and planned coordinated cruises to collect information. These cruises have been carried out in both countries and are scheduled again for this year, to investigate hake and rockfish stocks.

Bilateral agreements. These have now been negotiated with the Soviet Union and Japan, to identify what restrictions each country will place on its own fishermen or what concessions it will extend to the other country. These agreements have included provisions such as: areas closed from December 15 through April 1; areas closed because of U.S. sport-fishing concentrations; no specialized fishery for perch or flounder; agreed limit on hake catch;

control of pollution; communication between fleets; scientific exchanges; port privileges; and a claims agreement.

For example, we would go into a bilateral negotiating meeting with the Soviets, determined to secure protection for perch; but we didn't want them to fish for sole, either. And we were concerned about concentrations of our sport-fishing boats off the mouth of the Columbia River, ten or 12 miles out. We thought the Soviets should stay out of these areas; there were similar problems in Alaska.

We would say, "We recognize these are areas on the high seas, and you have the right to do what you want out there, but you are causing problems for us; we would like to have you refrain from fishing in particular areas."

Then the Soviets would reply, "We recognize the problem, but there are some things we want, too. We need protected loading zones in some areas, where we can transfer supplies and fish; we find the need to enter your ports at times."

And so we got together and traded—what they wanted for what we wanted. As a result of these negotiations, the Soviets do have port privileges; they can come into Seattle, Portland, and Honolulu with four days' notice if they are approved. The Russian boat in Portland now, the *Posyet*, has taken advantage of that privilege.

Although this provision has been in effect for about three years now, this is the first time (to my knowledge) that commercial fishing vessels have taken advantage of it. However, Soviet research vessels have done so; one was in Portland last year. It seems rather strange to me that the Soviets are willing to forego harvest of some species in certain areas in order to obtain a port privilege—and then not take advantage of it. Apparently, they have their own reasons.

(One reason they didn't enter our ports prior to 1973 was that they became involved in court action. In the first years after this privilege was provided for in a 1971 agreement, one of their draggers pulled up some lobster pots, and the owners of the pots put a lien on a Soviet boat in a West Coast port. The Soviets ended up paying for the lost gear, and they were reluctant to send any fishing vessels into port, for fear the same thing might happen. But the State Department resolved the incident to the Soviets' satisfaction at the last bilateral negotiating meeting.)

Surveillance activities. We have a continuous need for information on the types of fish that the Soviets are catching. You can appreciate how difficult it is for a small American boat—trawler, troller, rowboat—to sit beside a Soviet stern-trawler and try to identify salmon, hake, or Pacific perch as the net goes up the stern ramp. There is no way of making observations once the fish reach the deck, unless you are in the air. That's where the Coast Guard comes in.

The Coast Guard makes twice-weekly flights along the coast, from Cape Mendocino, California, to Whidbey Island, Washington; a member of the National Marine Fisheries Service enforcement group accompanies each flight. The flights record where the Soviet fleet is located, what it is catching (when possible),

and violations of the 12-mile limit or any other provision of the bilateral agreements.

The Coast Guard has also assigned one patrol boat to this mission and is constructing a helicopter port at Coos Bay. An Astoria-based helicopter will also cover the Oregon coast to assist in monitoring the foreign fleet.

The great advantage to the scientists of all this surveillance is that it gives us a check on what the Soviets are saying they are doing. We know how many boats are out there; we know how many full and part loads we have seen; and we can make estimates of what they are taking, by species.

A little story will show what I mean. In July 1966, the first year the U.S. went over to Moscow (I was not present), we asked the Soviets for an estimate of their Pacific ocean perch catch off Oregon and Washington up to that time. They couldn't provide it on the spur of the moment, but they told us it was not very large.

Using the kind of surveillance data I have described, the American scientists prepared some rough estimates of the Soviet catch. It took the Soviets two days to get their production records, and they found out that we had been very close to their figures. They immediately had a great deal of respect for our ability to second-guess their production.

It is my opinion that, within their capability of identifying species on production vessels, and of providing information to us, the Soviet figures are reasonably accurate; however, there is no way of telling for sure.

Problems to Be Resolved

What I see as the primary problem is the lack of control by any one country or any one group over the resources off our coast, and this holds true for the resources of other countries, where they are subject to the harvest of more than one nation. I believe some type of protection is going to be mandatory. There are two ways to this goal that the U.S. is considering right now.

Congressional action. Bills have been introduced to unilaterally establish some U.S. offshore jurisdiction, either the continental shelf or a 200-mile limit. The most popular bill is one introduced by Senator Warren G. Magnuson (D., Wash). Such bills have a large amount of support from coastal fishermen, but I think the fishing industry as a whole throughout the U.S. still does not want an absolute line like this established. The reason is that the U.S. also has distant-water fleets that contribute a large part of the fishery landings in the U.S. There is merit in considering their needs as well as the coastal fishermen's in any type of extended-jurisdiction legislation.

Law of the Sea Conference. This is where the U.S. judges it most appropriate to sit down with other nations at a conference table, to try to work out agreements that all nations can subscribe to. Professor Jacobson will be talking to you later today about the conference.

REGIONAL PORT PLANNING

Joseph D. Carrabino, Ph.D., Professor of Management,
Graduate School of Management, University of California, Los Angeles;
Board Chairman, Engineering and Management Sciences Corporation (EMSCO)



The greatest managerial need for port management is a master long-range planning capability. The phenomena of periodic influxes of new commissioners into port administration pose unique problems of continuity and stability of leadership. Commissioners who are responsible for making policy-level decisions must have a road map or guideline against which they can relate and appraise proposals for new uses of limited land and water resources. The primary purpose of a master long-range plan is to develop a land-use study. The allocation of land usually falls into three categories:

1. Land to meet the basic objectives of serving the maritime activities of the ports.
2. Land for recreational activities.
3. Land that will be used to develop projects that will promote the economic well-being of the community.

The primary factors that should be considered in developing a master long-range plan can be grouped under three headings:

Marketing trends. Forecasts have to be made of commodity movements that might be anticipated in future port activities. Such forecasts should consider the competitive forces exercised by neighboring ports, changing world commerce patterns, and changes in consumer tastes and buying habits. These forecasts would provide a rational basis for conducting port development programs such as public relations, advertising, and trade missions.

Technological innovations. A study of changes in the modes of moving commodities has to be made on a continuing basis in order to develop facilities to meet these changing requirements. Such innovations would include fast-deployment logistics ships, nuclear-powered ships, supertankers, containerization, etc.

Financial requirements. Consideration of future marketing trends of commodities and the impact of technological innovations on type of facilities will provide a rational basis for determining the financial requirements of the ports.

Figure 1 demonstrates a more systematic listing of these primary factors and suggests the development of a detailed five-year plan. This time period can, of course, be varied to meet particular needs, depending on the reliability of forecast data. Long-range planning is an ever-continuing process; we must periodically update our strategies as new developments take place. We must also allow for entrepreneurial opportunism.

Please note that an important part of this process is to identify the weaknesses as well as the strengths of a port. All too often, elected and appointed officials allow their ego needs to blind rational considerations. We can all point to white elephants that should never have been built. It appears to me that one's perception of the value of a dollar varies with the source of the dollar; it is my experience that the most elastic of all dollars is the public dollar.

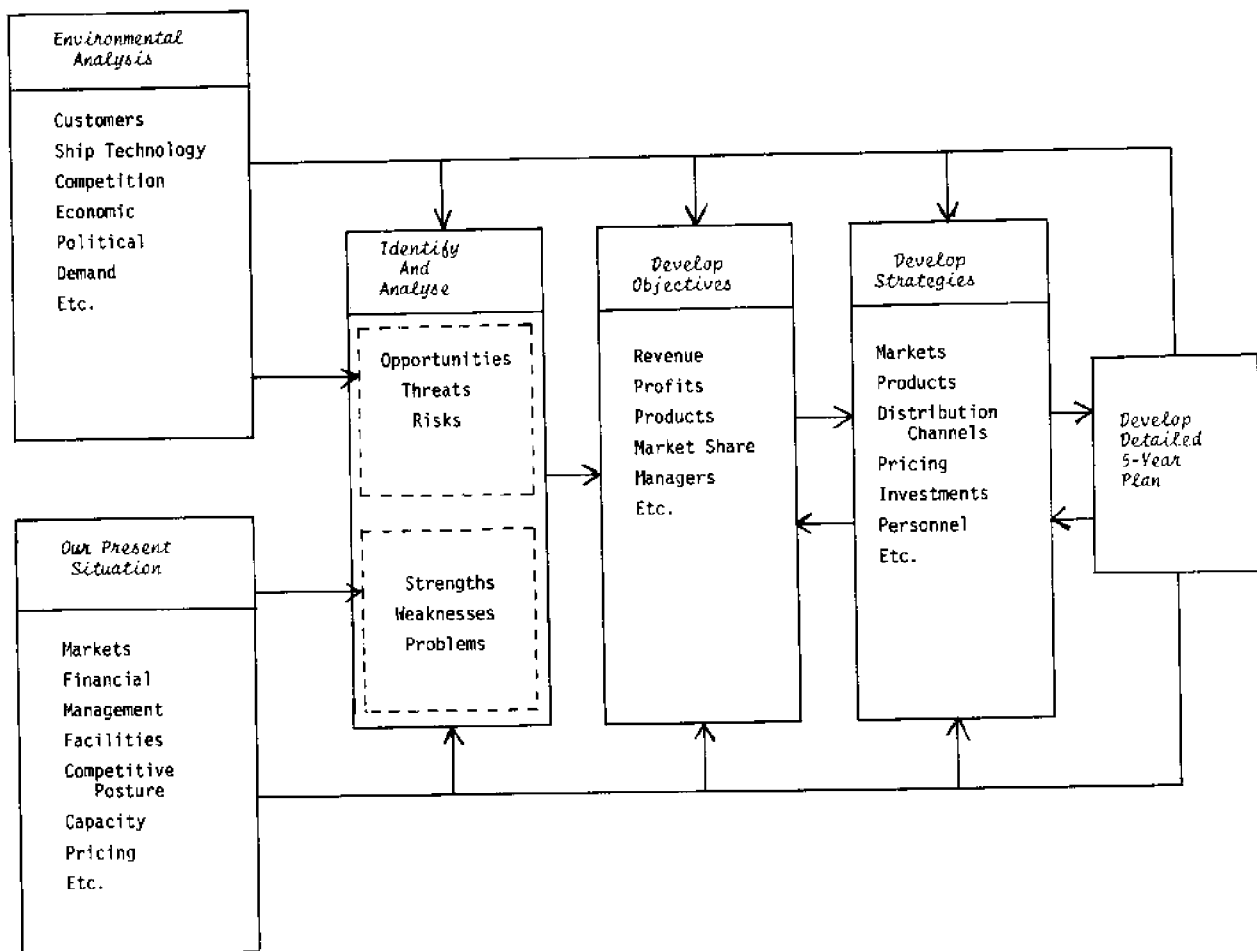


Figure 1.—A model for a port's long-range planning.

The above-mentioned planning factors can be considered, as is usually the case in the United States, by individual ports acting in a way fully competitive with other ports; or a central government port authority can consider these factors and make decisions looking at a particular region. The port industry has been careful to avoid government intervention. The traditional approach of individual port planning has resulted in many redundant facilities. It appears to me that in the short run, the only viable approach is to employ regional port planning programs through which contiguous ports in a given region jointly plan, on a voluntary basis, to develop optimal facilities.

The first such pioneering program is now underway in the State of Washington. The Washington Public Ports Association is sponsoring a study with substantial financial support from the U.S. Maritime Administration; the objective is to forecast the needs of the state to the year 2000 by carefully defining regions. Hopefully, the information generated by this study will be used by the various ports within a region to determine the respective areas of economic specialization and distinctive competence. Those managements that try to retain traditional roles or fail to accurately assess the changing economic environment will not serve the public interest that has been placed in their hands.

ESTUARY PLANNING AND COASTAL ZONE MANAGEMENT

Captain Martin E. West, Commissioner, Port of Astoria;
Member, Oregon Coastal Conservation and Development Commission



Last year at this forum I described for you some of the emerging problems and threats to Oregon coastal industries, including the maritime industry, as presented by the work of the Oregon Coastal Conservation and Development Commission (OCC&DC). Some of you may know that the OCC&DC is a state agency created by the 1971 legislature to prepare guidelines for the conservation and development of Oregon coastal resources. It is intended that these guidelines be enacted into law by the 1975 legislature.

Such a mandate sounds reasonable enough at casual glance when you hear words like "resources" and "guidelines." However, you and the people of the Oregon coast need to know that "resources" has been interpreted to mean all land and water areas of the coastal zone as well as all of the timber, mineral, and fishery resources in the coastal zone. You need to know that "guideline" has been interpreted to mean specific regulation in detail, down to specific areas in each of the local communities on the coast.

Finally, you need to know that the justification upon which the commission was created was the propositions, whether true or not, that the people of the state of Oregon as a whole have an interest in the resources of the coastal zone, that the people of the coastal zone have demonstrated that they are not willing to protect the interest of the state at large, and therefore, that the people of the state will protect their interest by a state law.

It is not too hard to see how an eastern Oregon or Portland legislator might wish to protect certain scenic and esthetic sites on the coast. It is possible to cite failures of local planning commissions. I suspect, however, that few lawmakers who contributed to the majority of votes that passed this law were aware that their mandate would be the justification for a complete "master plan" instead of guidelines. I also suspect that few of the legislators who enacted this law intended to supersede local authorities and negate the local knowledge, expertise, and, most important of all, the local support that a local planning commission and local unit of government has.

Yet it is, indeed, a master plan that is being developed. It rides roughshod over the wishes of local communities. It totally ignores the certain loss of value to private property owners that will result. The master plan will largely replace the authority of the local government unit on the coast to plan its own community.

In fact, many coastal communities are developing, at considerable effort, their comprehensive land-use plans, as required by another state law of 1969; but almost before the people have spoken about what their communities should look like, the mandate of OCC&DC will descend upon them to force changes. The supporters of the OCC&DC master plan will tell us that local knowledge and wishes will be protected by the concept that local planning commissions will be allowed to administer the so-called guidelines. That is so much hogwash. What they mean is that the local planning commission and the local units of government will be allowed to take the heat for decisions about which they had no say and no choice.

If the development of the OCC&DC plan proceeds for another seven months in the direction it has already headed for three years and five months, I foresee a total breakdown in development in the Oregon coastal zone similar to that which happened statewide in the building, real estate, and home financing business, as a result of the recent consumer protection law in Oregon that was repealed.

The reason will be the same: Neither the industries of the coastal zone (such as marine transportation and timbering) nor the legislators who enacted the law in the first place are providing any input into the master plan. Neither will know what the effect will be after it is enacted. That is totally to be expected because, after three years and five months' work on a four-year program, neither the staff nor the commissioners of OCC&DC can say what the economic effect of the master plan restrictions will be on property values, economic activity, industrial operation, or local government tax bases.

It is a simple fact that during three years and five months of work in developing environmental restrictions on every feature of the geography and human activity of the coastal zone, there has been no economic information developed and no way found to measure the effect of what the OCC&DC has been proposing all of this time. While a staff economist has been hired, at this late date, and an economic study commissioned—which will provide some profile data about the coastal economy before the final product is to be submitted—I suggest that it is contrary to human nature to expect that staff and commissioners will be personally or politically willing to throw out three years and nine months of work and redo the whole thing in the final three months.

The economic study is too late and the staff economist will have too little authority to expect the inertia of three years and nine months to be overcome in the final hectic three months. In short, we can see the shape of the future of the coastal zone economy, the coastal zone industries, and the maritime use of the coastal zone estuaries. The shape is called disaster.

I can't believe that the legislators who created OCC&DC intended to ride roughshod over the wishes and well-being of the 160,000 residents of the Oregon coastal zone simply to preserve some beaches and scenic sites for the citizens of the state at large.

Before we consider how all of this came about, I would like to read some of the proposed policies to show how estuaries, navigation, and dredging will be affected.

One policy statement says, "It is imperative that provisions be made for the continuance of navigation." But when we read further, we find, as many of you have found already, that navigation is imperative, all right, but so are the considerations that prevent dredge spoil disposal. No state or Federal agency currently says we cannot dispose of dredge spoil. They say, now, as the OCC&DC policy statements will say, you simply are prevented from dumping spoil here, or there, or some other place—and all for good and sufficient reasons based on protection of one or another of our destructible resources.

One OCC&DC policy statement on dredge spoil disposal says, "Dredge materials shall be deposited in certain areas only if the material is suitable for anticipated uses of those areas." Great concept, provided that the total dredge spoil to be disposed of exactly matches the kinds of materials required to support the other activities and in the exact amounts required for these unknown activities. Otherwise (familiar song) "We don't say you can't dump; you simply can't dump that material in that spot."

Try another for size: "Environmentally acceptable, potential disposal sites for dredged materials shall be considered priority use in estuary and wetland areas." This is a classic example of bureaucratic doubletalk that appears to give with one hand but takes away with the other. The term "priority use" in that statement is intended to indicate that dredge spoil disposal is more important than other uses and will be accomplished. However, the statement is prefaced by the qualification "environmentally acceptable," and no state or Federal natural resource agency that I know of—and I know of a bunch—would agree that covering any part of any wetland or estuary is environmentally acceptable.

So much for maintaining navigation channels and shipping berths. Some of you may *not* think the fate of the Oregon coast is of concern to you in the Portland shipping community. If so, you had better look over your shoulder to see what the state Land Conservation and Development Commission is doing under Senate Bill 100. The chairman of LCDC said recently that if he had an organization such as OCC&DC in each of the other districts of the state, his job would be done. Those of you in the Portland shipping community should be thinking about what happens to your dredge spoil from maintaining a 40-foot channel when these restrictions begin to apply outside the coastal zone. The river bank is simply loaded with those critical areas of esthetic, environmental, or recreational concern that may have higher priorities for the resource agencies than mere dredge spoil.

Those of you who find security in the fact that the 40-foot channel is a Federal project should examine what is currently going on in Willapa Bay, just a short way up the coast in Washington. A full-scale attack is underway by environmental interests on the Federal channel project to Raymond, Washington. It is argued that the financial and environmental cost of maintaining the channel to Raymond is not justified by the public benefit derived from the business and jobs resulting from the industry dependent on the channel. But at no point is there any consideration for easing the impact of loss in jobs, industry, careers, homes that would result from closing the channel. The concept seems to be that the public good, however uncertain and unspecific, justifies the loss to individuals, however acute and specific.

Here is another policy statement that is intended to become state law because everyone on the Oregon Coastal Conservation and Development Commission considers it something like a "Sunday school and motherhood" concept: "All development in estuary and wetland areas shall be water-related unless designated for priority uses and activities."

The argument is that estuary and wetland areas are both limited and of fragile nature and that, therefore, only those activities that have high social or environmental priority should be allowed. So far, "Sunday school and motherhood," and you listening to me have now gone exactly as far as the OCC&DC commissioners have gone.

What has not been asked is, "What happens to the private landowner who has purchased such land in good faith and who continues to pay good money in taxes on the land?" There have to be hundreds of miles of waterfront land on the estuaries and lakes and streams of the coastal zone that are now undeveloped and hereafter will be locked up in a public land bank until someone can devise a use that is water-related. Homes are not. General business is not. Most common usage is not. Therefore, private landowners will be prevented from using the land at the best economic demand permits; instead, they must hold the land in public trust without compensation and while still being required to pay "market value" taxes. Accordingly, a long-term public benefit is being extracted from a few private citizens without any compensation. The Boston Tea Party resulted from similar "enlightened policies."

These policy statements are just a slight glimpse of the things that are going on in the area of natural resources. Another policy statement that is present in every so-called resource category suggests the extent to which OCC&DC has exceeded its legislative charge to develop guidelines; it would prevent outdoor advertising signs anywhere on the Oregon coastal zone except in urban areas (where the most people are located). I can understand that some people are against outdoor advertising, but I don't see how this is an issue applicable only to the coastal zone. There are certainly scenic areas in the state outside the coastal zone that may suffer from commercial outdoor advertising, but that is not the point. The point is that environmental elements are in control of the OCC&DC, whereas they do not as yet control the entire state with restrictive authority. I hope you'd like to know where these policies came from.

How has all of this come about? What pressures have created this situation? The beginning justification has been the nationwide concern for environmental matters plus the determination of our governor to make Oregon and himself environmental leaders. Most of the problems develop from a general desire to endorse the concepts of environmental preservation when there is a general lack of knowledge or understanding of what is the price. It also happens that costs are easier to sell, politically, if they do not fall upon a large number of people—better to lay the burden on a few, and in that way not antagonize the majority of voters.

The problem which should be understood by everyone in the state is that the majority interest can be defeated by an organized minority if only a few of the majority at a time are taken on. Right now only 160,000 residents of the coastal zone are being asked to pay the price of a so-called public benefit. Should some of you be asking when is it going to be your turn, and where will you turn for help when your time comes?

But aside from the general mood of environmental concern, how does a state agency such as OCC&DC get so far down the road, if it is indeed the wrong direction, without a revolution among the people of the coastal zone? There are several answers.

They begin with the fact that it is simply a mind-boggling job to consider how we, as OCC&DC commissioners, can develop and implement regulations to govern all of the geography and all of the related people activities in the coastal zone, from border to border and from the Pacific Ocean to the peak of the Coast Range. To handle such a job, we have reached for the cheapest available expertise, in all the natural resource areas, that was to be found in the various state government departments. In particular, each of the natural resource agencies has been called upon to assist in drawing up the recommendations that would protect its particular resource. So far so good.

The problem that has unbalanced the work done by OCC&DC during the last three and a half years is that there is no corresponding information available from state agencies that can measure *the social and economic impact* to be expected from the implementation of the "Christmas list" of recommendations submitted by all of the natural resource agencies. Each agency is staffed by highly trained resource specialists. These are unusual public servants— not only highly trained but highly motivated in the preservation of their particular resources. Any of you in private business would be fortunate to have such people looking out for your interests.

The problem is that none of these natural resource people are trained to evaluate the *economic* consequences of their particular restrictive resource recommendations. Each makes an excellent technical case for his particular recommendations; however, none of these people is responsible or accountable for the total effect of the combined package of all of the natural resource recommendations.

The responsibility for pulling together all of the resource recommendations into a package that is socially, economically, and environmentally balanced is the responsibility that the legislature laid on the commissioners of OCC&DC. That problem is simply stated but horribly difficult to accomplish for two main reasons.

First, we simply have not had the money to develop economic data by which to measure the effect of the proposed restrictions offered by the resource agencies.

Second, the environmental nature of the restrictions proposed amount to the classic "offer he can't refuse" when presented to a coastal politician who happens to be an OCC&DC commissioner. Not many are prepared to take a public position in opposition to the technical logic and emotional impact of specific resource proposals when the specific economic result cannot be demonstrated with equal technical logic and emotion.

The resulting total program must then turn out to be unbalanced and unacceptable to the people of the coastal zone. Whether the legislature will enact such a program anyway remains to be seen.

In any case, I urge those of you from the rest of the state to be aware of similar things getting underway for the rest of the state through the work of the state Land Conservation and Development Commission. When the LCDC held one of its public workshops in eastern Oregon recently, citizens were told that there was nobody in the state better qualified to conduct the affairs of eastern Oregon than eastern Oregonians. When the LCDC visited Astoria recently for a similar workshop, they asked Astorians what they could do to assist us in our goals. The answer of a substantial number of people was, "Don't interfere in our affairs."

The people of northwest Portland did not want the people of the state acting through a state agency to tell them where the freeway would be located. Citizens of northwest Portland wanted to make that decision. They did. Likewise the people of eastern Portland demanded to be heard on the Mount Hood Freeway, as did the people of Albina regarding the Fremont Bridge approaches. Nobody that I know of came to the Willamette Valley from the coast to demand conditions on field burning or to comment on the location of the PGE plant in Linton.

What I am suggesting is that simply because you in the Portland-Willamette Valley area have the votes and numbers necessary to control the affairs of 160,000 coastal residents, it does not follow that you have the right to do so. I urge that we return to the idea that some scenic areas and beaches be preserved in the name of the common good but that we abandon the controlled society for the Oregon coastal zone that is taking shape under OCC&DC mandate. Portlanders have demonstrated that they would not hold still for it if the shoe were on the other foot.

THE THIRD LAW OF THE SEA CONFERENCE:
IMPLICATIONS FOR NORTHWEST OCEAN INDUSTRIES

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A. *Present legal zones and boundaries in the ocean (the result of custom and two previous Law of the Sea conferences).*

1. Internal waters—complete sovereignty.
2. Territorial sea—sovereignty subject to innocent passage by vessels.
3. Contiguous zone.
4. Fishing zone—U.S.' currently 9 miles beyond 3-mile territorial sea.

5. Continental shelf zone—200-meter depth, plus exploitability expansion.

6. High seas—freedom of navigation, fishing, overflight, laying of submarine cables and pipelines.

B. *Present system about to be changed by current United Nations Law of the Sea Conference (LOS 3) now meeting in Caracas. Almost 150 nations in attendance.*

C. *LOS 3—Background and significance*

1. November, 1967, U.N. General Assembly: Malta's Arvid Pardo and the "common heritage of mankind" proposal.
2. 1967-1973: "The [U.N. Gen. Assembly] Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction" (The Seabed Committee) performed the preparatory work with a view toward a 1973 Conference.
3. Basic "Seabed Question" (deep-sea mining) expanded to questions concerning all ocean uses.
4. 1972: Gen. Assembly selected time and place for first session of LOS 3, April and May 1974, in Santiago; because of the 1973 coup in Chile, this was changed to summer 1974, in Caracas.

D. *The Conference itself*

1. Technically opened in N.Y. in December 1973; reconvened for first real session on June 20, 1974.
2. Second session will undoubtedly be held in Vienna, probably in April and May 1975.
3. Agenda: 25 major items, and many more subitems and subsubitems.

E. *U.S. position and predicted outcomes in five major areas*

1. *Navigation*

- a. U.S. position: 12-mile territorial sea, with "free transit" (especially for submarines) through international straits.
- b. Prediction: 12-mile territorial sea, with something less than free transit. U.S. may have to negotiate for submarine privileges after the Conference.
- c. Northwest implications: More rules, and perhaps some detours, for U.S. shipping. States to push for 12-mile boundaries.

2. *Fishing*

- a. U.S. position: "Species approach"—coastal nations to have management and allocation preference with respect to *coastal* and *anadromous* species; "highly migratory oceanic species" (tuna, e.g.) to be managed by international agreement.
- b. Prediction: 200-mile limit for fisheries, as result of LOS 3. Subsequent developments may include broad regional management areas.
- c. Northwest implications: Coastal fishermen happy. Federal limited entry plans facilitated by new broad fisheries jurisdiction.

3. *Seabed mining*

- a. U.S. position: Relatively narrow coastal-nation jurisdiction; broad, comprehensive jurisdiction for an "International Seabed Resources Authority." (Position has modified since 1970 toward greater recognition of broad coastal-nation zones.)
- b. Prediction: 200-mile coastal-nation zones, or to edge of continental margin. International control in area beyond, based in part on the "common heritage" concept.
- c. Northwest implications: None of significance until and unless mineral resources in northeast Pacific are discovered and become minable.

4. *Marine pollution*

- a. U.S. position: 1973 proposal aimed at controlling vessel and seabed-operation source pollution. (However, most pollution gets there through atmospheric fallout and runoffs from land.)
- b. Prediction: General prohibition on fouling marine environment, but no really effective antipollution treaty. Coastal nations will be given some control over vessel pollution in broad offshore zones.
- c. Northwest implications: Mainly for shipping--new navigation and hull construction rules, some longer routes.

5. *Scientific research*

- a. U.S. position: No coastal-nation restrictions on nonmilitary, noncommercial ocean research beyond the territorial sea, provided the researcher shares, explains, and publishes results.
- b. Prediction: Coastal nations will be allowed to prohibit, but will be discouraged from prohibiting, scientific research in the broad economic (fishing and mining) zones.

F. *Suppose LOS 3 fails to create agreement?* Broad coastal-nation zones would result, but they would be created by conflict rather than cooperation. And the deep-seabed minerals would belong to those who are capable of mining them.

THE COLUMBIA RIVER SYSTEM: THE ASIAN GENERAL STORE

Fritz Timmen

District Manager, The Port of Portland, Pasco, Washington



Less than 35 years ago, the whistle of the last stern-wheeler resounded from the canyons of the Snake River, and the last plume of steam was dissipated by the restless winds that sweep through the Columbia Gorge. The day of the diesel towboat had arrived, and with it the river barge that could haul in one trip more of the products of the Columbia Basin than a fleet of a dozen steamboats. The transition from steam to diesel, from sacked grain to bulk, from dangerous white water and rocky shoals to stabilized pools behind multiple-purpose dams, occurred within the memory of many of us who are here today.

The steamboat age had lasted almost exactly one hundred years. During that century there occurred no significant changes in the methods of cargo handling. Burly roustabouts manhandled freight by muscle power. A hand truck was the only piece of mechanized equipment. But today, less than a third of the way into the second century of river transportation, we are on the threshold of a most significant revolution in cargo movement. It is containerization.

In some fashion, every one of us is involved in the effects of the container revolution. Whether we represent the ports through which the containers pass or the laboring force that handles them on the ship or dock, whether we are involved in the transportation or the consumption of goods, we share in the impact of containerization. And so far as it is possible to see into the future, that ubiquitous box is here to stay.

I have been asked to discuss the Columbia River system as a general store for the Asian market. It is inescapable that the prime delivery system of that store is, with one exception, going to be by means of a box eight feet by eight feet square and 20 or 40 feet long. The exception is, of course, volume quantities of grain.

Grain is carried as a bulk commodity. Economics dictates it. But without straining the imagination, one could term the dry-bulk ship an oversized container, because that is actually what the ship is. It is possible that wheat, barley, or oats may some day be carried by standard containers. If prices keep rising, those products may become valuable enough to ship in that fashion. After all, more peas, beans, lentils, alfalfa, and hay cubes are shipped in containers today than in bulk.

But let's focus on the Columbia Basin as the Asian general store and on the items our customers in the Pacific Rim are buying.

Back in 1933, when the United States was gripped by depression, the Grand Coulee Project was begun, to answer two vital needs: The top priority was to provide irrigation water to produce foodstuffs for the Nation; a secondary benefit was the production of hydroelectric power. Irrigation water began pouring onto the land in 1952, and today about half of the one million irrigable acres in the Columbia Basin are growing crops. Though agriculture in the basin is diversified, nine crops account for more than 90 percent of the irrigated acreage.

Of these, the highest acreages are in alfalfa hay, sugar beets, potatoes, corn, and wheat. And three of these—alfalfa, potatoes, and wheat—are finding their way into export markets.

Potatoes. One of the most dramatic crop developments has occurred in the potato industry. More than 27 percent of the total irrigated acreage in the Columbia Basin is devoted to potato raising. And in Oregon, in the vicinity of Boardman and Hermiston, where irrigation water is drawn direct from the Columbia River, a far higher percentage of new land is under potato cultivation.

Washington harvested a bumper potato crop in 1973 and moved into second place in the Nation, trailing only Idaho. That state led with almost double Washington's production; Maine, long the number two potato producer, fell into third place behind Washington.

So, with increased harvests in Washington and Oregon, Pacific Northwest states (including Montana) now account for more than half the U.S. potato production. All this new acreage has resulted in heavy investments in potato-processing plants. Recent construction, plus capital expenditures planned for next year, amounts to \$35 million in the Columbia region alone.

Although 80 percent of the area's production went to local processing plants, more and more tonnage is finding a market in Japan.

Japan is the most advanced industrial nation in Asia. Its per capita income is approaching Western standards. The country is now at a point where processed, frozen, and convenience foods make up a substantial part of the family diet. This is evidenced by McDonald's present 100 outlets, with plans to have 500 stores in operation by 1975. Kentucky Fried Chicken, Burger Chef, Dairy Queen, and Denny's all have moved into the Japanese market...and all are featuring french fried potatoes on their menu.

The greatest growth potential for Pacific Northwest potato export probably lies in the form of french fries. Because of the newness of the market, export figures are not yet available. In the categories of flakes, granules, and dehydrated potatoes, the Japanese already have become major buyers. In 1972, they purchased more than 455 t (metric tons) of those types of Pacific Northwest processed potatoes.

Grapes. It is the kind of dramatic growth that has hit the potato industry that has opened up other vistas for agricultural expansion in the Columbia River Basin. Take grapes, for example. Four years ago, less than 10,000 acres of grapes were under cultivation in the mid-Columbia region. Today, the acreage has passed the 22,000 mark. The impact can best be demonstrated by citing a few dollar figures. It costs about \$3,000 an acre, including land, to bring a vineyard into production; this includes land preparation, irrigation pumps and sprinkler systems, and nursery stock. And it takes three years before the first crop can be picked.

Thus, the developers of a new 2,000-acre vineyard near Pasco, on the Snake River, will have invested \$6 million in their operation before the first crop is harvested. But higher yields per acre than in other grape-growing states and an increasing U.S. consumption of table wines makes the investment worthwhile, growers believe. Although most of the crop will find its way into domestic wine and juice production, a market for export is developing. Growers and processors, well aware of this trend, are actively seeking foreign markets, especially on the Asian Rim.

Our Prospects in the Pacific Rim Nations

Let us turn now for a look at some of the nations of Asia and examine their potential as customers of our general store.

A major economic objective in almost every country in the Far East is the increase of agricultural output. Though the Pacific Rim is a well-diversified region, agriculture dominates the economy of most countries; yet, most do not produce enough food for their needs.

Such is the case in *China*. As we know, this country has been a recent, heavy purchaser of U.S. grain. Paradoxically, China at the same time has been an exporter of rice, tea, and soybeans.

This situation comes about because China is slowly changing from an agrarian to an industrial nation, and this change in the economic structure has been paid for by the peasant farmers. Despite rapid development of manufacturing industries, China is forced to export agricultural products to pay for its industrial needs. China's present government policy is to buy relatively inexpensive food items—wheat and wheat flour—and to use prime agricultural lands for high-quality, high-priced agricultural products for export.

Hong Kong also reflects the changing patterns of Asian economic development. During the past 20 years, Hong Kong has switched from an importer to an exporter of locally manufactured goods. This growth as a processing center depends on increasing imports of raw materials and has brought about the take-over of agricultural lands for manufacturing purposes. Farmers have been compelled to practice intensive cultivation and to diversity crop and livestock output. Even so, domestic food production has not kept pace with rising demand. So Hong Kong, firmly committed to a free trade policy, maintains trade relations with all foreign countries, including the Communists, to provide markets for its manufactured goods and to supply its agricultural needs.

In the great subcontinent of *India*, demand for food is at an all-time high. This is the result of increasing population and rising per capita income. The Indian Government is facing the food need problem on two fronts, by increasing domestic production and by importing large amounts of food grains. At the moment, there is little beyond grain that can flow to India from the shelves of the Columbia Basin's general store.

All such imports are tightly controlled by the central government, which gives the highest priority to importation of development goods and essential commerce commodities, and holds to the lowest level on all other imports.

The government of *Pakistan*, like that of India, maintains a monopoly on the importation of wheat. However, Pakistan imposes no import duties on tallow, dairy products, or fertilizers. Because of foreign exchange difficulties, the country has found it necessary to maintain rather strict controls over exports and imports and the expenditure of foreign exchange.

This brief overview brings us inevitably to *Japan*—our largest trading partner in many items, including agricultural. For a long time, in terms of dollar value as well as tonnage, Japan has ranked first in business handled through the ports of the Oregon Customs District. In 1973, the seaports of Oregon, including the Columbia River ports, shipped and received more than 2.73 million t of merchandise valued at over \$900 million. So it's natural to look to Japan as our prime target. And the emphasis of the Japanese Government since World War II on upgrading Japan's food intake has worked strongly in our favor.

The major aims of Japan's agricultural policy are to assure food for the population, to equalize farm returns with urban incomes, and to keep prices of food in line with prices of other commodities. But despite efforts to increase consumption of protein foods such as meats and dairy products, 55 percent of the total calorie consumption is accounted for by rice, wheat, and other cereals. Substantial purchases of U.S. cattle-breeding stock have been made in recent months to upgrade Japanese beef and dairy herds. The success of this program will have a considerable influence on future exports of meat and dairy products to Japan. In the past, importation of livestock commodities has been strictly controlled and has been permitted only when domestic supplies decline and prices exceed set maximum limits.

Japan, like the United States, is faced with a drop in the agricultural labor force. To counteract this, the Japanese Government is promoting increased farming efficiency through creation of larger farm units, modernization of agriculture in remote areas, and increased farm production through management and technical research. Fruit orchards are encouraged in hilly and rough areas not suitable for cultivation; rice production is increased through research for better varieties and improved growing practices.

In Japan, a complex system of control exists for the production and marketing of major food grains. The marketing of all rice, whether domestic or imported, is controlled by the food agency of the Ministry of Agriculture and Forestry. This agency, through designated private traders, controls all imports of wheat and purchases domestic wheat at government-supported prices. Domestic wheat is marketed at prices *below* producer-support levels; wheat imports are marketed at prices well *above* the import prices. This tends to offset the losses incurred in the marketing of domestic grain.

Japan's import-quota system is operated primarily to protect domestic producers. For example, issuance of pulse quotas depends on its own pulse production. However, since 1969, Japan has made a serious effort to liberalize nontariff trade barriers. The number of categories under quota has been reduced from about 120 to 34. Around half of the liberalized items were agricultural, including instant potatoes.

Pacific Rim Food Exports/Imports: A Paradox

The relatively low level of economic development in the majority of Pacific Rim countries suggests a low level of trade. With economic improvement, consumers achieve more purchasing power and begin to demand foods not widely grown at home. In those countries we have just discussed, this pattern is clear, with Japan the dominant example.

In developing countries—and here I except Japan—unless they are well endowed with natural resources, there is one salable item, agricultural products. This brings about a paradox: *Pacific Rim countries that are deficient in food are major exporters of food items to those countries that have adequate amounts of food.*

The situation that arises could almost be called a barter agreement, wherein a food-deficit country sends one unit of high-quality food to a country that has a food surplus, in exchange for five units of low-value food that is then consumed by the people of the food-deficit country. Specifically, then, agricultural production in the developing countries is for export and in most cases is the sole means of creating buying power for needed imports.

The Columbia Basin: The Potential

How, then, does this theory affect the capability of the Columbia River system to supply its trans-Pacific customers? The potential, I submit, is significant.

1. Countries deficient in the cereals food group provide markets to us for wheat, barley, oats, and other food grains.
2. Potato and starch deficits can be met by our export of potatoes or derivatives.
3. The sugar beet industry is a likely source for meeting requirements of those countries deficient in the sugars, sweets, and syrups group.
4. Lentils, dried peas, and beans have a market source in those deficient in the pulses and seeds food group.
5. Vegetables, principally onions and some canned products, and fruits, especially fresh apples and pears, are prime exports to those countries that are short in the vegetables and fruits food group.

6. Other food-group potentials exist in feeder cattle, pork, poultry, and beef and in milk, cheese, and other dairy products and derivatives.

Even though potential customers exist for all the products in our general store, businessmen who want to reach these markets must develop the markets themselves. Many forms of assistance are available, on both Federal and state levels—Oregon alone has more than 30 agencies dedicated to fostering trade development. But about the best these agencies can do is to bring buyer and seller together. From then on, the marketing job is up to the supplier or his agent. It may take two years to open up a market. Each country has its own restrictions and regulations, especially involving the agricultural industry; and these must be considered.

But the customer is out there; the products he wants are here; and the ability to get the goods to him exists in the highly developed transportation network that serves the Columbia Basin hinterland.

In the beginning I spoke of containerization as the revolutionary mode of transportation that is destined to change traditional concepts of moving goods to market. *Let me say again that, with the exception of bulk grain, every product discussed today is capable of containerization...even livestock.* About the only criteria necessary for moving any product by container are that it have a relatively high value and that it occupy a minimum amount of space.

The front-end costs of preparing for containerization are high. The Port of Portland's new John Fulton Terminal, a fully automated, sophisticated container facility, has cost about \$18 million to build. A container ship can cost about \$25 million, and it costs up to \$3,000 a day to operate. But the efficiencies that can be realized—in rapid turnaround of the ships, in reduced labor costs (handling up to 20 tons at a time on the dock instead of a ton or less), and in the reduction of cargo loss and damage—more than offset the investments.

It is these considerations...
customers who are willing to buy,
plus products that they want,
added to the ability to get those products
swiftly and efficiently to market...
that have made the Columbia River system
the outlet to the world
for the products of a quarter of the Nation.

ENERGY PROBLEMS AND THE MARITIME INDUSTRIES

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We have all learned a lot about our energy problems, most of it unpleasant. Our supplies are vulnerable. Early warnings of pending shortages were largely ignored. We were caught quite unprepared for the Arab oil embargo. However, the response of the public and business was generally good. We have so far escaped major economic dislocation.

The question now becomes, "Where do we stand? And where do we go from here?" Some disturbances are temporary; others are not. The scramble for supplies seems to be over, but high prices remain, and these high prices are likely to be permanent.

Government has intervened in the production and distribution of fuels and energy through the fuels allocation program centered in the Federal Energy Administration, with other agencies participating. FEA policies will impact on both the supply and the demand sides of the market. These policies will have positive as well as negative results; they may make us less vulnerable and more efficient in use of the supplies available.

Project Independence is important to everyone concerned with fuels and energy. It is aimed at reducing our vulnerability, not eliminating imports. It will likely have a key role in the energy market for years to come. Further, it will require a major effort on the part of both government and industry, requiring billions in investment capital.

To see what we are confronted with, consider some important data. You are already familiar with the basic story these statistics will tell, so I will keep it brief.

1. With six percent of the world's population, the U.S. consumes one-third of the world's energy.
2. Our consumption has grown rapidly; it doubled between 1950 and 1970; it will double again by 1990.
3. Predictions indicated that by 1990 we would have to import over half our crude oil needs *if we did not make serious efforts to alter present trends.*
4. Total consumption is running at about 37 million bbl/d crude oil equivalent.

5. Domestic supply is expected to increase but at a substantially slower rate than consumption, resulting in sharply increasing imports.
6. Energy imports are largely in the form of petroleum; almost all additions to these imports will come from the Middle East.
7. Domestic crude oil production is expected to remain about the same.
8. Gas production is expected to decline.
9. Coal production is expected to increase.
10. Hydro and nuclear production is expected to increase.
11. Imports, largely oil, are expected to increase.

Our most immediate concerns are with petroleum supplies, specifically imported petroleum supplies:

1. U.S. crude oil production (lower 48 states) peaked in 1970-1971.
2. Canadian crude oil production has increased moderately.
3. Real growth in crude oil supply has been from overseas, notably from Arab countries.
4. Middle East oil producers did stop sending us crude oil, but the key point is they may have done us a favor by forcing us to face the fact that the U.S. is energy-dependent on Third World nations.

The goals of Project Independence are not yet specified in detail; there is a massive interagency effort underway in Washington to do this. It aims at analyzing the complex interrelationships among various energy industries to see how far we can go, over the next decade or so, to achieve independence. It will take many months to map out a course. The general outline is clear: we must reduce the rate of increase in energy consumption, and we must increase domestic production—i.e., close the import gap.

To implement this requires some tough decisions. We have already learned we can get along with less energy; higher prices will help. They will also help to increase domestic production, but this will take time to implement. Government intervention will be necessary to keep prices high enough.

So prices will remain high. Industry responds, "What can be done?" One answer is to adopt less-energy-intensive ships. Look at developments in one such area.

Nuclear propulsion is not really new; the S.S. *Savannah*, U.S. naval ships, and foreign programs have been operating for a lengthy period. The U.S. has had nuclear-propelled ships at sea since 1955. We built few nuclear merchant ships because of the problem of relative costs, that is, the high capital cost of nuclear ships wiped out (in past years) any potential fuel savings. Nuclear propulsion could close the cost gap only where very large amounts of fuel were required, or where that fuel was very expensive.

The increase in ship size in recent years had led MarAd specialists to suspect that we were approaching the point where horsepower requirements were high enough to make nuclear propulsion competitive. With bunker C fuel at about \$4/bbl, the smallest power plant thought to be competitive was around 120,000 shp, implying a tanker of around 600,000 dwt.

The rapid increase in oil prices has, we think, reduced the minimum competitive ship size to well below 120,000 shp. A few months ago, we projected the trend in oil price changes to reach \$11.50/bbl in 1985, but as you know, prices reached approximately that level this past winter.

There are, of course, other cost factors to consider besides fuel in examining the comparative economics of nuclear propulsion. Comparing the major variables between two 400,000 dwt tankers, one nuclear and the other conventional, both at 1980 prices (escalated from present levels at the rates of 5 to 7.5 percent per year), it appears that if the bunker C price exceeds \$10.85/bbl, the higher fuel price would favor nuclear propulsion. The higher shaft horsepower for nuclear propulsion increases speed significantly, a key point. Again, as 1980 costs for each ship are analyzed on an annual basis:

1. The annualized first costs and operating costs are significantly higher for the nuclear ship.
2. Fuel costs are about 45 percent lower for the nuclear vessel.
3. Total costs of the nuclear ship would be about 20 percent higher, assuming a bunker C fuel cost of \$10.85/bbl.
4. However, the higher productivity for the nuclear ship reduces cost-per-ton-carried to 15 percent below that of the conventional ship (the effect of higher speed).

For 400,000- and 600,000-dwt tankers, nuclear propulsion appears to be competitive when the price of bunker C fuel reaches the range of \$24 to \$27 per ton. A projection of world demand for large ships up to 1990 indicates that ships of 100,000+ shp will number about 500 on the world's oceans. We may be in the range of 80,000+ shp, which will mean even more ships.

MarAd has asked ship-operating companies for declarations of interest in its nuclear power program, by May 29, 1974. Thank you.

Workshops

WORKSHOP A: WHY WE DON'T SHIP MORE U.S. GOODS ON U.S. SHIPS

Moderator: Ben J. Ellis

Recorder: Charlie Jackson

Panelists: Jan Baldwin, Lee Bettinger, Arch Davis, Terry Kaseberg, Dick Lawrence, Dean Sanders

The panel found that the answer to the title question for the workshop was quite simple. We do not ship more U.S. goods in the U.S.-flag ships because there are very few U.S.-flag ships in operation at this time. This obviously led to the question of why there are not more U.S.-flag ships in operation.

The answer to that question came through loud and clear, that it is not profitable to operate U.S.-flag ships considering the huge investments required and the low return on the dollar. This condition exists in spite of U.S. Government subsidies in both construction and operation of U.S. vessels.

Construction subsidies are intended to offset differences in cost between construction of vessels in U.S. yards and construction in foreign yards and are not totally successful. *Operating subsidies* again do not totally equalize the differences in cost of operation between U.S.-flag ships and those of foreign competitors. In addition, with both types of subsidy, area restrictions are imposed that remove a good deal of flexibility, particularly the forced operation on trade routes that include unprofitable ports of call.

Another area of great concern is crewing of vessels. It is estimated that the cost of crew is approximately 30 percent of the total operating cost for a foreign-flag vessel, compared with 60 percent on a U.S.-flag vessel. There are many maritime unions involved in the operation of a vessel under the U.S. flag, and the unions have simply not kept pace with the advanced technology available in vessel construction and operation today.

A shining example of this is the automation of engine rooms. On many foreign-flag vessels, these rooms are operated totally from the bridge with very few, if any, crew members in the engine room. On U.S.-flag ships we are still carrying a full complement in the engine room as though the automated controls did not exist.

Another major factor in answering the title question was what appears to be nationalism of foreign shippers and receivers of goods, who many times specify shipment on their countries' flag vessels. This is not generally true with U.S. shippers and receivers. In fairness, however, it must be noted that with the relatively few numbers of U.S.-flag vessels, it is difficult for U.S. importers and exporters to move their goods in an expeditious fashion if they must wait for U.S.-flag ships.

Added to the nationalism of the importers and exporters is a great deal of nationalism in foreign governmental policies. Some countries require all or certain portions of their foreign commerce to be carried in their own vessels. Again this is not generally true with U.S. merchant marine policy. (With the exception of some giveaway programs such as Public Law 480, U.S. commerce both in and out of this country can be carried in the flag vessel of any nation; however, the Jones Act prohibits the carriage of cargo between any two U.S. ports in a foreign-flag ship.)

This led to a discussion on the demise of the once-large fleet of vessels carrying cargo coastwise and intercoastally between the mainland (U.S.) states. That industry disappeared entirely because of the increasingly high cost of maritime operation and because of the concerted efforts (aided and abetted by the Interstate Commerce Commission) of railroads and truck lines to reduce rates below competitive levels, in order to force the ships out of business. After the vessels had been withdrawn from service and the competition from that source removed, the land carriers then increased their rates to a profitable level. It was the workshop's consensus that if any vessel operator were to reinstitute intercoastal or coastwise trade, the land carriers would reduce rates again, driving the vessel operator out of business.

Recommendations:

- A-1 The Government, industry, academia, and the media should encourage U.S. firms to ship their products on U.S. bottoms because these ships help maintain a favorable balance of payments; approximately 80 percent of every dollar spent for freight on a U.S.-flag ship stays in this country.
- A-2 Industry should ship U.S. goods on U.S.-flag ships because this action protects the U.S. merchant fleet for national defense purposes.
- A-3 Industry should ship more U.S. products on U.S. ships because this action supports the U.S. ship repair and building capability, so that these will be available with facilities and trained personnel in case of national emergency.
- A-4 Industry should ship U.S. goods on U.S.-flag ships because this action helps maintain competition on world trade routes, which in turn will guarantee reasonable freight rate levels for U.S. exporters and importers.

WORKSHOP B: POLLUTION CONTROL IN PORTS AND HARBORS

Moderator: Charles Miller

Recorder: Ken Hilderbrand

Panelists: Glen Carter, Raymond Cox, Vern Cox, Chuck Galloway, Walter Hitchcock, Gerald March, Larry Slotta

This group met and discussed many ideas and opinions about the causes of harbor pollution, the regulations to control it, and methods of preventing it. A positive plan of action to do something about pollution control and prevention was formulated for the Portland-Columbia River harbor area. The initial step would be to set up a steering committee to put together a formal pollution control organization comprised of representatives from every facet of maritime commerce. The goal of the organization would be to design and implement a continuing pollution control/prevention program.

The major discussion points below are presented in no particular order of importance and do not imply a consensus of opinion on the part of the workshop participants.

1. Many pollution problems relating to unloading of bulk cargo ships are caused by lack of equipment operator skill, lack of equipment operator concern for "good housekeeping," and general lack of knowledge about what is and is not good operational practice.
2. Industry has been slow to respond to its responsibility for active pollution control/prevention programs and has taken a "Let the other guy do it" attitude.
3. Industry wants more enforcement help for the Coast Guard.
4. Private docks are hard to police.
5. Confusion exists because of multiagency jurisdiction and conflicts in regulatory authority.
6. The Corps of Engineers is too lenient but should not be blamed for the problem.
7. Industry has no forum to discuss common problems and to work toward common solutions.
8. Education is lacking, and no training in pollution control/prevention techniques is available.
9. Industry needs to (and usually does) operate with the philosophy that "You can't break the law" and needs to do whatever has to be done to comply.
10. Industry needs better information (and better research) on what is or is not harmful to the environment.

11. Pollution control equipment needs to be kept in a better operating condition.
12. Foreign ships are hard to regulate and need more concrete instructions on what practices are forbidden while in port— for example, not dumping sewage. Guidelines written in crewmen's native tongue might be one way to "get the word" passed on by the master to the crew.
13. Is "booming" around ships a workable technique for Portland-Columbia River harbors? Will the Coast Guard require it as it does in San Francisco? Do we have good "booming" capability in this harbor? Are existing "boom" and "skimmer" systems compatible if they need to be connected to clean up a "major" spill? (These and similar questions were not completely answered, but there seemed to be no indication that "booming" was not practical and no indication that it would become a mandatory requirement. Other questions about quantity, availability, location, and compatibility of "booming" and "skimming" systems were not answered. Several comments pointed to a need for an organized program to assemble this information and make it readily available in case of a major spill.)
14. It may become necessary to stop using "bunker" fuel in ships as they enter the lower river to avoid air pollution.

Recommendations:

- B-1 A Maritime Industry Pollution Control Committee for the Portland-Columbia River area should be organized, composed of the U.S. Coast Guard, Oregon Department of Environmental Quality, Corps of Engineers, Port of Portland, Portland Police Association, and the Oregon State University Extension Service; its goal would be to organize an aggressive pollution control program.
- B-2 Permanent members of the pollution control committee should include industry groups representing steamship companies and terminal and ship repair companies or agencies.
- B-3 The pollution control committee's specific objectives should include (but should not be limited to): a coordinated personnel training program; a mutual sharing of expertise and equipment; problem identification and plans of action for resolution; a centralized information dissemination system; and a unified voice in the legislative and regulatory process.

WORKSHOP C: DEEPENING COLUMBIA RIVER BAR CHANNEL AND EFFECTS OF DREDGING

Moderator: Robert Elsensohn

Recorder: Dan Panshin

Panelists: Paul Benson, Robert Cormack, Robert Dodge, G. R. Hall, Danil Hancock, Mark Harbert, Jane Harris, Adam Heineman, D. E. Hughes, Becky Kreag, Ed Quan, David Smith

The Columbia River bar is presently dredged and maintained to a depth of 48 feet while the channel to Portland is dredged and maintained to 40 feet. The bar and channel projects were designed to allow comfortable passage for vessels with drafts of 34 feet.

The problem the panel considered is that the trend of modern vessels is to greater length, beam, and draft. Table 1 shows the regular growth in the size of ships using the Columbia River, since 1964.

Table 1.—Average draft and tonnage for commercial vessels on the Columbia River, with destination or origin at Longview or Portland, in four selected years

Year	Average draft	Average net tonnage
1964	22'6"	4,600
1970	24'3"	6,600
1973	25'5"	7,835
1974 (Jan.-Mar.)	25'8"	8,141

Currently there are numerous vessels of 35-foot draft and greater. In increasing numbers, vessels with drafts between 35 and 40 feet are crossing the Columbia River bar and navigating the channel. In 1972 there were 125 such passages, including two of 40 feet. In 1973 there were 194 such passages (out of a total of 2,035 ships), including eight of 40 feet. These deeper-draft vessels can safely transit the channel but have difficulty with the bar, except under ideal conditions, because of the effective increase of draft caused by rolling and pitching.

The panel concurred that, as matters presently stand, the channel is not being fully utilized and that the Columbia River ports are in danger of being relegated to second-class status. Any project to deepen the bar must consider the consequences of dredging and dredge-spoil disposal and must also consider bar maintenance as well as bar deepening. Dredging studies should not be dissociated from the related questions of possible new control structures (i.e., jetties), extension of existing control structures, and bar channel realignment.

There was agreement that the bar should be deepened to the range of 53 to 55 feet in order to utilize fully the existing river channel and to help prevent environmental damage, which could occur if the deeper-draft ships presently crossing the bar were to ground.

Recommendations:

- C-1 Columbia River ports and other interested bodies should take appropriate steps now to secure a deepening of the Columbia River bar to a depth (estimated to be 53 to 55 feet) that will mean full utilization of the existing river channel.
- C-2 The Corps of Engineers should initiate the required study of bar deepening as soon as possible and should carry it out without delay.
- C-3 The Corps of Engineers' required environmental impact study should give due weight to the social effects that would result from bar deepening, as well as to the biological and physical effects.
- C-4 Columbia River ports should form an ad hoc committee, under the chairmanship of the Port of Portland, to work with the Corps of Engineers in support of bar deepening.
- C-5 The States of Oregon, Washington, and Idaho should form a regional water transportation program for the Columbia River system.

WORKSHOP D: ALASKAN FERTILIZER—AN EXEMPTION TO THE JONES ACT?

Moderator: Jean B. Wyckoff

Recorder: Fred Smith

Panelists: Paul Chilcote, Glen Christensen, Gayle Gilmour, Frank Huxtable,
Larry E. Kaseberg, Fred Lange, Russ Tennant, Charles W. Wallace, Rey
Young

What is the Jones Act? It was passed by the Congress in 1920 to promote U.S. shipbuilding and shipping interests. Pertinent to our problem, the act forbids the shipment of domestic trade (one U.S. port to another U.S. port) in foreign bottoms.

What is the problem? Pacific Northwest agriculture needs fertilizer (urea and anhydrous ammonia). The Collier Chemical Co. in Kenai, Alaska is producing fertilizer, but it is not getting to the Pacific Northwest—and timing is important for agriculture. Some of the reasons are:

1. *Increased foreign demand*, primarily the Japanese taking Collier production. They have the ships to carry the fertilizer because they anticipated the need and built for it. The Asian "green revolution" depends on this fertilizer. The U.S. expects the Asian nations to supply more of their own food needs. Collier may choose to supply them, but presently lack of production is the problem.
2. *Lack of the proper type of U.S. shipping*. Anhydrous ammonia calls for a specialized ship or barge, and ships are required to carry it at high pressure or low temperature. The U.S. didn't anticipate the need, and no contract existed to assure that the U.S. was ready, in spite of the MarAd subsidy program.
3. *Kenai dock facilities are a bottleneck*. Strong tides and the ice in Cook Inlet make loading urea tricky and very expensive.

The status of a waiver or exemption of the Jones Act based on the lack of the proper type of U.S. ships is as follows: Exemptions are possible from the Defense Department, the administration, or Congress. The Defense Department and the administration have turned it down. Meanwhile, Collier is building what will be a suitable (and U.S.-flag) ship, but it won't be ready until 1975 (Collier's plant is to double its capacity by 1975).

What can we in the Northwest do? We must first find out if increased foreign demand is the primary problem. If it isn't, we can continue to work for exemption or waiver of the Jones Act, or (if an exemption is forthcoming) we should arrange adequate offloading facilities in Portland and obtain union support of exemption.

Group consensus was that the discussion was most worthwhile and mutually informative and that agriculture and transportation interests should be brought together again.

Recommendations:

- D-1 The Wheat League of Oregon should ask Oregon State University to convene a meeting including Collier Chemical decisionmakers and representatives of: Wheat Leagues of Oregon and Washington; Masters, Mates, and Pilots and other unions; MarAd; foreign shipping lines; Washington and Oregon congressmen; towboat and barge companies; the Ports of Portland and Seattle, and the U.S. Coast Guard.
- D-2 The Oregon State University Extension Service should investigate Collier Chemical's position on a Jones Act exemption.
- D-3 The Wheat Leagues of Washington and Oregon, and other agricultural organizations in both states, should prepare a request to Congress for a Jones Act exemption, with documentation of the specific needs of Pacific Northwest agriculture.
- D-4 The Oregon State University Extension Service should bring agriculture and export interests together again for exchange of information, at next year's Future of Oregon Maritime Industries conference.

Postscript: Followup on 23 May Workshop

I discussed the Jones Act exemption for anhydrous ammonia and urea with Leigh Pierson, vice president of the Collier Chemical Co., a subsidiary of Union Oil Co., and Dwelly Jones, Walla Walla, Washington, wheat rancher and former lobbyist for the Washington Wheat League. These points summarize the conversations:

1. The "surplus" fertilizer that had been available to the Pacific Northwest has now been committed to Mexico.
2. Both Collier and the Washington wheat growers (through Dwelly Jones) have worked hard the past 6 months to obtain an executive exemption to the Jones Act, specifically to carry fertilizer from Alaska to the Pacific Northwest.
3. The Secretary of the Treasury is authorized to grant the exemption on the basis of defense needs. Secretary Schultz was prepared to grant the exemption about one month ago, but at the last moment Secretary of Defense Schlesinger failed to support him, and the matter died.
4. Parallel efforts to gain an exemption through Congress were and are stalled in the Merchant Marine Subcommittee of the House Committee on Merchant Marine and Fisheries, which is chaired by Representative Leonor K. Sullivan (D., Mo.).
5. Further efforts to gain an exemption for the 1974 season appear to be unproductive, since the fertilizer is no longer available; however, Pierson and Jones agree that efforts should continue with the House subcommittee in the hope of obtaining an exemption for 1975.

The best source of more detailed information on what has happened already is Dwelly Jones (phone 509-525-8485).

—Fred Smith (June 11, 1974)

ATTENDEES

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List of Abbreviations Used

bb1	barrel
bb1/d	barrels per day
dwt	deadweight tons
MarAd	U.S. Maritime Administration
shp	shaft horsepower
t	metric ton (2000-lb tons X .91 = metric tons)

