

6-1-1977

Oceans

Kathleen Patterson

Robert Rywkin

Stanley Sneath

Kathleen O'Donnell

Follow this and additional works at: <http://repository.law.miami.edu/umialr>



Part of the [Comparative and Foreign Law Commons](#), and the [International Law Commons](#)

Recommended Citation

Kathleen Patterson, Robert Rywkin, Stanley Sneath, and Kathleen O'Donnell, *Oceans*, 9 U. Miami Inter-Am. L. Rev. 417 (2015)
Available at: <http://repository.law.miami.edu/umialr/vol9/iss2/9>

This Report is brought to you for free and open access by Institutional Repository. It has been accepted for inclusion in University of Miami Inter-American Law Review by an authorized administrator of Institutional Repository. For more information, please contact library@law.miami.edu.

THE OCEANS

KATHLEEN PATTERSON*
 ROBERT RYWKIN*
 STANLEY SNEATH*
 KATHLEEN O'DONNELL*

FISHERIES

United States

On Tuesday, March 1, 1977, the jurisdiction of the United States over its coastal waters was increased to 200 miles. The Fishery Conservation and Management Act of 1976 (hereinafter the Act), as reported in 8 Law. Am. 537, creates an exclusive fishing zone in which the United States has control over all fish except migratory tuna.

The creation of this management zone is expected to effect a sharp reduction in the total catch of foreign fishing fleets. New England fishermen, who campaigned for the new limit, are hoping that this move will reverse the decline of their industry. Technological advances and the use of newer fishing methods by foreign factory ships had put the New England fishing industry at a distinct disadvantage. Of particular concern is the method called "pulse fishing," which results in the cleaning out of an entire school of fish, including the young, and breaks the life cycle. Factory ships, operating for months at a time, seriously threatened the supply of haddock, cod and yellowtail flounder in the Northwest Atlantic. While American harvests rapidly declined, foreign hauls were on the increase. Between 1970-1974, Japan's catch rose 15 percent, South Korea's rose 145 percent, and the USSR's rose 27 percent. Ten years ago, the United States imported one-quarter of the fish consumed here. Imports now account for three-quarters or more. About 65 percent of the fish eaten in the United States, mostly in the form of fish sticks and other processed foods, is supplied by factory ships operating off our coasts.¹

*J. D. Candidates, University of Miami School of Law

¹Steinhart, Nation Expands Boundaries at Sea with 200-Mile Limit, The Miami Herald, Feb. 27, 1977, §E at 1, col. 4.

Although New England fishermen are optimistic about the recovery of their industry, other fishing groups are not as enthusiastic. Many groups opposed the Act and are now concerned about the effects this zone may have on their activities. Gulf shrimp fishermen in Texas have said that the boundary lines drawn with Mexico will allow Mexican fishermen to keep and harvest most of the shrimp. Tuna fishermen opposed the 200 mile limit from the beginning. The zone includes most of the fishing banks in the Northwest Atlantic and, through a special provision, all anadromous species, such as salmon. Tuna are "highly migratory" and, of course, not aware of 200 mile limits. Tuna fishermen argue that the United States declaration legitimizes the earlier declarations made by Ecuador and Peru which resulted in seizures and fines against United States tuna boats.

One group of fishermen is receiving protection for the first time. Lobster fishermen had little or no rights under ICNAF, the International Commission for the Northwest Atlantic Fisheries (ICNAF). Now trawling will be prohibited from areas set aside for lobster pots. Trawling in other areas will also be prohibited upon notification by lobstermen to the Coast Guard.

The effect of the zone on whaling depends on whether or not the United States government decides to ban whaling within the 200 miles. Canada and Mexico have already taken that step in their new zones. If the United States and other nations insist on independent regulation of whaling, the effectiveness of the International Whaling Commission will be drastically reduced at the very least.

If the United Nations Law of the Sea proposals should ever become an international agreement, according to the Act, the treaty would automatically void the 200 mile zone. Law of the Sea treaty terms as to fishing boundaries and coastal state jurisdiction would become part of the United States law. The management provisions of the Act would remain in effect and would apply to both domestic and foreign fishing.

Management of fish and the establishment of quotas for fishing are the responsibilities of the regional councils. The Act creates eight such councils. They have the authority to set up areas in which fishing is not permitted in order to allow depleted fish stocks to regenerate. The councils also must establish management plans for individual species by estimating the size of the stock of fish and determining the sustainable yield. The sustainable yield is defined as that amount of any species which can

be fished without harming the stock. They also decide when to open and close seasons, and what gear may be used. The regional councils are to send their recommendations on quotas to the State Department. Foreign fishermen will only be allowed to catch that portion of the sustainable yield not caught by United States fishermen.

The New England Council is recommending, for example, that no foreign fishing be allowed on haddock and no foreign permits be issued for butterfish or mackerel. Some permits for Soviet vessels to fish hake have been approved, as the demand for that fish in the United States is low. Squid, rarely eaten in the United States, but a delicacy in the Mediterranean, has the highest foreign quota.

The permits require foreign captains to keep detailed records on each use of their gear, their position, speed, the species caught and its tonnage. Hull numbers must be large enough for Coast Guard patrols to read them. The most sensitive requirement is the one allowing the Secretary of Commerce to order any foreign vessel to accept an American observer. The United States Coast Guard may also board any foreign vessel for inspection and for the arrest of officers and/or crew for violations of the law.

The Coast Guard shares the responsibility of inspection with the National Marine Fisheries Service. Coast Guard surveillance of the zone will concentrate on active fishing areas only, because of the severe shortage of equipment. As of March 1, the Coast Guard had only 19 ships and 17 airplanes patrolling both the Atlantic and Pacific Oceans.² The six vessels operating in the North Atlantic would be reduced to three by April. Rear Admiral Glenn O. Thompson, in hearings before the Senate Commerce Committee, said that enforcement would largely depend on the ability of the Coast Guard to "establish credibility of United States' intent to enforce the law." The Coast Guard had requested 90 million dollars for construction but received only 64.3 million dollars. That is not enough to have effective long range planning. Senator Magnuson told the Admiral that "he didn't expect the Coast Guard to cut back on its other responsibilities in order to enforce the zone."³ Faced with the problems of surveillance of over 2.5 million square miles, plus the maintenance of other activities, the Coast Guard will have to rely on the good faith of foreign nations having permits in order to enforce the quota systems.

²N.Y. Times, March 2, 1977, at 58, col.4.

³Ocean Science News, Jan. 28, 1977, at 1.

The first violation of the Act occurred March 7th when the Coast Guard boarded the MYS Verona 30 miles off the Schiemen Islands, southwest of the Alaskan Peninsula. The Coast Guard issued a citation for having halibut aboard. The ship and the crew were not detained, but the civil fine might be as high as \$25,000.

As of March 1, the United States had signed permit agreements with Bulgaria, Rumania, Nationalist China, East Germany, the Soviet Union, Poland, Japan, South Korea, the European Economic Community and Canada. The United States and Canada signed "interim" agreements that will allow fishermen to continue fishing in each other's waters. The agreement does not cover crab, clams, lobster or shrimp in the Atlantic nor clams, scallops, herring and crab in the Pacific. Salmon fishing is prohibited by both nations.

The United States law affected more than fishing off our coasts. The Soviet Union announced on February 24 that a 200 mile fishing zone along its Atlantic and Pacific coastlines would become effective March 1. Foreign trawlers would be prohibited unless their government had signed an agreement with the USSR, but the action is merely a temporary measure pending the Law of the Sea Convention.

Cuba extended its territorial waters from 3 to 12 miles and also established a 200 mile fishing zone. The zone would give Cuba sovereignty for exploration, exploitation, conservation, and administration of living and nonliving resources. The United States and Cuba have been negotiating the boundary lines between their zones.

It remains to be seen whether the new zone will have all the beneficial effects attributed to it. The New England fishing industry has received a desperately needed shot in the arm, but problems inherent in the industry may not be solved by limiting foreign catch. There is also some question as to the long range effect of fishery management and conservation, and an increase in the fish stocks. The councils are an interesting experiment in regional government and their authority to manage and set quotas for fishing is certainly a significant step in fishery conservation.

LAW OF THE SEA

Elliot Richardson has been appointed by President Carter and confirmed by the Senate as the new head of the U.S. delegation to the

United Nations Law of the Sea Conference (LOS). During the confirmation hearings held by the Senate Foreign Relations Committee, Ambassador Richardson indicated that unless the United States gets a treaty which will maintain the traditional rights of navigation, the United States could be in worse shape than if the LOS conference had never been held. He did say, however, that the LOS treaty was the only way to prevent the "creeping jurisdiction"⁴ of the coastal states.

On the issue of seabed mining, Richardson discussed the possibility of separating that section from the rest of the treaty to facilitate agreement on the remainder. Although customary law could presently be interpreted to permit mining now, such action without a treaty would be strenuously challenged by other nations.

Ambassador Richardson met with the Evensen group in Geneva earlier this year. The Evensen group, composed of 70 developed countries, was attempting to reach agreement on the system of exploitation of deep sea resources, particularly the International Seabed Authority and the economic effects of seabed mining on certain nations. The developed nations hope that, by presenting a united front, they will have a stronger bargaining position at the next session, to be held in New York in May.

The discussions centered on several areas: deep sea mining and the quota system for access, the voting and composition of the ISBA council, decision making and financing of the enterprise, and the interim production controls. The group also discussed rules for marine scientific research, the development of a fisheries policy for highly migratory species, pollution policies and the United States' insistence on compulsory dispute settlement in the economic zone.

Richardson told the assembled nations that while the United States mining companies preferred the LOS treaty as the legal framework for mining of manganese nodules, the U.S. government would be prepared to establish an alternative through domestic legislation if agreement on the LOS treaty is not forthcoming.

RESEARCH AND DEVELOPMENT

A drilling project conducted on the continental shelf off the Mid-Atlantic states is giving scientists new information on the environment

⁴Ocean Science News, Feb. 25, 1977, at 6.

and the resources of the continental shelf. Scientists and technicians on board the R/V Glomar Conception have discovered fresh water, as far as 60 miles off the coast of New Jersey, trapped in sediments beneath the shelf. This discovery may provide useful information for hydrologists and water resource managers who are trying to get a clearer picture of onshore-offshore ground water conditions and of the interlacing of salt and fresh water.

Very high concentrations of methane (marsh gas) were also found at two drill sites. One of these sites is 86 miles east of Atlantic City, New Jersey, and the other is 50 miles east of Cape Charles, Virginia. These pockets of methane are unusual, but are currently of little or no use to oil and gas companies. The discoveries were made only in conjunction with an assessment of continental shelf resources for the United States Coast and Geodetic Survey.

An international team of scientists is attempting to collect samples of sediment for a study of the geological evolution of the continental margins. Working on board the R/V Glomar Challenger, scientists are drilling at the base of the continental slope off the Atlantic coast of North Africa. By looking at organic material deposited within the sediment layers, they hope to outline the process of decay which changes vegetable matter into the hydrocarbons that form oil and gas deposits. Samples already collected may show that with more abundant organic material petroleum deposits may develop under the continental margin.

The first step of the International Phase of Ocean-Drilling, Deep Sea-Drilling Project began in January with a survey of the ocean crust off the Bahamas. Students and faculty from the University of Delaware are conducting a detailed magnetic study of some of the oldest ocean crust on earth. It is believed that this particular segment of crust is as old as 165 million years.

The National Bureau of Standards has announced the development of a device which will allow samples of the deep sea environment to be brought up to the surface virtually unchanged. This machine gives scientists a new way of studying various facets of ecology, biology, and environment while maintaining the original conditions. It can be used in the deep trenches of the Pacific Ocean, where the depth is as great as 6 miles and the pressure as much as 1000 times atmospheric pressure.

A new method of treatment for decompression sickness using intravenous fluids to restore the otherwise deadly loss of small-scale blood

circulation is being tested by doctors in Galveston, Texas. Dr. Charles H. Wells of the Shriners Hospital for Crippled Children in Galveston said that "the shock of sudden decompression is like that of a severe burn or crushing injury. Even rapid recompression of test animals failed to restore the micro-circulation vital to life."⁵ The injection of a dextrose or saline solution to replace the 25-40 per cent loss of blood plasma caused by decompression has had a dramatic effect on test animals. To date there have been no tests on humans.

OFFSHORE OIL

Mexico

Mexican officials have confirmed the existence of crude oil reserves, estimated at 60 billion barrels, located mostly in the southeastern states of Chiapas and Tabasco and offshore from the State of Campeche in the Gulf of Mexico. Previously, the Mexican Government estimated its oil reserves at eleven billion. Mexican oil production just recently exceeded one million barrels per day, and the state oil monopoly, Pemex, is shooting for a 1982 production target of 2.2 million barrels, half of which would be for export.¹

Mexico's new President, Jose Lopez Portillo, has given his approval to the accelerated exploitation of this crude oil, and consideration is being given to contracting with foreign drilling companies (including companies from the United States) for the difficult extraction of this oil. Mexican authorities say that if an agreement is reached with a foreign drilling company, compensation will be strictly on a money basis rather than on any participation or interest in the oil basis.²

United States

A Federal District Court Judge voided the Interior Department's lease sale of \$1.13 billion in oil and gas drilling rights to 214,000 acres on the Outer Continental Shelf off the northeastern Atlantic coast. In the case of *County of Suffolk v. Secretary of the Interior*, Judge Weinstein concluded that the sales were in violation of the National Environmental Policy Act (NEPA). Weinstein stated that former Interior

⁵*Id.*, Jan. 14, 1977, at 6.

¹N.Y. Times, Feb. 18, 1977, at 1, col. 5, (city ed.).

²*Id.*

Secretary Kleppe, by deciding to sell the leases, "had ignored the practical effects of local government licensing, permitting and review powers in the NEPA documents,"³ and had "failed to consider the environmental impact of specific probable pipeline routes from the outer continental shelf, in spite of the fact that projection of such routes is routinely made by the Secretary or his agents."⁴ Weinstein criticized the NEPA documents filed in support of the sales as "highly abstract" and nonspecific. In addition, Judge Weinstein cited the Interior Department's overstatement of peak oil and gas production and understatement of costs, and its failure to separate exploration leasing from production leasing, as other factors which led him to rescind the sales. The decision mentioned that tankers might have to be employed if the local governmental obstacles and the expense of the pipelines prove to be too burdensome. The Secretary of the Interior, Cecil D. Andrus, will seek an appeal of this decision.

A comprehensive investigation will be made by the Interior Department of reported holdbacks in natural gas production in four gas fields in the Gulf of Mexico. Secretary Andrus said that the results of a preliminary inquiry indicate that gas production was below maximum practicable rates. Recognizing that failure to achieve maximum gas production may be due to factors such as inadequate pressure or absence of pipeline connections, Andrus has stressed that the goal of the Interior Department will be to achieve more gas flow rather than to place blame on the companies involved.⁵

The Interior Department will attempt to accomplish its goal of increased gas production by, among other measures, more closely scrutinizing the requests for lease extensions for nonproducing gas fields, and making the granting of such lease extensions contingent on the personal approval of Secretary Andrus. In addition, production rates for oil and gas will be established, including an emergency high rate which will ensure temporary increased production for times of special need. The establishment of these rates is in accordance with the December, 1975 Energy Policy Act.⁶

President Carter's proposed Department of Energy will include the management of outer continental shelf leasing, currently handled by the

³County of Suffolk v. Secretary of the Interior, (E.D. N.Y. Feb. 17, 1977), in N.Y. Times, Feb. 18, 1977, §B, at 7, col. 2 (city ed.).

⁴*Id.*

⁵N.Y. Times, Feb. 18, 1977, §D, at 1, col. 4 (city ed.).

⁶*Id.*

Department of the Interior. The new Department will have the responsibility of establishing regulations to encourage competition for federal leases, to implement alternative bidding systems for the award of leases, to set up diligence requirements and rates of production for operations, conducted on the federal lease sites, and finally to specify the procedures, terms, and conditions for the acquisition and disposition of federal royalty interests taken in kind. The outer continental shelf activities of the Interior Department will be monitored by a leasing liaison committee and the new Department will assume actual management of the leases.

MARINE MAMMALS

On March 1 the National Marine Fisheries Service (hereinafter cited as NMFS) set the 1977 porpoise kill quota at 59,050.¹ The quota falls between the 29,920 limit initially recommended by NMFS and the 96,100 porpoise kill quota requested by fishermen. The March 1 decision divided the kill allowance among the following species: offshore spotted porpoise — 43,090; white-bellied spinners — 7,840; other species — 8,120. No taking of the eastern spinner is permitted as that species has been declared “depleted”. The NMFS decision further provided *inter alia* that federal observers may be put on tunaboats as a condition to receiving a permit;² that the industry must set up an “expert skippers’ panel” to review the performance of tunaboat captains in regard to porpoises; and that setting on porpoise schools may be banned with seven days notice.³

The March 1 announced kill quota was received with protest by all parties concerned. The Committee for Humane Legislation, Inc., who had filed the 1976 suit resulting in a ban on tuna fishing on porpoise,⁴ filed

¹42 Fed. Reg. 12015 (1977).

²On March 24, 1977, the Senate Appropriations Committee approved an additional \$1 million for the tuna/porpoise observer program. 3 Marine Mammal News (Mar. 1977).

³The expression “setting on porpoise” means the use of mammals to locate the yellow fin tuna that swim below the porpoises. For further explanation of the phenomenon, see 9 LAW.AM. 197 (Feb. 1977).

⁴Committee for Humane Legislation v. Richardson, 540 F.2d 1141 (D.C. Cir. 1976).

This decision was followed by a series of conflicting court orders which left the tuna industry in a state of confusion. United States District Court Judge William B. Enright ruled on January 21, 1977 that the U.S. tuna fleet could resume their setting on porpoise. He set a temporary kill-quota at 10,000 porpoises. A week later, the United States Court of Appeals for the D.C. circuit ordered the American

(Footnote continued on next page)

suit again in the United States District Court seeking to enjoin NMFS from implementing its regulations. The environmentalists still maintain that any killing of porpoise is illegal under the Marine Mammal Protection Act. The tuna fleet, greatly damaged by the November ban,⁵ returned to port to voice its objection to the low kill quota. Already the U.S. tuna industry had been unable to compete with foreign vessels for the 1977 yellowfish tuna because of the court-ordered ban. Even the March 8th U. S. Court of Appeals order granting emergency relief by allowing fishing under interim regulations failed to placate the fishermen. They remained in port. Of particular concern to the fleet is the ban against setting on schools of mixed porpoise species in order to protect the depleted population of eastern spinners. With such restrictions, the industry cannot compete in the world tuna market.

The International Whaling Commission (hereinafter cited as IWC) will hold its annual meeting on June 20th in Canberra, Australia. The United States delegation is expected to recommend that the IWC Scientific Committee be required to approve permits issued by member governments to themselves to take whales for scientific research. The proposed requirement is intended to discourage the taking of large numbers of whales under scientific permits and to encourage the enforcement of IWC whaling quotas. The possibility that IWC members are circumventing the quotas by buying whale products from non-member countries may be another topic at the meeting.

SHIPPING

Supertanker Ban in State of Washington

The United States Supreme Court has agreed to decide whether a state has the power to limit the size of oil tankers using its ports. Evans v. Atlantic Richfield, No. 76-930. The background of this important case to be reviewed on appeal is outlined in the following section.

(Footnote continued from previous page)

Tunaboat Association (ATA) to restrain from taking porpoises incidental to tuna fishing. Judge Enright then reaffirmed his temporary kill-quota. He was quoted as saying, "I cannot abdicate my responsibility while the entire industry withers." Wall St. J., Feb. 9, 1977, at 17, col. 1.

⁵A February estimate showed the fleet losing \$20 million to \$26 million by mid-April as a result of the ban on fishing on porpoise. Wall St. J., Feb. 9, 1977, at 17, col. 1.

Atlantic Richfield Company, a large oil company, and Seatrain Lines, Inc., a shipping firm, sued officials of the State of Washington to enjoy enforcement of Washington's 1975 "Tanker Act."¹ The Act prohibited "supertankers" from entering Puget Sound² and required smaller oil tankers of specified weights to employ locally licensed pilots³ and to comply with enumerated design specifications.⁴ Washington's law allegedly overlapped the federal Ports and Safety Act of 1972 (hereinafter cited as PWSA), which established a comprehensive federal plan for regulating the operations, traffic routes, pilotage and safety specifications of tankers.⁵ One section of the PWSA gives the Coast Guard authority to restrict or exclude tankers from Puget Sound under adverse or hazardous conditions.⁶ The United States District Court for the Western District of Washington, in a three-judge panel per curiam decision, held that the Washington Tanker Law was preempted by federal law regulating the same subject matter of oil tanker standards and hence was void. *Atlantic Richfield Co. v. Evans*, 1976 A.M.C. 1973 (W.D. Wash. 1976).

The State of Washington has an urgent interest in taking preventive measures against oil pollution in Puget Sound since the trans-Alaskan oil pipeline is scheduled to open up this year. Transport plans rely substantially on the use of supertankers. An estimated fifteen percent of the Alaskan crude will enter the lower forty-eight states via Puget Sound. The intent of the Washington legislature in enacting the Tanker Law was to "decrease the likelihood of oil spills on Puget Sound and its shorelines"⁷ by regulating tanker entry into port. The legislative purpose behind the PWSA was to "promote the safety and protect the environmental quality of ports, waterfront areas, and the navigable waters of the United States" by supplementing the existing scheme of vessel traffic

¹Wash. Rev. Code §§ 88.16.170-.190 (Supp. 1975).

²Any oil tanker heavier than 125,000 deadweight tons is prohibited from going east of a line from Discovery Island light south to New Dungeness light. *Id.* at § 88.16.190(1).

³Any oil tanker weighing 50,000 deadweight tons or greater must take on board a Washington state licensed pilot while navigating Puget Sound and adjacent waters. *Id.* at § 88.16.180.

⁴The design specifications, including double bottoms, only apply to oil tankers weighing from 40,000 to 125,000 deadweight tons. *Id.* at § 88.16.190(2).

For a discussion of the impact of requiring double bottoms, see Comment, *National and International Efforts to Prevent Traumatic Vessel Source Oil Pollution*, 30 U. Miami L.Rev. 985, 1005 (Summer 1976).

⁵33 U.S.C. §§ 1221-27, 46 U.S.C. § 391a.

⁶33 U.S.C. 1221(3) (iv). The Coast Guard has never done so.

⁷Wash. Rev. Code. § 88.18.170.

services and subjecting vessels to higher standards of design, construction and operation.⁸

The district court compared the purposes of the two statutes and found that the federal law embraced a uniform system of traffic control and tanker design regulations which should not be upset by "balkanization."⁹ Furthermore, the court rejected Washington's argument that the Tanker Law should be upheld as part of that state's federally encouraged comprehensive coastal management plan.¹⁰ Since the PWSA was enacted partially for environmental reasons, the state law "overlapped" the federal law and the conflicting state law was voided.¹¹ Shortly after the district court's decision was rendered, the sponsor of PWSA in the U.S. Senate, Senator Warren Magnuson from Washington, was quoted as saying that the lower court had misread the intent of Congress and that preemption was not favored in the law.¹²

It is difficult to predict which way the Burger Court will decide on the Washington Tanker law. The Washington appeal raises complicated constitutional issues of federal-state relations. In its jurisdictional statement to the United States Supreme Court, Washington took the following position:

1. The preemption holding upsets the traditional competence of coastal states to use their police powers to prevent pollution to the coasts and harbors;
2. The PWSA primarily authorizes the Coast Guard to establish a traffic control system and it does not express a "clear and manifest purpose" to pre-empt the field;
3. The Eleventh Amendment precludes jurisdiction over Washington State as a defendant.¹³

⁸1972 U.S. Code Cong. & Ad. News 2766.

The PWSA was passed in spite of foreign concern that the United States was developing unilateral standards for ship construction in contravention of United States commitments to seek uniform international standards through multinational negotiations. See Comment, U. Miami L. Rev., *supra* note 4.

⁹1976 A.M.C. at 1975.

¹⁰See Coastal Zone Management Act of 1972, 16 U.S.C. §§ 1451-64.

¹¹1976 A.M.C. at 1977.

¹²Wall St. J., Mar. 1, 1977, at 6, col. 2.

¹³Envir. Rep. (BNA) 1687 (Mar. 6, 1977).

Ten other states have filed amicus curiae briefs in support of Washington's appeal. They are Maryland, Delaware, Maine, Minnesota, New York, California, Alaska, Pennsylvania, Wisconsin and Missouri.

The district court order has been stayed pending appeal. Until the Supreme Court hears the Washington case, in the Fall at the earliest, the oil companies must comply with the Tanker Act and keep their supertankers out of Puget Sound.

TANKER SAFETY STANDARDS

The grounding and breakup of the *Argo Merchant* on Nantucket Shoals, with the consequent release into the Atlantic Ocean of almost 24,000 tons of industrial fuel oil, has brought renewed public interest in the question of oil tanker safety. Recently there has been a string of casualties involving groundings and explosions, some resulting in major oil spills. The populous northeast seacoast was spared major contamination due to the strong northwest winds accompanying this winter's cold spell, but the effect of the *Argo Merchant* spill upon the rich Georges Bank fishing grounds remains undetermined. Although the slick itself has dissipated, the repercussions are being felt through renewed calls for more stringent safety standards.

Coast Guard

The United States Coast Guard carried out its previously announced intention to amend 33 Code of Federal Regulations by adding section 164.¹ This section states that all self-propelled vessels of over 1600 gross registered tons (including foreign flag vessels) are required, when in the navigable waters of the United States, to meet certain equipment requirements. The new regulations require that all such vessels have an operational radar unit, a magnetic steering compass, an up-to-date deviation card (to indicate corrections for the magnetic effects of the vessel upon the compass), and a working gyrocompass with a repeater unit at the main steering station. Also required are a rudder angle indicator, a posted list of specified maneuvering characteristics and an echo-depth sounder with a recording unit.² In addition, all ships on international voyages must have an approved radiotelephone.³

Some of these regulations duplicate those already promulgated for tankships under 46 C.F.R. §32.15. This section requires proper navigation lights, fog signals, a depth sounder, a radiotelephone and a Radio Di-

¹42 Fed. Reg. 5956 (1977).

²33 C.F.R. §164 (1977).

³46 C.F.R. §32 (1977).

rection Finder unit (RDF is a short range device with which a navigator can determine the directions of various radio beacons).

The Coast Guard also proposed a new section to be added to 33 C.F.R. §164. This section would require the installation of Loran-C in all vessels of over 1600 gross tons (GRT). Loran is a long-range navigation instrument which uses the signal-pulse time difference between radio waves broadcast from widely separated stations to provide a remarkably accurate line of position.⁴ Loran-C now covers about two thirds of the United States East Coast, plus the Bering Sea and the Hawaiian Islands. West Coast and Gulf of Alaska coverage was to be operational by the spring of 1977 with completion of the system for the Gulf of Mexico, the East Coast and the Great Lakes expected by 1978, 1979 and 1980, respectively. The Coast Guard indicated that if the Loran requirement is finally promulgated, it would first be made effective for tankers and other vessels carrying dangerous cargoes.⁵

Congress

Hearings have begun on several proposals to tighten safety standards for oil tankers. Companion bills, H.R.-3711 and S.-687, supported by Senator Warren Magnuson, would impose increased liability for damages and clean-up costs resulting from tanker and terminal oil spills. The Carter Administration offered amendments to H.R.-3711 which would allow foreign nations to recover for damages to property, natural resources, earning capacity or tax revenues. The bill calls for a \$200 million compensation fund financed by a 3 cents per barrel tax on all terminals and refineries. Vessels transporting oil would be subject to a minimum liability of \$500,000. Liability for greater amounts would be pegged at a rate of \$300 per gross ton, whatever the size of the vessel. Thus, there would be no absolute ceiling on potential liability.⁶

The federal government would also set up a "superfund" of \$200 million to compensate for clean-up expenses.

The Magnuson bill, in its present form, also mandates certain safety standards for vessel construction and equipment. These standards would include double bottom construction, segregated ballast tanks, gas inerting systems and back-up boilers. It would also require the installation of dual

⁴George W. Mixter, *Primer of Navigation*, 152 (5th ed. 1967).

⁵42 Fed. Reg. 5956 (1977).

⁶19 Ocean Science News, Apr. 8, 1977, at 3.

radar sets and Loran-C, and the use of a satellite navigation system. Compliance with these proposals would be expensive.⁷

Double bottom construction involves building a vessel in which the cargo tanks are separated from the bottom of the vessel by several feet of space. It is argued that if such a vessel were to ground and tear open the outer hull, the cargo tanks would retain their integrity and, therefore, prevent the accidental discharge of oil into the ocean. While a number of such vessels have been built, there is opposition to making double bottoms mandatory. Opponents claim that such construction might prove counterproductive in some circumstances. The rupture of the outer hull in a grounding incident could cause the ship to lose buoyancy if the space between the two hulls should fill with water, increasing the likelihood that the ship would break in half and spill oil.

The requirement for segregated ballast tanks is an attempt to eliminate one of the sources of non-catastrophic oil spills: those caused by the discharge of sea-water ballast from tanks which are dirty from oil. Although the major spills attract more attention, much of the tanker-related oil pollution is caused by the discharge of this dirty ballast water and by the discharge of water used to clean the cargo tanks during the legs of the voyage when the ship carries no oil. Constructing all oil tankers with segregated ballast tanks, which are tanks that never hold anything other than the water ballast used to stabilize the tankers when they run empty of cargo, would involve major expenditures. Nevertheless, the 1973 *Inter-Governmental Maritime Consultative Organization Convention* (hereinafter IMCO Convention), which the United States has yet to ratify, would require segregated ballast tanks on all tankers of more than 70,000 deadweight tons (DWT) that are ordered after December 31, 1975.⁸

Many tanker owners, acting under the auspices of the IMCO Convention, are sponsoring a system for vessels built without segregated ballast tanks, which could prevent oil pollution from normal tanker operations. This system, called "Load On Top," involves a procedure in which the oil that gets mixed with the tank-cleaning and ballast water is given a chance to rise to the top of the water ballast. The clean water at the bottom of the tanks is then pumped overboard, while the oily water is pumped into special "slop" tanks. If the voyage is long enough, the re-

⁷Barrons, Feb. 28, 1977, at 9.

⁸1973 International Convention for the Prevention of Pollution from Ships, see 27 Y.U.N. 964.

maining oil-water mixture will contain a large enough percentage of oil to allow the new cargo to be loaded right on top of the "slops." If the voyage is too short to allow for sufficient separation of the ballast water and the oil, the dirty water will be pumped into tanks on shore.⁹

Inert gas systems are almost universally recognized as the solution to a problem that has plagued tanker owners.¹⁰ In some circumstances oil fumes will mix with the air in empty cargo tanks to produce a highly explosive mixture. After a series of explosions wracked several VLCCs (Very Large Crude Carriers, tankers generally over 125,000 DWT) many ships have been fitted with inert gas systems. Such installations allow the vessel to fill its cargo tanks with carbon dioxide and carbon monoxide from its exhaust fumes, reducing the oxygen level below the danger point. Many older vessels, such as the Claude Conway which exploded and broke up off Cape Hatteras in March of 1977, do not yet have this equipment.

Most tankers have been built with a single screw (propeller) and propulsion plant for reasons of simplicity and economy. The proposed requirement for back-up boilers is an attempt to assure that these vessels are not incapacitated by the breakdown of their main power plant. Fuel economy factors and improved technology have encouraged the use of diesel engines rather than steam turbines, so this proposal may prove superfluous.

The Merchant Marine Subcommittee is also considering proposals for flag preference legislation. The Jones Act now requires that all goods traveling between American ports be shipped on American flag vessels. The proposed law would require that 30% of all oil shipped from abroad be carried on U.S. flag ships. This proposal has failed in the past, but it remains viable.

In other areas, Senator Muskie has introduced a bill which would extend the jurisdiction of the United States for pollution control purposes out to the same 200 mile limit as the current contiguous fishing zone. The bill would amend the Federal Water Pollution Control Act by defining this zone as the "navigable waters" of the United States.¹¹ Additionally, Transportation Secretary Brock Adams is expected to strongly support Senate ratification of the 1973 IMCO Convention.

⁹*Draft Guidelines For Assessment of Reception Facility Tankage at Oil Loading Ports*, Oil Companies International Marine Forum, May 1975.

¹⁰Wall St. J., Mar. 15, 1977, at 48, col. 1.

¹¹19 Ocean Science News, Mar. 4, 1977, at 6.

State Department

The United States State Department issued a statement in January outlining its understanding of American jurisdiction over foreign flag vessels.¹² Noting that most foreign flag tankers traveling off the American coasts are bound for United States ports, the State Department indicated that this country could use its inland waters jurisdiction to impose adequate safety standards for these vessels.

The statement noted that under current international law, a coastal state may interfere with freedom of navigation on the high seas, on which the *Argo Merchant* was lost, only to prevent grave and imminent damage to its coastline or related interests. In the territorial sea, the United States claims the right to impose pollution control regulations provided that they fall short of interfering with the rights of innocent passage. Finally, in its internal waters the United States has complete jurisdiction subject only to the terms of conventions and treaties to which it is a party. Thus, regulations promulgated by the Coast Guard can apply to foreign flag vessels while they are in American ports.

Other Developments

Liberian maritime officials promised to "tighten screws" to enforce the current Liberian safety and personnel requirements.¹³ The Liberian maritime administration, which in 1970 set up a New York based team of 150 inspectors, has recently come under heavy criticism. The Liberian Shipping Council, a newly created organization of ship owners, has urged stricter standards. The Council stated that they will recommend severe penalties for violators.

Globtik Tankers, a British based firm, has proposed the construction of three nuclear-powered tankers, each of 600,000 DWT.¹⁴ The ships, to be delivered between 1985 and 1987, would be the largest vessels ever built. Globtik claims that the greatly increased costs of fuel oil will make nuclear propulsion more economical than current oil-fueled propulsion. Tenneco, Inc. and Globtik have signed a letter of intent, proposing that the three ships be built in Tenneco's Newport News, Virginia shipyard.

¹²Department of State, News Release, January 11, 1977.

¹³J. Com. Mar. 3, 1977, at 1, col. 1.

¹⁴Wall St. J., Feb. 3, 1977, at 6, col. 3.