The Impact of the 200-Mile Economic Zone on the Law of the Sea

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I. INTRODUCTION

The gradual encroachment of national controls into ocean areas has been a long and complex process dating back to the Seventeenth Century when the Dutch held that the sea could not be subjected to private ownership and the British countered with the claim that States had a right to protect their interests by restricting the use of certain areas. Bynkershoek, in 1702, held that permanent dominion over offshore areas could be maintained only by shore-based fortifications. Eight decades later, the Italian jurist Galiani suggested that a standard measure—the marine league—be taken as the breadth of the offshore belt over which coastal States could exercise sovereignty; this, despite the fact that three nautical miles was well in excess of the range of any cannon at that time. In 1793, the United States proclaimed a provisional neutrality zone three nautical miles in breadth, and the American position gradually gained acceptance in Britain. With Britain's mari-

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time supremacy following the victory of Trafalgar the three-mile principle began to spread to other countries as well.

Students of marine affairs can easily trace the evolving process of offshore claims: the expansion of territorial sea breadths in the case of many States to four, six, twelve, or even greater mileages; the claims to specialized extra-territorial zones, as for example, customs, fishing, pollution control, and neutrality; the closing off of bays, gulfs, and inter-island waters as part of the national territory; and the extension of national rights over continental shelf resources. Unilateral actions have followed one another in steady procession, and terms such as straight baselines, historic bays, and archipelagic waters have become recognized (if sometimes ill-defined) parts of the law of the sea lexicon. Now, yet another concept has emerged, the 200-mile zone. Like the straight baseline and the continental shelf regimes, it began through unilateral action; like them, it gradually gained acceptance among various States, and it appears now destined to become a part of the new regime of the world ocean. But its impact on the traditional freedoms of the seas will be far more pronounced than were those of its predecessors; indeed, one can safely hypothesize only some of the *short-term* impacts of the new jurisdiction; what the long-range implications will be is still very much in doubt.

At the Caracas session of the Third Law of the Sea Conference (LOS III) a great many delegations spoke in favor of the 200-mile concept, although they differed somewhat on the details of Coastal State rights within the zone. Statistics vary somewhat on national positions taken there, but a rough approximation is that 102 countries in the early plenary session favored the 200-mile concept (although with some variations as explained below); eight other States subsequently spoke in favor of the proposal, bringing the roster of countries actively supporting the concept to nearly 73 percent of the total number of independent States of the world. Four countries during the plenary spoke in opposition to the 200-mile regime, and four others subsequently joined them in this stance.[1] Ten other States at Caracas which spoke during the plenary neither supported nor opposed the new regime.[2] The remaining 23 of the world's 151 independent States neither addressed the issue during the Caracas plenary, nor in later meetings of the session did they indicate their position on the 200-mile question.[3]

1. Opposing the 200-mile concept were Belgium, Bhutan, Italy and Japan; Mali, Botswana, Swaziland, and Luxembourg later joined this group.
2. These were Afghanistan, Austria, Bahamas, Guinea, Holy See, Israel, Kuwait, Laos, Netherlands, and Yemen.
3. Andorra, Central African Republic, Chad, Ethiopia, Gabon, Granada,

Within the framework of the 200-mile concept there are many possible variations of coastal State, neighboring States, and international community rights. Five categories of 200-mile positions might be identified.

1. *Two-hundred mile territorial sea.* Coastal State rights within the 200-mile area are the same as now exist within narrow territorial seas. Peru, among others, maintains this claim.

2. *Modified territorial sea.* Freedom of navigation and overflight, and the laying of submarine cables and pipelines guaranteed to the international community between 12 and 200 miles offshore. Uruguay is a representative country in this group.

3. *Two-hundred mile economic resource zone.* At the other extreme from the 200-mile territorial sea is the resource zone concept calling for a maximum territorial sea breadth of 12 miles and coastal State rights in the 12-200-mile zone limited to the living and non-living resources of that area. Scientific research by foreign States would be permitted in the waters of the 12-200-mile zone. In this zone pollution-control standards would be set by an international authority. One variation of this resource regime is the full utilization concept, under which those living resources which are not harvested by the fishing fleets of the coastal State but are less than maximum sustainable yield limits (modified by economic and environmental considerations) must be made available to foreign fishermen. The United States is a proponent of the resource zone formula.

4. *The expanded economic zone.* Under this concept the coastal State has sovereign rights not only to the living and non-living resources in the 12-200-mile area but also over foreign scientific research and/or pollution control measures. Canada is a country which claims these additional rights.

5. *Regional economic zone.* The living and/or non-living resources of the economic zone beyond territorial limits may be shared by the coastal State either with neighboring land-locked States, or with any developing geographically-disadvantaged States

Guatemala, Guyana, Haiti, Ivory Coast, Jordan, Liechtenstein, Malawi, Maldives, Mongolia, Nauru, Niger, Qatar, Republic of China (Taiwan), Rhodesia, Rwanda, San Marino, and Syria. In some of these cases it is interesting to speculate as to why the governments have taken no position whatever on the 200-mile issue.

within the region. Kenya is a coastal State which has recognized the need for neighboring land-locked countries to share on an equal basis in the exploitation of the living resources of the economic zone. Jamaica favors sharing in the exploitation of the living resources of a regional water body by all littoral developing geographically disadvantaged States.

At the Geneva LOS III session and beyond, new categories of proposals for the 200-mile zone will probably be advanced. One variation, already suggested, is the extension of coastal State rights to the mineral resources of the seabed and subsoil of the continental margin in areas where this margin extends beyond the outer limits of the 200-mile economic zone. What the limits might be for national jurisdiction over sea floor resources more than 200 miles from shore is a subject discussed later in this paper.

II. Offshore Areas Closed Off by the 200-Mile Zone

In the past, most countries of the world have limited their claims to offshore jurisdiction to twelve miles or less. The consequences of such claims have been felt primarily in narrow water bodies, particularly straits, where areas of high seas are restricted, or eliminated entirely. Coastal configurations, and the presence of offshore islands may affect the location of the outer limits of these zones since such features may be used as basepoints for determining the breadth of the zones. For example, an infinitely small island would generate a territorial sea measuring πR^2, where R equals the breadth of the territorial sea. Thus, a three-mile breadth would generate an area of territorial waters of approximately 28 square nautical miles about the island, while a twelve-mile claim would close off 452 square miles.

The adoption of a 200-mile offshore zone greatly magnifies the areas affected. A prominent point along the coast could influence the location of the outer limits of the zone two hundred miles in either direction parallel to the shoreline. A single island could close off approximately 125,000 square nautical miles of ocean space.

As a consequence of such extensive jurisdictional claims and of geographic positioning, the 200-mile zone "encloses" not only a significant portion of the global ocean, but also totally encompasses certain areas, particularly the world's enclosed and semi-enclosed seas. These arms of the oceans, being important for the economic, political, and social activities of the bordering States, will all fall under some form of national jurisdiction. Seas such as the Baltic, North, Mediterranean, Black, Red, Persian, South China, East China, Japan, Java, Celebes, Sulu, and Caribbean will be under the

jurisdiction of their littoral States if a universal 200-mile zone is established. Moreover, other semi-enclosed water bodies would be almost completely enclosed by such jurisdictional claims, *i.e.*, the Gulf of Mexico, Norwegian, Arabian, and Okhotsk Seas and Bay of Bengal. Even some of the oceans, particularly the Arctic, would have their non-national areas drastically reduced in scope. The configuration of the Arctic plus the locations of the Canadian Arctic Archipelago, Greenland, Svalbard, Franz Josefland, and other Soviet island groups extend national jurisdiction nearly to the Pole itself. Such zones, based on these islands and the mainland, would close off a large proportion of the ocean within national limits.

The following Table[4] reflects the total areal effects of the 200-mile claims. The presence of semi-enclosed seas and scattered islands in the Atlantic and Pacific Oceans account for the proportionately greater percentage under national jurisdictions in contrast with the more open Indian Ocean.

Table 1

Allocation of Areas in Square Nautical Miles to Coastal States

Ocean	Total Area	Area (and Per Cent of Total) Closed Off by the 200-Mile Limit
Atlantic and Arctic	31,040,000	11,668,000 (37.59%)
Indian	21,842,000	7,064,000 (32.34%)
Pacific	52,385,400	19,013,000 (36.29%)
Total	105,267,400	37,745,000 (35.86%)

The generalized distribution of the "zones" may be seen on the attached map (Appendix A).[5] The 200-mile zones shown here are predicated on the theory that all islands, regardless of size, population, economic significance, or political status, will generate an economic zone. It also allocates economic zones, as does Table 1,

4. Adapted from OFFICE OF THE GEOGRAPHER, BUREAU OF INTELLIGENCE AND RESEARCH, U.S. DEP'T OF STATE, *Theoretical Areal Allocations of Seabed to Coastal States . . .*, in INTERNATIONAL BOUNDARY STUDY, LIMITS IN THE SEAS No. 46, at 35 (Washington, D.C.).

5. It should be noted that the map is based on a Mercator Projection. This system grossly exaggerates scale poleward. In fact, the North and South Poles will be situated at infinity, and cannot be represented on the map.

to the Antarctic continent. Neither of these Law of the Sea issues, of course, has been resolved, or even seriously faced by the LOS III Conference. Pending a solution of the two thorny issues—islands and the Antarctic—we can only assume, in order not to prejudice the outcome, that special types of geographic features will not be deprived of the advantages freely granted to other land areas. To attempt to isolate these by categories would be difficult, for each criterion selected tends to contain an inherent inequality within it. For example, Micronesia comprises a series of small islands which, due to poor soils and lack of mineral resources, do not have a viable economic land base. Many of the "islands" of Micronesia are small, isolated and uninhabited. Should this poor, developing area be deprived of portions of its economic zone, merely because it is poor and insular? Such a judgment would appear to be inequitable, unjust, and fundamentally indefensible. Eventually, the LOS III Conference will debate these issues, although hopefully it will chose not to deprive certain islands of the advantage of separate economic zones, merely because of their geographic character.

III. The Impact on Access to the Sea and its Resources

The allocations to coastal States of their national zones of jurisdiction will clearly relate to (1) the size of the State, in particular, the length of its coastline; (2) the number and distribution of islands under its sovereignty; (3) its location in the open ocean, in contrast to an enclosed or semi-enclosed sea; and (4) the nature of the ultimate boundary delimitation with adjacent or opposite States.

Until all baselines are delimited and all boundaries agreed upon by adjacent and/or opposite States, it is impossible to determine the area of national jurisdiction for each coastal country. However, assuming an equidistant boundary and a normal baseline, it appears that the largest economic zones will belong to the following States:[6]

Table 2

States with the Largest Economic Zones

State	Area (approximate) in Square Nautical Miles
United States	2,222,000
Australia	2,043,300
Indonesia	1,577,300
New Zealand	1,409,500
Canada	1,370,000

6. *Theoretical Areal Applications, supra* note 4, at 11-35.

Soviet Union	1,309,500
Japan	1,126,000
Brazil	924,000
Mexico	831,500
Chile	667,300
Norway	590,500
India	587,000
Philippines	551,400
Portugal	517,400
Madagascar	376,800
Total	16,103,500

These 15 coastal States would receive among them approximately 42 percent of the world's 200-mile economic zone area. Significantly, these States are among the world's largest, or possess a large number of islands scattered over the oceans.

The median allocation of economic zone for each coastal State of the world would be approximately 61,900 square nautical miles, an area roughly equal to the land territory of Romania. Certain large States, however, as a consequence of their limited coastline, their coastal configuration, or their situation on a semi-enclosed sea, will have very meager economic zones. Perhaps the least equitable land/economic zone relationships will be that of Zaire. The largest of all African States has virtually no coastline. Hemmed in by Angola to the south and its exclave, Cabinda, to the north, Zaire's coastline is restricted to the mouth and a small area astride the Congo River. A strict application of the equidistance principle will probably confine the Zairian economic zone to a small triangle in the vicinity of 12 nautical miles measured from the natural baseline. Even if boundaries were developed along the parallels of latitude marking the seaward termini of the land boundaries with Angola and Cabinda, Zaire will gain only a narrow band some thirty miles or so in width. Thus, a land State of nearly one million square (statute) miles will be allocated only a minimal economic zone.

Sudan, the second largest African State, is situated on the narrow Red Sea. Its economic zone thus will be restricted to an area determined by the length of its coastline and the mid-line of the semi-enclosed sea. A State of approximately 900,000 square (statute) miles, it will have an economic zone of some 27,000 square miles, well below the median area for coastal States, most of which are far smaller in area and length of coastline than Sudan.

Geographic area alone, however, is not the sole measure of the relative economic value of a national zone of offshore jurisdiction.

It is a well-known fact that living and non-living resources are not evenly distributed on the land surface of the earth. As deserts exist on land where few plants or animals of economic value exist, so too, do the oceans contain regions of little or no fishing life. Except for highly migratory or anadramous species, the living resources of the sea tend to be concentrated in the shallow shelf or bank areas of the world. Moreover, within the range of these shallow waters the most fertile grounds for fishing are found in the middle-latitudes, witness the Canadian, Icelandic, and North Sea Banks. Other major concentrations of fish occur where upwellings of currents carrying vital plankton to sustain living aquatic resources exist. This phenomenon accounts for the tremendous volume of the anchovy fishery off the coast of Peru. Such upwelling areas, however, tend to migrate over periods of time. The last few years, for example, have seen a marked decline in the national fisheries taken off the coast of Peru. Fortunately, in 1974, the upwelling returned to its "marginal" location and the offshore waters of Peru have again become fertile.

Just as living resources are unevenly divided throughout the world, offshore mineral resources also tend to be concentrated in specific areas. Obviously, until an area is extensively examined geologically, and until exploratory wells have been drilled, no one knows the precise pattern of petroleum resource reserves within national economic zones. Nevertheless, there are certain indicators which point to particular areas. First of all, a region must have a potential source of base material for the processes which will lead to the development of hydrocarbons over geological time. Second, reservoir rocks to hold the oil and gas, and a trap structure to contain the resources, are essential. Finally, a base of sedimentary rock at least one kilometer in thickness must be present. Even if all of these elements exist it cannot be assumed that petroleum and other hydrocarbons will occur until drilling operations have proved their actual existence. For example, the Canadian shelf in the Newfoundland area contains all of the vital indicators, but nearly one hundred exploratory drillings have failed to find commercially exploitable deposits.

Other rich, or potentially rich, areas for hydrocarbons are the Persian Gulf, the North Sea, parts of the Aegean, the South China and East China Seas, and the Indonesian continental shelf (both in the west adjacent to the Asian mainland and in the east off West New Guinea's Irian Barat). Elsewhere in the world, the Gulf of Mexico, the Canadian Arctic archipelagic waters, areas of Brazil adjacent to the delta of the Amazon, and areas of Venezuela adjacent

to the delta of the Orinoco are presently considered particularly promising regions for oil and gas.

Perhaps one of the best indicators of offshore hydrocarbons is the presence of petroleum on adjacent land areas. Much development has taken place, for example, in the Niger delta of Nigeria and in coastal areas of Gabon. The offshore regions adjacent to these zones are believed to hold great potential for profit for the West African States situated between Ghana and Cabinda. Just as the oil fields of West Texas and Louisiana have their counterparts in the offshore Gulf of Mexico, so will these offshore Gulf of Guinea areas be fields of great promise.

In contrast, other parts of the world lack the vital geologic character to contain petroleum and/or gas deposits. The economic zones of most mid-ocean islands situated on volcanic or basaltic bases will obviously not have hydrocarbons. The same situations will prevail off the shore of major parts of the continents. One or more of the basic geological requirements for hydrocarbon development will be missing.

Other offshore mining activities will be spotty. Placer mining will occur in the economic zones adjacent to land areas of these deposits. Sand and gravel, particularly in developing States, will continue to represent a major mining resource in the economic zone and adjacent territorial sea. In addition, there are highly mineralized sands containing tin, iron, gold, diamonds, and other substances, which for some countries may prove to be economically viable.

Geographically Disadvantaged States

One problem developing from the creation of national zones of jurisdiction in adjacent seas is that of the thirty land-locked States of the world which have no coastlines whatever, and hence, no chance of an economic zone. Other countries have only limited coastlines, are "shelf-locked," or are otherwise geographically disadvantaged. How are such States to share in the development of the economic zones? Do they have any rights now, and will the new Convention of LOS III grant them special rights?

Under current international law the land-locked States have certain limited rights. Although jokes have long been made concern-

ing the "Swiss Navy," land-locked countries do have the rights of navigation guaranteed to their geographically more fortunate coastal State neighbors. The land-locked countries have also other "high-seas" rights, such as fishing, whaling, and scientific research. But economic activities other than transport in adjacent States' territorial seas and contiguous zones are generally forbidden.

Early in the current law of the sea negotiations the concept of revenue sharing in a "trusteeship zone" of the continental margin was advanced by the United States. Presumably these revenues would have been available for both coastal and land-locked States. Recent negotiations in Caracas, however, showed little enthusiasm for revenue sharing in any zones close to the shores of a coastal State.

What then, are the alternatives? The land-locked African States, meeting at Kampala, Uganda, proposed that land-locked countries should have the right to share in the resources economic zones of an adjacent coastal State. While the Declaration of Kampala does not appear to have been accepted completely by the States of the Organization for African Unity (OAU), the concept did surface in several forms at Caracas.

Two particular variations were advanced. One theme would grant to the land-locked States certain rights to exploit the living and non-living resources of the economic zone of an adjacent coastal State. The second concept limited such rights to the living resources of the zone. It is not possible at this stage of the negotiations to estimate the support in favor of each of the options. It is believed, however, that the latter would generate more followers.

No specific proposals were made which address the many operational problems associated with these resource sharing suggestions. How would the allocations of resources or of derived wealth be made? One might imagine a fixed percentage of the allowable annual catch to be assigned to fishermen of the land-locked State. An alternative would involve an areal location within the economic zone being set aside as a "reserve" for such fishermen. As a third possibility, the coastal State could permit fishing vessels of certain classes belonging to the land-locked country to operate annually in the economic zone. The land-locked State could also be given first preference within its neighbor's economic zone to exploit the catch in excess of that capable of being taken by the coastal State fishermen, up to the maximum sustainable yield—or to some other equivalent limitation.

All of these concepts imply fishing vessels of the land-locked States operating in the economic zone of the coastal country. The spectre of "free ports" and transit rights for the land-locked State would then be raised. Would processing plants be permitted extra-territorially, or would the land-locked country be required to have its catch processed in the coastal State's plants? It might be more logical, perhaps, to permit the land-locked State to invest in joint stock companies, or to form joint ventures with coastal State entities. Time alone will tell how the complexities will be resolved. It does seem apparent, however, that land-locked countries will not be granted rights to concession zones for mineral exploitation in neighboring States' economic zones. Exclusive national jurisdiction over mineral resources of the adjacent seabed area has become a strongly ingrained concept which would be difficult to alter.

To a geographer, an intriguing question involves the right of land-locked States to operate in the economic zones of more than one adjacent country. Of the thirty land-locked States, two border on only one coastal country—San Marino (Italy) and Lesotho (South Africa). One land-locked entity, Leichtenstein, bounds only two other land-locked States—Austria and Switzerland. Afghanistan, however, borders the U.S.S.R., China, Pakistan, and Iran. Will Afghanistan eventually have exploitation rights in the economic zones of all four States?

On the opposite side of the coin, South Africa is bordered by a number of land-locked countries—Botswana, Swaziland, Rhodesia, and Lesotho. Will all four turn out to have equal access rights in South Africa's economic zone?

The problems of other geographically-disadvantaged States are not generally so complex. Even though Saudi Arabia is shelf-locked, no one would consider its shelf to be a hardship factor for the State. Furthermore, it has direct access to the open ocean for fisheries. Regional arrangements, it would appear, offer the best alternatives for these disadvantaged States. As with the land-locked countries, the opportunities for revenue sharing from specific geographic areas or joint ventures could constitute at least a partial solution to the perceived problems of geographic inequity. In view of the inequalities which exist in the geographical distributions of both living and non-living resources within economic zones of the world, the issue of reallocations of future wealth from these zones

may prove to be one of the most difficult to resolve following LOS III.

IV. The Impact on Marine Boundary Delimitations

The LOS III discussions at Caracas did not really focus on problems of boundary delimitation. Underlying the discussions there appears to be a belief that the existing principles of the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone, the Continental Shelf Convention, and certain International Court of Justice cases, as well as existing State practice, will be maintained pretty much in toto, with perhaps minor modifications.

Generally speaking, the existing Conventions, laws and practices provide for boundaries in the marine environment to be determined primarily by negotiations between the States involved. Historic rights and undefined "special circumstances," should also be considered. The 1958 Conventions, however, mention only one specific principle, that of equidistance, which has become virtually a "conventional wisdom."

One may, in fact, look at the existing law from two different directions:

1) The law is effective and useful as may be witnessed by the existing offshore boundary agreements; or,

2) The law is too vague to be useful, as indicated by the fact that most coastal States have not even delimited mutual territorial sea boundaries, let alone continental shelf limits which are generally further seaward. If this latter position is true, how may we use existing delimitation principles for the even greater geographic distances involved with the 200-mile economic zone?

An examination of current offshore boundary agreements shows that most of these pertain to narrow, semi-enclosed areas where valuable petroleum deposits are known to exist—*i.e.*, the North Sea, the Persian Gulf, and the waters adjacent to Indonesia. Other agreements have been reached between States such as Italy-Yugoslavia, Finland-U.S.S.R., and Japan-Korea. In the Americas, three territorial sea and continental shelf boundaries have been delimited. Two U.S.-Mexican boundaries extend to 12 miles from the baseline, and the Argentina-Uruguay agreement covers their claimed 200-mile territorial seas. There are vague rumors of a Mexican-Guatemalan offshore boundary agreement as well as rumors that Chile, Ecuador and Peru have an agreement which may be said to "delimit" their common boundaries in a general way. Elsewhere, no limits have been agreed upon.

Does the relative scarcity of offshore boundary agreements throughout the world reflect a lack of need for precise offshore limits at this time, or are there serious problems inherent in the existing rules and regulations? We suggest that the latter is a more realistic answer, *i.e.*, that the existing parameters for maritime boundary delimitations are too vague and imprecise. However, it is realized that it may not be possible at this time to negotiate any major changes in the existing law. Each negotiating State would view proposed changes in the light of its own real or perceived problems with adjacent or opposite States.

Some of the difficulties inherent in offshore delimitations are due in part to the enshrinement of the equidistance principle and to the acknowledgement of the presence of special circumstances. While no catalog has been made of the latter in the creation of equidistance boundaries, the existence of nearby islands has often become a major source of controversy. Situated seaward of most basepoints used for the development of an equidistant boundary, these islands will be the last determinant points in the boundary delimitation. The State without islands perceives an island-rich neighbor as having an unfair advantage in the delimitation process.

Because of certain State practices some general "principles" of delimitation have developed. A number of these have been examined in Robert Hodgson's study of islands[7] and need not be discussed in detail here. There are orderly means to assign values to islands which may be negotiated. The actual practices of certain States with regard to delimitation are published in The Geographer's Series, *Limits in the Seas.*[8]

It does appear vital that LOS III face, in more specific terms than it has up to now, the problem of how islands should be used to eliminate or reduce inequitable divisions of the economic zones of coastal States. In the absence of more specific principles, the final Convention could, of course, create a boundary tribunal to assist in national (as well as internal) delimitations. An alternative proposal would be the use of the International Court for settling

7. R. Hodgson, *Islands: Normal and Special Circumstances*, in LAW OF THE SEA: THE EMERGING REGIME OF THE OCEANS 137-201 (Proceedings of the Eighth Annual Conference of the Law of the Sea Institute, 1973).

8. OFFICE OF THE GEOGRAPHER, BUREAU OF INTELLIGENCE AND RESEARCH, U.S. DEP'T OF STATE, continuing series.

boundary disputes, coupled with provisions for compulsory arbitration. Such arrangements, however, could prove to be extremely difficult to negotiate within the climate of LOS III. But the alternatives may be even less desirable. One consequence might be that of the lack of agreed-on offshore boundaries. For the economic zone would inhibit, if not prevent, the exploitation of the zonal resources. A greater evil, of course, would be actual conflict over disputed offshore territories.

LOS III is also facing another delimitation question—that of archipelagos. The issue here may be stated as follows: do certain mid-ocean, insular States have the right to draw baselines about their islands and to claim the enclosed waters either as internal or as special archipelagic waters? Interestingly enough, some of these mid-ocean States would become contiguous to one another as a consequence of a 200-mile economic zone. The archipelago concept appeared in its conception as primarily resource-oriented. But as the economic zone idea has evolved in the U.N. Seabed Committee and at LOS III, the archipelagic principle has taken on more of a security connotation.

The chief difficulty with the principle arises from the profound influence its application would have on world shipping and the movement of naval vessels. If the concept of guaranteed transit through archipelagic waters can be wedded to the political concept of closing off inter-island waters from the regime of the high seas, the effects on the extent of the 200-mile economic zone would be minimal. This statement is premised, however, upon a conservative and restricted application of the archipelago principle. This principle cannot be applied to all island groups under the same sovereignty which are located within a single ocean. Only a few such cases truly qualify as archipelagic States.

V. The Impact on Traditional Freedoms of the High Seas

In the 1958 Geneva Convention on the High Seas, four freedoms were specified as pertaining beyond the limits of the territorial sea. These were: (1) freedom of navigation; (2) freedom of fishing; (3) freedom to lay submarine cables and pipelines; and (4) freedom of flight over the high seas. In addition, acknowledgement was made of those other high seas freedoms "which are recognized by the general principles of international law," a phrase which is sometimes taken to include freedom of scientific research. In addition, article 16 of the Convention on the Territorial Sea and the Contiguous Zone guarantees against the suspension of the right of innocent passage of foreign ships through straits which are used

for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State. These freedoms have, for the most part, been traditionally a part of the high seas regime. What would the impact be on these freedoms if a 200-mile economic zone were established world-wide?

Navigation and Overflight

Most of the economic zone proposals made at Caracas favored freedom of navigation and overflight beyond territorial limits, although there were some differences. China, for example, suggested recognition of the right of innocent passage in the economic zone, rather than freedom of navigation; innocent passage might not also include the right of overflight. There were also references by countries such as Brazil to free transit of non-military, as opposed to military, ships in the economic zone.

The status of navigation and overflight rights in the zones of the nine Latin American 200-mile States is somewhat cloudy. Three years prior to the Caracas session, F.V. Garcia-Amador surveyed the Latin American 200-mile claims and concluded that three of these were "claims to a territorial sea *stricto sensu*, that is, a maritime space subject to a legal regime like the one established by the Geneva Convention on the Territorial Sea and the Contiguous Zone."[9] These were the claims of Brazil, Panama, and Ecuador. The author noted, however, that the Ecuadorian Decree of 1966 "provides for the establishment of 'different zones of the territorial sea by executive decree . . . (which) shall be subject to the regime of free maritime navigation or of innocent passage for foreign ships.' "[10] The author also noted that "[w]ithout exception the unilateral claims of the remaining countries recognize free navigation; those of Argentina, Chile, Costa Rica, El Salvador, Peru, and Uruguay do so expressly, and Nicaragua's claim does so implicitly. They also recognize tacitly or expressly (the latter in the case of Argentina and Uruguay) free air navigation or overflight . . . ."[11]

This division of Latin American claims was reflected only in part at Caracas. Brazil favored innocent passage in the belt contiguous

9. Garcia-Amador, *Latin America and the Law of the Sea*, in THE LAW OF THE SEA: A NEW GENEVA CONFERENCE 104 (Proceedings of the Sixth Annual Conference of the Law of the Sea Institute, 1971).
10. *Id.* at 105.
11. *Id.*

to the coast and free transit in the remainder of the 200-mile zone exclusively for purposes of navigation, transport, and communications. Ecuador supported freedom of navigation and overflight in its 200-mile territorial sea, while Panama suggested only the right of innocent passage out to the 200-mile limit. Of the other six countries of the group, five recognized freedom of navigation and overflight beyond the immediate coastal belt, but the sixth, Peru, spoke only of the sovereignty of the coastal State over the 200-mile zone.

The issue of the breadth of the territorial sea (within which only innocent passage is permitted and overflight is banned except with coastal State consent) was still an open one at Caracas. At the time of the session 54 countries were claiming a twelve-mile territorial sea, 41 claimed distances less than twelve miles, 20 claimed more than twelve miles (of these ten claimed 200 miles), while the remaining five coastal States reported no specific claims. Some proposals, such as those of Albania, North Korea, and Guinea-Bissau, recommended that States be free to fix their own territorial limits up to a 200-mile maximum. However, most of the countries appeared to favor a "package" arrangement of a twelve-mile maximum for the territorial sea, coupled with a 188-mile maximum for the economic zone.

The resolution of the issue relating to passage of submerged submarines through the economic zone is an uncertain one. Does "freedom of navigation" also include freedom of submerged passage, both of military and non-military submersibles? And in those cases where countries claim extensive territorial limits, would such States seek to impose special restrictions on the transit of submerged vessels?[12]

The general trend at Caracas seemed to be in favor of minimizing interference with foreign navigation and overflight within the 200-mile economic zone. The suggestions of such countries as China and Brazil with respect both to innocent passage and separate treatment for military vessels represented only a minority position.

Laying of Submarine Cables and Pipelines

This type of activity was guaranteed for foreign States within the economic zone in the proposals at Caracas. One of the few suggested restrictions was in a working paper of the Chinese, pre-

12. Article 14 of the Geneva Convention on the Territorial Sea and the Continguous Zone requires that within foreign territorial sea, submarines must navigate on the surface and show their flag. Yet, as noted earlier, few of the 200-mile claims of the Latin Americans are to a territorial sea *stricto sensu.*

pared prior to Caracas, which stated that "[t]he delineation of the course for laying cables and pipelines in the sea-bed of the economic zone is subject to the consent of the coastal State."[13] Obviously, the laying of submarine cables and pipelines by one country in another's economic zone must not interfere unreasonably with the activities of the coastal State in that zone.

Fishing

Throughout history, one of the basic rationales for extending coastal State jurisdiction farther and farther out into the sea has been to expand the exclusive rights of the country over its offshore fishery resources. The gradual extensions of territorial sea breadths prior to and following the 1958 Geneva Conference were made essentially for the purpose of fisheries control; and following the Conference extra-territorial exclusive fisheries zones were established, most of them out to a maximum of twelve miles offshore. At the time of the Caracas session, at least 20 countries still claimed less than twelve miles for their territorial sea, but maintained an exclusive fisheries zone between their outer territorial limits and twelve miles from shore. Eleven other countries, claiming a twelve-mile territorial sea breadth, had exclusive fisheries zones which extended seaward from that limit.[14]

The early 200-mile claims were made primarily in the interest of fisheries control. The Chilean Declaration of June, 1947, proclaimed national sovereignty over the seas adjacent to its coasts "within those limits necessary in order to reserve, protect, preserve and exploit the natural resources," while Peru, in the same year, extended its national sovereignty and jurisdiction "to the extent necessary to reserve, protect, maintain, and utilize natural resources and wealth."[15] Some years later, Andres Aguilar wrote: "As for the extension of the rights of the coastal State, the first and most important is the right such a State would have over the resources

13. *See* Aguilar, *The Patrimonial Sea or Economic Zone Concept*, 11 SAN DIEGO L. REV. 579, 588 (1974).

14. OFFICE OF THE GEOGRAPHER, BUREAU OF INTELLIGENCE AND RESEARCH, U.S. DEP'T OF STATE, *National Claims to Maritime Jurisdiction*, in LIMITS IN THE SEAS No. 26 (2d Rev. 1974).

15. *Quoted in* Ferrero, *The Latin American Position on Legal Aspects of Maritime Jurisdiction and Oceanic Research*, in FREEDOM OF OCEANIC RESEARCH 97-137 (W. Wooster ed. 1973).

of the zone. This right, is in fact, the distinctive, essential feature of this new juridical concept."[16]

In addition to extensions of coastal State fisheries zones there have been efforts by regional fisheries organizations to enact conservation regulations in parts of the high seas, and in a few cases to go beyond this to some form of allocation arrangements. Albert Koers lists nearly two dozen international fisheries commissions and councils now existing throughout the world, all of them associated in one way or another with conservation efforts.[17] Some, such as the North-East Atlantic Fisheries Commission and the Inter-American Tropical Tuna Commission, are very active in setting regulations beyond territorial and exclusive fisheries zone limits. These include mesh sizes, closed areas, and closed seasons. The International Commission for the Northwest Atlantic Fisheries has even gone so far as to set national quotas for the total amount of fish to be harvested in an area by individual countries. While such activities are in a sense abridgements on freedom of fishing on the high seas, it should be noted, first, that decisions within such organizations are generally made on the basis of consensus; and, second, that any country is eligible to join such organizations and to participate in the fishery.

There can be little doubt that the adoption of a 200-mile economic zone on a global basis will have a tremendous impact on traditional fishing activities. Over 90 percent by volume of the world commercial catch is estimated as being taken within 200 miles of land. Countries with important distant water fleets, such as Japan, the Soviet Union, Poland, Spain, South Korea, Thailand, Romania, West Germany, and the United States, will be seriously affected by the new limits; in the case of Japan, it is estimated that some 45 percent of its total harvest is taken within 200 miles of a foreign coast. Outside of tuna, whales, and anadramous species such as salmon (which are for the most part protected by treaty), there is little of current economic value in the deep oceans. Lantern fish, Antarctic krill, sharks, squids, and dolphin, all found in the ocean are largely unutilized, and their potential has not been determined.[18]

Within the exclusive economic zone of countries what arrangements will be made for conserving and utilizing the stocks? How can the coastal States realize the wealth from full fisheries exploit-

16. Aguilar, *supra* note 13, at 584.

17. A. KOERS, INTERNATIONAL REGULATIONS OF MARINE FISHERIES: A STUDY OF REGIONAL FISHERIES ORGANIZATIONS (1973).

18. *See* J. GULLAND, THE FISH RESOURCES OF THE OCEAN 205-18 (Rome: Food and Agriculture Organization of the United Nations, FAO Fisheries Technical Paper No. 97, 1970).

ation off their coasts? Will the total world catch decline as foreign fleets are denied access to their traditional fishing grounds? What obligations will countries be under to observe international conservation regulations within their economic zones? The answers lie in part in the type of regime which ultimately emerges from the LOS III negotiations.

The United States, in its August, 1974 draft proposal, has suggested a full utilization concept coupled with a priority system for foreigners. Under this formula, that portion of the total allowable catch within the economic zone which is not harvested by coastal State nationals will be allocated first to States which have traditionally fished the area; second to other States in the region, particularly land-locked countries and those with limited access to living resources off their coasts; and third to other States. But neither the full utilization concept nor the system of priorities favoring countries with historic fishing rights won much support at Caracas.

What seems more probable, at least in the immediate years following LOS III, is that within the economic zone coastal States will for the most part maintain exclusive rights to their offshore fishery resources, and any non-national fishing will have to be accomplished through bilateral or regional negotiations. The coastal State will lease to foreign countries the right to fish its unutilized stocks under conditions established and maintained by the coastal State itself.

In some areas the pioneer conservation efforts of international fisheries commissions will continue to apply in the economic zones of member States and eventually the commissions involving recent entrants into the world fisheries will also begin to gain acceptance. There will also be efforts toward regional exploitation such as those in the Caribbean Sea, where nations of neighboring States may participate in common fisheries beyond territorial limits. But such procedures, along with the implementation of land-locked States' rights to share in the harvest of neighboring countries' economic zones, will probably be many years in evolving.

What will be the impacts? In the short term, the world fisheries catch may decline as foreign fishing tapers off in certain offshore grounds (*i.e.*, off Northwest Africa, southern Argentina, and in the Gulf of Guinea), and as coastal States are themselves unable to harvest the full potential. At the same time the distant-water

fleets of several countries will experience considerable economic hardships as the costs of operations increase, and as they are forced to concentrate more on hitherto unutilized species. The general cost of fish to the consumer will probably rise.

But there is also the potential for long term gains. With protected fisheries coastal States can institute meaningful management programs. Their own nationals can gradually work into the commercial fisheries industry, and through cooperative arrangements with foreign countries and companies, the fisheries can be expanded and improved. In time, regional arrangements may be worked out whereby geographically disadvantaged countries can share in the new wealth. Under such pressures the tradition-bound fishing industries of developed maritime powers will be forced to reorganize and to more effectively harvest the fisheries resources of their seas. Eventually the total world catch should again climb to points well above current production levels. And new countries, with extensive offshore resources, should emerge as major fishing powers. Among such countries would be Canada, Mexico, Brazil, Argentina, Australia, New Zealand, South Africa, and Indonesia.

Scientific Research

At the time of the 1958 Geneva Conference, a distinction was drawn between foreign research beyond territorial limits, which dealt with the seabed and subsoil, and research in the superjacent waters. Article 5(8) of the Continental Shelf Convention reads:

> The consent of the coastal State shall be obtained in respect of any research concerning the continental shelf and undertaken there. Nevertheless, the coastal State shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research . . . .

So far as the water column and water surface beyond territorial limits are concerned, the countries interested in conducting scientific research off foreign shores have tended to assume that this activity is one of the high seas freedoms subsumed under the phrase "recognized by the general principles of international law."

Space does not permit a detailed analysis of the difficulties encountered in trying to distinguish "pure" or "bona fide" oceanographic research from research intended for economic or military purposes, nor a discussion of the fears of at least some developing countries of the adverse consequences of unrestricted foreign research (even of the "pure" variety) off their coasts, and of the proposals by developed maritime States to fulfill obligations to the

coastal State in exchange for retaining the freedom of research principle in the waters beyond territorial limits. Many excellent articles have appeared in recent years on these topics.[19] What is important here is the potential for restricting freedom of scientific research in the economic zone, and some of the problems attendant to such a restriction. During the early plenary session at Caracas, 29 countries spoke in favor of coastal State control over scientific research in their economic zones. Subsequently, 54 other States indicated similar positions through support of draft articles,[20] bringing the total of opponents to the freedom of research issue to 83, or 55 percent of the independent States of the world. Countering this at the Caracas plenary session were twelve States in favor of the freedom of research concept, a figure which was subsequently expanded to 21.[21]

If the decision is made to extend the consent requirement for scientific research to the waters of the economic zone, what will the effect be on research activities? Is there really a serious threat, or do the research scientists primarily face the prospects of increased inconvenience in obtaining permission to continue doing what they have been doing up to now anyway? Commenting on this theme, Judith Kildow writes:

> The changing status of freedom of access for oceanic research is difficult to document with precision because adequate reliable records are seldom available. Ironically, oceanography, a field which prides itself on precision in data collection and scientific record-keeping, has an unusually poor record of the political and sociological aspects of its research cruises . . . until last year, when efforts to standardize State Department procedures for processing the requests [for research relating to foreign continental shelves] were begun, many of the reports and discussions of important difficulties [encountered] were conducted by phone and

19. *See, e.g.*, the articles in Wooster, *supra* note 15, and Knauss, *Developing the Freedom of Scientific Research Issue of the Law of the Sea Conference*, 1 OCEAN DEV. & INT'L L.J. 93-121 (1973).

20. Data on countries' positions at Caracas subsequent to the plenary session from Appendix A of E. Miles, *An Interpretation of the Caracas Proceedings*, in LAW OF THE SEA: CARACAS AND BEYOND (W.T. Burke ed. in press).

21. Countries favoring the freedom of scientific research principle in the economic zone were Belgium, Bulgaria, Byelorussian S.S.R., Costa Rica, Denmark, Finland, France, West Germany, East Germany, Hungary, Iceland, Netherlands, Poland, Switzerland, South Africa, U.S.S.R., United Kingdom, United States, Ukranian S.S.R., Uganda, and Upper Volta.

these conversations were rarely recorded or referred to in correspondence.[22]

One of the few statistical analyses available was made by Conrad Cheek of the Naval Research Laboratory.[23] On the basis of 339 responses to a questionnaire he found that the distribution of research at sea is estimated to be 50 percent on and above the continental shelf, 30 percent beyond the continental shelf but landward of 200 nautical miles, and 20 percent beyond 200 nautical miles from land.

> For most of the 28 report rejections of clearance requests, either no reason was given or rejection was attributed to diplomatic difficulties not necessarily related to marine research. The 22 reported abandonments of clearance requests were attributed mainly to long delays, discouraging statements, or actions encountered during clearance process.[24]

The sampling base Cheek used is admittedly limited in scope, but it serves to point up both the geographic locale at least of U.S. oceanic research (80 percent within the proposed economic zone), and some of the difficulties which up to now have been encountered in obtaining approval of clearance requests for shelf related research. The author also noted the attitudes of marine scientists toward the requirements and restrictions coastal States impose as requisites for the granting of clearances.

> The results show that U.S. scientists undertaking open research would probably not object to a coastal State's desires for participation and training of its personnel and for ensuring that research conducted in waters under its jurisdiction conforms to stated intentions. But the more bothersome requirements were those involving jurisdiction over raw data and/or samples, publication rights, substantial time and/or expense, and substantial modification of research plans.[25]

There seems little doubt that the ocean science community will be among the user-groups most strongly feeling the impact of the economic zone regime. The costs of carrying out research off foreign coasts will rise considerably. "The operational cost of an oceanographic research vessel typically exceeds $3,000 per day, so any coastal State requirement that increases ship time is a serious financial matter. In some cases, the unattractive alternative to additional ship time is to delete other planned projects or oceanographic stations."[26] At a time when the needs for oceanographic

22. *Nature of the Present Restrictions on Oceanic Research*, in Wooster, *supra* note 15, at 8-9.
23. Check *Law of the Sea: Effects of Varying Coastal State Controls on Marine Research: A Survey of the U.S. Ocean Science Community*, 1 OCEAN DEV. & INT'L L.J. 209-21 (1973).
24. *Id.* at 210.
25. *Id.*
26. *Id.* at 218-19.

research are growing, particularly with respect to such activities as global pollution and weather forecasting, and when the costs of research even under existing conditions continue to rise, it is ironic that major new impediments are soon to be placed on the freedom of action of scientists in those parts of the world ocean which seem to be most important to the acquisition of oceanographic knowledge.

Transit Through International Straits

The conditions under which foreign vessels may transit (or overfly) straits used for international navigation is not a problem directly related to the economic zone regime except insofar as these vessels pass through the zone en route to and from the strait. The problem is more one of the breadth of the territorial sea of the country or countries bordering the strait. According to one naval analyst, a universal six-mile territorial limit would result in 52 major international straits coming under the sovereignty of coastal States, while a twelve-mile limit would affect 116 straits.[27]

Assuming there were freedom of navigation, overflight and free transit of submerged submarines through all economic zones of the world, the straits problem would not be a relevant one in considering this regime. Even if restrictions were placed on the passage of certain types of foreign vessels, access routes might be established through the economic zone to and from the straits. But considering the explosive political nature of the international straits issue in LOS III negotiations it is difficult to believe that some attempts may not be made by countries opposed to the free transit through straits concept to becloud the issue by bringing in the issue of transit through the economic zone to and from the straits.

VI. THE IMPACT ON OTHER USES OF THE SEA

The 1958 Geneva Conventions do not mention the exploitation of seabed resources beyond the limits of national jurisdiction on the continental margin. Presumably, such exploitations should be included as one of the freedoms of the high seas, although the emergence of the "common heritage of mankind" principle has

27. B. Harlow, *Freedom of Navigation*, in THE LAW OF THE SEA: OFFSHORE BOUNDARIES AND ZONES 188, 193 (Proceedings of the First Annual Conference of the Law of the Sea Institute, 1966).

meant that the development of such resources is planned as coming under the control of the international community.

Pollution control is another activity which has become increasingly internationalized—in this case beyond the limits of the territorial sea.

> The International Convention for the Prevention of Pollution of the Sea by Oil, which was concluded in 1954 and amended, under the auspices of IMCO (Inter-Governmental Maritime Consultative Organization), in 1962, 1969, and 1971, places steadily increased controls on ship practices in this regard. Under the 1954 and 1962 versions of the Convention, the discharge of oil or oily mixtures was prohibited within specified zones; the 1969 and 1971 amendments do away with the system of prohibited zones and in principle prohibit oil discharge (except under carefully limited conditions) more stringently than those previously applicable.[28]

Although it can only recommend, rather than require action by member States, IMCO has proven to be a strong leader in the battle against pollution of the world ocean. The question here, as in the case of other uses, is what effects will the new economic zone regime have on global pollution control efforts?

A third activity relates to the military uses of the sea. Mention has already been made of the issue of free passage of military vessels through another country's economic zone. Another element here is whether or not military vessels passing through a foreign economic zone enjoy the right of "sovereign immunity" so far as compliance with the coastal State's pollution control standards are concerned. Still another is whether or not one State is free to use another's continental margin for non-resource uses, such as for implanting detection devices on the seabed.

Finally, there are the more exotic activities, such as use of the oceans for energy, for installations on the top of seamounts, or for the construction of artificial islands on reefs. The economic zone regime may have an impact on these issues as well.

Seabed mining operations

Much has been written with respect to the seabed, both as to where to place the outer limits of national jurisdiction over seabed resources and the need for an international authority to control seabed resource development in the area beyond those limits. A 200-mile economic zone would include within its limits all present and currently feasible oil and gas exploitation activities on the continental shelf. In the few areas where the seaward portions of the

28. Hardy, *Offshore Development and Marine Pollution*, 1 OCEAN DEV. & INT'L L.J. 239, 244 (1973).

shelf are more than 200 miles from land depths are sufficient to discourage much exploitation under current technological conditions.[29]

It is with respect to the manganese nodules of the seabed that the principal problem arises from the economic zone concept.

> A 200-mile limit might bring under national jurisdiction large areas of the ocean floor covered with high grade manganese nodules, particularly in the central Pacific area. In that case, nodule mining could commence with national jurisdiction, independently of the establishment of an international regime for deep seabed resources. . . . Nodules are found on all oceans and even on some inland lakes, but it is in the Pacific Ocean that nodules with the highest metallic content of nickel, cobalt, copper and manganese have been found.[30]

Some of the more economically viable concentrations lie within 200 miles of Pacific islands, raising the problem not only of the extent of "common heritage" nodule resources of the international area, but also of the ownership of disputed Pacific islands, such as Clipperton, Canton and Enderbury, as well as the status of artificial islands such as the one proposed in 1972 for the Minerva Reefs south of Tonga.[31]

But the presence of commercially valuable nodules within 200 miles of land in the central and northern Pacific may be something of an anomaly. J. Albers and R. Meyer report that on a global basis, "[k]nown occurrences within 200 nautical miles of coastlines are rare,"[32] and they go on to note that "[i]t seems unlikely that a viable manganese-nodule mining operation will come into being within the probable jurisdictional limits of a coastal nation."[33] As if echoing the latter two authorities, the U.N. Secretariat, after extensive investigation, concluded that "[a]bout 17 percent of all the

29. For a discussion of variations in shelf breadths and depths, *see* Burke, *Consequences for Territorial Sea Claims of Failure to Agree at the Next Law of the Sea Conference*, in THE LAW OF THE SEA: A NEW GENEVA CONFERENCE 37-46 (Proceedings of the Sixth Annual Conference of the Law of the Sea Institute, 1971).

30. Kanenas, *Wide Limits and 'Equitable' Distribution of Seabed Resources*, 1 OCEAN DEV. & INT'L L.J. 137, 140 (1973).

31. *See* Auburn, *Some Legal Problems of the Commercial Exploitation of Manganese Nodules in the Pacific*, 1 OCEAN DEV. & INT'L L.J. 185-201 (1973).

32. Albers & Meyer, *New Information on Worldwide Seabed Resources*, 2 OCEAN MANAGEMENT 61, 74 (1974).

33. *Id.*

nodules containing more than 1.2 percent nickel, —but only 10 percent of the nodules containing at least 1.2 percent nickel and 0.8 percent copper,—were found within 200 nautical miles of land."[34] So there may conceivably be some early action in manganese nodule exploitation in the Pacific Ocean—some of it within 200 miles of land—but over the long run, it would seem that such exploitation will be carried on well away from the coast and thus beyond the limits of any country's economic zone.

It was noted earlier that recovery of hydrocarbons has occurred, and in the foreseeable future will continue to take place, within 200 miles of the shore. But some States are already looking into the more distant future and are suggesting that national control over the resources of the seabed and subsoil be extended well out onto the continental margin if the margin extends more than 200 miles offshore. Such has been the position of the Latin American countries (as opposed to the African block which supports only the 200-mile zone) and such is also the position of the United States. The U.S. draft articles of August 8, 1974, refer to the continental shelf as "the sea-bed and subsoil of the submarine areas adjacent to and beyond the territorial sea to the limit of the economic zone or, beyond that limit, throughout the submerged natural prolongation of the land territory of the coastal State to the outer limit of its continental margin . . . ."[35] At the Caracas plenary session, Bangladesh, Canada, India, Ireland, South Korea, Turkey, and the United Kingdom also supported the principle of extending national seabed limits to the outer edge of the continental margin, if this lay beyond the 200-mile economic zone limit.

The extension of national controls over seabed and subsoil resources to the outermost portions of the continental margin (*i.e.*, the shelf, slope, and rise) implies that all revenues derived from hydrocarbon exploitation on the margin would go to the coastal State, rather than to an international fund. While it may be many decades before significant exploitation of oil and gas occurs on the shelf and slope, the closing off of even this long term potential source of revenue might be seen by some as unjustified nationalism. Partly in response to such a position, the United States draft articles propose that a portion of the revenues derived from the exploitation of non-renewable resources of the seabed, seaward of the territorial sea or the 200-meter isobath, whichever is farther seaward, be used for international community purposes, particularly

34. *Economic Significance, in Terms of Sea-Bed Mineral Resources, of the Various Limits Proposed for National Jurisdiction*, U.N. Doc. A/AC.138/87 (1973).

35. A/CONF.62/C.2/L.47, art. 22.

for the benefit of developing countries. As noted earlier, this proposal met with virtually no support whatever at Caracas.

Pollution Control

The environmental issue within the economic zone involves primarily the question of who shall establish and enforce pollution control standards beyond territorial limits, the coastal State, the international community, or (in the case of enforcement) the flag State? Not surprisingly, at the Caracas plenary session, most of the major maritime States favored the observance of international pollution control standards within the economic zone—a stance also supported by such countries as Argentina, Bahrain, Honduras, Kuwait, Pakistan, Somalia, and Thailand. Australia and Canada, among others, favored supplementary regulations imposed when necessary by the coastal State. However, Belgium warned that it might be dangerous to allow coastal States to impose additional requirements, although these States could see to it that the international standards were respected off their coasts. Opposing the "internationalists" were such countries as Bangladesh, France, and Spain which felt that the coastal State had special rights to pollution control activities in its economic zone. Barbados felt that pollution control measures should not impede the industrial growth of developing countries. The possibility of double standards in the economic zones of some developing nations is a very real one: one set of standards for ships of the major maritime powers and another set for the coastal State and for other developing countries.

Fewer States supported flag state enforcement than were in favor of uniform international standards. Among the supporters were the United States, France, Greece, Japan, and the United Kingdom—the latter noting that "genuine link" provisions should be strengthened. But the trend at present seems in the other direction. A great many countries are unwilling to continue the regime of flag state enforcement of pollution standards however they be established within the economic zone. Given these conditions, it is likely that there may be serious interference at times with international navigation, as vessels (particularly potential polluters such as oil tankers, LNG carriers and ammunition ships) pass through foreign economic zones. One view might be negative, inasmuch as port States may want the continued use of the vessels

in question. But if the ship or ships are merely transiting one State's economic zone in order to enter another State's port, unilateral action by the first coastal State might force the vessel to re-route so that it passes outside the economic zone, thereby increasing the cost of the voyage.

Military Uses

The question of whether the "sovereign immunity" principle for government owned ships in foreign waters applies to military vessels is a potentially important one in terms of the military's concern with the economic zone regime. Even if freedom of navigation were guaranteed for all foreign vessels in the zone, certain restrictions might be imposed in the interests of pollution control by the coastal State. Such restrictions could presumably be applied to oilers, ammunition ships, and nuclear submarines, and to vessels whose design and construction do not conform to the coastal State's environmental requirements—a stricture which might prove to be applicable to certain types of foreign military ships.

With regard to military uses of the seabed within the economic zone (and beyond the limits of that zone in cases where the seaward limits of national control on the continental margin are more than 200 miles from shore) an important element is the distinction between jurisdiction over the seabed as a whole and jurisdiction over only certain uses of the seabed, particularly uses related to resource exploitation. The United States draft articles of August, 1974, note in article 22 that "[t]he coastal State exercises sovereign rights over the continental shelf for the purpose of exploring and exploiting its natural resources,"[36] while article 28 grants to the coastal State "the exclusive right to authorize and regulate on the continental shelf the construction, operation and use of artificial islands and other installations *for the purpose of exploration or exploitation* of *natural resources or for other economic purposes* . . . ."[37] Such legal distinctions are considered by the military as being important to its current and future interests.

Other Uses of the Sea

In addition to the eight types of use noted above are those with more distant potential. At the present time these prospective uses do not seem to have serious interrelationship problems with the economic zone concept. Plans for the derivation of energy from the sea involve ocean areas near the coast for the most part. This

36. A/CONF.62/C.2/L.47.
37. *Id.* (emphasis added).

is true whether one is talking about tidal power, wave power, power based on thermal differences or the harvesting of ocean currents, or the use of ocean space as a site for nuclear or fossil fuel plants.

If seamounts are utilized for underwater installations this need not carry with it any right to a 200-mile economic zone. Artificial islands are not entitled under the 1958 Geneva Conventions to their own territorial sea; if this reasoning holds in the future they would not require an economic zone of their own. Floating cities, ports, and breakwaters would presumably remain close to land.

VII. Alternative Arrangements for the Economic Zone Following LOS III

It is, of course, risky to predict what the future might hold for a subject as complex as the law of the sea. The Third Conference may end in complete agreement, in complete disagreement, in partial agreement, or in agreement merely to continue the negotiation process for some years to come. The two alternatives suggested here are either (1) general agreement on the scope of coastal State competences in the economic zone; or (2) no agreement on the topic. In both cases it is assumed that some form of economic zone out to a maximum of 200 nautical miles from the coast will emerge from the LOS III negotiations.

1. *General agreement.* Instead of complete coastal State option as to the nature and extent of competence claimed in the economic zone, some agreement might include, first, a definition of international rights and responsibilities in the zone; and, second, provisions for mandatory regional arrangements. One of the first topics requiring agreement would be the breadth of the territorial sea. Hopefully, this would have a maximum of twelve nautical miles from the shore; those States with greater breadths would then be under pressure to reduce their claims to the twelve-mile figure, to redefine their national rights in the "territorial sea" so that beyond twelve miles they are consistent with the rights of other States, or else to stand out as "non-conformists" whose extravagant claims are not recognized by the international community.

Among the other international rights and obligations which might be secured through agreement are unrestricted freedom of navigation and overflight in the economic zone, and observance of international fisheries conservation and environmental protection

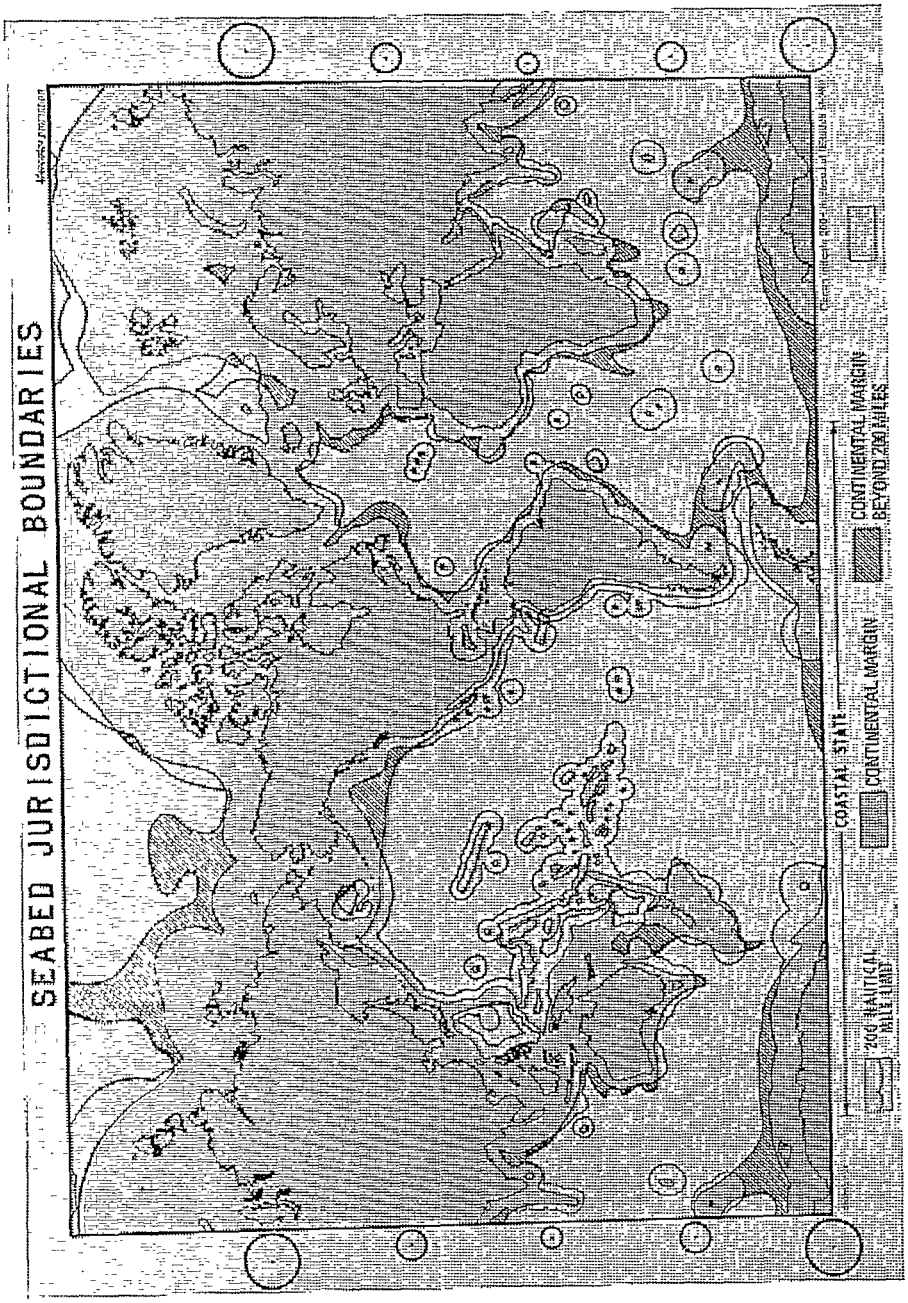
standards. On the issues of scientific research by foreign vessels, and of the establishment and enforcement of pollution control standards, the best that might be hoped for is some sort of compromise between coastal State and international community interests.

So far as regional arrangements are concerned, one consequence of agreement might be the creation of "compensatory groups," that is, regional associations which can provide access to the sea and its resources for land-locked and other geographically disadvantaged States. Despite the brave pronouncements of the Organization for African Unity and other bodies, the sharing of transit and port facilities, and sharing of at least the living resources of a coastal State's economic zone with its land-locked neighbor(s) may be a very difficult objective to implement. States with potentially rich economic zones, such as the United States, Canada, Australia, New Zealand, and Mexico have no land-locked or otherwise geographically disadvantaged neighbors to be concerned about. Others, such as the U.S.S.R., Brazil, Argentina, and Peru have only a few such neighbors. But for Tanzania, Zaire, Nigeria, and South Africa, the problem of adjacent land-locked countries is a very serious one. And if the burden of "compensatory grouping" falls unevenly on the coastal States of the world, one corollary of agreement may be some form of assistance to the geographically disadvantaged coastal countries upon whom demands are made for access to their economic zone by a number of land-locked neighbors.

2. *Non-Agreement.* One consequence of non-agreement might be conditions of "creeping jurisdiction" on the part of many coastal countries so far as their economic zones are concerned. Either they might extend their territorial claims to the outer limits of the zone, or else assert special rights in the zone to the point where it becomes virtually indistinguishable from territorial waters. Even freedom of navigation and overflight might in time be jeopardized. The recognition of international conservation and environmental control standards would be up to the individual State to decide, and any compensations to geographically disadvantaged States would presumably be on a bilateral basis.

There might also be regional arrangements, particularly in semi-enclosed seas, but these, initially at least, would be largely exclusionary in nature—excluding non-littoral warships, research and fishing vessels. Under a system of "closed" seas, as well as "closed" economic zones, a great many new adjustments would be necessary with respect to international uses of the world ocean.

APPENDIX A


SEABED JURISDICTIONAL BOUNDARIES
COASTAL STATE
CONTINENTAL MARGIN
CONTINENTAL MARGIN
BEYOND 200 MILES
200 NAUTICAL
MILE LIMIT