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MINING RIGHTS AND THE GENERAL INTERNATIONAL LAW REGIME OF THE DEEP OCEAN FLOOR*

L.F.E. Goldie**

I: Introduction

A. A Problem of Time Horizons

The sessions of the Third Law of the Sea Conference at Caracas and Geneva have ended inconclusively. Further sessions are awaited, not so much with impatience and an eager anticipation that the Great Charter of Man’s Shared Values in the Sea is on the verge of its hailed completion, as with a disillusioned resignation. Even those observers, commentators, and participants who publicly express unstinted optimism1 that future sessions of the Third Law of the Sea Conference will produce a work product commensurate with the money and time invested seem to anticipate a “treaty” formulated in terms so nebulous as to do little

* This article is based on a lecture given by the writer to the Committee on Undersea Mineral Resources of the American Mining Congress on January 20, 1975. See also Goldie, A General International Law Doctrine for Seabed Regimes, 7 Int’l Lawyer 796 (1973).

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more than paraphrase the platitudes of this new area of diplomatic intercourse. Such a "treaty" can be envisioned as a result of compromise. Its bland generalizations would merely camouflage obstinate disagreement on basic issues, goals, and values. Such obfuscating formulae might provide rhetoric for public speakers; they could not provide the major premises of judgment or the governing principles for administration of a regime.

If a more specific agreement were miraculously to emerge from future deliberations of the Third Law of the Sea Conference, there would inevitably be considerable delay in its ratification by the minimum number of states required to bring it into force. If such a politically unlikely treaty to enter into force, it would still not be binding on non-adherents. For example, the most widely publicized and comprehensive draft, the United States Draft for a United Nations Convention for a Sea-Bed Regime, suffers from the hubris of an assumption by its draftsmen that it would become enthroned as a universal law and would exclude the possibility of coexistence with alternative regimes. While its silence on the status and rights of non-participants is perhaps understandable, its apparent assumption that non-signatory states could be bound by its terms would not appear to be in the best interests of either the regime or its promoting nation, the

2. See, e.g., Hon. Lee Metcalf, 1974 Status Report, supra note 1, at 822 where he stated:

While we agree that it would be preferable to discover and develop the seabed mineral resources under international law or under some kind of international agreement, we cannot wait until doomsday for such an agreement.

As I recall, something like 14 years of diplomatic chess games were involved in achieving at least one of the 1958 Geneva conventions with which we are concerned.

If we have spent 4 years on this one and have 10 to go, it will not be until George Orwell's 1984 that we have international agreement. In the meantime, I believe we should do what we can to help our nationals develop the mineral resources we need, at least to exert some measure of control over them, pending international agreement.

Mr. Stevenson, this subcommittee is after facts. We have had reports from some observers that progress at Caracas was measurable with only the most delicate of instruments.

United States. The attainment of compliance by non-signatory states might well involve extensive coercive action not permitted under contemporary international law.

There is a need to put the various proposals for regimes into perspective and to view them against the background of present international law governing deep seabed mining activities. This view may provide the basis for an interim regime, as well as determine the contours of international regimes which could develop in the absence of either an international constituent convention or international regimes arising out of the interactions of reciprocating domestic regimes.

B. Outline

At present, customary international law provides for the lawful taking of nodules from the beds of the high seas. While the high seas are common to all nations and cannot be appropriated by anyone or any nation, the wealth they contain can become the object of proprietorship. This distinction is illustrated by Grotius' quotation from Plautus:

[W]hen the slave says: 'The sea is certainly common to all persons,' the fisherman agrees; but when the slave adds: 'Then what is found in the common sea is common property,' he

4. For a criticism of the U.S. Draft from this standpoint, see Jennings, The United States Draft Treaty on the International Seabed Area—Basic Principles, 20 Int'l & Comp. L.Q. 433 (1971). See also id. at 450, where the author concludes his criticism of the U.S. Draft, after pointing out that its "paper universality" is of "doubtful pedigree" in the following terms:

There is surely more hope for an international regime that third States can, and indeed must, live with, or rather live alongside; than for one that third States, wishing to exploit what the present law regards as their exclusive resources, are almost compelled to defy; for in such a contest it is by no means clear that the novel international regime would prove the stronger.

The thrust of the article which follows is to investigate the contours of such a regime, which would govern the relations of states, with respect to deep seabed resources, anterior to the creation of a proposed treaty regime. It would also govern, after that point in time, the relations of states living "alongside" the treaty regime, both among themselves and with the states participating in that regime.

rightly objects, saying: 'But what my net and hooks have taken, is absolutely my own.'

Grotius also pointed out that states and individuals may not assert dominion over the air and sea which are “common,” or “public,” but that wild animals, fish and birds may be reduced to possession “[f]or if any one seizes those things and assumes possession of them, they can become the objects of private ownership.”

By analogy with Grotius’ traditional examples of fish and game, individuals have had the right of lawfully taking ambergris, sponges, pearl oysters, chanks, corals, bêche-de-mer, green snails, treasure from abandoned wrecks, and other ownerless items of food and wealth from the sea floor, after these items have been found and reduced to possession in areas beyond the limits of any national jurisdiction. When the scientists aboard HMS Challenger took the first manganese nodules found by Man from the seabed and claimed them on behalf of the expedition, their right to do so was not questioned. Justification for the appropriation is found in the right to take and own masterless goods which are capable of being possessed. At that time, the distinction made by today’s commentators between the taking of resources for purposes of “scientific research” or “exploration” and the taking for purposes of “exploitation” was not recognized.

The traditional Grotian justification for appropriation of goods is not the only one to be found in international diplomatic practice. The history of mining on Spitzbergen before the Treaty of Paris of 1920 is illustrative. In that agreement, the participating states withdrew their individual, inchoate claims to the Archipelago and quitclaimed them to Norway, subject to the retention of rights on behalf of their nationals and to further limitations upon other important aspects of Norwegian sovereignty. Each of the interested countries based its diplomatic posture on

7. Id.
9. One may also question the propriety of this contemporary lumping of “scientific research” with “exploration” in the context of seabed matters, when a great effort is being made by the proponents of the freedom of scientific research to distinguish them.
the assumption that general international law had previously
given and would continue to give its nationals not only title to
ccoal which they had severed from the ground and brought under
physical control, but also exclusive mining rights over the unsev-
ered and untouched coal lying in the ground within the mining
tracts. It should be noted that public notification had been given
of the miners' claims and recording had been appropriately effec-
tuated.

While the Grotian theory of appropriation is well known, an
international theory of exclusive rights with respect to the re-
sources of mining tracts has not received its due recogni-
tion—probably because the evidence of state practice in which it
is reflected and presumed valid has long remained buried in ar-
chival collections. This article will examine the international
legal implications of the diplomatic vindication of the appropro-
iation of rights to mine exclusively in tracts on Spitzbergen when
that Archipelago was a terra nullius. It will also touch upon con-
temporary doctrines governing the acquisition of possession, to
the extent that such discussion is necessary for development of
the argument that there exist customary international law doc-
trines alternative to those generally found by text writers and
stemming from Hugo Grotius' reliance on a crude notion of cap-
ture as the basis of possessoriy rights. Similarly, the assumptions
underlying the Guano Islands Act of 185611 would appear to tes-
tify to the belief of the United States Congress that under inter-
national law the discoverer of a guano deposit may, upon notice
of intent to mine, obtain an exclusive right to win, remove, and
place in commerce the content of the whole deposit. This article
will, therefore, briefly review the Guano Islands Act in order to
examine the recognition of exclusive rights in deposits, lodes,
banks, beds, or caches of valuable resources or goods. Such recog-
nition has been generally overlooked in international law.

One source of the intellectual myopia so prevalent in the
context of exclusive rights over the resources of the sea has been
an inability to perceive the appropriate units for measuring the
subjects of these rights. The recognition of sedentary fishery
rights in international law can be explained by regarding the
subject of the exclusive rights as the bed or deposit, not the
individual oysters, sponges, chanks, corals and other sessile
species which have been removed from the bulk. The unit of

appropriation should be the bed, lode, or deposit itself. Such units have long been the deposits, not the items severed therefrom. This thesis will be developed in a later section which compares coal mining on Spitzbergen to the taking of guano under both public international law and the legislation of the United States, and the long established duty of deference to rights with respect to historic sedentary fisheries.

II: INTERNATIONAL LAW AND RIGHTS OF POSSESSION

International law has developed only hazy concepts of possessory, usufructuary, and exclusive rights with respect to moveable property. The doctrine of occupation permits a state to acquire extensive tracts of masterless territory through acts which are not felt throughout the acquired region, while the same doctrine has been cited to limit the taking of fish or animals to only that portion which has been reduced to the taker's complete control.

In the Status of Eastern Greenland Case, the Permanent Court of International Justice recognized that in uninhabited or sparsely populated areas very little in the nature of possessory control may be required. Danish acts of sovereignty, performed mainly in the western and southern regions of Greenland, were held sufficient to exclude Norwegian claims to the northeastern coastal area of that vast plateau of ice. This extensive view of

12. Traditionally, rights could be established over a bed of sedentary resources: Exceptionally, on grounds based on historical and prescriptive considerations, it has been generally admitted that a limited portion of the bed of the open sea is capable of occupation by individual States for well-defined purposes, and entitled to recognition by other States. S. Colombos, International Law of the Sea 63 (5th ed. 1962). See also 1 Oppenheim, International Law 376 (7th ed. Lauterpacht 1949). Sir Hersch Lauterpacht, in his editorial capacity, saw fit to omit the phrase "by strictly local occupation" from the relevant passage at pp. 628-29 in the 8th edition (1955). Although the latter edition appeared after Sir Hersch's Sovereignty Over Submarine Areas, 27 Brit. Y.B. Int'l L. 376 (1950), there would appear to be little in that article which would directly justify the omission, and nothing at all in the passage quoted, or neighboring it. See also Young, Sedentary Fisheries and the Convention on the Continental Shelf, 55 Am. J. Int'l L. 359, 362, and especially n.14 (1969); Goldie, Australia's Continental Shelf: Legislation and Proclamations, 3 Int'l & Comp. L.Q. 535, 559-60 (1954); Goldie, Sedentary Fisheries and the North Sea Continental Shelf Cases—A Paradox Revealed, 63 Am. J. Int'l L. 536, 540 (1969) [hereinafter cited as Goldie, Paradox].


14. The Status of Eastern Greenland Case and the other cases cited in the preceding footnote have analogies in the municipal private law of adverse possession. Thus, in Kirby v. Cowderoy, [1912] A.C. 599 (J.C.P.C.), the Judicial Committee of the Privy
the unit to be brought under exclusive rights through the operation of the doctrine of occupation (when dealing with states' claims to acquire territory), has been considerably narrowed when applied to animals, fish, or such inanimate objects as jewels, treasures, or wrecks. The latter view has, indeed, turned on the notion of capture, as illustrated by Grotius' quotation from Plautus.\(^{15}\)

If a regime were established to govern the exploitation of seabed hard mineral resources based upon the primitive concept of capture which Grotius, some three and a half centuries ago, thought adequate to protect the rights of fishermen, there would be a free-for-all which would be most counterproductive for world welfare and world peace. While the number of enterprises with technological skills and interest in mining seabed resources are now relatively few\(^{16}\) and while they may, at present, be capable of divergent technologies appropriate for different seabed areas, such an idyllic situation will not exist indefinitely. As technologies become more flexible, as the number of enterprises increase, and as the pressure of competition escalates, businesses will even-

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Council held that where, in a wild and inaccessible part of British Columbia, the only act of possession which the adverse claimant performed was to pay all the taxes imposed upon the subject land for the limitation period of 20 years he had, nevertheless, effectively possessed it sufficiently to extinguish the owner's title. The adverse possessor had not resided on the land, improved it in any way, nor had he even used it as a holiday retreat. Given the nature of the terrain, the payment of taxes, without any other possessory or proprietary act, was viewed as the most reasonable course of conduct the adverse possessor might rationally be required to follow "with a due regard to his own interest." \textit{Id.} at 603 (per Lord Shaw). Similarly, \textsc{3 American Law of Property} 766-67 (1952) tells us:

Wild, undeveloped lands so situated and of such a character that they cannot be readily improved, cultivated or resided upon involve a very different degree of control evidenced by much less actual exercise of ownership by affirmative acts to establish possession.

\textit{See also} \textsc{7 R. P. Powell on Real Property} ¶ 1018 (1974).

15. See note 6 supra.

16. Three United States corporations are currently interested in mining hard minerals from the floor of the deep ocean, namely the Tenneco Corporation (whose offshoot, Deepsea Ventures, Inc. is also involved with an international consortium including Belgian and Japanese partners), the Kennecott Copper Corporation and the Hughes Tool Company. German and Japanese enterprises are in the process of formation in these countries, the latter with the generous support of very extensive government financing. \textit{Metals Week} writes of a total figure of a "$227 million semi-public venture to pursue deep-ocean mining and processing of manganese nodules." \textit{Metals Week} (Jan. 15, 1973) at 9; see also \textit{Metals Week} (June 11, 1973) at 2. The American Society of International Law Newsletter (Nov. 1974) at 1 reported that "46 firms with interests in deepsea mining in several different countries" were given notice of the "Notice of Discovery and Claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment" filed by Deepsea Ventures, Inc., with the Department of State on Nov. 16, 1974. \textit{See app. A infra}. 

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\footnotesize{\textsc{1975] Ocean Mining Rights} 7}
truly feel constrained to compete for the choicest sites and will attempt to exhaust them before their discovery by competitors. Such an uncontrolled state of affairs would result in further undesirable effects of overcapitalization, cause wild market fluctuations, and affect the world market prices of hard minerals from both the ocean floor and the land. The disasters of the West Texas oil fields of the early 1920's could be repeated in the hard minerals industry.

Additionally, the acceptance of a primitive right of capture could put title to minerals won from the floor of the deep ocean in jeopardy. Some states may consider one enterprise to be the finder, and hence the "true owner," of minerals placed in commerce, while other states may recognize a prior right to those minerals as inuring in some other enterprise, thereby leading to a situation of irreconcilable conflicts.

It is unnecessary to accept Grotius' theory of possession and a resulting "free-for-all" regime. Rather, rights to deepsea floor minerals may stem from another theory of possession. This may be viewed as a rejection of the limited notion of the acquisition of possessory rights which the Grotian theory requires or, alternatively, as a special customary view of possessory rights over minerals in situ governing the mining industry in the absence of state, national, or international legislation. Should the latter view prevail, Grotius' principle of possession would be inoperative in relation to the mining of hard minerals from deep ocean floors, although it would still prevail in other aspects of general international law governing the acquisition of moveable property.

A. A Reexamination of Possession

In discussions of gaining possession, as distinct from maintaining possession, international and domestic law systems have tended to focus unduly upon the relation of the possessor to a single item rather than to a collection or group. This focus has led to the development of doctrines stressing the need for specific, immediate, and active control by the possessor over the object possessed. A reexamination of cases from the Anglo-American

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17. For this distinction see O. HOLMES, THE COMMON LAW 215-16, 235 (1st ed. 35th Printing 1943) [hereinafter cited as HOLMES].
18. Id. at 216-19, 239, 245. For three common law examples, see Young v. Hichens, 6 Q.B. 606, 115 Eng. Rep. 228 (1844) (notwithstanding an opposite verdict, the Court of Queen's Bench decided that when pilchards were almost entirely surrounded by a net, with an opening occupied by boats stationed there to prevent the fish from escaping, they
common law which have long caused controversy among lawyers may illustrate the misleading effects of that focus when applied to familiar subject matter.

A note of caution, which may not be necessary, should be sounded possibly *ex abundancia cautela*. The common law cases on possession are not discussed because of any international authority which may be imputed to them, but because they illustrate universal problems. Furthermore, Mr. Justice Holmes tells us that while the "[theory of possession has fallen into the hands of the philosophers,]" it is important to show that a far more developed, more rational, and mightier body of law [*i.e.*, the common law] than the Roman, gives no sanction to either premise or conclusion as held by Kant and his successors. Finally, we may follow the practice of jurisprudential writers of drawing upon philosophers, civilians, and common law sources without discrimination when dealing with possession.

It is debatable whether the focus of attention on the possession of a specific object and on the need for the direct exercise of power over that object is reasonable in light of the cases usually cited in its support. The well-known cases of *Young v. Hichens* and *Pierson v. Post* illustrate the inequities caused by such focus. Plaintiff in the former case had almost entirely surrounded a school of pilchards with a net and had stationed boats at the opening to prevent fish from escaping. Defendant rowed through the opening and caught the fish with his own net. Plaintiff sought application of the whaling industry practice in which appropriation was considered to be complete when "fairly proceeding towards full accomplishment" because, at that point, the possessor's intent is clear and his control so manifest as to be entitled to protection. The Queen's Bench acknowledged this practice but found for defendant and limited the practice to situations like

had not been reduced to possession as against a stranger who rowed through the opening and caught them with his own net; *Pierson v. Post*, 3 Cai. R. 175 (N.Y. 1805) (action does not lie against a defendant who shot and killed, in full view of the plaintiff, a fox being pursued by the plaintiff, who had originally chased the animal); *Buster v. Newkirk*, 20 Johns. Cas. 75 (N.Y. 1822) (when plaintiff had wounded a deer and discontinued the hunt at nightfall, he resumed the hunt the next day to find defendant had killed and appropriated the injured animal; *Pierson v. Post* was held to govern).

19. HOLMES, supra note 17, at 206.
20. Id. at 210.
22. 3 Cai. R. 175 (N.Y. 1805). *See* description in note 18 supra.
the whaling industry where special customs govern. This reasoning has become conventional wisdom. Similarly, in *Pierson v. Post*, the New York Court of Appeals held that the defendant who shot and killed a fox had a claim of right superior to that of the plaintiff who had started and was in pursuit of the fox. Other well-known cases illustrate the inconsistencies caused by such focus. In *Bridges v. Hawkesworth*, a customer picked up a pocketbook which had been dropped onto the floor of the public part of a shop by another patron. The Court held that the customer could keep the pocketbook as opposed to the shopkeeper, who had no knowledge of the pocketbook before it was found by the customer. In *McAvoy v. Medina*, however, a barber was held to have a better possessory right than the finder of a pocketbook which had been left on a table in the barbershop. The usual explanation offered is that "a distinction [exists] between things voluntarily placed on a table and things dropped onto the floor" in that the former indicates "an implied request to the shopkeeper to guard it." *Kincaid v. Eaton* involved suit for a reward offered by the owner of a pocketbook. The claimant had found it on a desk installed by a bank for the use of its customers and located in the banking chamber outside of the teller's counter. The court held that the case did not involve the finding of a lost article and that "the occupants of the banking house, and not the plaintiff, were the proper depositaries of an article so left." Mr. Justice Holmes suggests that since the bank was a proper depository of the article, the decision can be viewed as deciding only "that the pocket-book was not lost within the condition of the offer."

A number of cases show how possession can be gained, recognized, and protected when the possessor's attention is not focused upon the object. It may be true that in such cases as *Elwes v. Brigg Gas Co.* and *South Staffordshire Water Co. v. Sharman*, the landowners' success in repelling the claims of finders of articles embedded in the soil of the land may be ascribed to a differ-

24. 21 L.J.K.B. 75 (1851).
26. HOLMES, supra note 17, at 222.
27. Id.
28. 98 Mass. 139 (1867).
29. Id. at 141.
30. HOLMES, supra note 17, at 223.
31. 33 Ch. D. 562 (1886) (a prehistoric boat embedded in the soil).
32. [1896] 2 Q.B. 44 (two rings buried in the mud of a pool).
ence between the standards required to protect the continuance of possession from those required for its acquisition. There are other cases, however, in which an entity with a unique, ambient character may be the source of some special or quasi-possessory claim. Thus, in *Hibbert v. McKiernan*, a golfing club was said to have a "special property" in golf balls lost by players which excluded any claim to them by a finder. It may be tempting to explain this case, clearly distinguishable from both the *Elwes* and the *Sharman* cases, on a number of different grounds: the balls remained on the surface of the land, the loss was relatively recent, a relation presumptively existed between the club and the players (members or their guests), and policy dictated the holding. A favorite academic device is the use of the following non-explanation: "the matter is, in the last analysis, simply a question of policy, which unfortunately is heavily obscured by a wholly irrelevant discussion of possession."

It may be tempting to resort to the touchstone of policy to explain the case, but such explanation may merely darken counsel. The word "policy" is meaningless as a legal concept, for after determining that policy dictated the holding, we still must define the term. Once a definition is given, we have at least a clue as to the legal values and principles involved. If, on the other hand, we shrug our shoulders and say that we should not attempt to reconcile these cases because "policy" dictated individual holdings, we are forced to conclude that the decisions reflect "palm tree justice" rather than legal principles.

It is submitted not that judges and juries have determined each case on the basis of merely what they felt to be inherent in the particular situation, but rather that commentators have overlooked other important factors. For example, the explanation of the golfing club's "special property" in *Hibbert v. McKiernan* may lie in the special relation between the players and the club, and the special relation of banker and customer may well provide the explanation for the holding in *Kincaid v. Eaton*.

The principle enunciated by the phrase "special custom of the industry" has permitted courts to distinguish cases falling outside the narrow limits usually envisioned for the acquisition

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of possession from those which the courts consider to encompass the necessary tenets of possession. However, the principle does not explain the holding in Hibbert v. McKiernan, and it would be less than satisfactory to assert, with Professors Dias and Hughes, that the principle merely reflects "the clear sentiment that dishonesty should not go unpunished." Rather, this principle is a result of the unsatisfactory restrictions of traditional theory and goes beyond McAvoy v. Medina and Kincaid v. Eaton in recognizing that possession can reside in one who shows the intention and will to act as the possessor and who exercises or displays possessory rights. The broader aspect of such rights, which has been stressed herein, constitutes a more inclusive rule than that to be found in the expressions of conventional wisdom. Recall Mr. Justice Holmes' apt illustration: "If there were only one other man in the world, and he was safe under lock and key in jail, the person having the key would not possess the swallows that flew over the prison." It thus becomes desirable to achieve a middle ground between Mr. Justice Holmes' evocative phrase and the restrictive policy reflected in the more familiar cases. Bridges v. Hawkesworth, Young v. Hichens, and Pierson v. Post are the familiar cases, and it may be argued that their authority stems from that very quality since there are less familiar cases which enjoy at least equal judicial authority but which have been all but ignored. These less familiar cases relating to possession can best be reconciled with those more familiar cases already discussed if the unit of the object possessed is measured in comprehensive terms rather than viewed as a specific item reduced to capture.

In *The Tubantia*, plaintiffs had ascertained and marked the area of a sunken ship, buoyed it, and positioned a salvage craft above the wreck. They conducted operations intermittently, as weather conditions permitted, by exploring the derelict, opening

35. Dias & Hughes, Jurisprudence 328 (1957).
36. This is an adaptation of the requirement, asserted by the Permanent Court of International Justice in the Legal Status of Eastern Greenland Case, that a state claiming territorial possession must show "the intention and will to act as sovereign and some actual exercise or display of such sovereignty," [1933] P.C.I.J. ser. A/B, No. 53 at 46.
37. Holmes, supra note 17, at 216.
38. [1924] P. 78. There are similar holdings by United States courts. See, e.g., The Moser, 55 F.2d 904 (2d Cir. 1932); The Edilio, 246 F. 470 (E.D.N.C. 1917).
approaches, and moving the cargo. Defendants claimed that plaintiffs only had possession of the cargo which they had already removed and not of the whole wreck. The British Probate Court held that by their conduct, plaintiffs had gained possession of the whole ship and her entire cargo. The court’s appraisal of the plaintiffs’ possession is very much in point:

There was the use and occupation of which the subject matter was capable. There was power to exclude strangers from interfering if the plaintiffs did not use unlawful force. The plaintiffs did with the wreck what a purchaser would prudently have done. Unwieldy as the wreck was, they were dealing with it as a whole. The fact on the other side which is outstanding is the difficulty of possessing things which lie in very deep water and can only be entered upon by workmen in fine weather and for short periods of time.39

Cases relating to whaling customs are relevant to a discussion of use and occupation in deep seabed mining for three reasons: (1) the theory of possession they reflect has been held to be reasonable in light of the difficult circumstances of harpooning; (2) the number of people possessing the requisite skills significantly reduces the quantity of potential conflicts; (3) the degree of control necessary to establish exclusive title must vary with the nature of the subject.40 In Ghen v. Rich,41 it was held that a whale which had been washed up onto a beach still belonged to the owners of a ship whose crew had harpooned and mortally wounded it. Judge Nelson of the United States District Court for Massachusetts said:

I see no reason why the usage proved in this case is not . . . reasonable . . . . Its application must necessarily be extremely limited, and can affect but a few persons. It has been recognized and acquiesced in for many years. It requires in the first taker the only act of appropriation that is possible in the nature of the case.42

In Swift v. Gifford,43 it was held that the owners of the ship which had first struck and wounded a whale in the Okhotsk Sea were entitled to the value of that whale as opposed to those who

40. Cf. notes 18, 23, 34 supra and the text accompanying note 23 supra.
41. 8 F. 159 (D. Mass. 1881).
42. Id. at 162.
had succeeded in killing the animal. The court stated that a harpooned whale which was subsequently killed by another belonged to the owner of the harpoon and not to the subsequent finder, provided that the claim was made before "cutting in." Emphasizing the importance of possessory rights in the law, Judge Lowell said:

The rule of law invoked in this case is one of very limited application. The whale fishery is the only branch of industry of any importance in which it is likely to be much used; and if a usage is found to prevail generally in that business, it will not be open to the objection that it is likely to disturb the general understanding of mankind by the interposition of an arbitrary exception. Then the application of the rule of law itself is very difficult, and the necessity for greater precision is apparent. Suppose two or three boats from different ships make fast to a whale, how is it to be decided which was the first to kill it? Every judge who has dealt with this subject has felt the importance of upholding all reasonable usages of the fishermen, in order to prevent dangerous quarrels in the division of their spoils. 45

These cases relate to disparate but interacting areas of the law. They point to the policy grounds for extending the unit of focus of the right of possession from one item to an aggregation or an identifiable collection, based on an identifiable possessory act (which may be incomplete from the standpoint of physical power or control over the subject or all of its parts), by measuring the quantum, as opposed to the quality, of this right.

B. Miners' Rights

In the landmark case of the United States Supreme Court, Jennison v. Kirk, 46 Mr. Justice Field, a lawyer from California who was familiar with the mining jurisprudence of that state and of her neighbors, described the rights of miners to appropriate their discoveries.

In every district which they [the miners] occupied they framed certain rules for their government, by which the extent of ground they could severally hold for mining was designated, their possessory right to such ground secured and enforced, and contests between them either avoided or determined. These rules bore a marked similarity, varying in the several districts

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44. Id. at 113, 23 Fed. Cas. at 559.
45. 98 U.S. 453 (1878).
only according to the extent and character of the mines; distinct provisions being made for different kinds of mining such as placer mining, quartz mining, and mining in drifts or tunnels. They all recognized discovery, followed by appropriation as the foundation of the possessor’s title, and development by working as the condition of its retention. And they were so framed as to secure to all comers, within practicable limits, absolute equality of right and privilege in working the mines. Nothing but such equality would have been tolerated by the miners, who were emphatically the law-makers, as respects mining, upon the public lands in the State. The first appropriator was everywhere held to have, within certain well-defined limits, a better right than others to the claims taken up; and in all controversies, except as against the government, he was regarded as the original owner, from whom title was to be traced.46

This was an apt description of miners’ rights as they might have appeared to a Californian not conversant with the practices and legal expectations of European immigrants in the California gold fields. In fact, the miners’ rights which evolved in these communities did not spring from the turbulent mining districts fully articulated and “developed.” They had a long and unbroken history traceable to the Middle Ages, if not earlier.47 For example, these customs have long been recognized as part of the Anglo-American common law48 and other legal systems. Thus, the following statement appears in American Law of Mining:

The strong influence of the common law on our mining law is apparent in many areas. The customs of the Derbyshire miners . . . resemble the way in which we mark off lode locations, our

46. Id. at 457. See also Argonaut Mining Co. v. Kennedy Mining and Milling Co., 131 Cal. 15, 20, 63 P. 148, 150 (1900), aff’d, 189 U.S. 1 (1903), where the Supreme Court of California said:

Some regulations as to mining claims sprung into existence naturally, in fact necessarily. First, so far as possible, each person was given a specified portion of the ground, which he could mine. Secondly, the allotment to each was so limited that there should be no monopoly. So far as possible, all should have an equal chance. The right of the first possessor was preferred, but no matter was considered more important than the limitation upon the extent of the claims. And, thirdly, as a corollary from these two cardinal rules, the third follows: That each claimant shall mark plainly upon the surface of the earth the boundaries of his claim, that others may locate claims without interfering with him . . . .

47. 1 AMERICAN LAW OF MINING § 1.1 (The Rocky Mountain Mineral Law Foundation ed. 1971) [hereinafter cited as AMERICAN LAW OF MINING].

exclusive surface rights of locators and even to some extent our approach to extralateral rights. We have been greatly influenced by the *ad caelum* theory in our cases dealing with subsurface and extralateral rights of locators. Our general attitude toward free-mining under the federal legislation of 1866 and 1872 has an ancient heritage in both the Germanic and English law.49

The continuity and necessity of the common law principles which were manifest in the practices of the mining districts were later embodied in state and federal legislation. The first legislation affecting the rights acquired in the California gold districts and recorded by the camp recorders50 was the following provision drafted by Stephen J. Field and inserted into the California Civil Practice Act in 1851:

In actions representing "mining claims," proof shall be admitted of the customs, usages, or regulations established and in force at the bar, or diggings, embracing such claim; and such customs, usages or regulations, when not in conflict with the constitution and laws of this State, shall govern the decision of the action.51

Between 1848 and 1866, similar laws were passed in other Western states, and in 1866 Congress enacted the Act Granting the Right of Way to Ditch and Canal Owners over Public Lands, and for Other Purposes,52 which has been characterized as "the first lode location law."75 The Section 9 of the Act provides the classic miners' rights "grandfather clause."

That whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for construction of ditches and canals for the purposes aforesaid is hereby acknowledged and confirmed: Provided, however, that whenever, after the passage of this act, any person or persons shall, in the construction of any ditch or canal, injure or damage the possession of any settler on the public domain, the party

49. AMERICAN LAW OF MINING, supra note 47, § 1.1 at 5 (footnotes omitted).
50. See, e.g., id. at 23.
52. 14 Stat. 251, ch. 262 (1866).
53. AMERICAN LAW OF MINING, supra note 47, § 1.12 at 39.
committing such injury or damage shall be liable to the party injured for such injury or damage.\textsuperscript{54}

In \textit{Jennison v. Kirk},\textsuperscript{55} the Supreme Court affirmed that the policy of the Act was to confirm titles previously acquired under miners' rights. Mr. Justice Field stated in \textit{Jennison} that

[In no provision of the act was any intention manifested to interfere with the possessory rights previously acquired, or which might be afterwards acquired; the intention expressed was to secure them by a patent from the government.\textsuperscript{56}]

From the 1866 Act Granting the Right of Way to Ditch and Canal Owners over Public Lands, and for Other Purposes to the present, mining legislation in the United States has included a grandfather clause preserving miners' rights which have been acquired before the statute's enactment. A recent example is provided by Section 4(a) of the Geothermal Steam Act of 1970.\textsuperscript{57} The enactment of "grandfather clauses" to protect previously acquired mining rights reflects a continuing and uniform legislative policy to recognize the validity and the equity, as well as the necessity, of maintaining those rights. In addition to confirming the miners' rights, these clauses operate as declaratory legislation affirming the common law principles giving rise to the customs of the mining districts.

In countries without a long history of the institution of miners' rights, this practice appears to have sprung spontaneously into existence whenever alternative regimes had broken down or had failed to come into existence. The early history of the gold fields of South Africa and Australia and the mines in the Sierra Nevada of California and the Yukon of Alaska all testify to the universality and necessity of the institution.\textsuperscript{58} This conclusion is

\textsuperscript{54}. Ch. 262, §§ 2-9, 14 Stat. 251 (1866).
\textsuperscript{55}. 98 U.S. 453 (1878).
\textsuperscript{56}. Id. at 459. See also Ames v. Empire Star Mines Co., 17 Cal.2d 213, 110 P.2d 13 (Traynor, J.), cert. denied, 314 U.S. 651 (1941).

This committee is of the opinion that those individuals who pioneered during the early years to develop geothermal steam under then existing law established equitable claims and should have a priority under any new legislation. S. 368, as amended, provides such a priority.

\textsuperscript{58}. The following list of cases testifies to the general recognition of the miner's right customs of the mining districts and mining camps of the American West (and in addition to those of the Sierra Nevada) by the courts of 1849 to 1866 or relates to the period before
supported by the fact that state and federal legislation in the Western states of the United States contained grandfather clauses protecting mining rights which had previously come into existence. These rights were valid from their inception and not from the enactment of the grandfather clauses for three reasons: (1) the common law incorporated previous reasonable and relevant practices of the mining camps which were consistent with existing law; (2) the grandfather clauses in state and federal legislation pointed to the anterior bases of those rights and validated the customary rules out of which those rights were molded; (3) the uniformity of miners’ rights concepts and their universal acceptance throughout the common law world indicated a general customary rule of common law governing the opening and working of mines whereby no subsequent surface landowner could lawfully claim rights which limited those traditional miners’ rights, provided that the miner observed his obligation of due diligence.

The mining rights which developed in the Western states were more than mere fabrication of special local requirements arising under the exigencies of frontier life and attuned to the evanescent conditions of early mining and prospecting in the West. Rather, their basis had been established in the mainstream of the common law. This fact has been overlooked by text writers who have either considered it to be embarrassing to their theories or dismissed it as falling within a specialization of legal study and practice. The subjectivities of particular studies and the economies of the classroom have been permitted to impose a strait-jacket on reality.

C. *Spitzbergen—Mining Claims on a Terra Nullius*

The rise of practices in international law similar to those of the western United States may be illustrated by an examination of the history of the *terra nullius* of Spitzbergen. Universal equity and necessity demand the recognition of these rights, too frequently associated only with the mining camps of the West in the middle years of the last century.

The Archipelago and main island of Spitzbergen provide the setting. These islands were discovered by English and Dutch whalers in the late sixteenth and early seventeenth centuries,

59 extensive summer settlements were established. In 1614, King James I of England proclaimed annexation of the main island and named it King James his New-land. The Dutch contested this claim.

60 After the island’s bay fishery for whales ceased to exist, the territorial claims of the two states remained but were not pressed.

61 In later years, Danish, Russian, German, and Norwegian claims were also presented and a diplomatic standoff ensued. Each country was prepared to accept the Archipelago’s status as a *terra nullius*, provided that all other interested parties did likewise.

62 The United States expressed a special, non-territorial interest in the islands, meant only to assure adequate protection for the business interests of the Arctic Coal Company, a Boston enterprise with extensive coal mines on Spitzbergen. In the decade prior to World War I, Norway engaged in intense diplomatic activity in support of a regime which would recognize the Archipelago’s status as a *terra nullius* but which would give Russia, Norway, and Sweden a special standing in island administration. Various convention drafts were criticized on the grounds that they would in effect establish joint sovereignty in the three countries. There were ancillary grounds of criticism which related to the judiciary, the right to tax, and the protection...

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59. On the history of Spitzbergen’s discovery, see M. Conway, *No Man’s Land: A History of Spitsbergen from Its Discovery in 1596 to the Beginning of Scientific Exploration of the Country 11-20* (1906) [hereinafter cited as *No Man’s Land*].

60. *Id.* at 65, 70. This English Proclamation had been based on the misapprehension that English whalers had been the first discoverers of this land. It had been the Dutch whose famous sailor Barents led the way there in 1596. *Id.* at 11. Interestingly, King Phillip of Spain, through his Burgundian inheritance, claimed to be the overlord of the Dutch, and accordingly the Spanish had performed a very formal and elaborate ritual of annexation of Spitzbergen. *See id.* at 70-71.

61. *Id.* at 96-123.

62. *Id.* at 202, 225.

of the property rights of enterprises already exploiting mineral resources, in particular coal, on Spitzbergen. After World War I, nine states recognized Norwegian sovereignty over the islands in the Treaty of Paris of 1920. The Treaty also recognized and preserved the established rights of citizens of the signatory countries to exploit their coal and other mineral holdings and to fish in Spitzbergen waters.

Of special interest is the provenance and recognition of mining rights in the years and decades before the Treaty was signed when British, American, Norwegian, Swedish, and Russian coal companies operated on Spitzbergen under the wardship of their own Foreign Offices. The history of activities of the Arctic Coal Company and the espousal of claims by the United States Department of State is of particular importance. The Arctic Coal Company, which was incorporated under the laws of West Virginia, conducted its business from Boston. It worked four tracts of coal-bearing ground on Spitzbergen. The first, the "Advent Bay Tract," was purchased in 1906 from one Ludwig Sollberg and the Trondhjem-Spitzbergen Kulcompagnie, a Norwegian concern. Sollberg and the Trondhjem-Spitzbergen Kulcompagnie had recorded their claims in 1900 with both the Norwegian Foreign Office and Department of the Interior. It should be noted that Norway, like Russia, Sweden, the United States, and other

64. For the history of the various North Sea states' claims to the islands of the Spitzbergen Archipelago, and of their economic activities in the area (especially fishing and whaling in Spitzbergen's offshore waters), see Fulton, The Sovereignty of the Sea 112, 181-85, 193-94, 198-200, 527 (1911); Nielsen, The Solution of the Spitzbergen Question, 14 Am. J. Int'l L. 232 (1920); Lansing, supra note 55. See also Lakhtine, Rights over the Arctic, 24 Am. J. Int'l L. 703, 705-06 (1930); Shepstone, Coal and Iron from the Arctic, 121 Scientfic American 362, 376 (Oct. 11, 1919).

65. Signed Feb. 9, 1920, 43 Stat. 1892, T.S. 686, 2 L.N.T.S. 7, 18 Am. J. Int'l L. 199 (Supp. 1924). The nine signatory states were: United States, Great Britain, France, Italy, Japan, Denmark, the Netherlands, Norway, and Sweden. Russia protested against this agreement, as she had not been consulted despite the historic claims she entertained towards the Archipelago. In 1924, however, she informed the Norwegian Government that she would recognize Norway's sovereignty over Spitzbergen. Letter from the Norwegian Minister (Bryn) to the Secretary of State, March 20, 1924, [1924] For. Rel's. U.S. vol. I, at 1 (1939 ed.).

66. Treaty of Paris of 1920, supra note 57, arts. 2, 6, 7 and annex. See also Nielsen, supra note 56, at 232, 234.

67. See letter from the Arctic Coal Co. (by Messrs. Ayer and Longyear) to Secretary of State Knox, Dec. 27, 1909, 346 Numerical File 1906-1910, Case #3746, Record Group 59, Dep't of State. See also letter from Arctic Coal Co. to Secretary of State Bryan, May 25, 1914, transaction #950d.00.270, 4 Decimal File, Subnumbers 251-335c, Record Group 59, Dep't of State.
interested nations agreed that the Archipelago was a *terra nullius* and did not press any territorial claim at that time.\(^{68}\)

The remaining three tracts worked by the company had been acquired by Messrs. Ayer and Longyear, who were the incorporators and officers of the Arctic Coal Company. The company worked a total area in excess of 475 square miles under a claim of exclusive title to the coal in place.\(^{69}\) The claimants asserted their right on the basis of the "registration" of their "titles" with the United States Department of State\(^6^{8}\) on the theory that the Department's acceptance of that registration conferred the titles claimed when added to possession, posting of notices, and active working of the mines.\(^{71}\) Any prospecting or mining by Norwegian or other foreign interests on those tracts was characterized as "trespassing." The United States Government espoused this claim in a number of letters to Norwegian authorities.\(^{72}\) This

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68. See letter from Norwegian Dep't of Foreign Affairs to Fasting, May 11, 1904, "Exhibit B" attached to letter from Messrs. Ayer and Longyear to Secretary of State Root, March 10, 1906, (1906) Dep't of State, Miscellaneous Letters, March 1906, pts. II & III, Record Group 59, Dep't of State; Instructions by Secretary of State Bryan to Collier and Schmederman regarding the "forthcoming International Conference on Spitzbergen to be held at Christiana," May 23, 1914, transaction #850d.00/271a, 4 Decimal File, Case #850d.00/271a, Subnumbers 251-355c, Record Group 59, Dep't of State; [1914] For. Relns. U.S. vol. I, 975; Series B, No. 10, Spitzbergen, No. 2, Dep't of State, Div. of Information. [hereinafter cited as Instructions]. But see Telegram from Secretary of State Bryan to the American Delegation at the Christiana Conference, July 3, 1914, transaction #850d.00/313, 4 Decimal File, Case #850d.00, Subnumbers 251-335c, Record Group 59, Dep't of State.

69. The tracts' dimensions were approximately as follows: Tract No. 1 - 170 square miles, approx.; Tract No. 2 - 130 square miles, approx.; Tract No. 3 - 150 square miles, approx.; Tract No. 4 - 25 square miles, approx. Total holdings of Arctic Coal Company and Messrs. Ayer and Longyear - 475 square miles, approx. See correspondence in note 60 *supra*; letter from N. Wilson (attorney for the Arctic Coal Co., and Messrs. Ayer and Longyear) to Secretary of State Bryan, May 25, 1914, at 3, 4 Decimal File, Case #850d.00, Subnumbers 251-335c, Record Group 59, Dep't of State.

70. See letter from N. Wilson (attorney for the Arctic Coal Co., and Messrs. Ayer and Longyear) to Secretary of State Root, March 10, 1906, and accompanying documents, (1906) Dep't of State, Miscellaneous Letters, March 1906, pts. II & III, Record Group 59, Dep't of State.

71. Letter from Robert Bacon, Acting Secretary, Dep't of State to Messrs. Ayer and Longyear, c/o N. Wilson, March 14, 1906, 288 Domestic Letters 526, Record Group 59, Dep't of State.

72. See, e.g., letter from United States Legation, Christiana to Norwegian Foreign Minister Christopherson, July 30, 1909, and reply thereto, August 11, 1909, American
position was emphasized by a passage in President William Taft's Message to Congress on December 7, 1909. He said, with respect to acceptance by the United States of an invitation to participate in the proposed conference at Christiana to establish an international regime to govern Spitzbergen:

The Department of State, in view of proofs filed with it in 1906, showing American possession, occupation and working of certain coal-bearing lands in Spitzbergen, accepted the invitation under the reservation above stated [i.e., the question of altering the status of the islands as countries belonging to no particular state and as equally open to the citizens and subjects of all states should not be raised] and under the further reservation that all interests in those islands already vested should be protected and that there should be equality of opportunity for the future.\(^7\)

The President's reference to "interests . . . already vested" is distinguishable from the discredited "vested rights" theory in conflict of laws. It is a term of legal rather than theoretical derivation. It referred to the way in which private individuals acquire rights in sea areas and territories outside national jurisdiction. The rights become "vested" or "acquired" under general international law and, as such, they can be used to oppose the claims of a state which later attempts to exercise jurisdiction.

D. "Acquired Rights"\(^7\)

The Treaty of Paris of 1920\(^7\) provides a prime example of the protection of rights acquired in a \textit{terra nullius}. The Treaty is similar to a quitclaim, thus Norway could receive only what the signatories had to convey. The other interested states quitclaimed their interests in the Archipelago of Spitzbergen to Nor-

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75. See note 65 supra.
way, reserving inviolate the properties and rights which their citizens had previously enjoyed. For the future, they also stipulated equality of access and treatment for their citizens. The question remains as to whether the Archipelago’s continental shelf is subject to Norway’s sovereign rights. Clearly, if the signatories conveyed to Norway only what they considered to be within their lawful claims in 1920, the *Abu Dhabi Award* would require a decision that the grant contained in the Treaty of Paris would not extend to rights which were not then in existence, but which evolved subsequently.

Since the agreement was merely a quitclaim to Norway of the rights which the other signatories did not reserve, those which they did reserve cannot be regarded as having been created or validated by the Treaty. These rights necessarily existed, as President Taft’s Message amply demonstrates, prior to the Convention and were preserved and protected by it. The United States Government held to this opinion most pertinaciously. It viewed the rights which the Arctic Coal Company had acquired in Spitzbergen sufficient to be the subject of international arbitration as to the boundaries between the American enterprise’s holdings and those of a Norwegian citizen. Furthermore, the position of the United States was that the opening of coal mines within the tracts belonging to the Arctic Coal Company and to Messrs. Ayer and Longyear and the removal of boundary markers therefrom were actions tantamount to “trespasses”—despite the technical, common law connotation of the term. Finally, in the negotiations for establishing a regime governing Spitzbergen, the United States asserted:

[T]he Government of the United States finds that for the present it cannot give its adherence to any convention for the government or administration of order in Spitzbergen which, while

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77. Annual Message of the President to Congress, Dec. 7, 1909, *supra* note 73. See also text accompanying note 73 *supra*.
78. See, e.g., letter from Peirce (U.S. Minister to Norway) to Norwegian Minister of Foreign Affairs Irgens, April 30, 1910, 2 American Legation in Christiana, Spitzbergen Correspondence, 1910, Record Group 59, Dep’t of State; Note Verbale from Dep’t of State to Norwegian Foreign Minister, Jan. 13, 1911, Case #850d.00/154, 2 American Legation in Christiana, Spitzbergen Correspondence, Record Group 84, Dep’t of State.
79. This technical common law term arises in the U.S. diplomatic correspondence. See letter from Peirce to Secretary of State Knox, July 30, 1909 and Diplomatic Protest of same date from U.S. Legation to Minister of Foreign Affairs, Transaction #3746, 346 Numerical File, Record Group 59, Dep’t of State.
pronouncing upon the validity of claims to land in Spitzbergen, does not recognize the indisputable validity of the claims of its citizens as recorded in the Department of State at Washington.\textsuperscript{80}

E. The Guano Islands Act of 1856\textsuperscript{81}

In 1856 the United States recognized that American prospectors had international legal rights with respect to guano deposits they had discovered and worked on islands which were terra nullii. Instead of merely leaving to the Executive Branch the prerogative of asserting personal jurisdiction over the miners as permitted under general customary international law, the United States Congress provided procedures for extending territorial jurisdiction\textsuperscript{82} over such islands. It should be noted, however, that:

The right of citizens of the United States to the use and control, under the Revised Statutes, of deposits of guano on islands, rocks, and keys, 'is based on the discovery, not of the island or other place named, but of the deposit of guano.'\textsuperscript{83}

While there may be parallels between United States policies with respect to guano islands and to the mining tracts on Spitzbergen, the two situations are clearly distinguishable. The United States merely asserted personal jurisdiction over the American miners on Spitzbergen and espoused their claims against other countries as well as against citizens of other countries who were "trespassing" on their tracts.\textsuperscript{84} As to the guano islands, however, the United States went one step further and asserted territorial jurisdiction. The similarities between this regime and that actually existing on Spitzbergen before the Treaty of Paris may be highlighted by imagining an assertion by Congress of a claim to exercise territorial jurisdiction over all persons and events within the areas of the mining tracts held by Americans on Spitzbergen together with such incidental lands as might be considered necessarily appurtenant—for example, those lands which completed

\textsuperscript{80} Note Verbale from Secretary of State to Norwegian Minister, Jan. 14, 1911, 2 American Legation in Christiana, Spitzbergen Correspondence, 1910, Record Group 84, Dept't of State; copy of note verbale sent to Norwegian and Swedish Governments, enclosed with letter from Secretary Knox to Ambassador Rockhill, Series B, No. 9, Spitzbergen, No. 1, p. 40, Dept't of State, Div. of Information.


\textsuperscript{82} See, e.g., \textit{Jones v. United States}, 137 U.S. 202 (1890).

\textsuperscript{83} 1 J. Moore, \textit{Digest of International Law} 559 (1906) [hereinafter cited as Moore's Digest].

\textsuperscript{84} See notes 78 & 79 supra and accompanying text.
the geophysical features constituting the tracts, those which pro-
vided campsites, storage areas, machine and tool sheds, jetties,
railroad and tramway sites, and other requisite adjuncts to the
actual operation of the mines and the removal of their products.

In Jones v. United States, the Supreme Court said:

By the law of nations, recognized by all civilized States,
dominion of new territory may be acquired by discovery and
occupation, as well as by cession or conquest; and when citizens
or subjects of one nation, in its name, and by its authority or
with its assent, take and hold actual, continuous and useful
possession, (although only for the purpose of carrying on a par-
ticular business, such as catching and curing fish, or working
mines,) of territory unoccupied by any other government or its
citizens, the nation to which they belong may exercise such
jurisdiction and for such period as it sees fit over territory so
acquired.

It should be noted that the action of private individuals per se has
"little legal relevance" for the acquisition of territory under pub-
lic international law "unless it takes place in pursuance of a
license or some other authority received from their Govern-
ment." Thus, in the Jan Mayen Island case, the Norwegian
Supreme Court found that Norway could not extend a
territorially-based tax law to impose taxes on a citizen who lived
on Jan Mayen Island, which was a terra nullius at the relevant
times. The Norwegian Government argued that its citizen's set-
tlement as the sole resident on the island constituted Norway's
acquisition thereof by occupation. The Court rejected this argu-
ment, holding that mere private acts by citizens or subjects of a
sovereign state do not by themselves establish state sovereignt
under international law. In his dissenting opinion in the Fisheries
Case, Lord McNair argued:

Another rule of law that appears to me to be relevant to the
question of historic title is that some proof is usually required
of the exercise of State jurisdiction, and that the independent
activity of private individuals is of little value unless it can be
shown that they have acted in pursuance of a licence or some

85. 137 U.S. 202 (1890).
86. Id. at 212.
87. 1 Oppenheim, supra note 8, at 544.
 Ct., Norway 1933). It should be noted that this case was cited with approval in 1 Oppen-
heim, supra note 8, at 555 n.1.
other authority received from their Governments or that in some other way their Governments have asserted jurisdiction through them. 9

At first blush, claims such as that initiated by a United States citizen to take possession of the Lacepede Islands on behalf of the United States would appear to be congruent with the proposition in Jones v. United States. Mr. Lord, a United States Vice Consul General in Melbourne, Victoria, contended that while the islands may have fallen within the official delimitations of the colony of Western Australia (they were, for example, included in the Governor's Commissions), the group had never been effectively occupied by or on behalf of Great Britain so as to bring it within the colony. Mr. Lord also argued that his commission from the United States Consul General, which he claimed to be justified under the Guano Islands Act, effectively established his authority to occupy the islands in the name of the United States. He presented this position to the Western Australian authorities in the following terms:

7. On the day my agent, Charles Robert Baldwin, landed on one of the Islands, hoisted the American Flag, and proclaimed that he took formal possession of the Lacepede Islands in the name of the United States Government.

8. This was done in pursuance of the provisions of An Act of Congress of 1856, entitled "An Act to authorise protection to be given to the Citizens of the United States who may discover deposits of Guano," which specially authorises citizens of the United States to take possession of Guano Islands in the name of their Government; and also in pursuance of a Warrant under the hand and seal of the United States Consul General of Australia at Melbourne, date the eleventh day of May, One thousand eight hundred and seventy-six.

9. There is no analogous Act contained in the English Statute book; but, on the contrary, the British Government do not recognise the right of a subject to take possession of any territory in the name of his Sovereign. 89

89. [1951] I.C.J. 116, 184. See also 1 Oppenheim, supra note 8 at 544 n.1; and, to the same effect, Hall, A TREATISE ON INTERNATIONAL LAW 128-29 n.1 (8th ed. Higgins 1924) [hereinafter cited as Hall].

90. Letter from S.P. Lord to H.E., the Governor of Western Australia, Oct. 20, 1876, Western Australia Legislative Council, Votes and Proceedings No. 15, 1877, Lacepede Islands, at 9-10 [hereinafter cited as Lacepede Islands]. Although Mr. Lord's assertions may appear to be no more than the self-serving claims of an unauthorized person, his basic position would not appear to be too far distant from the passage in Jones v. United States, 137 U.S. at 212. See text accompanying note 77 supra.
This situation was finally settled in Washington between the British Ambassador and the United States Secretary of State with the statement that “the Government of the United States have rejected the claim advanced by Mr. Lord with respect to the Lacepede Islands.”

The justification for any thesis supporting United States acquisition by occupation of the guano islands which have been listed as “appertaining” to its territory is based upon the formulation of sections 1412, 1418, and 1419 of Title 48 United States Code. The first of these provisions prescribes the Department of State procedures which the discoverer of a guano island must follow before his discovery may be “considered as appertaining to the United States.” The second authorizes the President, “at his discretion,” to “employ the land and naval forces of the United States” to protect the rights of a discoverer and his successors. The third section speaks of the United States’ “right to abandon” the islands, and thereby assumes a previous occupation.

Two preliminary points should be made. First, the prescription of procedures regarding the Department of State’s recognition and the President’s discretionary protection of a discovery does not necessarily involve the establishment of territorial sovereignty over a guano island. The Arctic Coal Company’s interest in Spitzbergen involved both notification to the Department of State of its claims and protection thereafter, and yet no sovereignty resulted. Second, the phrase “appertaining to the United States” and its grammatical variants to be found in the statutory provisions may not necessarily establish sovereignty. However, the practice of the United States with respect to such islands tends to show that the statute has been treated, not only by the United States but by foreign countries as well, as an assertion of nothing less than territorial sovereignty for the United States. It is also arguable that the statute empowers private citizens to provisionally acquire an island’s territory and that the final governmental act requisite for occupation is that of the Department of State and of the President.

91. See Lacepede Islands, supra note 90.
92. See, e.g., 1 Moore’s Digest, supra note 83, at 566-80.
94. See, e.g., Reeves, Agreement over Canton and Enderbury Islands, 33 Am. J. Int’l L. 521 (1939); Orent and Reinsch, Sovereignty over Islands in the Pacific, 35 Am. J. Int’l L. 443 (1941); 1 Moore’s Digest, supra note 83, at 560-65.
95. 48 U.S.C. §§ 1411-12 (1970). For an amplification of these procedures and their significance, see 1 Moore’s Digest, supra note 83, at 558-65. A possible analogy to this
It should be remembered, however, that the subsequent gloss upon the statute was made in an age of imperialism. It is possible to imagine the act operating effectively by merely providing notification procedures and the means of protecting, under international law, the rights of American discoverers by the United States Government. Given such an interpretation, it is a municipal law formulation for ensuring the protection of international equivalents of miners’ rights with respect to guano deposits. The measure of possession was the deposit itself and not the portions thereof which the entrepreneur or his agents severed from the bulk.\footnote{See text accompanying note 89 supra.} Viewed as an example of the perspective of international law regarding the subject of commercial possession, we have a clear parallelism with the Spitzbergen mining claims. The main difference lies not in the rights of possession but in the statutorily prescribed procedures for invoking the Government’s protection of rights acquired under international law.

F. Possessory Issues Connected with Sedentary Fisheries

The holding of the International Court of Justice in the \textit{North Sea Continental Shelf Cases}\footnote{Convention on the Continental Shelf, \textit{done} April 29, 1958, (1964) 1 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311, 52 Am. J. Int’l L. 858 (1958) [hereinafter cited as the Continental Shelf Convention]. This convention came into force on June 10, 1964. See 499 U.N.T.S. 311, 312 n.1.} that the first three articles of the Continental Shelf Convention\footnote{[1969] I.C.J. 3.} reflect or crystallize “received or at least emergent rules of customary international law relative to the continental shelf”\footnote{[1969] I.C.J. at 40.} has had the effect of replacing traditional customary international law rules with the provision in Article 2(4) of the Convention.\footnote{For a discussion of this possibly unforeseen result of the Court’s holding, see Goldie, \textit{The North Sea Continental Shelf Cases—A Paradox Revealed}, 63 Am. J. Int’l L. 536 (1969).} Prior to the emergence of the continental shelf doctrine, a number of coastal states had acquired historical exclusive rights to exploit, or to regulate the exploitation of, sedentary fishery resources beyond waters considered to be within the limits of their national jurisdiction. These states included Algeria (coral), Australia (pearl, pearl shell, chank, and green snail), the Bahamas (sponge), British Honduras (sponge), Ceylon (pearl), Cuba (sponge), England (oyster), Egypt
(sponge), France (oyster), Greece (sponge), Ireland (oyster), Italy (coral), Japan (pearl), Libya (sponge), Mexico (pearl), Panama (pearl), the Persian Gulf States (pearl), the Philippines (pearl), Sicily (coral), Tunisia (coral and sponge), Turkey (sponge), and Venezuela (pearl). These rights have been generally recognized under international law as valid exceptions to the general doctrine of the freedom of the high seas. For example, Vattel wrote in 1758: “Who can doubt that the pearl fisheries of Bahrein and Ceylon may lawfully become property.” In 1911 Fulton reiterated the general acceptance of Vattel’s phrase in his classic work The Sovereignty of the Seas and defined it as follows:

The other class of fisheries referred to, for sedentary animals connected with the bottom, such as oysters, pearl-oysters, and coral, which are found in shallow water, as a rule, and usually near the coast, have always been considered as on a different footing from fisheries for floating fish. They may be very valuable, are generally restricted in extent, and are admittedly capable of being exhausted or destroyed; and they are looked upon rather as belonging to the soil or bed of the sea than to the sea itself. This is recognised in municipal law, and international law also recognises in certain cases a claim to such fisheries when they extend along the soil under the sea beyond the ordinary territorial limit. Cases in point are the pearl-fisheries on the banks in the Gulf of Manar, Ceylon, which extend from six to twenty-one miles from the coast, and are subject to a colonial Act of 1811, which authorises the seizure and condemnation of any boat found within the limits of the pearl-banks, or hovering near them: boats or vessels navigating the inner passage are prohibited from hovering or anchoring in water deeper than four fathoms, and those navigating the outer passage from hovering or anchoring within twelve fathoms. These pearl-fisheries are very valuable, and have been treated from time immemorial by the successive rulers of the island as subjects of property and jurisdiction; and the laws referred to apply also to foreigners. Another case is the pearl-fisheries in Australia. In Western Australia certain Acts are applied far beyond the three-mile limit, though apparently only against British subjects, and a similar


Act, of 1888, applied in Queensland to extra-territorial waters west of Torres Strait. The pearl-fisheries of Mexico and Colombia are also subject to regulation beyond the ordinary three-mile limit. Examples of extra-territorial jurisdiction over beds of the common edible oyster are to be found in the British conventions with France in 1839 and 1867, by which the Bay of Granville was reserved to France, and in the last of these conventions (Article ix.) a closetime was provided in the English Channel; and likewise in the proceedings concerning the Arklow and Wexford banks, off the Irish coast. Coral-beds in the Mediterranean, off the coasts of Algeria, Sardinia, and Sicily, are in a similar way regulated by Italian and French laws beyond the ordinary three-mile limit.  

Again, Jonkheer Feith, through the International Law Association's 1950 *Report on the Rights to the Sea-bed and Its Subsoil*, said:

> The theory that not only the waters of the high seas should be regarded as "res communis" but that also the sea-bed and its subsoil (I am henceforth speaking solely of the sea-bed and its subsoil outside territorial waters) are "res communis," "res extra commercium," still satisfies very few people.

> It is certainly very tempting, now that the sea is regarded as a "res extra commercium," to postulate that the seabed and its subsoil are also "extra commercium" and "communis omnium." But we must not allow ourselves to be blinded by this temptation into maintaining, without further examination, that international law classifies the sea-bed and its subsoil as a "res communis" and puts them on all fours with the waters of the sea.

> The facts indicate otherwise.

> At all times and in many parts of the world coastal states . . . have, without incurring any protests, undertaken the development of sea-bed and subsoil resources lying outside territorial waters, *whenever this was technically possible*.

> As soon as technical progress is so far advanced that, in spite of the depth of the sea, the sea-bed or its subsoil can usefully be developed, no-one in practice is prepared to assert that the mineral or other resources to be obtained from the sea-bed and its subsoil by such development are resources belonging to the community of nations, which no state or individual can or may appropriate. Such sea-bed and subsoil resources have

103. FULTON, supra note 64, at 696-98.
always found an owner, in spite of the view of many writers that
the sea-bed and its subsoil are "res communis."

And there can be no doubt that international law has sanc-
tioned such appropriation, even though it is in conflict with the
idea of "res communis.""\(^{104}\)

In the seventh edition of Oppenheim's International Law, pub-
ished in 1948, Lauterpacht stated:

[I]t is submitted that it would be not inconsistent with princi-
ple, and would be more in accord with practice, to recognise
frankly that, as a matter of law, a State may by strictly local
occupation acquire, for sedentary fisheries and for other pur-
poses, sovereignty and property in the surface of the sea-bed,
provided that in so doing it in no way interferes with freedom
of navigation.\(^{105}\)

Despite the old debate as to whether sedentary fisheries may
be acquired by prescription, there has been general agreement
that only the seabed areas where fishery activities are actually
carried on can be acquired and that the acts of acquisition must
have been continuous and open for a considerable period of
time.\(^{106}\)

Although some of the states which have exercised exclusive
sedentary fishery rights in seabed areas beyond national jurisdic-
tion have done so since time immemorial, others have not. In his
appearance before the Special Master appointed by the United
States Supreme Court in United States v. Maine,\(^ {107}\) the Honor-
able Philip C. Jessup testified:

In regard to this concept of immemorial usage as an alleged
source of rights under international law I have already noted the
European powers seemed to acknowledge that East Asian native
rulers had something recognizable as sovereignty which they
could transfer. Thus, perhaps the Portuguese, Dutch and Eng-
lish acquired prescriptive rights in Ceylon and India from the
native authorities. However, this is not true of other Asian
seabed fisheries or of others in the Americas and elsewhere.\(^ {108}\)

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\(^{104}\) INTERNATIONAL LAW ASSOCIATION, REPORT OF THE FORTY-FOURTH CONFERENCE 90
(1950) (emphasis in original).

\(^{105}\) See note 17 supra.

\(^{106}\) See, e.g., Gidel's requirement of "l'usage effectif et prolongé," 1 GIDEL, DROIT
INTERNATIONAL PUBLIC DE LA MER 500 (1932).

\(^{107}\) 420 U.S. 515 (1975).

\(^{108}\) Testimony of the Hon. Philip C. Jessup in United States v. Maine, transcript
at 104.
Immemorial usage, then, although often present, is not required to constitute a "considerable period"; what is needed is the discoverer's public possession and exploitation for a time long enough to show a consistent claim of right. The requisite proof for demonstrating that such a fishery has been established is not, and cannot be, effective physical exercise of power over each and every animal on the seabed within the areas of the fishery. Nor is the authority of the coastal state limited to the creatures actually brought to the surface of the sea. Such a fishery right is established under international law when the coastal state's control over the resource as a whole leads to the possession of exclusive rights with respect to each individual uncaught and unidentified animal existing within the beds, banks, reefs, shoals, and localities of the fishery.

G. Applicable Possessory Concepts—Special Custom or General Rule?

The private law concepts of possession spring from three main sources whose waters are now mingled: the civil law, the philosophers, and the common law. It is generally thought that all three share the notion that the taking of moveable goods requires the apprehension of the specific chattel. However, when land is the subject of possession the possessor may claim the entire tract when only a portion is occupied, provided that part may give the means of controlling the whole. These contradictory requirements of possession traditionally applied to goods and to land would appear not only to be an inaccurate summary of the law, but also to have no justification in principle.

The history of miners' rights in the western United States, in Canada, Australia, South Africa, and other major centers of nineteenth century immigration, points to a wider utility of the concept of possession than that traditionally believed. Similarly, developments in Spitzbergen underscore the universality and necessity of recognizing that possession of a mineral tract can be obtained by opening and working a part of it. By analogy, it can be reasonably argued that when an enterprise develops and works an ocean bed resource of hard minerals, such activity establishes a valid claim of right to an area which will provide an equitable return in terms of technological and economic feasibility but which is not so extensive as to create a monopoly.109

109. See note 46 supra, the authorities cited therein, and the accompanying text.
H. Method of Claim

The procedure followed by the Arctic Coal Company in recording its claims to the coal mining tracts on Spitzbergen with the United States Department of State\textsuperscript{110} was not unique to this country, but was followed by all the states whose nationals claimed rights over mineral tracts in the Archipelago. This is supported, for example, by the fact that the Arctic Coal Company's title to its Advent Bay Tract ("Tract No. 1") stemmed from its purchase from Trondhjem-Spitzbergen Kulcompagnie, a Norwegian enterprise.\textsuperscript{111} The title which the Norwegian company showed to the purchaser was the recordation of its claim with the Norwegian Ministry of Foreign Affairs, with whom the sale was also recorded.\textsuperscript{112} The British practice was reported to be similar. Thus, Shepstone tells us:

The question of titles to land is most important. So far the practice has been for a mining company, on taking land, to erect notices to that effect, and to notify their own Foreign Office, where the claim is registered, if no previous claim invalidates it. This notification constitutes the real title-deed, and the British Foreign Office several years ago promised British mining companies that their claims would be safeguarded. All land titles of the two British companies named above are perfectly valid and beyond dispute. The same is true of the Norwegian, Swedish, and Russian estates. But Spitsbergen has already attracted adventurers, and complications are bound to ensue owing to attempts to jump claims.\textsuperscript{113}

Common Law, civil law, and international law all indicate the acceptance of the traditional rule of \textit{qui prior est tempore potior est jure} (he who is first in time is first in right). All three also reflect the requirement of a public and recorded announce-

\textsuperscript{110} See letter from N. Wilson (attorney for the Arctic Coal Co., and Messrs. Ayer and Longyear) to Secretary of State Bryan, March 10, 1914 and attachments including descriptions of tracts possessed by the claimants, (1906) Dep't of State, Miscellaneous Letters, March 1906, Parts II & III, Record Group 59, Dep't of State, and letter of acknowledgment from Acting Secretary of State Bacon to Messrs. Ayer and Longyear c/o N. Wilson, March 14, 1906 recognizing the "possession and ownership" of the coalbearing lands in them, 288 Domestic Letters 526 (Feb. - March, 1906), Record Group 59, Dep't of State. See also notes 70, 71 & 73 supra and the accompanying text.

\textsuperscript{111} See letter from Messrs. Ayer and Longyear to Secretary of State Root, March 1, 1906 at 2-3, 4 Decimal File, Case #850d.00, Subnumbers 251-335c, Record Group 59, Dep't of State.

\textsuperscript{112} Id.

\textsuperscript{113} Shepstone, supra note 64, at 376.
ment of the claim, as well as due diligence in the working of the claim and an equitable limitation on its area in order to prevent monopoly. In early England, for example, the requirement of publicity was satisfied by recordation in the stannaries courts of Cornwall and Devonshire and in the Great Court of Barmote of Derbyshire. In the American West, before the advent of state or federal legislation, a mining camp recorder, an official usually elected by the miners, maintained public records of the claims and of transactions affecting them. Subsequent state and federal legislation continues the requirement of publicity by requiring the fulfillment of registration procedures.

These statutory procedures clearly reflect an antecedent common law requirement which continues in effect where the statutory requirements are inoperative. It has become necessary to develop a means to adequately satisfy the duty to give due and sufficient notice of an enterprise's claim where the statutes of the United States and of other countries do not provide the appropriate procedures. In this regard, the practice of interested countries with respect to their nationals' holdings on Spitzbergen prior to 1920 evidences the development, out of necessity and of a sense of right, of customary principles of international law. For example, the “Notice of Discovery and Claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment” which Deepsea Ventures, Incorporated filed with the United States Department of State on November 16, 1974, and the information contained therein, together with the newspaper advertisements and other notifications which were given simultaneously to the filing, satisfies, confirms, and develops this custom.

III: The Relevance of Custom and “General Principles”

If one should doubt the applicability to the seabed of legal

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114. Amer. Law of Mining, supra note 47, at § 1.9.
115. For the method of proving these titles so that they became binding upon the Norwegian Government after the entry into force of the Treaty of Paris of 1920, see Annex to the Treaty. It should be noted that the tasks of “the Commissioner” appointed under the treaty, and of the “Tribunal” which was to be brought into being in the event of disputed or rejected titles, were not to clothe inchoate claims with legal validity, but to transform the former titles, which had been valid in international law under the terra nullius regime of Spitzbergen, into equally valid titles which became, by the disposition of the treaty, effective in the domestic law of Norway, and binding upon that kingdom as the new sovereign of the islands.
116. See copy of the Notice and accompanying documents regarding advertisements and notifications in app. A & B infra.
principles such as mining rights concepts, which enjoy worldwide acceptance in domestic law as well as under such international regimes as that on Spitzbergen prior to the Treaty of Paris of 1920, one must at least agree that there is the potential for such a mining regime in general international law. Patterned after the Spitzbergen precedent and the general principles just outlined, that regime could rapidly emerge as a special seabed custom. In addition to the observations already made, the following considerations are relevant to the speedy emergence of a customary seabed regime along the lines indicated in Section II:

(1) In *The Scotia,* the United States Supreme Court established that length of time is not an element in the formulation of a rule of customary international law, but that recent practice and the acceptance thereof as a claim of right or duty by the major interested states is sufficient.118

(2) The interest of the world community in alleviating the scars of strip mining in dry land areas and in augmenting the current supply of mineral resources which are increasingly needed to satisfy the rising expectations of an ever-growing world population calls for the mining of manganese nodules. It is also in the interest of the world community that such mining be conducted under a regime which precludes the development of such bitter controversies as those engendered by the contemporary free-for-all in high seas fisheries. Rather than promote the anarchy which would follow the application of the traditional freedom of the high seas doctrine, the world community should recognize the emergence of a special custom of deepsea mining in which the right of capture is mitigated by the principle that rights can inure in a resource while that resource is still on the sea floor. This would be an exception, though not unique, to the traditionally understood principle of the right of capture which requires that the claimant must have reduced the object to physical possession and control. Exceptions to the narrow right of capture were developed in the Greenland and Galapagos whale fisheries.119 Finally, these

117. 81 U.S. (14 Wall.) 170 (1871).
118. The acceptance of recent practice reflecting a claim of right as customary international law has been confirmed by the International Court of Justice in the *North Sea Continental Shelf Cases,* [1969] I.C.J. 3, 24.
119. See HOLMES, supra note 17, at 212. Under the right of capture it could be argued that an ocean miner can only claim to have legal possession and title to nodules when he has reduced them to his exclusive physical custody and control, i.e., only when he has caught them in his gathering equipment. This is an unnecessarily restrictive view and one which is not relevant to the exigencies of the mining of manganese nodules from the ocean
exceptions promote the prevention of violence and the recognition of the equities of those who have invested time, effort, and capital in their searches, as well as preparations for the final acquisition of the target resource.

(3) Article 38, paragraph 1(c) of the Statute of the International Court of Justice requires that the Court look to “the general principles of law recognized by civilized nations” as a source of law. The system compendiously described as “mining rights,” whether found on Spitzbergen before 1920 or in California, Australia, or South Africa, has been shown in the preceding sections to qualify in terms of equity, acceptance, and utility as general international law under this rubric.

IV: “MORATORIUM” AND “COMMON HERITAGE”

The United Nations General Assembly’s Moratorium Resolution provides that

pending the establishment of the aforementioned international regime:

(a) states and persons, physical or juridical, are bound to refrain from all activity of exploitation of the resources of the area of the seabed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction;

(b) no claim to any part of that area or its resources shall be recognized.120

Criticism of the arguments outlined above based on a supposition of the legal impact of this Resolution fails for three reasons. First, during his term as Legal Advisor of the Department of State, Mr. John R. Stevenson said publicly on a number of occasions that the Moratorium Resolution is not legally binding on the United States. He did concede that it should be given “good

floor because its main ocean law provenance has been in terms of fin fisheries. This restrictive view has not been applied in other fisheries, where the practicalities and the need for public order have dictated a recognition of merely symbolic possession—for example the special whale fishery customs of Greenland and Galapagos. See id.

In the context of deep ocean mining, the taking of the first nodule from a claimed ore body in an equitably acceptable and determinate area should be deemed to establish possession over all the nodules within that area. The taking of the first sample nodule should be viewed as a symbolic taking of possession of all the nodules which it represents; the enterprise has, from that moment on, a clear intention of taking all the other nodules in the claimed area as well as the technological power to reduce them to its physical control by means of the knowledge it gains from both the sample and from the procedures of collection and processing which the recovery of that sample requires.

faith consideration," but this attitude must be dependent upon the good faith of the promoting states in their prompt acceptance of an international regime. Six years have now elapsed since the General Assembly affirmed its Moratorium Resolution and no treaty regime is in sight. This time lapse makes the good faith of the promoters of the Resolution suspect.

Second, the General Assembly has mandated the Seabed Committee to promote the exploitation of the resources of the seabed. The Moratorium Resolution, no longer a brief interim measure, undermines that mandate. Because the two resolutions are contradictory, the mandate should prevail; it was more widely supported, was intended as a constitutive measure, and was formulated in terms of enhancement of world welfare. The Moratorium Resolution threatens that welfare by supporting the mineral production prices of a few states because it prevents the establishment of competitive alternatives. Third, one of the Moratorium Resolution promoters has recently conceded, in a statement for which no ascription can be given, that the Resolution was intentionally and specifically directed against the private enterprise interests of the United States and of other developed countries. It was framed to have a “chilling effect” on investors. It is not in the interest of the United States to have the economic efficiency of its investment market distorted by intervention in the form of political maneuvers of this kind. This may be underscored by a statement of President Richard Nixon:

I do not . . . believe it is either necessary or desirable to try to halt exploration and exploitation of the sea-beds beyond a depth of 200 metres during the negotiating process.

124. The vote on the Resolution establishing the seabed committee was: For 111; Against 0; Abstaining 7; Absent 0. The vote on the Moratorium Resolution was: For 62; Against 28; Abstaining 28; Absent 8. None of the major maritime states voted in favor of the Moratorium Resolution. This voting pattern negates the possibility of any claim that a consensus exists such as that called for by writers who seek to find a law indicating force in some of the resolutions of the United Nations General Assembly. See, e.g., Falk, On the Quasi-Legislative Competence of the General Assembly, 60 Am. J. Int’l L. 782 (1966); Higgins, The Development of International Law Through the Political Organs of the United Nations, 59 Am. Soc. Int’l L. Proc. 116 (1965); Onuf, Professor Falk on the Quasi-Legislative Competence of the General Assembly, 64 Am. J. Int’l L. 349 (1970).
Accordingly, I call on other nations to join the United States in an interim policy . . . . The regime should accordingly include due protection for the integrity of investments made in the interim period.\(^{125}\)

For these three reasons, it would be counterproductive to American interests for the Moratorium Resolution to be viewed as a means of stifling the development of customary norms in the area or the application of general principles of law recognized by civilized nations.

The bill now before Congress entitled the Deep Seabed Hard Minerals Resources Act\(^{126}\) proposed the establishment of a system of reciprocating domestic regimes. An oral criticism of the position outlined in the Bill and in this article has been offered by a friend of this writer. Playing devil's advocate, he argued that the characterization of the seabed and subsoil beyond national jurisdiction and their resources as “the common heritage of mankind” in Article 1 of the United Nations 1970 Declaration of Principles Governing the Sea-Bed and the Ocean Floor, and the Subsoil Thereof, beyond the Limits of National Jurisdiction,\(^{127}\) would provide a legal basis for a country to deny foreign title to seabed minerals and to goods manufactured therefrom which have come into its jurisdiction in the flow of international commerce. He further suggested that the recent litigation in Paris regarding Chilean copper\(^{128}\) or the earlier case of *The Rose Mary*\(^{129}\) are available as telling precedent. The government which viewed the unilateral taking of seabed minerals as a wrongful appropriation of “the common heritage of mankind” could seek a judgment in its own courts declaring that the importer had no title and ordering the sequestration of the goods.\(^{130}\) Such a characterization of

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130. The discussion did not take up the further situation of whether any property within the jurisdiction and belonging to an “offending” enterprise engaged in the winning
seabed resources reflects a misunderstanding of a number of legal principles.

This position, in effect, equates the "common heritage" clause with the Moratorium Resolution in that both are seen as providing the premise for an argument precluding any seabed activity dehors an international regime. This equation would be contrary to the policy and interests of the United States which have already been indicated. Finally, had the interpretation now proposed been originally given to the "common heritage" clause, the voting support enjoyed by the Declaration of Principles would not have been forthcoming. It would have succeeded in gaining only the same voting support as that given to the Moratorium Resolution. There is no possibility of this interpretation creeping under the umbrella of support given to the Declaration, thereby qualifying the policy of the Moratorium Resolution as "instant international law."

The second main argument against treating the "common heritage" clause as a prohibition upon seabed activity is that to do so is to characterize the mineral resources of the seabed as an estate held in common by all humanity. It follows from such characterization, according to the devil's advocate, that no single country or enterprise could help itself to any part of the deep seabed's hard mineral resources without the consent of all peoples or their duly appointed representatives (the authorities or agencies empowered under the treaty regime to license states and/or enterprises).

The assertion of this restriction assumes that the word "mankind" in the clause indicates only those people now alive. It also assumes that "mankind" is to be viewed only as organized by states, so that only a common action by the states of the world can create a regime which would authorize the use of the seabed's resources. This argument thus transmutes the slogan "common

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131. See notes 121 & 125 supra and the accompanying text.
132. For a contrast of the voting support given to each of these two Resolutions, see note 124 supra.
heritage of mankind” into a legal concept such as “property in common of the states now existing” (or “property in common of the states existing at the date of the treaty regime’s coming into force” or “. . . at the date of signature”). Lawyers, diplomats, and statesmen should avoid treating layman’s language as if it were formulated in terms of technical legal concepts, especially when that layman’s language is a political slogan. On the other hand, the phrase “common heritage of mankind,” a layman’s formula if ever there was one, should be given the greatest respect. While it should not, indeed cannot, be viewed as a prescription, it can be accepted as an important hortatory message or as the kind of “policy directive” found in the Irish and Indian constitutions. Like those directives, the phrase expresses fundamental values but requires further implementation. It cannot be seriously claimed that the “common heritage” phrase is a self-executing instrument creating titles, prohibitions, and rights without further implementing agreements.

Conceding for the moment the thesis that the phrase “common heritage of mankind” prescribes the worldwide joint ownership of seabed mineral resources, state action against an enterprise chartered by the United States would still not be justifiable under international law. For such action to be lawful, there would have to exist a legal rule prohibiting an individual joint owner from unilaterally exercising his rights to jointly owned property without the prior agreement of all the joint owners. There is no such rule applicable to any situation remotely relevant to the one under discussion. Certainly, there is not one which would qualify as a “general principle of law recognized by civilized nations” under Article 38, paragraph (1)(c) of the Statute of the International Court of Justice. An argument based on the supposed existence of such a rule is inconsistent with the theories of concurrent interests in the common law and the civil law. A tenuous parallel exists only in classical Roman law, which provided that one of a number of owners holding land in common could not build on the property without the consent or non-prohibition of all other owners.

The modern common law is well expressed in the authoritative treatise American Law of Property:

There are many American cases that agree with the English cases in the view that an individual cotenant may develop and operate mines, quarries, and oil wells without being liable for waste. It has also been held that a cotenant may cut and sell
timber, if such operations have the same relation to the reasonable use and enjoyment of property as they would have in the case of a sole owner in fee.\textsuperscript{134}

Where a co-tenant opens mines, digs oil wells, or cuts timber beyond his share, he should be "merely held to a duty to account for the net profits received from such operations, less the expenses thereof."\textsuperscript{135} Roman law may not have developed concepts regarding interests held in common to the same level of sophistication as did the common law. On the other hand, formulae similar to those long existing in the Anglo-American system are evolving in contemporary civil law jurisdictions.

It cannot be argued that the "common heritage" clause automatically and immediately creates an international condominium in the resources of the deep seabed. Such a change in the status of seabed resources could be accomplished only by a dispositive treaty with similar effect in international law as that of a deed or other conveyance in domestic law. The formal signature of all states would be required for such an important quitclaim. Furthermore, any state not acceding to such a treaty would not be bound thereby. Similarly, its citizens could continue to claim the privileges and immunities of the free high seas in mining the deep seabed. Even assuming that the clause were to have a dispositive effect, the devil's advocate position that no state or enterprise could take seabed minerals because they belong to all would still be incorrect. International law contains three examples of joint use of territory: separate exercise of joint sovereignty, joint exercise of separate sovereignty, and joint exercise of joint sovereignty.\textsuperscript{136} Even the last type leaves each state with separate sovereignty over its citizens, as illustrated by the Anglo-French Condominium over New Hebrides. Perhaps the best known example of joint exercise of joint sovereignty was the original four-power control of Berlin, which was specifically provided for by treaty. The ensuing frustrations led to a new regime in which three parties contributed their individual shares of joint power to a new three-party joint effort and the fourth party, through its delegates in East Germany, exercised its individual share of joint authority in East Berlin. The paralyzing effect of the original effort to exercise joint sovereignty jointly is depicted in Peter Ustinov's wickedly humorous play "The Love of Four Colonels."\textsuperscript{137}

\begin{footnotes}
\item 134. 2 \textsc{American Law of Property} 64-65 (Casner ed. 1952) (footnotes omitted).
\item 135. \textit{Id.} at 65-66 (footnotes omitted).
\item 136. 1 \textsc{Oppenheim}, \textit{supra} note 8, at 453-55.
\item 137. Dramatists Play Service (New York, 1953).
\end{footnotes}
The "common heritage" clause is not an agreement that parties interested in a common property resource cannot engage in unilateral exploitation of the common rights they enjoy with the rest of mankind. At most, the clause emphasizes the accounting they might possibly be called upon to render and the respect they must show for the rights of their fellow beneficiaries. The clause is not capable, as events have proved, of withholding deep seabed mineral resources from international commerce until their exploitation can be administered by an international regime (a result desired by the draftsmen of the Moratorium Resolution). Those who see the "common heritage" clause as a prohibition on seabed mining activities confuse it with an agreement among common owners of property to relinquish their individual rights of use and exploitation to a management regime in return for the advantages of common management. Such a regime is not to be found in the clause under discussion. Its establishment is one of the main goals of the Third United Nations Conference on the Law of the Sea. Since the clause cannot be construed as a treaty or other binding agreement having dispositive effects over rights and property, it cannot be considered to reflect agreement on even one aspect of such a regime. It merely reiterates in emphatic language a belief dating back to Grotius that all men can take the resources of the high seas because they represent common property in which all mankind may share.

The "common heritage" formula cannot justify the prevention of individual exercise by states of their common property rights; only a future comprehensive regime which entirely replaces the present customary international law regime can do that. If a government did accomplish the sequestration postulated by the devil's advocate, its conduct would be viewed as contrary to international law. The sequestering government could thus be held accountable to states espousing the claims of their citizens on the theory that actions were based on a misrepresentation, or at least misconception, of what international law permits. The sequestration would constitute "a confiscation . . . by an act of . . . state in violation of the principles of international law." Hence, the conduct envisaged as a reprisal for the taking of seabed minerals claimed to belong to the "common heritage of mankind" could attract litigation in the United States to the extent permitted by the doctrine of sovereign immunity, the

138. See text accompanying note 126 supra.
Hickenlooper Amendment,\textsuperscript{140} and First National City Bank v. Banco Nacional de Cuba.\textsuperscript{141} Such reaction might well be copied in other consumer countries which provide the major markets for raw mineral materials. The step suggested by the devil's advocate could be turned against the intervening state and become a nightmarish enactment of the "Sorcerer's Apprentice"\textsuperscript{142} in political rather than musical terms.

V. Absence of Any Prohibitory Rule

A further argument in support of contemporary international legal rights allowing the mining of seabed nodules, and one which is responsive to claims that these rights are precluded by the Moratorium Resolution and the "common heritage" clause, may be found in propositions which have made The Case of the S.S. "Lotus"\textsuperscript{143} famous.

International law governs relations between independent States. The rules of law binding upon States therefore emanate from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between these coexisting independent communities or with a view to the achievement of common aims. Restrictions upon the independence of States cannot therefore be presumed. . . . Far from laying down a general prohibition to the effect that States may not extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory, it leaves them in this respect a wide measure of discretion which is only limited in certain cases by prohibitive rules; as regards other cases, every State remains free to adopt the principles it regards as best and most suitable.\textsuperscript{144}

These passages can be summarized by the maxim "that which is not specifically forbidden is allowed," a proposition cited by the Committee of Jurists which was appointed to draft the Statute of the Permanent Court of International Justice as an example of "the general principles of law recognized by civilized nations."\textsuperscript{145}

The decision of the International Court of Justice in the

\textsuperscript{141} 406 U.S. 759 (1972).
\textsuperscript{142} \textit{Olson} \& \textit{Elder, Plays and Poems} (University of Chicago Press 1951).
\textsuperscript{144} \textit{Id.} at 18-19.
\textsuperscript{145} League of Nations, Permanent Court of International Justice, Advisory Committee of Jurists, Proces-Verbaux of the Proceedings (mimeograph, June 16-July 24, 1920).
Fisheries Case illustrates the continuing vitality of this maxim. Maitre Bourquin, Counsel for Norway, set forth several ingenious arguments in the Pleadings and in oral presentation. One of those arguments related to the nonexistence of any rule requiring Norway to measure her baselines from the low-water mark of her coastline and, consequently, the existence of a permissiveness in the international legal order regarding the definition of the baseline of territorial seas by coastal states. He argued that Norway could delimit these in a manner she considered to be "best and most suitable." He also stressed the special historic rights of Norway, arising from unique geographical and socio-economic factors, to establish the baselines she was defending. The Court followed both arguments and found

that the method employed for the delimitation of the fisheries zone by the Royal Norwegian Decree of July 12th, 1935, is not contrary to international law; and

that the base-lines fixed by the said Decree in application of this method are not contrary to international law.

The Court emphasized the unique geographical features of Norway's Arctic coasts and skjaergaard, the historical and social dependence of Norway's Arctic communities upon the waters, and the history of Norway's laws, policies, and economy as they related to the sea areas within the outer islands and reefs off her coasts. It was noted that the communities rely totally upon fishing, and that their fishermen view the sea areas as farmers regard their farmlands. The Court founded its judgment on both the affirmative rules justifying Norway's baselines and on the absence of any rules prohibiting those demarcations.

Customary international law does not prohibit the taking of ocean resources from areas beyond the exclusive jurisdiction of any state, and therefore permits the taking of manganese nodules from the deep seabed. In addition, the practices, principles, and rules which have demonstrated the concept of possession also support the mining privilege of removing nodules and the view that the item of property is the deposit rather than individual and specific nodules.

147. Id. at 143.
VI: Domestic United States Enterprises and Deepsea Mineral Exploitation

The discussion thus far has concerned the international legal relations of enterprises engaging in deepsea mineral exploitation while operating under the laws of different states. It is also necessary to indicate briefly the relations of two or more American enterprises vis-à-vis one another. Should a United States competitor seek to work within a seabed area already being worked by another American enterprise under a valid claim of right, the entity first establishing its possession would be entitled to have its rights vindicated under United States law against the enterprise which was second in possession and, hence, second in right. United States law would govern the relations of the parties, despite the fact that the source of the dispute was located beyond its territory.

A. Values Involved

In the domestic legal order, as in the international one, basic values inherent in laws governing natural resources are the protection of the environment, the maximization of the material goods to be gained from placing resources in commerce, and the assurance of public order. These values promote discovery of new resources and create incentives to win those already discovered. The traditional "miners' rights" have prevailed wherever the common law has governed resources unalienated from the surface. In the absence of statutes, these rights provide that each miner is entitled to an exclusive right to mine an area of such dimensions as he has the capability of exploiting over a reasonable period of time and yet of a size which does not permit him to unreasonably monopolize the resource to the exclusion of other participants in the industry.

B. Common Law Basis

Analysis of the legislative histories of federal and state laws containing "grandfather clauses" protecting prior mining claims indicates the recognition of rights acquired under common law and before enactment of the statutes. It is true that these rights

148. For a discussion of the common law underpinnings of miner's right, see § II.B of text supra.

may not have found their inception in the decisional laws of federal and state courts as much as in the customs of the mining communities, but these customs did not spring fully articulated and developed out of the turbulent mining communities of California. Rather, they have a long and unbroken history in English and Germanic mining customs and in the common law traceable to at least the medieval period.

C. The Extra-Territorial Operation of the Common Law

Insofar as it may be applicable, the common law governs United States citizens and enterprises whenever they are beyond the territorial jurisdiction of the United States, and especially when they are not subject to the jurisdiction of any other country. When mining on the high seas, United States citizens and enterprises are governed by the laws of the United States and by the common law of their state of citizenship on three bases: (1) when a ship engaged in a mining enterprise is an American flag ship, the laws of the United States govern by virtue of the flag; (2) in an area not subject to the sovereignty of any state, the personal law of the individual governs his conduct; 150 (3) when people subject to the common law have settled or worked in an area not governed by the law of any state, their relations have been governed by the common law. A statement by Chief Justice Field on this point is singularly apposite:

when American citizens emigrate into territory which is unoccupied by civilized man, and commence the formation of a new government, they are . . . considered as carrying with them so much of the same common law, in its modified and improved condition under the influence of modern civilization and republican principles, as is suited to their new condition and wants. 151

This article has already demonstrated that the common law

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150. An illustration of this was provided by the operations of the Boston mining corporation which won coal from Spitzbergen (at that time a masterless territory) in the first decade of this century. See § 1IC of text supra.
established the principle of miners’ rights wherever there was no relevant statute. Should the activities of two American mining enterprises overlap on the seabed (an area having neither a government nor a body of law), the common law and in particular that of miners’ rights governs the confrontation over claims to resources to be mined. Finally, since it is commonly understood that international law is part of the common law,\textsuperscript{152} the arguments set forth in that context in Section II subsections A through C are, \textit{ceteris paribus}, also applicable here.

\section*{VII: Conclusion}

Independent of congressional enactment of the Deep Seabed Hard Minerals Resources Act\textsuperscript{153} enterprises may claim and develop mining tracts of reasonable size on the deep seabed. What is “reasonable” would depend upon a number of criteria, including the nature and distribution of the resource, other claims to the same resource, and possessory intent and control on the part of the enterprise. These rights are not subject to impairment through any disparagements advanced pursuant to the United Nations General Assembly’s 1969 Moratorium Resolution\textsuperscript{154} or the 1970 Declaration of Principles.\textsuperscript{155}

Deep seabed mining claims should be recorded by filing all documents necessary to show title with the Foreign Office of the claimant’s country of nationality. These should include a “notice of discovery and claim” announcing the enterprise’s claim to the world, a surveyor’s or navigator’s description of the tract in terms of fixes, bearings, and distances, evidence of possession and of continued, active exploitation of the resource, expression of intention to assert exclusive rights to exploit the mineral resources of the tract, and testimony that the enterprise was “first in time.” In the absence of applicable statutes and treaties, these specific

\begin{itemize}
\end{itemize}
acts reflect a good faith intention of giving adequate notice of the making of a claim. The purpose is to utilize the most practical means available to effectively publicize an enterprise’s claim of exclusive rights and the area within which they are to be exercised, thereby putting all interested parties on either actual or constructive notice.

Rights arising under the customary international law principles which have been outlined in this article and which comply with requirements of the rule of reasonableness in terms of notice, area, and due diligence in beginning and developing mining operations, have an immediate validity. They would predate any regime created by international agreement or by domestic reciprocating laws. If these rights vest before such a regime comes into force, they can survive its establishment. Of course, they would still be subject to the domestic law, including the constitutional law, of their enterprise’s home state. Alternatively, these rights are entitled to conversion, subject to the constitution of the enterprise’s home state, without diminution of value, into continuing rights consistent with the regime’s mission or into claims for prompt, adequate, and effective compensation. The fact that they are capable of becoming vested under international law establishes a claim for protection from capricious or arbitrary international or national action.
APPENDIX A

DEEPSEA VENTURES, INC.
GLOUCESTER POINT, VIRGINIA 23062
703-642-2121 TELEX 827305
November 14, 1974

The Honorable Henry A. Kissinger
Secretary of State
U.S. Department of State
2201 C Street
Washington, D.C. 20520

Notice of Discovery and Claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment, by Deepsea Ventures, Inc.

My dear Mr. Secretary:

Deepsea Ventures, Inc., a Delaware corporation having its principal place of business in the County of Gloucester, The Commonwealth of Virginia, U.S.A., respectfully makes of record, by filing with your office this Notice of Discovery and Claim of Exclusive Mining Rights and Request for Diplomatic Protection and Protection of Investment, by Deepsea Ventures, Inc. (hereinafter “Claim”), as authorized by its Board of Directors by resolution dated 30 October 1974, a certified copy of which is annexed hereto as Exhibit A.

Notice of Discovery and Claim of Exclusive Mining Rights

Deepsea Ventures, Inc., (hereinafter “Deepsea”), hereby gives public notice that it has discovered and taken possession of, and is now engaged in developing and evaluating, as the first stages of mining, a deposit of seabed manganese nodules (hereinafter “Deposit”). The Deposit, illustrated by the sketch annexed as Exhibit B, is encompassed by, and extends to, lines drawn between the coordinates numbered in series below, as follows:

From:
(1) Latitude 15°44'N Longitude 124°20'W
A line drawn West to:
(2) Latitude 15°44'N Longitude 127°46'W
And thence South to:
(3) Latitude 14°16'N Longitude 127°46'W
And thence East to:
Latitude 14°16'N
Longitude 124°20'W
and thence North to the point of origin.

These lines include approximately 60,000 square kilometers for purposes of development and evaluation of the Deposit encompassed therein, which area will be reduced by Deepsea to 30,000 square kilometers upon expiration of a term of 15 years (absent force majeure) from the date of this notice or upon commencement (absent force majeure) of commercial production from the Deposit, whichever event occurs first. The Deposit lies on the abyssal ocean floor, in water depths ranging between 2300 to 5000 meters and is more than 1000 kilometers from the nearest island, and more than 1300 kilometers seaward of the outer edge of the nearest continental margin. It is beyond the limits of seabed jurisdiction presently claimed by any State. The overlying waters are, of course, high seas.

The general area of the Deposit was identified in August of 1964 by the predecessor in interest of Deepsea, and the Deposit was discovered by Deepsea on August 31, 1969.

Further exploration, evaluation, engineering development and processing research have been carried out to enable the recovery of the specific manganese nodules of the Deposit and the production of products and byproducts therefrom.

The work done, and in progress, is summarized in the annexed affidavits, Exhibits C and D.

Deepsea, or its successor in interest, will commence commercial production from the Deposit within 15 years (absent force majeure) from the date of this Claim, and will conclude production therefrom within a period (absent force majeure) of 40 years from the date of commencement of commercial production whereupon the right shall cease.

Deepsea has been advised by Counsel, whose names appear at the end hereof, that it has validly established the exclusive rights asserted in this Claim under existing international law as evidenced by the practice of States, the 1958 Convention on the High Seas, and general rules of law recognized by civilized nations.

Deepsea asserts the exclusive rights to develop, evaluate and mine the Deposit and to take, use, and sell all of the manganese nodules in, and the minerals and metals derived, therefrom. It is proceeding with appropriate diligence to do so, and requests and requires States, persons, and all other commercial or political entities to respect the exclusive rights asserted herein. Deepsea
does not assert, or ask the United States of America to assert, a territorial claim to the seabed or subsoil underlying the Deposit. Use of the overlying water column, as a freedom of the high seas, will be made to the extent necessary to recover and transport the manganese nodules of the Deposit.

Disturbance of the seabed and subsoil underlying the Deposit will be temporary and will be restricted to that unavoidably occasioned by recovery of the manganese nodules of the Deposit. To facilitate the United States of America's domestic policies and programs of environmental protection, Deepsea will provide, at no cost, reasonable space for U.S. Government representatives of the United States of America on vessels utilized by Deepsea in the development and evaluation of the Deposit. Deepsea does not intend to process at sea the manganese nodules from the Deposit.

It is Deepsea's intention, by filing this Claim in your office and in appropriate State recording offices, to publish this Claim and provide notice and proof of the priority of the right of Deepsea to the Deposit, and its title thereto.

A true copy of this Claim is being filed for recordation in the offices of the Secretary of State of the State of Delaware, U.S.A., the State wherein Deepsea is incorporated, and on 15 November 1974 in the office of the Clerk of the Circuit Court of Gloucester County, Virginia, U.S.A., the county and Commonwealth of Deepsea's principal place of business. Copies of this Claim are also being provided to others, as specified in the annexed Exhibit E.

We ask that this Claim, and all of the annexed Exhibits, be made available by your office for public examination.

Requests for Diplomatic Protection and Protection of Integrity of Investment

Deepsea respectfully requests the diplomatic protection of the United States Government with respect to the exclusive mining rights described and asserted in the foregoing Claim, and any other rights which may hereafter accrue to Deepsea as a result of its activities at the site of the Deposit, and similar protection of the integrity of its investments heretofore made and now being undertaken, and to be undertaken in the future.

This request is made prior to any known interference with the rights now being asserted, and prior to any known impairment of Deepsea's investment. It is intended to give the Department immediate notice of Deepsea's Claim for the purpose of
facilitating the protection of Deepsea’s rights and investments should this be required as a consequence of any future actions of the United States Government or other States, persons, or organizations.

The protection requested accords with the assurances given on behalf of the Executive Department to the Congress of the United States, including those by Ambassador John R. Stevenson, by Honorable Charles N. Brower, and by Honorable John Norton Moore, as follows:

“The Department does not anticipate any efforts to discourage U.S. nationals from continuing with their current exploration plans. In the event that U.S. nationals should desire to engage in commercial exploitation prior to the establishment of an internationally agreed regime, we would seek to assure that their activities are conducted in accordance with relevant principles of international law, including the freedom of the seas and that the integrity of their investment receives due protection in any subsequent international agreement.” Letter of January 16, 1970, from John R. Stevenson, Legal Advisor, Department of State, to Lee Metcalf, Chairman, Special Subcommittee on the Outer Continental Shelf, U.S. Senate, reproduced in Hearings before the Special Senate Subcommittee on the Outer Continental Shelf, 91st Cong., 1st and 2d Sess. at 210 (1970).

“At the present time, under international law and the High Seas Convention, it is open to anyone who has the capacity to engage in mining of the deep seabed subject to the proper exercise of high seas rights of other countries involved.” Statement of Charles N. Brower, Hearings before the House Subcommittee on Oceanography of the Committee on Merchant Marine and Fisheries, 93d Cong., 1st Sess., at 50 (1974).

“It is certainly the position of the United States that the mining of the deep seabed is a high seas freedom and I think that would be a freedom today under international law. And our position has been that companies are free to engage in this kind of mining beyond the 200-meter mark subject to the international regime to be agreed upon, and of course, assured protection of the integrity of investment in that period.” Statement of John Norton Moore, Hearings before the Senate Subcommittee on Minerals, Materials and Fuels, 93d Cong., 1st Sess., at 247 (1973).

The language of these extracts, and other statements similar to them made by these and other responsible officers of the Executive Branch is consistent with the Executive’s continuing prac-
OCEAN MINING RIGHTS

practice as reflected in a paragraph in President Taft's Message to the Congress of December 7, 1909, where he said:

"The Department of State, in view of proofs filed with it in 1906, showing American possession, occupation and working of certain coal-bearing lands in Spitzbergen [Spitzbergen was at that time recognized as being not subject to the territorial sovereignty of any State] accepted the invitation under the reservation above stated [i.e., the questions of altering the status of the islands as countries belonging to no particular State and as equally open to the citizens and subjects of all States, should not be raised] and under the further reservation that all interests in those islands already vested should be protected and that there should be equality of opportunity for the future." Annual Message of the President to Congress 7 December 1909, [1901] For. Rels. of the U.S. IX at XIII (1914).

Deepsea has used its best efforts to ascertain that there are no pipelines, cables, military installations, or other activities constituting an exercise of freedom of the high seas in the area encompassing the Deposit or in the superjacent waters, with which Deepsea's operations might conflict. So far as is known, no claim of rights has been made by any State or person with respect to said Deposit or any other mineral resources in the area encompassing the Deposit and no State or person has established effective occupation of said area.

Initially, approximately 1.35 million wet metric tons of nodules will be recovered by Deepsea from the Deposit per year. In accord with market conditions, this may later be expanded to as much as 4 million wet metric tons per year recovered. Deepsea's processing and refining technology, successfully demonstrated in its pilot plant, will recover copper, nickel, cobalt, manganese, and other products, depending on the market situation and competitive conditions. The recovered weight of the major four metals that the initial 1.35 million wet metric tons of nodules will yield per year will be approximately as shown in Column A below. Column B gives some indication of the dependency of the United States of America upon imports for these four metals.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td>Net U.S. Imports (1972) as a Percentage of U.S. Consumption</td>
</tr>
<tr>
<td>Metric Tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodules</td>
<td>1,350,000</td>
<td>---</td>
</tr>
<tr>
<td>Copper</td>
<td>9,150</td>
<td>9%</td>
</tr>
<tr>
<td>Nickel</td>
<td>11,300</td>
<td>71%</td>
</tr>
<tr>
<td>Cobalt</td>
<td>2,150</td>
<td>92%</td>
</tr>
<tr>
<td>Manganese</td>
<td>253,000</td>
<td>93%</td>
</tr>
</tbody>
</table>
The importance of these minerals to the economy of the United States does not require elaboration. It has been effectively expressed to the Congress by the Executive Branch.

For your information, the capital stock of Deepsea is at present wholly owned by nationals of the United States. Ninety percent thereof is owned by Tenneco Corporation, a Delaware corporation, and the other ten percent is owned by individuals, all of whom are United States citizens. At this date stock options are outstanding which, if all are exercised, will result in acquisition of the following percentages of ownership of Deepsea's capital stock by others:

23.75%: Essex Iron Company, a New Jersey corporation, a wholly owned subsidiary of United States Steel Corporation, a Delaware Corporation.

23.75%: Union Mines Inc., a Maryland corporation, a wholly owned subsidiary of Union Miniere, S.A., a Belgian corporation.

23.75%: Japan Manganese Nodule Development Co., Ltd., a Japanese corporation.

Respectfully,
DEEPSEA VENTURES, INC. [*]
By /s/ John E. Flipse, President
Counsel:
/s/ Northcutt Ely
/s/ L.F.E. Goldie
/s/R. J. Greenwald
*The signature of the President was duly notorized.]
CERTIFIED RESOLUTION
of the
Board of Directors
of
DEEPSEA VENTURES, INC.

At a duly constituted meeting of the Board of Directors of Deepsea Ventures, Inc., a Delaware corporation with its principal place of business in the County of Gloucester, Commonwealth of Virginia, U.S.A., held on 30 October 1974, the following resolution was adopted:

RESOLVED, that the President of the Company be, and he hereby is, authorized and directed to file a "Notice of Discovery and claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment" with the Secretary of State of the United States of America and with such other departments and agencies of the United States Government, and with the states in which it is authorized to do business, and with such other persons and organizations, as it may deem necessary to accomplish the corporate objectives of the Company.

I, the undersigned, hereby certify that the foregoing is a true copy of the resolution adopted by the Board of Directors of Deepsea Ventures, Inc., at a meeting of the said Board held on the aforementioned date, and entered upon the regular minute book of Deepsea Ventures, Inc. and now in full force and effect, and that the Board of Directors of Deepsea Ventures, Inc. has, and at the time of the adoption of the said resolution had, full power and lawful authority to adopt the said resolution and to confer the powers thereby granted to the officer therein named, who has full power and lawful authority to exercise the same.

IN WITNESS WHEREOF, I have affixed my name as Secretary and have caused the corporate seal of Deepsea Ventures, Inc. to be hereunto affixed, this 14th day of November, 1974

/s/ Richard J. Greenwald, Secretary [*]

*[The signature of the Secretary was duly notarized.]
John E. Flipse, being duly sworn, deposes that:

1. He resides at the Cove, Gloucester, Virginia, U.S.A., and that he is a citizen of the United States of America, and that he is 53 years of age.

2. He was, from September 1957 to October 1968, employed by the Newport News Shipbuilding and Dry Dock Company, a Delaware Corporation having its principal place of business in Newport News, Virginia, U.S.A.

3. From 1962 to October 1968, he was responsible for and directed the activities of the Research Division of Newport News Shipbuilding and Dry Dock Company and specifically the program of investigating the technical and economic feasibility of deep ocean manganese nodule mining as conducted by that Company, during which time he served in the capacity of Director of Research and Assistant to the President (among other responsibilities) with continuous control over said ocean mining program and was responsible for planning, operations, budgeting and obtaining corporate support during the conduct of said program.

4. He prepared the documentation and directed the transfer of the interest of Newport News Shipbuilding and Dry Dock Company to Deepsea Ventures, Inc., a Delaware Corporation, having its principal place of business in Gloucester County, Virginia, U.S.A., in September of 1968 during which month both companies became subsidiaries of Tenneco, Inc., a Delaware Corporation having its principal place of business in Houston, Texas, U.S.A. The assets of said ocean mining program including, but not limited to, the Research Vessel PROSPECTOR, the trip reports, engineering reports, designs, notebooks, files and rights to the patents developed prior to said transfer date, were transferred from Newport News Shipbuilding and Dry Dock Company to Deepsea Ventures, Inc., along with certain personnel knowledgeable in the technical and business aspects of the program.

5. From October 7, 1968, until this date, he has served as President of Deepsea Ventures, Inc., and directed the continuation and expansion of the transferred program to prove the technical and economic feasibility of deep ocean mining, said program including the prospecting and exploration of the deep ocean floor of the Pacific Ocean, the development and testing of components and mining systems, and the development and testing of processes for winning the metals from manganese nodules, and he
directed the preparation of summary resource data, engineering reports, filing of patent applications, and the economic analysis of a proposed commercial deep ocean mining system.

6. As a result of the foregoing activities, attention was concentrated in the California Seamount area of the Clarion Fracture Zone of the Baja California Oceanographic Province, identified during cruises of R/V PROSPECTOR (owned by Deepsea’s predecessor in interest) during August 1964 and April/May 1965. Further cruises based thereon resulted, on August 31, 1969, at 1820 local time, in recovery of a particularly significant grab sample of nodules from a station at 15°28’N. Latitude 125°100.5’W. Longitude. Survey activity on this cruise continued as far south as 15°12.5’N., 125°02’W.

7. Since August 31, 1969, further surveys during 16 cruises, of three to four weeks duration each, have further defined the extent of the deposit discovered on that date. These activities included the taking of some 294 discrete samples, including the bulk dredging of some 164 tons of manganese nodules from some 263 dredge stations, 28 core stations and three grab sample stations, cutting of some 28 cores, approximately 1,000 lineal miles of survey of sea floor recorded by television and still photography, etc. As a result, the deposit of nodules (hereinafter “Deposit”) identified with the discovery has been proved to extend generally throughout the entire area encompassed by lines drawn as follows:

From:
(1) Latitude 15°44’N. Longitude 124°120’W.
A line drawn West to:
(2) Latitude 15°44’N. Longitude 127°46’W.
And thence South to:
(3) Latitude 14°16’N. Longitude 127°46’W.
And thence East to:
(4) Latitude 14°16’N. Longitude 124°20’W.
And thence North to the point of origin;

including approximately 60,000 square kilometers, lying on the seafloor of the abyssal ocean, in water depths between 2300 to 5000 meters. This Deposit is some 1300 kilometers from the nearest continental margin, and some 1000 kilometers from the nearest island.

8. Principal characteristics of the Deposit, based upon data acquired to date, are:
9. It has been determined, after more than 10 years of exploration and survey, at-sea equipment testing and mineral and metal processing development, that deposits of manganese require tailoring the design of the mining and processing systems for each specific deposit, that geographic location, sea floor topography, sea floor sediment properties, nodule size, grade and concentration variation and nodule chemistry are sufficiently different so as to make a mining and processing system, which is based on one deposit, suffer important economic penalties if utilized for another deposit.

10. To this end dredge heads and mining systems have been designed by Deepsea Ventures, Inc., for the specific sediments, nodule properties, and water depths at, over and/or under the Deposit, and process design and pilot plant operations have been tailored to the nodules of grade and chemical composition of the manganese nodules in the Deposit. The cost to date of prospecting, exploration, design and test efforts required to identify and evaluate the potential of the Deposit has been approximately U.S. $20,000,000. Further exploration, evaluation, and development of the Deposit and associated facilities will consume some three years and cost between U.S. $22,000,000 and U.S. $30,000,000. Such further exploration, evaluation and development of the Deposit commenced on 1 November 1974.

11. Deepsea intends to commence commercial production of the Deposit within 15 years at an initial rate of approximately 1.35 million wet metric tons of manganese nodules per year, which rate may be expanded according to market conditions to as much as 4 million wet metric tons per year. The Company intends to process said nodules at a land-based processing plant which will yield as the products thereof copper, nickel, cobalt and manganese and other products.

/s/ John E. Flipse
President
Deepsea Ventures, Inc.[*]

*The signature of President was duly notarized.*
Raymond Kaufman, being duly sworn, deposes that:

1. He resides at 112 Cove Road, Williamsburg, Virginia, U.S.A., and that he is a citizen of the United States of America, and that he is 48 years of age.

2. From December 1968 to 15 November 1974, he served as Vice President Technical to Deepsea Ventures, Inc., a Delaware Corporation having its principal place of business in Gloucester County, Virginia, U.S.A.

3. During this period he directed the technical activities of Deepsea Ventures, Inc., associated with ocean mineral deposit prospecting and surveying, mining equipment development and mineral processing development.

4. Commencing November 1, 1974, he has directed and will direct a technical program of Deepsea Ventures, Inc., to develop and evaluate a potential Pacific Ocean manganese nodule deposit described in the affidavit of Mr. John E. Flipse, dated November 15, 1974 (hereinafter “Deposit”), which will take and use from 1.35 to 4 million wet metric tons of manganese nodules per year for a 40-year period. This development and evaluation program will be accomplished in three principal phases.

**Phase I—Deposit Evaluation**

The objective of this Phase is to confirm that the Deposit contains sufficient ore reserves in a favorable oceanographic environment to support the mining and processing operation for a period of 40 years. Phase 1 is being conducted over an approximate three-year period and will require 15 to 30 course grid survey cruises by the Company’s R/V PROSPECTOR to acquire the data required to assess the economic potential of the Deposit. The acquisition of bulk samples from the Deposit will be achieved as a product of a pilot-scale mining ship/system test to be conducted on the Deposit. The estimated expenditure on activities directly related to, or at the site of, the Deposit during Phase I will be approximately U.S. $22,000,000 to U.S. $30,000,000. Subsequent
evaluations of the Deposit will be conducted to define technical
details necessary for mining.

**Phase II—Initial Mine Development**

The objective of this Phase (which may commence during
Phase I above) is to develop a detailed plan to mine the Deposit
effectively. This will require a comprehensive fine grid survey
effort to map the sea floor, to provide topographical maps with a
contour interval approaching one to ten meters, to locate obstruc-
tions and to determine ore distribution, concentration and assay
variations for use in developing an effective mining plan for the
Deposit. The work will be accomplished over a three-year period
during which time data will be acquired, reduced, analyzed and
evaluated. Due to the very large areas involved, the detailed fine
grid survey of the entire Deposit will be completed in Phase III
(below). The survey and analysis work in Phase II will be con-
ducted over an area sufficient to provide ore for about three years
mining at rates of 1.35 million wet metric tons of manganese
nodules per year. The anticipated expenditure at the site of the
Deposit is U.S. $10,000,000 to U.S. $15,000,000 during the first
three years of Phase II.

**Phase III—Incremental Mine Development/Reconnaissance
Surveys during Commercial Production**

The Principal objective of this Phase is to continue the fine
grid mining plan development, while concurrently mining succes-
sive tracts of a size blocked out as described in connection with
Phase II. Mapping will proceed at a rate needed to provide min-
ing data for at least one year's activity about three years in ad-
vance of the actual mining. In addition, a secondary objective of
this Phase is to conduct broad area reconnaissance and prospect-
ing surveys aimed at discovering additional ore bodies for addi-
tional growth and expansion. This work will be undertaken as a
continuing activity over the whole period of exploitation and pro-
duction.

5. The survey and mine site development and evaluation
program is one segment of an ocean mining technical develop-
ment project which also includes the development of the mining,
transportation and support, and ore processing segments. The
technical and economic development of these elements is criti-
cally related to the properties of the specific deposit regarding sea
floor engineering parameters, terrain, water depth, nodule character, distribution and assay, geographic location and chemical composition. The Phase I and Phase II expenditures previously referred to, do not include the costs of production mining equipment, ships, terminals, or processing plants. These latter costs are currently projected to exceed U.S. $120,000,000, and are scheduled to commence on completion of Phase I.

6. Deepsea intends to mine the Deposit at an initial rate of approximately 1.35 million wet metric tons of manganese nodules per year, which rate may be expanded to as much as 4 million wet metric tons per year. The Company intends to process said nodules at a land-based processing plant which will yield as the products thereof copper, nickel, cobalt and manganese and other products.

/s/ Raymond Kaufman
Vice President
Deepsea Ventures, Inc. [*]

* [The signature of the Vice President was duly notarized.]

NOTICE LIST

True copies of the “Notice of Discovery and Claim of Exclusive Mining Rights and Request for Diplomatic Protection and Protection of Investment, by Deepsea Ventures, Inc.”, dated 14 November 1974, to which this notice list is appended as Exhibit E, shall be mailed by certified or registered airmail, return receipt requested, postage and certification or registration fee prepaid, by Deepsea Ventures, Inc. to each addressee listed in this Exhibit E. In addition, legal notice shall be published in as many of the following locations as is possible and practicable: Washington, D.C., U.S.A.; London, United Kingdom; Bonn, Germany; Paris, France; Moscow, U.S.S.R.; Tokyo, Japan; Ottawa, Canada; Brussels, Belgium; Caracas, Venezuela; Monrovia, Liberia; Singapore; New Delhi, India; Canberra, Australia; Tai Pei, Taiwan; Gloucester Point, Virginia; and Wilmington, Delaware.

THE HONORABLE FREDERICK B. DENT
Secretary of Commerce
The Department of Commerce
Fourteenth St., Between Constitution Ave. & E St., N.W.
Washington, D.C. 20230

THE HONORABLE JAMES R. SCHLESINGER
Secretary of Defense
The Department of Defense
The Pentagon
Washington, D.C. 20301
OFFICE OF THE AMBASSADOR
Embassy of AUSTRALIA
1601 Massachusetts Avenue
Washington, D.C. 20036

OFFICE OF THE AMBASSADOR
Embassy of BELGIUM
3330 Garfield Street
Washington, D.C. 20008

OFFICE OF THE AMBASSADOR
Embassy of BULGARIA
2100 Sixteenth Street
Washington, D.C. 20009

OFFICE OF THE AMBASSADOR
Embassy of CANADA
1746 Massachusetts Avenue
Washington, D.C. 20036

OFFICE OF THE AMBASSADOR
Embassy of CZECHOSLOVAKIA
3900 Linnean Avenue
Washington, D.C. 20008

OFFICE OF THE AMBASSADOR
Embassy of FRANCE
2535 Belmont Road
Washington, D.C. 20008

OFFICE OF THE AMBASSADOR
Embassy of FEDERAL REPUBLIC OF GERMANY
4645 Reservoir Road
Washington, D.C. 20007

OFFICE OF THE AMBASSADOR
Embassy of GREAT BRITAIN
3100 Massachusetts Avenue
Washington, D.C. 20008

OFFICE OF THE AMBASSADOR
Embassy of HUNGARY
2437 Fifteenth Street
Washington, D.C. 20009

OFFICE OF THE AMBASSADOR
Embassy of JAPAN
2520 Massachusetts Avenue
Washington, D.C. 20008

OFFICE OF THE AMBASSADOR
Embassy of POPLAND
2640 Sixteenth Street
Washington, D.C. 20009

OFFICE OF THE AMBASSADOR
Embassy of UNION OF SOVIET SOCIALIST REPUBLICS
1125 Sixteenth Street
Washington, D.C. 200036

TENNECO OCEAN METALS DEVELOPMENT CORPORATION
c/o Tenneco Corporation
P. O. Box 2511
Houston, Texas 77001
ATTN: Mr. S. Askin, President

JAPAN MANGANESE NODULE DEVELOPMENT CO., LTD.
c/o Nichimen Co., Ltd.
Natural Resources Development Division
11-1, Nihonbashi, 3-chome
Chuo-ku, Tokyo, JAPAN 103
ATTN: Mr. S. Hiraoka, Executive Vice President (JAMCO)

Japan Cotton Company
(Nichimen Co., Ltd.)
P.O. Box 1247
Dallas, Texas 75221
ATTN: Mr. N. Nakahara, President

C. Itoh & Co., Ltd.
Mineral Resources Development Department
4, 2-chome, Hon-cho Nihonbashi
Chuo-ku, Tokyo, JAPAN

Kanematsu-Gosho Ltd.
Non-Ferrous Metals Department
5, Takara-cho 2-chome, Chuo-ku
Tokyo, JAPAN

UNION MINES, INC.
c/o Union Miniere
Dept. Investissements
Rue de la Chancellerie 1
B-1000, Brussels, BELGIUM
E. H. Tuck, Esq.
Shearman & Sterling
53 Wall Street
New York, N.Y. 10005

ESSEX IRON COMPANY
Room 2786
600 Grant Street
Pittsburgh, Pennsylvania 15230
ATTN: Mr. Phillips Hawkins,
President

AMAX, INC.
1270 Avenue of the Americas
New York, New York 10020
ATTN: Mr. D.J. Donahue,
President

AMERICAN SMELTING & REFINING COMPANY
120 Broadway
New York, New York 10005
ATTN: Mr. R.L. Hennebach,
President

ARBEITSGEMEINSCHAFT MEERESTECHNISCH GEWINNBARE ROHSTOFFE
D-300 Hannover 1, Postfach 4827
Arnstrasse 1
FEDERAL REPUBLIC OF GERMANY

THE BROKEN HILL PROPRIETARY CORP., LTD.
Central Research Laboratories
Shortland, N.S.W. 2307,
AUSTRALIA
ATTN: Dr. J.B. Lean, Research Manager

CNEXO (CENTRE NATIONAL POUR L’EXPLORATION DES OCEANS)
Centre Oceanologique de Bretagne
B.P. 337
Brest 29, FRANCE
ATTN: Mr. Charles Christian

CONSOLIDATED GOLD FIELDS LIMITED
49 Moorgate
London EC2R 6BQ, ENGLAND
ATTN: Mr. J.D. McCall, Chairman

DEMA AG
41 Duisburg
Wolfgang-Reuter-Platz
FEDERAL REPUBLIC OF GERMANY
ATTN: Dr. H.G. Sohl, Chairman

DEEP OCEAN MINING ASSOCIATION
c/o Sumitoma Metal Mining Company, Ltd.
5-11-3, Shinbashi, Minatoku
Tokyo, 105 JAPAN
ATTN: Mr. Kenjiro Kawakami,
Chairman

DEEP OCEAN MINING ASSOCIATION
c/o Sumitoma Metal Mining Company, Ltd.
5-11-3, Shinbashi, Minatoku
Tokyo, JAPAN
ATTN: Mr. Sho Takano, Secretariat

DOME MINES, LTD.
360 Bay Street, Suite 702
Toronto, Ontario, CANADA
ATTN: Mr. J.B. Redpath, President

ETHYL CORPORATION
330 S. Fourth Street
Richmond, Virginia 23219
ATTN: Mr. B.C. Gottwald,
President

GENERAL CRUDE OIL COMPANY
Box 2252
Houston, Texas 77001
ATTN: Mr. D.E. Montague,
President
GLOBAL MARINE, INC.
Global Marine House
811 West Seventh Street
Los Angeles, California 90017
ATTN: Mr. R.F. Bauer, Chairman of the Board

INTERNATIONAL NICKEL COMPANY OF CANADA, LTD.
Toronto-Dominion Centre
King & Bay Streets
Ontario, CANADA
ATTN: Mr. J.E. Carter, President

KENNECOTT COPPER CORPORATION
161 East 42nd Street
New York, New York 10017
ATTN: Mr. F.R. Milliken, President

LOCKHEED MISSILES AND SPACE COMPANY, INC.
Sunnyvale, California 94088
ATTN: Mr. Stanley W. Burriss, President

MARUBENI
3-3 Hommachi
Higashiku, Osaka 541, JAPAN
ATTN: Mr. Hiro Hiyami, President

MESSERSCHMITT-BÖLKOW-BLOHM GMBH
8012 OTTOBRUN BEI MÜNCHEN
FEDERAL REPUBLIC OF GERMANY
ATTN: Office of the Chairman

MITSUI & COMPANY
1-2-9, Nishi-Shinbashi
Minatoku, TOKYO 105
ATTN: Mr. Yoshizo Ikeda, President

NL INDUSTRIES, INC. (formerly National Lead)
111 Broadway
New York, New York 10006
ATTN: Mr. R.C. Adam, President

NORANDA MINES, LTD.
Bank of Nova Scotia Bldg.
44 King Street W.
Toronto 1, CANADA
ATTN: Mr. A. Powis, President

OCEAN RESOURCES, INC.
P.O. Box 2244
La Jolla, California 92037
ATTN: Dr. John Mero, President

OCCIDENTAL MINERALS CORPORATION
6073 West 44th Avenue
Wheat Ridge, Colorado 80033
ATTN: Mr. P.A. Bailly, President

PLACER DEVELOPMENT LTD.
1030 W. Georgia Street
Vancouver 5, B.C., CANADA
ATTN: Mr. T.H. McClelland, President

PHELPS DODGE CORPORATION
300 Park Avenue
New York, New York 10022
ATTN: Mr. G.B. Munroe, President

PREUSSAG AKTIENGESELLSCHAFT
D-300 Hannover 1
P.O. Box 4829
Leibnizufur 9
FEDERAL REPUBLIC OF GERMANY
ATTN: Mr. G. Sassmannshausen, Chairman

MITSUBISHI CORPORATION
2-6-3, Marunouchi
Chiyodaku, Tokyo 100, JAPAN
ATTN: Chujiro Fujino, President
RHEINISCHE BRAUNKOHLEN-WERKE AKTIENGESELLSCHAFT
D-5000 Kölh 1
P.O. Box 10 16 66
Konrad-Adenauer-Ufer 55
FEDERAL REPUBLIC OF GERMANY
ATTN: Office of the Chairman

RIO TINTO-ZINC CORP. LTD.
6 St. James' Square
London, SW1Y 4LD, ENGLAND
ATTN: Sir J.N.V. Duncan OBE, Chairman

SALZGITTER AKTIENGESELLSCHAFT
D-3320 Salzgitter 41
P.O. Box 41 11 29
FEDERAL REPUBLIC OF GERMANY
ATTN: Office of the Chairman

SUMMA CORPORATION
Ocean Mining Division
P.O. Box 99006
Houston, Texas 77011
ATTN: Mr. P.G. Reeve, General Manager

SUMITOMO OCEAN DEVELOPMENT & ENGINEERING CO., LTD.
2-2, 1-chome, Hitosubashi
Chiyoda-ku, Tokyo, JAPAN
ATTN: Mr. J. Tamura, Managing Director

SUMITOMO SHOJI KAISHA, LTD.
5-15, Kitahama
Higashiku, Osaka 541, JAPAN
ATTN: Yukio Shibiayama, President

SUPERIOR OIL COMPANY
First City National Bank Building
Houston, Texas 77002
ATTN: Mr. H.B. Keck, President

TECK CORPORATION LIMITED
Suite 4900 (P.O. Box 49)
Dear Mr. Secretary:

This letter will serve as the first semi-annual supplement to the Notice of Discovery and Claim of Exclusive Mining Rights, and Request for Diplomatic Protection and Protection of Investment, by Deepsea Ventures, Inc. dated 14 November 1974, and filed by us in your office on 15 November 1974.

Our ship R/V PROSPECTOR is presently engaged in a series of voyages, during which it is working at the site of the claimed Deposit in its development and evaluation. On 10 March 1975 The Defense Mapping Agency (publishers of Notices to Mariners) was advised as follows:

1. A buoy has been emplaced at 14°49.5'N, 124°35.4'W, said buoy floating on the sea surface and being tethered to the seabed by means of nylon cable.
2. The Company's Research Vessel PROSPECTOR is, and for the next six months will be, carrying out continuous wire line dredging, and survey with ship-mounted cable-connected seabed T.V. systems, of the manganese nodules lying generally within a 20 mile radius of said buoy.

Since the date of such notice to The Defense Mapping Agency, the buoy has been moved on several occasions to various locations, all of which are within approximately two (2) degrees of the original emplacement site. This practice will continue in the period prior to our next report to you.

We will keep you advised on a regular basis of the progress of the work undertaken at the site of the Deposit, any outside interference with that work, and any instances where that work interferes with the lawful exercise of rights of others.
One of the primary objectives sought by Deepsea in filing and publishing the above referenced document in your office was to create a mechanism whereby the domestic mining industry could, in the absence of security of tenure safeguarded by treaty or statute, reveal the location of a commercially interesting manganese nodule deposit to serve as the situs for scientific research, including scientific research by governmental agencies having environmental responsibilities.

We do not have the intention or the power, nor have we asserted the right, to exclude or inhibit true scientific research activities by any person or Nation at the site of the Deposit which was the subject of our notice to you. On the contrary, as our notice states, Deepsea will provide, at no cost, reasonable space for government representatives on its vessels working the Deposit, to facilitate domestic scientific research, particularly those programs relating to the environmental impacts of marine development.

We urge the U.S. Government to accept this report and explanation in the spirit given—as positive contributions and as an opportunity to promote the efficient and equitable development of the international seabeds.

Cordially,

/s/ R. J. Greenwald
[Special Counsel]

RJG/rib

cc: The Honorable John Norton Moore
   Chairman of the Inter-agency Task Force on the Law of the Sea
   Law of the Sea Office, Room 4321
   Department of State
   Washington, D.C. 20520

The Honorable Jack Carlson
Assistant Secretary - Energy and Minerals

U.S. Department of Interior
Washington, D.C. 20240

The Honorable Robert White
Administrator - NOAA
U.S. Department of Commerce
Washington, D.C. 20002

Mr. R. J. Beaton
Technical Director
Defense Mapping Agency
Hydographic Center
Washington, D.C. 20390