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The “Alternative” Seabed Mining Regime:1981

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Abstract

This article will attempt both to describe the evolution effected by the regulations upon the United States’ “alternative” seabed mining regime, and to explore some of the international consequences flowing therefrom.

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INTRODUCTION

The National Oceanic and Atmospheric Administration (NOAA)¹ acting pursuant to the Deep Seabed Hard Mineral Resources Act² (Act), has now promulgated its second set of regula-

* The regime is "alternative" in the sense that it may ultimately provide a legal seabed mining framework for those nations, possibly including the United States, which fail to ratify the UNCLOS-proposed Sea Treaty and its "common heritage"-oriented seabed provisions. See, Draft Convention on the Law of the Sea, U.N. Doc. A/Conf. 62/L.78 (August 28, 1981), arts. 133-91; *id.*, Annexes III, IV; Arrow, *Prospective Impacts of the Draft Sea Convention*, 1 Int. Prop. Inv. J. — (1981) [hereinafter cited as *Prospective Impacts of the Draft Sea Convention*].

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1. Specifically, the regulations were created in and will be administered by the Office of Ocean Minerals and Energy of the National Oceanic and Atmospheric Administration [hereinafter cited as NOAA]. NOAA is an agency of the United States Department of Commerce. While earlier versions of the Deep Seabed Hard Mineral Resources Act had assigned the lead agency role to the Department of the Interior, the final draft substituted NOAA as lead agency due, *inter alia*, to its greater specialized expertise in dealing with the marine environment. Compare, e.g., Deep Seabed Mineral Resources Act (proposed), S. 493, 96th Cong., 1st Sess., 125 CONG. REC. 18554, § 4(14) (1979), with the version finally enacted on June 28, 1980 as the Deep Seabed Hard Mineral Resources Act [hereinafter cited as the "Act"], Pub. L. 96-283, § 4(12), 94 Stat. 553 (to be codified in 30 U.S.C. § 1401), reprinted in 49 U.S.L.W. 105 (August 12, 1980), and 19 INT'L LEGAL MAT. 1003 (1980).

2. Act, *supra* note 1, § 116. In applying its discretion, NOAA is directed, *inter alia*, by the three declared domestic purposes stated in § 2(b) of the Act:

... to establish, pending the ratification by, and entering into force with respect to, the United States of ... a [comprehensive Law of the Sea] Treaty, an interim

tions affecting United States citizens³ wishing to participate in the

program to regulate the exploration for and commercial recovery of hard mineral resources of the deep seabed by United States citizens; . . . to accelerate the program of environmental assessment of exploration for and commercial recovery of hard mineral resources of the deep seabed and assure that such exploration and recovery activities are conducted in a manner which will encourage the conservation of such resources, protect the quality of the environment, and promote the safety of life and property at sea; and . . . to encourage the continued development of technology necessary to recover the hard mineral resources of the deep seabed.

3. The United States, of course, has internationally cognizable jurisdiction to regulate the conduct of its citizens, wherever undertaken. *See, e.g., Sachs v. Government of the Canal Zone*, 176 F.2d 292 (5th Cir. 1949); *United States v. Aluminum Corp. of Am.*, 148 F.2d 416 (2d Cir. 1945); 6 M. WHITEMAN, *DIGEST OF INTERNATIONAL LAW* 118 (1968). That citizenship and not territoriality is the basis for the jurisdictional assertion is evidenced by the stated premises of the Act, which are that seabed minerals beyond the limits of national jurisdiction are subject to ownership through capture, that their recovery is protected by the freedom of the seas principle, and that no sovereign claim to the seabed itself is necessary to support a claim to harvest the resources thereon, just as no sovereign claim to the sea itself is necessary to sustain a claim to mid-oceanic fishing rights. *See, Act, supra* note 1, § 2(a)(12), § 3(a). Moreover, § 101(a)(1) of the Act makes it clear that only United States citizens are affected by its provisions. The Act further includes within its definition of "citizens", however, "any corporation, partnership, joint venture, association, or other entity (*whether organized or existing under the laws of any of the United States or a foreign nation*) if the controlling interest in such entity is held by an individual or entity described in subparagraph (A) or (B)." Act, § 4(14)(c) (emphasis added); *see also* Department of Commerce, National Oceanic and Atmospheric Administration, *Deep Seabed Mining Regulations Affecting Pre-Enactment Explorers*, 15 C.F.R. §§ 970.2401-.2402 (1981), at § 970.2401(g)(3) [hereinafter cited as *Pre-Enactment Explorers Regulations*]. Because paragraphs (A) and (B) of the Act describe individual United States citizens and corporate or other business entities "organized or existing under the laws of any of the United States," respectively, the resulting jurisdictional assertion might potentially extend to *non-domesticated* foreign corporations whose "controlling interest" (liberally defined by § 4(3) of the Act to include "a direct or indirect legal or beneficial interest in or influence over another person arising through ownership of capital stock, interlocking directorates or officers, contractual relations, or other similar means, which *substantially* affect the independent business behavior of such person") is held by a domesticated foreign corporation (emphasis added). If enforced to its ultimate extension, however, it is doubtful that international judicial comity could be expected in non-reciprocating states, leaving the United States to apply whatever sanctions are available to it. *See, e.g., British Nylon Spinners, Ltd. v. Imperial Chemical Industries, Ltd.*, [1953] 1 Ch. 19, [1952] 2 All E.R. 780, [1952] W.N. 469; *Fruehauf Corp. v. Massardy*, Judgment of May 22, 1965, Cour d'appel, Paris, 14e Ch., reprinted in 5 INT'L LEGAL MAT. 476 (1965). *See also* the recent legislative response of the British Parliament to attempted extraterritorial applications reflected in the Protection of Trading Interests Act, 1980, c.11, in force March 20, 1980, discussed in Lowe, *Blocking Extraterritorial Jurisdiction: The British Protection of Trading Interests Act*, (1980), 75 AM. J. INT'L L. 257 (1981); but see Lowenfeld, *Sovereignty, Jurisdiction, and Reasonableness: A Reply to A.V. Lowe*, 75 AM. J. INT'L L. 629 (1981). This realization, coupled with an awareness of the potential of an overly exuberant jurisdictional policy to erode the credibility of the United States freedom-of-the-seas position perceived in broader context, will hopefully temper the urge to apply the jurisdictional grant as broadly as it may be construed.

exploration⁴ phase of the seabed mining venture.⁵ Regulations concerning the *commercial recovery* phase, which the Act permits to commence after January 1, 1988,⁶ are currently scheduled for promulgation in 1984.⁷ In promulgating regulations pursuant to

4. § 4(5) of the Act, *supra* note 1, defines exploration to consist of:

(A) [A]ny at-sea observation and evaluation activity which has, as its objective, the establishment and documentation of—

(i) The nature, shape, concentration, location, and tenor of a hard mineral resource; and

(ii) The environmental, technical, and other appropriate factors which must be taken into account to achieve commercial recovery; and

(B) The taking from the deep seabed of such quantities of any hard mineral resource as are necessary for the design, fabrication, and testing of equipment which is intended to be used in the commercial recovery and processing of such resource.

§ 101(a)(2) of the Act, then exempts from its prohibited activities:

(A) Scientific research

(B) Mapping, or the taking of any geophysical, geochemical, oceanographic, or atmospheric measurements or random bottom samplings of the deep seabed, if such taking does not significantly alter the surface or subsurface of the deep seabed or significantly affect the environment.

(C) The design, construction, or testing of equipment and facilities . . . if such design, construction, or testing is conducted on shore, or does not involve the recovery of any but incidental hard mineral resources.

These exceptions may tend to partially impugn the more general prohibitions contained in § 4(5)(A), especially during the exploration phase.

5. As used in this article, seabed mining refers exclusively to the recovery of hard mineral resources from areas beyond the limits of national jurisdiction. Hard mineral resources are defined by the Act to consist of "any deposit or accretion on, or just below, the surface of the deep seabed of nodules which include one or more minerals, at least one of which contains manganese, nickel, cobalt, or copper" Act, *supra* note 1, § 4(6); *see also* § 970.10(j) of the Department of Commerce, National Oceanic and Atmospheric Administration, *Deep Seabed Mining Regulations for Exploration Licenses*, 46 Fed. Reg. 45,890-45,920 (September 15, 1981) (to be codified in 15 C.F.R. § 970.100), *reprinted in* 20 Int'l Legal Mat. 1228 (1981) [hereinafter cited as *Regulations*]. Concerning the strategic and economic value of nodule recovery, *see, e.g.*, J. Mero, *THE MINERAL RESOURCES OF THE SEA* 127-30 (1965); NOAA, *Deep Seabed Mining: Final Draft Programmatic Environmental Impact Statement* 5-9 (September 1981); Arrow, *The Proposed Regime for the Unilateral Exploitation of Deep Seabed Mineral Resources by the United States*, 21 HARV. INT'L L.J. 337, 339-44 (1980) [hereinafter cited as *Unilateral Exploitation of the Deep Seabed*]. Concerning the legality of unilateral nodule recovery generally, *see id.* at 350-94; T. Kronmiller, *THE LAWFULNESS OF SEABED MINING passim* (1980); Arrow, *The Customary Norm Process and the Deep Seabed*, 9 OCEAN DEV. & INT'L L.J. 1 (1981) [hereinafter cited as *The Customary Norm Process and the Deep Seabed*].

6. Act, *supra* note 1, § 102(c)(1)(D).

7. NOAA, *Deep Seabed Mining Public Hearings* at 6 (Washington, D.C., May 8, 1981) (statement of Robert Knecht). This hearing was the fourth of four conducted by NOAA between April 24 and May 8, 1981 concerning a preliminary version of the Exploration Licensing Regulations which it promulgated on March 24. *See Proposed Rules, Deep Seabed Mining Regulations for Exploration Licenses*, 46 Fed. Reg. 18,448-18,475 (March 24, 1981) (proposed 15 C.F.R. Part 970). [hereinafter cited as *Proposed Regulations*]. These proposals

the Act, NOAA has not only regulated the fledgling American seabed mining industry⁸ but has also provide it with an expansible degree of protection from the uncertainty of future seabed regimes.⁹ This article will attempt both to describe the evolution effected by the regulations upon the United States' "alternative" seabed mining regime, and to explore some of the international consequences flowing therefrom.

I. PRE-ENACTMENT EXPLORERS

A. *The November 1980 Regulations*

The first set of regulations, which was made effective upon its publication on November 20, 1980, affected only those citizens who had engaged in exploration activities prior to the passage of the Act on June 28, 1980, and who intend to apply for an exploration license under the Act. Such citizens are exempted by the Act¹⁰ from its prohibition¹¹ against either exploration or commercial recovery of seabed hard minerals without an NOAA-issued exploration li-

evolved, *inter alia*, from responses generated by NOAA to its notice of proposed rulemaking (45 Fed. Reg. 79,089 (1980)), from comments submitted in response to NOAA's "major issues" paper of November 28, 1980, *id.* and from a public hearing held in Washington, D.C., on December 17, 1980. The hearings held subsequent to the publication of the *Proposed Regulations* were conducted on April 24 (Honolulu, Hawaii) (two sessions), April 28 (San Francisco, California), and May 8 (Washington, D.C.). [These hearings will hereinafter be cited as the *First*, *Second*, *Third* and *Fourth Hearing* respectively. Since they remain unpublished as this article goes to press, the page numbers cited correspond to the pagination of the original hearing transcripts (copies on file with the author)].

8. Historically, there have been four consortia with United States corporations participating, all of which are expected to apply for exploration licenses. The *Kennecott Corporation* consortium, formed in January of 1974, consists of Kennecott Corporation and Noranda Exploration, Inc., of the United States; the Mitsubishi Corp. of Japan; and B.P. Petroleum Div., Ltd., Consolidated Gold Fields, Ltd., and R.T.Z. Deep Sea Mining Enterprises, Ltd., all of the United Kingdom. *Ocean Minerals Company* (OMCO), formed in November of 1974, consists of subsidiaries of Lockheed Corp., Lockheed Missiles and Space Co., and Standard Oil Co. of Indiana of the United States; and BRW Ocean Minerals and a subsidiary of Royal Dutch Shell of the Netherlands. *Ocean Mining Associates* (OMA), also formed in November, 1974, consists of subsidiaries of Tenneco Corp., U.S. Steel Corp., and Sun Oil Co. of the United States; Union Miniere of Belgium; and Samin Ocean, Inc., a subsidiary of the Italian government. *Ocean Management, Inc.* (OMI), formed in May 1975, consists of Sedco, Inc., of the United States; INCO, Ltd., of Canada; Deep Ocean Mining Co., Ltd., of Japan; and AMR West German Companies (an aggregate) of the Federal Republic of Germany.

9. See note 26, *infra*.

10. Act *supra* note 1, § 101(b).

11. *Id.* § 101(a).

cense or commercial recovery permit. Those citizens may continue exploration pending final determination of their exploration license applications.¹² This legislative exemption directly benefits pre-enactment explorers because their right to continue exploration is recognized while other parties will likely be required to wait until mid-1983 to obtain exploration licenses.¹³ The regulations both create a permissive¹⁴ procedure by which a party claiming pre-enactment explorer status may file written notice of its claim to the Administrator of NOAA, and describe the information deemed relevant to the perfecting of a claim to such status.¹⁵ The regulations specify that this procedure fills a notice function only, and does not operate as a substitute for an exploration license application.¹⁶

Even qualified pre-enactment explorers are required to provide notice to NOAA concerning the timing and nature of exploration voyages not later than 45 days prior to the scheduled embarkation date,¹⁷ and must submit a post-voyage environmental report

12. *Id.* § 101(b)(1)(b).

13. The final exploration regulations were issued September 15, 1981. NOAA officials are now assuming somewhere around a six month lag time between that date and the opening date for receipt of new exploration license applications, a date therefore unlikely to be prior to early 1982. See, e.g., *Third Hearing*, *supra* note 7, at 33, 34; *Fourth Hearing*, *supra* note 7, at 7 (statements of Robert Knecht); see also text accompanying note 48, *infra*. Certification will normally occur within 100 days after the application is complete. Act, *supra* note 1, § 103(g); *Regulations*, *supra* note 5, 46 Fed. Reg. 45,920 (1981) (to be codified in 15 C.F.R. § 970.400(c)). The Administrator will then propose license terms within 180 days, *id.* § 970.500(b), with a final determination required at the end of another 180-day period, *id.* § 970.500(c). Thus, a late 1983 licensing date for new (non-pre-enactment) explorers appears to be a somewhat reasonable expectation. Concerning the possible ameliorating effect that § 101(a)(2) of the Act, *supra* note 1, has on new explorers, however, see note 4, *supra*.

14. 15 C.F.R. § 970.2402(a) (1981).

15. 15 C.F.R. § 970.2402(b) (1981) requests the notifying party to specify the names and addresses of citizens responsible for exploration, as well as a further description including the place of incorporation, if any, of the notifying party; the places where the party does business; certification of the essential and non-proprietary provisions in the charter, articles of incorporation or articles of association, if any; and the membership of participants if the notifying party is an association, partnership, or joint venture. In addition, the notifying party is requested to specify a general description of all exploration activities which occurred prior to the passage of the Act on June 28, 1980, including their dates and approximate costs, but excluding any information concerning the location of past or future exploration or prospective mine sites. Finally, the notifying party is requested to inform NOAA concerning its intention to apply for an exploration license.

16. 15 C.F.R. § 970.2402(a) (1981).

17. 15 C.F.R. § 970.2501 (1981).

within 30 days after its conclusion.¹⁸ A procedure is provided for evaluating the confidentiality of any information submitted,¹⁹ and the Administrator of NOAA is authorized to suspend any exploration voyage when necessary to prevent a significant adverse effect on the environment.²⁰

Except insofar as they reiterate definitions and substantive conclusions dictated by the Act,²¹ the November, 1980 regulations, in short, are exclusively procedural. Moreover, not only the form, but the necessity of the Notice of Pre-enactment Exploration provided by § 970.2402 of the Regulations were recommendatory only as of that time.²² Although the absence of any procedure in the regulations for a prior determination concerning the confidentiality of information submitted has proven controversial, that defect has

18. 15 C.F.R. § 970.2502 (1981).

19. Essentially, 15 C.F.R. § 970.2602 (1981) requires that material as to which confidential treatment is requested be clearly identified as such, and that the basis for such request (trade secret or other privilege) also be identified. Further relevant issues to be addressed in the written confidentiality request include the nature of the competitive advantage involved, the competitive harm of dissemination, the extent of past disseminations and access, and past measures taken to prevent dissemination. No determination of the substantive validity of the confidentiality request, however, is to be made until *after* a request for disclosure, pursuant to 15 C.F.R. Part 903, has been made. This last provision, it will be noted, has been subjected to serious industry criticism, especially as repromulgated in § 970.902(c)(3) of the more generally applicable *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 184,466 (1981). As a result, the *Regulations*, *supra* note 5, have been modified to allow in § 970.902(b)(4) for the possibility of a binding written confirmation of oral NOAA guidance in advance of any request for disclosure, 46 Fed. Reg. 45,910 (1981). This issue will be discussed further in the text accompanying notes 134-147, *infra*.

20. 15 C.F.R. § 970.2503 (1981). This clause implements the broad analagous authority delegated the Administrator by § 106(c) of the Act, *supra* note 1. The criteria for and procedural guarantees affecting non-emergency suspensions and other modifications in exploration license conditions are controlled primarily by § 105(c) and § 106 of the Act. Finally, the Administrator is also authorized by § 106(a)(2)(B) of the Act to suspend or modify particular activities under any license or permit if the President determines that such action is necessary:

(i) to avoid any conflict with any international obligation of the United States established by any treaty or convention in force with respect to the United States, or
(ii) to avoid any situation which may reasonably be expected to lead to a breach of international peace and security involving armed conflict.

21. Compare *e.g.*, Act, *supra* note 1, at § 4, with 15 C.F.R. § 970.2401 (1981) of the *Pre-Enactment Explorer Regulations*, *supra* note 3; but *c.f.* 15 C.F.R. § 970.2401(b) (1981), which allows the Administrator of NOAA to appoint a designee to act for him in administering the Act. No such authority may be found in § 4(12) of the Act. See also *Regulations*, *supra* note 5, 46 Fed. Reg. 45,897 (1981) (to be codified in 15 C.F.R. § 970.101(b)).

22. See note 14 *supra*; but see the text accompanying notes 37-38 *infra*.

been eliminated by the September, 1981 Exploration License Regulations.²³

Finally, despite questions concerning the wisdom of allowing pre-enactment explorers to continue exploring with both temporarily minimal regulation²⁴ and a two year "head start,"²⁵ at least three broad policy considerations tend to support this legislative judgment. First, the seabed mining industry, which has been operating in the context of arguably the least settled of all legal regimes,²⁶ is urgently in need of at least a tentative security of tenure²⁷ in order to justify the sizable investment required by the nature of the seabed mining venture.²⁸ The Act's exemption of pre-enactment explorers from an enforced exploratory hiatus, at the least, precludes interference with whatever security now exists, and tends to reward those explorers who entered the field at the time of the greatest economic risk. Second, given the significance of the legislatively determined national interest in assuring "the availability of hard mineral resources . . . independent of the export policies of foreign nations,"²⁹ and the potential pitfalls of regulating or licensing in haste, a two year period of minimal regulation for a limited number³⁰ of pre-enactment explorers seems a reasonable compromise designed to permit both administrative reflection and continued technological development. Finally, because the regula-

23. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,910 (1981) (to be codified in 15 C.F.R. § 970.902(b)(4)); *see also* note 19 *supra*.

24. After the scheduled promulgation of Subpart C of the Exploration License Regulations later this year, even pre-enactment explorers will be subject to the license conditions and restrictions described in Section II-D, *infra*. In addition, the Administrator enjoys the powers described in notes 17-20 *supra*, over pre-enactment explorers even prior to licensing.

25. *See* note 13 *supra*.

26. *See, e.g., Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 405-06; Biggs, *Deep Seabed Mining and Unilateral Legislation*, 8 OCEAN & DEV. INT'L L. J. 223 (1980); *but see, The Customary Norm Process and the Deep Seabed*, *supra* note 5 at 12-38.

27. "[A]fter ten years, it will take about seven years of full operation to recover your initial investment. So, we have a seventeen year period in which it is absolutely necessary to have . . . a stable legal regime, regardless of whether the legal regime itself . . . [is] extremely favorable or just marginally favorable. So far, the most important thing is that it not change" *Third Hearing*, *supra* note 7 at 31 (statement of Conrad Welling); *see also Fourth Hearing*, *supra* note 7 at 4 (statement of Robert Knecht).

28. An amount of available risk capital in excess of one billion dollars has been estimated to be required. *First Hearing*, *supra* note 7, at 19 (statement of Hideto Kono). The need for sufficient capital is underscored by the "financial capability" requirements of § 103(c)(1) of the Act, *supra* note 1.

29. *Id.*, § 2(a)(3).

30. *See* note 8, *supra*.

tions actually authorized "[t]he taking from the deep seabed of such quantities of any hard mineral resource as are necessary for the design, fabrication, and testing of equipment . . . ,"³¹ by pre-enactment explorers in 1980, the exemption and its corresponding regulations provided immediate reaffirmation, in a more than "paper" fashion, of the United States protest against the erosion of the freedom-of-the-seas principle by the proposed "common heritage/common property" regime.³²

B. Prospects for Future Regulation

When NOAA promulgated the *Proposed Exploration License Regulations*³³ on March 24, 1981, Subpart C³⁴ thereof was designed to complete the establishment of the legal regime affecting pre-enactment explorers which the November, 1980 regulations had begun. Although NOAA has temporarily reserved issuance of this subpart, due primarily to the need to synchronize U.S. dispute-settlement procedures with those of potentially reciprocating states,³⁵

31. *Pre-Enactment Explorer Regulations*, *supra* note 3, 45 Fed. Reg. 76,662 (1980) (to be codified in 15 C.F.R. § 970.2401(e)(2) (1981)).

32. The currently-proposed application of the common heritage principle to the deep seabed is contained in the Draft Convention on the Law of the Sea, *supra* preliminary title footnote * p. 1. For discussions of that proposed regime, *see generally*, *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 394-414; Caron, *Municipal Legislation for the Exploitation of the Deep Seabed*, 8 OCEAN DEV. & INT'L L. J. 259 (1980); *Prospective Impacts of the Draft Sea Convention*, *supra* preliminary title footnote * p. 1. *See also* text accompanying notes 147-52, *infra*.

33. *See* note 7, *supra*.

34. *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,457-18,458 (1981) (proposed 15 C.F.R. § 990.300-.302).

35. § 118 of the Act, *supra* note 1, allows the Administrator, upon consultation, to designate a foreign state as a "reciprocating state" with consequent mutual license recognition if the foreign state regulates its nationals in a manner compatible with the Act, recognizes U.S. licenses and priorities, and provides an interim framework for exploration and exploitation which does not unreasonably interfere with the exercise of other states' freedoms of the seas. To date, the United Kingdom and the Federal Republic of Germany have passed legislation which may qualify for such status. *See*, Federal Republic of Germany, *Act of Interim Regulation of Deep Seabed Mining*, Bundesgesetzblatt, Part I, 9080, No. 50 (August 22, 1980), at 1457, *unofficial translation appears at* 20 INT'L LEGAL MAT. 393 (1981); United Kingdom: *Deep Sea Mining (Temporary Provisions) Act*, 1981 Chapter 53, July 28, 1981, *reprinted in* 20 INT'L LEGAL MAT. 1217 (1981). Pursuant to § 118(f) of the U.S. Act, *supra* note 1, both NOAA and the Department of State Law of the Sea Office are currently conducting negotiations with these and other states. The difficulty of a non-synchronous dispute resolution procedure was expressed in the Hearings as follows:

The way the present structure [is set] forth in the proposed regulations . . . [there are] rigid time periods during which conflict resolution will take place in the United States.

the subpart's contents, coupled with the substantive requirements of the Act, provide some illumination concerning prospects for the eventual regulatory approach.

Section 101(b) of the Act authorizes the Administrator to prescribe a reasonable period of time after promulgation of the regulations during which pre-enactment explorers must file to preserve their rights to uninterrupted exploration and priority of right.³⁶ The proposed regulations required that notice of any claim to pre-enactment explorer status be filed within twenty days and that a license application be filed within ninety days of the regulations' publication date.³⁷ Applications not filed within the ninety day period would not be deemed to be based on pre-enactment exploration.³⁸ The disability thus produced by late application would be critical because the Act, in cases involving conflicting applications for the same exploration area, applies different selection criteria to pre-enactment explorers and new explorers. Regarding pre-enactment explorers, the Act provides:

*The timely filing of any application for a license . . . shall entitle the applicant to priority of right for the issuance of such license In any case in which more than one application [based on pre-enactment exploration] . . . is filed . . . which refer to all or part of the same deep seabed area, the Administrator shall, in taking action on such applications, apply principles of equity which take into consideration, among other things, the date on which the applicants or predecessors in interest, or component organizations thereof, commenced exploration activities and the continuity and extent of such exploration and amount of funds expended*³⁹

In the . . . discussions that have been going on among the reciprocating states, . . . [there is] a different time frame.

From a lawyer's point of view, I could not help but be concerned by a situation in which my client would be involved in a domestic conflict situation with witnesses on the record explaining the entire theory of a number of years' work, . . . much of which could be related to the defense of another mine site.

I think any U.S. company would be prejudiced where . . . [it has] to face a domestic conflict first on the record and then move several months later into an international procedure in which substantial information would be heard.

Fourth Hearing, supra note 7, at 33-35 (statement of Alan Kauffman).

36. Act, *supra* note 1, §§ 101(b)(1)(A), 101(b)(3).

37. *Proposed Regulations, supra* note 7, 46 Fed. Reg. 18,457 (1981) (proposed 15 C.F.R. § 970.301).

38. *Id.*

39. Act, *supra* note 1, § 101(b)(3) (emphasis added).

As to new explorers, the Act provides that priority shall be established "... on the basis of the *chronological order* in which license applications which are in substantial compliance with the requirements [of the Act and its implementing regulations] . . . are filed with the Administrator."⁴⁰ The proposed regulation just described was reserved, along with the remainder of Subpart C, and is thus not as yet in force as of the date this article goes to press. Nevertheless, the establishment, in some manner, of a "cut-off" date for the assertion of pre-enactment equities is a condition precedent to ultimately licensing new explorers through the chronological process described above. Similar provisions may be reasonably anticipated, therefore, in the final version of Subpart C, when promulgated. Timely filing of the claims and license applications of pre-enactment explorers will likely be required to preserve their license priorities and uninterrupted exploration rights.

In addition to the notice and application requirements described above, proposed Subpart C contained criteria for resolving conflicting claims *between* pre-enactment explorers⁴¹ and the process by which the resolution was to be achieved.⁴² Since the primary equitable principles to be applied to such disputes are specified by the Act,⁴³ the final version of Subpart C will certainly remain substantively unchanged in this respect.

Concerning the dispute resolution process, the proposed regulations provided for notification by NOAA to affected parties of the existence of a conflict,⁴⁴ voluntary resolution by compromise,⁴⁵ and finally for either a binding dispute settlement mechanism of the parties' choice or resolution by the Administrator.⁴⁶ Although it is still too early to predict the outcome of the reciprocating states' negotiations concerning an issue as sensitive as dispute resolution, it is likely that the final process will incorporate due process-type

40. Act, *supra* note 1, § 103(b) (emphasis added).

41. *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,458 (1981) (proposed 15 C.F.R. § 970.302(c)).

42. *Id.* § 970.302(a) (b).

43. See text accompanying note 39 *supra*.

44. *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,457 (1981) (proposed 15 C.F.R. § 970.302(a)(2)).

45. *Id.* § 970.302(a)(3),(d).

46. *Id.* § 970.302(b).

safeguards similar to the ones contained in the proposed regulations.⁴⁷

In any case, one of the obvious consequences of NOAA's decision to reserve Subpart C is that NOAA will accept no exploration license applications until after Subpart C has been promulgated.⁴⁸

II. REGULATIONS AFFECTING ALL EXPLORERS

As has been indicated, both pre-enactment explorers⁴⁹ and prospective new entrants⁵⁰ are required to apply for exploration licenses pursuant to the Act. Although pre-enactment explorers are entitled to initial license priority and uninterrupted exploration, the advantage created by these rights terminates either upon the issuance of the license, or upon the final administrative or judicial decision affirming its denial.⁵¹ Due to the reservation of Subpart C, all the license regulations promulgated by NOAA on September 15, 1981 are of general applicability.

Because the regulations are extensive, no attempt is made to discuss all of their due process-oriented procedural provisions. Rather, the discussion will be directed towards their substantive determinations and criteria, and to those of the procedures which

47. One provision *not* likely to survive revision is the proposed provision by virtue of which the Administrator would review a license application involved in a conflict *only* if "the applicant advises the Administrator in writing that loss of the area in conflict will not materially affect the applicant's ability to perform the exploration program set forth in his application". *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,458 (1981) (proposed 15 C.F.R. § 970.302(a)(4)(iii)(B)). This provision was criticized in the Hearings as putting a pre-enactment explorer involved in an area dispute on the horns of a dilemma: either it *admits* that the loss of the area in conflict will not affect its ability to perform (arguably an admission that the disputed area was not part of the logical mining unit to begin with) or it declines the admission at the cost of having its license application delayed. *Fourth Hearing*, *supra* note 7, at 17-18 (statement of Jeffrey Amsbaugh); *see also id.* at 24 (statement of Robert Knecht). Concerning the similarly controversial voluntary "resolution by subunit" approach contained in § 970.302(d) of the *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,458 (1981); *see generally Fourth Hearing*, *supra* note 7, at 18-19 (statement of Jeffrey Amsbaugh); *id.* at 25 (statement of Robert Knecht); *id.* at 25-26 (statement of Brooks Bowen); *id.* at 26 (statement of Fred Ritts).

48. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981); *see also* 15 C.F.R. § 970.200(e)(4) (1981). Since a qualified pre-enactment explorer is given an absolute right to a license in areas in which it can establish superior equity, the claims of such explorers must be established prior to general licensing.

49. Act, *supra* note 1, § 101(b)(1)(A).

50. *Id.* § 101(a)(1).

51. *Id.* § 101(b)(1)(B).

are of primary and general applicability.⁵² The approach taken will initially be chronological, tracing the regulations' impact on the application, certification, and issuance stages of the licensing procedure, and their further impact on the nature of licensees' continuing obligations. The important related issue concerning confidentiality is given separate treatment at the end of this section.

A. Application

Applications must be submitted in the form and manner prescribed by Subpart B of the regulations.⁵³ NOAA will be available for pre-application consultations with prospective applicants concerning the requirements of both Subparts B and C, and is authorized to provide written confirmation of any proffered oral guidance given.⁵⁴

detail the information required to be submitted, which must be sufficient to document the applicant's ownership,⁵⁵ its financial⁵⁶ and technical⁵⁷ capabilities, the safety⁵⁸ and environmental sound-

52. By virtue of this admittedly somewhat arbitrary taxonomy, §§ 970.211-.213, §§ 970.501-.502, § 970.905, all of Subpart J, and all of Subpart K except for §§ 970.1103-.1106 of the *Regulations*, *supra* note 5, will be excluded from discussion in this article.

53. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,898 (1981) (to be codified in 15 C.F.R. § 970.200(a)).

54. *Id.* § 970.200(d).

55. *Id.* 46 Fed. Reg. 45,900 (1981) (to be codified in 15 C.F.R. § 970.206).

56. In furtherance of the diligence requirements of the Act, the *Regulations*, *supra* note 5, specify that submitted information must show that the applicant is reasonably capable of committing or raising sufficient resources. 46 Fed. Reg. 45,899 (1981) (to be codified in 15 C.F.R. § 970.201(a)). The estimated cost and financing plan must be detailed. Applicants are required to submit the most recently audited financial statement and credit bond rating of themselves, and of such financing entities as will be relied upon to finance exploration. The most recent annual report and S.E.C. Form 10-K will suffice for publicly held companies. *Id.* § 970.201(b).

57. In providing the Administrator with a basis for determining whether the applicant technically has the capacity to explore in an environmentally sensitive manner, the applicant is permitted to present technological knowledge and skills to which it can demonstrate access as well as that which it currently possesses. *Id.* § 970.202(b).

58. U.S. flag vessels in excess of 300 tons are required to possess a current Coast Guard Certificate of Inspection, and must satisfy all other federal inspection statutes, some of which are listed in *Regulations*, *supra* note 5, 46 Fed. Reg. 45,909 (1981) (to be codified in 15 C.F.R. § 970.801). Foreign flag vessels are required to satisfy either the SOLAS 74, SOLAS 60, or International Association of Classification Societies (IACS) certificate requirements. *Id.* § 970.205 of the *Regulations* requires that relevant supporting documentation be furnished with the application, 46 Fed. Reg. 45,900 (1981). *See also* Act, *supra* note 1, § 112(b).

ness⁵⁹ of its exploration, any known conflicting oceanic uses,⁶⁰ and the possible antitrust ramifications of any exploration in which it engages.⁶¹ The applicant is required to submit a \$100,000 fee.⁶²

Both the Act⁶³ and Regulations⁶⁴ require the submission of a general exploration plan. The contents of the required exploration plan are specified by the Act:

(B) The exploration plan for a license shall set forth the activities proposed to be carried out during the period of the license, describe the area to be explored, and include the in-

59. Act, *supra* note 1, § 109(d) subjects the license issuance process to § 102 of the National Environmental Policy Act of 1969, Pub. L. 91-190, 83 Stat. 852 (codified at 42 U.S.C. §§ 4321, 4331-35, 4341-47 (1976)). In order to develop the site-specific environmental impact statement required by those provisions, NOAA has requested that physical, chemical, and biological information be submitted for the exploration area. While § 970.204 of the *Regulations* contains a statement of the legal requirements, a Technical Guidance Document has been issued to specify the details concerning the necessary monitoring and information. This document is not intended to carry its own force of law. *See Fourth Hearing, supra* note 7, at 23 (statement of James Lawless); *see generally Third Hearing, supra* note 7, at 47 (statement of Robert Knecht).

60. *Regulations, supra* note 5, 46 Fed. Reg. 45,900 (1981) (to be codified in 15 C.F.R. § 970.204(b)).

61. Section 103(d) of the Act, *supra* note 1, specifically provides for antitrust review of applications by the Attorney General and the Federal Trade Commission. In order to provide for this review, § 970.207(b) of the *Regulations, supra* note 5, 46 Fed. Reg. 45,900 (1981), requires that applicants identify themselves, their affiliates, and their form of doing business. In addition, each applicant, affiliate, or parent or subsidiary of an affiliate *which is actually engaged in production in, or the purchase or sale to the United States of* any of the four involved metals or their derivatives is required to specify, pursuant to §970.207(b)(3) of the *Regulations*, the annual dollar value of their purchase, sale, or production during the preceding two years; to produce copies of the preceding two years' annual reports, balance sheets, and income statements; and to submit copies of each document submitted to the S.E.C. Earlier proposed regulations requiring market studies, surveys, and other memoranda on seabed mining prospects, as well as supplementary information on request, were eliminated as overly burdensome, and as tending to require the production of proprietary information. *See Regulations, supra* note 5, at Supplementary Information, 9-10. *See also Fourth Hearing, supra* note 7, at 16 (statement of Jeffrey Amsbaugh); *id.* at 36 (statement of Alan Kauffman).

62. Section 970.208(b) of the *Regulations, supra* note 5, 46 Fed. Reg. 45,901 (1981), also provides for cost adjustments in case of variation in administrative costs, and permits a reduced fee, determined by preapplication consultation as provided by § 970.200(d), to transfer applicants who have previously been found qualified for licensing. These provisions demonstrate NOAA's efforts to implement in good faith the Act's requirement that the fee imposed "shall reflect the reasonable administrative costs incurred in reviewing and processing the application." Act, *supra* note 1, § 104.

63. Act, *supra* note 1, § 103(a)(2)(B), (D).

64. *Regulations, supra* note 5, 46 Fed. Reg. 45,899 (1981) (to be codified in 15 C.F.R. § 970.203).

tended exploration schedule and methods to be used, the development and testing of systems for commercial recovery to take place under the terms of the license, an estimated schedule of expenditures, measures to protect the environment and to monitor the effectiveness of environmental safeguards and monitoring systems for commercial recovery, and such other information as is necessary and appropriate to carry out the provisions of this title. The area set forth in an exploration plan shall be of sufficient size to allow for intensive exploration.

(D) The applicant shall select the size and location of the area of the exploration plan . . . *which . . . shall be approved unless the Administrator finds that—*

(i) the area is not a logical mining unit; or

(ii) commercial recovery activities in the proposed location would result in a significant adverse impact on the quality of the environment which cannot be avoided by the imposition of reasonable restrictions.⁶⁵

The required contents of the exploration plan are implemented by § 970.203(b) of the Regulations. In addition, they serve to clarify several important issues left unsettled by the Act and the Proposed Regulations.

First, the regulations make clear that the certification of the area chosen by the applicant as constituting a "logical mining unit" will be performed by NOAA on a case-by-case basis,⁶⁶ exclusively according to the criteria provided in the Act:

In the case of an exploration license, a logical mining unit is an area of the deep seabed which can be explored under the license, and within the ten-year license period, in an efficient, economical and orderly manner with due regard for conservation and protection of the environment, taking into consideration the resource data, other relevant physical and environmental characteristics, and the state of the technology of the applicant as set forth in the exploration plan. In addition, it must be of sufficient size to allow for intensive exploration.⁶⁷

65. Act, *supra* note 1, § 103(a)(2)(B), (D) (emphasis added).

66. Regulations, *supra* note 5, 46 Fed. Reg. 45,907 (1981) (to be codified in 15 C.F.R. § 970.601(b)).

67. *Id.* § 970.601(a). This subsection, with the exception of the ten-year proviso, restates the criteria specified by §§ 103(a)(2)(E)(i), 103(a)(2)(B) of the Act, *supra* note 1. The ten-year condition is apparently in furtherance of the diligence requirements of § 108 of the Act, and will be discussed further in the text accompanying note 68, *infra*. See also Act, §

Second, the regulations clarify that although applicants *will* have to demonstrate that the 10-year license period will likely be sufficient to enable them to apply for and obtain a commercial recovery permit, they will *not* have to demonstrate the likelihood of actual commercial recovery by that time.⁶⁸

Third, they render the required exploration schedule sufficiently flexible to take into account the different technologies and chronologies employed by different applicants⁶⁹ whose technologies the regulations permit to be mutually supportive for license application purposes.⁷⁰ Furthermore, the final regulations were also modified to specify that, at the time of application, descriptions of planned designs and tests of commercial recovery systems could be general.⁷¹

Fourth, in response to comment,⁷² NOAA has specifically recognized that the submitted exploration plan may contain a retrospective (and supporting) element in the form of a description of any exploration and prospecting work completed prior to application.⁷³

The date of submission of a substantially⁷⁴ complete application determines the priority of right for new entrants.⁷⁵ The application is ready for certification when complete.

107(a). The *Proposed Regulations* contained a rebuttable presumption that logical mining units would not exceed 80,000 sq. km. In recognition, *inter alia*, of the relationship of any presumed size to conflict resolution among pre-enactment explorers' applications, NOAA decided to at least temporarily delete this reference, pending possible repromulgation of this or another presumptive figure if made necessary by the dispute settlement procedures eventually agreed to by the reciprocating states. See *Regulations*, *supra* note 5, at *Supplementary Information* 14-15. See also note 35, *supra*.

68. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,899 (1981) (to be codified at 15 C.F.R. § 970.203(a)).

69. *Id.* § 970.203(b)(3).

70. See, e.g., *Regulations*, *supra* note 5, 46 Fed. Reg. 45,899 (1981) (to be codified in 15 C.F.R. § 970.202(a)); see also note 57 *supra*.

71. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,899 (1981) (to be codified in 15 C.F.R. § 970.203(b)(5)).

72. See, e.g., *Fourth Hearing*, *supra* note 7, at 14-15 (statement of Jeffrey Amsbaugh).

73. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,900 (1981) (to be codified in 15 C.F.R. § 970.203(b)(8)); see also, *Regulations*, *supra* note 5, at *Supplementary Information* 16.

74. The "substantial compliance" provisions and procedures are contained in *Regulations*, *supra* note 5, 46 Fed. Reg. 45,901 (1981) (to be codified in 15 C.F.R. § 970.209(b)).

75. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,901 (1981) (to be codified in 15 C.F.R. § 970.210); see also *Act*, *supra* note 1 § 103(b).

B. Certification

Certification is an intermediate step between application and actual issuance or transfer which focuses solely on the applicant's eligibility.⁷⁶ The Act requires the Administrator to certify an application upon his making the requisite determinations and findings described above.⁷⁷ If certification has not been completed within 100 days after submission of the application, the Administrator is required to give written notice to the applicant of the unresolved issues, the Administrator's efforts to resolve them, and an estimate of the time required to do so.⁷⁸ Before certification, the Administrator must determine that issuance would not violate any of the restrictions of §102(c) of the Act,⁷⁹ and must make further findings, upon consultation, concerning the applicant's financial⁸⁰ and technological⁸¹ capabilities and fulfillment of all previous license and permit obligations, if any.⁸² In addition, the Administrator is required to make written determinations concerning fee payment,⁸³ and the legal adequacy of the applicant's proposed exploration plan⁸⁴ and designated site.⁸⁵ Denial of certification is subject to judicial review,⁸⁶ and may occur for failure to satisfy any of the requirements described above,⁸⁷ or for *prospective* inability to meet any of the further requirements for issuance contained in § 105(a) of the Act.

76. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981) (to be codified in 15 C.F.R. § 970.400(a)).

77. See text accompanying notes 53-71 *supra*; Act *supra* note 1, § 103(g).

78. *Id.*; see also *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981) (to be codified in 15 C.F.R. § 970.400(c)).

79. Section 102(c) of the Act, *supra* note 1, deals primarily with licenses which would be duplicitious, either internally, or in the context of reciprocating states' licenses. Also precluded are the issuance of licenses to non "citizens," see note 3, *supra*, terminated licensees, or subsequent to United States ratification of a conflicting treaty. Also relevant is the restriction against the issuance of any commercial recovery permit until January 1, 1988. See also *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981) (to be codified in 15 C.F.R. § 970.401(b)).

80. *Id.* § 970.401; see also note 56, *supra*.

81. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981) (to be codified in 15 C.F.R. § 970.404); see also note 57 *supra*.

82. *Id.*, § 970.403.

83. *Id.* § 970.406; see also note 62, *supra*.

84. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,902 (1981) (to be codified in 15 C.F.R. § 970.404); see also text accompanying notes 65-73 *supra*.

85. *Id.*, § 970.405; see also text accompanying notes 66, 67, *supra*.

86. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,903 (1981) (to be codified in 15 C.F.R. § 970.407(f)).

87. See notes 79-85, *supra*.

If, in the course of reviewing an application for certification, the Administrator *becomes aware* of the fact that one or more of the requirements for issuance or transfer under §§ 970.503 through 970.507 *will not be met*, he may also deny certification of the application.⁸⁸ The substance of the requirements alluded to tends to focus on more internationally oriented issues, upon which the minimal information⁸⁹ submitted by the applicant is not expected to be sufficient for resolution. For that reason discussion of these issues will be deferred to the next subsection concerning the issuance stage, during which the factual context surrounding these issues will be more completely developed.

C. Issuance

Normally within 180 days following certification, the Administrator will propose and publish⁹⁰ license terms, conditions, and restrictions for the purpose of ensuring compliance with the diligence,⁹¹ conservation,⁹² safety at sea,⁹³ and freedom-of-the-seas⁹⁴ requirements of the Act. The regulations require that all proposed and final terms, conditions, and restrictions be uniform, except as

88. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,900 (1981) (to be codified in 15 C.F.R. § 970.407(a) (emphasis added)). The authority for this provision may be found in §§ 103(g), 106(a) of the Act, *supra* note 1. Sections 970.503 to 970.507, alluded to in the text, state the criteria found in § 105(a) of the Act.

89. The applicant will, of course, have submitted information concerning *known* competing uses pursuant to § 970.204(b) of the *Regulations*, which may relate to the Administrator's judgment in applying § 970.503(c) and § 970.505. It will also have supplied some environmental data pursuant to § 970.203-.204 which may be relevant to the Administrator's judgment in applying § 970.506. It will also have submitted vessel safety information pursuant to § 970.205 which is clearly relevant to the Administrator's judgment in applying § 970.507. Nevertheless, no data concerning § 970.504, and only incomplete data concerning the requirements of §§ 970.503, .505 and .506 are required to be submitted in the application. The cautious language of § 970.407(a), quoted in the text accompanying note 88, presumably reflects this recognition. *See also* text accompanying note 95 *infra*.

90. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,903 (1981) (to be codified in 15 C.F.R. § 970.500(b)(1)).

91. *Id.* (to be codified in 15 C.F.R. § 970.517).

92. *Id.* (to be codified in 15 C.F.R. §§ 970.518-.520, .522-.523).

93. *Id.* (to be codified in 15 C.F.R. § 970.521).

94. *Id.* (to be codified in 15 C.F.R. § 970.520). Concerning the extent to which the freedom-of-the-seas principle mandates the environmental concern reflected in sections 970.518-.520, .522-.523 of the *Regulations*, *see, e.g., Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 359-60, 365-68, 390-93; *The Customary Norm Process and the Deep Seabed*, *supra* note 5, at 16-21, 27.

required due to differing environmental conditions.⁹⁵ In addition, the Administrator is required at this stage to make written findings of fact upon consultation with interested departments and agencies pursuant to section 103(e) of the Act, and upon consideration of public comments concerning the five criteria established by § 105(a) of the Act. The substance of these limitations may now be examined in greater detail.

Section 105(a) of the Act requires written findings by the Administrator prior to licensing, that the issuance of the license:

- (1) will not unreasonably interfere with the exercise of the freedoms of the high seas by other states, as recognized under general principles of international law;
- (2) will not conflict with any international obligation of the United States established by any treaty . . . in force with respect to the United States;
- (3) will not create a situation which may reasonably be expected to lead to . . . armed conflict;
- (4) cannot reasonably be expected to result in a significant adverse effect on the . . . environment . . . ; and
- (5) will not pose an inordinate threat to the safety of life and property at sea.⁹⁶

The first of these conditions is, of course, the preeminent condition imposed by international law on the exercise of any of the freedoms of the seas,⁹⁷ and therefore constitutes a condition precedent to any valid assertion of rights by the United States pursuant to that doctrine. In cases involving a competing use of the high seas by another nation or its nationals, although the regulations encourage negotiated compromise which maximally permits both uses, failing such settlement the final discretion regarding the licensing is left with the Administrator.⁹⁸ While a statement of factors to be con-

95. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,903 (1981) (to be codified in 15 C.F.R. § 970.500(b)(1)).

96. Act, *supra* note 1, § 105(a).

97. See in this regard art. 2 of the Convention on the High Seas, *done* April 29, 1958, 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82 (*in force* September 30, 1962) [hereinafter cited as *Convention on the High Seas*] which in this regard represents a codification of a pre-existing norm of customary international law. M. McDOUGAL and W. BURKE, *THE PUBLIC ORDER OF THE OCEANS* 763 (1962).

98. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,903 (1981) (to be codified in 15 C.F.R. § 970.503(c)(2)). The role of consultation pursuant to § 103(e) of the Act is left somewhat unclear by §§ 105(a), 106(a) of the Act.

sidered was omitted in the final regulations,⁹⁹ general reference to the principles of international law is already mandated by the Act.¹⁰⁰ Clearly, subordinate factors such as the duration of any historical usage, abstentions therefrom, and other comparative equities should be relevant to this determination.

The second required finding concerns the absence of any prior United States treaty obligation inconsistent with the issuance of a license.¹⁰¹ This provision, which ignores international customary norms, may be criticized as sometimes rendering unavoidable the commission of an international delict.¹⁰² Nevertheless, the provision reflects both American legal dualism¹⁰³ in the context of international custom, and a continuing suspicion of interpretations of the customary norm process based on a "limited sovereignty" premise.¹⁰⁴

The third required finding involves the avoidance of situations likely to lead to breach of the peace involving armed conflict.¹⁰⁵ International law also imposes this limitation generally, by virtue, *inter alia* of article 33 of the United Nations Charter. The mechanics of the Act seek to preserve the "peaceful settlement" process both by denying licensing in situations in which a breach of the peace will likely occur,¹⁰⁶ and by limiting the automatic United States response to any such breach to diplomatic protection.¹⁰⁷

Fourth, the Administrator is required to make findings concerning the safety of life and property at sea.¹⁰⁸ The alternative

99. Compare *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,448, 18,460 (1981) with *Regulations*, *supra* note 5, 46 Fed. Reg. 45,903 (1981) (to be codified in 15 C.F.R. § 970.503).

100. Act *supra* note 1, § 105(a)(1).

101. See *Regulations*, *supra* note 5, 46 Fed. Reg. 45,904 (1981) (to be codified in 15 C.F.R. § 970.504); Act, *supra* note 1, § 105(a)(2).

102. See, e.g., *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 388-89; but see *Third Hearing*, *supra* note 7, at 21 (statement of Brooks Bowen).

103. See RESTATEMENT (SECOND), FOREIGN RELATIONS LAW OF THE UNITED STATES § 3, Comment j (1965); *Schroeder v. Bissell*, 5 F.2d 838 (D. Conn. 1925).

104. For an examination of the ripeness of that premise in a public international law context, see *The Customary Norm Process and the Deep Seabed*, *supra* note 5, at 4-9. For an examination of some of the dangers of its overextension, see Lowenfeld, *supra* note 3, at 629-38.

105. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,904 (1981) (to be codified in 15 C.F.R. § 970.505); Act, *supra* note 1, § 105(a)(3).

106. *Id.*

107. Act, *supra* note 1, § 3(a)(1)(2).

108. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,904 (1981) (to be codified in 15 C.F.R. § 970.507); Act, *supra* note 1, § 105(a)(5)).

SOLAS 60, SOLAS 74, or IACS requirements¹⁰⁹ should provide adequate basis for this judgment.

Finally, the Administrator must find, prior to licensing, that the exploration proposed "cannot reasonably be expected to result in a significant adverse effect on the quality of the environment"¹¹⁰ In making this determination, the Administrator is required to take into account the Programmatic Environmental Impact Statement (EIS) mandated by § 109(c) of the Act,¹¹¹ as well as the site-specific EIS required for each license issuance.¹¹² He is also required to consider the effective scope of the terms, conditions, and restrictions to be imposed, which *must* include requirements concerning environmental conservation,¹¹³ and an authorization for onboard monitoring by federal observers.¹¹⁴

Monitoring will focus on the three cumulative effects¹¹⁵ which NOAA has determined to have, during the *commercial recovery* phase, the potential to create a significant adverse environmental impact, and a fourth as to which a conclusion has been tentatively reached.¹¹⁶ NOAA has concluded that although these effects also

109. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,909 (1981) (to be codified in 15 C.F.R. § 970.801); *see also* note 58 *supra*.

110. Act *supra* note 1, § 105(a)(4); *Regulations*, *supra* note 5, 46 Fed. Reg. 45,904 (1981) (to be codified in 15 C.F.R. § 970.506).

111. NOAA published a Draft Programmatic Environmental Impact Statement in March, 1981. The final version was released in October, 1981.

112. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,904 (1981) (to be codified in 15 C.F.R. § 970.506).

113. *Id.* (to be codified in 15 C.F.R. §§ 970.518-.519).

114. *Id.* (to be codified in 15 C.F.R. §§ 970.522, 970.1105). The latter section also imposes a duty of cooperation on the licensee and vessel operator in connection with the observer's duties, but correspondingly specifies that the observer will have no authority over the operation of the vessel or its activities, officers, crew or personnel.

115. Destruction of benthos in and near the collector track; blanketing of benthic fauna and dilution of food supply away from mine site subareas; and the surface plume effect on fish larvae. *Id.* (to be codified in 15 C.F.R. § 970.701(b)(2)(i)-(iii)). In addition, the effect on highly migratory species may warrant further study.

116. The fourth effect thought potentially though "remotely" harmful as of March 24, 1981 the potential entry of trace metals from abraded nodules into the food chain through zooplankton, has been the subject of subsequent review by the National Marine Fisheries Service. This study concludes that there is a low probability of significant effect from such trace metals, *even at the commercial recovery stage*. *See Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,448, 18,465 (proposed 15 C.F.R. § 970.701(b)(2)); *Regulations*, *supra* note 5, at *Supplementary Information* 16-17. Accordingly, its listing was deleted in the final regulations, although the trace metal issue will be subject to further study and to monitoring to verify the preliminary conclusion. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,908 (1981) (to be codified in 15 C.F.R. § 970.701(b)(2)).

occur during mining system tests which may be conducted under an *exploration* license,¹¹⁷ they are expected to be insignificant at this stage.¹¹⁸ The monitoring plans,¹¹⁹ of course, are designed to permit verification or rebuttal of this important conclusion.

The final decision on license issuance or transfer will normally be made within 180 days from the date on which the proposed terms, conditions, restrictions, and the draft site-specific EIS were published.¹²⁰ A procedure for objecting to proposed terms, conditions, and restrictions is provided,¹²¹ although they may be modified or suspended¹²² by the Administrator, upon notice and consultation, to insure continued compliance with the requirements of § 105(a) of the Act.¹²³

D. Continuing Duties

In addition to the obligation to promote environmental monitoring described above, the Act permits the imposition of resource conservation requirements, as needed, ". . . which have due regard for the prevention of waste and the future opportunity for the commercial recovery of the unrecovered balance of the hard mineral resources in the area" ¹²⁴

The Regulations impose the continuing duties to provide verification information,¹²⁵ and to report information concerning con-

117. Specifically, at-sea testing of recovery equipment and the operation of processing test facilities have been recognized as having "some potential for significant environmental impacts *during exploration*." *Id.* (to be codified at 15 C.F.R. § 970.701(b)(1)) (emphasis added).

118. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,908 (1981) (to be codified in 15 C.F.R. § 970.701(b)(2)); see also *Regulations*, *supra* note 5, at *Supplementary Information*, 16.

119. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,908 (1981) (to be codified in 15 C.F.R. § 970.702(a)) provides that a monitoring plan will be included "as part of the terms, conditions and restrictions developed for each license . . . [to] be based on the monitoring plan proposed by the applicant and reviewed by NOAA for completeness, accuracy and statistical reliability."

120. *Id.* (to be codified in 15 C.F.R.) § 970.500(c)).

121. *Id.* (to be codified in 15 C.F.R. § 970.510).

122. *Id.* (to be codified in 15 C.F.R. §§ 970.511, 970.512).

123. See text accompanying note 96, *supra*.

124. Act, *supra* note 1, § 110. This section also specifies that, "[a]s used in this Act, the term 'conservation of natural resources' is *not* intended to grant, imply, or create any inference of production controls or price regulation" *id.* (emphasis added).

125. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,909 (1981) (to be codified in 15 C.F.R. § 970.901(a)(2)).

servation, diligence in the exploration plan and environmental monitoring at least once a year.¹²⁶

Finally, the Act requires the Administrator to impose terms, conditions, and restrictions to insure diligence in exploration,¹²⁷ safety at sea,¹²⁸ environmental protection,¹²⁹ and reasonable regard for the exercise by other nations and their nationals of their freedoms of the seas.¹³⁰

Once issued, licenses are initially valid for 10 years unless suspended or revoked.¹³¹ Although licenses may be surrendered at any time, their surrender does not terminate liability for any violations or penalties incurred.¹³² Licensees are required to apply for license revision in case of a "major change" in the basis for either the certification, transfer, or issuance of a license.¹³³

E. Confidentiality

Under what circumstances are documents and supporting evidence to be considered public record? The Act specifies only that the Administrator shall provide, upon qualified request,¹³⁴ copies of any document maintained or received by the Administrator, "except that neither the Administrator nor any other officer or employee of the United States may disclose any data or information knowingly and willingly required under this title the disclosure of which is prohibited by section 1905 of title 18, United States Code"

126. *Id.* (to be codified in 15 C.F.R. § 970.901(b)).

127. The licensee must propose a schedule which will allow completion of exploration by the end of the 10 year license period. Ultimately, the diligence determination will require a retrospective judgment by the Administrator, "based on the licensee's reasonable conformance to the approved exploration plan." *Id.* (to be codified in 15 C.F.R. § 970.602(c)).

128. *Id.* (to be codified in 15 C.F.R. § 970.521); *see also* note 58 *supra*.

129. *Regulations, supra* note 5, 46 Fed. Reg. 45,906 (1981) (to be codified in 15 C.F.R. § 970.518); *see also* text accompanying notes 110-19 *supra*.

130. *Regulations, supra* note 5, 46 Fed. Reg. 45,906 (1981) (to be codified in 15 C.F.R. § 970.520); *see also* text accompanying notes 97-100 *supra*.

131. *Regulations, supra* note 5, 46 Fed. Reg. 45,906 (1981) (to be codified in 15 C.F.R. § 970.515).

132. Act, *supra* note 1, § 115. The *Regulations, supra* note 5, in implementing §§ 302, 106, 306, and 117 of the Act, provide uniform procedures for assessing civil penalties (§§ 970.1101-.1102), license sanctions (§ 970.1103), the remission or mitigation of required forfeitures (§ 970.1104), and notice requirements for parties wishing to bring civil actions under § 117 of the Act (§ 970.1107).

133. *Regulations, supra* note 5, 46 Fed. Reg. 45,905 (1981) (to be codified in 15 C.F.R. § 970.513(c)).

134. A request is deemed qualified for these purposes if specific, and made in accordance with rules adopted by the Administrator. Act, *supra* note 1, § 113(c).

(the Trade Secrets Act).¹³⁵ The Freedom of Information Act is also residually relevant to any disclosure decision.¹³⁶ The procedure for disclosure tentatively established by the proposed regulations, which provided that confidentiality determinations would be made *only* after a disclosure request by a third-party had been made,¹³⁷ was strongly criticized during the Hearings.¹³⁸ At that time, procedures were suggested both to evaluate the confidentiality of submitted information in *advance* of third-party request, and to evaluate such confidentiality in a binding manner, suitable for reliance by the applicant. Suggested provisions for written confirmation of oral NOAA guidance given in the preapplication consultation stage¹³⁹ were partially incorporated into the final regulations.¹⁴⁰

The applicant is also required to request confidentiality specifically and in writing.¹⁴¹ Such requests may include a statement of the basis for the claimed confidential treatment and should address issues concerning:

- (i) The commercial or financial nature of the information;
- (ii) The nature and extent of the competitive advantage enjoyed as a result of possession of the information;

135. *Id.*

136. See 5 U.S.C. § 552 (1976).

137. See *Proposed Regulations*, *supra* note 7, 46 Fed. Reg. 18,466 (1981) (proposed 15 C.F.R. § 970.902(d)(2)); see also note 19 *supra*.

138. See *Fourth Hearing*, *supra* note 7, at 45 (statement of Dick Greenwald); *id.* at 13-14 (statement of Jeffry Amsbaugh); *id.* at 36 (statement of Alan Kauffman).

139. See *id.*

140. See, e.g., *Regulations*, *supra* note 5, 46 Fed. Reg. 45,910 (1981) (to be codified in 15 C.F.R. § 970.902(b)(4)):

"Normally, NOAA will not make a determination as to whether confidential treatment is warranted until a request for disclosure of the information is received. However, on a case-by-case basis, the Administrator may decide to make a determination in advance of a request for disclosure, *where it would facilitate NOAA's obtaining voluntarily submitted information* (rather than information required to be submitted under this part)." (emphasis added)

While this regulation stops short of providing advance review upon demand presumably due to the sheer volume of requests which NOAA would likely be called upon to process (see *Fourth Hearing*, *supra* note 7, at 46 (statement of Brooks Bowen)), it does provide the Administrator with sufficient flexibility, especially in light of the vagueness inherent in the "voluntary - required" distinction, to insure confidentiality in the most pressing cases in which the claim is substantively justifiable.

141. *Regulations*, *supra* note 5, 46 Fed. Reg. 45,909-910 (1981) (to be codified in 15 C.F.R. § 970.902(b)(2), (3)).

- (iii) The nature and extent of the competitive harm which would result from public disclosure of information;
- (iv) The extent to which the information has been disseminated to employees and contractors of the person submitting the information;
- (v) The extent to which persons other than the person submitting the application possess, or have access to, the same information; and
- (vi) The nature of the measures which have been and are being taken to protect the information from disclosure.¹⁴²

If no prior confidentiality determination has been made and a third-party information request is presented, the party requesting confidential treatment will be provided with notice and the opportunity to comment. The Administrator will then determine whether confidentiality is warranted, and if not, will provide the most expeditious notice possible to the party who had requested it.¹⁴³

The confidentiality issue is critical for two reasons. First, as recognized by the regulations,¹⁴⁴ NOAA must have access to as much information as possible to ensure compliance with the Act. This need tends to support the availability of a prior confidentiality determination as to information helpful to NOAA but not specifically required pursuant to the Act.¹⁴⁵ Second, and of greater potential import to the applicant, there remains the need to protect confidential information for its own intrinsic value, given the competitive nature of the industry involved and the potentially enormous value of the resource deposits involved. Although certain collateral regulatory provisions furnish some specific protections for confidential information at various stages of the proceedings,¹⁴⁶ the more general provisions of § 970.902(d) described above¹⁴⁷ provide the most certain, and the only prospective method of insuring that legally protected confidential information will not be disclosed.

142. *Id.* (to be codified in 15 C.F.R. § 970.902(c)(2)).

143. *Id.* (to be codified in 15 C.F.R. § 970.902(d)).

144. *See* note 140 *supra*.

145. *See, e.g., Fourth Hearing, supra* note 7, at 45 (statement of Dick Greenwald).

146. *See, e.g., Regulations, supra* note 5, 46 Fed. Reg. 45,920 (1981) (to be codified in 15 C.F.R. § 970.1106). The elimination in the final regulations of requirements for market studies, surveys, and other memoranda has also tended to ameliorate in part the confidentiality problem. *See* note 61, *supra*; *Fourth Hearing, supra* note 7, at 42 (statement of Alan Kauffman).

147. *See* note 140 *supra*.

III. PROSPECTIVE INTERNATIONAL EFFECTS

A. *The Proposed Draft Convention on the Law of the Sea*¹⁴⁸

As has been indicated, the Regulations operate in perhaps the most unsettled of all areas of international interaction. Whether the unsettlement is political, legal, or both, depends ultimately on point of view.¹⁴⁹ In any case, whether the legislative scheme progresses beyond the exploration licensing phase will be determined¹⁵⁰ by the ultimate position taken by the United States concerning the proposed Draft Convention on the Law of the Sea or subsequent drafts which may be proposed.

148. See preliminary title footnote * *supra*, p. 1.

149. Concerning the status of the common heritage concept, central to the legal debate, § 2(a)(7) of the Act, *supra* note 1, indicates that:

[T]he United States supported (by affirmative vote) the United Nations General Assembly Resolution 2749 (XXV) declaring *inter alia* the principle that the mineral resources of the deep seabed are the common heritage of mankind, with the expectation that this principle would be *legally* defined under the terms of a comprehensive international Law of the Sea Treaty yet to be agreed upon . . . (emphasis added).

In testimony before a Congressional committee, Ambassador Elliott-Richardson in early 1979 responded to an inquiry about the status of the common heritage principle by stating that "[w]e regard it as essentially an abstract concept." Testimony before the *Subcomm. on Oceanography of the Committee on Merchant Marine and Fisheries, House of Representatives*, 96th Cong., 1st Sess. (February 27, 1979). Ambassador Richardson has, however, continued to favor a negotiated general settlement, as reflected by his recent defense of the proposed Draft Convention:

As the Special Representative of the President for the Law of the Sea Conference for the most of the last four years, I can attest to the fact that the Draft Convention represents neither a loss for the United States nor a victory for the Group of 77. Rather, it embodies balanced and, I believe, acceptable compromises that emerged from tough and protracted battles between the conflicting ideologies and interests of both sides.

Richardson, *Letter to the Editor*, Wall St. J., Mar. 9, 1981, at 23, col. 1.

On the other side of the legal issue concerning unilateral seabed mining are Group of 77 spokesmen such as Ambassador Christopher Pinto of Sri Lanka, who articulated his position as follows:

The common heritage of mankind is the common property of mankind . . . The minerals are owned by your country and mine, and by all the rest as well. In their original location, these resources belong in undivided and indivisible share . . . to all mankind, in fact, whether organized as States or not. If you touch the nodules at the bottom of the sea, you touch my property. If you take them away, you take away my property.

Statement of Ambassador M.C.W. Pinto, reprinted in "Alternatives in Deepsea Mining" (Proceedings of the Law of the Sea Institute Workshop, December 11-14, 1978) at 13 (S. Allen and J. Craven eds. 1979).

150. Act, *supra* note 1, §§ 201-04.

Early in March of 1981, the Reagan Administration decided to conduct a comprehensive review of the provisions of the Draft Convention, and instructed acting representative George Aldrich "to seek to insure that the negotiations do not end at the present session of the conference."¹⁵¹ Although the formal outcome of the review is not expected until early 1982,¹⁵² some indicators suggest that the Administration intends to take a stronger position concerning the freedoms of the seas.

Along with the recent U.S.-Libyan incident, (which may or may not be *sui generis*), foremost among these political indications has been the recent statement of the Honorable James Malone, Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs. Testifying in April before the Subcommittee on Oceanography of the House Merchant Marine and Fisheries Committee, Secretary Malone described some of the impacts of the Draft Convention which were of primary Administration concern:

The Draft Convention places under burdensome international regulation the development of all of the resources of the seabed and subsoil beyond . . . national jurisdiction . . . [It] would establish a supranational mining company, called the Enterprise, which would benefit from significant discriminatory advantages relative to the companies of industrialized countries Moreover, [it] requires the U.S. and other nations to fund the initial capitalization of the Enterprise, in proportion to their contributions to the U.N. . . . [It] compels the sale of proprietary information and technology now largely in U.S. hands . . . [It] limits the annual production of nodules . . . for the first twenty years of production. [It] creates a one-nation one-vote international governing Assembly, characterized as the "supreme" organ (of the proposed International Seabed Authority) . . . [In the] 36-member Executive Council, the Soviet Union and its allies have three guaranteed seats, but the U.S. must compete with its allies for representation.¹⁵³

151. Somewhat conflicting accounts of the etymology of this decision were presented in contemporaneous journalistic accounts. Compare Oberdorfer, *Sea Law Treaty Being Blocked*, Wash. Post, Mar. 4, 1981, at A-1; Gwertzman, *U.S. Bars Treaty For Now on Use of Sea Resources*, N.Y. Times, Mar. 4, 1981 at 1, col. 6; Daily Oklahoman Mar. 5, 1981, at 13; Dickson, *Scuttling the Sea-Law Treaty*, THE NATION, May 30, 1981, at 1.

152. But see *Fourth Hearing*, *supra* note 7, at 5 (statement of Robert Knecht).

153. *Hearings on the Tenth Session of the United Nations Conference on the Law of the Sea before the Subcommittee on Oceanography, Committee on Merchant Marine and Fish-*

In response, the United States has been conducting "reciprocating states" negotiations with several of its allies, some of which have already enacted legislation similar to that of the United States.¹⁵⁴ Should these negotiations result in substantial accord concerning, *inter alia*, the currently unresolved issues concerning minesite size, jurisdictional conflicts, and dispute resolution, an orderly regime would begin to emerge, with mutual recognition of property rights¹⁵⁵ in licenses issued by reciprocating states. Such a regime would not only constitute effective protest against the establishment of a "common property" regime,¹⁵⁶ but might, assuming substantial participation by the specially affected states,¹⁵⁷ constitute a foundation for its future evolution into the customary legal regime as well.

The foregoing analysis of course, assumes the pessimistic conclusion that the finally-proposed sea treaty will not be harmonized with perceived U.S. vital interests. Even the Group of 77, however, generally recognizes that seabed mining will not occur absent sufficient economic incentive for private capital investment. The U.S. mining industry also appears to realistically recognize both that an internationally administered regime cannot give the United States a better financial arrangement than it can give itself, and that the value of the broader security of tenure offered by international consent cannot be measured solely in a short-term economic context. Nevertheless, the residual problems detailed by Secretary Malone¹⁵⁸ still persist, and both local¹⁵⁹ and national¹⁶⁰ economic and

eries, House of Representatives, 97th Cong. 2d Sess. 4-6 (statement of James Malone); See *Third Hearing*, *supra* note 7, at 31-32 (statement of Conrad Welling). For an examination of some benefits of the proposed Draft Convention to the United States, see generally, Charney, *Law of the Sea: Breaking the Deadlock*, 55 FOREIGN AFF. 598 (1977); *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 404-14. See also text accompanying notes 177-83 *infra*.

154. See note 35 *supra*. These negotiations are authorized by § 118 of the Act, *supra* note 1.

155. The generally liberal license transfer provisions contained in the Act, *supra* note 1, and *Regulations*, *supra* note 5, coupled with the Act's relatively stringent diligence requirements tend to promote rather than obstruct free alienation. Within the first ten years, such alienation will almost certainly take place. See, *Fourth Hearing*, *supra* note 7, at 33 (statement of Alan Kauffman).

156. See notes 32, 148 *supra*.

157. See *North Sea Continental Shelf Cases*, [1969] I.C.J. 3, 43.

158. See text accompanying note 153 *supra*.

strategic interests continue to press for relatively unrestricted access.

B. *The New International Economic Order*

The primary countervailing consideration lies, of course, in the necessity for responding meaningfully to the demands of the developing countries for a new international economic order.¹⁶¹ The necessity is derivative of moral, economic, and political concerns.

About a quarter of the world population lives in absolute poverty. Life expectancies in the developing states are about 20% shorter than in the industrialized Northern countries, and their infant mortality rate is five times as high. The thirty-five poorest nations—accounting for 1.1 billion people—share only 3% of the world's wealth, and have annual per capita incomes of less than \$300.¹⁶²

At least two alternative sets of hypotheses concerning the causes and effects of this poverty may be expressed. The former propositions likely constitute at least the tacit assumptions of many observers in the industrialized nations of the North:

First, that the international system created after World War II, the so-called Bretton Woods system, really does not discriminate against the South and is basically sound;

second, that the world's economic system still has to be governed by countries in accordance with their economic power;

third, that the problems of the developing countries are . . . more due to their own internal policies than to anything to do with the international environment; and

159. A processing plant located on Hawaii could increase the state's economic output by almost one billion dollars per year. *First Hearing*, *supra* note 7, at 19 (statement of Hideto Kono).

160. The economic and strategic impacts of such mineral imports are discussed in *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 341-44.

161. See, e.g., the Declaration on the Establishment of a New International Economic Order, which states as one of its primary goals worldwide economic cooperation "whereby the prevailing disparities in the world may be banished and prosperity secured for all." G.A. Res. 3201 (S-VI), U.N. GAOR, Supp. (No. 1) 4, U.N. Doc. A/9559 (1974) at 5. See also the Programme of Action on the Establishment of a New International Economic Order, G.A. Res. 3202 (S-VI), U.N. GAOR, Supp. (No. 1) 5, U.N. Doc. A/9559 (1974).

162. See, e.g., *NEWSWEEK*, Oct. 26, 1981, at 36-37.

fourth, . . . that the important issues of . . . security are those of military power and are related mainly to East-West issues.¹⁶³

The latter propositions, however, must also be considered in the search for perspective and eventual worldwide political harmony:

[F]irst, . . . that international development efforts affect the developing countries as much as . . . the developed world, and that the developing countries both because of their size and their numbers are going to have a much greater decision-making role [therein] . . . ;

second, that the international system either inadvertently or purposely discriminates against the developing countries in a variety of ways; and

[third], that what happens in the Third World as the result of . . . economic factors . . . is going to have as much impact on the growth and progress of the industrial world as it has on their own.¹⁶⁴

The formulation of the development issue ultimately to prevail will hopefully be based in significant measure upon judgments concerning the criteria for international distributive justice¹⁶⁵ and the verifiability of the economic propositions asserted rather than exclusively upon short-sighted or self-interested criteria.

Pending further exploration of these issues, the North-South cold war persists. The more moderate developing-state demands include increased direct aid and investment, freer and preferably interest-subsidized credit, and reduced trade barriers. More radical are demands for: minimum prices on raw materials and agricultural exports, "common heritage" status for outer space, celestial bodies, and, of course, the deep seabed,¹⁶⁶ repudiation of the Paris Convention for the Protection of Industrial Property,¹⁶⁷ and the

163. *North-South Dialogue: Progress and Prospects, Hearing before the Subcomm. on International Economic Policy and Trade and on International Organizations of the Comm. on Foreign Affairs*, House of Representatives, 96th Cong. 2d Sess. 53, 56 (May 13, 1980) (statement of John Sewell) [hereinafter cited as *Hearings on North-South Dialogue*].

164. *See id.* at 56-57.

165. An early and thoughtful international dialogue concerning these criteria might provide the basis for subsequent and more specific negotiations. *See generally*, J. TINBERGEN, *RESHAPING THE INTERNATIONAL ORDER* 12 (1976).

166. *See, e.g.*, *The Customary Norm Process and the Deep Seabed*, *supra* note 5 at 21-28; *Unilateral Exploitation of the Deep Seabed*, *supra* note 5 at 368-84 and 393-94.

167. 21 U.S.T. 1583, 24 U.S.T. 2140, T.I.A.S. 6923, 7727. *See Major Issues Arising From the Transfer of Technology in Developing Countries*, U.N. Sales No. E. 75 II.D. 2.

imposition of an international income tax, couched in terms of what Algerian President Chadli Benjedid, among others, has referred to as a "right" to world wealth redistribution.

At the recent Cancun summit,¹⁶⁸ the United States counterproposed negotiations, preferably bilateral or within the World Bank or International Monetary Fund,¹⁶⁹ to discuss specific issues, including tariffs, investment, and development. It also offered some gratuitous advice concerning the efficiency of capitalism and the need for each developing country to "put its own house in order."¹⁷⁰ The responses were predictable. President Nyerere of Tanzania responded that "We are not here to talk about the internal affairs of any of us . . . ," and President Marcos of the Philippines added, quite rightly, that "Corruption is not the exclusive preserve of the Third World."¹⁷¹ Nevertheless, as the developed states are asked to share increasing percentages of their ever more limited wealth, the issues of internal efficiency and corruption, as well as the related question concerning internal wealth disparities in the developing states, should be addressed to insure that the ultimate beneficiaries of that wealth are those whose need is the greatest.

As has been indicated, economic as well as normative considerations support cooperation where possible. The United States currently runs a substantial trade surplus with the developing countries, which now receive about 40 % of all U.S. exports—more than Europe, Japan, and Australia combined. In addition, the United States imports about 30 % of all its raw materials, including 100 % of its tin and natural rubber, 90 % of its bauxite, and 25 % of its petroleum (resources which cannot be obtained from seabed mining) from such states.¹⁷² Exports to the developing states include

168. This conference, held in late October in Cancun, Mexico, was designated to move the "North-South Dialogue" to the summit level, and was attended by representatives of eight "Northern" (developed) and fourteen "Southern" (developing) states. Participating were Algeria, Austria, Bangladesh, Brazil, Canada; China (People's Republic), France, Germany (Federal Republic), Great Britain, Guyana, India, Ivory Coast, Japan, Mexico, Nigeria, the Philippines, Saudi Arabia, Sweden, Tanzania, the United States, Venezuela, and Yugoslavia. The Soviet Union did not attend, reportedly on the ground that poverty is exclusively the result of capitalism.

169. Concerning the format of negotiations, President Reagan indicated that if negotiations meant that "some gigantic new international bureaucracy [would be] in charge, then we would be opposed to that." *NEWSWEEK*, Nov. 2, 1981, at 34.

170. See, e.g., Ungar, *Cancun: "North" and "South" at the Summit*, *THE ATLANTIC*, Jan., 1982 at 7, 8.

171. *Id.* at 8.

172. See, e.g., U.S. Department of State, *Gist* (June 1981).

50% of U.S. cotton, 65% of U.S. wheat, and 70% of U.S. rice, and are estimated to create about 800,000 American jobs in manufacturing as well. U.S. investment in developing states is currently in excess of \$50 billion.¹⁷³ This interdependence has made the pursuance of a unilateral oceans policy risky, with attendant dangers of both decreased world economic growth and political instability.

There exists, of course, the possibility that the United States will choose to pursue its ideological and economic interests separately by distinguishing the goals of the New International Economic Order from the practical and economic goals of oceans policy. The burden to so choose is likely to be placed upon the United States in the near future. To sever the New International Economic Order from oceans policy constitutes a formidable challenge, given perceived deficiencies in the seriousness of the U.S. anti-poverty commitment,¹⁷⁴ and the direct capital or credit transfers such an effort would require.¹⁷⁵ It may be noted that the costs of a seabed mining compromise are prospective (opportunity) costs only, provided the security of current investments is assured.¹⁷⁶

In short, both the United States and the developing countries have considerable inducements to further serious negotiations at UNCLOS. From the United States' strategic perspective, a negotiated compromise would assure: that the nodules recovered by its citizens would be subject to clear and undisputed ownership,¹⁷⁷ that

173. See *id.*; *Hearings on North-South Dialogue*, *supra* note 163 at 108 (May 15, 1980) (statement of Thomas Ehrlich).

174. U.S. development assistance now totals about 0.23% of its gross national product, compared, for example, with a 0.4% figure for the United Kingdom and a U.N. target of 0.7%. West Germany and Japan have reportedly committed to 0.5% figures by 1985, and some OPEC countries have claimed records in excess of 3 or 4%. See *Hearings on North-South Dialogue*, *supra* note 163 at 57 (statement of John Sewell). In addition, the United States is currently in arrears in its contributions to the World Bank, especially its International Development Association branch, which extends 50 year development loans at nominal interest. Ungar, *supra* note 170 at 8. Also criticized has been the United States' history of tying aid to political cooperation, which seems unlikely to abate. See, e.g., the recent statement of U.S. Deputy Ambassador to the United Nations Kenneth Adelman: "[t]here's enough poverty and suffering, unfortunately, in those countries that share our approach to the world to really soak up . . . all the resources we have in this area." *Daily Oklahoman*, Nov. 20, 1981, at 20A.

175. Concerning potential intermediate positions, see text accompanying note 169 *supra*.

176. Although an opportunity cost only, its burden *does* fall exclusively on the eight to ten states with seabed mining investments rather than being distributed equitably among all the developed states of the world.

177. See *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 405-06.

exclusive claims to nodule tracts would be internationally recognized,¹⁷⁸ and that the United States, as part of the UNCLOS "package,"¹⁷⁹ would enjoy certain strategic benefits unavailable pursuant to customary international law.¹⁸⁰ From a political perspective, the United States would benefit from the resultant developing state perception that its intent to promote the New International Economic Order was *bona fide*, and might ironically gain prestige among the European allies as well.¹⁸¹ From a moral standpoint, the United States would (assuming the final acceptability of some revenue-sharing or technology-transfer obligations) be taking a short but meaningful step toward the abolition of world hunger,¹⁸² and would help to assure that its nineteenth century Indian policy does not become a paradigm for its policy toward the developing states in the twentieth.¹⁸³

The developing state negotiating inducements are both economic and symbolic. The former involves the recognition that any benefits from seabed mining are contingent upon participation in the system by the developed states. Symbolically, the primary inducements stem from the desire to insure the success of the United Nations negotiating process at UNCLOS (with its one-nation-one-

178. See *id.* at 406-07.

179. See *id.* at 387-88; Third United Nations Conference on the Law of the Sea, Rules of Procedure, 31 U.N. GAOR, U.N. Doc. A/CONF. 62/30/Rev. 2 at 18 (1976).

180. See *Unilateral Exploitation of the Deep Seabed*, *supra* note 5, at 407-13. See generally Arrow, *Prospective Impacts of the Draft Sea Convention*, 1 Int'l Prop. Inv. J. ____ (1981).

181. In 1980, the Brandt Commission, in a World Bank study, reported that credit and monetary reform, *inter alia*, were essential to a program of world economic survival. In addition, France has recently been reported to have urged the United States to back a reform package for the World Bank and I.M.F., as well as increasing its direct aid and commitment to commodity price supports. Foreign Minister Genscher of the Federal Republic of Germany has also endorsed a new economic order generally. See also note 174, *supra*. But see text accompanying note 154, *supra*.

182. In 1979, a Presidential Commission recommended that the United States "make the elimination of hunger the primary focus of its relationships with developing countries . . ." United States, Presidential Commission on World Hunger, Preliminary Report at III. 6 (1979). The report also noted that since the primary cause of hunger is poverty, efforts to eliminate hunger need focus more generally on the abolition of poverty as well.

183. The President's Cancun advice to the developing states concerning the virtues of capitalism may be vaguely reminiscent of the early American attitude, for example, toward communally-owned Indian land. In 1816, Secretary of War Crawford told the Senate, "No one will exert himself to procure the comforts of life unless his right to enjoy them is exclusive." Address by Secretary Crawford to the U.S. Senate, March 13, 1816, at II American State Papers, Indian Affairs 26-27 (1834), cited in M. ROGIN, *FATHERS AND CHILDREN: ANDREW JACKSON AND THE SUBJUGATION OF THE AMERICAN INDIAN* 180 (1976).

vote premise), as well as the more substantive and immediate goal of furthering the New International Economic Order.

Some intransigence on both sides may be anticipated. The United States' *legal* position concerning the validity of unilateral, nonexclusive seabed mining is a strong one, likely occupying the favorable position of the "incumbent" principle, and economically, an international regime would, of course, inevitably be more expensive and difficult to control than a unilateral or "reciprocating states" regime. On the other side, while the developing states' legal principle is still the challenger, political and ideological gains may be perceived by some developing states in forcing the United States into either accepting an unacceptable regime, or committing itself to defend its seabed miners by force. No such commitment currently exists in the United States Act,¹⁸⁴ which actually requires the Administrator to suspend any exploration license likely to create a situation which may reasonably be expected to result in armed conflict.¹⁸⁵

In the meanwhile, the "reciprocating states" negotiations¹⁸⁶ provide the best bellwether of prospective U.S. policy. Several specific issues—including individual minesite size, the cumulative seabed area to be licensed, the diligence with which the exploration actually occurs, and the prospects for unlimited production in the commercial recovery phase—are likely to be concluded by these negotiations. The resolution of these issues by the reciprocating states¹⁸⁷ and the results of the U.S. policy review may well signal the extent to which only partially satisfactory political compromise is ultimately to be preferred to the perpetuation of the freedom of the seas by force.

184. Act, *supra* note 1, art. 3(a)(1)(2).

185. *Id.*, art. 105(a)(3).

186. See note 148 *supra*.

187. See generally, *First Hearing*, *supra* note 7, at 28-31 (statement of John Craven); *Third Hearing*, *supra* note 7 at 19 (statement of Phil Grote).

