

Military Uses of Ocean Space and the Developing International Law of the Sea: An Analysis in the Context of Peacetime ASW*

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Mr. Zedalis examines the international legal prescriptions regulating peacetime military uses of ocean space other than passage through straits used for international navigation. He contrasts the approaches to possible regimes set forth in the 1958 Conventions and in UNCLOS III and assesses each. Finally, he advances which proposal is the most desirable.

* This study was prepared in an attempt to fill two gaps in international legal thinking concerning the principles governing peacetime military uses of ocean space other than passage through straits used for international navigation. The first, and perhaps the most discernable gap, is the result of the absence of any legal writing comprehensively examining the rules proposed at the Third United Nations Conference on the Law of the Sea, which are designed to regulate future military uses of ocean space. The second, and less distinct aperture, is the result of the dearth of writing concerning the legality of the use of ocean space for peacetime anti-submarine warfare (ASW). The author would like to express his appreciation to Professor W.T. Mallison, Jr., Director of the International and Comparative Law Program, George Washington University, for reviewing an earlier draft of this study, and to his wife, Catherine, for encouragement during its preparation.

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I.	PROLOGUE	577
II.	ANTI-SUBMARINE WARFARE: AN OVERVIEW	578
	A. <i>Naval Missions and ASW Tactics</i>	578
	B. <i>Underwater Acoustic Detection</i>	582
	1. The Devices and Platforms: An Introduction ...	582
	2. Passive and Active Detection Devices	583
	a. <i>Ocean Characteristics Affecting Passive and Active Detection Devices</i>	584
	3. Water Column Acoustic Detection Devices: The Sonobuoy	586
	a. <i>Sonobuoy Platforms</i>	586
	i. Fixed-Wing Aircraft	586
	ii. Helicopter	587
	iii. Moored Surveillance System (MSS) ...	588
	4. Fixed Acoustic Detection Array Systems	588
	C. <i>Anti-Submarine Weapons</i>	590
	1. Anti-Ship Mines	590
III.	INTERNATIONAL LAW OF THE SEA AND MILITARY USES OF OCEAN SPACE: PEACETIME ASW.....	591
	A. <i>Legal Regime Governing the Waters of Ocean Space</i>	596
	1. The Internal Waters and the Territorial Sea....	596
	a. <i>The 1958 Convention</i>	598
	b. <i>UNCLOS III</i>	602
	c. <i>Assessment</i>	603
	2. The High Seas.....	605
	a. <i>The 1958 Convention</i>	606
	i. The Three Power Proposal: Military Maneuvers	608
	ii. The Four Power Proposal: Nuclear Weapon Tests	609
	iii. Reasonable Regard Standard.....	610
	b. <i>UNCLOS III</i>	611
	c. <i>Assessment</i>	615
	3. Contiguous Zone	618
	a. <i>The 1958 Convention</i>	618
	b. <i>UNCLOS III</i>	621
	c. <i>Assessment</i>	621
	4. Exclusive Economic Zone	623
	a. <i>UNCLOS III</i>	623
	b. <i>Assessment</i>	626
	i. The Contiguous Zone: Its Relation to the EEZ	629
	B. <i>Legal Regime Governing the Sea Floor of Ocean Space</i>	630
	1. The Internal Waters and the Territorial Sea ..	630

a. <i>The 1958 Convention</i>	631
b. <i>UNCLOS III</i>	634
c. <i>Assessment</i>	636
2. <i>The Continental Shelf</i>	637
a. <i>The 1958 Convention</i>	638
b. <i>Assessment</i>	645
3. <i>The Exclusive Economic Zone</i>	648
a. <i>UNCLOS III</i>	648
b. <i>Assessment</i>	651
4. <i>The Deep Seabed</i>	651
a. <i>The 1958 Convention</i>	652
b. <i>UNCLOS III</i>	654
c. <i>Assessment</i>	660
IV. <i>CONCLUSION</i>	663

I. PROLOGUE

Nations competitively use every aspect of seapower to promote their own security, power, wealth, well-being, and respect.¹ The object of international law's decisionmaking process is to resolve peacefully such competing State claims in a fashion that secures the widest possible distribution of shared values while simultaneously rejecting exclusive claims that threaten to impair the interests of the international community.² The likelihood of the claim, counterclaim, and resolution process producing a decision that conserves inclusive values (or exclusive values that do not jeopardize community interests) is predicated upon the extent to which participants in the decisionmaking process adhere to the relevant legal prescriptions. However, because the participants are intermittently claimants and decisionmakers, the mutualities and reciprocities of the network are conducive to compliance with the doctrinal standards. Stated another way, a nation that submits claims or renders determinations not authorized by interna-

1. See Rao, *Legal Regulation of Maritime Military Uses*, 13 INDIAN J. INT'L L. 425, 427-31 (1973).

2. M. McDUGAL & W. BURKE, *THE PUBLIC ORDER OF THE OCEANS* (1962). McDougal and Burke state at 37-38:

The kind of balancing of common interests long regarded as best serving the most comprehensive community of mankind both emphasizes the primacy of inclusive interests over exclusive interests, requiring only reasonableness in accommodation between conflicting inclusive interests, and honors and protects assertions of exclusive interests, when in conflict with inclusive interests, only when, and to the degree that, such honoring and protection will contribute more to the common good.

tional law is likely to find its own actions used in the future by others to impair its national interests.

The objective of this study is to examine the international legal prescriptions regulating peacetime military uses of ocean space other than passage through straits used for international navigation. To facilitate this task, the relevant principles will be discussed in the context of that aspect of peacetime anti-submarine warfare (ASW) conducted below the navigable water surface. Therefore, although reference will be made to the general principles enunciated in the four 1958 Conventions on the Law of the Sea currently governing uses of ocean space,³ as well as to the principles embodied in the products of the first six sessions of the Third United Nations Conference on the Law of the Sea (UNCLOS III) designed to govern future uses of ocean space, the article will contain no suggestions as to the legality or illegality of various naval activities other than peacetime ASW. This restrictive analysis does not, however, preclude the use of the principles adduced or of the reasoning applied as a yardstick for assessing the permissibility of such other activities. In fact, because this study examines virtually every existing and prospective *conventional* prescription relating to military use of the sea, it has significance far beyond the narrow concern expressly addressed. To provide analytical context, the apposite principles are discussed and evaluated following a brief review of both the role of the submarine in the fulfillment of basic naval missions and the tactics, assorted devices, and platforms of ASW.

II. ANTI-SUBMARINE WARFARE: AN OVERVIEW

A. *Naval Missions and ASW Tactics*

The modern navy is designed to accomplish four basic missions:⁴ sea control, projection of power ashore, naval presence, and strategic deterrence.⁵ Sea control is the capacity to assert

3. Convention on the Continental Shelf, *done* Apr. 29, 1958, [1964] 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311; Convention on Fishing and Conservation of the Living Resources of the High Seas, *done* Apr. 29, 1958, [1966] 17 U.S.T. 139, T.I.A.S. No. 5969, 559 U.N.T.S. 285; Convention on the High Seas, *done* Apr. 29, 1958, [1962] 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82; Convention on the Territorial Sea and the Contiguous Zone, *done* Apr. 29, 1958, [1964] 15 U.S.T. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205 [hereinafter cited as Territorial Sea Convention].

4. The United States Navy effectively pursues all four missions. It has been suggested that the Soviet Navy fails to meet adequately the projection of power ashore and the assertion aspects of sea control. *See* Turner, *The Naval Balance: Not Just a Numbers Game*, 55 FOREIGN AFF. 339, 343-44 (1977).

5. Turner, *Missions of the U.S. Navy*, NAVAL WAR C. REV., Mar.-Apr., 1974, at 5. *See also* M. JANIS, SEA POWER AND THE LAW OF THE SEA 1 (1976).

one's own use of the seas and to deny that use to others.⁶ More specifically, sea control is comprised of both assertion and denial. Assertion means that the navy of a particular nation can protect its own ships transporting resources, material, or personnel to or from one particular spot on the globe to another, or can remain at a specific location in the face of efforts to displace it. Denial is the opposite; it is the ability to prevent transiting foreign ships from effectively using sea lanes, or to force an adversary to choose between fleeing a specific position or remaining at the risk of suffering substantial damage.⁷ Sea control is the most traditional naval mission and perhaps the most essential tactical function because without effective sea control, the other non-strategic functions could not be effectively carried out.

Projection of power ashore includes the ability to threaten and to strike effectively military targets along the littoral of the enemy or deep inside his territory.⁸ Though advent of the inter-continental ballistic missile has minimized the strategic significance of this mission, as long as concepts of flexible response⁹ and limited war¹⁰ remain operational possibilities, circumspection would ad-

6. Turner, *The Naval Balance: Not Just a Numbers Game*, 55 FOREIGN AFF. 339, 345 (1977).

7. Although this study is not concerned with appraising the existing naval balance of the major sea powers, it may be of interest to note that unlike comparative analyses of strategic deterrence and projection of power ashore forces, any survey of the relative strength of sea control forces involves a direct comparison. That is, while strategic deterrence and projection ashore forces do not meet a corresponding force component during conflict, the sea control forces of each combatant do. Thus, in a battle for sea control, the sea control forces of navy X will meet the sea control forces of navy Y. More specifically, the "assertive" force capabilities of navy X will conflict with the "denial" capabilities of navy Y. Still two other factors make direct numerical comparisons fatuous. First, because sea denial essentially involves striking at a time and place most advantageous to the attacking forces, a numerically inferior denial force has a marked advantage. Second, the weapons of denial and assertion differ. Denial weapons, *i.e.*, torpedoes and anti-ship missiles, are designed to attack surprised assertion forces, while assertion weapons are designed to destroy or to neutralize incoming missiles or torpedoes or to detect, identify, locate, and preemptively destroy their launch platforms. For a thorough discussion in the context of the United States versus the Soviet Union, see *id.* at 347-51.

8. Turner, *Missions of the U.S. Navy*, NAVAL WAR C. REV., Mar.-Apr., 1974, at 5, 8.

9. Flexible response is a conceptual doctrine that describes international conflict as a series of graduated levels of intensity of violence. It is the converse of "massive retaliation." The doctrine is frequently used as justification for procurement of a variety of conventional and nuclear ordnance.

10. Limited war is the physical and operational manifestation of the doctrine of flexible response. Unlike flexible response, which requires only unilateral ac-

wise continued development and deployment of weapons capable of accomplishing this mission. At present, tactical aircraft,¹¹ naval bombardment, and amphibious landing vessels conjoin to permit nations that do not maintain sufficient land-based forces in a particular portion of the globe to pursue effectively such an overseas function.

The mission most directly related to everyday foreign policy is naval presence.¹² In essence, it is the orchestrated, non-combat use of seapower to secure an international political objective.¹³ When the naval forces of two sea powers competitively seek to influence the outcome of some political event ashore, the relative quantity, quality, and character of their respective forces can prove determinative. Moreover, because the navy is a component of the overall military force structure, the relative weakness or strength of that component may serve to supplement or to diminish the credibility of express or tacit threats implicit in any particular foreign policy decision. It is primarily for these reasons that a dwindling navy evokes alarm among policy planners sensitive to the overall balance of military forces.

Of the four naval missions, strategic deterrence contributes most directly to continued international security and to avoidance of thermonuclear holocaust. Essentially, its primary objectives are:

- To deter all-out attack by any nation possessing a nuclear war-making capability;
- To threaten any nation contemplating less than all-out attack with a counterforce capability sufficient to create apprehensions of unacceptable risks of devastating response; and
- To maintain an international political climate conducive to the actualization of foreign policy objectives.¹⁴

During the closing days of World War II, it appeared as though the future role of sea-based strategic deterrence would be played by the aircraft carrier. Today, however, this role is largely dominated by invulnerable nuclear submarines armed with Pola-

ceptance to remain extant, limited war is non-existent absent effective adherence by all parties to a conflict.

11. For two views on the role of the aircraft carrier in providing for projection of power ashore, see Bagley, *The Decline of U.S. Sea Power*, 21 *ORBIS* 211 (1977); Krepon, *A Navy to Match National Purposes*, 55 *FOREIGN AFF.* 355 (1977). The debate focuses on the vulnerability of a few large carriers as opposed to the usefulness of numerous small vessels capable of launching vertical short take off and landing (V/STOL) aircraft.

12. The relative balance of parties' naval presence forces, like those of sea control, can be evaluated by direct comparison.

13. Presence has been termed "suasion" by one commentator. See E. LUTTWAK, *THE POLITICAL USES OF SEA POWER* 1-38 (1974).

14. See M. JANIS, *SEA POWER AND THE LAW OF THE SEA* 1 (1976).

ris/Poseidon ballistic missiles (SSBNs).¹⁵ The invulnerability of the SSBN is a product of its relatively quiet propulsion system and of its ability to stay submerged for periods of up to sixty days.¹⁶ These and other features actuated former United States Secretary of Defense James Schlesinger to describe the SSBN as the most secure element in the nuclear triad.¹⁷

Conventional diesel-powered¹⁸ and modern nuclear-powered submarines participate in the various naval missions only to the extent that their invulnerability is assured. Because the submarine's principal utility proceeds from its ability to remain submerged and thereby to avoid detection, missions that require surface navigation are undesirable. Consequently, the submarine does not usually support the naval presence or the projection of power ashore missions,¹⁹ but rather operates most effectively when supporting the strategic deterrence and sea control missions.

The traditional strategy of ASW, though changing to meet burgeoning SSBN force structures, is predominantly tactical and defensive.²⁰ In general, it seeks the cumulative attrition²¹ of enemy submarines moving through a series of systems on their way to and from the safety of their home port. Specifically, it is designed

15. At the present time the United States has 41 SSBNs and the Soviet Union 62. The SALT I accord permits the United States to deploy 45 such vessels. See Brennan, *The Soviet Military Build-Up and its Implications for the Negotiations on Strategic Arms Limitations*, 21 ORBIS 107, 116 (1977).

16. See M. JANIS, *SEA POWER AND THE LAW OF THE SEA* 2 (1976).

17. REPORT OF SECRETARY OF DEFENSE JAMES R. SCHLESINGER TO THE CONGRESS ON THE FY 1976 AND TRANSITION BUDGET, FY 1977 AUTHORIZATION REQUEST AND FY 1976-1980 DEFENSE PROGRAMS, at II-30 (1975). See also Krepon, *A Navy to Match National Purposes*, 55 FOREIGN AFF. 355, 355 (1977), where the SSBN is described as "assured and invulnerable."

18. See O'Connell, *International Law and Contemporary Naval Operations*, [1970] 44 BRIT. Y.B. INT'L L. 19 (1971). O'Connell notes that many diesel-powered submarines must surface frequently to charge their batteries and to circulate air. This problem has been somewhat ameliorated by the use of surface access snorkels. Nevertheless, the constraints faced by the conventional submarine either to surface or to rely on a snorkel significantly increase the chances of its detection over that of the nuclear-powered submarine. *Id.* at 40.

19. Except for the SSBNs, which play a strategic deterrence role, submarines are not designed to contribute significantly to projection of power ashore.

20. *Antisubmarine Warfare*, [1974] WORLD ARMAMENTS AND DISARMAMENT 303 (Stockholm Int'l Peace Research Inst.) [hereinafter cited as Y.B. WORLD ARMAMENTS: 1974].

21. *Hearings on First Concurrent Resolution on the Budget Before the Comm. on the Budget*, 95th Cong., 1st Sess. 239-45 (1977). See also D. RUMSFELD, ANNUAL DEFENSE DEPARTMENT REPORT: FY 1977, at 172 (1976).

to provide both area and point defense during conflict. The objective of area defense is to secure specific vast expanses of ocean space. The accomplishment of this task is initially sought through the use of barrier control which, if unsuccessful, is supplemented with ocean surveillance and submarine trailing.²² Point defense, on the other hand, picks up where area defense leaves off, seeking to insulate transiting allied vessels from the depredations of enemy submarines that have managed to elude the barrier-control network.²³ The following portion of this study will discuss the various ASW detection devices. Though the purpose is not to provide the reader with any comprehensive technical evaluation of the worth of each particular system, hopefully it will engender a general understanding of the basic accoutrements.

B. Underwater Acoustic Detection

1. The Devices and Platforms: An Introduction

In its most rudimentary form, ASW consists of four integrated functions: detection, identification, localization, and destruction. A variety of devices are employed in performing the first three functions, including visual and radar apprehension,²⁴ infra-red line scan,²⁵ magnetic anomaly detection,²⁶ sonobuoy,²⁷ and under-

22. "Barrier control" is occupation and utilization of narrow ocean-passage zones, known as "choke points," for the purpose of interdicting enemy submarines attempting to transit into the deep ocean. This occupation and utilization is usually achieved with fixed detection systems, mines, and anti-submarine submarines. See S. HIRDMAN, PROSPECTS FOR ARMS CONTROL IN THE OCEAN 11 (1972). Once beyond the barrier and in deep ocean, area defense becomes a game of ocean surveillance and of submarine trailing. Considering the extreme difficulty of locating an enemy submarine once in the deep ocean, the strategy usually switches, at that time, to point defense.

23. Once an enemy submarine has escaped allied barrier-control systems, or manages to transit to the deep ocean before the commencement of conflict, ASW switches to "point defense." Here, allied ASW forces, exercising ASW sea assertion capabilities, attempt to frustrate enemy sea denial forces by creating a *cordon sanitaire* around transiting allied vessels.

24. Visual and radar apprehension are effective only when some portion of the submarine obtrudes above the water surface.

25. I.R.L.S. is a submarine detection system that may be operated from a satellite and is designed to discriminate various heat levels emanating from earth.

26. M.A.D. is a close-range detection device that functions on the changes induced in the earth's magnetic field created by a submarine at a particular location. Its primary platform is the airplane.

27. Sonobuoy, as used here, includes all water column detection devices other than towed acoustic arrays. It includes low-frequency analyzation and recording (L.O.F.A.R.), as well as C.O.D.A.R., its comparable close-range localization unit. The difference between L.O.F.A.R. and C.O.D.A.R. is that the former uses a high-frequency spectrum with better directional but shorter-range abilities while the latter uses a low-frequency spectrum that increases range but reduces directional abilities.

water acoustic array systems.²⁸ These devices utilize a myriad of platforms including surface ships and submarines, fixed-wing aircraft²⁹ and helicopters,³⁰ free-floating and moored buoys, satellites, and seabed. Because this study focuses on peacetime ASW activities conducted below the navigable water surface, attention will be confined to an examination of *underwater acoustic detection devices*, or more specifically, sonobuoys and fixed acoustic array systems.

2. Passive and Active Detection Devices

All submarines have two characteristics that make them detectable. First, they generate and diffuse a spectrum of acoustic energy as a result of the cavitation and turbulence of their motion while proceeding through ocean space. Second, sound-wave emissions that strike the interface of a submarine, like that of any tangible object, reflect and become susceptible to detection and analysis.³¹ Acoustic energy emission and acoustic energy reflection of underwater acoustic submarine detection devices, provide operational foundations for the two generic types of underwater acoustic submarine detection devices, the passive device and the active device.

Relative to the passive acoustic detection device, the active device is a newcomer to ASW.³² Basically, the passive device consists of hyper-sensitive hydrophones or listening instruments that detect sound emissions generated by transiting vessels and then relay the detected emissions to an awaiting computer analysis

28. Acoustic array systems are usually fixed to the sea floor or are towed by ship.

29. The most popular aircraft used by the United States for submarine surveillance include the land-based Orion P-3C and the carrier-based Viking S-3A. For others, see Robinson, *Sea Control Ship Tests Advance ASW*, AV. WEEK & SPACE TECH., Feb. 11, 1974, at 43. The Orion has a crew of 12 and a patrol endurance of 11 hours with a maximum speed of 475 knots and a patrol speed of 200 knots. It employs various sonobuoys including the D.I.F.A.R. (directional low-frequency analyzer and ranging) with an effective range of 10 kilometers. As of 1973 the United States possessed 100 Orions and planned to purchase 140 more. See Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 311.

30. A helicopter can effectively "sanitize" an area around a task force at the rate of about 40 square kilometers per hour. See Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 312.

31. *Id.* at 306-07.

32. Knauss, *The Military Role in the Ocean and its Relation to the Law of the Sea*, in THE LAW OF THE SEA: A NEW GENEVA CONFERENCE, PROCEEDINGS OF THE SIXTH ANNUAL CONFERENCE OF THE LAW OF THE SEA INSTITUTE 77, 79 (L. Alexander ed. 1972).

unit which processes out the ambient ocean noise and attempts to identify the nature of the transiting object.³³ Though the passive acoustic detection device provides no direct measure of submarine range,³⁴ it is said to be capable of picking up sounds generated more than 100 miles from the hydrophone's location.³⁵ The active acoustic detection device, in comparison, employs large electromechanical generators, called transducers, in addition to the familiar hydrophones used by the passive detection device. These transducers are designed to convert electrical energy into acoustic energy and to propagate the resultant sound waves through ocean space.³⁶ The hydrophones then listen to detect any reflection of the sound waves, processing the information feedback in a manner similar to that used by the passive system. Though the active detection system lacks the long-range abilities of the passive system,³⁷ it is nevertheless capable of computing object range.³⁸

Passive as well as active underwater acoustic detection devices face certain inveterate operational impediments incident to the very nature of ocean space.³⁹ Before proceeding to a discussion of the various water column and fixed array detection devices presently in use by the United States Navy, some of these inherent oceanic obstacles will be briefly discussed.

a. Ocean Characteristics Affecting Passive and Active Detection Devices

The nature of the ocean limits the selection of effective devices. For instance, electromagnetic radiation cannot be used for submarine detection because it is too readily attenuated by sea water. As a result, devices utilizing acoustic energy have been

33. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 306-07.

34. S. HIRDMAN, PROSPECTS FOR ARMS CONTROL IN THE OCEAN 12 (1972).

35. Brown, *Military Uses of the Ocean Floor*, in FACEM IN MARIBUS 285, 288 (E. Borgese ed. 1972). Some authorities, however, set the range at 100 kilometers. See Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 307. Brown notes in comparison that the average distance for detection devices mounted on surface ship or submarine remains only five to 10 miles. Brown also notes that one of the major drawbacks of passive detection devices is that their dependence on broad-frequency sound reception makes them "more susceptible to being either misled or deafened by spurious emissions" and jamming. Brown, *supra* at 287.

36. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 308-09.

37. Some commentators set the range at 50 miles, see Brown, *supra* note 35, at 287, others at substantially less, see Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 307 (mentions 20 kilometers).

38. Processing units accomplish this by measuring the time it takes for sound pulses to return to the hydrophones.

39. For a detailed account of the scientific aspects of underwater detection, see Tsipis, *Underwater Acoustic Detection*, in THE FUTURE OF THE SEA-BASED DETERRENT 169 (1973) [hereinafter cited as SEA-BASED DETERRENT].

turned to almost exclusively. Nevertheless, the character of ocean space limits the effectiveness even of these devices. Specifically, the velocity of acoustic sound waves is directly related to ocean temperature, ocean salinity, water pressure (which is a function of depth), and water turbulence. These factors necessarily mean that there are variations in both sound wave velocity and consequential acoustic energy refraction⁴⁰ from one ocean to another, or even from one spot to another within the same ocean. A further complication is that geological and hydrological discontinuities and sea floor sinuosities reflect acoustic energy that otherwise might travel in a straight line. Both active and passive acoustic detection devices suffer as a consequence. In fact, the combination of reflection and refraction creates shadow zones⁴¹ where sound waves, regardless of intensity, are unable to penetrate. A submarine located in such a zone may easily escape detection.

In addition to the foregoing, the level of ambient ocean noise and a phenomenon known as the Doppler shift also hinder detection. Essentially, ambient ocean noise is the product of acoustic energy emitted by anything from man-made vessels, to natatorial creatures, to geological disturbances, or to meteorological changes. It necessarily results in a detection threshold below which the origin of one sound becomes indistinguishable from that of another. The problems caused by the Doppler shift, in comparison, are not a consequence of the presence of *other* moving objects in ocean space, but rather of the motion of the detected object itself. Specifically, the frequency of all acoustic waves reflected by the hull of a moving submarine is in direct proportion to the submarine's radial speed.⁴² Therefore, differing speeds produce differing sound frequencies. When acoustic wave reflection and refraction, ambient ocean noise, and the Doppler shift are all taken together, the reason for the uncertain nature of submarine detection is quite apparent.⁴³

40. This phenomenon is known as Snell's Law. Essentially, it holds that sound waves, otherwise traveling in a straight line, will be refracted into arcs of circles with variations in the velocity of the waves. Such variations are caused by a host of features characteristic to the ocean including temperature, depth, salinity, and discontinuities.

41. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 305.

42. *Id.* at 307. See also Tsipis, *supra* note 39, at 169.

43. Most commentators agree that submarine detection is a rather inexact science. See generally Tsipis, note 39 *supra*.

3. Water Column Acoustic Detection Devices: The Sonobuoy

The objective of this portion of the study is to discuss briefly the widely used acoustic submarine detection device known as the sonobuoy. No attempt is made here to examine the various other types of submarine detection devices mentioned earlier,⁴⁴ including devices platformed on surface ships or submersible vessels. A detailed accounting of fixed acoustic detection array systems will be presented in a later section.

The sonobuoy may be either a passive device, composed exclusively of hydrophonic detection instruments, or an active device, consisting of both hydrophonic detectors and electromechanical transducers. Whether passive or active, the sonobuoy is designed to be dropped onto the ocean surface and lower detection instruments a few hundred meters into the water column⁴⁵ to ascertain the presence of acoustic energy. Information received is then transmitted through the buoy to an analysis unit stationed on aircraft flying or hovering overhead.⁴⁶ Such free-floating sonobuoys are subject to being displaced by surface turbulence and by normal hydrological motion. In an attempt to avert this intrinsic problem, nations have endeavored to develop and to deploy moored sonobuoy systems.

a. Sonobuoy Platforms

i. Fixed-Wing Aircraft

The sonobuoy may be dropped from either the land-based Orion P-3C or the carrier-based Viking S-3A fixed-wing aircraft. Though theoretically two sonobuoys should be capable of pinpointing the precise location of a submarine, the typical practice is to seed a large portion of ocean space with several such devices. Once the presence of a submarine is ascertained, its position is usually localized with magnetic anomaly detection (M.A.D.).⁴⁷

The Orion land-based, fixed-wing aircraft has a patrol speed of approximately 200 knots and is capable of deploying eighty-seven active and passive sonobuoys.⁴⁸ The active sonobuoys are said to

44. Such devices include vision, radar, infra-red line scan, magnetic anomaly detection, or underwater acoustic array systems. See notes 24-30 and accompanying text *supra*.

45. For purposes of analysis, the water column should be distinguished from the superjacent navigable surface.

46. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 309.

47. *Id.*

48. *Id.* at 310. See also K. TSIPIS, TACTICAL AND STRATEGIC ANTISUBMARINE WARFARE 22 (1974) [hereinafter cited as ANTISUBMARINE WARFARE].

have an effective detection range of about three kilometers; the passive devices have a reported range of approximately ten kilometers.⁴⁹ The Viking carrier-based aircraft is a twin-engine jet with a sea-level loiter speed of 160 knots and a maximum patrol range of 2,000 to 3,000 nautical miles. Although the Viking, like the Orion, employs both active and passive sonobuoys, some authorities have suggested that it is not suitable for lengthy ocean patrol.⁵⁰

ii. Helicopter

In recent years the helicopter has proven an effective ASW platform. The operational union of helicopter and long-range, fixed-wing aircraft has permitted a large-area "sanitization" compelled by the advent of submarine-based surface-to-surface cruise missiles with effective ranges of from twenty to 400 kilometers. In an effort to detect transiting submarines, the United States Navy has stationed both dipping sonar and sonobuoys aboard land- and carrier-based helicopters.

The best known anti-submarine helicopter employing both dipping sonar and sonobuoys is the Sea King SH-3 series.⁵¹ The Sea King is a land- or carrier-based helicopter piloted by a four-man crew. It carries active acoustic dipping sonar with a range of a few kilometers,⁵² as well as various active and passive sonobuoys.⁵³ The sonobuoys are dropped on the surface, like those used by the Orion P-3C and the Viking S-3A. They scan the area for audible sound emissions and transmit the information to the hovering helicopter, where it is processed and analyzed. Employing both sonobuoys and dipping sonar, the Sea King can effectively "sanitize" a large expanse of ocean space in a relatively

49. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 310.

50. *See* ANTISUBMARINE WARFARE, *supra* note 48, at 24. The Viking carries active (AC/SSQ-47/47B code-named "Julie"; AN/SSQ-50) and passive (AN/SSQ-41/41A code-named "Jezebel"; AN/SSQ-53 D.I.F.A.R.) sonobuoys. It also uses M.A.D. and forward-looking infra-red sensors. *Id.*

51. *See id.* Appendix 1, Table 1, A(3). *See id.* Appendix 2, Table 6, for a comprehensive listing of the other ASW helicopters used by the United States and other nations.

52. *Id.* at 25 (British version compared).

53. The various sonobuoys reputed to be carried by the Sea King include the AN/SSQ-53 D.I.F.A.R. (passive sonobuoy), AN/SSQ-47/47B (active miniature sonobuoy used for localization, code-named "Julie"), AN/SSQ-50 (a self-powered active localization unit), and "Cass" (command-activated sonobuoy system). *See id.* Appendix 1, Table 1, A(4).

short period of time.⁵⁴

iii. Moored Surveillance System (MSS)

Though this detection platform shares some of the attributes of a large fixed array system, it also shares many of those characterizing the free-floating sonobuoy. For precisely this reason, it seems most appropriate to mention MSS⁵⁵ in this, the final portion of the subsection dealing with sonobuoy platforms, immediately preceding the section covering fixed acoustic array systems.

Briefly, MSS consists of command-activated, long-life sonobuoys which are dropped from the air and which automatically moor themselves to the ocean floor to prevent displacement. Each sonobuoy is equipped with an elaborate communications and detection system having a useful life of about ninety days. The deployment scenario calls for each sonobuoy to be placed in a position that facilitates submarine localization through triangulation techniques. The fact that the sonobuoys can be moored in up to 3,000 fathoms of water creates the likelihood of a deep-ocean detection capability.⁵⁶

4. Fixed Acoustic Detection Array Systems

In addition to the sonobuoy, which despite its limited range is well-suited to barrier control and to point defense, the United States Navy employs a network of large fixed acoustic detection devices capable of scanning vast expanses of ocean space. The Sonar Surveillance System (SOSUS), for instance, is a major underwater passive acoustic detection and classification network comprised of several separate systems employing a series of hydrophones. It is linked by electrical cable to shore-based processing units.⁵⁷ SOSUS has an estimated range of several hundred kilometers.⁵⁸

The entire SOSUS consists of several individual systems, each designed to monitor specific areas of ocean space. "Caesar," the

54. It has been reported that a Sea King using a dipping sonar alone can effectively patrol an area 10 kilometers by 100 kilometers in one hour. *See id.* at 23.

55. *See generally Hearings on Military Posture and H.R. 5068 Before the Comm. on Armed Services*, 95th Cong., 1st Sess. 374 (1977).

56. *See ANTISUBMARINE WARFARE*, *supra* note 48, at 30; Appendix 1, Table 1, A(5). *See also* Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 317-18.

57. *See generally Hearings on Military Posture and H.R. 5068 Before the Comm. on Armed Services*, 95th Cong., 1st Sess. 374 (1977); Teplinsky, *America's Naval Programmes*, 15 SURVIVAL 75 (1973).

58. ANTISUBMARINE WARFARE, *supra* note 48, at 30. *But see* Tsipis' estimate, *supra* note 39, Appendix 1, Table 1, A(5) (1,000 nautical miles).

seminal component of SOSUS,⁵⁹ is emplaced on the continental shelf along the eastern seaboard.⁶⁰ A more advanced and refined version, "Colossus,"⁶¹ is located on the Pacific shelf off the west coast.⁶² "Barrier" and "Bronco," systems similar to those scanning the two seabords, are believed to be deployed beyond the coasts of the various allies of the United States.⁶³

Additional long-range ocean surveillance is conducted by both the Azores Fixed Acoustic Range (AFAR) and the Sea Spider networks. AFAR consists of several sonars mounted on top of three or more 130-meter towers, each spaced thirty-five kilometers apart⁶⁴ and submerged off the southern-most islands of the Azores group in water 300 to 600 meters in depth.⁶⁵ Its principal task is to keep a check on submarines entering and leaving the Mediterranean. Sea Spider is a much more ambitious system. Basically, it is a passive acoustic submarine detection unit composed of a single hydrophonic listening device three meters in diameter and anchored by three cables at a depth of approximately 5,000 meters. The entire unit is reported to be powered by a nuclear battery and stationed a few hundred miles north of Hawaii.⁶⁶

Although these fixed networks tend toward "insonification" of ocean space, they pale to insignificance in comparison with the degree of ocean transparency sought with the Suspended Array System (SAS).⁶⁷ Conceived in the early 1970's, SAS is said to consist of a massive tower resting on the ocean floor at a depth of close to 5,000 meters with each leg of the tripod ten kilometers apart. An acoustic detection array consisting of both electromechanical transducers and hydrophonic receivers sits on top of the structure. Reportedly, one such device stationed in each

59. "Caesar" was deployed in the 1950's. A similar version is being deployed along the gulf coast.

60. ANTISUBMARINE WARFARE, *supra* note 48, Appendix 1, Table 1, A(5).

61. "Colossus" was deployed in the 1960's. It consists of 5-15 devices per linear mile. *See id.* at 30.

62. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 317.

63. *See* ANTISUBMARINE WARFARE, *supra* note 48, Appendix 1, Table 1, A(5).

64. *Id.* at 30.

65. *Id.* Appendix 1, Table 1, A(5). AFAR has been in operation since 1972.

66. *Id.* In 1969 the Navy attempted, unsuccessfully, to instal such a system. Reports that it later succeeded have not been confirmed.

67. *See Cost Escalation in Defense Procurement Contracts and Military Posture: Hearings on H.R. 6722 Before the House Comm. on Armed Services*, 93d Cong., 1st Sess. 3289-508 (1973) (statement of Hon. Peter Waterman, Acting Assistant Secretary of the Navy for Research and Development).

ocean will be capable of insonifying all ocean space.⁶⁸ The deployment of such a device could well lead to a complete erosion of the submarine's invulnerability, exposing both conventional and SSBN submarines to constant surveillance.⁶⁹

C. Anti-Submarine Weapons

Once a submarine's presence has been detected, its nature determined, and its exact location ascertained, various types of naval ordnance may be employed to destroy it if it proves menacing. These include depth charges,⁷⁰ anti-submarine rockets,⁷¹ anti-submarine torpedoes,⁷² and submersible anti-submarine mines. Because the use of all but the last of these weapons signals either the initiation or existence of hostilities, the present discussion will be confined to an examination of submersible anti-submarine mines. Weapons of this sort may be deployed during peacetime, perhaps years in advance of actual international conflict, and permitted to await future acquisition of an enemy target. However, the launching of a depth charge, an anti-submarine rocket, or an anti-submarine torpedo would be inconsistent with the continuation of peace.

1. Anti-Ship Mines

The anti-ship mines presently utilized by the United States Navy fall into three categories: physical-contact, depression, and

68. Y.B. WORLD ARMAMENTS: 1974, *supra* note 20, at 317.

69. The impact of "insonification" on the SSBN will be discussed in pt. III(B)(4) *infra*, where the changes in the present system made by UNCLOS III will be considered at length.

70. The depth charge is a simple device that may be jettisoned from ship or airplane and set to detonate at a predetermined depth. Since 1965 the United States Navy has deployed a unique depth charge known as the UUM-44A Subroc. Essentially, it is a missile fired from a nuclear "hunter-killer" submarine (SSN) tube. The missile, tipped with a nuclear warhead, breaks the water surface and proceeds aerially toward target location. At that point the depth bomb separates, allowing the bomb to return to the water, sink, and explode at a pre-set depth. *See* ANTISUBMARINE WARFARE, *supra* note 48, Appendix 1, Table 2, B(5).

71. The most popular anti-submarine rockets utilized by the United States are code-named "Hedgehog" and "Mousetrap." *See id.* Appendix 1, Table 2, D(1).

72. The United States Navy uses several anti-submarine torpedoes. The MK-45 Astor (anti-submarine torpedo ordnance rocket) was first issued in the 1960's. It is a high-speed, deep-diving torpedo, armed with a nuclear warhead. The Astor has a range of 16,000 meters. Although it is in the process of being phased out by the MK-48, the MK-37 torpedo is also used by the Navy. The MK-37 can be deployed on either submarine or surface ship. The MK-48, first deployed in 1972, and successor to the MK-37, is an anti-submarine, anti-ship torpedo with a wire-guided acquisition range of 40,000 meters. It is capable of diving to 1,000 meters and of traveling at 50 knots. In addition, the Navy uses the MK-44, which can be launched from either fixed-wing aircraft or helicopter, as well as the MK-46, which is fitted with a solid fuel or liquid monopropellant motor.

magnetic/acoustic.⁷³ Generally, physical-contact mines are either moored or free-floating.⁷⁴ Depression and magnetic/acoustic mines, in comparison, always rest on or are secured to the sea floor. Unlike physical-contact mines, which explode on impact, both depression and magnetic/acoustic mines are activated by vicissitudes in the immediate ocean space caused by transiting vessels. Specifically, depression mines depend on fluctuations in hydrostatic pressure, while magnetic/acoustic mines are sensitive to changes in surrounding magnetic or acoustic energy levels. Physical-contact, depression, and magnetic/acoustic mines are all subject to certain range limitations. The very nature of physical-contact mines reduces their range to situations of actual impact. Though depression and magnetic/acoustic mines have ranges of about thirty fathoms,⁷⁵ considered against the vastness of ocean space, they are of limited utility.

The latest known addition to the Navy's ASW arsenal is the Captor anti-submarine mine. In essence, Captor consists of a submersible mine moored to the ocean floor. It contains an MK-46 torpedo with an active and/or passive homing device. The torpedo is released from its mine casing when a magnetic or acoustic detection device reveals the presence of a submarine. At that point, the torpedo homing device takes over and guides the torpedo to its target. The sensor acquisition radius of the Captor torpedo has been estimated at one kilometer, which would make it a relatively effective weapon against all deep-diving submarines.⁷⁶

III. INTERNATIONAL LAW OF THE SEA AND MILITARY USES OF OCEAN SPACE: PEACETIME ASW

The objective of this portion of the study is to examine the international legal principles regulating all military uses of ocean space other than passage through straits used for international navigation. Of specific concern, however, is the legality of the use

73. Brown, *supra* note 35, at 289.

74. The Hague Convention Relating to the Laying of Automatic Submarine Contact Mines, *done* Oct. 18, 1907, 36 Stat. 2332, T.S. No. 541, 1 Bevans 669, prohibits the use of physical-contact mines unless they either become harmless within one hour after release or are anchored and become harmless if they break loose. This prohibition probably does not affect contact mines that are innocuous until automatically activated. However, even these may be subject to a requirement that they become harmless within one hour after activation.

75. Brown, *supra* note 35, at 289.

76. ANTISUBMARINE WARFARE, *supra* note 48, at 33.

of the underwater acoustic detection systems and anti-submarine mines mentioned above.

Of all the values nations seek to promote through the use of seapower,⁷⁷ security is without question the most highly prized and widely shared. This priority is probably the result of the pragmatic recognition that absent security all other values would prove ephemeral. Therefore, any international convention that seeks to place restrictions on the militarization of ocean space will not secure broad-based support or general adherence unless it guarantees international stability and State security⁷⁸ by maintaining the existing balance of power.⁷⁹ A convention that fails to

77. Seapower in general and ASW in particular play a role in promoting security, power, respect, wealth, and well-being. As mentioned earlier, *see* notes 4-23 and accompanying text *supra*, the modern navy has four basic missions, and the submarine plays a significant role in two of them: strategic deterrence and sea control. ASW provides a State with the ability to detect, identify, localize, and destroy enemy submarines that may either threaten the State with nuclear attack or jeopardize the ability of the State's sea denial forces to protect its littoral from projection of power ashore. This ability promotes the State's security. ASW provides a State with the capacity to destroy enemy submarines that may otherwise prevent its sea assertion or strategic deterrence forces from accomplishing their basic objectives. This capacity promotes the State's power. The maintenance of a naval force that can both insulate and threaten is essential to maintaining a State's image and enhancing its respect. ASW promotes both wealth and well-being because it facilitates continued use of vital sea lanes by eliminating enemy submarines that might otherwise destroy vessels shipping raw material and finished products to and from the home port.

78. *See THE LAW OF THE SEA: A NEW GENEVA CONFERENCE, PROCEEDINGS OF THE SIXTH ANNUAL CONFERENCE OF THE LAW OF THE SEA INSTITUTE 96-97* (L. Alexander ed. 1972). Myers McDougal stated in relation to security and restrictions on the militarization of ocean space:

In terms of the inclusive interests of all States, I think we can see that security is indivisible today. It is indivisible around the globe. This indivisibility includes the land masses as well as the oceans. I think also we must keep in mind that security in the world today is maintained by a very delicate balance of power between the United States and the Soviet Union, with Communist China gradually coming into the picture.

The United Nations expresses the high aspiration to which we all subscribe that violence, intense coercion, is not to be used for change, for disruption of the peaceful processes of producing values; but I think as realists we all know that on a fundamental, effective power level today security is maintained by a certain balancing of power. We are not likely to have much opportunity for the production and distribution of other values if this balancing of power is disturbed. This balancing of power extends not only to activities on the oceans but to activities on the land masses.

. . . I would . . . urge . . . all of us, to very *carefully appraise every particular proposal about the law of the oceans in terms of its effect upon the necessary balancing of power in the world, and upon interrelations of activities on the land masses and activities on the oceans.*

Id. (emphasis added). *See also* Zedalis & Wade, *Anti-Satellite Weapons and the Outer Space Treaty of 1967*, 8 CAL. W. INT'L L.J. 454 (1978), in which the authors discuss the threat that deployment of anti-satellite weapons presents to the ability of the superpowers to verify observance of the arms-control measures such as SALT.

79. Even those who subscribe to the "functionalist" theory of international relations do not advocate destabilizing military undertakings.

proscribe uses of ocean space that augur disruption of the strategic balance is not only unlikely to elicit general support but is generally undesirable. The same can be said with equal force of any convention if it is difficult or impossible to verify the extent to which the various State-Parties are observing their obligations. Nations that typically comply with multilateral obligations realize the potential for destabilizing perfidy. Consequently, any international agreement to limit militarization of ocean space must be designed to ensure international stability and State security and to provide easy verification of the extent of State-Party observance.⁸⁰

At present several international conventions limit peacetime military activity in ocean space. Included among these are:
— The Limited Test Ban Treaty of 1963:⁸¹ prohibits nuclear test explosions in territorial waters or in the high seas;⁸²
— The Treaty of Tlateloco:⁸³ prohibits, *inter alia*, testing and de-

80. See Young, *Arms Control and Disarmament in the Ocean*, in PACEM IN MARIBUS 266, 274-76 (E. Borgese ed. 1972).

81. Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, done Aug. 5, 1963, [1963] 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 43.

82. Article 1 states:

1. Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control:

(a) in the atmosphere; beyond its limits, including outer space; or underwater, including territorial waters or high seas; or

(b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted.

Id. It appears that nuclear test explosions conducted beneath internal seas are merely regulated by Article 1(1)(b) rather than proscribed by Article 1(1)(a). See generally X. [sic], *Nuclear Test Ban Treaty*, [1963] 39 BRIT. Y.B. INT'L L. 449 (1965); Schwelb, *The Nuclear Test Ban Treaty and International Law*, 58 AM. J. INT'L L. 642 (1964).

83. Treaty for the Prohibition of Nuclear Weapons in Latin America, done Feb. 14, 1967, 634 U.N.T.S. 281 (English text *id.* at 326). See also Additional Protocol II, entered into force for the United States May 11, 1971, [1971] 22 U.S.T. 754, T.I.A.S. No. 7137, 634 U.N.T.S. 364. Article 1 of the treaty reads:

1. The Contracting Parties hereby undertake to use exclusively for peaceful purposes the nuclear material and facilities which are under their jurisdiction, and to prohibit and prevent in their respective territories:

(a) The testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons, by Parties themselves, directly or indirectly, on behalf of anyone else or in any other way, and

(b) The receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or indirectly, by the Parties themselves, by anyone on their behalf or in any other way.

ployment of nuclear weapons by Latin American States within their territorial waters or any other area over which they exercise sovereignty;⁸⁴

The Antarctic Treaty of 1959;⁸⁵ establishes a non-military regime,⁸⁶ subject to the continuation of traditional military uses of the high seas,⁸⁷ over the entire area south of sixty degrees south latitude; prohibits nuclear test explosions anywhere in that area;⁸⁸ and

The Seabed Arms Control Treaty (SACT):⁸⁹ prohibits the installation of nuclear weapons on the sea floor⁹⁰ at any point

2. The Contracting Parties also undertake to refrain from engaging in, encouraging or authorizing, directly or indirectly, or in any way participating in the testing, use, manufacture, production, possession or control of any nuclear weapon.

Territory is defined in Article 3 to include "territorial sea, air space, and any other space over which the State *exercises sovereignty in accordance with its own legislation.*" *Id.* (emphasis added).

84. Though this term is ambiguous, it is generally accepted to mean a claim to exclusive jurisdiction over foreign nationals within a specific area, or active exclusion of such nationals from some area.

85. The Antarctic Treaty, *done* Dec. 1, 1959, [1961] 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71. On Antarctica generally, see Daniel, *Conflict of Sovereignties in the Antarctic*, [1949] 3 Y.B. WORLD AFF. 241; Jessup, *Sovereignty in Antarctica*, 41 AM. J. INT'L L. 117 (1947); Sullivan, *Antarctica in a Two-Power World*, 36 FOREIGN AFF. 154 (1957).

86. Article 1 reads:

1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, *inter alia*, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons.

2. The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.

The Antarctic Treaty, *done* Dec. 1, 1959, [1961] 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71.

87. Article 6 reads:

The provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area.

Id.

88. Article 5(1) reads "Any nuclear explosions in Antarctica and the disposal there of radioactive waste material shall be prohibited." *Id.*

89. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof, *done* Feb. 11, 1971, [1972] 23 U.S.T. 701, T.I.A.S. No. 7337. See generally Krieger, *The United Nations Treaty Banning Nuclear Weapons and Other Weapons of Mass Destruction on the Ocean Floor*, 3 J. MAR. L. & COM. 107 (1971); Rao, *The Seabed Arms Control Treaty: A Study in the Contemporary Law of the Military Uses of the Seas*, 4 J. MAR. L. & COM. 67 (1972).

90. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof, *done* Feb. 11, 1971, art. 1(1), [1972] 23 U.S.T. 701, T.I.A.S. No. 7337:

The States Parties to this Treaty undertake not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the

beyond twelve miles from the coast.⁹¹

Although these agreements have proved useful in "denuclearizing" the sea, the most significant single contribution to the development of a comprehensive legal regime designed to regulate every use of ocean space has been made by the continuing United Nations Conference on the Law of the Sea. Demilitarization and disarmament of the oceans have not been its *raison d'etre*. Nevertheless, the nature of the legal regime established by the 1958 Conventions⁹² issuing from the First Conference, and that portended by the various negotiating texts⁹³ produced at the first six sessions of UNCLOS III, exert an influence on the kinds of activity perceived as authorized by international law.

What follows is a discussion of the international legal principles regulating military uses of ocean space enunciated in the four 1958 Conventions and the Informal Single and Informal Composite Negotiating Texts (ISNT, ICNT) produced at UNCLOS III.⁹⁴ Specifically, the legality of peacetime deployment of underwater acoustic detection devices and anti-submarine mines will be examined in light of the general principles governing, or that may soon govern, the internal waters, the territorial waters, the high seas, the contiguous zone, the continental shelf, the exclusive economic zone, and the deep seabed.

In perusing part III, the reader should bear in mind that ocean space is comprised of several vertical and horizontal zones. For instance, ocean space can be divided vertically into the navigable surface, the water column, the sea floor, and the subsoil. The waters can similarly be divided horizontally, from the coast seaward,

outer limit of a seabed zone . . . any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.

(emphasis added).

91. *Id.* Article 2 reads: "For the purpose of this Treaty, the *outer limit of the seabed zone* referred to in article I shall be coterminous with the twelve-mile outer limit of the zone referred to in part II of the Convention on the Territorial Sea and the Contiguous Zone . . ." (emphasis added).

92. *Cited in note 3 supra.*

93. Informal Composite Negotiating Text (ICNT), U.N. Doc. A/Conf. 62/WP. 10, reprinted in 8 UNCLOS III OR 1, and in 16 INT'L LEGAL MATERIALS 1108 (1977); Revised Single Negotiating Text (RSNT), U.N. Doc. A/Conf. 62/WP.8/Rev. 1, reprinted in 5 UNCLOS III OR 125 (1976); Informal Single Negotiating Text (ISNT), U.N. Doc. A/Conf. 62/WP. 8, reprinted in 4 UNCLOS III OR 137, and in 14 INT'L LEGAL MATERIALS 689 (1975).

94. *Cited in note 93 supra.*

into internal waters, territorial waters, and high seas. The seabed immediately below the various water zones can also be divided horizontally into the internal and territorial seabed, the continental shelf, and the deep seabed.⁹⁵ Keeping these delineations in mind provides a certain clarity of analysis when applying presently existing or prospective conventional Law of the Sea to any particular set of factual circumstances. This is specifically because the rules regulating the *waters* of ocean space are not necessarily the same as those regulating the *seabed* zones subjacent to those waters.

A. Legal Regime Governing the Waters of Ocean Space

This section examines only those rules affecting military uses of the waters of ocean space. The regime governing military uses of the subjacent sea floor will be discussed below in section B.

1. The Internal Waters and the Territorial Sea

The starting point of any discussion concerning the rules affecting military uses of the internal waters and of the territorial sea is the location of the baseline. Essentially, the baseline is a demarcation that separates the internal waters⁹⁶ from the territorial sea. Waters landward of the baseline are internal.⁹⁷ Those paralleling the coast and extending seaward from the baseline form the territorial sea. Generally, the baseline itself is drawn along the coast of a particular State at a low-water mark.⁹⁸ However, it may be

95. See H. KNIGHT, *THE LAW OF THE SEA: CASES, DOCUMENTS AND READINGS* xxx-xxxv (1976).

96. Apparently, internal waters first received formal definition in the 1958 Territorial Sea Convention, note 3 *supra*. The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 12, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 265, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), though not defining internal waters, nevertheless recognized their existence. See *id.* art. 1 commentary. The definition found in Article 5(1) of the 1958 Convention initially appeared in a report on the work of the First Committee (territorial sea and contiguous zone), Report by the Secretariat on the work of the Drafting Committee of the First Committee, U.N. Doc. A/Conf. 13/C.1/L.167, reprinted in 3 UNCLoS I OR, C.1 Annexes 254, 255, U.N. Doc. A/Conf. 13/39 (1958), and was most likely the result of a proposal offered by Yugoslavia, U.N. Doc. A/Conf. 13/C.1/L.58, reprinted in 3 UNCLoS I OR, C.1 Annexes 227, U.N. Doc. A/Conf. 13/39 (1958).

97. The Territorial Sea Convention, *supra* note 3, art. 5(1), states: "Waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State." Both the ISNT, *supra* note 93, pt. II, art. 7(1), and the ICNT, *supra* note 93, art. 8(1), define internal waters in the same fashion.

98. The Territorial Sea Convention, *supra* note 3, art. 3, reads: "Except where otherwise provided in these articles, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State." Both the ISNT, *supra* note 93, pt. II, art. 4, and ICNT, *supra* note 93, art. 5, establish a similar rule. Is-

located seaward of this point if permanent harbor works forming an integral part of the harbor system⁹⁹ or low-tide elevations¹⁰⁰ are situated off the coast.

In addition to delineating the internal waters from the territorial sea, the baseline also serves as the point from which the breadth of the territorial sea is measured. Originally that breadth was no greater than the range of a cannon.¹⁰¹ Today, although most States recognize a breadth of twelve or fewer miles,¹⁰² there is no controlling *conventional* international legal principle. This absence is specifically the result of the failure of the delegates at both the 1958 and 1960 Geneva Conferences on the Law of the Sea to reach agreement on the issue.¹⁰³ Because the extent of coastal

lands also have points for the location of baselines. See Territorial Sea Convention, *supra* art. 10(2); ISNT, *supra* art. 132(2); ICNT, *supra* art. 121(2).

99. The Territorial Sea Convention, *supra* note 3, art. 8, reads: "For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system shall be regarded as forming part of the coast." See also ICNT, *supra* note 93, art. 11; ISNT, *supra* note 93, pt. II, art. 10.

100. Low-tide elevation is defined by the Territorial Sea Convention, *supra* note 3, art. 11(1), to mean "a naturally formed area of land which is surrounded by and above water at low-tide *but submerged at high tide*." (emphasis added). For low-tide elevations to be used as points along the baseline, they must be located within the breadth of the territorial sea. In other words, if the breadth of the territorial sea of State X is three miles, in order for a low-tide elevation off the coast of State X to be used as a point along the baseline it must be situated no more than three miles from the coast of State X. See also ICNT, *supra* note 93, art. 13; ISNT, *supra* note 93, pt. II, art. 12. Both texts use language identical to the 1958 treaty.

101. The rule of *terrae dominium finitur ubi finitur armorum vis* seems to have been first recorded in 1702 by Cornelius van Bynkershoek in his treatise, *De Dominio Maris Dissertatio*. See generally Walker, *Territorial Waters: The Cannon Shot Rule*, [1945] 22 BRIT. Y.B. INT'L L. 210, 230-31 (1962). Several earlier jurists suggested various other distances. See T. FULTON, *THE SOVEREIGNTY OF THE SEA* 538-39 (1911) (Bartolus of Saxo-Ferrato suggested 100 miles; Baldus Ubaldus suggested 60-100 miles). In 1782, Galiani, sensitive to the disparities in range of various cannon, suggested a uniform belt of three miles. See Walker, *supra* at 230-31. But see Baty, *The Three-Mile Limit*, 22 AM. J. INT'L L. 503, 503-06 (1928).

102. See H. KNIGHT, *THE LAW OF THE SEA: CASES, DOCUMENTS AND READINGS* 329 (1976), stating that 56 States claim a 12-mile territorial sea and that 48 claim one of less than 12 miles.

103. For some time consensus as to the breadth of the territorial sea has proven intractable. The earliest attempt to codify the international Law of the Sea was the 1930 Hague Conference on Codification. Although it reported in Basis of Discussion No. 3 that the breadth of the territorial sea was three nautical miles, League of Nations Doc. C.74.M.39.1929.V, reprinted in 24 AM. J. INT'L L. (Supp.) 25, 28 (1930), it was frankly admitted that no real unanimity existed. See *id.* Point III, at 27. The draft convention prepared by the ILC in 1956 clearly recognized the divergence of opinion on this issue but nevertheless set a 12-mile limit. See Report of the International Law Commission to the General Assembly, 11 U.N. GAOR,

State control varies from the internal waters to the territorial sea, both the differentiation between the zones as well as the actual breadth of the territorial sea are important in determining the international legality of any particular foreign State use.

a. *The 1958 Convention*

To determine whether international law entitles any foreign State to deploy ASW devices in the internal waters or the territorial sea of another State, the conventional rules governing the general uses of these zones must be examined. To the extent that the coastal State possesses sufficient internationally acknowledged legal control over the waters contained in these areas, it may be authorized to exclude any such foreign State devices. Absent such legal control, any attempted exclusion will not be sanctioned by international law and, if it is to be successful, must be based in large part on the ability of the coastal State to muster force adequate to effectuate removal.

The fundamental provision enunciating the degree of coastal State control over both the internal waters and the territorial sea adjacent to its littoral is Article 1 of the Convention on the Territorial Sea and the Contiguous Zone.¹⁰⁴ Article 1 states:

1. The sovereignty of a State extends, beyond its land territory and its internal waters, to a belt of sea adjacent to its coast, described as the territorial sea.
2. This sovereignty is exercised subject to the provisions of these articles and to other rules of international law.

An examination of the provision indicates that both the internal waters¹⁰⁵ and the territorial sea fall within the purview of coastal

Supp. (No. 9) 4, art. 3, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 256, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), which stated:

1. The Commission recognizes that international practice is not uniform as regards the delimitation of the territorial sea.
2. The Commission considers that international law does not permit an extension of the territorial sea beyond *twelve miles*.
3. The Commission, without taking any decision as to the breadth of the territorial sea up to that limit, notes, on the one hand, that many States have fixed a breadth greater than three miles and, on the other hand, that many States do not recognize such a breadth when that of their own territorial sea is less.
4. The Commission considers that the breadth of the territorial sea should be fixed by an international conference.

(emphasis added).

For an analysis of the dispute over the breadth of the territorial sea at the 1958 and 1960 Conferences, see Dean, *The Geneva Conference on the Law of the Sea: What Was Accomplished*, 52 AM. J. INT'L L. 607 (1958); Dean, *The Second Geneva Conference on the Law of the Sea: The Fight for Freedom of the Seas*, 54 AM. J. INT'L L. 751 (1960).

104. Note 3 *supra*.

105. The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 4, art. 1(1), U.N. Doc. A/3159 (1956), reprinted in

State sovereignty;¹⁰⁶ yet, the complete essence of that sovereignty is not articulated. Does it mean that the State possesses merely the right to employ the internal waters and the territorial sea for its own purposes but lacks the legal authority to proscribe similar use of these areas by other States? Doubtless, two States may have concurrent rights of use. Or does it mean that the coastal State possesses rights of an exclusive nature so that it may effectively proscribe the use of these areas by other States even though it may not be actively engaged in use itself?

Admittedly the word "sovereignty" is normatively ambiguous but, when employed, it is designed to signify control of an exclusive nature¹⁰⁷ and appears to have been used throughout the Conventions in just this sense.¹⁰⁸ This conclusion seems particularly compelling when one notices that the second paragraph of Article 1 explicitly subjects coastal State sovereignty to the other provisions of the Convention. One of the provisions thus invoked is the right of innocent passage through the territorial sea. Had coastal State sovereignty been viewed as less than plenary—in

[1956] 2 Y.B. INT'L L. COMM'N 253, 256, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), discloses that the ILC in 1956 did not include the internal waters as a zone to which coastal State sovereignty *expressly* extended. It reads: "The sovereignty of a State extends to a belt of sea adjacent to its coast, described as the territorial sea." However, that the delegates intended this omission to indicate that sovereignty did not extend to the internal waters is highly unlikely. They probably felt it too obvious to require mention. Nevertheless, this deficiency was corrected at the 1958 Conference when a proposal submitted by the United Kingdom was adopted. See United Kingdom of Great Britain and Northern Ireland: revised proposal, U.N. Doc. A/Conf. 13/C.1/L.134, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 247, U.N. Doc. A/Conf. 13/39 (1958). Both Denmark, U.N. Doc. A/Conf. 13/C.1/L.81, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 233, U.N. Doc. A/Conf. 13/39 (1958), and Yugoslavia, U.N. Doc. A/Conf. 13/C.1/L.57, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 227, U.N. Doc. A/Conf. 13/39 (1958), submitted and then withdrew proposals designed to achieve the same effect. The United Kingdom's proposal was adopted by 61 votes to 1, with 8 abstentions.

106. Sovereignty is a concept first devised by Jan Bodin in the eighteenth century. Although it has some use when speaking of the relationship between one person or group of persons and the State, because all States are equal (*par in parem non habet imperium*) in the eyes of international law, except in the most empirical sense, the term sovereignty has little use and is normatively ambiguous. See J. BRIERLY, *THE LAW OF NATIONS* 36 (1936).

107. See *Island of Palmas Case (Netherlands v. United States)*, Hague Ct. Rep. 2d (Scott) 83, 92, 22 AM. J. INT'L L. 867, 875 (Perm. Ct. Arb. 1928), stating that the word generally signifies "[i]ndependence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other state, the functions of a state." (emphasis added). See also 2 G. HACKWORTH, *DIGEST OF INTERNATIONAL LAW* 1-6 (1941); 1 L. OPPENHEIM, *INTERNATIONAL LAW* §§ 123-124 (8th ed. Lauterpacht 1955).

108. See pt. III (A) (2) and notes 137 & 143 *infra*.

fact, had it been perceived as merely a right of use—there would have been no need for such a provision. However, because sovereignty conjures exclusivity, the need for such a provision is manifest.

As briefly alluded to, the second paragraph of Article 1¹⁰⁹ derogates the absolutistic, plenary nature of coastal State sovereignty by subjecting the territorial sea to the foreign State right of innocent passage.¹¹⁰ Although the internal sea remains the preserve of the exclusive incidents of State sovereignty, the Convention expressly permits foreign nations to transit the territorial sea of the coastal State in order to enter or exit its internal waters or simply to traverse them without entering internal waters. Passage is innocent so long as it does not interfere with the peace, good order, or security of the coastal State.¹¹¹ If the passage appears ominous, the coastal State is entitled to take all necessary steps to prevent it.¹¹² Though the coastal State cannot suspend the right of innocent passage through straits used for international navigation, even through territorial waters,¹¹³ it may, if essential for the protection of its own national security, hold the right in temporary abeyance throughout the balance of the territorial sea.¹¹⁴

109. The Territorial Sea Convention, *supra* note 3, art. 1(2), uses the invocative language "subject to the provisions of these articles." The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 4, art. 1(2), U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 256, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), reads: "This sovereignty is exercised *subject to the conditions prescribed in these articles . . .*" (emphasis added). The ILC's commentary does not indicate why this specific language was employed. The language was changed at the 1958 Conference when Yugoslavia, U.N. Doc. A/Conf. 13/C.1/L.58, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 227, U.N. Doc. A/Conf. 13/39 (1958), Greece, U.N. Doc. A/Conf. 13/C.1/L.58, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 229, U.N. Doc. A/Conf. 13/39 (1958), and Denmark, U.N. Doc. A/Conf. 13/C.1/L.81, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 233, U.N. Doc. A/Conf. 13/39 (1958), all withdrew their proposals in favor of amending the United Kingdom proposal, U.N. Doc. A/Conf. 13/C.1/L.134, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 247, U.N. Doc. A/Conf. 13/39 (1958) (substitute "provisions of this convention" for "conditions prescribed in these articles"), which was adopted 61 to 1, with 8 abstentions. The United Kingdom draft was then slightly modified by the Drafting Committee of the First Committee, Report by the Secretariat on the work of the Drafting Committee of the First Committee, U.N. Doc. A/Conf. 13/C.1/L.67, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 254, U.N. Doc. A/Conf. 13/39 (1958).

110. The Territorial Sea Convention, *supra* note 3, art. 14, reads: "1. Subject to the provisions of these articles, ships of all States, . . . shall enjoy the right of innocent passage through the territorial sea." Article 14(1) is essentially the same as Article 15(1) of the 1956 ILC draft. *See* Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 5, art. 15(1), U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 258, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957).

111. Territorial Sea Convention, *supra* note 3, art. 14(4).

112. *Id.* art. 16(1).

113. *Id.* art. 16(4).

114. *Id.* art. 16(3).

The application of the right of innocent passage to warships has been disputed.¹¹⁵ It appears, however, that the better-reasoned argument permits warships to invoke the right as freely as other foreign State vessels. This conclusion seems ineluctable when one considers that the provision governing the right of innocent passage is found in section III (A), entitled *Rules Applicable to All Ships*. Subsections (B), (C) and (D) of section III then establish *specific rules* applicable to *Merchant Ships*, *Government Ships Other Than Warships*, and *Warships*, respectively. These specific rules are designed to supplement the general rules of subsection (A). Article 23 of Subsection (D) states that any warship not complying with the regulations of the coastal State concerning *passage through the territorial sea* may be required to leave.¹¹⁶ The latter provision implicitly assumes that warships¹¹⁷ have the right of innocent passage, and it merely prescribes the coastal State remedy whenever a foreign State warship in its territorial sea fails to comply with regulations concerning passage.

Clearly, then, the 1958 Convention provides for coastal State sovereignty over both internal waters and the territorial sea. The exclusive nature of this sovereignty diminishes in the waters of the territorial sea only in so far as the coastal State is obligated to afford all foreign State vessels the right to exercise innocent passage. Though innocent passage may not be suspended in straits used for international navigation, it may be suspended in the bal-

115. The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 22, art. 24, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 276, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), required warships to secure previous authorization to pass. The ILC rejected this draft provision 43 to 24, with 12 abstentions. Nevertheless, even the commentary to that draft indicated that the rules of innocent passage apply to warships, *id.* commentary. Years ago, however, the United States argued against such an application. See Oral Argument of Elihu Root in North Atlantic Coast Fisheries Arbitration, in 11 PROCEEDINGS IN THE NORTH ATLANTIC COAST FISHERIES ARBITRATION 2007 (1912). See also Shyan, *International Straits and Ocean Law*, 15 INDIAN J. INT'L L. 17 (1975), in which the author maintains that the law on the question is ambiguous.

116. Territorial Sea Convention, *supra* note 3, art. 23.

117. The right of innocent passage also covers submarines. The Territorial Sea Convention merely prescribes the requisites that must be fulfilled in order to exercise the right: "Submarines are required to navigate on the surface and to show their flag." *Id.* art. 14(6). The clandestine nature of the submarine necessitates such a rule in order to facilitate coastal State determination of the "innocent" nature of the vessel. For an earlier pronouncement, see The Report of the Second Comm'n (Territorial Sea), Article 12, League of Nations Doc. C.230.M.117.V., at 10 (1930).

ance of the territorial sea if essential for the protection of the coastal State's national security.

b. UNCLOS III

The draft conventions produced at UNCLOS III have left the regime established by the 1958 Convention essentially intact. Specifically, both the ISNT¹¹⁸ and the ICNT¹¹⁹ continue to acknowledge coastal State sovereignty over the internal waters and the territorial sea. Similarly, the territorial sea is subject to the foreign State right of innocent passage,¹²⁰ which continues to inure to military as well as to non-military vessels. Although the coastal State is obliged not to hamper innocent passage,¹²¹ it may temporarily suspend such passage in all areas of the territorial sea,¹²² except straits used for international navigation,¹²³ if the passage threatens its national security. Non-innocent passage, in comparison, may clearly be prevented.¹²⁴

Both the ISNT and the ICNT differ substantially from the 1958 Convention in the provision of indicia that assist the coastal State in assaying the innocent character of foreign State passage. More precisely, though the products of UNCLOS III continue to permit passage that does not prejudice the peace, good order, or security of the coastal State, both the ISNT¹²⁵ and the ICNT¹²⁶ list specific activities which, if engaged in by a foreign state vessel while in

118. The ISNT, *supra* note 93, pt. II, art. 1(1), states: "The sovereignty of a coastal State extends beyond its land territory and internal waters, and in the case of an archipelagic State, its archipelagic waters, over an adjacent belt of sea described as the territorial sea."

119. The ICNT, *supra* note 93, art. 2(1), is essentially the same as Article 1(1) of the ISNT, note 93 *supra*. See note 118 *supra*.

120. The ISNT, *supra* note 93, pt. II, art. 1(3), invokes its Article 14. Article 14 states: "Subject to the provisions of these articles, ships of all States, whether coastal or not, shall enjoy the right of innocent passage through the territorial sea." The ICNT, *supra* note 93, art. 2(3), invokes its Article 17. Article 17 of the ICNT is substantially the same as Article 14 of the ISNT.

121. ICNT, *supra* note 93, art. 24(1); ISNT, *supra* note 93, pt. II, art. 21(1).

122. ICNT, *supra* note 93, art. 25; ISNT, *supra* note 93, pt. II, art. 22.

123. ICNT, *supra* note 93, art. 45; ISNT, *supra* note 93, pt. II, art. 44.

124. The ISNT, *supra* note 93, pt. II, art. 22(1) reads: "The coastal State may take the necessary steps in its territorial sea to prevent passage which is not innocent." The ICNT, *supra* note 93, art. 25(1), uses identical language. Both the ISNT and the ICNT permit temporary coastal State suspension of the right of innocent passage. See ISNT, *supra* art. 22(3): "The coastal State may, without discrimination amongst foreign ships, suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security. Such suspension shall take effect only after having been duly published." The ICNT, *supra* art. 25(3), is identical. The suspension, however, cannot apply to straits used for international navigation, see ICNT, *supra* art. 45; ISNT, *supra* art. 44.

125. ISNT, *supra* note 93, pt. II, art. 16(2).

126. ICNT, *supra* note 93, art. 19(2).

the territorial sea of another State, are per se prejudicial. Among the enumerated activities are weapons practice,¹²⁷ the collection of information prejudicial to the defense or the security of the coastal State,¹²⁸ and the launching or landing of any military device.¹²⁹ If a foreign vessel pursues any such activity, the coastal State is entitled to undertake all steps necessary to prevent or to abate the passage.¹³⁰

Though it is unlikely that the mere addition of such a provision to the 1958 regime actually increases the extent of coastal State sovereignty over the internal waters and the territorial sea, it undoubtedly clarifies the nature of the activities a foreign State may claim as being within the ambit of innocent passage. Any activity comparable to one of those articulated is per se prejudicial and subject to coastal State proscription. Activities which foreign vessels may have pursued in the past under the guise of freedom of navigation and of innocent passage are now clearly non-innocent.¹³¹

c. Assessment

Coastal State control over the internal waters is absolute and exclusive. In fact, the coastal State may put the area to whatever use it sees fit¹³² while simultaneously excluding all foreign States. The control that the coastal State exercises over the territorial sea, a zone extending seaward perhaps to twelve miles, is equally extensive, except for the right of innocent passage which may itself be temporarily suspended under certain conditions.¹³³ The 1958 Convention permits the coastal State to prevent any foreign vessel from transiting its territorial sea if the vessel prejudices the peace, good order, or security of the coastal State. The draft conventions produced at UNCLOS III go further and enumerate specific activities that are per se prejudicial. For present pur-

127. *Id.* art. 19(2)(b); ISNT, *supra* note 93, pt. II, art. 16(2)(b).

128. ICNT, *supra* note 93, art. 19(2)(c); ISNT, *supra* note 93, pt. II, art. 16(2)(c).

129. ICNT, *supra* note 93, art. 19(2)(f); ISNT, *supra* note 93, pt. II, art. 16(2)(f).

130. ICNT, *supra* note 93, art. 25(1); ISNT, *supra* note 93, pt. II, art. 22(1).

131. On innocent passage, see Gehring, *Legal Rules Affecting Military Uses of the Seabed*, 54 MIL. L. REV. 168, 181-84 (1971).

132. Purver, *Canada and the Control of Arms on the Seabed*, [1975] 13 CAN. Y.B. INT'L L. 195, 199 (1976). See Brown, *The Legal Regime of Inner Space: Military Aspects*, 22 CURRENT LEGAL PROB. 181 (1969) [hereinafter cited as *Legal Regime of Inner Space*].

133. *Legal Regime of Inner Space*, *supra* note 132, at 185. See also Gehring, *Legal Rules Affecting Military Uses of the Seabed*, 54 MIL. L. REV. 168, 181 (1971).

poses the most significant appear to be the collection of information prejudicial to the defense or the security of the coastal State and the launching or landing of military devices.

Although it is conceivable that anti-submarine mines and underwater acoustic detection devices (sonobuoys) might be deployed in the waters landward of the baseline as well as the territorial sea of a foreign State during wartime, such deployment seems an unlikely event during peacetime. The relatively small area encompassed, the regularity with which the waters are traversed by indigenous civilian as well as military vessels, and the conspicuous nature of any effort undertaken to accomplish deployment conjoin to militate against such an event. Moreover, it would be particularly difficult for one sea power to seek to maintain amicable relations with another while pursuing such a paradoxical course. Nations value security and territorial sovereignty above all else. The discovery of any foreign State plan to deploy ASW devices during peacetime would surely appear as nothing less than the most egregious form of violation of territorial sovereignty. Opposition to continued detente would undoubtedly resonate. In addition, because there is little need for knowledge of vessel movement *within* such waters, and because deployment of destructive anti-submarine and anti-ship mines can be undertaken on very short notice once conflict has commenced, the risks involved in pursuing such a peacetime operation seem greatly disproportionate to any benefits that may accrue.

Nevertheless, actual foreign State deployment of such devices during peacetime violates international law. In fact, coastal State sovereignty over both internal waters and territorial sea entitles the coastal State to remove such devices once deployed. Though there may be some dispute, it appears that the language of the 1958 Convention providing the coastal State with the right to prevent passage that prejudices its peace, good order, or security authorizes the coastal State to prohibit all naval vessels of a deploying State from passing through its territorial sea. The products of UNCLOS III remove any uncertainty in this respect by clearly enunciating the coastal State right to prevent foreign State vessels from passing through the territorial sea if such vessels are engaged in either the collection of information prejudicial to the coastal State's defense or security or the launching or landing of military devices. In addition, the 1958 Convention as well as the ISNT and the ICNT entitle the coastal State to suspend temporarily innocent passage through the territorial sea if essential for the protection of its national security. As a result, vessels from all foreign States may be temporarily excluded without discrimination if, for instance, the coastal State knows of a plan to deploy

ASW devices, yet lacks precise knowledge of the carrier's identity.

In terms of ASW, the consequence of such a proscriptive legal regime is highly desirable. The target States for any major ASW peacetime deployment effort undoubtedly would be the sea powers—the United States, the Soviet Union, Great Britain, and France. The principal objective would be to provide both readily available information on the precise location of submarines, particularly SSBNs, and potential for destroying, immediately before or simultaneous with the commencement of hostilities, all submarines located in the internal waters and the territorial sea. SSBNs constitute the least vulnerable component of the strategic triad and perhaps the most dependable counterforce deterrent. Thus, if any sea power can expose another's SSBNs to the possibility of immediate attrition, a strategic asymmetry will exist which could very well jeopardize both international stability and State security.

International law is designed to provide for the preservation and extension of widely shared values such as security. Absent security and international stability, all values would be § jeopardized, and the process for resolving competing international claims would no longer be peaceful. In this sense, the legal regime of exclusive coastal State control over the waters landward of the baseline, as well as those within the territorial sea, seems preferable to any regime that permits peacetime foreign State deployment of ASW devices in such areas.

2. The High Seas

The internal waters of a coastal State are located landward of the baseline. The territorial sea extends from the baseline seaward perhaps as much as twelve miles. Pursuant to the 1958 Convention on the High Seas,¹³⁴ all waters beyond the outer perimeter of the territorial sea are known as the high seas.¹³⁵

134. The ISNT and ICNT locate the waters of the high seas beyond a point 200 miles from the coast. Filling the interstice between the territorial sea and the high seas is a zone known as the exclusive economic zone. It will be discussed in depth at pt. III (A)(4) *infra*.

135. The Convention on the High Seas, *done* Apr. 29, 1958, art. 1, [1962] 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82, reads: "The term 'high seas' means all parts of the sea that are not included in the territorial sea or in the internal waters of a State." The ILC draft initially considered by Committee II (High Seas) of the 1958 Conference read, Report of the International Law Commission to the General As-

a. *The 1958 Convention*

The nature of the international legal regime governing the waters beyond the territorial sea is explicitly articulated in Article 2 of the 1958 Convention on the High Seas.¹³⁶ In general, it denies the validity of any attempt by any nation to subject a portion of the high seas to its sovereignty¹³⁷ and proclaims the entire area

sembly, 11 U.N. GAOR, Supp. (No. 9) 7, art. 26, U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 259, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957): "1. The term 'high seas' means all parts of the sea that are not included in the territorial sea, as contemplated by Part I, or in the internal waters of a State. 2. Waters within the baseline of the territorial sea are considered 'internal waters.'" Several proposals were made when Committee II of the 1958 Conference considered the ILC draft Article 26. Included were those of France, U.N. Doc. A/Conf. 13/C.2/L.6, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 116, U.N. Doc. A/Conf. 13/40 (1958), Romania and the Ukrainian Soviet Socialist Republic, U.N. Doc. A/Conf. 13/C.2/L.26, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 123, U.N. Doc. A/Conf. 13/40 (1958), the United Kingdom, U.N. Doc. A/Conf. 13/C.2/L.48, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 128, U.N. Doc. A/Conf. 13/40 (1958), and Brazil, U.N. Doc. A/Conf. 13/C.2/L.67, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 133, U.N. Doc. A/Conf. 13/40 (1958). The Committee adopted the proposal of France to delete paragraph 2 of the ILC draft, and on proposal of Greece, 4 UNCLOS I OR, C.2 (15th mtg.) 37, 37, U.N. Doc. A/Conf. 13/40 (1958), referred paragraph 2 to Committee II (52 to 0, with 2 abstentions). The Plenary meetings of the Conference amended the Committee II draft to read like Article 1 above.

136. The Convention on the High Seas, *done* Apr. 29, 1958, art. 2, [1962] 13 U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82, states:

The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by other rules of international law. It comprises, *inter alia*, . . . :

- (1) Freedom of navigation;
- (2) Freedom of fishing;
- (3) Freedom to lay submarine cables and pipelines;
- (4) Freedom to fly over the high seas.

These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas.

The final draft is identical to that reported out of Committee II. *See* U.N. Doc. A/Conf. 13/C.2/L.17/Add. 1, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 150, U.N. Doc. A/Conf. 13/40 (1958). The 1956 ILC Report, *supra* note 96, art. 27, stated simply:

The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas comprises, *inter alia*:

- (1) Freedom of navigation;
- (2) Freedom of fishing;
- (3) Freedom to lay submarine cables and pipelines;
- (4) Freedom to fly over the high seas.

137. Mr. Colglough (United States) stated that the prohibition against the exercise of sovereignty meant that "the high seas were the property not of one nation, or of a few nations, but of the community of nations . . . [and] that the high seas were not open to *regulation or appropriation* by any one nation or group of nations." (emphasis added). *See* 4 UNCLOS I OR, C.2 (15th mtg.) 37, 37, U.N. Doc. A/Conf. 13/40 (1958). On the same subject the ILC said, Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 24, art. 27 commentary, U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L.

open to use by all States.¹³⁸ More specifically, Article 2 entitles all States to exercise the freedoms of navigation,¹³⁹ overflight, fishing, laying of submarine cables and pipelines, and any other freedoms recognized by the general principles of international law.¹⁴⁰ The exercise of any of these freedoms, however, is subject to the condition that it be undertaken with reasonable regard to the interests of other States in their exercise of the freedoms similarly assured them.¹⁴¹

One of the most widely acknowledged unstated uses of the high seas recognized by the general principles of international law is the right of States to employ the area for military purposes. Military vessels are undoubtedly entitled to traverse the waters of the high seas pursuant to the freedom of navigation. The permissible extent of other military uses is not altogether made clear by the Convention. In order to explicate the general nature of other permissible military uses it will prove helpful to examine two proposals submitted at the 1958 Conference designed to restrict both military maneuvers and nuclear weapon tests conducted on the high seas.¹⁴²

COMM'N 253, 278, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957): "No State may subject any part of the high seas to its sovereignty; hence no State may *exercise jurisdiction* over any stretch of water." (emphasis added).

138. As initially articulated by Hugo Grotius, the principle of *mare liberum* was said to rest on three bases. First, it was said the vast area encompassed made it impossible for any one nation to occupy it. Second, the resources were said to be inexhaustable and thus there was no need to permit individual States to reduce the area to possession to prevent dispute. Finally, it was said that the readily accessible transportation lanes provided by the sea facilitated important inter-cultural exchanges. See H. GROTIUS, *MARE LIBERUM* 7-10, 22-44 (rev. ed. 1916) (1st ed. n.p. 1608). It seems that only the latter basis has endured the 350 years since Grotius produced his work.

139. The freedom of navigation historically has been the most important inclusive use. See M. MCDUGAL & W. BURKE, *supra* note 2, at 765-73. For case support, see *Le Louis*, 2 Dods. 210, 165 Eng. Rep. 1464 (Adm. 1817); *The Marianna Flora*, 24 U.S. (11 Wheat.) 1 (1826).

140. Article 27 of the 1956 ILC draft also contained "*inter alia*" language. The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 24, art. 27 commentary (2), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 278, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), states: "The list of freedoms of the high seas contained in this article is not restrictive. The Commission has merely specified four of the main freedoms, but is aware that there are other freedoms . . ."

141. M. MCDUGAL & W. BURKE, *supra* note 2, at 773.

142. The commentary on Article 27 of the 1956 draft somewhat prompted both proposals. Paragraph 1, sentence 3 of the commentary states that in exercising any high seas freedom a nation must refrain from any activity that might "adversely affect" the use of the high seas by nationals of another State. See Report of the International Law Commission to the General Assembly, 11 U.N. GAOR,

i. The Three Power Proposal: Military Maneuvers

For some time, major military powers have found it essential to use specific portions of the high seas for conducting military maneuvers and target practice. Though this use has, of necessity, resulted in the exclusion of simultaneous use by other States,¹⁴³ the conducting nations have been averse to exercising any exclusive jurisdiction over foreign nationals within the maneuver zones or to attempting forcibly to prevent such nationals from entering the area.¹⁴⁴ To do so would constitute a subjection of the area to sovereignty and thereby run afoul of Article 2 of the Convention. Nevertheless, the nature of the maneuvers has actually resulted in the zones being put to extensive long-term exclusive use.¹⁴⁵

Several nations expostulated against such use of the high seas at the 1958 Conference.¹⁴⁶ Albania, Bulgaria, and the Soviet Union actually went so far as to sponsor jointly a proposal designed to prohibit such activities.¹⁴⁷ Though the proposal was

Supp. (No. 9) 24, art. 27 commentary, U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 278, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957).

143. Mr. Colglough (United States) perspicaciously noted, 4 UNCLOS I OR, C.2 (9th mtg.) 14, 15, para. 13, U.N. Doc. A/Conf. 13/40 (1958), that any time State X exercises a freedom over spot 1, it is impossible for the use not to "adversely affect" the use of the same spot 1 by State Y. He said:

It could not be held that the use of the high seas was invalid solely because some inconvenience would result for other users. Any use of the high seas by one state temporarily [denies] to other states some degree of ability to use the seas, just as the use of a road by a motor-car to some extent [restricts] its use by others.

144. *See* Legality of Using the High Seas in Connection with Nuclear Weapons Tests in the Pacific, U.S. Delegation Paper, U.N. Conference on the Law of the Sea, 1958, US/CLS/Pos/48(2)-(3), Annex II, Feb. 20, 1958, *reproduced in part in* 4 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 546 (1965). *See also* M. McDUGAL & W. BURKE, *supra* note 2, at 769-70.

145. *See* Legality of Using the High Seas in Connection with Nuclear Weapons Tests in the Pacific, U.S. Delegation Paper, U.N. Conference on the Law of the Sea, 1958, US/CLS/Pos/48(2)-(3), Annex II, Feb. 20, 1958, *reproduced in part in* 4 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 546 (1965):

Apparently there has been no essential change in attitude in recent years even though rather substantial portions of international space [high seas] are being utilized as military aircraft target and maneuver ranges for *relatively long periods of time*. There are today numerous United States military aircraft practice zones over international waters in the Atlantic, Gulf and Pacific areas. . . .

The British have similar military aircraft practice zones over portions of international waters near the British Isles. These are in such regular use that commercial aircraft must regularly detour them on flights to and from the continent.

(emphasis original).

146. At the 1958 Conference, the Soviet Union, 4 UNCLOS I OR, C.2 (7th mtg.) 8, 10, para. 12, U.N. Doc. A/Conf. 13/40 (1958), Romania, *id.* (9th mtg.) 14, 16, para. 23, and Bulgaria, *id.* (10th mtg.) 19, 19, para. 6, all expressed this view.

147. The Three Power Proposal, U.N. Doc. A/Conf. 13/C.2/L.32, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 124, U.N. Doc. A/Conf. 13/40 (1958), was to be appended to Article 27 of the 1956 ILC draft. It read: "No naval or air ranges or other

not comprehensive,¹⁴⁸ it would have eliminated extensive, long-term use of the high seas for maneuvers or for target practice. In decisively rejecting the Three Power Proposal¹⁴⁹ the Conference acknowledged that naval maneuvers and target practice, though exclusive, are not violative of the international Law of the Sea.

ii. The Four Power Proposal: Nuclear Weapon Tests

The defeat of the Three Power Proposal left the Eastern bloc undaunted.¹⁵⁰ Determined to eliminate nuclear test detonations on the high seas,¹⁵¹ Czechoslovakia, Poland, Yugoslavia, and the Soviet Union proposed that all States refrain from testing nuclear weapons in that area.¹⁵² Several delegates insisted that because the question of banning test explosions was so closely related to the whole disarmament issue, consideration of such a proposal was outside the bailiwick of the Conference.¹⁵³ Others thought

combat training areas limiting freedom of navigation may be designated on the high seas near foreign coasts or on international sea routes." The proposal was rejected 43 to 13, with 9 abstentions, 4 UNCLOS I OR, C.2 (21st mtg.) 54, 54, para. 5, U.N. Doc. A/Conf. 13/40 (1958).

148. It should be noted that this was not a blanket proposal. It was designed to proscribe only extensive activities near coasts or international sealanes. See remarks by Mr. Raduilsky (Bulgaria), 4 UNCLOS I OR, C.2 (16th mtg.) 40, 41, para. 9, U.N. Doc. A/Conf. 13/40 (1958), in reference to the Three Power Proposal (Albania, Bulgaria, and the Soviet Union) to ban military maneuvers. He stated that the proposal did "not refer to areas of the high seas used for *ordinary* naval or air exercises of *short* duration. It was rather designed to establish international standards forbidding the designation of naval and air training areas for *long* periods on a unilateral basis." (emphasis added).

149. The Three Power Proposal was rejected 43 to 13, with 9 abstentions. See note 147 *supra*.

150. Several delegates spoke against the legality of nuclear tests. Mr. Bierzanek (Poland) stated that such tests created a "*de facto* sovereignty," 4 UNCLOS I OR, C.2 (6th mtg.) 5, 7, para. 12, U.N. Doc. A/Conf. 13/40 (1958); Mr. Tunkin (Soviet Union) said that they violated paragraph 1 of the commentary to the ILC's draft Article 27, *id.* (7th mtg.) 8, 9, para. 11; Mr. Ohye (Japan) expressed agreement with Tunkin's position in relation to Article 27, *id.* (8th mtg.) 11, 11, para. 2; Mr. Ghilmegeanu (Romania) felt the tests "interfered" with other uses, *id.* (9th mtg.) 14, 16, para. 22; Mr. Zourek (Czechoslovakia) concurred with Tunkin's position, *id.* (11th mtg.) 23, 24, para. 11.

151. Such detonations were later eliminated by the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, *done* Aug. 5, 1963, [1963] 14 U.S.T. 1313, T.I.A.S. No. 5433, 480 U.N.T.S. 43.

152. The Four Power Proposal was designed to insert the following after Article 27 of the 1956 ILC draft: "States are bound to refrain from testing nuclear weapons on the high seas." See U.N. Doc. A/Conf. 13/C.2/L.30, *reprinted in* 4 UNCLOS I OR, C.2 Annexes 124, U.N. Doc. A/Conf. 13/40 (1958).

153. See remarks of Mr. Weeks (Liberia), 4 UNCLOS I OR, C.2 (10th mtg.) 19, 21, para. 28, U.N. Doc. A/Conf. 13/40 (1958); Mr. Colglough (United States), *id.* (9th mtg.) 14, 15, para. 13; Mr. Randall (United Kingdom), *id.* (8th mtg.) 11, 13, para. 28.

that because nuclear testing constitutes use of the high seas, the Conference was authorized to consider the problem as part of the discussion on freedom of the seas.¹⁵⁴ Ultimately, the United Kingdom countered the Four Power Proposal with its own proposal,¹⁵⁵ later withdrawn after lengthy debate in favor of a compromise solution tabled by India to send the matter to the General Assembly.¹⁵⁶ The compromise was adopted, and the proposal to ban nuclear test detonations was never subjected to a vote.¹⁵⁷

iii. Reasonable Regard Standard

Following the rejection of the Three Power Proposal and the expedient compromise solution on the Four Power Proposal, the delegates immediately proceeded to adopt the joint proposal of the United Kingdom and Ireland subjecting each permissible use of the high seas to the condition, mentioned above, that it be undertaken with reasonable regard to the interests of other States in the exercise of the freedoms guaranteed them.¹⁵⁸ In doing so, the Conference silenced those nations which maintained that interna-

154. Mr. Sikri (India), *id.* (8th mtg.) 11, 12, para. 12.

155. U.N. Doc. A/Conf. 13/C.2/L.64, *reprinted in* 4 UNCLoS I OR, C.2 Annexes 132, U.N. Doc. A/Conf. 13/40 (1958).

156. The United Kingdom proposal was withdrawn at the eighteenth meeting of Committee II, 4 UNCLoS I OR, C.2 (18th mtg.) 46, 47, para. 19, U.N. Doc. A/Conf. 13/40 (1958). The Indian proposal, U.N. Doc. A/Conf. 13/C.2/L.71/Rev. 1, *reprinted in* 4 UNCLoS I OR, C.2 Annexes 134, U.N. Doc. A/Conf. 13/40 (1958), stated:

Recalling that the Conference has been convened by the General Assembly of the United Nations in accordance with resolution 1105 (XI) of 21 February 1957, and

Recognizing that there is a serious and genuine apprehension on the part of many States that nuclear explosions constitute an infringement of the freedom of the seas, and

Recognizing that the question . . . is still under review by the General Assembly . . . and by the Disarmament Committee . . . ,

Decides to refer this matter to the General Assembly for appropriate action.

(emphasis original).

157. The Indian proposal was adopted 51 to 1, with 14 abstentions, 4 UNCLoS I OR, C.2 (20th mtg.) 52, 52, para. 5, U.N. Doc. A/Conf. 13/40 (1958). On the general debate as to the legality of nuclear weapon tests, see Margolis, *The Hydrogen Bomb Experiments and International Law*, 64 YALE L.J. 629 (1955); McDougal & Schlei, *The Hydrogen Bomb Tests in Perspective: Lawful Measures for Security*, 64 YALE L.J. 648 (1955).

158. The proposal of the United Kingdom, U.N. Doc. A/Conf. 13/C.2/L.68, *reprinted in* 4 UNCLoS I OR, C.2 Annexes 134, U.N. Doc. A/Conf. 13/40 (1958), was adopted 30 to 18, with 9 abstentions. It appended the following to Article 27 of the ILC draft (see note 136 *supra*): "These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas." Also appended to Article 27 was a proposal submitted by Mexico, U.N. Doc. A/Conf. 13/C.2/L.3, *reprinted in* 4 UNCLoS I OR, C.2 Annexes 115, U.N. Doc. A/Conf. 13/40 (1958). Article 27, as amended by the United Kingdom and Mexican proposals, was adopted by Committee II 50 to 4, with 12 abstentions, 4 UNCLoS I OR, C.2 (22d mtg.) 55, 56, para. 20, U.N. Doc. A/Conf. 13/40 (1958), and

tional law does not countenance military uses of the high seas either lengthy in duration, yet spatially circumscribed (maneuvers), or short in duration, but encompassing vast geographical areas (nuclear tests). Any military use of the high seas was permissible as long as it was reasonable. In comparison, though every use inevitably precluded some other State from undertaking a simultaneous use of the same area, such use was not ipso facto unreasonable or violative of the provision proscribing subjection of the high seas to State sovereignty. If the benefits derived from the particular exclusive military use outweighed the inconvenience caused to inclusive uses of the seas,¹⁵⁹ and the utilizing State refrained from either exercising exclusive jurisdiction over foreign nationals within the area or preventing them from traversing the area, then the activity comported with the provisions of the Convention.

b. UNCLOS III

One caveat is necessary before beginning the examination of the rules relating to uses of the high seas. Article 1 of the 1958 Convention states that all waters beyond the territorial sea constitute high seas. The ISNT¹⁶⁰ and the ICNT¹⁶¹ use a different locational definition. Each draft convention defines the high seas as that body of water situated beyond a delineation 200 miles from the baseline. Intervening between the outer boundary of the territorial sea and the landward boundary of the high seas is the eco-

approved at the Plenary meetings 51 to 0, with 1 abstention, 2 UNCLOS I OR, PLENARY MEETINGS (10th mtg.) 20, 20, para. 2, U.N. Doc. A/Conf. 13/38 (1958).

159. See M. McDOUGAL & W. BURKE, *supra* note 2, at 772:

Fair assessment of the relevant factors would indicate to the impartial observer that the exclusive use attendant upon weapons testing fully comports with the reasonableness criterion. . . . In contrast to [the] minimal effects upon inclusive use, the interest at stake for the United States is easily seen to be of the greatest significance for its security and for that of a good part of the world.

160. The ISNT, *supra* note 93, pt. II, art. 73, reads: "The term 'high seas' as used in the present Convention means all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State"

161. The ICNT, *supra* note 93, art. 86, reads:

The provisions of this Part [Part VII, High Seas] apply to all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State This article does not entail any abridgement of the freedoms enjoyed by all States in the exclusive economic zone in accordance with article 58.

conomic zone, an area within which the coastal State has numerous economic interests.

In general terms, the regime established by the 1958 Convention and that contained in the draft conventions issuing from UNCLOS III are quite similar. The invalidity of any attempt by any nation to subject a portion of the high seas to its sovereignty is declared, while the entire area is proclaimed open to use by all States.¹⁶² Every State is entitled to exercise each of the freedoms specified in the 1958 Convention and the additional freedoms to conduct scientific research¹⁶³ and to construct installations for the exploration and exploitation of that portion of its own continental shelf extending beyond the economic zone.¹⁶⁴ Furthermore, though neither the ISNT¹⁶⁵ nor the ICNT¹⁶⁶ contains language incorporating other unstated freedoms recognized by general principles of international law, the fact that the litany of express freedoms is prefaced by the words "*inter alia*" accomplishes the same result. The exercise of any of the freedoms, express or implied, is irrefutably subject to the condition that it be undertaken with "due consideration" for the interests of other States.¹⁶⁷

One of the most conspicuous additions made by UNCLOS III to the legal regime established by the 1958 Convention is the "peace-

162. The ISNT, *supra* note 93, pt. II, art. 75(1), reads in part:

1. The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by other rules of international law. It comprises, *inter alia*, both for coastal and noncoastal States: . . .

See ICNT, *supra* note 93, art. 87(1), for similar language.

163. ICNT, *supra* note 93, art. 87(1)(f); ISNT, *supra* note 93, pt. II, art. 75(1).

164. ICNT, *supra* note 93, art. 87(1)(d); ISNT, *supra* note 93, pt. II, art. 75(1)(d).

165. It should be recalled that the proposal of the United Kingdom at the 1958 Conference to append the language reproduced in note 158 *supra* to Article 27 of the 1956 ILC draft indicated that the provision also incorporated other freedoms recognized by general principles of international law. Neither the ISNT nor the ICNT contain such language, but both do preface the enumerated freedoms by the words "*inter alia*." *See* Article 75(1) of the ISNT, note 162 *supra*.

166. *See* ICNT, *supra* note 93, art. 87(1).

167. The language used in the 1958 text states "reasonable regard." This specific language was contained in a proposal submitted by the United Kingdom, *see* note 158 *supra*, adopted in opposition to language used in sentence 3 of comment 1 to Article 27 of the 1956 ILC draft, which sought to prevent any use that might adversely affect use by nationals of another State. Pursuant to the "adversely affect" test, the Eastern bloc powers objected to many uses that were exclusive in nature and sought to proscribe both military maneuvers and nuclear weapon tests. "Due consideration" seems to require any using State to be cognizant of the interests of others in using the area and to abstain from nonessential exclusive uses which substantially interfere with valued inclusive uses—a requirement not really different from the 1958 Convention.

ful purposes" clause. Both the ISNT¹⁶⁸ and the ICNT¹⁶⁹ contain a provision reserving the use of the high seas for "peaceful purposes." Though this language is by no means new to international conventions,¹⁷⁰ its ambiguity has generated continuing debate as to the normative prescription it declares. Some suggest it permits all non-aggressive uses; others insist only non-military uses are consonant.¹⁷¹ In the context of the instant draft conventions, if only non-military uses are permitted, then the high seas may not be employed for any military purpose, including the navigation of warships. On the other hand, if it simply prescribes non-aggressive utilization, then the high seas may legally be used for a whole panoply of military purposes as long as none of them are aggressive.

When the "peaceful purposes" clause of either the ISNT or the ICNT is construed in the context of the whole draft convention so as to effectuate the general intention of the architects as evidenced by the preceding and subsequent provisions,¹⁷² the inescapable conclusion is that the clause establishes a non-aggressive normative standard. One of the enumerated freedoms of the high

168. ISNT, *supra* note 93, pt. II, art. 74: "The high seas shall be open to all States, . . . and their use shall be reserved for peaceful purposes."

169. ICNT, *supra* note 93, art. 88: "The high seas shall be reserved for peaceful purposes."

170. Peaceful purposes is also used in Article 1 of the Antarctic Treaty, *done* Dec. 1, 1959, [1961] 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71; in Article 4 of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, *done* Jan. 27, 1967, [1967] 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205; and in the Statute of the International Atomic Energy Agency, *done* Oct. 26, 1956, [1957] 8 U.S.T. 1093, T.I.A.S. No. 3873, 276 U.N.T.S. 3.

171. For a non-military construction in reference to the Outer Space Treaty, see Markov, *Against the So-Called "Broader" Interpretation of the Term "Peaceful" in International Space Law*, in PROCEEDINGS OF THE ELEVENTH COLLOQUIUM ON THE LAW OF OUTER SPACE 73 (1969). For a non-aggressive interpretation, see Dembling & Arons, *The Evolution of the Outer Space Treaty*, 33 J. AIR L. & COM. 419 (1967).

172. There are basically two schools of thought on the construction of treaties: the "plain meaning" school and the "general purpose" school. The former uses as its primary premise the notion of univocalism, *i.e.*, that every term has but one meaning, that the meaning is easily identifiable, and that the meaning controls. The preferable method of construction is the latter school. It seeks to effectuate the true intentions of the drafters by construing ambiguous provisions in the context of the total treaty. This approach is supported by Article 31 of the Vienna Convention on the Law of Treaties, *opened for signature* May 23, 1969, U.N. Doc. A/Conf. 39/27, *reprinted in* 63 AM. J. INT'L L. 875 (1969). For further support, see Judge Anzilotti's dissenting opinion in Interpretation of the 1919 Convention Concerning Employment of Women During the Night, [1932] P.C.I.J., ser. A/B, No. 50. On the plain meaning rule, see Gross, *Voting in the Security Council: Abstention from Voting and Absence from Meetings*, 60 YALE L.J. 209 (1951).

seas guaranteed all States is that of navigation. This freedom is not restricted, and in fact both draft conventions contemplate navigation by military as well as civilian vessels.¹⁷³ Such use, however, would be clearly inconsistent with a non-military standard.¹⁷⁴ Military use of the high seas is a well-established customary utilization recognized by the general principles of international law and incorporated in both draft conventions by virtue of the words "*inter alia*" prefacing the statement of express freedoms. To suggest that the "peaceful purposes" clause of either draft convention establishes a non-military standard is inconsistent with the language contemplating military navigation as well as that incorporating more extensive military use. In light of the minimal interference caused to inclusive uses of ocean space by highly valued exclusive military uses, this result is desirable. Essentially, then, the negotiating texts issuing from UNCLOS III locate the point of origin of the high seas some 200 miles from the baseline. The international legal regime pronounced by the 1958 Convention to govern the general character of the high seas remains intact with the waters being both open to all States and beyond the efforts of any nation to subject them to sovereignty. The freedoms of the sea include those declared by the

173. The ISNT, *supra* note 93, pt. II, art. 81, states: "Warships on the high seas have complete immunity from the jurisdiction of any State other than the flag State." The ICNT, *supra* note 93, art. 95, reads identically. Both these provisions implicitly contemplate the use of the high seas by warships. Moreover, the ISNT, *supra* arts. 27-32, and the ICNT, *supra* arts. 29-32, establish the rules for foreign warships passing through the coastal State's territorial sea. Because foreign warships most frequently reach the territorial sea of a coastal State by traversing a portion of the high seas, it seems that these Articles also contemplate some use of the high seas by military vessels.

174. The opposite position, however, has been argued in relation to the Outer Space Treaty. See Finch, *Outer Space for "Peaceful Purposes,"* 54 A.B.A. J. 365 (1968). Many commentators feel that the Outer Space Treaty language permitting the use of military personnel and equipment on the moon and other celestial bodies requires that "peaceful purposes" be defined to prescribe a non-aggressive standard. In light of the fact that most if not all celestial exploration is undertaken by military personnel utilizing military equipment, it can be cogently argued that the drafters included such language to avert suggestions that a non-military definition of the "peaceful purposes" clause precluded military personnel from exploring outer space. Thus, it is possible to have a non-military normative standard for outer space, yet in recognition of the realities, permit military personnel to explore space. After all, military equipment can be used for non-military purposes.

In relation to the ISNT and the ICNT, the same argument seems casuistic because it is not essential to use military personnel and equipment to navigate the oceans. Consequently, the existence of a provision permitting military vessels to use the high seas, accompanied by a provision reserving the high seas for "peaceful purposes," cannot mean that the latter prescribes a non-military normative standard with the former merely permitting the military, *out of necessity*, to use the high seas. Clearly, as the "peaceful purposes" clause is used in both the ISNT and the ICNT, it means non-aggressive. For support, see Oxman, *The Third United Nations' Conference on the Law of the Sea: The 1977 New York Session*, 72 AM. J. INT'L L. 57, 73 (1978).

1958 Convention and a few additional ones endemic to the general legal cadre constructed by UNCLOS III. In addition, though the language in the earlier Convention subjecting the exercise of all freedoms to the condition that the exercise be undertaken with "reasonable regard" for the interests of others has been changed to read with "due consideration" for the interests of others, the change is little more than semantical. The inclusion of a provision prescribing that the use of the high seas is reserved for "peaceful purposes" merely obligates all utilizing States to refrain from aggressive uses.

c. Assessment

Military vessels are clearly entitled to traverse the high seas pursuant to the freedom of navigation articulated in both the 1958 Convention and the draft agreements produced by UNCLOS III. Other military uses of the high seas are permitted by virtue of the non-exhaustive, incorporative language prefacing the enumeration of various other freedoms. The exercise of any freedom, whether express or implied, including military freedom, is subject to two basic conditions. First, in light of all the circumstances, the exercise must be reasonable in nature. More precisely, though every use of a particular portion of the high seas tends to exclude the simultaneous use of the same area by another State, the value of the exclusive use must be sufficiently great to outweigh the interference resulting to inclusive uses. Second, though military uses extensive in terms of time and geographical area are permitted under this standard, no State may attempt to occlude a portion of the high seas by preventing foreign nationals from entering it or by asserting jurisdiction over foreign nationals within it. The high seas are open to all, and any attempt by any nation to subject them to its sovereignty is invalid.¹⁷⁵

Of the water zones examined thus far, the high seas, without doubt, is the most likely to feel the impact of any peacetime ASW deployment effort. A deployment operation undertaken in this area is less likely to be detected, not only because it is situated sufficiently distant from the vessel concentration zones located in proximity to the coast, but also because foreign State activity on the high seas just appears less intrusive than activity conducted

175. Baxter, *The Legal Aspects of Arms Control Measures Concerning the Missile Carrying Submarines and Anti-Submarine Warfare*, in *SEA-BASED DETERRENT*, *supra* note 39, at 209, 221.

landward of the baseline or in the territorial sea. Coastal State sensitivity about security increases in direct relation to the proximity to the State itself. Foreign State ASW deployment on the high seas may appear less ominous to coastal security than deployment within the territorial sea. Similarly, any deployment effort on the high seas will appear more consistent with professed friendly relations than an effort undertaken in the waters of the territorial sea. Though the deployment of ASW devices landward of the baseline or in the territorial sea will undoubtedly be seen as aggressive, a stronger case can be made that deployment on the high seas is merely defensive in character.

Peacetime deployment of underwater acoustic detection devices (sonobuoys) and anti-submarine mines in the waters of the high seas is consistent with the international legal regime established by the 1958 Convention and with that proposed by the draft conventions issuing from UNCLOS III. Both regimes permit military uses of the high seas which are reasonable in nature. This has included not only geographically extensive uses, such as nuclear weapon tests, but also less extensive long-term uses, such as military maneuvers. Underwater acoustic detection devices and anti-submarine mines are designed to occupy small portions of the water column for moderate periods of time. In this sense, the use of the high seas for ASW activities is somewhat analogous to use for military maneuvers. While military maneuvers tend to result in some measurable, albeit minimal, degree of interference with inclusive uses of ocean space, because ASW activities are by their very nature subsurface, the amount of interference they cause inclusive uses is virtually non-existent. Perhaps they interfere most with the exclusive *military* use of ocean space by other States.

Although international law does not purport to prohibit the peacetime deployment of ASW devices on the high seas, the consequence of its refusal to recognize the validity of any effort to subject a portion of the area to State sovereignty necessarily means that the deploying State may not seek to impose a security zone around the area of use. While States are permitted to make exclusive use of the high seas, even though the use may be of long duration, they are entitled neither to assert jurisdiction over foreign nationals intruding on the exclusive use nor actively to prevent such nationals from pursuing their own internationally permitted interests in or near the area. Simply stated, every State may use the high seas for ASW activities, but no State is entitled either to prevent another from traversing near deployed devices or to assert jurisdiction over foreign nationals who do so.

Any such effort would contravene the provision prohibiting subjection to sovereignty.

It can be stated without reservation that the most desirable international legal regime to govern military uses of the waters of the high seas would unquestionably be one which eliminated peacetime deployment of all ASW devices. This would virtually assure continued invulnerability of the submarine, particularly the SSBN, resulting in the preservation of international stability and State security through the maintenance of the balance of power. Continued invulnerability of the SSBN would guarantee an adequate counterforce deterrent. However, upon close examination, it is apparent that international stability would prove ephemeral if a mere proscriptive regime were adopted. The vast geographical area encompassed by the high seas and the relative ease and inconspicuity with which underwater acoustic detection devices and anti-submarine mines can be deployed conjoin to reduce the degree to which observance of such a regime could be verified. If one superpower voluntarily complied with the prohibition while another did not, a slight strategic asymmetry might be created. Although the immediate consequence might not be a preemptive nuclear strike, particularly in light of the limited nature of the strategic advantage, the violating nation may be less averse to pursuing a more adventurist foreign policy, thereby ultimately increasing the chances for confrontation. Verifiability is one of the desiderata of every arms control regime, and a comprehensive prohibition of water column acoustic detection devices and anti-submarine mines would not be verifiable.

The regime established by both the 1958 Convention and the draft conventions produced by UNCLOS III seems to be the most desirable alternative to a complete prohibition. By permitting peacetime deployment of ASW devices in the waters of the high seas, the regime recognizes the inherent difficulty of verifying any total prohibition. Moreover, the location of such deployed devices creates almost no interference with other inclusive uses of ocean space. Of added importance is the fact that the limited range of such underwater acoustic detection devices presents little *actual*, as opposed to perceived, threat to the invulnerability of the SSBN. As discussed in an earlier section, the effective range of a sonobuoy is significantly circumscribed by its intrinsic character. Thus, while any nation that actively pursues a peacetime water column ASW deployment program may feel it is obtaining some

strategic advantage, in reality the advantage is indeed slight. In practical terms, the legal regime that permits deployment eliminates the chance of a threat to international stability developing out of some mistaken perception incident to violation of a proscriptive regime.

3. Contiguous Zone

Pursuant to the 1958 Convention on the Territorial Sea and the Contiguous Zone, the coastal State is entitled to protect certain interests within an area of the high seas, known as the contiguous zone, the outer boundary of which is not to exceed twelve miles from the baseline used to measure the breadth of the territorial sea.¹⁷⁶ The ISNT¹⁷⁷ and the ICNT¹⁷⁸ retain the concept of the contiguous zone. However, both draft conventions depart substantially from the concept as articulated in the 1958 Convention in that the zone is expanded to twenty-four miles and is superimposed on an exclusive economic zone rather than on the high seas.¹⁷⁹

a. The 1958 Convention

There are two principal features about the contiguous zone that preclude any coastal State from attempting to proscribe peremptorily all foreign military activity conducted therein.¹⁸⁰ First, the zone is superimposed on the high seas, and as such it continues to be high seas¹⁸¹ except for the coastal State's right to exercise

176. Territorial Sea Convention, *supra* note 3, art. 24. This Convention states in part: "The contiguous zone may not extend beyond twelve miles from the baseline from which the breadth of the territorial sea is measured." See generally Fitzmaurice, *The Case of the I'm Alone*, [1936] 17 BRIT. Y.B. INT'L L. 82, 97-98 (1962).

177. ISNT, *supra* note 93, pt. II, art. 33.

178. ICNT, *supra* note 93, art. 33.

179. Pursuant to the ISNT and the ICNT, the high seas no longer adjoin the territorial sea. The major sea zone contiguous to the territorial sea is now the exclusive economic zone, which stretches some 200 miles seaward from the baseline. The contiguous zone is now superimposed on this zone rather than on the high seas.

180. The mere fact that a specific international legal regime permits foreign military activity in a particular area does not mean that the coastal State may not take measures to protect itself pursuant to the inherent right of self-defense as enunciated in Article 51 of the United Nations Charter. To this effect, see Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 39-40, art. 66 commentary (4), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 295, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957). This rule antedates the Charter. See *Church v. Hubbard*, 6 U.S. (2 Cranch) 187 (1804). See also M. McDUGAL & W. BURKE, *supra* note 2, at 78-81.

181. The Territorial Sea Convention, *supra* note 3, art. 24(1), states: "In a zone of the *high seas* contiguous to its territorial sea." (emphasis added). See also Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 39, art. 66 commentary (1), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 294, U.N. Doc. A/CN.4/SER.A/1956/Add. 1

jurisdiction to enforce its customs, fiscal, immigration, and sanitary regulations.¹⁸² Therefore, logical consistency demands that all high seas freedoms, including the freedom of foreign and coastal State warships to navigate and conduct other military activities, attach to the contiguous zone. Second, the coastal State is not entitled to exercise jurisdiction within the contiguous zone

(1957). In relation to the imposition of the contiguous zone on the high seas, it states: "These waters are and remain a part of the high seas and are not subject to the sovereignty of the coastal State . . ." Essentially, then, the contiguous zone does not transform the basic character of the water as high seas.

182. The Territorial Sea Convention, *supra* note 3, art. 24(1), reads:

1. In a zone of the high seas contiguous to its territorial sea, the coastal State may exercise the control necessary to:

- (a) Prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;
- (b) Punish infringement of the above regulations committed within its territory or territorial sea.

The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 39, art. 66(1), U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 294, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), states:

1. In a zone of the high seas contiguous to its territorial sea, the coastal State may exercise the control necessary to

- (a) Prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;
- (b) Punish infringement of the above regulations committed within its territory or territorial sea.

It is readily apparent that the 1956 ILC draft did not mention immigration. *Id.* art. 66 commentary (7) stated in this respect:

[T]he majority of the Commission took the view that the interests of the coastal State do not require an extension of the right of control to immigration and emigration. It considered that such control could and should be exercised in the territory of the coastal State and that there was no need to grant it special rights for this purpose in the contiguous zone.

Although "immigration" did appear in the 1953 ILC draft, *see* Report of the International Law Commission to the General Assembly, 8 U.N. GAOR, Supp. (No. 9) 19, U.N. Doc. A/2456 (1953), *reprinted in* [1953] 2 Y.B. INT'L L. COMM'N 200, 219, U.N. Doc. A/CN.4/SER.A/1953/Add. 1 (1959), some have suggested that it was removed from the 1956 draft Article 66 for fear it would be used against political emigrants, 4 M. WHITEMAN, DIGEST OF INTERNATIONAL LAW 486 (1965). Immigration found its way back into the provision covering the contiguous zone when a proposal submitted by Poland, U.N. Doc. A/Conf. 13/C.1/L.78, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 232, U.N. Doc. A/Conf. 13/39 (1958), was adopted 33 to 27, with 15 abstentions, then amended by Ceylon, 3 UNCLOS I OR, C.1 (58th mtg.) 180, 182, U.N. Doc. A/Conf. 13/39 (1958), to include "immigration" in addition to "fiscal, sanitary and security." (emphasis added). When draft Article 66 went to the Plenary session, it initially failed to receive the necessary two-thirds vote (40 to 27, with 9 abstentions, 2 UNCLOS I OR, PLENARY MEETINGS (14th mtg.) 35, 40, U.N. Doc. A/Conf. 13/38 (1958). When an American proposal, identical except for the absence of "security," U.N. Doc. A/Conf. 13/L.31, *reprinted in* 2 UNCLOS I OR, PLENARY MEETINGS Annexes 126, U.N. Doc. A/Conf. 13/38 (1958), was voted on, it received approval 60 to 0, with 13 abstentions.

to protect "security" interests. In fact, the delegates at the 1958 Conference clearly rejected a proposal that would have included "security" among the list of protectable coastal State interests.¹⁸³ In doing so they demonstrated not only their desire to approach any potential encroachment on freedom of the high seas with great circumspection, but also their confidence that "security" was adequately protected by the inherent right of self-defense articulated in Article 51 of the United Nations Charter.¹⁸⁴

183. When Article 66 was reported by Committee I to the Plenary sessions of the 1958 Conference, it *did* include "security." The term initially appeared in the Polish proposal, U.N. Doc. A/Conf. 13/C.1/L.78, *reprinted in* 3 UNCLOS I OR, C.1 Annexes 232, U.N. Doc. A/Conf. 13/39 (1958), which was adopted by Committee I. This proposal was then amended at the urging of Ceylon, 3 UNCLOS I OR, C.1 (58th mtg.) 180, 182, U.N. Doc. A/Conf. 13/39 (1958). Security remained as one of the protectable interests when draft Article 66 was reported to the 1958 Conference's Plenary sessions. (The Philippines had earlier proposed that the word "defence" rather than "security," as contained in the Polish proposal, be used, *id.* (36th mtg.) 105, 107.) At the Plenary meetings, draft Article 66 as reported by Committee I failed to secure the necessary two-thirds vote (40 to 27, with 9 abstentions, 2 UNCLOS I OR, PLENARY MEETINGS (14th mtg.) 35, 40, para. 63, U.N. Doc. A/Conf. 13/38 (1958). The proposal of the United States, which did not mention "security" but was otherwise identical to the Committee I draft Article 66, U.N. Doc. A/Conf. 13/L.31, *reprinted in* 2 UNCLOS I OR, PLENARY MEETINGS Annexes 126, U.N. Doc. A/Conf. 13/38 (1958), was then adopted 60 to 0, with 13 abstentions. There was little comment.

It should be noted that the ILC's draft Article 66 issuing from the Eighth Session of the Commission did not mention "security" either. *See* Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 39-40, art. 66 commentary (4), U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 295, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), stating:

The Commission did not recognize special security rights in the contiguous zone. It considered that the extreme vagueness of the term "security" would open the way for abuses and that the granting of such rights was not necessary. The enforcement of customs and sanitary regulations will be sufficient in most cases to safeguard the security of the State.

Moreover, neither the 1950 nor the 1951 ILC Rapporteur proposals mentioned security. *See* Summary Records of the 65th Meeting, [1950] 1 Y.B. INT'L L. COMM'N 197, 204, U.N. Doc. A/CN.4/SER.A/1953 (1958); Regime of the High Seas, U.N. Doc. A/CN.4/42 (1951), *reprinted in* [1951] 2 Y.B. INT'L L. COMM'N 75, U.N. Doc. A/CN.4/SER.A/1951/Add. 1 (1957). *See also* Report of the International Law Commission to the General Assembly, 6 U.N. GAOR, Supp. (No. 9) app. 17, 20, U.N. Doc. A/1858 (1951), *reprinted in* [1951] 2 Y.B. INT'L L. COMM'N 123 app. 141, 144, U.N. Doc. A/CN.4/SER.A/1951/Add. 1 (1957). However, the 1930 Hague Codification Conference did mention "security" as a protectable interest in its Basis of Discussion No. 5, League of Nations Doc. C.74.M.39.1929.V, *reprinted in* 24 AM. J. INT'L L. (Supp.) 25, 29 (1930). *But see* Report of the Second Committee, League of Nations Pub. V. Legal Questions 1930.V.9, *reprinted in* 24 AM. J. INT'L L. (Supp.) 234, 236 (1930), where no decision was reached.

184. *See* note 180 *supra*. As early as the 1930 Hague Conference, delegates expressed the opinion that there was no need to mention "security" as a protectable interest. *See* Report of the Second Committee, League of Nations Pub. V. Legal Questions 1930.V.9, *reprinted in* 24 AM. J. INT'L L. (Supp.) 234, 236 (1930), where it is stated: "The recognition of a special right in the matter of legitimate defence against attack would, in the opinion of [some] States, be superfluous, since that right already existed under the general principles of international law . . ." The reference is to the inherent right of self-defense, later reflected in Article 51 of the United Nations Charter.

While all States are permitted to use the waters of the contiguous zone for military purposes, the use must be reasonable. In other words, although use of the contiguous zone, just as that of the high seas, may be exclusive in nature, the value of the exclusive use must be sufficiently great to outweigh the consequent interference with inclusive uses. Though uses as extensive and exclusive as military maneuvers and nuclear weapon tests have been viewed as justifiable under this standard, no State may attempt to close an area being used to foreign nationals or to assert jurisdiction over such nationals found within the area.

b. UNCLOS III

Although the ISNT and the ICNT leave the concept of the contiguous zone intact,¹⁸⁵ the outer boundary of the area has been resituated twenty-four miles from the coast and the zone itself superimposed on the exclusive economic zone rather than on the high seas.¹⁸⁶ For present purposes, it need be stated only that the change in superimposition has resulted in the *elimination* of the right of foreign States to deploy underwater acoustic detection devices and anti-submarine mines within the waters of the contiguous zone during peacetime. Further assessment of the regime of the contiguous zone under the products of UNCLOS III will be found below in subsection 4. The following brief assessment will therefore be limited exclusively to a consideration of the regime established by the 1958 Convention.

c. Assessment

The contiguous zone stretches seaward from the outer boundary of the territorial sea to a point twelve miles from the baseline. Within the waters of the contiguous zone the coastal State is enti-

185. The ISNT, *supra* note 93, pt. II, art. 33(1), reads:

1. In a zone contiguous to its territorial sea, described as the contiguous zone, the coastal State may exercise the control necessary to:

(a) prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;

(b) punish infringement of the above regulations committed within its territory or territorial sea.

The ICNT, *supra* note 93, art. 33(1), is identical to Article 33(1) of the ISNT.

186. The ISNT, *supra* note 93, pt. II, art. 33(2), states: "The contiguous zone may not extend beyond 24 nautical miles from the baseline from which the breadth of the territorial sea is measured." The ICNT, *supra* note 93, art. 33(2), is identical. As to the superimposition of the contiguous zone on the exclusive economic zone rather than on the high seas, see note 179 *supra*.

tled to exercise jurisdiction to enforce its custom, fiscal, immigration, and sanitary regulations. Because the zone is superimposed on the high seas, it is considered to be high seas for all other purposes. Therefore, the high seas freedoms of navigation, overflight, fishing, laying of submarine cables and pipelines, and other traditional uses recognized by the general principles of international law continue unaffected. One of the traditional uses left unaffected is the right of foreign States to employ the area for reasonable military activities. In fact, as mentioned, a proposal that would have permitted the coastal State to exercise jurisdiction in the contiguous zone for the enforcement of "security" regulations was rejected at the 1958 Conference.

Although foreign States are clearly entitled to utilize another State's contiguous zone for reasonable military purposes, it seems unlikely that any foreign State would actually pursue a peacetime ASW deployment program within the waters encompassed by such a zone. The propinquity to the coast and to areas of vessel concentration, the fact that waters are regularly traversed by indigenous civilian and naval vessels, and the conspicuous nature of foreign State vessels within the zone all militate against such an eventuality. Moreover, the limited usefulness of information obtained dealing with vessel movement in the waters landward of the outer perimeter of the contiguous zone seems unlikely to induce any foreign State to risk jeopardizing the continuation of friendly relations. If any nation feels constrained to deploy underwater acoustic detection devices and anti-submarine mines in the waters of another State's contiguous zone, this task can be accomplished simultaneous with or immediately subsequent to the commencement of hostilities, with no loss of effectiveness.

Should a foreign State decide to undertake such a peacetime deployment effort, it appears that the program would be consonant with the international legal regime governing the waters of the contiguous zone. Though a proscriptive regime may seem much more desirable (particularly in light of the fact that the degree of observance over such a narrow zone of ocean space could be satisfactorily verified, and that the deployment of such devices in close proximity to the location of SSBN bases poses a greater threat than, say, deployment on the high seas), it is palpable that the coastal State may exercise its inherent right of self-defense, pursuant to Article 51 of the United Nations Charter, if warranted by the extent of the intrusion. The coastal State is not at the peril of a permissive regime. Because the waters remain high seas for all purposes other than the enforcement of customs, fiscal, immigration, and sanitary regulations, the foreign deploying State may neither attempt to prevent nationals of other States from pursu-

ing their own interests in or near areas where the devices are located nor assert jurisdiction over such nationals refusing to heed admonitions to remain away.

4. Exclusive Economic Zone

A perusal of the four 1958 Conventions reveals no mention of the concept of the exclusive economic zone (EEZ). In fact, it is readily apparent that the 1958 High Seas Convention establishes no juridical zone adjacent to the territorial sea other than the high seas. The contiguous zone is merely superimposed upon the high seas. The ISNT, produced at the Geneva Session of UNCLOS III, is the seminal document in the short history of the EEZ. Though the precise nature of the EEZ will be discussed in greater detail, it suffices for now to state that it is a zone of increased coastal State control over economic activities. The zone itself is located between the outer perimeter of the territorial sea and the landward boundary of the high seas. Actually, by the express terms of the ISNT¹⁸⁷ and the ICNT,¹⁸⁸ the EEZ must not extend beyond 200 miles from the baseline that is used to measure the breadth of the territorial sea. All waters located seaward of the outer boundary of the EEZ are high seas.

a. UNCLOS III

The international legal regime governing use of the waters of the EEZ is comprised of three basic components: coastal State economic rights in the EEZ, foreign State rights in the non-economic utilization aspects of the EEZ, and residual rights (rights other than those expressly granted to all States or implicitly denied all States as a result of being expressly granted to the coastal State). These will be discussed seriatim.

Within the EEZ the coastal State possesses certain specifically articulated rights designed to facilitate control of its economic interests. For instance, it exercises sovereign rights for the purpose of exploring and exploiting, conserving and managing all the natural resources located on the bed or in the subsoil of the EEZ or in the waters superjacent thereto.¹⁸⁹ In addition, only the coastal

187. ISNT, *supra* note 93, pt. II, art. 46.

188. ICNT, *supra* note 93, art. 57.

189. The ISNT, *supra* note 93, pt. II, art. 45(1)(a), states: "1. In an area beyond and adjacent to its territorial sea, described as the exclusive economic zone, the coastal State has: (a) sovereign rights for the purpose of exploring and exploiting,

State is entitled to establish, use, or exercise jurisdiction over artificial islands, installations, and structures located within 200 miles of the coast.¹⁹⁰ When exercising any of these exclusive rights, the coastal State is obligated to do so with due regard for the rights of all other States in the EEZ.¹⁹¹

To be sure, the coastal State is not the only entity entitled to utilize the waters of the EEZ. In fact, many of the freedoms exercised by foreign States within the waters of the EEZ while still high seas remain intact. More precisely, all States continue to enjoy the traditional high seas freedoms of navigation, overflight, and the laying of submarine cables and pipelines.¹⁹² The freedom to fish the waters of the EEZ, however, has been omitted because the continuation of such a foreign State right would be inconsistent with the exclusive character of coastal State control over economic interests.¹⁹³ In addition to the three enumerated freedoms, foreign States are entitled to engage in any "other internationally lawful uses of the sea *related to* navigation and communication."¹⁹⁴

The product of the reservation to the coastal State of exclusive control over the economic aspects of EEZ utilization, and the devolution to all States of the three enumerated freedoms plus any other internationally lawful uses *related to* navigation and communication, does not exhaust all possible uses of the EEZ.¹⁹⁵ The regime does not expressly provide or expressly deny any State the right to employ the EEZ for some purpose other than eco-

conserving and managing the natural resources, . . . of the bed and subsoil and superjacent waters." The ICNT, *supra* note 93, art. 56(1)(a), reads essentially the same: "1. In the exclusive economic zone, the coastal State has: (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, . . . of the sea-bed and subsoil and the superjacent waters"

190. ISNT, *supra* note 93, pt. II, art. 45(1)(b): "1. In an area beyond and adjacent to its territorial sea, described as the exclusive economic zone, the coastal State has: . . . (b) exclusive rights and jurisdiction with regard to the establishment and use of artificial islands, installations and structures." The ICNT, *supra* note 93, art. 56(1)(b), does not preface "jurisdiction" with the word "exclusive"; otherwise it remains unchanged.

191. ISNT, *supra* note 93, pt. II, art. 45(2): "In exercising its rights and performing its duties under the present Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States." The ICNT, *supra* note 93, art. 56(2), is basically the same.

192. ICNT, *supra* note 93, art. 58(1); ISNT, *supra* note 93, pt. II, art. 47(1).

193. See notes 189-90 *supra*.

194. ISNT, *supra* note 93, pt. II, art. 47(1). The ICNT, *supra* note 93, art. 58(1), states: "and other internationally lawful uses of the sea related to these freedoms such as those associated with the operation of ships, aircraft and submarine cables and pipelines, and compatible with the other provisions of the present Convention."

195. See Oxman, *The Third United Nations Conference on the Law of the Sea: The 1976 New York Sessions*, 71 AM. J. INT'L L. 247, 264-65 (1977).

conomic utilization, navigation, overflight, the laying of submarine cables and pipelines, and uses *related to* navigation and communication. Article 2 of the High Seas Convention,¹⁹⁶ as well as the present draft proposals applicable to the high seas,¹⁹⁷ do not create a similar problem because they purport to touch on all conceivable uses of the high seas. To provide some useful guideline for determining the international permissibility of employing the EEZ for some uncovered purpose, both negotiating texts contain a "residual" provision.¹⁹⁸

The residual provision specifically applies to situations in which the coastal State or a foreign State attempts to utilize the EEZ for some purpose neither expressly permitted nor expressly or implicitly denied. For instance,¹⁹⁹ though reasonable military activities on the high seas are permitted by virtue of the broad, incorporative language of the apposite provisions in both the 1958 Convention and the present negotiating texts, the ISNT and the ICNT are silent on this point in relation to the EEZ. Military vessels are entitled to traverse the EEZ in a non-aggressive fashion²⁰⁰ pursuant to the freedom of navigation, but nothing is mentioned in either draft convention about the permissibility of utilizing the EEZ for some more extensive military activity. To determine the permissibility of any such actual or contemplated activity, one must consider the respective interests involved and the impact of the determination on the international community as a whole.²⁰¹ Restating the equation, if the benefits that accrue

196. *Reproduced in* note 136 *supra*.

197. ICNT, *supra* note 93, art. 87; ISNT, *supra* note 93, pt. II, art. 75.

198. ICNT, *supra* note 93, art. 59; ISNT, *supra* note 93, pt. II, art. 47(3).

199. The ISNT, *supra* note 93, pt. II, art. 47(1), guarantees the right of "navigation." Article 47(2) then invokes Articles 76-97 with Article 81 specifically applying to "warships." The same applies for the ICNT, *supra* note 93, art. 58(1), which guarantees "navigation." Article 58(2) then invokes Articles 88-115 with Article 95 specifically applying to warships.

200. The ICNT, *supra* note 93, art. 58(2), and the ISNT, *supra* note 93, pt. II, art. 47(2), invoke the "peaceful purposes" clause. The discussion adduced in pt. III(A)(2) *supra* applies here with equal force. *See also* Oxman, *The Third United Nations' Conference on the Law of the Sea: The 1977 New York Session*, 72 AM. J. INT'L L. 57, 73 (1978).

201. The ISNT, *supra* note 93, pt. II, art. 47(3), states:

In cases where the present Convention does not attribute rights or jurisdiction to the coastal State or to other States within the exclusive economic zone, and a conflict arises between the interests of the coastal State and any other State or States, the conflict should be resolved on the basis of equity and in the light of *all the relevant circumstances, taking into account the respective importance of the interests involved to the parties as well as to the international community as a whole.*

as a consequence of permitting a particular exclusive use of the EEZ do not outweigh the resultant diminution in coastal State and community values, then the use is impermissible.

b. Assessment

Both the ISNT and the ICNT grant the coastal State exclusive control over all economic utilizations of the EEZ.²⁰² Other States continue to enjoy at least three of the four freedoms formerly applicable to the high seas area now encompassed by the EEZ. In addition to navigation, overflight, and the laying of submarine cables and pipelines, all States are entitled to exercise other internationally lawful uses *related to* navigation and communication. Because the rights expressly reserved to the coastal State and those granted to other States in no way establish a comprehensive international legal configuration touching on all possible uses of the EEZ, a "residual" provision has been inserted to provide some standard by which the permissibility of other uses may be determined. The permissibility of employing the waters of the EEZ for some purpose neither expressly granted nor expressly or implicitly denied is determined by balancing, in light of all the relevant circumstances, the exclusive use against the effect that such a use will have upon the interests of the coastal State and of the international community. If the diminution to coastal State and community values incident to permitting the exclusive use is not outweighed by the benefits that accrue as a result of that use, then the use is impermissible. All military uses of the *waters* within the EEZ must be judged against this standard.

The EEZ covers a vast expanse of ocean space, stretching from the outer boundary of the territorial sea to the landward-most boundary of the high seas. Though propinquity to the shore makes that portion closest to the littoral an unlikely spot for foreign State peacetime deployment of ASW devices, the outer reaches seem at least as susceptible as the high seas. Situated distant from the areas of vessel concentration and in a location where foreign State activity is less conspicuous and at least appears less threatening to immediate security, any program designed to deploy underwater acoustic detection devices (sonobuoys) and anti-submarine mines may go undetected. However, if the coastal State actually discovers the true nature of the foreign State activity, the fact that it has been conducted in such relative proximity to the coast will undoubtedly generate immediate

(emphasis added). The ICNT, *supra* note 93, art. 59, is basically the same.

202. Oxman, *The Third United Nations Conference on the Law of the Sea: The 1976 New York Sessions*, 71 AM. J. INT'L L. 247, 265 (1977).

and pronounced acrimony. Any foreign State contention that the deployment is motivated by concerns of self-defense will lack credibility.

In light of the severely circumscribed range of underwater acoustic detection devices, and of the fact that anti-submarine mines can be deployed subsequent to or simultaneous with the commencement of hostilities with no loss of effectiveness, it seems extremely unlikely, despite the susceptibility of the outer reaches of the EEZ, that any foreign State will risk the continuation of amicable relations for some advantage which is at best minimal. The limited range of underwater acoustic detection devices prevents them from posing any substantial, credible threat to the SSBN.

Nevertheless, if a foreign State decides to pursue a peacetime ASW deployment program, the permissibility of the program must be determined in light of the standard articulated in the "residual" provision of the ISNT and ICNT. Undoubtedly, the first inclination is to adjudge such an exclusive use of the waters of the EEZ impermissible. This inclination is quite understandable because it certainly appears that any foreign State submission that deployment is essential to preserve foreign State security lacks veracity. Moreover, it also appears that such a military program threatens coastal State security, and as a consequence, international stability. International law should not seek to promote such results. Closer examination reveals that a determination to proscribe such devices will not advance coastal State and community interests. Strangely enough, the interests of both are best preserved by permitting deployment of ASW devices within the waters of the EEZ and letting the coastal State deal with threats to its security under Article 51 of the United Nations Charter. A total proscription might very well jeopardize coastal State security and international stability by creating a regime that could be transgressed with little likelihood of detection.

The principal coastal State interests in the waters of the EEZ are economic exploitation, navigation, and security. Though the other States of the international community are not entitled to tap the resources of the EEZ, they too have an interest in navigation of the waters of that zone as well as in the maintenance of a climate conducive to international stability. As mentioned earlier, both underwater acoustic detection devices and anti-submarine mines are designed to accomplish their primary objective while

occupying a small area below the navigable water surface. The amount of interference they cause to the coastal State's interests in economic exploitation, and the coastal State's and the international community's interests in navigation, is hardly measurable. Moreover, neither underwater acoustic detection devices nor anti-submarine mines designed to occupy the water column pose a serious threat to the invulnerability of the SSBN. Only ASW devices with long-range capabilities possess such potential. The circumscribed operational radius of ASW devices designed to be deployed in the waters of the EEZ limits their functional utility. Because these devices are incapable of substantially eroding the invulnerability of the SSBN, it will remain perhaps the only assured counterforce component in the strategic triad. As a result, international stability and State security will remain intact. The balance of power will be preserved. To be sure, any potential foreign State threat to coastal State security incident to the deployment of ASW devices will fall within the ambit of Article 51 of the United Nations Charter. The foreign State will not be permitted to capitalize on the permissive regime at the expense of coastal State security.

But what of the coastal State's interest in security as guaranteed by some other portion of the naval force structure? For instance, does not a regime that permits deployment of ASW devices, though admittedly incapable of threatening SSBNs, jeopardize other non-strategic submarines and result in a diminution of coastal State security? In fact, does not a regime designed to proscribe the deployment of all ASW devices enhance coastal State security by guaranteeing the continued existence of non-strategic submarines? To ascertain the answers to questions of this sort, it is imperative that one measure the likelihood that a foreign State will attempt a deployment program having such a limited objective against the threat to international stability and State security incident to the asymmetry resulting from a proscriptive regime that cannot be verified.

As discussed earlier, it is on the one hand extremely unlikely that a foreign State would attempt to deploy ASW devices in the waters of the EEZ. The minimal advantage to be secured is far outweighed by the potential for serious adverse reaction consequent to the discovery of such devices. On the other hand, the ease and inconspicuousness with which deployment could be carried out would make it exceedingly difficult to detect violations of any proscriptive regime. This minute detection risk would present an irresistible temptation to the perfidious to violate the prohibitions. International stability and State security would prove illusory because the violators would proceed to capitalize

on whatever perceived advantage they obtained over those States that observed the prohibitions. Though, in light of the limited range of such ASW devices, the efforts would probably not take the form of some nuclear threat, the foreign State might well embolden an otherwise circumspect foreign policy. Thus, while neither a permissive regime nor a proscriptive regime that is subject to repeated violation actually threatens the SSBN because of the limited range of ASW devices, it is quite clear that the latter poses an acute threat to international stability and State security by increasing the chances for confrontation.

A regime that permits all States, including the coastal State, to pursue peacetime ASW deployment programs appears to serve best the interest of the international community. Because each coastal State is entitled to use its own EEZ for the deployment of such ASW devices and to invoke Article 51 of the United Nations Charter in apposite situations, a permissive regime does not subject it to any inordinate threat. In addition, because all States are permitted to utilize the waters of the EEZ for the deployment of ASW devices of limited range, those that might otherwise surreptitiously violate a proscriptive regime to seek to capitalize on whatever advantage they secured see that potential advantage minimized as a result of a similar advantage accruing to other States. In short, one of the asymmetries that typically result in confrontation is eliminated.

i. The Contiguous Zone: Its Relation to the EEZ

The 1958 Convention superimposed the contiguous zone on the high seas. Pursuant to the ISNT and the ICNT, the zone has been resituated on top of the EEZ. Within the waters of the contiguous zone, the coastal State still retains jurisdiction to enforce its customs, fiscal, immigration, and sanitary regulations.

As mentioned above, the legal regime governing the outer reaches of the EEZ permits foreign State deployment of underwater acoustic detection devices and anti-submarine mines. Deployment that poses a threat to coastal State security falls within the ambit of Article 51 of the United Nations Charter. To be consistent with strict logic, the international legal rules that apply to one part of the EEZ should apply throughout. Because the contiguous zone does not convert the status of the waters over which it is situated, the EEZ rule of permissibility appears to apply with equal force to that area. Threats to coastal State security are

therefore to be handled under the inherent right of self-defense enunciated in Article 51.

Notwithstanding the consistency of this suggestion, the "residual" provision of the ISNT and the ICNT requires that the permissibility of any activity within the EEZ be determined on the basis of a balancing of various interests in light of "all the relevant circumstances." Clearly, then, no hard and fast rule of permissibility applies throughout the entire EEZ. One of the relevant circumstances that may substantially impact on the computation of the equation is the proximity to the coast of any ASW deployment. Although deployment in the outer reaches of the EEZ poses little real threat to the SSBN, primarily because of the limited range of ASW devices, the threat increases in direct relation to the proximity of the deployment to the coast. Consequently, though Article 51 of the United Nations Charter may be adequate to deal with distant deployment, a less ambivalent standard of coastal State proscription within the waters of the contiguous zone best serves to balance equitably the interests of all concerned.

Pursuant to the 1958 Convention, coastal States are left with no choice. Threats to security can be dealt with only on the basis of the United Nations Charter. The "residual" provisions contained in the products of UNCLOS III attempt to provide some standard that satiates the desire for a proscriptive regime in waters beyond coastal State sovereignty yet close enough to host lurking danger. Because the contiguous zone is a relatively small body of water situated close to the coastal State and regularly traversed by indigenous vessels, it appears the degree of observance of the proscription can be readily verified. Although the regime established within the contiguous zone by the 1958 Convention is satisfactory in that it permits the coastal State to invoke Article 51 if the threat resulting from deployment is acute, the proscriptive regime of the ISNT and the ICNT is particularly desirable in that it eliminates potential disagreements over the invocation of Article 51.

B. Legal Regime Governing the Sea Floor of Ocean Space

This section discusses the international legal principles affecting military uses of the seabed. Particular attention is given to the seabed of the internal waters and the territorial sea, the continental shelf, the exclusive economic zone, and the deep seabed, now known as the Area.

1. The Internal Waters and the Territorial Sea

The internal waters are those waters located landward of the

baseline, which is generally drawn along the coast at the low-water mark, but which, in particular circumstances, may be located seaward of the coast.²⁰³ The territorial sea, in contrast, is that belt of water paralleling the coast and extending from the baseline perhaps as much as twelve miles.²⁰⁴

a. The 1958 Convention

The coastal State has absolute sovereignty over all *waters* landward of the baseline and, except for the foreign State right of innocent passage, which may itself be prevented or temporarily suspended if it portends a threat to coastal State security, equivalent sovereignty over the *waters* of the territorial sea. The objective of this portion of the study is to determine whether the absolutistic regime governing the water column and navigable surface of the internal waters and the territorial sea applies to the *seabed* subjacent to each of the water zones. If such a regime does in fact govern these areas then it seems strong arguments may be adduced by the coastal State in justification of a proscription of foreign State ASW devices throughout the entire area.

Article 2 of the 1958 Convention²⁰⁵ expressly extends coastal State sovereignty to the seabed and subsoil of the territorial sea, yet says nothing about an extension to the seabed area subjacent to the internal waters.²⁰⁶ Nevertheless, any suggestion that the coastal State lacks absolute control over the seabed immediately below its internal waters is surely erroneous. Coastal State sovereignty over the airspace, surface, and subsurface of its land and territorial sea is explicit. It is similarly acknowledged that the coastal State possesses absolute sovereignty over waters situated landward of its baseline. It would be anomalous to suggest that the mere misfortune of being the inheritor of a geographical mass spotted with indentations obtruding deep into the interior permits foreign States to make use of the seabed of those indentations not only with impunity but with international legal authorization.

203. See pt. III(A)(1) *supra*.

204. *Id.*

205. Territorial Sea Convention, *supra* note 3, art. 2: "The sovereignty of a coastal State extends to the air space over the territorial sea as well as its bed and subsoil."

206. The Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 4, art. 2, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 256, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), also failed to make mention of coastal State sovereignty over the seabed below internal waters.

The coastal State's historical interest in security is not in the least diminished by the presence of numerous bays marking its littoral. In fact, that interest is substantially intensified.²⁰⁷

In addition, it seems any suggestion that the absence of express wording in the 1958 Convention extending coastal State sovereignty to the sea floor of the internal waters operates to warrant permitting foreign State military use of the area is violative of the basic scheme of the agreement. It is clearly palpable that a greater degree of coastal State control is permitted throughout²⁰⁸ the internal waters than within the territorial sea.²⁰⁹ In fact, in commenting on Article 1(2)—which subjects the territorial sea to the other provisions of the Convention—Mr. Tuncel, the Turkish delegate, noted that because Article 1(1) states that coastal State sovereignty extends “beyond” the land area and internal waters, any danger that this sovereignty is viewed as similarly subject to the other provisions (regarding innocent passage) is removed.²¹⁰ Coastal State sovereignty extends over the entire horizontal and vertical area encompassed by the internal waters. The land territory and the internal waters are analogous in the sense of abso-

207. Denmark, the Netherlands, Colombia, and France all proposed amendments to the ILC draft. Denmark's proposal, U.N. Doc. A/Conf. 13/C.1/L.81, *reprinted in* 3 UNCLoS I OR, C.1 Annexes 233, U.N. Doc. A/Conf. 13/39 (1958), emphasized extending sovereignty to the airspace above the internal seas. The Netherlands' proposal, U.N. Doc. A/Conf. 13/C.1/L.83, *reprinted in* 3 UNCLoS I OR, C.1 Annexes 234, U.N. Doc. A/Conf. 13/39 (1958), emphasized extending sovereignty to the airspace above the territorial sea. Colombia's proposal, U.N. Doc. A/Conf. 13/C.1/L.82 & Corr. 1, *reprinted in* 3 UNCLoS I OR, C.1 Annexes 233, U.N. Doc. A/Conf. 13/39 (1958), was essentially the same as the ILC draft except for asserting a 12-mile territorial sea. France's proposal, U.N. Doc. A/Conf. 13/C.1/L.6, *reprinted in* 3 UNCLoS I OR, C.1 Annexes 212, U.N. Doc. A/Conf. 13/39 (1958), merely called for “airspace” to be defined in accordance with international law. None of these proposals did more than express concern about areas other than the bed of the internal waters. In fact, all were eventually withdrawn in favor of the ILC draft, which focused on extending coastal State sovereignty to the bed of the territorial sea, a zone further from the coastal State than the internal waters and one in which the coastal State surely has less, or at least no greater, security interest than it has in the internal waters. *See* M. MCDUGAL & W. BURKE, *supra* note 2, at 64.

208. At the 1930 Hague Codification Conference, the American representative to the Second Committee, David Miller, noted that for purposes of State sovereignty there is no division between air and water, or water and seabed. *See* 3 League of Nations Hague Codification Conf. Acts of Conf., Minutes of the Second Committee, Fifth meeting, March 21, 1930, C.351(b).M.145(b).1930.V, at 48. *See also* RESTATEMENT (SECOND) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 11 (1965), where territory of a State is defined to include the internal waters and the subjacent seabed.

209. After all, the territorial sea and not the internal waters is subjected to innocent passage.

210. *See* remarks of the representative of Turkey, 3 UNCLoS I OR, C.1 (44th mtg.) 134, 136, para. 15, U.N. Doc. A/Conf. 13/39 (1958).

lute State control.²¹¹ This leaves little doubt as to the extent of coastal State control over the seabed subjacent to its internal waters. The coastal State may proscribe any foreign State military use of the seabed while proceeding to employ it for its own military purposes.²¹²

Though there seems little dispute about the right of the coastal State to prevent *foreign State* military use of the seabed subjacent to its territorial sea, particularly in light of the language of Article 2, which expressly extends coastal State sovereignty to the seabed and subsoil,²¹³ the obverse is not quite so clear. A conjunctive reading of Articles 1 and 2 raises some doubt as to whether the *coastal State* may use the seabed beneath its territorial sea for some military purpose that interferes with the foreign State right of innocent passage across the navigable surface.²¹⁴ After all, the first paragraph of Article 1 extends coastal State sovereignty to the waters of the territorial sea with the following paragraph subjecting "[t]his sovereignty" to the right of innocent passage. Article 2 then proceeds to extend coastal State sovereignty to the airspace, seabed, and subsoil of the territorial sea but does not contain a second paragraph subjecting sovereignty over those areas to innocent passage. Although the absence of such conditional language prompted some delegates at the 1958 Convention to submit amendments designed to assure that coastal State sovereignty over the seabed would not interfere with innocent passage²¹⁵ and others to voice their belief that

211. This view has support among authorities. See Gutteridge, *The 1958 Geneva Convention on the Continental Shelf*, [1959] 35 BRIT. Y.B. INT'L L. 102, 119 (1960).

212. See *Legal Regime of Inner Space*, *supra* note 132, at 184.

213. Article 2 is reprinted in note 205 *supra*. See also François, *Regime of the Territorial Sea*, U.N. Doc. A/CN.4/53 (1952), reprinted in [1952] 2 Y.B. INT'L L. COMM'N 25, 28, U.N. Doc. A/CN.4/SER.A/1952/Add. 1 (1958), where Article 3 reads: "The territory of a coastal State also includes the bed of the territorial sea and the subsoil." See also Memorandum prepared by Frank Boas, Attorney-Advisor, Office of the Legal Advisor, Jan. 1958, US/CLS/LEG/2 at 1-3. Writing of coastal State control of the bed he said in quoting from 1 P. FAUCHILLE, *TRAITÉ DE DROIT INTERNATIONAL PUBLIC* 152 (1925): "Fauchille also made the point that the practice of States has always recognized that the riparian State of territorial sea can alone occupy the subsoil of the territorial sea." See also 1 L. OPPENHEIM, *INTERNATIONAL LAW* § 217 (8th ed. Lauterpacht 1955).

214. The navigable surface is specified because even submarines, which may exercise the right, must surface in order to rely on innocent passage.

215. See the proposal of the Netherlands, U.N. Doc. A/Conf. 13/C.1/L.83, reprinted in 3 UNCLÓS I OR, C.1 Annexes 234, U.N. Doc. A/Conf. 13/39 (1958). It would have combined Articles 1 and 2 into a single Article reading: "Subject to the right of innocent passage . . . , the sovereignty of a State extends to: (a) a belt of sea adjacent to its coast, described as the territorial sea, . . . (b) the bed and the

coastal State sovereignty over the bed of the territorial sea was absolute²¹⁶ and beyond restriction, it seems widely acknowledged that the coastal State may employ its territorial sea floor for military purposes as long as the use does not interfere with innocent passage across the navigable surface.²¹⁷

The coastal State's sovereignty over the seabed subjacent to the internal waters and the territorial sea entitle it to prohibit foreign State military use of the areas. In addition, the extent of the sovereignty affords the coastal State the opportunity to utilize the seabed beneath the two water zones for its own military purposes. Though the coastal State's military use of the bed beneath the internal waters may be so extensive as to interfere with foreign surface traffic, because innocent passage does not attach to that water zone the coastal State is well within its legal authority. On the other hand, any coastal State use of the bed subjacent to the territorial sea must not hamper foreign State innocent surface passage unless the interference would otherwise be authorized pursuant to the 1958 Convention.

b. UNCLOS III

Neither the ISNT nor the ICNT retreats from the extent of sovereignty granted the coastal State by the 1958 Convention over both the waters landward of the baseline and the waters within

subsoil of the territorial sea." This proposal was rejected 49 to 6, with 18 abstentions.

216. Mr. Tuncel (Turkey) stated, 3 UNCLOS I OR, C.1 (44th mtg.) 134, 136, para. 16, U.N. Doc. A/Conf. 13/39 (1958), that "he could not support the Netherlands amendment to article 1 . . . , because the coastal State had absolute sovereignty over the bed and subsoil of its territorial sea." This position receives support from the fact that the Report of the Second Committee, League of Nations Pub. V. Legal Questions 1930.V.9, art. 2, reprinted in 24 AM. J. INT'L L. (Supp.) 234, 240 (1930), states in respect to international legal limitations on the use of the seabed that "there are but few rules of international law." Moreover, the ILC acknowledged in 1956 that its draft convention was not designed to deal with the seabed and subsoil. See Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 12, art. 2 commentary, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 265, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957).

217. At the 1958 Conference, Mr. Busmann (Netherlands) stated that although the 1956 ILC draft did not contain language in Article 2 subjecting coastal State sovereignty over the seabed beneath the territorial sea to innocent surface passage, any impression that no such limitation applied "was not correct." See 3 UNCLOS I OR, C.1 (58th mtg.) 180, 182, para. 25, U.N. Doc. A/Conf. 13/39 (1958). See also *Legal Regime of Inner Space*, supra note 132, at 185, where it is stated in reference to the territorial sea:

It is clear, however, that whatever right of passage the warship enjoys, it must be exercised (i) "innocently," (ii) as a right of passage, and (iii) on the surface. Subject to this limitation, the coastal State is free to use [the water, seabed and subsoil] for whatever military purposes it pleases and any measures of demilitarization would once again have to be effected on a basis of consent.

the territorial sea. Nonetheless, has either draft convention sought to diminish coastal State control over the seabed subjacent to these water zones? If so, has the effect been to permit foreign State military use of either area or simply to reduce coastal State military use?

Both the ISNT²¹⁸ and the ICNT²¹⁹ expressly extend coastal State sovereignty to the seabed and subsoil beneath the territorial sea, but, like the 1958 Convention, say nothing about an extension to the area beneath the internal waters. Despite the absence of such language, it seems that the arguments made in relation to the 1958 Convention supporting an extension to the sea floor beneath internal waters apply here with equal force. The need to protect against foreign State intrusion deep into the littoral of coastal States is as important as ever. To suggest that the coastal State may prohibit foreign military uses of its land territory and seabed beneath the territorial sea, yet lacks legal authority to prohibit foreign military uses of the sea floor subjacent to internal waters, fixes the coastal State with a burdensome inconsistency that is the result of a mere geographical patrimony.

As far as the territorial sea is concerned, there is little question that the ISNT and the ICNT entitle the coastal State to proscribe foreign State military use of the subjacent seabed and subsoil.²²⁰ This entitlement is consistent with the regime established by the 1958 Convention. However, the two negotiating texts go further and appear explicitly to subject coastal State sovereignty over the seabed of the territorial sea to the right of innocent passage.²²¹

218. ISNT, *supra* note 93, pt. II, art. 1(1).

219. ICNT, *supra* note 93, art. 2(1).

220. The ISNT, *supra* note 93, pt. II, art. 1(2), reads: "This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil." The ICNT, *supra* note 93, art. 2(2), is identical.

221. Using the ISNT, *supra* note 93, pt. II, art. 1, as illustrative, it now appears that coastal State sovereignty over both the *waters* and the *bed* of the territorial sea is subject to innocent passage. It reads in pertinent part:

1. The sovereignty of a coastal State extends beyond its land territory and internal waters, . . . over an adjacent belt of sea described as the territorial sea.
2. This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.
3. The sovereignty over the territorial sea is exercised subject to the provisions of these articles and to other rules of international law.

The 1958 text located Article 1(1) and 1(3) of the ISNT in Article 1 subjecting "[t]his sovereignty"—sovereignty over the waters of the territorial sea—to innocent passage. Article 1 was then followed by a separate Article 2, which read as ISNT Article 1(2) now reads. That particular Article 2 was not expressly subjected

This subjection is the result of a merger of the terms of Articles 1 and 2 of the 1958 Convention. It should eliminate all apprehensions held by delegates at the 1958 Conference that the coastal State may be entitled to use the seabed subjacent to its territorial sea for military purposes that impede passage. Any coastal State use of the seabed beneath the territorial sea must not hamper innocent surface passage unless such passage would otherwise be permitted by the draft texts.

Doubtless, both the ISNT and the ICNT preserve the regime established by the 1958 Convention to govern the seabed beneath the internal waters. Similarly, the regime designed to regulate foreign and coastal State use of the bed and subsoil subjacent to the territorial sea is left intact. The coastal State has the right to prohibit foreign military use of the seabed beneath both its internal waters and its territorial sea. In addition, it is entitled to utilize the seabed and subsoil below its internal waters and territorial sea for its own military purposes. However, just as with the regime established by the 1958 Convention, coastal State military use of the seabed subjacent to its territorial sea must not be such as to interfere with innocent surface passage. Activity conducted below the internal waters is not limited by any such condition.

c. Assessment

The legal regimes established by the 1958 Convention and by the products of UNCLOS III are identical. The sovereignty of the coastal State extends beyond the waters landward of the baseline, and beyond those within the ambit of the territorial sea, to the subjacent seabed and subsoil. The coastal State is entitled to prevent any foreign military use of the seabed subjacent to either water zone. Subject to the right of innocent passage across the territorial sea, the coastal State may employ its own seabed for

to innocent passage. By locating the former Article 1(1) as the first paragraph in Article 1 of the ISNT and by following it with the former Article 2 as paragraph 2, it can be strongly argued that the confusion about whether the coastal State sovereignty over the bed of the territorial sea is subject to innocent passage has been eliminated. For a draft that leaves no doubt that the seabed of the territorial sea is subject to innocent passage, see Informal suggestion by the Chairman for a possible unified text on the nature and characteristics of the territorial sea, Comm. II White Paper, Part I, Territorial Sea (Item 2), March 20, 1975, cited in R. PLATZODER, THIRD UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA 197 (1975). It reads:

1. The sovereignty of a coastal State extends beyond its coast and its internal waters to . . . the territorial sea, the air space over the territorial sea as well as to its bed and subsoil.

3. This sovereignty is exercised in accordance with the provisions of the articles and other relevant rules of international law

military purposes. In a general sense, the legal regime of the seabed subjacent to the internal waters and the territorial sea is quite similar to that governing the navigable surface and water column encompassed by the same zones.

The probability of foreign State peacetime deployment of ASW devices on the seabed subjacent to the internal waters and the territorial sea of another State seems remote. The conspicuous nature of any effort designed to station fixed acoustic detection devices or sea floor anti-submarine mines in either area conjoins with the high risk of adverse consequences incident to coastal State detection to militate against such a likelihood. Should some foreign State seek to pursue such a program, the legal regime established by the 1958 Convention, as well as that contemplated by UNCLOS III, entitles the coastal State to prohibit deployment or to remove the devices once discovered if prohibition itself proves ineffective. This conclusion follows, of necessity, from the principles discussed above, which extend coastal State sovereignty to the seabed and subsoil beneath the internal waters and the territorial sea.

The prohibition of foreign State deployment of fixed acoustic detection devices and sea floor anti-submarine mines is highly desirable. It maintains the balance of power by preserving the invulnerability of the submarine, particularly the SSBN. As a result, both international stability and the widely shared value of State security are conserved. In fact, it is not altogether clear that permitting such deployment would increase foreign State alacrity to undertake peacetime efforts in either area. After all, mines can be discharged with the same efficiency simultaneous with or immediately subsequent to the initiation of conflict, and technically there is little need to deploy massive fixed acoustic detection devices within the territory of another State because their long-range capacity makes them most desirable for shelf and mid-ocean, rather than internal water or territorial sea, surveillance.

2. The Continental Shelf

The 1958 Conference adopted a definition of the continental shelf quite different from geological realities.²²² Essentially, the

222. The Study Prepared by the Secretariat of the United Nations for the ad hoc Committee to Study the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction, U.N. Doc. A/AC.135/19, para. 13 (1968), notes of the ILC's work on the shelf: "From the beginning of its study in 1950, the

continental shelf recognized by international law extends outward from the edge of the territorial sea and is wholly surmounted by waters of the high seas. More precisely, Article 1 of the 1958 Geneva Convention on the Continental Shelf²²³ states that the continental shelf is comprised of the seabed and subsoil beyond the territorial sea, yet adjacent to the coast, to a point where the water depth is 200 meters or, even beyond that, to where the waters admit of exploitation. It is obvious that although the landward boundary of the continental shelf is easily located, the outer limit remains uncertain. With the advance of technology the 200-meter limit has fallen virtually into disuse. Nevertheless, there seems to be general agreement that the "admits of exploitation" test is circumscribed by the requirement of "adjacency."²²⁴

Both the ISNT²²⁵ and the ICNT²²⁶ retain the concept of the continental shelf. Because this area is now also effectively a part of the EEZ, many of the principles regulating use of the seabed and subsoil between the territorial sea and the Area are principles of the EEZ. The international legal regime governing that portion of the seabed previously viewed as simply the continental shelf will be considered below in subsection 3, which discusses the seabed of the EEZ.

a. *The 1958 Convention*

The high seas are located beyond the outer boundary of the territorial sea. Every nation is entitled to exercise the freedoms of navigation, fishing, overflight, the laying of submarine cables and pipelines, and any other freedoms recognized by the general principles of international law throughout the entire portion of ocean space comprising the high seas. Traditionally, the right of States

Commission decided not to adhere strictly to the geological concept of the continental shelf, a decision which it maintained for its final draft produced in 1956." See generally Knight, *The Draft United Nations Conventions on the International Seabed Area: Background, Description, and Some Preliminary Thoughts*, 8 SAN DIEGO L. REV. 459, 463-70 (1971).

223. The Convention, done Apr. 29, 1958, art. 1, [1964] 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311, declares that the term "continental shelf" is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas

224. For an excellent summary of the various theories of "exploitability" and "adjacency," see Finlay, *The Outer Limit of the Continental Shelf: A Rejoinder to Professor Louis Henkin*, 64 AM. J. INT'L L. 42 (1970); Henkin, *A Reply to Mr. Finlay*, 64 AM. J. INT'L L. 62 (1970).

225. ISNT, *supra* note 93, pt. II, arts. 62-72.

226. ICNT, *supra* note 93, arts. 76-85.

to utilize the high seas for military purposes has been viewed as implicitly assured by the language recognizing freedoms other than the four freedoms specifically enumerated. Moreover, as discussed earlier, whether the deep seabed immediately subjacent to the waters of the high seas be considered *res communis* or *res nullius*, the right of military use still attaches. Because the continental shelf is covered by the waters of the high seas, it appears only logical that, except to the extent modified by the provisions of the Continental Shelf Convention, the freedoms of the high seas apply to the continental shelf with equal force.²²⁷

Article 2(1) of the 1958 Continental Shelf Convention²²⁸ grants every coastal State "sovereign rights" to explore its shelf and to exploit all the natural resources²²⁹ located both on the bed of the shelf and in the subsoil thereof. The rights of the coastal State do not require any express proclamation or actual occupation to be

227. In fact, this appears to have been the position of some delegates at the 1958 Conference. See the remarks of Mr. Munch (West Germany), 6 UNCLoS I OR, C.4 (28th mtg.) 81, 83, para. 28, U.N. Doc. A/Conf. 13/42 (1958), that: "All rights over the continental shelf other than those set forth in article 68 were open to everyone; except for the express purpose of the exploration and exploitation of its natural resources, the continental shelf, including its subsoil, was *subject to the régime of the high seas*." (emphasis added). This conception is also apparent in the comments of Mr. Kanakaratne (Ceylon) at the 1958 Conference, *id.* (27th mtg.) 78, 80, para. 41, where he said:

Article 27 [now Article 2 of the Convention on the High Seas, *done* Apr. 29, 1958, [1966] 17 U.S.T. 139, T.I.A.S. No. 5969, 559 U.N.T.S. 285] of the International Law Commission's draft referred to four specific freedoms of the high seas. . . . [A]rticles 69 to 71 [now Articles 3-5 of the Convention of the Continental Shelf, *done* Apr. 29, 1958, [1964] 15 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311] of the International Law Commission's draft had been designed to regulate the question of those freedoms in relation to the continental shelf.

In this respect it should also be noted that the Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 11-12, U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 264, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), included the continental shelf principles as the third and final § of part II of the portion of the draft, entitled the "High Seas." Moreover, Article 26(1) specifically defined the "high seas" to mean "all parts of the sea that are not included in the territorial sea, as contemplated by Part I." Because the continental shelf was in part II rather than part I, a strong argument can be made that the high seas freedoms apply to the shelf.

228. The Convention on the Continental Shelf, *supra* note 223, at 473, reads: "The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources."

229. *Id.* art. 2(4) defines natural resources as

mineral and other non-living resources of the seabed and subsoil together with living organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

effective.²³⁰ The rights are exclusive, and the coastal State need not engage in actual exploration of the shelf or subsoil thereof to require that other States secure its consent before lawfully undertaking either of these specific activities.²³¹

The grant of “sovereign rights” to the coastal State is clearly not tantamount to a grant of absolute “sovereignty.” Any fair review of the origins of the “sovereign rights” provision indicates that all efforts were designed to confer rights essential to the effectuation of exploration and exploitation without bestowing absolute “sovereignty.” Though the International Law Commission (ILC) stated in its 1951 draft that the coastal States should have “control and jurisdiction”²³² for the purposes of exploring and exploiting the shelf, this was rephrased in 1953, following the rejection of proposals conferring “sovereignty,”²³³ to read “sovereign

230. *Id.* art. 2(3) states: “The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.”

231. *Id.* art. 2(2) states that the rights of exploration and exploitation “are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities, or make a claim to the continental shelf, without the express consent of the coastal State.”

232. See Report of the International Law Commission to the General Assembly, U.N. Doc. A/1858 app. 17, 18, art. 2 (1951), reprinted in [1951] 2 Y.B. INT’L L. COMM’N 123 app. 141, 141 (1957) (Draft Articles on the Continental Shelf and Related Subjects), which states: “The continental shelf is subject to the exercise by the coastal State of *control and jurisdiction* for the purpose of exploring it and exploiting its natural resources.” (emphasis added). In comment 7 to Article 2, the ILC stated, *id.* at 142:

Article 2 avoids any reference to “sovereignty” of the coastal State over the submarine areas of the continental shelf. As control and jurisdiction by the coastal State would be exclusively for exploration and exploitation purposes, they cannot be placed on the same footing as the general powers exercised by a State over its territory and territorial waters.

This comment reveals that the ILC attempted to limit coastal State rights to exploration and exploitation only. Such a severe restriction created apprehension on the part of the United Kingdom that it might not permit jurisdiction over things such as crimes committed on the shelf or in a tunnel beneath the shelf. The ILC dealt with this fear in 1953. See notes 233-34 *infra*.

233. In 1953 the ILC considered several proposals, including those of Mr. Francois (Netherlands), Summary Records of the 197th Meeting, [1953] 1 Y.B. INT’L L. COMM’N 79, 83, para. 58, U.N. Doc. A/CN.4/SER.A/1953 (1959) (to place “sovereign rights” before the words “control and jurisdiction” in the 1951 ILC draft Article 2) (amended, Summary Records of the 198th Meeting, [1953] 1 Y.B. INT’L L. COMM’N 85, para. 2, U.N. Doc. A/CN.4/SER.A/1953 (1959)), and Mr. Pal (India), Summary Records of the 198th Meeting, [1953] 1 Y.B. INT’L L. COMM’N 87 para. 17, U.N. Doc. A/CN.4/SER.A/1953 (1959) (“The coastal State has the sovereign rights of control and jurisdiction over the continental shelf in respect only of its mineral resources and of the exploration and exploitation of the same.”). Mr. Yepes (Colombia) proposed complete sovereignty, *id.* at 79, 83, para. 59 (“The coastal State possesses the same rights of sovereignty over the continental shelf as it exercises over its land area.”) (amended *id.* at 86, para. 7). Mr. Lauterpacht (United Kingdom) proposed “sovereignty” also, Summary Records of the 197th meeting, [1953] 1 Y.B. INT’L L. COMM’N 84, para. 67, U.N. Doc. A/CN.4/SER.A/1953 (1959) (“The continental shelf is subject to the sovereignty of the coastal State.”), but distinguished his

rights.”²³⁴ A proposal at the 1956 session²³⁵ to replace this language with “exclusive rights” was rejected in favor of retaining

proposal from that of Mr. Yepes, Summary Records of the 198th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 86, para. 10, U.N. Doc. A/CN.4/SER.A/1953 (1956), stating that he conceived “sovereignty” to be subject to the limitations of freedom of the seas. The proposal of Mr. Lauterpacht proceeded from his concern that the 1951 ILC draft did not confer sufficient jurisdiction on the coastal State to deal with crimes on or beneath the shelf. The Fourth Committee initially adopted the Lauterpacht proposal 6 to 5, with 1 abstention, the thirteenth delegate (Sweden) being absent, *id.* at 88, para. 38. Yepes withdrew his proposal because the Committee would obviously have rejected it as too extensive.

A second paragraph, adopted 7 to 5, with 1 abstention, was appended to draft Article 2. It read: “The exclusive rights of the coastal State are limited to the rights of use, control and jurisdiction for the purposes of exploration and exploitation”

234. The Lauterpacht proposal was reconsidered at the 210th meeting when the Swedish delegate noted that he had been absent when it was initially adopted but would have voted against it had he been present. Summary Records of the 210th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 163, 169, U.N. Doc. A/CN.4/SER.A/1953 (1959). Actually, though the Lauterpacht language had been adopted, 7 of the 13 delegates spoke against it. See Summary Records of the 198th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 85, U.N. Doc. A/CN.4/SER.A/1953 (1959); Summary Records of the 197th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 79, U.N. Doc. A/CN.4/SER.A/1953 (1959). At the 215th meeting, the Swedish delegate stated that his fear of the language used in the proposal stemmed from the fact that “sovereignty over a territory was bound to result in sovereignty over what lay above that territory.” See Summary Records of the 215th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 198, 199, para. 6, U.N. Doc. A/CN.4/SER.A/1953 (1959). Thus, he proposed that the language, however limited by Lauterpacht, be replaced with “exclusive rights of control and jurisdiction.” Mr. Alfaro, seeking to assure the delegates that Lauterpacht's proposal, although couched in terms of “sovereignty,” was really only designed to guarantee coastal States the right to handle activities related to exploration and exploitation stated, *id.* at 201, para. 25: “It was . . . abundantly clear that the Commission was not recognizing the coastal State's sovereignty over the continental shelf, but its exclusive . . . right of control and jurisdiction for the purposes of exploring and exploiting” Many were unsatisfied with the language of draft Article 2. It was finally amended, *id.* at 202, para. 40, to read: “The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring and exploiting its natural resources.” In reference to earlier United Kingdom fears, the ILC said of draft Article 2, Report of the International Law Commission to the General Assembly, 8 U.N. GAOR, Supp. (No. 9) 14, para. 69, U.N. Doc. A/2456 (1953), reprinted in [1953] 2 Y.B. INT'L L. COMM'N 200, 214 U.N. Doc. A/CN.4/SER.A/1953/Add. 1 (1959); “[N]o doubt . . . the rights conferred upon the coastal State cover *all rights necessary for and connected with* the exploration and the exploitation of the . . . shelf.” (emphasis added).

235. Mr. Hsu (China) proposed, Summary Records of the 359th Meeting, [1956] 1 Y.B. INT'L L. COMM'N 142, 146, paras. 35-37, U.N. Doc. A/CN.4/SER.A/1956 (1973), that “exclusive rights” be substituted for “sovereign rights.” This proposal was rejected 9 to 3, with 3 abstentions, *id.* at 147, para. 48. In retaining “sovereign rights” the ILC said, Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 42, art. 68 commentary (2), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 297, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), that it “was unwilling to accept the *sovereignty* of the

the compromise language adopted in 1953. At the 1958 Conference, the Fourth Committee initially adopted a proposal similar to that rejected by the ILC in 1956 but later decided against its inclusion in the final draft, preferring to retain "sovereign rights."²³⁶

The fact that the coastal State possesses "sovereign rights" to explore and exploit the shelf in no way affects the superjacent waters of the high seas or the airspace above those waters.²³⁷ The

coastal State over the seabed and subsoil of the continental shelf." (emphasis added).

236. Several proposals were submitted to the Fourth Committee. They came from Argentina, U.N. Doc. A/Conf. 13/C.4/L.6, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 127, U.N. Doc. A/Conf. 13/42 (1958) (proposing "sovereignty" but limiting its scope); Mexico, U.N. Doc. A/Conf. 13/C.4/L.2, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 126, U.N. Doc. A/Conf. 13/42 (1958) (granting full "sovereignty"); West Germany, U.N. Doc. A/Conf. 13/C.4/L.43, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 138, U.N. Doc. A/Conf. 13/42 (1958). The United States noted its objection to the word "sovereign" contained in the 1956 draft, 6 UNCLOS I OR, C.4 (10th mtg.) 19, 20, para. 12, U.N. Doc. A/Conf. 13/42 (1958), and proposed that it be replaced with the word "exclusive," U.N. Doc. A/Conf. 13/C.4/L.31, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 135, U.N. Doc. A/Conf. 13/42 (1958). The Mexican proposal was rejected 37 to 24, with 6 abstentions, 6 UNCLOS I OR, C.4 (24th mtg.) 68, 69, para. 21, U.N. Doc. A/Conf. 13/42 (1958), and the United States proposal initially adopted 21 to 20, with 27 abstentions, *id.* at 69, para. 24. Clearly the delegates wished to back away from any word that could mistakenly lead to extensive coastal State control. At the eighth Plenary meeting of the 1958 Conference, Ms. Whiteman (United States) noted she would support the proposal of Mr. Jhirad (India) to restore the language of "sovereign rights," 6 UNCLOS I OR, C.4 (8th mtg.) 11, 11, para. 4, U.N. Doc. A/Conf. 13/42 (1958), because the balance of Article 68 (predecessor of Article 2) and Article 69 (predecessor of Article 3) circumscribed the extent of the "sovereign rights." The proposal was adopted 51 to 14, with 6 abstentions, *id.* at 14, para. 64. "Sovereign rights," though very limited, was restored.

237. The Convention on the Continental Shelf, *supra* note 3, art. 3, states: "The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas, or that of the airspace above those waters." See comment on Article 3 of the 1958 draft by Ms. Whiteman (United States), 6 UNCLOS I OR, C.4 (26th mtg.) 73, 76, para. 38, U.N. Doc. A/Conf. 13/42 (1958). Early in the efforts to gain a consensus about the language to be used to illustrate the extent of coastal State control over the shelf, jurists expressed fear lest the language selected impair the freedom of the superjacent water and air space. See draft Article 4 (predecessor of Article 3), Summary Records of the 114th Meeting, [1951] 1 Y.B. INT'L L. COMM'N 274, 277, para. 58, U.N. Doc. A/CN.4/SER.A/1951 (1957), where in selecting the language the ILC stated: "The exercise by a coastal State of control and jurisdiction over the continental shelf does not affect the legal status of the superjacent waters as high seas." The commentary to the 1956 draft Article 69 (predecessor of Article 3), Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 43, U.N. Doc. A/3159 (1956), *reprinted in* [1956] 2 Y.B. INT'L L. COMM'N 253, 298, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957), states: "The articles on the continental shelf are intended as laying down the régime of the continental shelf, only as subject to and within the orbit of the paramount principle of the freedom of the seas and of the airspace above them." Clearly, the desire was to avoid impairing the freedoms extant in the waters of the high seas. See also Report of the International Law Commission to the General Assembly, 8 U.N. GAOR, Supp. (No. 9) 15, para. 76, U.N. Doc. A/2456 (1953), *reprinted in* [1953] 2 Y.B. INT'L L. COMM'N 200, 215, U.N. Doc. A/CN.4/SER.A/1953/Add. 1 (1959).

effect of coastal State rights over the continental shelf is confined to that area alone. Moreover, the limited nature of the coastal State's rights over the continental shelf appears to militate against any suggestion that the Convention has diminished the applicability of traditional high seas freedoms to the shelf.²³⁸ Because one such freedom is the right of military use, all States are apparently entitled to employ another's continental shelf for military purposes provided the use does not interfere with the coastal State's rights of exploration and exploitation. Any threat to coastal State security resulting from foreign military activity falls within the ambit of Article 51 of the United Nations Charter.

A careful reading of the travaux préparatoires produced over the many years preceding the final adoption of "sovereign rights" discloses that jurists considering the question desired to avoid impairing the right of foreign State military use of the shelf. Before Mr. Lauterpacht's proposal to grant the coastal State "sovereignty" over the shelf was ultimately rejected by the ILC in 1953 in favor of less extensive language, Mr. Hsu of China inquired as to whether "sovereignty" as defined by Lauterpacht would entitle coastal States to remove foreign submarines or weapons concealed on the shelf.²³⁹ At that point Mr. Amado, the chairman, reminded Mr. Hsu and the other delegates that the United Kingdom had been the country which had submitted the "sovereignty" proposal and that doubtless she was one of the premier champions of freedom of the seas.²⁴⁰ Consequently, it was unlikely that the proposal was intended to impair military use of the shelf. The

238. There seems little question that the impetus for granting the coastal State "sovereign rights" rather than "sovereignty" was the apprehension that the latter would adversely affect use of the superjacent waters. M. MCDUGAL & W. BURKE, *supra* note 2, at 699-700. However, by failing to grant full "sovereignty," it appears that the Convention left intact the applicability to the shelf of traditional freedoms. There were three possible regimes to which the shelf could have been subjected: full sovereignty, *res communis*, or *res nullius*. Full sovereignty was obviously rejected, leaving two remaining regimes. By explicitly prohibiting any foreign State "claims" (*see* Article 2(2)) to the shelf absent coastal State consent, the *res nullius* characterization was also rejected. However, because the coastal State was granted plenary rights over the natural resources of the shelf, it cannot be maintained that the area is completely *res communis*. The best characterization of the shelf is that it is a hybrid of sovereignty and *res communis*. The coastal State is given complete control over exploration and exploitation of the shelf. Uses of the shelf by other States for unrelated purposes continue to be permitted.

239. Summary Records of the 200th Meeting, [1953] 1 Y.B. INT'L L. COMM'N 97, 98, para. 19, U.N. Doc. A/CN.4/SER.A/1953 (1959).

240. *Id.* at 99, para. 37.

delegates of the United Kingdom expressed no objection to Mr. Amado's admonition.

During the Eighth Session of the ILC in 1956, one of the principal topics of discussion was atomic weapon tests on the high seas. Prior to that session, Mr. François of the Netherlands submitted a comprehensive report urging not only that the question of atomic weapon tests be seriously considered, but, that because the high seas surmounted the shelf, a provision should be adopted requiring foreign States to secure coastal State consent before conducting tests on the shelf with any new weapons.²⁴¹ After the ILC refused explicitly to proscribe atomic weapon tests on the high seas, because such tests were considered by many to be beyond the scope of the Commission's concern, Mr. François urged the delegates to disregard his suggestions in reference to weapon tests on the shelf.²⁴² They did just that.

At the 1958 Conference, the delegates accepted the notion of coastal State "sovereign rights" over the shelf and finally embodied the principle in one of the four international agreements produced by the Conference. In the process they rejected several proposals that would have impaired the right of foreign States to utilize the continental shelf of another State for some military purpose. When Mexico proposed coastal State "sovereignty," Mr. Kanakarathne of Ceylon cautioned that unless the coastal States were invested with "sovereignty" rather than with the limited control of exploration and exploitation, any other State would be entitled to use the shelf for "some entirely different purpose . . . and the coastal State would be unable to protest."²⁴³ In apparent acknowledgement, Mr. Garcia-Amador of Cuba spoke against the Mexican proposal, emphasizing that he did not wish to see coastal States invested with legal control sufficient to entitle them to proscribe foreign submarines from coming to "rest" on the continental shelf.²⁴⁴ Most delegates apparently agreed with Mr. Garcia-

241. Regime of the High Seas and Regime of the Territorial Sea, U.N. Doc. A/CN.4/97, para. 57 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 1, 11, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957).

242. Summary Records of the 359th Meeting, [1956] 1 Y.B. INT'L L. COMM'N 142, 147, para. 51, U.N. Doc. A/CN.4/SER.A/1956 (1973).

243. 6 UNCLOS I OR, C.4 (23d mtg.) 63, 67, para. 43, U.N. Doc. A/Conf. 13/42 (1958). Mr. Kanakarathne supported the Mexican proposal because of a desire to entitle the coastal State to proscribe foreign activities other than exploration and exploitation.

244. *Id.* (20th mtg.) 50, 52, para. 25. He said:

It should be remembered also that freedom of navigation included freedom of submarine navigation. It might be necessary for a submarine to come to rest on the seabed, an act which would be fully in accordance with the principle of freedom of the seas but would become technically a legal impossibility if the sovereignty of the coastal State extended to the seabed and subsoil of the high seas.

Amador. The Mexican proposal was later decisively rejected.²⁴⁵

The delegates also considered a proposal submitted by India,²⁴⁶ designed to prohibit any State from constructing military installations on its own or on another State's continental shelf.²⁴⁷ Although the proposal was debated at length, it was rejected,²⁴⁸ yet not before Mr. Munch of West Germany had explicitly stated that because coastal States possessed "sovereign rights" only for the purposes of exploring and exploiting the shelf, "[a]ny State could build installations on [the shelf], provided that they did not interference [*sic*] with the exploration and exploitation of natural resources."²⁴⁹ The delegates were apparently reluctant to adopt any provision designed to enhance the coastal State's control over foreign State activities on the continental shelf. The clear implication is that all States are entitled to utilize the continental shelf for military purposes as long as the use does not interfere with the coastal State's rights of exploration and exploitation.²⁵⁰

b. Assessment

Pursuant to the 1958 Convention, the coastal State possesses "sovereign rights" over the continental shelf for purposes of exploration and exploitation. These rights do not depend upon express proclamation or actual occupation. The rights are exclusive in the sense that the coastal State need not actually explore or exploit the shelf in order to require that other States wishing to

(emphasis added).

245. *See id.* (24th mtg.) 68, 69, para. 21. *See* note 236 *supra*.

246. The Indian proposal was generated by an inartfully drafted Bulgarian provision, U.N. Doc. A/Conf. 13/C.4/L.41/Rev. 1, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 137, U.N. Doc. A/Conf. 13/42 (1958), reading: "The coastal State shall not use the continental shelf for the purpose of building military bases or installations." This provision was to apply only to coastal State use of its own shelf.

247. The Bulgarian proposal was withdrawn in favor of the Indian proposal, U.N. Doc. A/Conf. 13/C.4/L.57, *reprinted in* 6 UNCLOS I OR, C.4 Annexes 141, U.N. Doc. A/Conf. 13/42 (1958), which stated: "The continental shelf adjacent to any coastal State shall not be used by the coastal State or any State for the purpose of building military bases or installations."

248. The vote was 31 to 18, with 16 abstentions. 6 UNCLOS I OR, C.4 (30th mtg.) 88, 91, para. 45, U.N. Doc. A/Conf. 13/42 (1958).

249. *Id.* (28th mtg.) 81, 83, para. 28.

250. Neither Article 2(2) of the Convention on the Continental Shelf, note 3 *supra* (which prohibits foreign State exploration of the shelf without coastal State consent), nor Article 5(8), *id.* (which requires coastal State consent before undertaking any shelf research), changes this proposition because anti-submarine mines do not research or explore the shelf. Though fixed acoustic detection devices may do both, they limit their surveillance to the *water* immediately *above* the *sea floor*.

do so secure its consent before proceeding. Nothing in the provisions of the Convention or in its negotiating history evinces an intention to proscribe all foreign State military utilizations of the shelf. As long as the use does not interfere with the coastal State's efforts to explore or exploit the shelf, the use is permissible.

Although it is unlikely that any foreign State would feel so irresistibly constrained to obtain information about the movement of submarines within the territorial sea of a potential enemy that it would actually pursue a peacetime ASW effort to deploy fixed acoustic detection arrays on the bed of that narrow belt, the benefits to be secured from comparable deployment on the continental shelf may prove too tempting to ignore. Once a submarine has crossed the outer reaches of the continental margin and proceeded into the deep sea, it is especially difficult to locate. Consequently, if a State desires to obtain a capability to detect and eliminate (instantly and effectively) the counterforce component carried by SSBNs before they escape to the deep sea, from whence they may actually threaten foreign targets, it is imperative that a substantial portion of that State's ASW program be directed toward the installation on the opponent's shelf of both large (SAS) and small (Bronco and Barrier) fixed acoustic detection arrays and anti-submarine mines.

Military use of another State's continental shelf is not prohibited by the 1958 Convention unless it interferes with the exploration or exploitation of that area.²⁵¹ The coastal State is clearly entitled to use its own shelf for military purposes.²⁵² Foreign military uses that jeopardize coastal State security fall within the ambit of Article 51 of the United Nations Charter. The Convention does not explicitly proscribe all peacetime programs designed to

251. The Soviet Union has stated that it feels the continental shelf of every coastal State may be used by another for military purposes. See 23 U.N. GAOR, C.1 (1605th mtg.) 4-5, U.N. Doc. A/C.1/PV.1605 (1968). As to the position of other powers, see Purver, *Canada and the Control of Arms on the Seabed*, [1975] 13 CAN. Y.B. INT'L L. 195, 201 (1976). Several States have stated that although international law may permit foreign State military use of the shelf, they will not allow such use of their shelf. See ENDC/PV.410, at 6-7 (Canada); 25 U.N. GAOR, C.1 (1758th mtg.) 4-6, U.N. Doc. A/C.1/PV.1758 (1970) (India); *id.* (1763d mtg.) 8, U.N. Doc. A/C.1/PV.1763 (Mexico). In sympathy, see ENDC/PV.423, at 24-28 (Brazil); ENDC/PV.432, at 12 (Argentina); ENDC/PV.430, at 32 (Ethiopia); *id.* at 19-20 (Italy).

252. See Gehring, *Legal Rules Affecting Military Uses of the Seabed*, 54 MIL. L. REV. 168, 189 (1971); Stoeber, *The "Race" for the Seabed: The Right to Emplace Military Installations on the Deep Ocean Floor*, 4 INT'L LAW. 560, 561 (1970); Comment, *Military Use of the Ocean Space and the Continental Shelf*, 7 COLUM. J. TRANSNAT'L L. 279, 287-88 (1968). But see Baxter, *The Legal Aspects of Arms Control Measures Concerning the Missile Carrying Submarines*, in SEA-BASED DETERRENT, *supra* note 39, at 209, 219.

deploy fixed acoustic detection arrays and anti-submarine mines on another State's continental shelf. However, if the deployment threatens to interfere with the coastal State's exclusive rights to explore and exploit the continental shelf, then the activity is violative of the regime enunciated by the Convention.²⁵³ In this age of technological innovation, it is extraordinarily difficult to conceive of any ASW deployment program that would not pose some degree of interference to coastal State enjoyment of its rights of exploration and exploitation. As a result, most ASW deployment programs designed to utilize another State's continental shelf violate international Law of the Sea and are subject to coastal State proscription.

The most desirable international legal regime governing ocean space is undoubtedly one that promotes international stability and State security through the effective prohibition of all destabilizing military uses. The same is equally true of any regime specifically regulating utilization of the continental shelf. Nevertheless, as reiterated throughout this study, if the extent of observance of any proscriptive regime cannot be readily verified, then security may prove illusory, and the regime may in fact produce international instability. It is imperative that any ocean space arms-control regime maintain the balance of power and embody readily verifiable proscriptions.

The 1958 Convention meets both of these requisites. By proscribing all foreign State utilizations of the continental shelf that interfere with exploration and exploitation by the coastal State, it implicitly prohibits foreign State peacetime installation of ASW devices. This prohibition prevents any large scale foreign State ASW deployment effort designed to erode the invulnerability of the SSBN and to subject it to destruction. Moreover, because any foreign State program designed to secure such an objective will necessitate substantial foreign State surface and subsurface activity, the degree to which the proscription is actually observed will be readily verifiable. Although violations incident to less ambitious programs may be more difficult to detect, the actual benefit to the foreign State as a result of such deployment will be slight

253. For authorities that reason to prohibition one way or another, see generally E. BROWN, *ARMS CONTROL IN HYDROSPACE: LEGAL ASPECTS* 32 (1971); W. BURKE, *TOWARDS A BETTER USE OF THE OCEAN* 98 (1969); Rao, *Authority and Control Over Offshore Areas: In Defence of Common Interests*, 11 *INDIAN J. INT'L L.* 379 (1971); Rao, *Legal Regulation of Maritime Military Uses*, 13 *INDIAN J. INT'L L.* 425 (1973).

because of the circumscribed range of both detection devices and anti-submarine mines.

3. The Exclusive Economic Zone

Though both the ISNT and the ICNT have retained the concept of the continental shelf, use of most of that portion of the seabed and subsoil is now generally controlled by the principles governing the EEZ.²⁵⁴ Nevertheless, both negotiating texts have attempted to clarify substantially the precise parameters of the shelf because the shelf principles alone apply to that portion of the seabed and subsoil beyond the EEZ. Essentially, the continental shelf is defined as including the seabed and subsoil that is a natural prolongation of the coastal State's land territory to the outer edge of the continental margin or to a point 200 miles from the baseline if the margin does not extend to that distance.²⁵⁵ This definition takes full account of the fact that the breadth of the EEZ itself is 200 miles. Thus, it is conceivable that a coastal State may possess absolute rights over all economic activities conducted in its submarine areas to a point 200 miles from the baseline despite the fact that the outer boundary of its continental margin may fall far short of that point. If the margin is indeed located still further seaward, the coastal State possesses control over that portion in excess of 200 miles from the baseline pursuant to the regime of the continental shelf rather than that of the EEZ.

a. UNCLOS III

The products of UNCLOS III grant each coastal State complete control over all economic activities within its EEZ. This control specifically includes "sovereign rights" for the purposes of exploring²⁵⁶ and exploiting, conserving and managing all the natural resources located on the seabed or in the subsoil thereof.²⁵⁷ However, the metamorphosis of an area formerly high seas has not re-

254. However, it should be noted that these principles do not prejudice the principles governing the coastal State's rights to the shelf. See ICNT, *supra* note 93, art. 56(3); ISNT, *supra* note 93, pt. II, art. 45(3).

255. ICNT, *supra* note 93, art. 76; ISNT, *supra* note 93, pt. II, art. 62.

256. Though the regime of the EEZ confines the rights of the coastal States to exploration for natural resources, the few rules specifically articulating the coastal State's interest in the shelf itself note that the right extends to exploring "it," specifically meaning the shelf rather than just the resources. See ICNT, *supra* note 93, art. 77(1); ISNT, *supra* note 93, pt. II, art. 63(1).

257. The ISNT, *supra* note 93, pt. II, art. 45(1)(a), states: "In an area beyond and adjacent to its territorial sea, described as the exclusive economic zone, the coastal State has: (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, . . . of the bed and subsoil . . ." The ICNT, *supra* note 93, art. 56(1)(a), is essentially the same.

sulted in the diminution of traditional freedoms of navigation, overflight, and the laying of submarine cables and pipelines still expressly recognized as exercisable by all States.²⁵⁸ But because the zone is now the economic preserve of the coastal State, foreign States are entitled to fish only upon securing coastal State consent.

Both the ISNT and the ICNT declare that use of the entire EEZ, including the seabed and subsoil, shall be reserved for "peaceful purposes."²⁵⁹ Because warships are expressly permitted to traverse the EEZ in the exercise of the freedom of navigation,²⁶⁰ "peaceful purposes" certainly means nothing more than that the use must comport with international law and the United Nations Charter. Neither negotiating text includes incorporative or enumerative language purporting expressly to approve any other military uses of the EEZ.²⁶¹ Just as assuredly, neither contains language proscribing all other military uses of the seabed and subsoil of the EEZ.

The permissibility of non-aggressive military uses other than navigation must initially be judged against the "residual clause" which requires that the importance of the interests of the utilizing State, the coastal State, and the international community be balanced in light of all the relevant circumstances.²⁶² Measured by this test, some foreign State as well as coastal State military uses of EEZ submarine areas may well be consonant with the draft texts. Still, otherwise permissible military uses may be severely restricted by the extent of control granted the coastal State over drilling activities and installations on the seabed and in the subsoil of its EEZ.

Specifically, the ISNT and the ICNT contain provisions explicitly stating that within the EEZ the coastal State shall have the

258. ICNT, *supra* note 93, art. 58(1); ISNT, *supra* note 93, pt. II, art. 47(1).

259. The ISNT, *supra* note 93, pt. II, art. 74, is invoked by *id.* art. 47(2). The ICNT, *supra* note 93, art. 88, is invoked by *id.* art. 58(2).

260. The ISNT, *supra* note 93, pt. II, art. 81, implicitly recognizes the right of warship navigation and is invoked by *id.* art. 47(2). The ICNT, *supra* note 93, art. 95, also implicitly recognizes the right of warship navigation and is invoked by *id.* art. 58(2).

261. The ISNT, *supra* note 93, pt. II, art. 47(1), lists three specific freedoms. "Inter alia," or such similar language, is not used. As a result, military uses are not expressly permitted. The ICNT, *supra* note 93, art. 58, also lacks such language. See the discussion of this matter in reference to the water space of the EEZ, pt. III(A)(4) *supra*.

262. ICNT, *supra* note 93, art. 59; ISNT, *supra* note 93, pt. II, art. 47(3).

exclusive right to “construct and to authorize and regulate the construction, operation and use” of all “installations and structures” that may interfere with the exercise of the rights of the coastal State in the zone.²⁶³ Because the seabed and subsoil of the EEZ are also part of the continental shelf, the coastal State is granted the exclusive right to authorize and regulate drilling for “all purposes.”²⁶⁴

It is readily apparent that both this provision and the “residual clause” are designed to restrict foreign State activity on the seabed and in the subsoil of the EEZ. The coastal State may utilize the bed of the EEZ for military purposes if it can demonstrate that its interest in such utilization is superior to any interest of the international community. Foreign State military activity on or beneath the sea floor of the EEZ, however, must not only pass muster under the “residual clause” but must also avoid contravention of the provisions granting the coastal State exclusive control over all drilling activities and all installations or structures that may interfere with the rights of the coastal State in the zone.

The portion of seabed and subsoil beyond the 200-mile breadth of the EEZ is specifically subject to the regime of the continental shelf. Essentially, the nature of coastal State control over the continental shelf proposed by the negotiating texts does not differ greatly from that articulated in the 1958 Continental Shelf Convention. The coastal State possesses “sovereign rights” for the purposes of exploring and exploiting the shelf rather than absolute “sovereignty” over the shelf.²⁶⁵ These rights do not depend upon express proclamation or actual occupation to be effective.²⁶⁶ In addition, the rights are exclusive in the sense that the coastal State need not explore or exploit the area before requiring that others wishing to do so secure its consent before proceeding.²⁶⁷

The regime proposed by both the ISNT and the ICNT differs from the earlier Convention in that foreign States must secure coastal State consent before proceeding to lay pipelines along a specific route.²⁶⁸ Also, the coastal State is entitled to exercise the same authority over construction and use of installations or structures on its continental shelf²⁶⁹ and drilling into the subsoil below that shelf²⁷⁰ as it exercises over such activities in reference to the

263. ICNT, *supra* note 93, art. 60(1)(c); ISNT, *supra* note 93, pt. II, art. 48(1)(c).

264. ICNT, *supra* note 93, art. 81; ISNT, *supra* note 93, pt. II, art. 67.

265. ICNT, *supra* note 93, art. 77(1); ISNT, *supra* note 93, pt. II, art. 63(1).

266. ICNT, *supra* note 93, art. 77(3); ISNT, *supra* note 93, pt. II, art. 63(3).

267. ICNT, *supra* note 93, art. 77(2); ISNT, *supra* note 93, pt. II, art. 63(2).

268. ICNT, *supra* note 93, art. 79(3); ISNT, *supra* note 93, pt. II, art. 65(3).

269. The ISNT, *supra* note 93, art. 66, applies Article 48 to the shelf; the ICNT, *supra* note 93, art. 80, applies Article 60 to the shelf.

270. ICNT, *supra* note 93, art. 81; ISNT, *supra* note 93, pt. II, art. 67.

EEZ. As a result, though military use in general is not proscribed, foreign State military use involving drilling into the shelf or construction and use of installations and structures that may interfere with the coastal State's rights in the shelf is subject to proscription.

b. Assessment

Although coastal State installation of large (SAS) or small (SOSUS) fixed acoustic detection arrays and anti-submarine mines on the seabed of its own EEZ or beyond, to the outer boundary of its continental margin, is justified on the grounds of superior interest in self-defense and of minimal interference with foreign State non-military use of these areas, it is clear that any comparable foreign State deployment scheme is restricted by both negotiating texts and subject to coastal State proscription. To the extent that the deployment of such ASW devices necessitates drilling into the sea floor, it is subject to coastal State authorization and regulation. Because the affixation and utilization of acoustic detection arrays and anti-submarine mines constitutes construction, operation, and use of installations and structures that may interfere with the rights of the littoral State in the area, these are subject to advance authorization and regulation. As a result, the coastal State is clearly entitled to enact regulations prohibiting foreign State military installations or structures on the seabed of its EEZ.

4. The Deep Seabed

In the most general sense, what is commonly referred to as the deep seabed is that portion of the ocean floor and subsoil beyond the continental shelf and subjacent to the high seas. Though never expressly defined at the 1958 Conference, it is clear that the Conventions produced by that Conference implicitly situate the deep seabed at this location because every coastal State is entitled to exercise control over that portion of the bed which is a natural prolongation²⁷¹ of its littoral. The ISNT and the ICNT redesignate the deep seabed as the "Area" and expressly state that it extends seaward from the outer perimeter of the EEZ or the continental shelf if the latter is broader than 200 miles.²⁷²

271. See *North Sea Continental Shelf Cases*, [1969] I.C.J. 3. See Brown, *The North Sea Continental Shelf Cases*, 23 *CURRENT LEGAL PROB.* 187 (1970).

272. See ICNT, *supra* note 93, art. 1; ISNT, *supra* note 93, pt. I, art. 2(1).

Consequently, despite the fact that the continental shelf of a particular State may be attenuated, by definition the landward-most boundary of the Area is located no closer than 200 miles from the coastline.

a. *The 1958 Convention*

The *waters* of the high seas are open to all nations for navigation, overflight, fishing, laying of submarine cables and pipelines, and any other uses recognized by the general principles of international law.²⁷³ One of the more traditional, widely accepted other uses of the high seas recognized by international law is the right of all States to conduct reasonable military activities. Military uses as extensive as naval maneuvers and nuclear weapon tests have in the past been viewed as consonant with this principle.²⁷⁴ The objective of this section of the study is to determine the precise nature of the international legal regime governing the uses of the deep seabed located immediately below the waters of the high seas.

The extent to which any nation may employ a portion of the deep seabed for its exclusive use is predicated upon the character of the bed itself. However, the authorities are not in agreement on this issue. One school of thought maintains that the deep seabed is *res nullius* and therefore subject to sovereign appropriation.²⁷⁵ Any State is entitled to utilize any part of the deep seabed for its exclusive use, and no other State may attempt to prohibit it from doing so. Once a particular State has effectively occupied²⁷⁶ a portion of the deep seabed, it then possesses sufficient jurisdictional control to exclude all other States from the area. The other school of thought contends that the deep seabed is *res communis* and therefore open to all and subject to appropriation by none.²⁷⁷ The international legal regime governing the deep seabed is said to be identical to that controlling the superja-

273. See pt. III(A)(2) *supra*.

274. *Id.*

275. 1 P. FAUCHILLE, *TRAITE DE DROIT INTERNATIONAL PUBLIC* pt. II, 19 (1925); H. HENKIN, *LAW FOR THE SEA'S MINERAL RESOURCES* 25-29 (1968); 2 H. SMITH, *GREAT BRITAIN AND THE LAW OF NATIONS* 122 (1935); 1 J. WESTLAKE, *INTERNATIONAL LAW* 187-88 (1904); Hurst, *Whose is the Bed of the Sea?*, [1923-24] 4 *BRIT. Y.B. INT'L L.* 34 (1923).

276. See *Island of Palmas Case (Netherlands v. United States)*, Hague Ct. Rep. 2d (Scott) 83, 22 *AM. J. INT'L L.* 867 (Perm. Ct. Arb. 1928). Effective occupation is reflected by continuous and peaceful display of the incidents of sovereignty over a particular area. Specifically, it involves the taking of possession of a particular area and exercising exclusive authority therein. For the proposition that the deep seabed can be acquired, see Young, *The Legal Regime of the Deep-Sea Floor*, 62 *AM. J. INT'L L.* 641, 645 (1968).

277. C. COLOMBOS, *THE INTERNATIONAL LAW OF THE SEA* § 81 (6th rev. ed. 1967); 1 G. GIDEL, *LE DROIT INTERNATIONAL PUBLIC DE LA MER* 498-501 (1932).

cent high seas, also viewed as *res communis*. The high seas and the seabed are viewed as identical, not *sui generis*.²⁷⁸

If the primary concern is military utilization, it really matters little whether the deep seabed is characterized as *res nullius* or *res communis*. Both positions entitle all States to use the deep seabed for their exclusive purposes. The major point of departure between the two positions is that the *res nullius* characterization goes beyond the concept of exclusive use and authorizes *sovereign appropriation* of a portion of the deep seabed if the exclusive use is sufficient in duration and extent to constitute effective occupation. Once a State has satisfied the requests for effective occupation and appropriated a portion of the deep seabed, it may then proceed to exercise the incidents of sovereignty: jurisdiction over foreign nationals within the area and actual exclusion of such nationals from the area. Consequently, though it can be said that both characterizations permit exclusive military uses of the

278. The Territorial Sea Convention, *supra* note 3, art. 2, begins: "The *high seas* being open to all." (emphasis added). "High seas" is defined in Article 1 to include "all parts of the sea that are not included in the territorial sea or in the internal waters of a State." (emphasis added). Such broad language may support the *res communis* characterization by including the *seabed* as well as the waters within "all parts" of the sea. This conclusion seems even more compelling when one realizes that the delegate from Brazil desired to have the term "high seas" changed to read "*waters of the high seas*" (emphasis added) and then proposed to define "waters of the high seas" to mean "those waters lying between the outer limits of the territorial sea" (referring to the territorial seas of all States), U.N. Doc. A/Conf. 13/C.2/L.67, reprinted in 4 UNCLoS I OR, C.2 Annexes 133, U.N. Doc. A/Conf. 13/40 (1958). Mr. Pedreira (Brazil) had been particularly interested in delimiting not only the horizontal zones of ocean space but also the *vertical zones*. He felt that his proposal would accomplish this delimitation and would confine the applicability of the principles to the *water surface and column only*, leaving the seabed unaffected. See remarks of Mr. Pedreira, 4 UNCLoS I OR, C.2 (16 mtg.) 40, 42, U.N. Doc. A/Conf. 13/40 (1958). Committee II rejected, *id.* (20th mtg.) 52, 53, para. 19, an earlier proposal of his designed to emphasize the same distinction between water and seabed, U.N. Doc. A/Conf. 13/C.2/L.67, reprinted in 4 UNCLoS I OR, C.2 Annexes 133, U.N. Doc. A/Conf. 13/40 (1958), forcing him to withdraw it. See 4 UNCLoS I OR, C.2 (21st mtg.) 54, 54, para. 7, U.N. Doc. A/Conf. 13/40 (1958). The rejection of the one and the withdrawal of the other proposal may well indicate that what appears to be expansive language in Articles 1 & 2 should be so construed. *But see* Report of the International Law Commission to the General Assembly, 11 U.N. GAOR, Supp. (No. 9) 24, art. 27 commentary (2), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. INT'L L. COMM'N 253, 278, U.N. Doc. A/CN.4/SER.A/1956/Add. 1 (1957). It reads:

The Commission has not made specific mention of the freedom to explore or exploit the subsoil of the high seas. It considered that apart from the case of the exploitation or exploration of the soil or subsoil of a continental shelf . . . such exploitation had not yet assumed sufficient practical importance to justify special regulation.

deep seabed, only the *res nullius* characterization possesses the potential for legitimizing sovereign appropriation. Until one State has effectively occupied a portion of the deep seabed, any attempt actually to exclude foreign nationals from the area or assert jurisdiction over such nationals found violating exclusionary rules or regulations lacks international juridical consequence. The incidents of sovereignty remain inchoate until the indicia of effective occupation have been satisfied.

b. *UNCLOS III*

The ISNT and the ICNT reflect an attempt to construct an international legal regime to govern future uses of the seabed and subsoil beyond the EEZ or the continental shelf if it extends beyond that zone.²⁷⁹ Activities designed to explore and/or exploit the natural resources of the Area are to be subject to the regulation and supervision of an international body known as the Authority.²⁸⁰ Other activities are to be governed by a few rules of general applicability. Because this portion of the study is concerned with the international legality of military uses of the Area, the primary focus will be the provisions in the ISNT and the ICNT that reserve the Area to use exclusively for peaceful purposes²⁸¹ and prohibit any State from claiming or exercising sovereignty over, or appropriating, any part of the Area.²⁸²

279. This portion of the seabed is known as the "Area." The ISNT, *supra* note 93, pt. I, art. 2(1), defines the Area as "the sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction." The ICNT, *supra* note 93, art. 1(1), states: "'Area' means the sea-bed and ocean floor and subsoil thereof beyond the limits of national jurisdiction."

280. See generally H. KNIGHT, *THE LAW OF THE SEA: CASES, DOCUMENTS AND READINGS* 623-32 (1976); Adede, *The System for Exploitation of the "Common Heritage of Mankind" at the Caracas Conference*, 69 AM. J. INT'L L. 31 (1975); Goldie, *The Contents of Davy Jones's Locker—A Proposed Regime for the Seabed and Subsoil*, 22 RUTGERS L. REV. 1 (1967).

281. The ISNT, *supra* note 93, pt. I, art. 8, reads: "1. The Area shall be reserved exclusively for peaceful purposes. 2. The Area shall be open to use exclusively for peaceful purposes by all States Parties, whether coastal or land-locked, without discrimination, in accordance with the provisions of this Convention, and regulations made thereunder." The ICNT, *supra* note 93, art. 141, reads: "The Area shall be open to use exclusively for peaceful purposes by all States, whether coastal or land-locked, without discrimination and without prejudice to the other provisions of this Part of the present Convention."

282. The ISNT, *supra* note 93, pt. I, art. 4, reads:

1. No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or person, natural or juridical, appropriate any part thereof. No such claim or exercise of sovereignty or sovereign rights, nor such appropriation shall be recognized.

2. States or persons, natural or juridical, shall claim, acquire or exercise rights with respect to the minerals in their raw or processed form derived from the Area only in accordance with the provisions of this Convention.

Article 8(2) of the ISNT,²⁸³ and Article 141 of the ICNT,²⁸⁴ explicitly state that the Area is "open to use exclusively for peaceful purposes." Neither draft convention proceeds to explain the precise standard of use implicit in this reservation, and the travaux préparatoires do not make up for this noticeable deficiency.²⁸⁵ If the provision is construed to prohibit only aggressive uses of the Area, specifically those activities violative of Article 2(4) of the United Nations Charter,²⁸⁶ then numerous other military activities may well be consonant with the regime.²⁸⁷ On the other hand, if the provision proscribes all military uses of the Area, then any military activity, whether aggressive or not, will undoubtedly be in contravention of the provision.²⁸⁸ The non-aggressive connotation of the "peaceful purposes" clause in relation to the high seas is not controlling because the applicability of that particular clause does not extend beyond the *waters* of the high seas. Moreover, as that specific clause is applied, it is accompanied by a provision implicitly recognizing the right of warships to traverse the high seas. Thus, the only reconciling construction of

Otherwise, no such claim, acquisition or exercise of rights shall be recognized.

The ICNT, *supra* note 93, art. 137, is virtually identical.

283. See note 281 *supra* for the text of ISNT Article 8(2).

284. See note 281 *supra* for the text of ICNT Article 141.

285. The meaning of "peaceful purposes" received attention, 5 UNCLOS III OR, PLENARY MEETINGS (68th mtg.) 63 (1976); *id.* (67th mtg.) 56; *id.* (66th mtg.) 54. One commentator, however, has stated that the clause permits the use of listening devices on the deep-sea floor. See M. JANIS, SEA POWER AND THE LAW OF THE SEA 85 (1976).

286. The U.N. CHARTER ch. 1, art. 2, § 4, states: "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state . . ."

287. See 5 UNCLOS III OR, PLENARY MEETINGS (67th mtg.) 56, 62, para. 81 (1976), where Mr. Learson (United States) stated:

The term "peaceful purposes" did not, of course, preclude military activities generally. The United States had consistently held that the conduct of military activities for peaceful purposes was in full accord with the Charter of the United Nations Any specific limitation on military activities would require the negotiation of a detailed arms control agreement. The Conference was not charged with such a purpose"

288. See *id.* at 56, para. 2, where Mr. Valencia Rodriguez (Ecuador) stated: "It had already been recognized in many international bodies and agreements that the use of the ocean space for exclusively peaceful purposes must mean complete demilitarization and the exclusion from it of all military activities." See also *id.* (66th mtg.) 54, 54, paras. 5-12 (comments of Mr. Bakula (Peru)). See also Rao, *The Legal Regime of the Sea-Bed and Ocean Floor*, 9 INDIAN J. INT'L L. 1, 17 (1969), contending that the majority of States define "peaceful purposes" to mean non-military. On earlier discussions see 23 U.N. GAOR, C.1 (1601st mtg.) 14, U.N. Doc. A/C.1/PV.1601 (1968) (Trinidad and Tobago); *id.* (1596th mtg.) 5-8, U.N. Doc. A/C.1/PV.1596 (Sweden).

the clause as used in reference to the waters of the high seas is non-aggressive. Neither draft convention permits comparable military use in relation to the Area. Thus, there is no compelling analogy to be drawn.

Frequently, ambiguities can be removed simply by construing a troublesome provision in the context of the entire Convention, seeking to effectuate the general intention of the drafters as evidenced in both preceding and subsequent provisions. Yet, in the case of the "peaceful purposes" clause, the ambiguity seems particularly inveterate. The ISNT²⁸⁹ as well as the ICNT²⁹⁰ contains a provision pronouncing the Area and its resources to be the "common heritage of mankind."²⁹¹ Even when the "peaceful purposes" clause is construed in conjunction with this provision, one still cannot state categorically that all military activities are proscribed. This is an evident, logical extrapolation from the previous examination of both the deep seabed and the waters of the high seas, areas long acknowledged by many commentators to be the common heritage of all mankind (*res communis*)—but areas where reasonable military uses not accompanied by a claim to or exercise of sovereignty have been permitted.

Furthermore, both draft proposals also contain a provision stating that all "[a]ctivities in the Area shall be carried out for the benefit of mankind as a whole."²⁹² Though language of similar import in the Outer Space Treaty of 1967²⁹³ prompted some scholars to suggest that any military activity conducted in that realm would transgress that specific provision because no military activity could possibly benefit mankind as a whole,²⁹⁴ the same cannot be said about such language in relation to the Area because both

289. The ISNT, *supra* note 93, pt. I, art. 3, states: "The Area and its resources are the common heritage of mankind."

290. The ICNT, *supra* note 93, art. 136, is identical to Article 3 of the ISNT. See note 289 *supra*.

291. For the origin of this concept see 22 U.N. GAOR, C.1 (1515-1516th mtgs.), U.N. Docs. A/C.1/PV.1515-1516 (1967); G.A. Res. 2340, 22 U.N. GAOR, Supp. (No. 16) 92, U.N. Doc. A/6964 (1967). See generally Arnold, *The Common Heritage of Mankind as a Legal Concept*, 9 INT'L LAW. 153 (1975).

292. The ISNT, *supra* note 93, pt. I, art. 7, reads: "Activities in the Area shall be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States, . . . and taking into particular consideration the interests and needs of the developing countries." The ICNT, *supra* note 93, art. 140, is essentially the same.

293. Article 1 of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, done Jan. 27, 1967, [1967] 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205, states: "The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries"

294. See Markoff, *Disarmament and "Peaceful Purposes" Provision in The 1967 Outer Space Treaty*, 4 J. SPACE L. 3 (1976).

the ISNT²⁹⁵ and the ICNT²⁹⁶ define "activities in the Area" to refer specifically to activities designed to explore and/or exploit the natural resources located therein. The provision clearly does not cover *all* conduct, let alone military conduct. By its express terms, it is applicable only to activities designed to explore and/or exploit the natural resources of the Area. Similarly, any contention that detection devices installed on the sea floor and designed to conduct surveillance of the ocean "space"²⁹⁷ come within the ambit of the "benefit of mankind" provision by virtue of constituting exploration of a resource is incorrect. Not only is it highly unlikely that mere observation constitutes "exploration," but both draft conventions specifically restrict the application of the provision to the *seabed* and *subsoil* and define "resources" to mean *mineral* resources,²⁹⁸ not resources as metaphysical as space.

In addition to the "peaceful purposes" clause, both draft con-

295. The ISNT, *supra* note 93, pt. I, art. 1(ii), states: "'Activities in the Area' means all activities of exploration of the Area and of the exploitation of its resources, as well as other associated activities in the Area including scientific research."

296. The ICNT, *supra* note 93, art. 133(a), states: "'Activities in the Area' means all activities of exploration for, and exploitation of, the resources of the Area." It appears that a stronger case probably can be made pursuant to the ISNT definition of "activities in the Area" in favor of bringing surveillance devices within the purview of the "benefit of mankind" provision. The relevant language covers "all activities of exploration of the Area." Nothing is said about the exploration having to be connected with "resource" exploration. Although this has been clarified with the ICNT, it still seems unlikely a convincing argument can be made under the ISNT because surveillance is probably not the type of "exploration" contemplated by the provision and, nevertheless, the surveillance is not of the "Area" (seabed and subsoil) but rather of the ocean space immediately subjacent thereto.

297. See M. McDUGAL, H. LASSWELL, & I. VLASIC, *LAW AND PUBLIC ORDER IN SPACE* 780 (1963). They designate it a "spatial-extension resource" with the most distinctive characteristic being its utility as a medium of transportation and communication. After stating that the land, ocean, airspace, and outer space constitute the most noticeable examples, they continue:

The land masses obviously contain various stock and flow resources, as do the oceans and air space and outer space. The particular reference we make is, however, to the spatial or extension quality of the resource which makes it a highly advantageous medium of transportation and communication; for present purposes, the material aspects of these resources are relevant, not for their characteristics as flow or stock resources, but because they form a surface or extension which can be made use of for movement.

298. The ISNT, *supra* note 93, pt. I, art. 1(iii)-(iv), states: "(iii) 'Resources' means resources *in situ*. (iv) Mineral resources means any of the following categorisation: (a) liquid or gaseous substances . . . ; (b) useful minerals occurring on the surface of the sea-bed . . . ; (c) solid minerals in the ocean floor . . . ; (d) ore-bearing silt and brine." The ICNT, *supra* note 93, art. 133(b), states: "'Resources' means mineral resources *in situ*."

ventions contain another provision that may well affect military uses of the Area. Article 4(1) of the ISNT, and Article 137(1) of the ICNT, provide: "No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or person, natural or juridical, appropriate any part thereof. No such claim or exercise of sovereignty or sovereign rights, nor such appropriation shall be recognized."²⁹⁹

Clearly, no State may claim or exercise sovereignty over any portion of the Area. Though mere exclusive use does not contravene the prohibition, because, as noted in relation to the 1958 High Seas Convention, all uses of ocean space necessarily operate to exclude simultaneous use of the same area by any other State,³⁰⁰ there is little doubt that both the exercise of exclusive jurisdiction over foreign nationals located within the parameters of the Area and the assertion of any occlusive authority are strictly forbidden. The prohibition against any claim or exercise of sovereignty does not ipso facto prevent military utilization of the Area. After all, most military activities constitute mere exclusive use and involve neither a *claim* of sovereignty nor an exercise sufficient to give rise to any *implication* of a claim of sovereignty. The quoted provision also contains a proscription of State *appropriation* of any portion of the seabed and subsoil thereof beyond the limits of national jurisdiction, a proscription that may well affect certain military uses of the Area. It seems axiomatic that the inclusion of appropriation among the list of prohibited State activities clearly indicates an intention to go beyond a simple denunciation of claims to or exercises of sovereignty. If this were not so, there would have been no need to include a term perceived as a mere recitation of previously proscribed conduct.

Though neither the negotiating texts nor the travaux préparatoires contain any definitive statements as to the type of conduct constituting an appropriation,³⁰¹ it apparently consists of

299. ICNT, *supra* note 93, art. 137(1); ISNT, *supra* note 93, pt. I, art. 4(1) (emphasis added).

300. See pt. III(A)(2) *supra*.

301. Before the First Session of UNCLOS III, many seabed issues were debated by the United Nations Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction. In 1973, Subcommittee I forwarded a draft convention to UNCLOS III which contained several alternative provisions, 28 U.N. GAOR, 2 Supp. (No. 21) 54, U.N. Doc. A/9021 (1973). Alternative draft Article 4 read:

(A)

Neither the Area nor (its resources nor) any part thereof shall be subject to appropriation by any means whatsoever, by States or persons natural or juridical, and no State shall claim or exercise sovereignty or sovereign rights over the Area or (its resources or) any part thereof; nor,

something less than an explicit or implicit claim of sovereignty. Consequently, the mere fact that a certain military use is not sufficient to contravene the proscription of any claim to or exercise of sovereignty over any portion of the Area does not mean that it is authorized by international law. If the use amounts to an appropriation, then, despite the fact that it may comport with all other principles enunciated in the draft conventions, it is prohibited.

Standing alone, or construed in conjunction with the "common heritage" or "benefit of mankind" provisions, the "peaceful purposes" clause lacks sufficient normative clarity to proscribe all military activities within the Area.³⁰² Neither the draft conven-

except as hereinafter otherwise specified in these articles, shall any State or any person natural or juridical claim, acquire or exercise any rights over the resources of the Area or of any part thereof. Subject to the foregoing, no such claims or exercise of such rights shall be recognized.

OR (B)

1. No State shall claim or exercise sovereignty or sovereign rights over any part of the sea-bed or the subsoil thereof. States Parties to this Treaty shall not recognize any such claim or exercise of sovereignty or sovereign rights.
2. Similarly, the sea-bed and the subsoil thereof shall not be subject to appropriation by any means, by States or persons, natural or juridical.

The precise meaning of "appropriation" was never clarified. Moreover, it appeared in neither the 1971 report, 26 U.N. GAOR, Supp. (No. 21), U.N. Doc. A/8421 (1971), nor the 1972 report, 27 U.N. GAOR, Supp. (No. 21), U.N. Doc. A/8721 (1972). However, in 1971 Canada submitted a paper to the Committee, International sea-bed régime and machinery working paper, U.N. Doc. A/AC.138/59, cited in 26 U.N. GAOR, Supp. (No. 21) 205, U.N. Doc. A/8421 (1971), which contained an Article prohibiting "appropriation." In explanation it said:

Bearing in mind *international experience with various uses of the high seas* . . . it would also be advisable to give a clearer indication in the treaty as to what might constitute a form of appropriation falling short of a claim or exercise of sovereignty or sovereign rights (a question which is closely related both to the scope of activities to be governed by the régime and to the reservation of the sea-bed for exclusively peaceful purposes). To this end "appropriation" might be defined to mean any *exclusive use or denial of the right of access* not provided for in the treaty.

Id. at 206. (emphasis added). Though denial of the right of access is surely appropriation, it will be demonstrated below that to proclaim mere exclusive use an appropriation is unwise.

302. Mr. Bavand (Iran), recapitulated the various interpretations voiced at UNCLOS III, 5 UNCLOS III OR, PLENARY MEETINGS (68th mtg.) 63, 65 (1976):

Three trends of thought seemed to emerge . . . Many States had taken the view that "peaceful purposes" meant the prohibition of all *military activities*, including activities by military personnel, on the sea-bed. Other States interpreted the principle as prohibiting all military activities for *offensive purposes*, but not, for instance, the use of military means of communication or the use of military personnel for scientific purposes. A third group of States maintained that the test of whether an activity was

tions nor the working documents indicate any consensus as to the meaning of the clause. Moreover, the "common heritage" provision merely operates to prohibit assertions of sovereignty over the Area, while the "benefit of mankind" provision governs only activities designed to explore and/or exploit the mineral resources of the seabed and subsoil.

Any explicit claim to sovereignty over a portion of the Area is proscribed. Claims implicit in any assertion that a portion of the Area is closed to foreign nationals, or in the exercise of exclusive jurisdiction over such nationals found within a portion of the Area, are similarly proscribed. Because neither draft convention expressly prohibits every possible exclusive use of the Area, it appears that many military uses continue unaffected unless it can indubitably be shown that "peaceful purposes" proscribes all activities of a military nature. Even if this proscription cannot be demonstrated, those exclusive military activities *exhibiting some indication of permanency* are prohibited by the proscription of appropriation.

c. Assessment

Most authorities are still in disagreement as to whether the international legal regime established by the 1958 Conference designates the deep seabed *res communis* or *res nullius*. Nonetheless, it is clear that both characterizations permit military utilization,³⁰³ with the former differing only in that it proscribes efforts to subject the Area to State sovereignty. In general terms, UNCLOS III leaves the regime of military utilization intact. However, in addition to characterizing explicitly the Area as *res communis* and thereby proscribing all claims to or assertions of sovereignty, any use exhibiting an indication of permanency is prohibited by the proscription of "appropriation" of any portion of the ocean floor beyond the limits of national jurisdiction. The only permissible exclusive military uses are those of a temporary nature.

The vastness of the deep seabed, its distance from the littoral, and its physical composition relative to the superjacent high seas all conjoin to increase the likelihood that in the future it will become one of the primary areas for substantial ASW deployment

peaceful was whether it was consistent with the Charter of the United Nations and other obligations of international law. (emphasis added).

303. See *Legal Regime of Inner Space*, *supra* note 132, at 188; Rao, *Legal Regulation of Maritime Military Uses*, 13 INDIAN J. INT'L L. 425, 453 (1973). But see Stoeber, *The "Race" for the Seabed: The Right to Emplace Military Installations on the Deep Ocean Floor*, 4 INT'L LAW. 560, 563-64 (1970).

programs (and for that matter, military uses in general). The United States has already embarked on programs designed to actualize this prognostication. In the area of anti-submarine mines, the "Captor" (MK-46) is designed to take advantage not only of reduced coastal State sensitivity to military utilization of areas of the ocean floor distant from the littoral but also of the fact that the seabed, as opposed to the water column, admits to the affixation of mines which one can rest assured will remain in place to threaten enemy submarines in perpetuity. Also, since the early 1970's military engineers have been seriously considering the deployment of a network of massive fixed acoustic detection instruments known as the "Suspended Array System" (SAS). Reportedly, one such device stationed in each ocean would "insonify" the earth's entire water column. The potential military advantages incident to either program are not difficult to conceptualize.

The present international legal regime governing military utilization of the deep seabed does not effectively proscribe undertakings as ambitious as Captor and SAS. Assuming that deployment of these ASW devices is unaccompanied by any closing of the area to use by foreign nationals, or by assertions of jurisdiction over such nationals found in the immediate vicinity, the exclusive use appears quite consistent with notions of reasonableness. Historically, this standard has given great deference to military uses of ocean space unless they created inordinate interference with inclusive uses. The fact that both Captor and SAS are to be deployed far below the navigable surface removes almost any possibility that either will result in the least interference with inclusive uses of ocean space. Most likely, the only interference will be with exclusive military uses by other States.

A regime that permits deep seabed emplacement of ASW devices comparable to SAS or Captor is definitely undesirable. Such a fixed acoustic detection network would result in the transparency of the earth's entire water column. States could keep constant track of the precise location of every SSBN. The resultant loss of invulnerability would subject the SSBNs of potential opponents to destruction. As a consequence, the last assured counterforce component that may well have served in the past to deter the launching of any preemptive nuclear attack will itself become subject to elimination. A strategic asymmetry of this sort would jeopardize international stability and State security by

threatening to disrupt the balance of power.³⁰⁴ Any nation that possesses the capacity to attrite sufficiently all three components of the strategic triad may not feel the least averse to launching a nuclear strike if the international situation dictates.

The regime embodied in the proposals of UNCLOS III effectively proscribes the installation of such ASW devices and thereby preserves the invulnerability of the counterforce deterrent carried by the SSBN. Both the ISNT and the ICNT go beyond the mere proscription of claims to or assertions of sovereignty and prohibit all States from appropriating any portion of the Area. Specifically, although exclusive temporary use is permitted,³⁰⁵ any exclusive use that exhibits an indication of permanency, such as installation to the seabed, is prohibited. A proscriptive regime of this character guarantees international stability and State security through maintenance of the balance of power.

As mentioned in relation to the waters of the high seas and to those of the EEZ, proscriptive regimes frequently prove illusory and sometimes actually destabilizing. It would be fatuous to establish a regime prohibiting certain conduct if in fact the degree of compliance could not be readily verified. The perfidious would violate the agreement with impunity, oftentimes subjecting adherents to military disadvantage. This is clearly not the case with the proscription of State appropriation of any portion of the Area. Although admittedly the waters of the high seas are vast and susceptible to inconspicuous deployment of water column ASW devices, any effort to install successfully a network of fixed acoustic detection arrays or anti-submarine mines to the seabed will necessarily require a large-scale task force stationed on the navigable surface working for a considerable period of time. To verify the extent of State compliance with the proscription would be quite easy.

For precisely the reason stated in the preceding paragraph, it would be unwise to construe the "peaceful purposes" clause contained in each draft convention to mean an absolute proscription of all military uses of the Area. How, for instance, could one possibly verify whether some *temporary* military activity is taking place on the ocean floor, thousands of feet below the opaque water surface? Military uses designed to be *permanent* in nature inevitably result in significant surface activity; the same cannot be said of temporary uses. Therefore, any proscription of temporary military uses of the seabed beyond the limits of national ju-

304. See W. BURKE, TOWARDS A BETTER USE OF THE OCEANS 88-89 (1969).

305. *Id.* at 88.

risdiction will create a false sense of security. States with no moral compunction to abide by the proscription will undoubtedly violate it, while adherents will be placed at a military disadvantage.

IV. CONCLUSION

Certain military uses of ocean space jeopardize international stability and the widely shared value of State security. For instance, though it is quite clear that peacetime ASW programs designed for purposes of self-defense present little threat to the continuation of international tranquility, the same cannot be said of programs designed to deploy conjunctively massive fixed acoustic detection arrays, hunter-killer submarines, and electronically guided long-range anti-submarine weapons. Assured invulnerability of the counterforce component carried by the SSBN serves to deter nuclear conflict and cavalier foreign policy. In-sonification of ocean space accompanied by weapons that threaten the survivability of nuclear submarines launching Polaris/Poseidon missiles may well erode the constraints preventing thermonuclear conflagration.

If any international legal regime designed to control military uses of ocean space, particularly peacetime ASW, is to be effective, the extent to which the State-Parties observe the provisions must submit to ready verification, and the regime itself must in fact preserve the balance of power. Although it is unlikely many States would adhere to an arms-control convention that actually threatened to disrupt rather than maintain the balance of power, scrutiny of the annals of history could surely unearth several instances in which just such a thing has happened. But it should be kept in mind that the balance of power may also be jeopardized by a regime that does not specifically embody destabilizing obligations, but rather obligations to which the extent of State-Party observance cannot be easily verified. The perceived advantage incident to perfidy may prove too tempting to resist.

This study has sought to focus attention, not only on the specific legal rules regulating the use of ocean space for ASW activities, but also on the desirability of the particular regimes in reference to the desiderata of maintenance of the balance of power and verifiability. Measured against these requisites, the 1958 Conventions and the products of UNCLOS III establish desirable *proscriptive* regimes from the coastline to the outer

boundary of the territorial sea and equally desirable *permissive* regimes over all waters beyond the territorial sea. Throughout the remainder of ocean space, exclusive of the continental shelf, it appears that only the ISNT and the ICNT create comparably desirable regimes.

The 1958 Conventions permit all States to deploy ASW devices within the waters of the high seas. Both negotiating texts issuing from UNCLOS III permit deployment within the waters of the EEZ in addition to those of the high seas. This permission appears preferable because it would be particularly difficult to verify adequately compliance with a proscriptive regime and because successful deployment will infrequently prove beneficial. Any foreign use threatening coastal State security will fall within the ambit of Article 51 of the United Nations Charter. With respect to the seabed immediately subjacent to the waters of the EEZ and the deep sea, however, only the products of UNCLOS III prohibit foreign State deployment. The 1958 Convention deals with such deployment on the basis of Article 51.

Pursuant to the 1958 Conventions, the seabed beyond the continental shelf is clearly subject to foreign State military utilization. When one considers that that area is susceptible to emplacement of massive fixed acoustic detection devices, it is readily apparent that a proscriptive regime, such as that proposed by the products of UNCLOS III, is highly desirable. Because the installation of such devices will necessitate large-scale, prolonged foreign State naval activity on both the surface and the seabed below, it will be particularly easy to verify the extent of State-Party observance.