Long time no see, no hear!
Warmest regards to you & Lya,
Sheila & Fred,
Oct 25, 1967.

SYMPOSIUM:

PAPERS ON ALTERNATIVE REGIMES FOR THE SEA.

SUBMARINE ZONES OF SPECIAL JURISDICTION UNDER THE HIGH SEAS --

SOME MILITARY ASPECTS

by
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"SUBMARINE ZONES OF SPECIAL JURISDICTION"[1] UNDER THE HIGH SEAS -- SOME MILITARY ASPECTS

I: INTRODUCTION

(1) The Place of this Paper in the Author's Blueprint for an International Regime of the Oceans.

At the outset I wish to offer a definition and make two preliminary points. Following the position I took in my earlier study "Special Regimes and Pre-emptive Activities in International Law"[2] I propose that the word "regime" be used to indicate:

> "A system of rules operating within a given legal framework or with respect to a stipulated group of related objects to allocate effective rights and resolve conflicting claims on the basis of common values."[3]

To this definition I should add the observation that within the regime governing the allocation and evidencing of submarine zones of special jurisdiction I propose to discuss there are systems of priorities between types of envisaged uses (and especially military uses) of the sea. So much for the definition.

The first of my two preliminary points is that I have not changed my position from that put forward in the paper I gave at last year's Annual Summer Conference of the Institute regarding the terms of the treaty regime and the principles for reconciling conflicting uses of the seabed and subsoil of the oceans beyond the continental shelf I proposed therein.[4] (My proposal regarding the continental shelf was that this region should still be governed by the Convention on the Continental Shelf, Geneva, 1958,[5] with one amendment -- the elimination of the exploitability test in Article 1.) Secondly, following the definition just given, I view the term "regime" as applying, in the context of this study, to the legal rules and doctrines governing and reconciling possible alternative and even potentially conflicting uses, intereste and activities. Hence I cannot accept a view

that each use, economic, military and scientific, necessarily must have its own regime -- as would seem implicit in the choice of this panel's title and the allocation of individual topics. Indeed, such a theory of separate and alternative regimes would be an invitation to anarchy. My second point is concerned to clarify assumptions which the use of the phrase "alternative regimes" (and especially, within that wider formula the more restricting term "alternatives for military use") would appear to suggest regarding the effect of the outbreak of war upon a regime governing alternative or conflicting uses of the oceans. This paper will not be centrally concerned with the impact of war on the legal regime I suggested here last year and will indicate in later paragraphs.

(a) Can there be an "Alternative Regime" for "Military Use"?

My own proposals for the emerging rules and doctrines of the sea, if the oceans are to be rationally used, remain that the governing regimes should not be "alternative" to one another, but should reconcile alternative uses. There should be one embracing regime regulating each major economic and juridical division of the high seas; thus there should be one for the continental shelf, another for the resources of the seabed and subsoil of the deep oceans, one for the living resources of the volume of the waters, and another regulating transoceanic and maritime seaborne and airborne traffic. The proposal I put forward in the paper I gave here last year for a regime ordering the distribution and recognition of rights over the resources of the seabed and subsoil of the oceans, may, perhaps, offer merely one of a number of possibilities. But whatever the form of the international regime which does emerge, it should be one directed to bringing about the maximum use of available resources for the general benefit in order to achieve equitable allocations of the oceans' resources. The regime I suggested last year not only offered a blue print, it also provided the modalities of the transition from the present primitive and inadequate regime to one which was proposed as more completely responding to the present-day needs of the world.

(b) Military Uses -- War or Peace?

The premise of this present paper, let me repeat, is that the

regime discussed in the pages which follow is relevant to peaceful relations -- not warlike ones. Or, if relevant to the conduct of a limited war or a civil war, the regime discussed in the pages which follow is outside the conduct of hostilities and of actual military or naval operations. If the war is less than an unlimited one, then only those activities which are within the zone, the acceptable means, and the scope of the combat will be affected. But if the war is unlimited, then relations defined in terms of a peaceful regime will be changed into relations determined by the exigencies, and the dimensions, of total war. For unlimited war throws down a great land-mark[6] in international law whereby all legal relations are changed to the extent that they fall within the scope of the conduct of hostilities. In modern terms the issue of whether a legal relation has been translated from the dimension of peace to that of war may well depend on whether an escalation of hostilities includes, either by reason of their location or their category, activities which, without their being caught within the net of warfare, would remain within the regime proposed in this study. For example, whilst two states wage a limited war on each other on dry land, their fixed submarine bases, installation and depots may well fall within a regime governing peaceful relations. In such a situation these "sanctuaries" would be respected by the very nations which are waging war in other theatres.

(2) The Place of the Regime in International Law.

Traditionally the international law of peace distinguished between two categories of seas: those under the sovereignty of the coastal state by reason of a number of labels -- territorial waters, internal waters, historic waters; and those beyond the sovereignty of any state -- the "free high seas", these being viewed as res extra commercium whether

as res nullius or as res omnium communis. In recent years some novel doctrines have been developed for the affirmance of coastal states' claims to extend their exclusive authority further and further out from their coasts and into the maritime areas which formerly were characterized as "free high seas". Although these many doctrines pay lip-service to the freedom of the seas, like the older formulations of territorial and internal waters, they fall within the general category of exclusive rather than shared claims to use a resource or to exercise a jurisdiction. These contemporary variations on the older theme of exclusivity include: contiguous zones, zones of specialized jurisdiction, the continental shelf doctrine, and conservation zones. All these resemble the older concept of territorial and internal waters in that the rights they justify arise from the unilateral action of the coastal state and are exclusively expressed by that state. Though guided by the ideal of "progressive development" as well as faithful to the task of codification, the Geneva Conventions on the Law of the Sea, and their attendant Resolutions and Protocol, did little more than cast the traditional pattern of the international law of the sea into an authoritative form, consecrate several emerging doctrines (for example that of the continental shelf) as existing law, and introduce some specific and therefore limited reforms. The Conference did not, however, effectively temper the basic pattern of the regime of the world's oceans.

This general customary regime has been modified, with respect to a number of resources, and especially various species of fashionably edible fish, by treaty regimes (some bilateral, others multilateral) establishing regional fishery authorities which conduct research and exercise independent regulatory powers over access to the fishery in terms of conservation and exploitation claims. But even when due account is made of

these treaty regimes, the traditional, conceptualistic approach still holds sway over the general study and application of the discipline called international law of the sea. This is true, not only of those areas where treaty regimes have failed to replace the traditional order, but even in the negotiations for and interpretation of the existing treaty regimes. Invocation of the traditional concepts only too often provides the rhetoric for asserting claims to be incorporated into the treaty's provisions. Also international lawyers show a marked propensity, when confronted by the task of interpreting the terms of an existing treaty, to put forward, or to accept, the construction most congruent with traditional doctrines.

As world population increases, so mankind is looking more and more to the seas to supply natural resources of all kinds as these diminish on land in the face of an ever-increasing demand. The oceans offer us a great variety and multitude of mineral and organic resources, some of which have only come within the scope of our understanding and use in recent years, or even months. The traditional and still-existing rules which govern the international law of the sea have become completely inadequate to give a secure basis for winning all the resources of the sea -- those which have long been known and available equally with those which are newly discovered and exploited. This observation is particularly cogent in connection with the more newly known and exploitable resources. The economics of winning these call for great outlays of capital, skill and time. But, as international law stands at present, such investments may be placed in jeopardy since, beyond the territorial seas of the coastal states, and outside their continental shelves, the primitive Law of Capture provides the sole muniments of title to the hard-won riches of the seas. Such a legal rule as this provides no adequate security of title once a coastal state's zones of jurisdiction have been left behind. In addition,

it renders investment in mineral-winning activities in the deep oceans unnecessarily risky and unattractive to lenders, investors and entrepreneurs -- thereby reducing if not nullifying the incentives for engaging in these activities. When the technology, knowledge, capital and desire to engage in an activity are all present, and when that activity would be for the benefit of mankind, it seems absurd that only the state of the law should, through the ineptitude and primitiveness of the applicable legal doctrines, stand in the way of successfully pursuing that activity. Hence there is a pressing need to develop legal concepts and doctrines to secure transactions, equitably allocate the benefits derived from placing the oceans' resources at the disposal of mankind, and ensure that inconsistent uses of the high seas do not lead to conflicts not amendable to juridical formulation and resolution. The general regime I provisionally offered in a preliminary form in my paper last year is intended to bring about the type of legal change so needed today in the international law of the sea.

II. SOME IMAGINARY MILITARY SYSTEMS INDICATING PRESSURE FOR LEGAL CHANGE

Reading some of the technical journals has induced me to engage in some science-fiction speculation, and, on the premise that some aspects of the systems I am going to outline may, perhaps, feasibly form part of a nation's future defense arsenal, I shall propose the sort of legal regime which claims for the protection and integrity of such imagined systems and installations will logically call for. Most of the military hardware and establishments envisaged in the following paragraphs are based on articles and papers in recent issues of Geo-Marine Technology and Oceanology International, and the papers reproduced in The New Trust Seaward.[7]

(1) Submarine Pens and Forts.

In the near future, when men have learnt to establish semi-permanent

dwellings under the sea, naval authorities will see the need to establish permanent fixed submarine maintenance facilities, research and communications stations, storage depots and repair works (miniature submarine San Diegos, Gibraltars, Maltas and Guantanamos). These could be built on the seabed or in the subsoil; or could float suspended at various depths below the surface of the sea. However constructed and placed, these installations would need protection, not only from discovery and from espionage, but also from the direct exercise of either secret or overt force.

Accordingly, some analogy of states' present-day right to "territorial integrity" should be extended to such establishments -- despite the novel three-dimensional qualities of their borders. In this context there is one preliminary difficulty: under international law (and apart, possibly, from an extended and therefore potentially dangerous use of the doctrine of occupatio terrae nullius) there are no available doctrines which have been specifically fashioned for asserting territorial sovereignty over areas and volumes of submarine space, and for establishing sacrosanct national boundaries in and below the volume of the waters and beyond the geographical area of coastal states' continental shelves, territorial waters, and/or various types of protective contiguous zones. Can these permanent and fixed submarine establishments be lawfully protected? Two opposite possible solutions spring to mind. The first is to find security in existing international law. For a state may prefer to rely upon the protection which secrecy, provided by the limited effectiveness of radar and the blackness and vastness of the area and distances, both vertically and horizontally, of the ocean depths, affords -- a preference which would be strongly fortified when secrecy is reinforced by the right of self-defense in the event of a threatened attack. On the other hand, states relying on this combination of secrecy and self-defense expose themselves to a major risk; namely

that their installation may be discovered by vessels exercising the freedom of the seas, and hence immune from legitimate reprisals. An alternative possible solution would be to bring submarine installations within a treaty regime which, on an analogy with Article 82 of the United Nations Charter, recognizes "strategic areas" from which unauthorized persons, vessels and systems can be excluded under international law, and wherein the doctrine of the freedom of the seas would have no place. A state may not, however, seek to obtain the advantages of both types of regime. It must choose between them.

(2) Fixed or "Hardened" Submarine Rocket Sites.

Similar problems apply to fixed or "hardened" submarine rocket installations as have already been discussed in connection with submarine naval bases, work shops, supply depots and establishments. Here, too, a state may rely on either secrecy or the treaty regime which has just been indicated.

(3) Polaris Submarines, Deep Diving Systems and Mobile Naval Research Laboratories.

The units indicated in this heading include the many types of submarines, deep submersibles and surface vessels which have recently been, or are now being, developed. Since mobility is their keynote, there would appear to be little need to extend the suggested treaty regime to these craft. Unlike the units I have just discussed, general international law and the 1958 Geneva Convention on the High Seas would provide these mobile units with an adequate regime during peacetime -- subject to the eventual possibility, should these types of vehicle become very common, to agreements establishing "rules of the road" and perhaps, to similar arrangements as those which today govern major international air routes.

(4) Submarine Hunting Systems.

Secrecy and surprise, as well as the nuclear warhead of its weapons, provide the Polaris submarine with its awesome authority. This submarine warship's invulnerability depends on the difficulty, at the present state of the art, of finding it and keeping track of it -- a function equally of the present-day inability of radar to operate effectively under water and of the short range of sonar and the slow travelling speed of its signals. On the other hand, a perusal of the current and recent issues of such periodicals as Geo Marine Technology and Oceanology International show the many types of equipment which could be combined, with a little imagination, to limit the Polaris submarine's authority by ending its capability of surprise. One such combination has already been publicly proposed for peaceful uses -- namely General Dynamic's proposal for a "World Weather Watch" system. This is, briefly, to add to the present-day meteorological system of land stations supplemented by measurements in the upper atmosphere and the reports of the weather satellites, a world-wide network of giant data-collecting ocean buoys. The data which these buoys could collect, it is suggested, could be instaneously relayed to central positions by communications satellites. Why should such a system not be adapted to submarine watching? For if the buoys were in close enough proximity they could utilize sonar, for that system of detection's great weakness, slowness and short range of the signals, would no longer be a critical limitation to watching submarines, even such high speed, nuclear-powered submarines, as those mounting the Polaris missile.

What sort of a legal regime would be most apt for such a defensive system? My suggestion is that a "World Submarine Watch" system should be established and should be characterized in law as an "international easement" to be owned and controlled by a supranational agency whose members could include not only the contributing states, but also the Secretary General of the United Nations and any disarmament inspection agencies which might be

established in the future. (A similar status -- with suitable variations -- could be developed for an internationalized and universal "World Weather Watch" system, to the advantage and prosperity of the whole world.) If the "free for all" alternative were allowed there would be the potential wastage and confusion resulting from a number of countries establishing their own "World Submarine Watches". Here as in so many developing frontiers of international law, the danger of conflict would appear to threaten not only from inconsistent uses, but also from overcrowding of facilities directed towards the same, or parallel uses.

III: DEEP OCEAN MINING AND MILITARY USES

(1) Legal Relations within the Draft Convention (or Articles).

My basic proposals regarding this group of uses of the seabed and subsoil remain unchanged from last year. My position still is that legal analogies may fruitfully and appropriately be drawn from the provisions and institutions of the International Telecommunications (ITU) Convention for allocating to states specific areas of the seabed and subsoil, to be designated Submarine Zones of Special Jurisdiction, and that military activities should not fall within a distinct regime from that adumbrated in the Draft Convention (or Draft Articles) on the Resources of the Seabed and Subsoil I proposed in my paper last July.[9]

An outline of the general contours and qualities of such a regime might well be briefly indicated at this point. First, my proposal puts forward procedures for allocating and evidencing states' Submarine Zones of Special Jurisdiction for winning mineral resources from the seabed and subsoil of the deep oceans beyond states' territorial waters and continental shelves (the continental shelf being defined in terms of depth -- i.e., two hundred metres -- only). Second, the suggested regime provides

principles for the transnational[10] recognition and reception of valid and marketable titles to those resources. This second group of principles both outlines the terms, and the means of development, of an international (or, better, transnational) regime of recognition -- of "Full Faith and Credit" -- to be accorded by the authorities of all states who are parties to the regime to titles allocated by each state and pertaining to resources won from the bed and subsoil of the deep oceans. To be more explicit: my intention was to set out the principles of a regime governing the assurances of titles created under the municipal law of each state, by the recognition of those titles in the courts of all the others through an international agreement, and by means of establishing, under public international treaty law, conflict of laws standards and obligations of recognition.

By means of establishing a regime of this kind certain areas whose resources might otherwise subject them to conflicting multiple uses, or to over-use, would be preserved from becoming arenas of intractable disputes. While negotiation and agreement could effectively achieve an acceptable distribution of the Submarine Zones of Special Jurisdiction, requiring the delicate task of allocating mineral-bearing submarine areas to remain within the scope of Plenipotentiary Conferences, the recordation of rights already established could, and should, be left to an appropriate administrative agency. Hence, central to that study was the proposal that regional agencies with, necessarily, a central index in the United Nations Secretariat should be established to carry out evidentiary and recording functions. (These agencies would have no authority to grant titles.) The primary function of such institutions would be to ensure that the whole world had effective notice of the existence, area and content of recorded rights. With regard to defense activities I suggested

a third set of principles. I took, as my starting point, the strategic provisions of Article 82 of the United Nations Charter as an analogy. By virtue of those proposals states seeking to establish fixed defense installations on sea mounts and on the seabed should give notice to the effect that such areas have been taken for defense purposes and are not to be viewed as being any longer under the general international law rules governing the seabed and its subsoil. Upon such an announcement the asserting state may, further, establish "security zones" around its strategic areas. The jurisdiction asserted would be analogous to that claimed in the Australian Defense (Special Undertakings) Act of 1952[11] (proclaiming the Porto Bello Islands to be a "prohibited area" for the conduct of atomic bomb tests), rather than that published by the United States and the Soviet Union in their nuclear weapon testing areas on the high seas. (These countries merely issued Notices to Mariners.[12]) On the other hand, the proclamations of defense areas should be accompanied by Notices to Mariners; but these notices would be merely evidence of the privileges asserted, not the means creating those privileges. Naval submarines would not, of course, fall within this regime. They will have to take their chances, as heretofore, as they clandestinely move about under the cover of the seas.

(2) Legal Relations Outside the Draft Convention (or Articles).

In concluding I would like to add the observation that individuals, corporations and, indeed, states should be perfectly free to invoke, or not to invoke, at their discretion, the foregoing principles. They might, conceivably, prefer to carry on a specific submarine activity outside the porposed treaty regime and in secret. Again, a state placing a higher value on secrecy with respect to a defense installation on the

seabed than on the regime envisaged in the paper I gave here last year, could stay outside that regime, and rely on whatever protection general international law might allow. In such a case that state's reliance would, primarily, not be on any legal concepts, but upon secrecy and camouflage -- in the widest sense. (This is, of course, the present situation under general customary international law.) Outside the proposed treaty regime a state could not demand the immunities and protection, nor the exclusive rights, which that regime could afford, any more than today the United States Navy can demand exclusive rights on the high seas when its exercises excite the curiosity of Russian "trawlers".

The exploitation of resources under the proposed treaty regime should take priority over defense carried on outside the scope of the proposed articles. Thus no Notice to Mariners, promulgated for example by the Soviet Union, would provide an effective basis for deforcing a non-Russian enterprise from working a mineral deposit with respect to which that enterprise has an internationally effective claim recorded under the proposed treaty regime. In brief, a state opting to bring a fixed submarine installation into the regime gains immunity, but at the cost of the secrecy of that installation's general location -- but not, necessarily, of its exact location, nor of its characteristics. If a state prefers the shield of secrecy, it will stay outside the regime; but at the cost of immunity if the secret should be broken, or the installation discovered. Because, at least in most cases, the discoverer could invoke the freedom of the seas, the right of self-defense may well be unavailable to protect the secrecy of an installation. Here, indeed, we do have use for the phrase "alternative regimes";[13] but, one should note, here it refers to the same kinds of uses-- not to "alternative uses." Because, furthermore, if

alternative regimes are possible then they must be seen as co-existing. Hence a principle resolving inevitable conflicts between them is called for. Such a principle is that offered in my paper last year which gives priority to uses derived from validly recorded Submarine Zones of Special Jurisdiction over those depending on general international law.

IV: SCIENTIFIC RESEARCH AND THE REGIMES OF THE SEABED

(1) On the Continental Shelf.

The provisions in paragraphs 1 and 8 of Article 5 of the 1958 Convention on the Continental Shelf[14] regarding free scientific research should be modified. Those paragraphs are as follows:

> "1. The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, nor result in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication."

and;

> "8. The consent of the coastal state shall be obtained in respect of any research concerning the continental shelf and undertaken there. Nevertheless, the coastal state shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research into the physical or biological characteristics of the continental shelf, subject to the proviso that the coastal state shall have the right, if it so desires, to participate or to be represented in the research, and that in any event the results shall be published."

Last year at this Institute I discussed the significance of the term "unjustifiable interference" in paragraph 1 (suggesting its kinship to the civil law concept of abus de droit). This discussion will be developed, for the purposes of this present study, in terms of the interactions of military uses and scientific research. Again, the significance of the inclusion qualifier "unjustified" in the paragraph 1's formulation in terms of navigation and fishing, and the omission of that significant qualifying adjective from that paragraph's clause relating to

scientific research will be reviewed in the light of paragraph 8.

The 1958 United Nations Conference on the Law of the Sea at Geneva missed the opportunity of declaring a "freedom of research, experiment and exploration"[15] as a freedom of the high seas while drafting either the Convention on the High Seas[15a] (Article 2 of which enumerated a selection of such freedoms) or the Convention on the Continental Shelf. This omission is to be regretted, especially since the United Kingdom had, in 1955-56,[16] advocated such a freedom as a fifth freedom of the high seas, to be inserted in Article 2 of the International Law Commission's 1955 Draft Articles on the Regime of the High Seas (later Article 27 of the Commission's 1956 Articles Concerning the Law of the Sea[17] and, with significant changes, Article 2 of the Convention on the High Seas). Despite its composition of men of learning and of savants, the International Law Commission did not see fit to insert into any of its drafts for a Continental Shelf Convention a protection of the pre-existing freedom of scientific research at the same time as it was formulating the terms of the expansion of states' authority over the seabed and subsoil of the continental shelf -- thereby rendering the freedom of scientific research in that region more precarious than heretofore. The protections now in Article 5 of the Convention on the Continental Shelf[18], limited as they are, were added at the 1958 United Nations Conference on the Law of the Sea at Geneva as a result of discussions in the Fourth Committee of that Conference[19], a stylistic change in the Drafting Committee,[20] and the agreement of the 9th Plenary Meeting of the Conference.[21] Apart from noting that the Fourth Committee's deliberations point to a search for a balance between the interests of scientific research and the claims of coastal states to exercise discretionary authority and control over their contiguous and adjacent continental shelves, the travaux préparatoires are of little assistance in determining questions as to the scope of the freedom of science these clauses would appear to vouchsafe, or the effectiveness these protections would have, should they be invoked in any concrete

case.

The difference in formulation in paragraph 1 between the protection to be accorded to "fundamental oceanographic or other scientific research" and that to be accorded to "navigation, fishing and the conservation of the living resources of the sea" call for elucidation. For a while the latter (the economic) group of activities are to be protected only from "unjustifiable" interference, scientific work which is intended to culminate in "open publication" appear to be protected from all interference -- the qualifying adjective "unjustified" being dropped from interference with this latter class of activities. Does this mean that Article 5, paragraph 1, is mandatory, and that all forms of continental shelf exploration and exploitation activity which might, conceivably, interfere with the types of scientific research[22] falling within the clause are prohibited? Or does it merely seek to protect scientific work actually to be undertaken, or in the process of being conducted, in situ? An affirmative answer to the first question would lead to the stultification of much business-oriented exploration and exploitation activities, because such activities may possibly impair future scientific research. An affirmative response to the second question might lead to the complete foreclosure of the interests of possible future research. Clearly neither of these answers was in the contemplation of the draftsmen. Commonsense tells us that although paragraph 1 is silent as to whether certain exploration and exploitation activities may set limits to the freedom of scientific research, that freedom is not altogether without those restraints which would enable exploration and exploitation activities to be reasonably carried on. To construe the paragraph as excluding all interference, even those interferences which might arise from necessity or from the claims of higher social values specifically operating in an individual context, would render the freedom of scientific research a tyrant governing all other uses of the resources of the world's continental shelves.

But if exploration and exploitation activities may, in special circumstances, also justifiably interfere with scientific research, we should ask why, then, was the modifying adjective "unjustified" excluded from the description of the prohibited interferences with scientific research, but included in that of the prohibited interferences with navigation, fishing and the conservation of the living resources of the sea? My own response to such a question would be to suggest that the answer lies in the fact that if the term "unjustified" appeared in paragraph 1 in both contexts, and without further modification with respect to the impact of the exploration and exploitation of the continental shelf upon both economic and scientific activities, then the possibility that the arguments of lawyers and judges who might seek to give the same meaning to both uses of the word "unjustified", and to develop the same criteria for the application of both -- notwithstanding their greatly different contexts -- would have to be faced. Thus, the submission here is that the omission of the term "unjustified" from the clause relating to the freedom of scientific research hereby indicates that the continental shelf exploration and exploitation activities which should be permitted to interfere with this freedom must be justified by entirely different criteria from those permitting interference with navigation, fishing and the conservation of the living resources of the sea.

Paragraph 8 formulates certain duties which reciprocally bind coastal states and those individuals and institutions who engage in the scientific research activities indicated by the article; but clearly its main thrust is the protection of the "sovereign rights" -- the discretionary powers -- of coastal states. Hence it would appear that the only limitations on those states' authority to grant or withhold consent at will is the provision that their consent is not to be "normally" witheld. The limits for applying this important modifying adverb "normally" are not indicated. While it remains in the paragraph it provides a temptation for coastal states

which may be uncertain as to the policies they should apply, or suspicious of research plans, to treat many genuine applications for the conduct of original research as outside the norm. Individual bona fide scientific projects could, when the clause is applied in this way, be diverted, modified, and even frustrated by states complying with the letter of paragraph 8. My suggestion is, therefore, that there should be, in addition to the obligations of "not normally withhold[ing]. . .consent" on the part of the coastal state, the provision of a positive duty of supporting, or at least of respecting, as a freedom of the seas, bona fide scientific researches carried out on that state's contiguous and adjacent shelves, and, in addition, of restraining its nationals from interfering with those researches. The paragraph should, accordingly, include positive obligations of protection and assistance, and of the recognition of a general freedom of research, experiment and exploration on the continental shelf. On the other hand these obligations, and this freedom, should be formulated so as not to stultify the coastal state's essential requirements of survival. Nor should the freedom of scientific research be permitted to expose the coastal state helplessly to espionage. Finally, a state should, when issuing exploration or exploitation licenses with respect to its continental shelf, bear in mind their effect on existing, impending, or even planned research (when known to that state's officials) and make both non-interference with the research activity, and non-destruction (from the researchers' point of view) of its subject-matter, a condition of granting the license. In sum, these proposals are all intended to implement the consideration that exploration and exploitation policies, no less than conservation policies, should be developed which take into account the enormous value of scientific research in the development of the shelf region, and be subordinated to that activity.

(2) Beyond the Continental Shelf.

What should be the position of scientific research beyond the shelf? Here again, freedom of research, experimentation and exploration should be championed. Indeed this should be recognized as a "fifth freedom" of the regime of the high seas no less than on the continental shelf, embracing the volume of the waters as well as the seabed and subsoil of the oceans. Again, when explorations or exploitations take place in areas governed by the proposed Convention (or Articles) on the Seabed and Subsoil of the High Seas, the exploring or exploiting entities (or individuals) should be required so to conduct their enterprises so as neither to interfere with, nor diminish the value of, any neighboring scientific activity. A right to collect damages for such interferences should be provided. Also preventive procedures should be available. Finally, an economic activity which had been recorded under the procedure to be provided in the proposed Convention (or Articles), and the state municipal laws consistent therewith, should not be carried on in any manner which might unreasonably impair the value of possible future scientific activities in the area.

The state which recorded its claim with the appropriate United Nations recording agency in accordance with the proposed Convention (or Articles) should, however, have analogous privileges and rights of participating in the scientific activity, or of sending observers, to those already recognized as enuring, by force of the Geneva Convention on the Continental Shelf, 1958, in the coastal state when a foreign country, or its citizens, engage in scientific activities on that coastal state's continental shelf. Similarly, the results of such research in the deep oceans should be published. Thus the policy of Article 5, paragraph 8, together with the additional principles and the freedoms proposed in this study, and aimed at protecting scientific research on the continental

shelf, should, by analogy, be extended to zones in the deep oceans, whatever their depth, and wherever states have established their control and exercise their sovereign rights. Again, the conductors of scientific research in the deep oceans should be able to obtain preventive relief from unjustified interferences, and be awarded damages. These proposals regarding scientific research beyond the continental shelf should be included in the Convention (or Articles) on the Resources and Subsoil of the High Seas suggested in the paper I presented before this Institute last year.

(3) Scientific Research for Defense Purposes.

At the outset we must ask ourselves whether scientific research for defense purposes is a valid special category of the type scientific research envisaged in Article 5, paragraph 1, of the 1958 Convention on the Continental Shelf and in the British proposals of freedom of scientific research as a "fifth freedom" of the high seas. There are many scientific activities which are carried out, for example the United States Navy's "Sea-Lab", which, generally speaking, may appropriately be carried out with civilian goals equally with military, and, indeed, could be carried out by civilian research agencies and institutes. Thus, even though they are carried out by defense services, such activities neither exclude other forms of scientific research(i.e., they are not necessarily pre-emptive), nor are they so overwhelmingly relevant to defense needs that the imagination would be hard pressed to find a direct civilian or general humanitarian benefit derivable from them. Thus they may be contrasted with other types of underwater scientific experimentation which can be explained only in terms of the armed services' needs -- apart from, perhaps, the sort of "spin-off" effect associated, for example, with making kitchen utensils from materials developed for rockets nose cones and the possible eventuality of using hydrogen bombs to

dig inter-ocean canals one day in the future.

Subject to such limitations as not being permitted, as of right, to use the continental shelves of other states for defense research purposes, scientific research of the non-pre-emptive category, even when conducted by the defense services of a state, should be permitted to assert at least the morality of their claim in terms of the porposed "fifth freedom of the seas" -- the "freedom of research, experiment and exploitation." The only reason, furthermore, why it appears to me that the defense services of one state might only with great difficulty, if at all, exercise this freedom on the continental shelf of another state, is because of the great suspicion which currently exists between nations. But need the armed services of one state be disadvantaged by the current atmosphere of suspicion when merely seeking to engage in research -- provided such safeguards as the coastal state's rights to inspect and participate in the experiment, and the obligations to publish results are scrupulously respected? With the reservation I have just noted, research activities by a defense service could well be classified as falling within a similar category to civilian scientific research.

But what of those activities which are preponderantly pre-emptive in that the fact of their being carried out excludes other uses? An imaginary example may be found in a submarine experiment with an equivalent effect on the scientific community as Project Westford ("Project Needles") had in 1963,[23] or a multi-megaton hydrogen device explosion to discover deep-sea effects -- from underwater fall-out to submarine construction and engineering theories? I submit that such operations do not fall within the type of scientific activity for which I have been advocating freedom of research. Whether or not they result in the general protection or advancement of mankind, they are, in an immediate sense, pre-emptive and exclusionary. This point is in no wise in disagreement with the influential McDougal and Schlei study, "The Hydrogen Bomb Tests in Perspective:

Lawful Measures for Security"[24] which, so it seems to me, defended the United States 1954 hydrogen bomb tests on the basis that these, being reasonable measures for protection in a threatening environment, were not prohibited under general international law. For this is not to argue that they would, therefore, become privileged activities under the "freedom of research, experiment and exploration" advocated in this paper. Far from being a privileged activity, the 1954 hydrogen bomb tests were merely a not-prohibited one -- with the actor tacitly exposing itself to responsibility for all risks.[25] In addition, the legal responsibility of the experimenting state clearly established the right of another state exercising jurisdiction or control (or sovereign rights) in the area of the experiment to refuse permission for the experiment to take place. For, along the lines of an argument I have expressed elsewhere, a state which passively allows its territory, or territory under its jurisdiction and control (or sovereign rights), to be used as the site for such experiments may, on an analogy with the Corfu Channel Case,[26] be viewed as jointly liable with the actively experimenting state -- despite its complete passivity.[27] In brief, my proposal is that experiments of this kind should be viewed as being permitted only; provided that they do not come into conflict with the stronger claims of the fifth freedom of the seas. Rather, if such an experiment is planned to be carried out in a maritime zone under the jurisdiction of another state, that state may interdict the activity, and secondly, if any loss of life, or injury to person or property should result, then the state undertaking the experiment should be absolutely liable[28] for all harms ascribable, by application of the concept of "channelling,"[29] to the experiment and to the state conducting it.

(4) An Exception -- Defense Installations.

In connection with the fixed defense installations under the sea there are two possibilities. First, if the area has been "dedicated" or

recorded for defense purposes under the treaty regime outlined in my offering last year to this Institute,[30] then the state establishing the defense installation should be entitled, on, perhaps, a somewhat extended analogy with Article 82 of the United Nations Charter (the "strategic areas" provision in Chapter XII, the "International Trusteeship System" -- the principles embodied in Article 83 are not relevant to the problem of this article), to proclaim the area as a zone to be used solely for defense purposes. The effect of such a proclamation would be to take the proclaimed area outside the proposed Articles (or Convention) on the Seabed and Subsoil of the High Seas[31] -- including those according privileges and immunities to scientific research. As with the other proposed Articles regarding defense installations on the seabed, these defense areas provisions are not intended to be relevant to submarines in motion. They would, however, be relevant to submarine pens on the seabed.

The second possibility occurs when a state establishing a fixed submarine defense system (as indicated in Section II paragraphs (1) and (2) above) does not bring it within the proposed regime. That state is, in effect, choosing to rely on secrecy and is risking the possibility of discovery -- including a surprise discovery by a scientific expedition -- as the cost of that secrecy. Should scientific research develop in the area, the claims of a state relying on secrecy and the regime provided by traditional international law rather than on the treaty regime should be subordinated to priorities and claims favoring research -- and the treaty regime. Furthermore, any violent interference with a peaceful scientific expedition for the purpose of preserving military secrecy on and under the high seas should be designated an act of aggression; for a state has a choice between the immunities provided by the proposed Convention (or Articles),[32] as a matter of law, and the protections which physical conditions may provide by secrecy. But these are distinct protections and the attendant benefits of each are different. In choosing

the one or the other the electing state balances its conveniences. It must, however, choose, it cannot have the advantage of both regimes, nor can it escape the limitations of either.

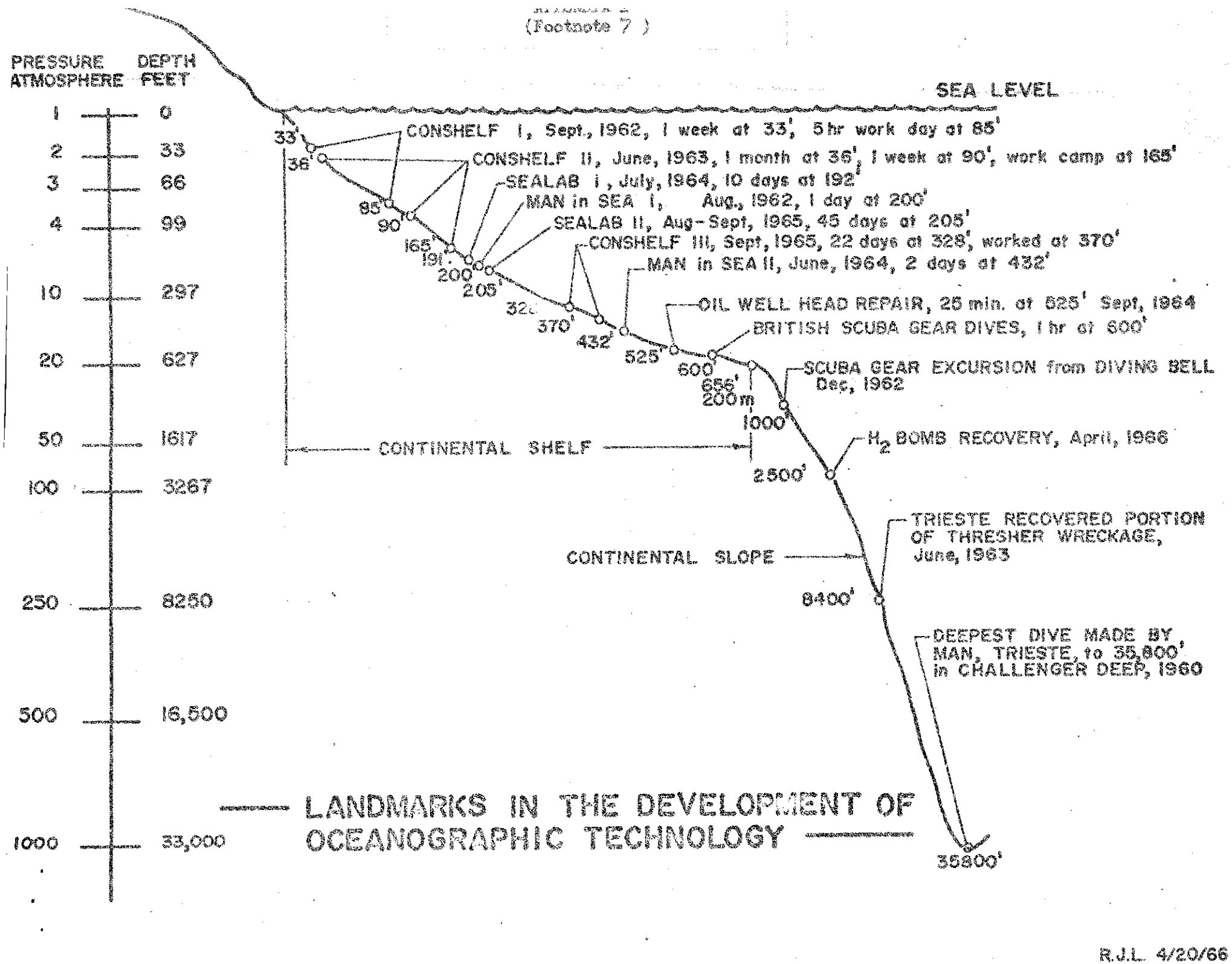
V: CONCLUSION

To return to the introductory points made at the outset of this study, clearly when peace reigns it is inappropriate to discuss the military, scientific and economic uses of the seas as calling for different regimes. These uses will co-exist within the regime existing for the reconciliation of their competing needs. Alternative regimes, even in time of peace, there well may be, but these are the alternative regimes of the present general, customary international regime and the treaty regime proposed in my presentation to this Conference last year.[33] Again, the conduct of hostilities transforms legal relations to the extent that the context reaches and affects the human activities concerned. Unless the opposed states permit the great landmark of absolute war[34] to define the whole range of their relations, or unless limited hostilities affect and translate specific relations into one of the possible alternative dimensions of war,[35] military uses do not provide, and are not able to provide, their own "alternative regime." But, one may well ask, does the transformation of the environment of a relationship or of an activity from that of peace to that of war create "alternative regime for military uses"? Used in this sense the meaning and context of the term "military uses" has been radically changed. It has come to indicate, not a military regime, but a dimension within which regimes operate.

L. F. E. Goldie
June 28, 1967

APPENDICES

(Footnote 7)



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APPENDIX II
(Footnote 18)

Comparative Table of the provisions relevant to freedom of scientific enquiry in the International Law Commission's 1951, 1953 and 1956 Drafts and in the Convention on the Continental Shelf, Geneva, 1958.

rticle 6	Article 6	Article 71	Article 5
. The exploration of he continental shelf nd the exploitation of ts natural resources ust not result in nbstantial interfer- nce with navigation r fishing. Due not- ce must be given of ny installation con- tructed, and due me- ns of warning of the resence of such in- tallations must be aintained.	1. The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interferences with navigation, fishing or fish production.	1. The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea.	1. The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, nor result in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication. . . . 8. The consent of the coastal state shall be obtained in respect of any research concerning the continental shelf and undertaken there. Nevertheless, the coastal state shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research into the physical or biological characteristics of the continental shelf, subject to the proviso that the coastal state shall have the right, if it so desires, to participate or to be represented in the research, and that in any event the results shall be published.

FOOTNOTES

FOOTNOTES

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1. This writer first used this term to designate the areas of the seabed and subsoil beyond the continental shelves of the coastal states and under the high seas wherein states could guarantee exclusive rights to exploit resources and ensure secure titles. See Goldie et al., A Symposium on the Geneva Conventions and the Need for Future Modifications, THE LAW OF THE SEA: OFFSHORE BOUNDARIES AND ZONES 265, 281-85 (L. Alexander ed. 1967) [hereinafter cited as "Goldie, Geneva Conventions"]. For a very brief outline of the proposals made in that study for an international treaty regime regulating the allocation of Submarine Zones of Special Jurisdiction among states and providing for the evidences, recognition and reception of titles and transactions derived therefrom see, infra, §§III (1) and (2).

2. 11 INT'L & COMP. L. Q. 670 (1962).

3. An example of such a regime (in terms of the then emerging Continental Shelf Doctrine) is to be found in Gidel, Le Plateau Continental (Opening Address at the Fourth Annual Conference of the International Bar Association, July 1, 1952), transl. as The Continental Shelf, 34 U. W. AUSTL. ANN. L. REV. 87, 102-03 (Goldie transl. 1954). It is as follows:

> "This much seems certain: Of those states which have claimed similar rights (although in many instances the claims lack that exact similarity which is a condition precedent to their recognition as a common rule), each has unilaterally expressed an intention in substantial conformity with that expressed by the others; thereafter it cannot venire contra factum proprium, it is estopped from denying to others rights similar to those which it has claimed for itself. Because in this way there has been formed a reciprocal system which has already acquired considerable importance it may be said that a regime of the continental shelf has come into being. But is that regime equivalent to a precept of customary international law capable of operating as a general category for every unilateral expression of intention of the same nature and therefore able to make such expressions of intention effective erga omnes?"

This writer (in Goldie, Special Regimes and Pre-Emptive Activities in International Law, 11 INT'L & COMP. L. Q. 670, 698 (1962)), without attempting to exhaust the categories, distinguished the following types of regimes (of which that indicated by Professor Gidel in the foregoing quotation is one -- the second):

> "(1) The acceptance, amongst a group of states, of a community of laws and of legal ideas -- for which Travers v. Holley and the cases following it provide an eloquent example; (2) the mutual respect and recognition accorded by certain states to the unilateral policies of others acting in substantial conformity with their own, enmeshing all the states concerned in a regime with respect to those policies; (3) a common loyalty, among a group of states, to the principle of abstention regarding a common resource when this is mutually and equitably administered in the light of scientific knowledge, the participation of these states within a regime of this kind most clearly illustrates the possibility of restraining pre-emptive acts which might otherwise be permitted under general international law."

4. Goldie, Geneva Conventions 281-85. See also infra §III(1).

5. Done April 29, 1958 [1964] 1 U.S.T. 471, T.I.A.S. No. 5578, 499 U.N.T.S. 311.

6. This writer has, in his book review of V. SOKOLOVSKII, SOVIET MILITARY STRATEGY (S. Dinerstein, L. Couré and T. Wolfe transl. 1963), 36 S. CAL. L. REV. 629, 633 (1963) [hereinafter cited as "Goldie, Sokolovskii"] criticized Kinglake's use of the "outbreak of hostilities as 'throwing down the great landmark between peace and war' and signifying an absolute change in relations" (footnotes omitted) in the following terms (id. n. 20):

> "This may express the thoughts of the closet and the study; but it does not reflect British military practice in that century, when Britain was continuously enforcing her authority in contests and wars of all sizes and degrees of commitment (from battle victories over Russia in the Crimean War in 1854-56 -- Russia was then regarded as the first military power in Europe -- to tribal skirmishes in Asia and Africa, and to the conduct of the Great Game in the Caucasus and Central Asia)."

This writer must now add a qualification to this observation. Insofar as hostilities, even in a limited war, so affect relations,

that war does become a landmark in the law, not absolutely, but relatively and with regard to its transforming effect on those relations. Secondly, unlimited, or "absolute" warfare, unforeseen in von Clausewitz's time, now does throw down "the great landmark" Kinglake mentioned, for:

> "The word 'absolute' here is used to indicate that it is now possible to wage absolute war, i.e., a war which need not be limited by Clauswitz's three modifying factors, but can 'spring up quite suddenly and spread to the full in a moment,' consist of 'a single absolute blow,' and impose irreparable harm upon the enemy, a harm in absolute terms in that it is one from which he may never recover. Such a blow is not 'a passing evil.' See, inter alia 3 VON CLAUSEWITZ 79-83 (Book VIII, Chapter 2, "Absolute and Real War")."

See Goldie, Sokolovskii 636 n. 34: The reference to "VON CLAUSEWITZ" in the above citation refers to VON CLAUSEWITZ, ON WAR (Graham transl. 1949). see Goldie, Sokolovskii 633 n. 19: Thus today it becomes possible to speak of hostilities as providing legal landmarks -- but in a sense different from Kinglake's -- and under the following circumstances:

(1) Relatively, and when specific relations are affected and transformed in the conduct of a limited war; and

(2) Absolutely, when "absolute war" -- now a military possibility the intellectual implications of which should not be shirked -- defines the totality of relations between the contesting states or blocs.

7. TRANSACTIONS OF THE THIRD ANNUAL MTS CONFERENCE AND EXHIBIT, 5-7 JUNE 1967, SAN DIEGO, CALIFORNIA (1967). The papers especially relied on are:

(a) Majkrzak and Polgar, Energy Converter for Unattended Data-Collecting Buoys, id. 277;

(b) Harter, Advanced Gas Handling Techniques as an Aid to Saturation Diving, id. 337;

(c) Krasberg, Saturation Diving: Vertical Excursion Techniques, id. 345;

(d) Brancart and Hoffman, Star II A Second Generation Research Submarine, id. 459;

(e) Eliot, The Design and Construction of Deepstar 2000, id. 479;

(f) Wasserman, Feasibility Evaluation of a Moored Oceanographic Buoy -- Satellite Data Relay System, id. 517;

(g) Beckner, An Infrared Detecting Set, id. 533;

(h) Perry and Smith, A New Set of Modules for Oceanographic and Marine Meteorological Instruments, Instrument Systems and Associated Data Processing, id. 571.

And see Appendix I attached hereto.

8. (Geneva Revision, done December 11, 1959), [1961] 2 U.S.T. 1761, T.I.A.S. No. 4892.

9. This treaty regime could equally well be established by adding new articles to the Geneva Convention on the High Seas, or, alternatively, by means of a fifth Convention on the Law of the Sea, possibly to be named the "Convention on the Resources of the Seabed and Subsoil of the High Seas." On the other hand, to add these proposed articles to the Continental Shelf Convention could be very misleading. Despite the fact that they also offer procedures for exercising sovereign rights in submarine areas, and create thereby means of securing titles to resources won from the seabed and subsoil of the oceans, the recognition of claims, the allocation of authority, and the procedures suggested in this writer's proposals operate on the basis of quite different principles from those set forth in the Geneva Convention on the Continental Shelf. To place these two sets of operating rules in the same Convention

could, therefore, create confusion -- especially in matters of interpretation.

10. "Transnational" is a most useful adjective, and one made popular by Judge Jessup in his book "TRANSNATIONAL LAW" (1956) to indicate legal relations (and factual situations) not adequately covered by any other word. He defines the term id. at 2, as follows:

> ". . . I shall use, instead of 'international law,' the term 'transnational law' to include all law which regulates actions or events that transcend national frontiers. Both public and private international law are included, as are other rules which do not wholly fit into such standard categories." (Footnotes omitted.)

Judge Jessup appended a n. 3 to this quotation which is as follows:

> "Myres McDougal has familiarized us with the use of the adjective 'transnational' to describe groups whose composition or activities transcend national frontiers, but he does not apply the term to law in the sense in which it is used here. Joseph E. Johnson suggested more broadly the utility of the word 'transnational' in place of 'international' in his address of June 15, 1955, at the annual meeting of the Harvard Foundation and Law School Alumni. Occasional use of the word has also been made by . . . CORBETT, THE STUDY OF INTERNATIONAL LAW 50 (. . . 1955), and by . . . NUSSBAUM, A CONCISE HISTORY OF THE LAW OF NATIONS (rev. ed. . . . 1954)."

"Transnationally valid and marketable titles" may, hence, be defined as those titles which depend, for their validity, upon a regime transcending domestic law -- even though their effectiveness is dependent upon their recognition and reception in domestic tribunals and as an adjunct of domestic property law.

11. No. 19, 1952.

12. See, e.g., U.S. Navy Hydrographic Office, Notice to Mariners, Pt. II, No. 21 para. 2716 (May 23, 1953); id., No. 14, para. 1685 (April 3, 1954); and id., No. 23, para. 2932 (June 5, 1954).

13. For a critical discussion of this term in the title to this Symposium see supra, § I (1).

14. Supra n. 5.

15. Quoted from United Kingdom's Reply, U.N. DOC. A/CN.4/99/Add.1, (transmitted by a Note Verbale Dated 15 March, 1956, from the United Kingdom Delegation to the U.N.), [1956] 2Y.B. INT'L L. COMM'N 80, U.N. DOC. A/CN.4/SER.A/1956/Add.1, Sales No.: 1956.V.3, Vol. II [hereinafter cited as "A/CN.4/SER.A/1956/Add.1"], suggesting the addition of a fifth item to the freedom of the seas article (Article 2) of the Commission's 1955 Provisional Articles on the Regime of the High Seas, International Law Commission, Report to the General Assembly Covering the Work of its Seventh Session, U.N. GEN. ASS. OFF. REC. 10th Sess., Supp. No. 9 at 2, 3 (A/2934) (1955), Report of the International Law Commission to the General Assembly, [1955] 2 Y.B. INT'L L. COMM'N 19, 21, U.N. DOC. A/CN.4/SER.A/1955/Add.1, Sales No.:60.V.3, Vol. II.

15a. Done April 29, 1958, [1962] 2U.S.T. 2312, T.I.A.S. 5200, 450 U.N.T.S. 82.

16. See supra n. 15 and accompanying text. See also [1956] 1 Y.B. INT'L L. COMM'N 29-32, Sales No.:1956.V.3, Vol.I.

17. 11 U.N. GEN. ASS. OFF. REC., Supp. No. 9 at 7, A/CN.4/SER.A/1956/Add.1 at 256.

18. See Appendix II to this paper for a comparative table showing the formal development of the provision protecting scientific endeavours into Article 5 of the Continental Shelf Convention.

19. 6 U.N. CONF. ON THE LAW OF THE SEA OFF. REC. (FOURTH COM.) 81-91, 119-20, U.N. DOC. A/CONF.13/42, Sales No.:58.V.4, Vol. VI [hereinafter cited as "A/CONF.13/42"].

20. 2 U.N. CONF. ON THE LAW OF THE SEA OFF. REC. (PLENARY MEETINGS) 15, U.N. DOC.A/CONF.13/38, Sales No.:58.V.4, Vol. II [hereinafter cited as "A/CONF.13/38"]. And see First Report of the Drafting Committee Articles and Final Clauses Adopted by the Fourth Committee

(U.N. DOC. A/CONF.13/L.13) (mimeo. April 21, 1958), A/CONF. 13/38 at 92-93.

21. A/CONF.13/38 at 15.

22. The question of the classes of scientific research activities which are within these protections is also open ended, compare e.g., the observations of Sorensen, A/CONF.13/42 at 82, with Schaeffer, id., at 89. See also id., 82 (Mouton), 83 (Ranukusomo), 84 (Sangkhadul) and 87 (Rouhani).

23. Project Westford consisted of the release of 50lbs of copper needles, each 1/3 the thickness of a human hair, from an Atlas-Agena rocket launched from the Western Test Range. The needles were released at a height of 200 miles and in a polar orbit. The experiment was carried out by the Lincoln Laboratories of MIT.

24. 64 YALE L. J. 648 (1955), McDOUGAL AND ASSOCIATES, STUDIES IN WORLD PUBLIC ORDER 763 (1960).

25. See infra., nn. 16-18 and the accompanying text.

26. [1949] I.C.J. 4.

27. See Goldie, Liability for Damage and the Progressive Development of International Law, 14 INT'L & COMP. L.Q. 1189, 1250-54 (1965) [hereinafter cited as "Goldie, Liability for Damage"]; Comments, BRIT. INST. INT'L & COMP. L., CURRENT PROBLEMS IN SPACE LAW, A SYMPOSIUM 49, 62-65 (Brit. Inst. Int'l & Comp L. Int'l Series No. 6, 1966) [hereinafter cited as "Goldie, Comment"].

28. For the suggestion of a more exact use of the term "absolute liability" (and its grammatical variants) than is currently in use see Goldie, Liability for Damage, 1215-18, 1241-46, 1248-49, 1262-64, and Goldie, Comment 55-57.

29. This term was developed in the context of international treaties on liability for damage arising out of civilian uses of nuclear energy to denote the tracing of responsibility for nuclear injuries back to an operator of a nuclear ship, reactor, etc., notwithstanding the length of the causal chain or the novelty of any intervening acts -- except the wilful acts of a claimant. See, for a discussion of these treaties, and of the concept of channelling, Goldie, Liability for Damage 1216-17 (and especially nn. 104-10 and the accompanying text), and 1241-44, and Goldie, Comment 55-57 (and especially nn. 19-23 and the accompanying text).

30. See Goldie, Geneva Conventions 283-84.

31. I.e., the proposed articles (or Convention) outlined in Goldie, Geneva Conventions 281-85; and see this study, supra., § III (1).

32. I.e., the proposed articles (or Convention) indicated in § III (1) above.

33. Supra. n. 1.

34. See supra. n. 6 for a discussion of this concept as used in this study.

35. Supra. n. 6.